



Administration Guide | INTERNAL – Authorized for SAP Customers and Partners
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Administration Guide for SAP Treasury G- Invoicing for SAP S/4HANA

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1 About This Guide

This guide is the central starting point for the implementation of SAP Treasury G-Invoicing for SAP S/4HANA. It tells you how to install and implement SAP Treasury G-Invoicing for SAP S/4HANA and also provides security and operations information.

This guide addresses the following target audience:

- System administrators
- Technical consultants
- Key users

1.1 Document History

See what changes have been made to this document since it was first released.

Note

The latest version of this document is available on SAP Help Portal at <http://help.sap.com/ginvs4>.

Date	Change	More Information
March 25, 2024	Initial release for the FPS03 release of SAP Treasury G-Invoicing for SAP S/4HANA. Many topics added or changed to support new Wave 3 functionality released as part of release FPS04.	<p>With the release of FPS04, the following topics were updated or added:</p> <ul style="list-style-type: none"> • Overview of Required SAP Notes [page 8] (Updated) • SAP Notes for Installation [page 14] (Updated) • Post-Installation Tasks [page 32] (Updated) • Accounts of Accrual Posting (Servicing Side) [page 57] (New) • BAdI: Field Control in the Sales Document [page 60] (Updated) • BAdI: Fetch the Accrual Postings (Servicing Sides) [page 63] (New) • BAdI: Facilitate Internal Mod Scenarios - BIO SO [page 64] (Updated) • Accounts of Accrual Posting (Requesting Side) [page 71] (New) • BAdI: Handle the Accrual Postings (Requesting Side) [page 80] (New) • BAdI: Facilitate Internal Mod Scenarios - Seller Facilitated Order [page 81] (New) • Maintain Settings for Persist Group and Sales Order Functionality [page 101] (Updated) • Review Delivered Scenario Definitions [page 110] (Updated) • Maintain Function Modules Triggered by Scenarios [page 112] (Updated) • Maintain Order Scenario Settings [page 115] (Updated) • Maintain Performance Scenario Settings [page 117] (Updated) • Authorization Objects [page 155] (Updated) • Standard Roles [page 160] (Updated) • CDS View at Performance Line-Item Level with Order Schedule Line [page 179] (New) • Error Monitoring [page 179] (Updated)

Date	Change	More Information
November 27, 2023	Initial release for the FPS02 release of SAP Treasury G-Invoicing for SAP S/4HANA.	
October 27, 2023	Numerous corrections throughout based on full test of documentation when implementing new system.	
September 18, 2023	Added a note to Post-Installation Tasks [page 32] .	
September 13, 2023	Added four notes to Prerequisites for Installation > SAP Notes for Installation [page 14] and one note to Post-Installation Tasks [page 32] .	
September 7, 2023	Added two entries to the list of G-Invoicing relevant AIF fix values in Define Fix Values [page 148] .	
August 24, 2023	Added note 3369597 - AIF configuration for SAP Treasury G-Invoicing for SAP S/4HANA FPS01 to Post-Installation Tasks [page 32] .	
July 27, 2023	Added documentation on how to Maintain Text IDs [page 37] .	
July 24, 2023	Initial release for the FPS01 release of SAP Treasury G-Invoicing for SAP S/4HANA.	
January 2023	Initial release for the 1.0 release of SAP Treasury G-Invoicing for SAP S/4HANA.	

2 Getting Started

Make sure to read the information in this section before you get started with SAP Treasury G-Invoicing for SAP S/4HANA.

2.1 Useful Links

The following resources provide access to more information about general topics, such as software downloads, customer incidents, or high availability.

Resource	Where to Find It
User assistance for SAP Treasury G-Invoicing for SAP S/4HANA	http://help.sap.com/ginvs4
Information about creating customer incidents	http://support.sap.com/incident
SAP Notes search	http://support.sap.com/notes
SAP Software Download Center	http://support.sap.com/swdc
Product Availability Matrix	http://support.sap.com/pam
Early Knowledge Transfer and role-specific learning maps	http://support.sap.com/ekt
Sizing	http://www.sap.com/sizing
Security	http://www.sap.com/security
Information about support package stacks, latest software versions and patch level requirements	http://support.sap.com/sp-stacks

2.2 Overview of Required SAP Notes

Many SAP Notes are essential for installing, upgrading, and operating SAP Treasury G-Invoicing for SAP S/4HANA.

This topic provides a list of SAP Notes mentioned throughout this Administration Guide. To support SAP Treasury G-Invoicing for SAP S/4HANA, further SAP Notes may be released after this documentation is published. You can find an up-to-date list of post-installation notes in the release note for this product:

[3354543](#) - **Release Information for SAP Treasury G-Invoicing for S/4HANA 1.0.**

📘 Note

The SAP Notes relevant for installation and upgrade are also listed in the respective sections in this guide.

Make sure that you have the latest version of each SAP Note, which is available on SAP Support Portal at <http://support.sap.com/notes>.

SAP Note Number	Title	Description	Context
3354543	Release Information for SAP Treasury G-Invoicing for S/4HANA 1.0	Contains information regarding SPS and FPS releases for SAP Treasury G-Invoicing for S/4HANA 1.0. This note includes a complete list of any notes created to support this release of SAP Treasury G-Invoicing for SAP S/4HANA FPS03 after initial release.	
3055347	Cross-Site Scripting (XSS) vulnerability in SAPUI5	UI5 version in use with known vulnerabilities arising out of jQuery 2.2.3 .	

2.3 Getting Support

If you encounter any problems with SAP Treasury G-Invoicing for SAP S/4HANA, report an incident on SAP Support Portal.

To report an incident, go to SAP Support Portal at <http://support.sap.com/incident>. The relevant component is IS-PS-GIV.

3 About SAP Treasury G-Invoicing for SAP S/4HANA

This section provides an overview of SAP Treasury G-Invoicing for SAP S/4HANA, including relevant business scenarios and technical system landscape.

Government Invoicing (G-Invoicing) is a long-term, sustainable solution, intended to improve the quality of the United States' Intragovernmental Transactions (IGT) - Buy/Sell data and to support more accurate financial management by Federal trading partners. Driven by the US Treasury, G-Invoicing will address current buy-sell accounting and reporting challenges by:

- Providing a common platform for brokering all IGT buy/sell activity
- Implementing a Federal IGT buy/sell activity

The US Treasury has mandated that G-Invoicing be implemented by the start of fiscal year 2023 per the US Federal fiscal calendar. Federal agencies must comply with this mandate and need to ensure that their ERP capabilities are enhanced to support the directive.

3.1 System Landscape for SAP Treasury G-Invoicing for SAP S/4HANA

This section describes selected technical system landscapes and the involved product versions and instances.

For SAP Treasury G-Invoicing for SAP S/4HANA, you can choose between embedded deployment (installation of the frontend Hub on the same system as the backend) and standalone deployment (installation of the frontend Hub on a separate system).

→ Recommendation

If you choose to use a standalone deployment, SAP recommends installing the frontend Hub on an SAP S/4HANA Foundation system, rather than an SAP NetWeaver Application Server for ABAP system, as shown in Alternative 2 of the system landscape diagrams below.

⚠ Restriction

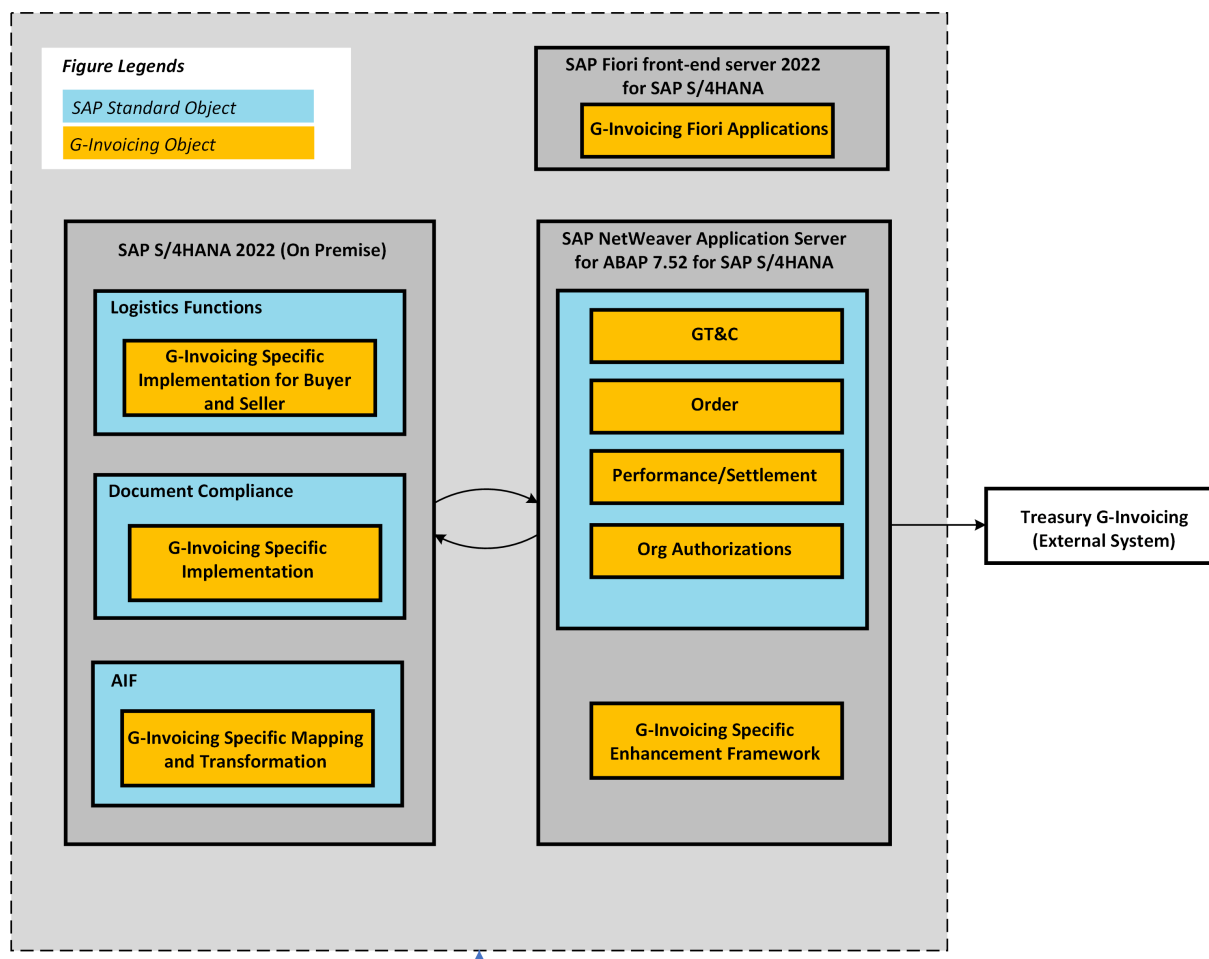
When opting for standalone deployment, if you wish to use the G-Invoicing change log functionality (see [Viewing the Change Log of an Order Modification or Performance](#) in the SAP Treasury G-Invoicing for SAP S/4HANA Application Help), you must install the the G-Invoicing Hub (see [GS4H 100 and GS4U 100 : G-Invoicing Hub and UI \[page 16\]](#)) on SAP S/4HANA Foundation, because the change log functionality depends on certain reused components that are not available in NetWeaver.

For information on installing or converting to SAP S/4HANA Foundation, see [SAP S/4HANA Foundation \[page 17\]](#).

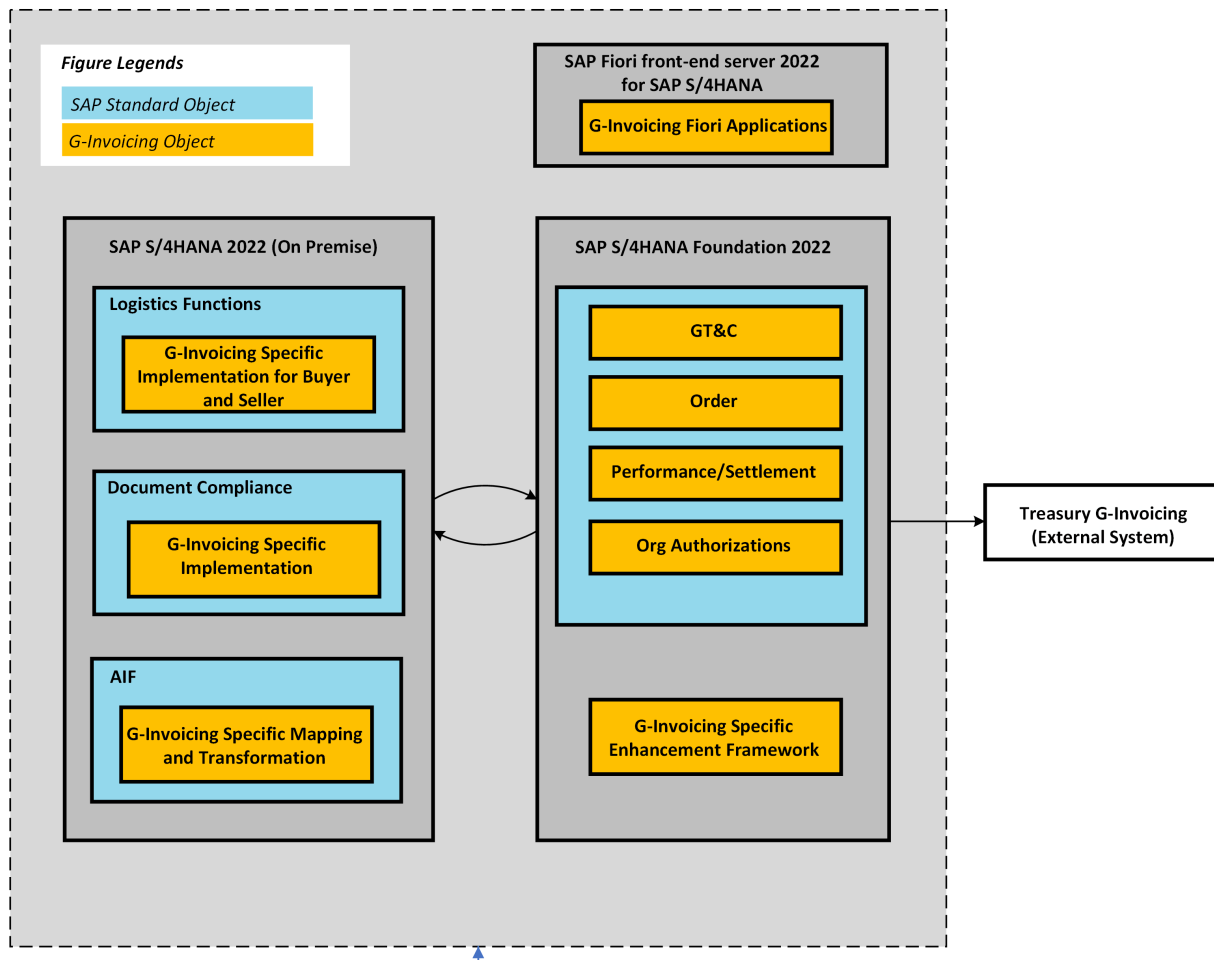
For more information on this restriction in general, see [3423292 - Limitation note for "Change Log" functionality in GINVOICING](#), including the details in the attachment to that note.

The figures below illustrate system landscape alternatives for SAP Treasury G-Invoicing for SAP S/4HANA 2022.

System Landscape: SAP Treasury for G-Invoicing for SAP S/4HANA 2022 Alternative 1



System Landscape: SAP Treasury G-Invoicing for SAP S/4HANA 2022 Alternative 2



The following software components are either required or optional, as indicated below, for the technical implementation of SAP Treasury G-Invoicing for SAP S/4HANA.

Business Scenario: Treasury Orders Initiated from SAP S/4HANA and Managed by Hub

Software Component	Required or Optional
GS4B 100 (G-Invoicing Backend)	Required
GS4H 100 (G-Invoicing Hub)	Required
GS4U 100 (G-Invoicing UI)	Required

4 Installing SAP Treasury G-Invoicing for SAP S/4HANA

This section provides information about how to prepare for installation and what to do before and after the installation of SAP Treasury G-Invoicing for SAP S/4HANA.

There are two deployment options for SAP Treasury G-Invoicing for SAP S/4HANA:

- Deploy the SAP Treasury G-Invoicing for SAP S/4HANA app as separate hub on SAP NetWeaver.
- Deploy the SAP Treasury G-Invoicing for SAP S/4HANA app within a single SAP ERP landscape on S/4HANA OP 2022 .

4.1 Prerequisites for Installation

This section lists the prerequisites that must be met before you start installation.

Prerequisites

SAP S/4HANA system Minimum Requirements:

- SAP S/4HANA OP 2022 or higher
- SAP S/4HANA Foundation 2022 or higher

ⓘ Note

If you opt to use SAP S/4HANA OP 2022, you must use SAP S/4HANA Foundation 2022. If you opt to use SAP S/4HANA OP 2023, you must use SAP S/4HANA Foundation 2023.

- UI5 Library 1.102.1

→ Recommendation

In order to ensure that your system has the latest fixes for accessibility-related defects, SAP recommends that you update your SAPUI5 versions to the latest patch level. For more information, see the [SAPUI5 Release Plan](#).

- NW AS ABAP 7.52
- SAP Fiori FES 2022 for S/4HANA
- Document Compliance






4.1.1 SAP Notes for Installation

Read the following SAP Notes before you start installation. These SAP Notes contain the latest installation information, as well as any corrections.

Note

Make sure that you have the latest version of each SAP Note, which is available on SAP Support Portal at <http://support.sap.com/notes>

SAP Note Number	Title	Description
3055347	Cross-Site Scripting (XSS) vulnerability in SAPUI5	UI5 version in use with known vulnerabilities arising out of jQuery 2.2.3.
3017310	Document Compliance Framework: Integration of Purchase Order, Purchase Requisition and Sales Order	This SAP Note delivers changes for the integration of purchase order, purchase requisition, and sales order to the Document Compliance Framework.
3126953	Document Compliance: Customizing for Purchase Order, Purchase Requisition and Sales Order	For the activation of the eDocument source types for purchase order, purchase requisition, and sales order additional customizing is needed.
3125684	Document Compliance Framework: Prerequisites for SAP Note 3017310	This SAP Note delivers the prerequisite objects (e.g. Data Dictionary) for the functional changes delivered with SAP Note 3017310.
3289733	Installation Error(s) for Software Component GS4B on S/4 HANA OP 2022	This SAP Note describes certain errors that may occur when installing software component GS4B on SAP S/4HANA OP 2022, as well as steps to resolve those errors if they occur.
3340738	FMFG_AAPAY with NewGL / S/4HANA	Addresses an issue where, when executing FMFG_AAPAY with NewGL or in a S/4HANA system, no open items are found even though they exist.
3352314	Clearing account assignment no overwrite mode	Addresses an issue where the clearing of the account assignment does not use the overwrite mode of the document split function.
3344395	G-Invoicing - Multiple issue with clearing for settlement	Addresses several issues that can arise when clearing documents during settlement.
3294808	Function for partial payment by G/L account assignment is active/error GLT2201	Addresses an issue that can result in an error during a partial payment in certain circumstances.
3365402	G-Invoicing: Partial Pay using BAPI (EAPS)	Together, these notes resolve an issue where using function module

SAP Note Number	Title	Description
3367192 	G-Invoicing: Partial Pay using BAPI (Core)	FMFG_POST_PAYMENT_IPAC to post partial payments in certain circumstances produces incorrect results.
3341547 	RFFMFG_UNFILLED_ORDERS: New BAdI	Provides a BAdI to fill the ExtensionIn structure with the G-Invoicing fields prior to calling BAPI_SALESORDER_CHANGE for newly creates sales order lines.
3141874 	BAdI for additional GTAS2 subscreen	In order to provide a required additional subscreen in the GTAS2 popup to support SAP fields that are not GTAS2-specific, this note creates a new BAdI, FMFG_USKONTUI_INT_SUBSCR1, in Enhancement Spot FMFG_USKONTUI_EXIT where an SAP Implementation can be created for SAP fields.
3352314 	Clearing account assignment: no overwrite mode	Addresses an issue where the clearing of the account assignment does not use the overwrite mode of the document split function.
3294808 	Function for partial payment by G/L account assignment is active/error GLT2201	Addresses an issue that can result in an error during a partial payment in certain circumstances.

4.1.2 Activate Required oData Services

Context

The process for activating oData services is described in SAP Note [2595454](#)  - HOW TO: Add, Activate and Maintain OData Services.

Repeat the process described there to activate each of the services required for G-Invoicing, using the following as the *Technical Service Name* in step 5:

- GTC_SRV
- ORDER_SRV
- PERFORMANCE_SRV
- SERVICELOG_SRV
- /GINH/CHANGE_DOCUMENTS_SRV
- /GINH/NOTIFICATIONS_SRV

This is also described in [Internet Communication Framework \(ICF\) Security \[page 161\]](#).

4.2 Pre-Installation Tasks

This section describes tasks that must be completed before you begin installation of SAP Treasury G-Invoicing for SAP S/4HANA.


SAP Treasury G-Invoicing for SAP S/4HANA is delivered as three add-ons that can be downloaded from the SAP Support Portal at <https://support.sap.com>.

Implementation

- GS4B 100: G-Invoicing Backend
- GS4H 100: G-Invoicing Hub
- GS4U 100: G-Invoicing UI

Support corrections to the Add-Ons are delivered using Notes, consistent with other SAP software.

Note


Refer to [3289733](#)  - Installation Error(s) for Software Component GS4B on S/4 HANA OP 2022 for known errors you may encounter during implementation.

4.2.1 GS4B 100 : G-Invoicing Backend

GS4B 100 must be deployed on SAP S/4HANA 2022 and higher with Enterprise Extension Public Sector (EA-PS) and PLM extension EA-PLM. Functions for US Federal Government must be active.

4.2.2 GS4H 100 and GS4U 100 : G-Invoicing Hub and UI

GS4H 100 requires either AS ABAP 7.52 or SAP S/4HANA Foundation 2022 or higher.

GS4U 100 requires SAP Fiori FES 2022 or higher (see SAP note [3191581](#)  - **SAP Fiori front-end server 2022 for SAP S/4HANA**).

They can be deployed together or in separate systems provided the prerequisites are met.

4.2.3 Activate Required Business Switches

Certain business switches must be active on your systems in order for SAP Treasury G-Invoicing for S/4HANA to function properly.

The following business switches are required for SAP Treasury G-Invoicing for S/4HANA:

- ENTERPRISE_EXTENSIONS
 - EA-PS: Public Services
- ENTERPRISE_BUSINESS_FUNCTIONS
 - CA_EDOC: Document Compliance Business Function (Reversible)
 - PSM_FM_CI_2: PSM, Funds Management 2
 - PSM_USFED_CI_2: PSM, US Federal 2
 - PSM_USFED_CI_3: PSM, US Federal generic 3
 - PSM_USFED_PEROP_1: PSM, US Federal - Period of Performance
 - PSM_USFED_PPAP_3: PSM, US Federal - PPA and Payments 3

Note

Switch PSM_USFED_PPAP_3 is required only if you plan to use Partial Clearing by Account Assignment (PCLAA) functionality. For more information, see [Activate Partial Clearing by Account Assignment \[page 40\]](#).

4.2.4 SAP S/4HANA Foundation

If you wish to choose the standalone deployment scenario (in which the G-Invoicing Hub is installed on a separate system from the S/4HANA G-Invoicing backend) and you wish to be able to use change log functionality (see [Viewing the Change Log of an Order Modification or Performance](#)), you must use SAP S/4HANA foundation on the system on which the Hub is installed. This section provides introductory information on how to install, upgrade, or convert to SAP S/4HANA foundation. If you do not intend to use the standalone deployment scenario with SAP S/4HANA foundation, this section is not relevant.

Note

If you instead choose the embedded deployment scenario (in which the G-Invoicing Hub is installed on the same system as the S/4HANA G-Invoicing backend), the change log functionality will work.

If you choose the standalone deployment scenario but install your G-Invoicing Hub on an SAP NetWeaver system, change log functionality will not work.

For more information on the available scenarios and the limitations on change log functionality, see:

- The SAP Treasury G-Invoicing for SAP S/4HANA Administration Guide > [System Landscape for SAP Treasury G-Invoicing for SAP S/4HANA \[page 10\]](#)
- SAP note [3423292](#) - Limitation note for "Change Log" functionality in GINVOICING

SAP S/4HANA foundation is the next-generation Business Suite foundation platform and is fully built on the most advanced in-memory platform existing today: SAP HANA. SAP S/4HANA foundation comprises the

ABAP platform plus a re-use layer built out of the components S4FND and MDG_FND. With SAP S/4HANA foundation, SAP helps businesses to run simple in the digital economy, including such topics and principles as the Internet of things, Big Data, business networks, and mobile-first. The software component uses modern design principles with the SAP Fiori user experience (UX) as well as a new role-based user experience concept.















📘 Note

SAP S/4HANA foundation is not allowed to be used standalone but only as a foundation in combination with an ABAP add-on as depicted on the corresponding allow list.

4.2.4.1 Installation

This section provides information on installing SAP S/4HANA foundation.

4.2.4.1.1 Installation Information

Documents	Comments and Links
Installation guides describing the installation of Application Server systems with Software Provisioning Manager 2.0, which is part of SL Toolset 1.0. Make sure that you always use the latest SP version of the tool and the guides available on SAP Support Portal at https://support.sap.com/sltoolset  .	<p>You find these guides (as well as a link to the SPM tool) on SAP Support Portal at https://support.sap.com/sltoolset  System Provisioning  System Provisioning Scenarios  Install a System using Software Provisioning Manager  Installation Option of Software Provisioning Manager 2.0 SP00 (or higher)  Installation Guides - Application Server Systems .</p> <p>These installation guides are sorted by database, technical stack (ABAP), and operating system platform. For the installation of SAP S/4HANA Foundation, choose the SAP HANA Database guide for your operating system (UNIX, IBM, or Windows), the ABAP Stack and the SAP HANA Database.</p>
SAP HANA Server Installation and Update Guide	<p>SAP HANA Server Installation and Update Guide</p> <p>For information about how to install or update these components, see the section Managing SAP HANA System Component in the above guide.</p>
System copy guides using Software Provisioning Manager 2.0	<p>You find these guides on SAP Help Portal at https://support.sap.com/sltoolset  under  System Provisioning  System Provisioning Scenarios  Copy a System using Software Provisioning Manager  System Copy Option of Software Provisioning Manager 2.0 (latest SPs)  System Copy Guides - Software Provisioning Manager 2.0 .</p>

4.2.4.1.1.1 Product and Database Information

SAP S/4HANA Foundation Components

Component	Comment
ABAP PLATFORM - Application Server ABAP	<p>ABAP Platform - Application Server ABAP</p> <ul style="list-style-type: none">• SAP ABA• SAP BASIS• SAP BW• SAP HOST AGENT• SAP IGS• SAP IGS HELPER• SAP KERNEL• SAP NW GATEWAY FOUNDATION• ST-PI• USER INTERFACE TECHNOLOGY
MDG FOUNDATION	
S4FND	

Database for SAP S/4HANA Foundation

SAP HANA (SAP HANA DATABASE 2.0) is used as the database for SAP S/4HANA Foundation. If one of your applications uses an SAP liveCache, you need to choose the SAP HANA integrated SAP liveCache.

4.2.4.2 Conversion

This section provides information on conversion to SAP S/4HANA foundation.

4.2.4.2.1 Documentation, Tools, and SAP Notes for the Conversion

Required Documents, Tools, and SAP Notes

You require the following conversion assets to prepare and run a conversion project.

Document	Available at	Comment
System Conversion to SAP S/4HANA using SUM 2.0 SP <latest version> (incl. DMO)	▶ Software Logistics Toolset (SL Toolset ▶ System Maintenance ▶ System Conversion to Sap S/4HANA using SUM 2.0 <latest SP> ▶	Describes how to prepare the system for running the Software Update Manager, how to use it, and what general follow-up steps are required.
Maintenance Planner User Guide	http://help.sap.com/maintenanceplanner	Describes how to use the Maintenance Planner for calculating and downloading the required stack.xml file and software packages.
SAP S/4HANA foundation: Release Information Note	https://support.sap.com To find the release information note for your target product version, search for SAP S/4HANA FOUNDATION Release Information Note .	The Release Information Note for a specific product version of SAP S/4HANA foundation provides valuable information, e.g. about supported ABAP Add-Ons and about supported start releases

Additional Information and SAP Notes

The following table lists important additional documents and SAP Notes.

Document	Available at	Comment
SAP S/4HANA foundation: Always-Off Business Functions	SAP Note 2240359	-
SAP S/4HANA foundation: Always-On Business Functions	SAP Note 2240360	-
Uninstalling ABAP Add-Ons	SAP Note 2011192	-

4.2.4.2.2 Overview of the Conversion Process

Preparation Phase

SAP provides a process for the conversion to SAP S/4HANA foundation. Before starting the realization phase of the conversion process, you have to do the following preparatory activities:

1. Planning
You need to gain an idea of the project steps and necessary preparations. Use the Roadmap Viewer to familiarize yourself with the project steps required for the transition to SAP S/4HANA foundation. For more information, see <https://roadmapviewer-supportportal.dispatcher.hana.ondemand.com/>.
 2. System requirements
You need to be aware of system requirements, start releases, conversion paths, and data volume. See the following sections for more information:
 - [System Requirements \[page 22\]](#)
 - [Supported Start Releases \[page 22\]](#)
 3. Maintenance Planner
You need to run the Maintenance Planner tool as a first step in the conversion process. It checks your components, add-ons, and business functions to ensure compatibility with SAP S/4HANA foundation and also creates the stack file used for the actual conversion process (done by the Software Update Manager tool). For more information, see [Maintenance Planner \[page 23\]](#).
- Note**

This step is mandatory, because the Software Update Manager requires the stack file for the conversion process.

The Maintenance Planner has replaced the Maintenance Optimizer, which is not supported by SAP S/4HANA foundation.
4. Cross-application preparation activities
In addition to the general preparation steps described above, you also need to do some cross-application preparations. For more information, see [Cross-Application Preparations \[page 24\]](#).




Realize Phase

After you have executed the steps in the preparation phase, you can continue with the activities of the realize phase using the Software Update Manager (SUM). The Software Update Manager does the database migration (if required), the actual software update, and the data conversion. For more information, see [Realizing the Conversion \[page 25\]](#).

4.2.4.2.2.1 Preparing the Conversion

For the conversion to SAP S/4HANA foundation you have to prepare an overall project plan and schedule the tasks. The preparation activities described in this section give you an idea of what is involved.

Note

In addition, review the planning section of the Software Update Manager guide System Conversion to SAP S/4HANA using SUM 2.0 <latest version> at <https://support.sap.com/sltoolset>  [Software Logistics Toolset \(SL Toolset\)](#)  [System Maintenance](#) .

4.2.4.2.2.1.1 System Requirements

Unicode








As a prerequisite for the conversion, your system needs to be a Unicode system. If your system is still non-Unicode, you can follow a two-step conversion approach: First, perform a combined upgrade and Unicode conversion with one of the supported start releases as target, then perform the conversion to SAP S/4HANA foundation.

For additional information, see [Unicode Conversion Overview](#)  (on SAP SCN).

Application Server ABAP Only

Your system has to be an AS ABAP only system. Dual stack systems (AS ABAP and AS Java combined in one system) are not supported for the conversion. If your system is a dual-stack system, you have to split it before doing the conversion.

For additional information on how to perform a dual-stack split, see:

- SAP Note [1655335](#) 
- Guide at <https://support.sap.com/sltoolset>  [System Provisioning](#)  [System Provisioning Scenarios](#)  [Split a System using Software Provisioning Manager 1.0](#)  [Dual Stack Split Guides](#) 
- [Dual Stack Split](#) 

4.2.4.2.2.1.2 Supported Start Releases

A one-step conversion from a minimum released level is supported in SAP S/4HANA foundation.

SAP S/4HANA foundation is not allowed to be used standalone but only as a foundation in combination with an ABAP add-on.

Therefore, the supported start releases for a conversion of SAP S/4HANA foundation also depend on the source and target stack of the installed add-on. For more information, see the add-on specific conversion information in which the SAP *S/4HANA Foundation* chapter is included.

Check the release information note for the target product version of SAP S/4HANA foundation for the supported start releases with regard to the foundation and the required feature package stack equivalencies. For more information, see [Documentation, Tools, and SAP Notes for the Conversion \[page 20\]](#).

4.2.4.2.2.1.3 Maintenance Planner

Overview

The Maintenance Planner generates the download files (add-ons, packages, DBDs, and the stack configuration file) that the Software Update Manager (SUM) uses to do a conversion or an upgrade. In particular, the Maintenance Planner checks if the following items are supported:

- Add-ons to your system
- Active business functions in your system

The Maintenance Planner checks whether there is a valid path for any of the items listed above (for example, an add-on is not released for the conversion or the upgrade yet). After the check, the Maintenance Planner creates the stack configuration file (stack.xml).

Note

In order to generate the stack.xml, you need to have valid licenses of the target SAP products. You can do the above checks without a license, but you cannot create a stack.xml with the Maintenance Planner without a license.

For more information, see the Maintenance Planner User Guide at <http://help.sap.com/maintenanceplanner>. For specific preparatory steps, see also [Cross-Application Preparations \[page 24\]](#).

Business Functions

Business functions can have the following status: `always on`, `customer switchable`, and `always off`. This results in the following behavior during the process:

- If a business function was switched on in the start release system but defined as `always off` in the target release, then a system conversion or upgrade is not possible with this release.
- If a business function was switched off in the start release system but defined as `always on` in the target release, then the business function will be activated during the process.

- If a business function is defined as customer switchable in the target release, it will keep the state defined in the source release during the upgrade.

For more information about always off and always on business functions in SAP S/4HANA foundation, see SAP Notes [2240359](#) and [2240360](#).

Add-Ons

Add-ons are either merged into SAP S/4HANA foundation or deleted during the process if no successor is available. Some add-ons may be included without being fully functional.

For a list of supported add-ons in the target stack, see the respective Release Information Note for the product version of SAP S/4HANA foundation in the target stack.

For information about uninstalling add-ons, see SAP Note [2011192](#).

4.2.4.2.2.1.4 Cross-Application Preparations

Before starting the process, you need to do the preparatory activities described in the next sections.

Prepare the Use of the Maintenance Planner

Context

Besides the general preparation described in the Maintenance Planner User Guide, you have to make the following specific preparatory steps:

Procedure

1. Setup the Maintenance Planner as described in the Maintenance Planner User Guide available at <http://help.sap.com/maintenanceplanner>.
2. Check the SPAM/SAINT version in your source release system.

Note

SPAM/SAINT patch 66 (or higher) is required.

3. Apply SAP Note [2186164](#) to your SAP Solution Manager system.
4. Create an RFC connection between your source release system and SAP Solution Manager:
 1. In SAP Solution Manager, choose **SOLMAN_WORKCENTER** > *Solution Manager Administration* > *Landscape (Technical Systems)*.
 2. Click **RFC connections** > *Start New Window*.
 3. Select client 000 and choose *Advanced Mode*.
 4. Under *Export Options*, fill in the field *Create SM_<SID>CLNT<CLNT>_READ*.

5. Under *Communication RFCs*, select *Create SM_<SID>CLNT<CLNT>_READ*.
6. Select *Create New User*.
7. Enter a password.
8. Enter a user and password under *Managed System Setup Administrator*, and choose *Test Login* in the group *Administration Users* to check that it works.

Remove Client 066

Context

Client 066 is the Early Watch client which was set up during the installation of your system. This client is not used in SAP S/4HANA foundation. To prevent issues, for example, with job scheduling, you have to remove it before starting the process.

Procedure

To remove client 066, proceed as described in SAP Note [1749142](#) .

4.2.4.2.2.2 Realizing the Conversion

After the preparation phase, you start with the realization of the conversion to SAP S/4HANA foundation using the Software Update Manager (SUM) tool.






Software Update Manager (SUM) is the technical tool used for the system conversion to SAP S/4HANA foundation.

Note

You have to run the Maintenance Planner before the SUM, because the SUM requires the stack.xml generated by the Maintenance Planner as an input. For more information, see [Maintenance Planner \[page 23\]](#).

Within the SUM process the following steps are done in a one-step procedure (for dedicated start releases):

1. Database migration (optional)
If your source system is not yet running on the SAP HANA database, use the database migration option (DMO) of the Software Update Manager to migrate your database to SAP HANA during the conversion.
2. Installation of the SAP S/4HANA foundation software
3. Conversion of your data into the new data structure used by SAP S/4HANA foundation (this is the automated part of the data migration).

For all information about using the SUM, see the System Conversion Guide available at <http://help.sap.com/slttoolset>  *Software Logistics Toolset*  *System Maintenance*  *System Maintenance Scenarios*  *System Conversion to SAP S/4HANA using SUM 2.0 <latest SP>* .





4.2.4.3 Upgrade

This section provides information on upgrading to SAP S/4HANA foundation.

4.2.4.3.1 Documentation, Tools, and SAP Notes for the Upgrade




Required Documents, Tools, and SAP Notes

You require the following assets to prepare and run an upgrade project.

Document	Available at	Comment
System Upgrade to SAP S/4HANA using SUM 2.0 SP <latest version> (incl. DMO)	 System Maintenance Scenarios  Software Update/Upgrade using SUM 2.0 <latest SP> 	Describes how to prepare the system for running the Software Update Manager, how to use it, and what general follow-up steps are required.
Maintenance Planner User Guide	http://help.sap.com/maintenance-planner	Describes how to use the Maintenance Planner for calculating and downloading the required stack.xml file and software packages.
SAP S/4HANA foundation: Release Information Note	https://support.sap.com  To find the release information note for your target product version, search for SAP S/4HANA FOUNDATION Release Information Note .	The release information note for a specific product version of SAP S/4HANA foundation provides valuable information about supported ABAP Add-Ons and supported start releases, for example.

Additional Information and SAP Notes

The following table lists important additional documents and SAP Notes.

Document	Available at	Comment
SAP S/4HANA foundation: Always-Off Business Functions	SAP Note 2240359 	-
SAP S/4HANA foundation: Always-On Business Functions	SAP Note 2240360 	-
Uninstalling ABAP Add-Ons	SAP Note 2011192 	-

4.2.4.3.2 Overview of the Upgrade Process

Preparation Phase

SAP provides a process for the upgrade to SAP S/4HANA foundation. Before starting the realization phase of the upgrade process, you have to do the following preparatory activities:

1. Planning
You need to gain an idea of the project steps and necessary preparations. Use the Roadmap Viewer to familiarize yourself with the project steps required for the transition to SAP S/4HANA foundation. For more information, see <https://roadmapviewer-supportportal.dispatcher.hana.ondemand.com/>.
2. System requirements
You need to be aware of system requirements, start releases, upgrade paths, and data volume. For more information, see [Supported Start Releases \[page 28\]](#).
3. Maintenance Planner
You need to run the Maintenance Planner tool as a first step in the upgrade process. It checks your components, add-ons, and business functions to ensure compatibility with SAP S/4HANA foundation and also creates the stack file used for the actual upgrade process (done by the Software Update Manager tool). For more information, see [Maintenance Planner \[page 23\]](#).

Note

This step is mandatory because the Software Update Manager requires the stack file for the upgrade process.

The Maintenance Planner has replaced the Maintenance Optimizer, which is not supported by SAP S/4HANA foundation.

4. Cross-application preparation activities
In addition to the general preparation steps described above, you also need to do some cross-application preparations. For more information, see [Cross-Application Preparations \[page 24\]](#).


Realize Phase

After you have executed the steps in the preparation phase, you can continue with the activities of the realize phase using the Software Update Manager (SUM). The Software Update Manager does the database migration (if required), the actual software update, and the data conversion. For more information, see [Realizing the Upgrade \[page 30\]](#).

4.2.4.3.2.1 Preparing the Upgrade

For the upgrade to SAP S/4HANA foundation, you have to prepare an overall project plan and schedule the tasks. The preparation activities described in this section give you an idea of what is involved.

Note

In addition, review the planning section of the Software Update Manager at ► [System Maintenance Scenarios](#) ► [Software Update/Upgrade using SUM 2.0 <latest SP>](#) ► .

4.2.4.3.2.1.1 Supported Start Releases

A one-step upgrade from a minimum released level is supported in SAP S/4HANA foundation.

SAP S/4HANA foundation is not allowed to be used standalone but only as a foundation in combination with an ABAP add-on.

Therefore, the supported start releases for an upgrade of SAP S/4HANA foundation also depend on the source and target stack of the installed add-on. For more information, see the add-on specific upgrade information in which the [SAP S/4HANA Foundation](#) chapter is included.

Check the release information note for the target product version of SAP S/4HANA foundation for the supported start releases with regard to the foundation and the required feature package stack equivalencies. For more information, see [Documentation, Tools, and SAP Notes for the Upgrade \[page 26\]](#).

4.2.4.3.2.1.2 Maintenance Planner

Overview

The Maintenance Planner generates the download files (add-ons, packages, DBDs, and the stack configuration file) that the Software Update Manager (SUM) uses to do a conversion or an upgrade. In particular, the Maintenance Planner checks if the following items are supported:

- Add-ons to your system
- Active business functions in your system

The Maintenance Planner checks whether there is a valid path for any of the items listed above (for example, an add-on is not released for the conversion or the upgrade yet). After the check, the Maintenance Planner creates the stack configuration file (stack.xml).

Note

In order to generate the stack.xml, you need to have valid licenses of the target SAP products. You can do the above checks without a license, but you cannot create a stack.xml with the Maintenance Planner without a license.

For more information, see the Maintenance Planner User Guide at <http://help.sap.com/maintenanceplanner>. For specific preparatory steps, see also [Cross-Application Preparations \[page 24\]](#).

Business Functions

Business functions can have the following status: `always on`, `customer switchable`, and `always off`. This results in the following behavior during the process:

- If a business function was switched on in the start release system but defined as `always off` in the target release, then a system conversion or upgrade is not possible with this release.
- If a business function was switched off in the start release system but defined as `always on` in the target release, then the business function will be activated during the process.
- If a business function is defined as `customer switchable` in the target release, it will keep the state defined in the source release during the upgrade.

For more information about `always off` and `always on` business functions in SAP S/4HANA foundation, see SAP Notes [2240359](#) and [2240360](#).

Add-Ons

Add-ons are either merged into SAP S/4HANA foundation or deleted during the process if no successor is available. Some add-ons may be included without being fully functional.

For a list of supported add-ons in the target stack, see the respective Release Information Note for the product version of SAP S/4HANA foundation in the target stack.

For information about uninstalling add-ons, see SAP Note [2011192](#).

4.2.4.3.2.1.3 Cross-Application Preparations

Before starting the process, you need to do the preparatory activities described in the next sections.

Prepare the Use of the Maintenance Planner

Context

Besides the general preparation described in the Maintenance Planner User Guide, you have to make the following specific preparatory steps:

Procedure

1. Setup the Maintenance Planner as described in the Maintenance Planner User Guide available at <http://help.sap.com/maintenanceplanner>.
2. Check the SPAM/SAINT version in your source release system.

ⓘ Note

SPAM/SAINT patch 66 (or higher) is required.

3. Apply SAP Note [2186164](#) to your SAP Solution Manager system.
4. Create an RFC connection between your source release system and SAP Solution Manager:
 1. In SAP Solution Manager, choose **SOLMAN_WORKCENTER** **Solution Manager Administration** **Landscape (Technical Systems)**.
 2. Click **RFC connections** **Start New Window**.
 3. Select client 000 and choose **Advanced Mode**.
 4. Under **Export Options**, fill in the field **Create SM_<SID>CLNT<CLNT>_READ**.
 5. Under **Communication RFCs**, select **Create SM_<SID>CLNT<CLNT>_READ**.
 6. Select **Create New User**.
 7. Enter a password.
 8. Enter a user and password under **Managed System Setup Administrator**, and choose **Test Login** in the group **Administration Users** to check that it works.

Remove Client 066

Context

Client 066 is the Early Watch client which was set up during the installation of your system. This client is not used in SAP S/4HANA foundation. To prevent issues, for example, with job scheduling, you have to remove it before starting the process.

Procedure

To remove client 066, proceed as described in SAP Note [1749142](#).

4.2.4.3.2.2 Realizing the Upgrade

After the preparation phase, you start the upgrade using the Software Update Manager (SUM) tool. For a short overview of the entire process, see [Overview of the Upgrade Process \[page 27\]](#).

Software Update Manager (SUM) is the technical tool used for the upgrade to SAP S/4HANA foundation.

Note

You have to run the Maintenance Planner before the SUM, because the SUM requires the `stack.xml` generated by the Maintenance Planner as an input. For more information, see [Maintenance Planner \[page 23\]](#).

For all information about using the SUM, see the guide *Software Update Manager 2.0 <latest version>* available at <https://support.sap.com/sltoolset> **Software Logistics Toolset** **System Maintenance** **System Maintenance Scenarios** **Software Update/Upgrade using SUM**.

4.2.5 Process All Pending Order- and Performance-Related eDocuments

Context

Implementing attachment handling in the Hub functionality, which is new to FPS03, will mark *all* existing attachments created in ERP with the origin *ERP*, upload type *External*, and status *In sync*. Some of these attachments, however, might not truly be in sync with Treasury. Therefore, before installing FPS03, perform these steps to ensure that no inaccurate status information will be stored for existing attachments.




Procedure

1. Process all relevant pending eDocuments related to purchase orders, sales orders, and billing so that corresponding orders and performances are created in the Hub with the relevant attachments.
2. Ensure that the Push report jobs are executed, so that all relevant orders and performances along with their attachments, are pushed to Treasury. These report jobs are:
 - /GINH/ORDERS_PUSH_R_DOCUMENTS
 - /GINH/ORDERS_PUSH_S_DOCUMENTS
 - /GINH/PERF_PUSH_R_DOCUMENTS
 - /GINH/PERF_PUSH_S_DOCUMENTS
3. Check the service logs to confirm that there are no attachment push errors. Resolve any errors that have occurred.

4.3 Overall Installation Sequence

This section provides detailed instructions for installing SAP Treasury G-Invoicing for SAP S/4HANA.

Use the [SAP Add-On Installation Tool](#) to install the three SAP Treasury G-Invoicing for SAP S/4HANA add-ons.

Step	Action
1	Install SAP Note 3283121  - Release strategy and Maintenance Information for the ABAP add-on GS4B
2	Install SAP Note 3283204  - Release strategy and Maintenance Information for the ABAP add-on GS4U
3	Install SAP Note 3283216  - Release strategy and Maintenance Information for the ABAP add-on GS4H

Note

Once these steps are complete, SAP Treasury G-Invoicing for SAP S/4HANA has been installed, but you will need to transport customizing data to your target client. See [Post-Installation Tasks \[page 32\]](#) for more information.





4.4 Post-Installation Tasks

This section describes tasks that should be completed after you've finished installing SAP Treasury G-Invoicing for SAP S/4HANA.

Copy Delivered Customizing to Your Target Client

After completing the [Overall Installation Sequence \[page 31\]](#), /GINB customizing data is available in reference client 000. The data needs to be transported to the target client. Until you do so, customizing entries in your target client will not include the delivered G-Invoicing customizing.

Consult the following SAP Notes for more information on why this is necessary and how to do it:

SAP Note Number	Title	Description
162594 	Missing Customizing entries	Describes the need to to transport Customizing data from reference client into your target client
91096 	Table Compare: Info about Cust. Cross System Check	Specifies which comparison/adjustment tools exist for Customizing objects.
2435438 	SPRO How to adjust customizing data with another client	Explains how to adjust Customizing data with another client or a client of another system.
3350587 	Missing Customizing entries for G-Invoicing	Provides G-Invoicing-specific steps to compare and adjust customizing setting between client 000 and your client.

Execute Report /GINH/CHANGE_DOC_BOFU_MAP

To support the [Change Log](#) button in order mods and performances, perform the following steps:

1. Execute transaction SE38.
2. Enter /GINH/CHANGE_DOC_BOFU_MAP as the program name and click [Execute](#).
3. Select [Step 1 - Test Run](#) and click [Execute](#).
4. Select [Step 2 - Update & Activate](#) and click [Execute](#).

You will be prompted to capture this change in a correction request. This request can then be transported to the test and production systems.

Implement Other Required Post-Installation Notes

Certain SAP Notes must be implemented after you finish installing SAP Treasury G-Invoicing for SAP S/4HANA. For the most current list of required post-installation notes, see [3354543](#) - **Release Information for SAP Treasury G-Invoicing for S/4HANA 1.0**, and refer to the section for release FPS03 of SAP Treasury G-Invoicing for SAP S/4HANA 2022.

As of the publication of this document, the relevant post-installation notes are:

SAP Note Number	Title	Description
2617459	v2 Batch Request: Fix empty response of batch operation in Micro Hub scenario	Contains the fix for empty responses for some batch requests on higher SP levels of SAP_GWFND Rel 750. This affects the edit of Partner Information in the Order application.
3356517	ALV export - focus is not retained	Provides a fix for one accessibility defect for the Error Monitoring Cockpit.
3367616	Incorrect activities maintained in authorization objects /GINH/ERR and /GINH/ERS	Adjusts authorization objects /GINH/ERR and /GINH/ERS to support only the 'Display' activity.
3367001	G-Invoicing - Partial Settlement Changes	Addresses some issues with certain partial settlement scenarios.
3339651	Actions required for extending United States Federal Government GTAS2 fields table FMFGUSKONTKEY with new data	Additional fields for the US Federal Government GTAS2 fields database table (FMFGUSKONTKEY) have been included, either through a provided add-on (for example, the SAP United States Federal G-Invoicing solution) or customer development. When extending this table with new fields or changing the length of fields in the table, additional steps are recommended to be taken.
3388509	FMFG_AAPAY: Error when posting prior year document	Addressess issues where certain error messages may appear when executing transaction FMFG_AAPAY in certain circumstances.
3404915	FMFG_POST_PAYMENT_IPAC: Error F5568	When processing Function Module FMFG_POST_PAYMENT_IPAC, error message F5568 'Fiscal year * is not allowed' can be raised. This occurs after the application of Note 3388509.

5 Configuring SAP Treasury G-Invoicing for SAP S/4HANA

This section describes how to configure SAP Treasury G-Invoicing for SAP S/4HANA.

Detailed configuration information about SAP Treasury G-Invoicing for SAP S/4HANA has been provided in the SAP Customizing Implementation Guide in two parts, one for the G-Invoicing Hub and the other for ERP G-Invoicing:

- G-Invoicing ERP configuration can be found at ► [SAP Customizing Implementation Guide \(SPRO\)](#) ► [Public Sector Management](#) ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ►
- G-Invoicing Hub configuration can be found at ► [SAP Customizing Implementation Guide \(SPRO\)](#) ► [G-Invoicing Hub \(US Federal Government\)](#) ►

If both are installed on the same system, you will be configuring them in SPRO on the same system. Detailed configuration information about SAP Treasury G-Invoicing for SAP S/4HANA has been provided in the SAP Customizing Implementation Guide.

5.1 SAP Treasury G-Invoicing for SAP S/4HANA ERP Customizing

This section describes configuration steps for SAP Treasury G-Invoicing for S/4HANA for your ERP system.

5.1.1 Common Settings

This section describes common configuration steps for SAP Treasury G-Invoicing for S/4HANA.

5.1.1.1 Message Configuration for Field Validations

The Configuration of Customizable Messages is a tool for SAP Treasury G-Invoicing for SAP S/4HANA that covers all G-Invoicing validations on Sales Order, Purchase Order, Supplier Invoice, and Billing Document.

Context

You can configure all the messages created as part of SAP Treasury G-Invoicing for SAP S/4HANA to classify them as errors or warnings, or you can set them to be ignored.

Procedure

1. Navigate to Customizing activity ► [Public Sector Management](#) ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Message Configuration for Field Validations](#) ►.
2. Review new entries.
3. Enter the following data:

Field Name	Activity
Application Area	Select the Application Area from the list.
Msg No	Select a message number.
Sales Ord.	Specify the message type for Sales Order using the drop-down (Error, Warning, or Ignored).
Purch Ord	Specify the message type for Purchase Order using the drop-down (Error, Warning, or Ignored).
Bill Docs	Specify the message type for Billing Document using the drop-down (Error, Warning, or Ignored).
Supp Inv	Specify the message type for Supplier Invoice using the drop-down (Error, Warning, or Ignored).

Use the entries in the '[Recomm.](#)' column as a reference when making changes.

Ensure that the following messages are included:

Application Area	Msg No	Message Text
/GINB/ORDER	157	Sales order can't be changed with un-processed eDocuments
/GINB/ORDER	182	Enter valid order line number for item &1
/GINB/ORDER	183	Enter valid order schedule number for item &1

4. Save your changes.

5.1.1.2 Partner Functions

In this customizing step you map G-Invoicing-specific partner functions for requesting as well as servicing agency to standard partner functions.

Prerequisites

Partner functions have been created and set up in SD and MM configuration prior to use here.

Procedure

1. In Customizing for Public Sector Management, open ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Partner function mapping](#) .
2. Create new entries.
3. Enter the following data:

Field Name	Activity
Agency Ty	Select the Agency type from the list.
Type of Partner Function	Select the G-Invoicing partner type from the list.
Partner Function	Select the partner function from the list.

4. Save your changes.

5.1.1.3 Maintain Business Event Type Codes (BETC)

In this Customizing activity, you maintain BETC (Business Event Type Code) entries for both requesting and servicing agencies.

Context

BETCs identify the type of event that is recorded against a Treasury Account Symbol (TAS) and are used to implement CARS (Central Accounting Reporting System) business rules for the posting of events to the TAS. Required for ALCs designated as CARS Reporters.

Procedure

1. To access this Customizing activity, do one of the following:
 - In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Business Event Type Code](#) ►.
 - Execute transaction [SM30](#), enter `/GINB/V_BETC` as the table/view name, and click [Maintain](#).
2. Click [New Entries](#).
3. Maintain values for both Requesting Agency and Servicing Agency.
4. Save your entries.

Example

Agency Identifier	Fund Type	BETC value
Requesting Agency	(leave blank)	DISNGF
Servicing Agency	(leave blank)	COLL

5.1.1.4 Maintain Text IDs

In this Customizing activity, you can maintain text IDs against G-Invoicing objects.

Context

Comments that are added to text IDs under text objects are read and copied into the relevant G-Invoicing objects (orders and performances) when they are created.

Procedure

1. Execute transaction `VOTXN`.
2. Maintain text IDs as required.
3. In Customizing for Public Sector Management, open ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Text ID mapping](#) ►.
4. Click [New Entries](#) to create a new mapping between an existing text ID and a G-Invoicing object.
5. In the [Object](#) column, use the drop-down to select the relevant G-Invoicing object.
6. In the [Text Object](#) and [ID](#) columns, enter the relevant text ID information.

7. Save your entries.

Example

Object	Text Object	ID
Performance Comments	VBBK	GIPC
Requesting agency comment	EKKO	B02
Servicing agency comment	VBBK	GISC

5.1.1.5 RFC Destination for HUB system

In this customizing step, you can define the RFC destination for the HUB system.

Procedure

1. Execute transaction SM30.
2. Enter /GINB/RFCDEST as the table/view name and click [Maintain](#).
3. Click [New Entries](#).
4. Enter the following data:

Field Name	Activity
NAME	'HUB'
RFC_DEST	HUB system name

5.1.1.6 Attachment Configuration

Context

In order to validate attachments during the upload in the business object, based on G-Invoicing requirements, add the G-Invoicing attachment class in view [SGOSATTR](#).



Procedure

1. Execute transaction SM30.
2. Enter [SGOSATTR](#) as the table/view name and click [Maintain](#).
3. Select the entry for Name: [PCATTA_CREA](#).
4. In the Class column, change the class to [CL_GOS_SRV_ATTACHMENT_CREATE](#).
5. Save.

5.1.1.7 Maintain Settings to Support Partial Settlement

In order to use G-Invoicing's Partial Settlement functionality, you must:

- Implement the following SAP Notes:

SAP Note Number	Title	Description
3367192 	G-Invoicing: Partial Pay using BAPI (Core)	Together, these notes resolve an issue where using function module FMFG_POST_PAYMENT_IPAC to post partial payments in certain circumstances produces incorrect results.
3365402 	G-Invoicing: Partial Pay using BAPI (EA-PS)	

- If you wish to be able to use Partial Clearing by Account Assignment (PCLAA), enable business function PSM_USFED_PPAP_3.
To enable PSM_USFED_PPAP_3, see the Release Notes for Public Sector for SAP enhancement pack 5 for SAP ERP 6.0, page 123.

Note

Activating PCLAA is required if you wish to use the split view when working with receivable and payable open items and to determine to which split line you want to assign payments. It is also required if you wish to use the automation of partially accepted settlements for multi-line billing documents on servicing agency performances.

If you do not need this functionality, you may skip activating PCLAA.

- Activate the partial clearing feature
- Define the relevant ledger from which the split view of the open items is retrieved
- Define the document types that can be paid using this transaction. (This is not required if you are not using PCLAA.)
- Define the payment block to be applied to the open items once a partial payment is posted (to prevent them from being paid afterwards using standard FI transactions)

Document Compliance

An eDocument type supports the Settlement Out process, needed for Partial Settlement functionality to work:

eDocument Type	Description	Process Type	Additional Information
US_IGT_SEO	G-Inv Settlement Out	Outbound	Clearing document out posting based on performance data

For more information on eDocument configuration, see [Document Compliance Customizing \[page 126\]](#).

Related Information

[Activate Partial Clearing by Account Assignment \[page 40\]](#)

[Maintain Relevant Ledger for Split View \[page 41\]](#)

[Set Supported Document Types \[page 41\]](#)

[Set Payment Block \[page 42\]](#)

5.1.1.7.1 Activate Partial Clearing by Account Assignment

This is required if you wish to use the split view when working with receivable and payable open items and to determine to which split line you want to assign payments.

Prerequisites

If you wish to be able to use Partial Clearing by Account Assignment (PCLAA), enable business function PSM_USFED_PPAP_3.


To enable PSM_USFED_PPAP_3, see the Release Notes for Public Sector for SAP enhancement pack 5 for SAP ERP 6.0, page 123.

Context

In order to activate this functionality, you must activate two separate switches in the Customizing.

If you do not need to split receivable/payable open items, you may skip this configuration.

Procedure

1. Execute transaction *SPRO* and navigate to **Financial Accounting** > **Special Purpose Ledger** > **Basic Settings** > **Master Data** > **Ledger** > **Partial Clearing by Account Assignment** > **Activate Partial Clearing by Account Assignment** .

2. Click [New Entries](#).
3. Check the [Activate Partial Clearing by Acct Asst](#) checkbox.
4. Save your entry.

5.1.1.7.2 Maintain Relevant Ledger for Split View

In this activity, you maintain the relevant ledger to be used in the function for partial clearing by account assignment. For SAP Treasury G-Invoicing for SAP S/4HANA FPS01, no entry should be maintained in this activity.

Procedure

1. Execute transaction [SPRO](#) and navigate to [Financial Accounting > Special Purpose Ledger > Basic Settings > Master Data > Ledger > Partial Clearing by Account Assignment > Maintain Relevant Ledger for Split View](#).
2. Ensure that no entry is made in the ledger field.

5.1.1.7.3 Set Supported Document Types

In this Customizing activity, you maintain the document types that can be paid using the partial clearing by account assignment.

Prerequisites

You have activated PCLAA as described in [Maintain Settings to Support Partial Settlement \[page 39\]](#).

Note

Activating PCLAA is required if you wish to use the split view when working with receivable and payable open items and to determine to which split line you want to assign payments. If you do not need to split receivable/payable open items, you may skip activating PCLAA.

Procedure


1. Execute transaction [SPRO](#) and navigate to [Financial Accounting > Special Purpose Ledger > Basic Settings > Master Data > Ledger > Partial Clearing by Account Assignment > Set Supported Document Types](#).

2. For each document type that you pay with the partial clearing by account assignment feature, click [New Entries](#).
 1. Click [New Entries](#).
 2. Enter the document types of the documents that you pay with the partial clearing by account assignment.
3. Save your entries.

5.1.1.7.4 Set Payment Block

In this Customizing activity, you maintain a payment block for the open items that you pay using the partial clearing by account assignment.

Procedure

1. Execute transaction *SPRO* and navigate to [Financial Accounting](#) > [Special Purpose Ledger](#) > [Basic Settings](#) > [Master Data](#) > [Ledger](#) > [Partial Clearing by Account Assignment](#) > [Set Payment Block](#) .
2. Click [New Entries](#).
3. Enter the payment block to be used in the block of the payable/receivable open item. The same payment block is also used to block the payment itself.

5.1.1.8 Maintain Settings to Support Print Form 7600B Functionality

Prerequisites

ADS (Adobe Document Services) must be active in your backend ERP system. For more information on ADS, see the [Adobe Document Services Configuration Guide](#).

Context

If you wish, you can print form 7600B from orders from both ERP and the Hub. The form provides essential information about newly created orders for approvers, enabling them to make effective approval decisions.

In order to be able to use Print Form 7600B functionality, the output type for purchase orders and sales orders must be configured in systems by the standard setup procedures of the respective product version.

BAdI /GINB/BADI_7600B_ATTRIB is provided to map additional order attributes to display in the form. This BAdI is triggered whenever an Order Form 7600B is printed from ERP. This BAdI provides method UPDATE_ATTRIBUTE_VALUES to map additional Print Form Attributes based on the PDF source. For more information on this BAdI, see [BAdI: Update G-Invoicing Print Form Attributes \[page 44\]](#).

Note

The steps described below are not needed if you do not require the ability to print Form 7600B from purchase orders or sales orders. The exact steps for configuring output type for purchase order and sales order may vary depending on your product version's output management procedures. The steps below illustrate one way to do this. Consult the SAP Online Help for your product version for more details.

Note

To print form 7600B for purchase requisitions, refer to SAP consulting note [3359206](#) - *Procedure to integrate Purchase Requisition with 7600B Form*.

Procedure

1. Maintain the output device in the user profile.
 1. Execute transaction [SU01](#) or [SU3](#).
 2. Select the user profile that needs the ability to print form 7600B.
 3. On the [Defaults](#) tab in the [Spool Control](#) section, ensure that output device to be used as the default for printing form is maintained.
2. If you would like to be able to print form 7600B for purchase orders:
 1. Configure the purchase order output type.
 1. In Customizing, navigate to [Materials Management](#) > [Purchasing](#) > [Messages](#) > [Output Control](#) > [Message Types](#) > [Define Message Types for Purchase Order](#).
 2. Select [Maintain Message Type for PO](#).
 3. Create a custom output type. You can also select an existing output type and click [Copy As](#) to create one.
 4. Choose the custom output type and double-click [Processing Routines](#) from the left navigation panel.
 5. Maintain the following values for Medium 'Print Output':
Program Name: /GINB/RENDER_PUR_ORD_PDF
Form Routine: RENDER_PO_PDF
Form Name: /GINB/FORM_ORDER_7600B
 2. Assign the purchase order output type to the message schema.
 1. In Customizing, navigate to [Materials Management](#) > [Purchasing](#) > [Messages](#) > [Output Control](#) > [Message Determination Schemas](#) > [Define Message Schema for Purchase Order](#).
 2. Select [Maintain Message Determination Schema: Purchase Order](#).
 3. Select the relevant message schema assigned to purchase order output and double-click [Control data](#) in the left-panel navigation.
 4. Click [New Entries](#) and maintain the custom output type you created there. Save your settings.

3. If you would like to be able to print form 7600B for sales orders:
 1. Configure the sales order output type.
 1. In Customizing, navigate to ► [Sales and Distribution](#) ► [Basic Functions](#) ► [Output Control](#) ► [Output Determination](#) ► [Output Determination Using the Condition Technique](#) ► [Maintain Output Determination for Sales Documents](#) ► [Maintain Output Types](#) .
 2. Create a custom output type. You can also select an existing output type and click [Copy As](#) to create one.
 3. Choose the custom output type and double click on [Processing Routines](#) from the left navigation panel.
 4. Maintain the following values for Medium 'Print Output'

Program Name: /GINB/RENDER_SLS_ORD_PDF

Form Routine: RENDER_SO_PDF

Form Name: /GINB/FORM_ORDER_7600B
 2. Assign the sales order output type to the message schema.
 1. In Customizing, navigate to ► [Sales and Distribution](#) ► [Basic Functions](#) ► [Output Control](#) ► [Output Determination](#) ► [Output Determination Using the Condition Technique](#) ► [Maintain Output Determination for Sales Documents](#) ► [Maintain Output Determination Procedure](#) .
 2. Select relevant message schema assigned to sales order output determination and double-click [Control data](#) in the left-panel navigation.
 3. Click [New Entries](#) and maintain the custom output type you created there. Save your settings.

5.1.1.8.1 BAdI: Update G-Invoicing Print Form Attributes

You can use this Business Add-In (BAdI) to update values for the G-Invoicing 7600B Order Print Form.

Context

BAdI /GINB/BADI_7600B_ATTRIB is provided to map additional order attributes to display in the form. This BAdI is triggered whenever an Order Form 7600B is printed from ERP. This BAdI provides method UPDATE_ATTRIBUTE_VALUES to map additional Print Form Attributes based on the PDF source.

This BAdI is triggered before the 7600B print form is rendered at runtime and is called for the following PDF source scenarios:

- Purchase Order (R)
- Sales Order (S)
- Purchase Requisition (PR)

Standard Settings

For more information about the standard settings (filters, fallback class, single or multiple use), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction SE18).

- Interface: /GINB/IF_7600B_ATTRIB

Procedure

1. If you want to use your own implementation, in the Customizing, navigate to ► [Public Sector Management](#) ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [BAdI: Update G-Invoicing Print Form Attributes](#) ► and execute the activity.
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the [BAdI](#) tab and choose [Create BAdI](#). In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description. Then press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your pointer on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and `endmethod` statements. The sample implementation is copied automatically.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section. The following example implementation is available:

- `/GINB/EHI_7600B_ATTRIB_EX`

You can use example class `/GINB/CL_EX_7600B_ATTRIB` for your BAdI implementation.

5.1.1.9 Maintain G-Invoicing Object Class Codes

Context

In this activity, you maintain optional object class codes for G-Invoicing.

Procedure

1. Execute transaction [SM30](#), enter `/GINB/V_OBJ_CC` as the table/view name, and click [Maintain](#).
2. Click [New Entries](#).
3. Maintain values for both [Type](#) and [Object Class Code](#) for each entry you wish to add.
4. Save your entries.

5.1.1.10 Maintain View PSC Names

Context

In this activity, you maintain optional Product Service Codes (PSCs) for G-Invoicing.

Procedure

1. Execute transaction [SM30](#), enter [/GINB/V_PSC_CODE](#) as the table/view name, and click [Maintain](#).
2. Click [New Entries](#).
3. Maintain values for [Item Code](#), [PSC Cat.](#), [Prod. Service Name](#), and [PSC Full Name](#) for each entry you wish to add.
4. Save your entries.

Example

Item Code	PSC Cat.	Prod. Service Name	PSC Full Name
4120	P Product	Air Conditioning Equipment	Air Conditioning Equipment
4130	P Product	Refrig and Air Cond Components	Refrigeration and Air Conditioning Components
AC11	S Service	Military: Basic Research	National Defense R&D Services: Department of Defense
B502	S Service	Special Supplies/Analysis-Air Quality	Special Supplies/Analysis-Air Quality

5.1.1.11 Maintain Agency Location Codes

In this Customizing activity, you maintain the agency location codes (ALCs) for your agency, as specified by the U.S. Federal Treasury.

Procedure

1. In Customizing, execute [Public Sector Management](#) [Functions for US Federal Govt](#) [Payment Processing](#) [Intragovernmental payment and collections \(IPAC\)](#) [Maintain Agency Location Codes](#).

2. Confirm that the ALCs being used in the SO and PO G-Invoicing screens have been set up.
3. If you need to create new entries, click [New Entries](#) to add new agency location codes. Save your entries.

Example

Agency Location Code	Description	Int ALC
00003127	Agency XXXX	Checked

5.1.1.12 Maintain US Federal Govt Field values

In this Customizing activity, you maintain Trading Partner (TP) and Treasury Account Symbol (TAS) values.

Procedure

1. In Customizing, execute [Public Sector Management](#) [Functions for US Federal Govt](#) [General Settings](#) [US Federal Govt Fields](#) [Maintain US Federal Govt Field Values](#).
2. In the right panel navigation, select the relevant data element. You can also click [New Entries](#) to add a field for which you want to maintain values.
3. In the left panel navigation, select [Maintain Field Values](#).
4. Maintain the [Field Value](#) and [Field Value Text](#) for your field.
5. Save your entries.

Example

Example for field FMFG_TP_MAIN_ACCT

Field Value	Field Value Text
0550	Main Acct 0550

5.1.2 Servicing Agency

This section describes servicing-agency-related configuration steps for SAP Treasury G-Invoicing for S/4HANA.

5.1.2.1 Document types relevant for G-Invoicing (Servicing side)

In this step you define the document types that you want to use for the G-Invoicing Document Out eDocument Process.

Context

All G-Invoicing validations will be active for these types. This customizing activity allows you to maintain sales document types that are relevant for G-Invoicing. G-Invoicing functionality, including screens and field validations, will only be enabled for these sales document types.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Document types relevant for G-Invoicing \(Servicing side\)](#) ►.
2. Create new entries.
3. Enter the following data:

Field Name	Activity
SaTy	Select Sales Document Type from the list For example, RONA, CR, DR, ROWA, OR

4. Save your changes.

5.1.2.2 Billing document type for eDocument

In this Customizing activity, you define the billing document types that you want to use for G-Invoicing Billing Document Out eDocument Process.

Context

This Customizing activity allows you to maintain Billing document types that are relevant for G-Invoicing. G-Invoicing functionality will only be enabled for these billing document types.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Billing document type for eDocument](#) ►.
2. Create new entries.
3. Enter the following data.

Field Name	Activity
Billing Type	Select the Billing Document type from the list. For example, F2.

4. Save your changes.

Example

Billing Type	Description
F2	Invoice
FAZ	Downpayment Request

5.1.2.3 Item Categories (Servicing side)

In this Customizing activity, you define item categories relevant for specific G-Invoicing-relevant sales documents.

Context

Specify item categories that are services and for which "dollarization" is required when transmitting to Treasury. Dollarization is where the amount on the PO is converted to a quantity. For example, if an SO has \$1000 with a quantity of 1 EA, this would get converted to a \$1 unit price, unit of measure DO, and quantity of 1000.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Item Categories \(Servicing side\)](#) ►.
2. Create new entries.

3. Enter the following data:

Field Name	Activity
Item Category	Select the Item Category from the list.

4. Save your changes.

Example

Item Category	Description
RONA	W/O Milestone Bill

5.1.2.4 Advance payment item categories

In this Customizing activity, you maintain item categories that will have the *Advance Payment Indicator* set to true.

Context

If there is a record for a sales order item in this table, the sales order item is sent to Treasury with *Advance Payment Indicator* set to true. G-Invoicing advance payment attributes becomes mandatory for the Sales Order containing such item.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Advance payment item categories](#) ►.
2. Create an entry for each item category that requires the Advance Payment Indicator.
3. Save your entries.

Example

Item Category	Description
ROWA	Milestone-Bill.Plan

5.1.2.5 Cash Accounts (Servicing side)

In this Customizing activity, you define which G/L account and document type will be used when posting clearing documents in the eDocument G-Invoicing Settlement In process.

Context

This G/L account and document type will only be used for servicing side. For G-Invoicing settlement processing, the system needs a corresponding G/L account that should be used for the posting.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Cash Accounts \(Servicing side\)](#) ►.
2. Create new entries.
3. Enter the following data:

Field Name	Activity
CoCd	Select the Company Code from the list.
Type	Select the cash account type from the list.
G/L Account	Enter the G/L account to which the transaction figures are updated.
Type	Select the FI document type from the list.

4. Save your changes.

Example

CoCd	Type	G/L Account	Type
9000	Collection	1010.0000	DZ
9000	Payment	1010.0000	DZ

5.1.2.6 Cash Accounts Down Payment In (Servicing side)

In this Customizing activity, you define which G/L account and document type will be used when posting downpayment documents in the eDocument G-Invoicing Settlement In process.

Context

This G/L account and document type will only be used for servicing side. For G-Invoicing downpayment settlement, the system needs a corresponding G/L account that should be used for the posting.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Cash Accounts Down Payment In \(Servicing side\)](#) ►.
2. Create new entries.
3. Enter the following data:

Field Name	Activity
CoCd	Select the Company Code from the list.
Type	Select the cash account type from the list.
G/L Account	Enter the G/L account to which the transaction figures are updated.
Type	Select the account documenting type from the list.

4. Save your changes.

Example

CoCd	Type	G/L Account	Type
9000	Collection	1010.0000	DZ

5.1.2.7 Accounts of Down Payment Reversal of Advances from Prior Year

In this Customizing activity, you define the FI document type and G/L accounts or accounts that will be used when clearing reverse down payment of advances from the prior year. This feature is only used on the servicing side.

Prerequisites

Review or implement the manual activity described in SAP Note [3299157](#) - G-Invoicing Down Payment In eDocument execution is end up with error.

Context

Note

If you do not maintain any entries in this Customizing activity, the functionality to reverse advances from prior years will not be available to users.

Define the document type and the G/L accounts that you require. There are two possible methods to enter the G/L account:

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Accounts of Down Payment Reversal of Advances from Prior Year](#) ►.
2. Create an entry for the company code and document type you wish to maintain.
3. Under [Maintain Accounts for Reversal](#), do one of the following:
 - Maintain a [cash disbursement account](#), a special account for collecting refunds of advances from the prior year
 - Maintain three lines:
 - [A cash disbursement account](#)
A special account for collecting refunds of advances from the prior year
 - [A debit entry account](#)
Prior-Year Unfilled Customer Orders With Advance - Refunds Paid
 - [A credit entry account](#)
Delivered Orders - Obligations, Paid
4. Save your changes.

Example

- Example 1: You wish to maintain only G/L account 1000.0000 as a cash disbursement account for clearing document type DZ for company code 9000:
 1. Create a new entry for company code **9000** and account type **DZ**.
 2. Under [Maintain Accounts for Reversal](#), maintain the following entries:

Type	Maintain Account for Reversal
Actual Cash Disbursement Account	1000.0000

- Example 2: You wish to maintain cash disbursement account 1000.1030, debit entry account 4253.0000, and credit entry account 4902.0000 for clearing document type DZ for company code 9000:
 1. Create a new entry for company code 9000 and account type DZ.
 2. Under [Maintain Accounts for Reversal](#), maintain the following entries:

Type	Maintain Account for Reversal
Actual Cash Disbursement Account	1000.0000
Debit Account	4253.0000
Credit Account	4902.0000

5.1.2.8 Define Incompleteness Procedures

In this customizing activity, you define the incompleteness procedures that should apply to the various incompleteness objects.

Context

In an incompleteness procedure, you group together the fields that are to be checked for completeness. If you have not entered data in one of the fields in the document, the document is incomplete. Depending on the status group, you can block certain subsequent activities for the document.

For every field in the procedure, you also have to define whether a warning message should be issued during processing if no data is entered in this field. This function does not exist in delivery processing. When you select the control field, it has no further consequences.

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Define Incompleteness Procedures](#) ►. (Alternatively,

you can navigate to ► [Sales and Distribution](#) ► [Basic Functions](#) ► [Log Of Incomplete Items](#) ► [Define Incompleteness Procedures](#) ►.)

2. Follow the steps as provided on [SAP Help Portal](#) on the product page for your ERP release. Search for settings in Sales and Distribution for "Assign Incompleteness Procedures."

Example

Group A: Sales - Header

Procedures

GC	G-Invoicing CMR		
GI	G-Invoicing		

Incompletion Fields: GC

VBAK	/GINB/GTC_NUM	GT&C Number	
VBAK	/GINB/REF_PERF_NUM	Reference Perf Num	

Incompletion Fields: GI

VBAK	/GINB/ALC	Agency ALC	K_INT_BADI_1
VBAK	/GINB/FOB_POINT	FOB Point	K_INT_BADI_1
VBAK	/GINB/GTC_NUM	GT&C Number	K_INT_BADI_1
VBAK	/GINB/ORG_GROUP_ID	Group ID	K_INT_BADI_1
VBAK	NETWR	Net Value	KKON

Group B: Sales Item

GF	G-Invoicing Fields			
----	--------------------	--	--	--

Incompletion Fields: GF

VBAP	/GINB/ TYPE_SRV_REQMNT	Service Reqrmnt Type	P_INT_BADI_1	01
VBAP	NETWR	Net value	PKON	01

5.1.2.9 Assign Incompleteness Procedures

In this Customizing activity, you assign procedures to the different incompleteness objects.

Context

Procedure

1. In Customizing for Public Sector Management navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Assign Incompleteness Procedures](#) ►. (Alternatively, navigate to ► [Sales and Distribution](#) ► [Basic Functions](#) ► ► [Log Of Incomplete Items](#) ► [Assign Incompleteness Procedures](#) ►.)
2. Follow the steps as provided on [SAP Help Portal](#) on the product page for your ERP release. Search for settings in Sales and Distribution for "Assign Incompleteness Procedures."

Example

Assign procedures to the sales document types

CR1	JFMIP Credit Memo	GC	G-Invoicing CMR
CR	Credit Memo Request	GI	G-Invoicing
RONA	Reimb Order No Adv	GI	G-Invoicing
ROWA	Reimb Ord With Adv	GI	G-Invoicing
ROWB	R/O With Adv at Line	GI	G-Invoicing
OR	Standard order	GI	G-Invoicing

Assign procedures to the sales document item categories

RONA	W/O Milestone Bill	GF	G-Invoicing Fields
ROWA	Milestone-Bill.Plan	GF	G-Invoicing Fields
TAN	Standard Item	GF	G-Invoicing Fields

5.1.2.10 Accounts of Accrual Posting (Servicing Side)

Context

In this Customizing activity, you define the G/L account for a given company code and corresponding document type that will be used to fetch the accrual postings to enable the creation of deferred performances. The G/L account and document type defined here are used on the servicing side.

Procedure

1. In the Customizing for Public Sector Management, navigate to ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Servicing Agency](#) ► [Accounts of Accrual Posting \(Servicing Side\)](#). ►
2. Select the line with the company code and document type for which you wish to maintain the G/L account to be used for deferred performances. If you need to, you can click [New Entries](#) to add a new line.
3. In the left-hand navigation, click [Maintain Accounts for Accrual postings\(Servicing\)](#).
4. Maintain the G/L account for the entry you've selected.
5. Save your entries.

Example

- Company Code: **9000**
- Document Type: **DR**
- G/L Account: **1000.1100**

5.1.2.11 Servicing Agency: BAdIs

This section describes SAP Treasury G-Invoicing BAdIs on your ERP system relevant to servicing agencies.

5.1.2.11.1 BAdI: Attachment Control for SO before Sending to the Hub

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component. You can use this BAdI to manage sending attachments to the Hub.

Context

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18). If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section. The following example implementation is available:

- /GINB/GINV_CUSTOM_UTIL

You can use this example class for your BAdI implementation.

5.1.2.11.2 BAdI: Define SO G-Invoicing Relevance

This Business Add-In(BAdI) is used to determine if an order is relevant for G-Invoicing. The enhancement point is /GINB/GINV_CUSTUI_BADIS.

Context

The example implementation calls /GINB/SO_GINV_RELEVANT_EX, which implements interface /GINB/IF_SO_GINV_RELEVANT.

You can use this BAdI to define whether a sales order is relevant for G-Invoicing. You can manipulate it based on importing parameters.

Note

Implementation Example Class /GINB/CL_EXM_SO_GINV_RELEVANT, which implements interface /GINB/IF_SO_GINV_RELEVANT.

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation.
2. If no composite exists, create a new one by clicking [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and click [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, and then [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
9. The sample implementation is copied automatically.
10. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/SO_GINV_RELEVANT_EX

5.1.2.11.3 BAdI: Field Control in the Sales Document

This Business Add-In (BAdI) is used to manage the fields in the sales document depending on the status of the order number. This is a default implementation of the BAdI definition, which is called if all the BAdI implementations are inactive or none of the BAdI implementation exists. The enhancement point is /GINB/GINV_CUSTUI_BADIS.

Context

You can use to define which fields are editable and which are not. You can manipulate it based on the importing parameters.

Note

Fallback Class /GINB/CL_IM_SD_ORD_MOD that implements interface /GINB/IF_GINV_SD_ORD_MOD.

For more information about the standard settings (filters, fallback class, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and end method statements. The sample implementation is copied automatically.

8. Save and activate all objects.

5.1.2.11.4 BAdI: Prefill Field Values for Sales Document Header

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component. You can use this BAdI to prefill field values in the G-invoicing fields. The enhancement point is /GINB/GINV_CUSTUI_BADIS.

Context

You can specify display options (display only, mandatory, or hidden) for each field that appears in the G-Invoicing dialog box. You can also adjust the field checks in the dialog (or on a document level).

Note

Implementation Example Class /GINB/CL_EXM_IM_SD_HDR_CUSTUI that implements interface /GINB/IF_GINV_SD_HEADER_CUSTUI

Requirements

- You have already added your fields to the database by creating an append structure to the /GINB/S_SO_HEADER_EXT structure, which is included in the VBAK table, and defining the customer fields in the append structure.
- You have already created the screen program and included the customer fields by doing the following:
 1. Copy the delivered /GINB/PO_HEADER_CUSTUI_EX function group.
 2. Add the new field into dynpro 0100 and reference the /GINB/S_SO_HEADER_EXT structure.

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18). For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).

5. On the next screen, expand the implementation node and double-click *Class*.
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- `/GIMB/EHI_SD_HEADER_CUSTUI_EX`

You can use this example class for your BAdI implementation. You must define the screen and screen program in the implementation.

5.1.2.11.5 BAdI: Prefill Field Values for Sales Document Item

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component. The enhancement point is `/GINB/GINV_CUSTUI_BADIS`.

Context

You can use this BAdI to prefill field values in the G-Invoicing fields. You can specify display options (display only, mandatory, or hidden) for each field that appears in the G-Invoicing dialog box. You can also adjust the field checks in the dialog (or on a document level).

Note

Implementation Example Class `/GINB/CL_EXM_IM_SD_ITEM_CUSTUI` that implements interface `/GINB/IF_GINV_SD_ITEM_CUSTUI`.

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction `SE18`). For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

Requirements

- You have already added your fields to the database by creating an append structure to the `/GINB/S_SO_ITEM_EXT` structure, which is included in the VBAP table and defining the customer fields in the append structure.

- You have already created the screen program and included the customer fields by doing the following:
 1. Copy the delivered /GINB/SD_ITEM_CUSTUI_EX function group.
 2. Add the new field into dynpro 0100 and reference the /GINB/S_SO_ITEM_EXT structure

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and end method statements. The sample implementation is copied automatically.
8. Save and activate all objects

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/EHI_SD_ITEM_CUSTUI_EX

You can use this example class for your BAdI implementation. You must define the screen and screen program in the implementation.

5.1.2.11.6 BAdI: Fetch the Accrual Postings (Servicing Sides)

Context

This Business Add-In (BAdI), /GINB/FILL_ACCRUAL_POSTING, is used to fetch the accrual postings for the sales orders that will be then used to create deferred performances. This is a default implementation of BAdI definition that is called if all the BAdI implementations are inactive or no other BAdI implementation exists.

Note

Fallback Class `/GINB/CL_FILL_ACCRUAL_POSTING`, which implements interface `/GINB/IF_FILL_ACCRUAL_POSTING`

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the Customizing, navigate to **Public sector Management** > **Functions for US Federal Government** > **General Settings** > **G-Invoicing** > **Servicing Agency** > **Business Add Ins (BAdI)** > **BAdI: Fetch the Accrual Postings (Servicing side)**.
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to development class.
4. Select the BAdI tab and choose [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then press [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With the cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
9. Save and activate all objects.

5.1.2.11.7 BAdI: Facilitate Internal Mod Scenarios - BIO SO

This Business Add-In (BAdI), `/GINB/DYNAMIC_MSG_HANDLING_SO`, is used to configure the messages that are raised during the internal modification and save of existing sales orders (SOs). For example, during year-end-processing of sales orders, you may want to modify an SO without a corresponding modification being sent by the grantor. This BAdI can be used to bypass the errors and allow for the SO to be saved.

Context

When a sales order is saved or processed, messages generated by G-Invoicing business validations during the processing can be Errors. They can also be configured as Warnings or set to Ignore, instead, by implementing the BAdI methods `MESSAGE_CONFIG` or `MESSAGE_CONFIG_SAVE`. This may be done, for example, to support certain fiscal scenarios that require permitting an order in ECC to be saved with differences from the same order in the Hub.

When a G-Invoicing business validation results in an Error message, the order cannot be saved. If the message is set to Warning or Ignore, though, the system will allow you to make changes to sales orders independent of the BIO Treasury order data on the servicing side. In such circumstances, the "Out of sync" flag is set on the ERP sales order header and also on the seller Hub order. For more about resolving out-of-sync orders, see [Check for and Resolve G-Invoicing Sales Order Data Inconsistencies](#).

The BAdI won't be invoked during the creation of sales order (that is, for transaction VA01).

The first BAdI method, [MESSAGE_CONFIG](#), is used to override mandatory field checks like line number and schedule number.

The second BAdI method, [MESSAGE_CONFIG_SAVE](#), is used to override business checks at the time of save.

The third BAdI method, [OUTOFSYNC_BILLINGBLOCK_OVERRIDE](#), is used to set the out-of-sync indicator independent of the first two BAdI methods. It is also possible to set or override a billing block at the item level using this method.

If you want to use your own implementation, complete the following steps:

Procedure

1. In the dialog box, enter a name for the enhancement implementation, a short text, and the composite enhancement implementation.

If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description and press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your pointer on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements.

The sample implementation is copied automatically.

8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the [Enhancement Spot Element Definitions](#) tab in the Implementation Example Classes section.

The following example implementations is available:

- `/GINB/CL_EX_DYN_MSG_HANDLG_SO` - Implementation for BADI `/GINB/DYNAMIC_MSG_HANDLING_SO`

You can use this example class for your BAdI implementation.

5.1.2.11.8 BAdI: G-Invoicing BAdI Definition for Partner Information

BAdI /GINB/BADI_PARTNER_INFO is used to derive *Funding Official*, *Program Official*, *Point of Contact* and *Prepared by* when the order is sent to the Hub.

Context

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation.
2. If no composite exists, create a new one by clicking [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and click [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, and then [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
9. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementation is available:

/GINB/CL_IM_PARTNER_INFO

This example implementation will be called if you do not use your own implementation of the BAdI.

5.1.3 Requesting Agency

This section describes requesting-agency-relevant configuration steps for SAP Treasury G-Invoicing for S/4HANA.

5.1.3.1 Document types relevant for G-Invoicing (Requesting side)

In this customizing step, you define the document types that are relevant for G-Invoicing from the requesting (or buyer) side.

Context

G-Invoicing functionality, including G-Invoicing specific validations and eDocument processing will only be enabled for these purchasing document types.

Procedure

1. Access Customizing for Public Sector Management ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Requesting Agency](#) ► [Document types relevant for G-Invoicing](#) ►.
2. From the dialog structure on the left, ensure [Purchase Requisition types for G-Invoicing](#) is highlighted. If not, double-click [Purchase Requisition types for G-Invoicing](#).
3. Click [New Entries](#).
4. Enter the following data:

Field Name	Activity
OType	Select the Purchase Requisition doc type from the list.
Skip Msgs	Select this indicator to skip the validations

5. Double-click [Purchase Order types for G-Invoicing](#).
6. Click [New Entries](#).
7. Enter the following data:

Field Name	Activity
OType	Select the Purchase Order doc type from the list.

8. Save your changes.

5.1.3.2 Item Categories (Requesting side)

In this customizing step, you define the Item Categories that are relevant for the Items in G-Invoicing document from requesting (or buyer) side.

Context

Specify item categories that are services and for which "dollarization" is required when transmitting to Treasury. Dollarization is where the amount on the PO is converted to a quantity. For example, if a PO has \$1000 with a quantity of 1 AU, this would get converted to a \$1 unit price, unit of measure DO, and quantity of 1000.

Procedure

1. Access Customizing for Public Sector Management ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Requesting Agency](#) ► [Item Categories \(Requesting side\)](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
ItCat	Select the Item Category from the list.

4. Save your entries.

5.1.3.3 Cash Accounts (Requesting side)

In this customizing step, you can define which G/L account and document type will be used when posting clearing documents in the eDocument G-Inv Settlement In process.

Context

This G/L account and document type will only be used for the requesting side.

Procedure

1. Access Customizing for Public Sector Management ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Requesting Agency](#) ► [Cash Accounts \(Requesting side\)](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
CoCd	Select the Company Code from the list.
Type	Select the type of cash account from the list
G/L Account	Enter the G/L account to which the transaction figures are updated.
Type	Select the accounting document type from the list.

4. Save your entries.

5.1.3.4 Cash Accounts Down Payment In (Requesting side)

In this customizing step, you can define which G/L account and document type will be used when posting down payment documents in the eDocument G-Inv Down Payment In process.

Context

This G/L account and document type will only be used for the requesting side.

Procedure

1. Access Customizing for Public Sector Management ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Requesting Agency](#) ► [Cash Accounts Down Payment In \(Requesting side\)](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
CoCd	Select the Company Code from the list.
Type	Select the type of cash account from the list

Field Name	Activity
G/L Account	Enter the G/L account to which the transaction figures are updated.
Type	Select the accounting document type from the list.

4. Save your entries

5.1.3.5 Configure constructive receipt days

In this customizing step, you define the maximum number of constructive receipt days allowed.

Context

The constructive receipt days are the agreed-upon number of days within which a buyer must respond to a performance transaction. If the buyer does not submit a performance transaction within this time frame, fund settlement is automatically initiated by Treasury.

Procedure

1. Access Customizing for Public Sector Management ► [Functions for US Federal Government](#) ► [General Settings](#) ► [G-Invoicing](#) ► [Requesting Agency](#) ► [Configure constructive receipt days](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Ident	Enter a numeric value for constructive receipt days.

4. Save your entries.

5.1.3.6 Field Selection Key GINV01 for Purchase Order

Context

These steps are required in order to prevent a purchase order from being changed when its status should prevent changes.

Procedure

1. Execute transaction SPRO and navigate to ► *Materials Management* ► *Purchasing* ► *Purchase Order* ► *Define screen layout at Document Level* ►
2. Create a new entry with the following values:
 - *FSel.:* GINV01
 - *Description:* PO Quantity in ME22N
3. For the *Quantity and Price* selection group, set the *Quantity* flag to *Reqd.entry*.
4. For the GR/IR Control selection group, set the *"Delivery Completed" Indicator* and *Final invoice indicator* flags to *Optional Entry*.
5. Set all the other flags in all selection groups to *Display*.

5.1.3.7 Accounts of Accrual Posting (Requesting Side)

Context

In this Customizing activity, you define which G/L account and document type will be used when posting the accruals and, in the case of reversal accrual postings, the reversal reason. This G/L account and document type will only be used for the requesting side.

Procedure

1. In the Customizing, navigate to ► *Public sector Management* ► *Functions for US Federal Government* ► *General Settings* ► *G-Invoicing* ► *Requesting Agency* ► *Accounts of Accrual Posting (Requesting Side)* ►.
2. Maintain the *Company Code*, *Document Type*, and *Reversal Reason*. If you need to, you can click *New Entries* to create a new line.
3. In the left-hand navigation, click *Maintain Accounts for Accrual postings(requesting)*.
4. Maintain the G/L account information. Save your entries.
 - For the Credit/Debit Budgetary Ledgers, the G/L account has to be specified manually.
 - For Accrual Expense (Debit), you can either maintain the G/L manually or select the option to derive the G/L from the PO.
 - For Accrual Expense (Credit), you can either maintain the G/L manually or it can be derived from the vendor account of the PO. For vendor accounts, you can also use the option to provide the special G/L indicator.
5. Save your entries.

Example

- Maintain Doc. Type (Requestion) (header information)
 - Company Code: **9000**
 - Document type: **KR**
 - Reversal Reason: **02**
- Maintain Accounts for Accrual postings (Requesting) (detail information)
 - Account Type: **Debit Budgetary ledger**
 - G/L Account: **1000.1000**

5.1.3.8 Requesting Agency: BAdIs

This section describes SAP Treasury G-Invoicing for SAP S/4HANA BAdIs on your ERP system relevant to requesting agencies.

5.1.3.8.1 BAdI: Define PO G-Invoicing Relevant

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component. You can use this BAdI to define Purchase Order is G-invoicing relevant or not. You can manipulate it based on importing parameters.

Context

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18). If you want to use your own implementation, complete the steps below.

Note

Implementation Example Class `/GINB/CL_EXM_PO_GINV_RELEVANT` that implements interface `/GINB/IF_PO_GINV_RELEVANT`.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.

3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/CL_EXM_PO_GINV_RELEVANT

You can use this example class for your BAdI implementation.

5.1.3.8.2 BAdI: Field Control in the Purchase Order

This Business Add-In (BAdI) is used to manage the fields in the purchase order, depending on the status of the order number. This is a default implementation of BAdI definition, which is called if all the BAdI implementations are inactive or none of the BAdI implementations exist.

Context

You can use this BAdI to define which fields are editable and which are not. You can manipulate it based on the importing parameters. For more information about the standard settings (filters, fallback class, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

Note

Fallback Class /GINB/CL_BADI_FIELD_CONTROL_PO that implements interface /GINB/IF_BADI_FIELD_CONTROL_PO.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).

2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

5.1.3.8.3 BAdI: Prefill Field Values for Purchase Order Header

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component.

Context

You can use this BAdI to prefill field values in the G-invoicing fields. You can specify display options (display only, mandatory, or hidden) for each field that appears in the G-invoicing dialog box. You can also adjust the field checks in the dialog (or on a document level). For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18). For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

Note

Implementation Example Class /GINB/CL_EXM_IM_PO_HDR_CUSTUI that implements interface /GINB/IF_GINV_PO_HEADER_CUSTUI

Requirements

- You have already added your fields to the database by creating an append structure to the /GINB/S_PO_H_EXT structure, which is included in the POEXT table and defining the customer fields in the append structure.
- You have already created the screen program and included the customer fields by doing the following:
 1. Copy the delivered /GINB/PO_HEADER_CUSTUI_EX function group.
 2. Add the new field into dynpro 0100 and reference the /GINB/S_PO_H_EXT structure.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).

2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/EHI_PO_HEADER_CUSTUI_EX

You can use this example class for your BAdI implementation.

5.1.3.8.4 BAdI: Prefill Field Values for Purchase Order Item

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component.

Context

You can use this BAdI to prefill field values in the G-invoicing fields. You can specify display options (display only, mandatory, or hidden) for each field that appears in the G-invoicing dialog box. You can also adjust the field checks in the dialog (or on a document level). For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18). For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

Note

Implementation Example Class /GINB/CL_EXM_IM_PO_ITEM_CUSTUI that implements interface /GINB/IF_GINV_PO_ITEM_CUSTUI

Requirements

- You have already added your fields to the database by creating an append structure to the /GINB/S_PO_EXT structure, which is included in the POEXT table and defining the customer fields in the append structure.

- You have already created the screen program and included the customer fields by doing the following:
 1. Copy the delivered /GINB/PO_ITEM_CUSTUI_EX function group.
 2. Add the new field into dynpro 0100 and reference the /GINB/S_PO_EXT structure.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/EHI_PO_ITEM_CUSTUI_EX

You can use this example class for your BAdI implementation.

5.1.3.8.5 BAdI: Prefill Field Values for Purchase Requisition

This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component.

Context

You can use this BAdI to prefill field values in the G-invoicing fields. You can specify display options (display only, mandatory, or hidden) for each field that appears in the G-invoicing dialog box. You can also adjust the field checks in the dialog (or on a document level). For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

Note

Implementation Example Class /GINB/CL_IM_PR_CUSTUI_EX that implements interface /GINB/IF_GINV_PR_CUSTUI

Requirements

- You have already added your fields to the database by creating an append structure to the /GINB/S_PR structure, which is included in the PREXT table and defining the customer fields in the append structure.
- You have already created the screen program and included the customer fields by doing the following:
 1. Copy the delivered /GINB/PR_CUSTUI_EX function group.
 2. Add the new field into dynpro 0100 and reference the /GINB/S_PR_EXT structure.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/EHI_PR_CUSTUI_EX

You can use this example class for your BAdI implementation.

5.1.3.8.6 BAdI: Attachment Control for PO Before Sending to the Hub

You can use this BAdI to filter attachments before sending to HUB.

Context

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

Note

The following example implementation is available: /GINB/CL_EXM_PO_ATTACH_CONTROL

You can use this example class for your BAdI implementation. This Business Add-In (BAdI) is used in the Functions for U.S. Federal Government (PSM-FG) component. You can use this BAdI to manage sending attachments to the hub.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then click [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your cursor on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and endmethod statements.
8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementations are available:

- /GINB/PO_ATTACH_CONTROL_EX

You can use this example class for your BAdI implementation.

5.1.3.8.7 BAdI: G-Invoicing BAdI Definition for Partner Information

BAdI /GINB/BADI_PARTNER_INFO is used to derive *Funding Official*, *Program Official*, *Point of Contact* and *Prepared by* when the order is sent to the Hub.

Context

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation.
2. If no composite exists, create a new one by clicking [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and click [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, and then [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
9. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the Enhancement Spot Element Definitions tab in the Implementation Example Classes section.

The following example implementation is available:

/GINB/CL_IM_PARTNER_INFO

This example implementation will be called if you do not use your own implementation of the BAdI.

5.1.3.8.8 BAdI: Handle the Accrual Postings (Requesting Side)

Context

This Business Add-In (BAdI) is used to change the accrual posting data before creation. This is a default implementation of a BAdI definition that is called if all the BAdI implementations are inactive or if no other implementation exists.

Note

Fallback Class /GINB/CL_HANDLE_ACCR_POSTING, which implements interface /GINB/IF_HANDLE_ACCR_POST_DATA

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

If you want to use your own implementation, complete the steps below.

Procedure

1. In the Customizing, navigate to ► *Public sector Management* ► *Functions for US Federal Government* ► *General Settings* ► *G-Invoicing* ► *Requesting Agency* ► *Business Add Ins (BAdI)* ► *BAdI: Handle the Accrual Postings (Requesting side)* .
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing *Create*.
3. Save your entries and assign the implementation to development class.
4. Select the BAdI tab and choose *Create BAdI*.
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then press *Enter*.
6. On the next screen, expand the implementation node and double-click *Class*.
7. With the cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method <Interface name> ~ <Name of method> and end method statements. The sample implementation is copied automatically.
9. Save and activate all objects.

5.1.3.8.9 BAdI: Facilitate Internal Mod Scenarios - Seller Facilitated Order

This Business Add-In (BAdI), `/GINB/DYNAMIC_MSG_HANDLING_PO`, is used to configure the messages that are raised during the online internal modification and save of existing purchase orders (POs) based on seller facilitated orders (SFO).

Context

The messages can either be configured as Warnings or set to Ignore. The BAdI can also be used to influence the "out of sync" indicator at the purchase order header.

The BAdI won't be invoked during the creation of purchase orders (that is, for transaction `ME21N`).

This BAdI offers three different methods whose functions are as follows:

- The `MESSAGE_CONFIG` method is used to override business checks before save.
- The `MESSAGE_CONFIG_SAVE` method is used to override business checks at the time of save.
- The `OUTOFSYNC_OVERRIDE` method is used to influence the 'out of sync' indicator, independent of the above two methods.

For more information about the standard settings (filters, fallback class, single or multiple use), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction `SE18`).

If you want to use your own implementation, complete the following steps:

Procedure

1. In the dialog box, enter a name for the enhancement implementation, a short text, and the composite enhancement implementation.

If no composite exists, create a new one by choosing [Create](#).

2. Save your entries and assign the implementation to a development class.
3. Select the BAdI tab and choose [Create BAdI](#).
4. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description and press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your pointer on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements.

The sample implementation is copied automatically.

8. Save and activate all objects.

Example

You can find example implementations in the BAdI Builder on the [Enhancement Spot Element Definitions](#) tab in the Implementation Example Classes section.

The following example implementation is available:

- `/GINB/CL_EX_DYN_MSG_HANDLG_PO` - Implementation for BAdI `/GINB/DYNAMIC_MSG_HANDLING_SO`

You can use this example class for your BAdI implementation.

5.2 SAP Treasury G-Invoicing for SAP S/4HANA Hub Customizing

This section describes configuration steps for SAP Treasury G-Invoicing for SAP S/4HANA for your Hub system.

5.2.1 Hub BAdIs

This section describes SAP Treasury G-Invoicing for SAP S/4HANA BAdIs relevant to the G-Invoicing Hub.

5.2.1.1 Update the Performance data sent from ERP

This BAdI is used to update the performance data sent from ERP during eDoc submission.

Context

The BAdI `/GINH/BADI_UPDATE_ERP_PER_DATA` is called before the performance is created or updated in the Hub.

It can also be used to influence the upload type of the attachments, as well changing the performance status between [On hold](#) and [Created](#).

A sample implementation, class `/GINH/CL_EX_UPD_ERP_PER_DATA`, method `/GINH/IF_EX_UPD_ERP_PERF_DATA~UPDATE_ERP_PERF_DATA` is provided for reference.

Note

Once there is an active BAdI implementation to change the upload type of attachments to "Internal," remember that deactivating the implementation or changing the logic in the implementation could cause internal attachments to be treated as external when updated ERP documents are submitted.

The following are the only two parameters that require additional information:

- Import parameter `IS_PERF_DET` sends the performance details from the ERP system.
- Changing parameter `CS_DATA_CONV` maps the data from `IS_PERF_DET`, which can be modified as part of the BAdI implementation logic and is used to create and update the order in the Hub.

For more information about the standard settings (filters, fallback class, single or multiple uses), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction SE18).

The BAdI uses interface `/GINH/IF_EX_UPD_ERP_PERF_DATA`.

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), select ► [Hub BAdIs](#) ► [Update the Performance data sent from ERP during edoc submit](#) ►.
2. In the dialog box, enter a name for the enhancement implementation, a short text, and the composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and choose [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description and press [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your pointer on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements.

The sample implementation is copied automatically.

9. Save and activate all objects.

Related Information

[Attachment Handling in the Hub](#)

5.2.1.2 Manual Activity Needed and Automatic Settlement Not Allowed

You can use this BAdI to change logic that sets the values of the `Automatic Processing Not Allowed` and `Manual Activity Required` flags, which help determine when automatic settlement can take place and when performances require manual steps in order to be fully settled.

Context

The system calls BAdI `/GINH/BADI_SETTLE_ACTIVITY_UPD` while accepting the performance quantity or amount in the Hub.

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), select ► [Hub BAdIs](#) ► [Manual Activity Needed and Automatic Settlement Not Allowed](#) ►.
2. Create an Enhancement Implementation.
3. You can use the following methods:
 - `MANUAL_ACTIVITY_FLAG_UPDATE`
The changing parameter 'CV_MANUAL_ACT' is used to update the manual activity needed flag.
 - `AUTO_SETTLE_FLAG_UPDATE`
The import parameter 'CV_AUTOSET_ACT' is used to update the auto settle not allowed needed flag.
4. Save your Enhancement Implementation.

5.2.1.3 Update Order Data sent from ERP

You can use this BAdI to change the values sent from ERP to the Hub when submitting eDocuments.

Context

The BAdI `/GINH/BADI_UPDATE_ERP_ORD_DATA` is called before the order is created or updated in the Hub. This BAdI uses interface `/GINH/IF_EX_UPD_ERP_ORD_DATA`. It can also be used to influence the upload type of the attachments. A sample implementation, class `/GINH/CL_EX_UPD_ERP_ORD_DATA`, method `/GINH/IF_EX_UPD_ERP_ORD_DATA~UPDATE_ERP_ORD_DATA` is provided for reference.

Note

Once there is an active BAdI implementation to change the upload type of attachments to "Internal," remember that deactivating the implementation or changing the logic in the implementation could cause internal attachments to be treated as external when updated ERP documents are submitted.

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), select ► [Hub BAdIs](#) ► [Update Order Data sent from ERP](#) ►.
2. Create an Enhancement Implementation.
3. You can use the following parameters:
 - **IS_ORD_DET**
The import parameter; sends the order details from the ERP system.
 - **CS_ORD_DATA**
The changing parameter; maps the data from IS_ORD_DET, which can be modified as part of the BAdI implementation logic
4. Save your Enhancement Implementation.

5.2.1.4 Update Performance data sent from ERP

This BAdI is used to update the performance data sent from ERP during eDoc submission.

Context

The BAdI `/GINH/BADI_UPDATE_ERP_PER_DATA` is called before the performance is created in the Hub. It can also be used to influence the upload type of the attachments or to change the status of the performance from "On Hold" to "Created" or vice versa.

Note

Once there is an active BAdI implementation to change the upload type of attachments to "Internal", consider the fact that deactivating the implementation or changing the logic in the implementation might cause "Internal" attachments to be treated as "External" during the submission of updated ERP documents.

The following are the only two parameters that require additional information:

- Import parameter **IS_PERF_DET** sends the performance details from the ERP system.
- Changing parameter **CS_DATA_CONV** maps the data from **IS_PERF_DET**, which can be modified as part of the BAdI implementation logic and is used to create and update the order in the Hub.

For more information about the standard settings (filters, single or multiple use), see the Enh. Spot Element Definitions tab in the BAdI Builder (transaction SE18).

The BAdI uses interface `/GINH/IF_EX_UPD_ERP_PERF_DATA`.

If you want to use your own implementation, complete the steps below.

Procedure

1. In the Customizing, navigate to **G-Invoicing HUB (US Federal Government) > Hub BAdIs > Update performance data sent from ERP**.
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to development class.
4. Select the BAdI tab and choose [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description, then press [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With the cursor on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements. The sample implementation is copied automatically.
9. Save and activate all objects.

Example

A sample implementation - class `/GINH/CL_EX_UPD_ERP_PER_DATA`, method `/GINH/IF_EX_UPD_ERP_PERF_DATA~UPDATE_ERP_PERF_DATA` - is provided for reference.

5.2.1.5 REST API to Call Treasury

In this Customizing Activity, you can provide your own implementation that system uses for call to the US Treasury.

Context

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and so on from Treasury. This sync is done via a REST API call to Treasury.

Procedure

1. Access Customizing for G-Invoicing Hub ► [Hub BAdIs](#) ► [REST API call to Treasury](#) ►.
2. Create Enhancement Implementation.
3. Provide required inputs and continue.

5.2.1.6 Notify Pull Changes from Treasury

In this customizing activity you can provide your own implementation to send notifications if the GT&C, Order, or performance pull from Treasury was successful.

Context

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and the like from Treasury.

Procedure

1. Access Customizing for G-Invoicing Hub ► [Hub BAdIs](#) ► [Notify Pull Changes from Treasury](#) ►.
2. Create Enhancement Implementation.
3. Provide required inputs and continue.

5.2.1.7 BAdI: Filter/Sort Performances for Negative Performance to D/P Mapping

Context

During the assignment of negative D/P performances to prior D/P performances, a list of eligible performances is fetched. This BADI allows you to filter the list based on priority and sort the eligible performances.

Similarly while posting CMR, CM, Negative DMR, or Negative DM documents in ERP, open quantity checks are carried out to verify that there is enough open quantity available in the order schedule line. The list of such eligible performances is filtered based on priority.

Filtering

The list of eligible performances is filtered based on this priority configuration in view `/GINH/C_CM_PRIO`.

Sorting

Filtered results can then be sorted based on the configuration in view `/GINH/C_CM_SORT` at the transaction group level.

Enhancement Spot	<code>/GINH/PERF_FLTR_SORT</code>
BAdI Definition	<code>/GINH/BADI_PERF_SPLIT_SORT</code>
Interface	<code>/GINH/IF_EX_PERF_FLTR_SORT</code>
Fall Back Class	<code>/GINH/CL_CMR_PERF_FLTR_SORT</code>

The interface has only one method: `SET_CMR_DP_FILTER_AND_SORT`. This method has only one changing parameter.

Requirements

Input will be a list of unfiltered or unsorted eligible performances. Output will be a list of filtered and sorted eligible performances, which are then used in further processing either during open quantity calculations or during priority D/P assignments as outlined above.

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), select ► [Hub BAdIs](#) ► [Filter/Sort Performances for Negative Performance to D/P Mapping](#) .
2. In the dialog box, enter a name for the enhancement implementation, a short text, and the composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and choose [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description and press [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your pointer on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and end method statements.

The sample implementation is copied automatically.

9. Save and activate all objects.

5.2.1.8 BAdI: Update recipients for email notifications

This BAdI allows you to modify the recipients of email notifications.

Context

BAdI /GINH/BADI_ENS includes the following method:

- **CHANGE_RECIPIENTS**: This method allows you to update recipients.

Note

The BAdI is triggered only when function module /GINH/FM_SEND_EMAIL_BY_KEY is maintained as a trigger for the object.

Standard Settings

For more information about the standard settings (filters, fallback class, single or multiple use), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction SE18)

- Interface: /GINH/IF_ENS

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), navigate to ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Email Recipients](#) ► [Business Add-In \(BAdI\)](#) ► [Update recipients for email notifications](#) ►. or ► [Hub BAdIs](#) ► [Update recipients for email notifications](#) ►.
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the [BAdI](#) tab and choose [Create BAdI](#). In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description. Then press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your pointer on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and `endmethod` statements. The sample implementation is copied automatically.
8. Save and activate all objects.
9. Method **CHANGE_RECIPIENTS** is provided. This method allows you to change recipients for notifications.

Example

The following example implementation is available:

- /GINH/CL_EI_ENS

📘 Note

This example class does not make any changes.

5.2.2 Maintain Treasury System ID

In this customizing step, you can maintain the Treasury system ID.

Context

The purpose of configuration identification is to maintain control of an evolving system by:

- Uniquely identifying the system, revisions of the system, and the component parts of each revision
- Understanding the status of configuration items as they progress through the development process

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and the like from Treasury.

Procedure

1. In Customizing, access ► [G-Invoicing Hub \(US Federal Government\)](#) ► ► [Maintain Treasury System ID](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
System ID	Enter a system ID.

4. Save your changes.

5.2.3 Maintain Treasury Destination

In this customizing step, you can define the RFC Source and Destination to pull and push data between the Hub and S/4 and the Treasury Systems.

Context

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and the like from Treasury and S/4.

Procedure

1. In Customizing, access ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Maintain Treasury Destination](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
RFC Source	Enter a value for RFC source.
RFC Destination	Enter a value for RFC corresponding destination.

4. Save your changes.

5.2.4 Maintain Treasury URL

In this customizing step, you can define the URL source to pull and push data to and from for the Treasury systems.

Context

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and the like from Treasury and S/4.

Procedure

1. In Customizing, access ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Maintain Treasury URL](#) ►.

2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Object Type	Choose the Object Type from the list.
URL	Enter a URL corresponding to the chosen object to Pull (or Push) data to (or from) Treasury System.

4. Save your changes.

Example

Object Type	URL
Attachment	/ginv/services/v1_0/
Groups under an Agency	http://qa.ws.igt.fiscal.treasury.gov/ginvt/services/v1_0/
Group	http://qa.ws.igt.fiscal.treasury.gov/ginvt/services/v1_0/groups/
GT&C	http://qa.ws.igt.fiscal.treasury.gov/ginvt/services/v2_0/gtc
Order	http://qa.ws.igt.fiscal.treasury.gov/ginvt/services/v2_0/order
Performance	http://qa.ws.igt.fiscal.treasury.gov/ginvt/services/v2_0/order

5.2.5 Maintain Valid Agency Location Code (ALC)

In this customizing step, you can define the ALC (Agency Location Code) of GT&C, Order, and Performance documents interfacing from the Treasury system into the Hub. This provides the flexibility to pull or review a GT&C, Order, or Performance document specific to its ALC number on the Hub.

Context

The G-Invoicing Hub needs to exchange business transaction data such as GT&C, Order, Performance, and the like from Treasury.

Procedure

1. In Customizing, access  [G-Invoicing Hub \(US Federal Government\)](#)  [Maintain Valid Agency Location Code \(ALC\)](#) .

2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Agency Location Code	Enter Agency Location Code.
ALC Description	Enter corresponding description for the Agency Location Code.

4. Save your changes.

Example

Agency Location Code	ALC Description
20552002	Bureau of the Fiscal Service Treasury

5.2.6 Maintain Created On Range for values for UI Search

In this customizing step you can define ranges of the days for G-Invoicing-specific objects (Order, Performance, and so on) for display that is shown on the tiles of all applications.

Context

In addition, this customizing step also allows you to set the default range for each object.

Procedure

1. In Customizing, access [G-Invoicing Hub \(US Federal Government\)](#) >> [Maintain Created On Range for values for UI Search](#).
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Object Type	Choose the Object Type from the list.
Selection Days	Enter desired number of days.
Default Days Range	Select the checkbox to mark this entry as default.
Description	Enter a description.

4. Save your changes.

Example

Object Type	Selection Days	Default Days Range	Description
Performance	7	□	Last week

5.2.7 Maintain GTC status for Pull

In this customizing step, you maintain the status check of GT&C documents interfacing from the Treasury system into the Hub and vice versa.

Context

It provides the flexibility to pull, push, and review a GT&C document specific to its status on the Hub.

Procedure

1. In Customizing, access [G-Invoicing Hub \(US Federal Government\)](#) [Maintain GTC status for Pull](#).
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Status	Enter a Status value.
Status Description	Enter corresponding Status description.

4. Save your changes.

Example

Object Type	URL
PND	Pending
REC	Open

Object Type	URL
REJ	Rejected
CLZ	Closed



5.2.8 Maintain Order Status for Pull

In this customizing step, you can define status check of Order documents interfacing from the Treasury system into the Hub and vice versa.

Context

It provides the flexibility to pull, push, and review an Order document specific to its status on the Hub.

Procedure

1. In Customizing, access  [G-Invoicing Hub \(US Federal Government\)](#)  [Maintain Order Status for Pull](#) .
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Order Status Code	Enter a Status value.
Status Description	Enter corresponding Status description.

4. Save your changes.

Example

Object Type	URL
SP2	Shared with Partner 2
REC	Open
REJ	Rejected
CLZ	Closed

5.2.9 Maintain Performance status for pull

In this customizing activity, you can define the status check of Performance documents interfacing from the Treasury system into the Hub and vice versa.

Context

It provides the flexibility to pull, push, and review a Performance document specific to its status on the Hub.

Procedure

1. In Customizing, access [► G-Invoicing Hub \(US Federal Government\) ► Maintain Performance status for pull ►](#)
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Performance Status	Enter a Status value.
Description	Enter corresponding Status description.

4. Save your changes.

Example




Object Type	URL
CRT	Created
STL	Settled
ERR	Error
INF	Informational
LOC	Created as Lock
ONH	On Hold
PND	Pending
SNT	Sent
STE	Error Settlement

5.2.10 Maintain Configurable Constants

Context

In this Customizing activity, you can maintain configurable constants that can be used in various scenarios.

Procedure

1. In Customizing, access  [G-Invoicing Hub \(US Federal Government\)](#)  [Maintain Configurable Constants](#) .
2. To add a new entry, click [New Entries](#). You can also change the values of existing entries in the [Constant Value](#) column.
3. Save your entries.

Example

Constant Name	Constant Value
APPL_LOG_EXPIRY_IN_DAYS	180
ENS_SENDER_ADDRESS	SAMPLEt@sap.com
ENS_SENDER_VISIBLE_NAME	SAP G-INVOICING SYSTEM NOTIFICATION

5.2.11 Negative Performance to D/P Mapping

This section describes SAP Treasury G-Invoicing for SAP S/4HANA configuration relevant to negative performance to D/P mapping.

5.2.11.1 Define D/P Performance Mapping Scenario Priorities

Context

In this customizing activity, you can influence the priority by which prior D/P performances are automatically applied as references for negative D/P performances created in the Hub as a result of eDocument processing

of credit memos or negative debit memos from ERP. This priority setting is also used in credit memo request, credit memo/negative debit memo request, and negative debit memo in ERP, to validate open D/P performance amounts for automatic mapping.

The following attributes can be maintained to specify the priority for automatic reference D/P performance assignment:

Transaction Group

Transaction Group serves as one of the key attributes for defining the priority order for D/P performances for mapping. The transaction group logically combines performances on a higher level before a finer grouping by D/P performances based on scenarios is applied for open amount calculation.

The following transaction groups are supported for automatic mapping:

- FOB Source Performances
- FOB Destination Performances

D/P Mapping Scenario

D/P Mapping Scenario denotes the pre-defined grouping of D/P performances, based on the acceptance status, for consumption in automatic mapping for negative D/P performances.

The following pre-defined D/P mapping scenarios are supported for automatic mapping:

- D/P performance amount is greater than R/A performance amount
- D/P performance has not been accepted
- R/A performance amount is greater than D/P performance amount
- Fully accepted D/P performance

Priority

Priority assigned to D/P performance mapping scenario defines the order in which the open amounts available on prior D/P performances can be consumed.

The following pre-defined priorities are supported for automatic mapping:

Priority	Description
01	Priority 1
02	Priority 2
03	Priority 3
04	Priority 4

Note

- If you assign a blank priority assigned for a D/P mapping scenario or do not maintain a D/P mapping scenario in this customizing, the corresponding D/P mapping scenario is not included for automatic mapping.
- Priority (except for blank value) cannot be repeated across D/P mapping scenarios.

Procedure

1. In Customizing, access [G-Invoicing Hub \(US Federal Government\) > Negative Performance to D/P Mapping > Define D/P Performance Mapping Scenario Priorities](#).
2. Create a new entry for adding a D/P mapping scenario to be included for automatic D/P performance mapping.

Alternatively, for an existing entry (Transaction Group and D/P Mapping Scenario), you can change the assigned priority order and save your entry. If you choose to do this, skip to step 6 after making your changes.

3. Select a Transaction Group (mandatory) from drop-down list.
4. Select a D/P Mapping Scenario (mandatory) from drop-down list.
5. Assign the priority order using the drop-down list.
6. Save your entry.

Example

For FOB destination performances, if you want to configure the "D/P performance amount is greater than R/A performance amount" scenario as priority 1 and the "D/P performance has not been accepted" as priority 2, the customizing entries would be:

Transaction Group	D/P Mapping Scenario	Priority
D FOB Destination Performances	D/P perf. amount is greater than R/A performance amount	3 Priority 3
D FOB Destination Performances	D/P performance has not been accepted	1 Priority 1
D FOB Destination Performances	R/A perf. amount is greater than D/P performance amount	4 Priority 4
D FOB Destination Performances	Fully accepted D/P performance	2 Priority 2
S FOB Source Performances	D/P perf. amount is greater than R/A performance amount	1 Priority 1
S FOB Source Performances	D/P performance has not been accepted	2 Priority 2
S FOB Source Performances	R/A perf. amount is greater than D/P performance amount	3 Priority 3
S FOB Source Performances	Fully accepted D/P performance	4 Priority 4

5.2.11.2 Define D/P Performance Sort Order

Context

In this customizing table, specify the sort order (ascending or descending) to be used within a transaction group. Sorting is performed based on the performance date.

Procedure

1. In Customizing, access [G-Invoicing Hub \(US Federal Government\) > Negative Performance to D/P Mapping > Define D/P Performance Sort Order](#).
2. Create a new entry to specify the sort order for a transaction group.

Alternatively, you can change the assigned sort order for an existing transaction group and save the entry. If you choose to do this, skip to step 5 after making your changes.
3. Select transaction group (mandatory) from the drop-down list.
4. Assign a sort order (ascending or descending) from the drop-down list.
5. Save your entry.

5.2.11.3 BAdI: Filter/Sort Performances for Negative Performance to D/P Mapping

Context

During the assignment of negative D/P performances to prior D/P performances, a list of eligible performances is fetched. This BAdI allows you to filter the list based on priority and sort the eligible performances.

Similarly while posting CMR, CM, Negative DMR, or Negative DM documents in ERP, open quantity checks are carried out to verify that there is enough open quantity available in the order schedule line. The list of such eligible performances is filtered based on priority.

Filtering

The list of eligible performances is filtered based on this priority configuration in view `/GINH/C_CM_PRIO`.

Sorting

Filtered results can then be sorted based on the configuration in view `/GINH/C_CM_SORT` at the transaction group level.

Enhancement Spot	/GINH/PERF_FLTR_SORT
BAdI Definition	/GINH/BADI_PERF_SPLIT_SORT
Interface	/GINH/IF_EX_PERF_FLTR_SORT
Fall Back Class	/GINH/CL_CMR_PERF_FLTR_SORT

The interface has only one method: SET_CMR_DP_FILTER_AND_SORT. This method has only one changing parameter.

Requirements

Input will be a list of unfiltered or unsorted eligible performances. Output will be a list of filtered and sorted eligible performances, which are then used in further processing either during open quantity calculations or during priority D/P assignments as outlined above.

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), select ► [Hub BAdIs](#) ► [Filter/Sort Performances for Negative Performance to D/P Mapping](#) ►.
2. In the dialog box, enter a name for the enhancement implementation, a short text, and the composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the BAdI tab and choose [Create BAdI](#).
5. In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description and press [Enter](#).
6. On the next screen, expand the implementation node and double-click [Class](#).
7. With your pointer on the method, double-click to enter method processing.
8. Enter the code for the implementation between the method [<Interface name> ~ <Name of method>](#) and end method statements.

The sample implementation is copied automatically.

9. Save and activate all objects.

5.2.12 Maintain Settings for Persist Group and Sales Order Functionality

Group and organization data can be pulled from Treasury and made available in the Hub, which improves performance when working with GT&Cs, purchase orders, and sales orders by reducing the need to make calls to Treasury.

Context

When displaying groups, you can choose to displays the group data for a single agency.

When displaying agency and group data stored in your system using report `/GINH/DISP_GROUPS` (transaction `/GINH/DISP_GROUPS`), the information is displayed as a hierarchical tree to show the group and agency relationships.

Prerequisites

Enabling this functionality requires customizing as described in:

- [Maintain Treasury URL \[page 91\]](#)
- [Maintain Valid Agency Location Code \(ALC\) \[page 92\]](#)

Reports and Transactions for Persist Group and Group Display Functionality

The following reports make this functionality possible:

Report	Transaction	Function	Authorization Object
<code>/GINH/ PULL_ACCTS_ORG_DATA</code>	<code>/GINH/ACCOUNT_PULL</code>	Pull agency accounts from Treasury into the Hub. You can also pull any active group data along with the account data. You can schedule this report as a background job to keep the Hub information up to date.	
<code>/GINH/ ACCTS_SET_EXCL_INTER</code>	<code>/GINH/ACCOUNT_HANDLE</code>	Displays agency account data stored in the Hub and allows you to exclude accounts with which you do not have business transactions from further data pulls from Treasury. You can also maintain your own agency account as "Internal."	<code>/GINH/ACCT</code>
<code>/GINH/ PULL_GRP_ORG_DATA</code>	<code>/GINH/GRP_PULL</code>	Pull group data for the account ID you specify from Treasury into the Hub.	<code>/GINH/GRP</code>
<code>/GINH/DISP_GROUPS</code>	<code>/GINH/DISP_GROUPS</code>	Displays agencies, groups, and sub-groups, arranged to illustrate the hierarchical relationships among them. If you specify an account ID, only the group data for that account will be displayed.	<code>/GINH/GRP</code>
<code>/GINH/DELETE_GROUPS</code>		Allows you to delete the group data of a selected account ID and set the exclude flag for it.	

→ Recommendation

1. If you already have group data in your Hub system pulled before implementing SAP Treasury G-Invoicing FPS04, SAP recommends that you delete all of it using report `/GINH/DELETE_GROUPS`.
2. Execute transaction `/GINH/ACCOUNT_PULL` (relevant report `/GINH/PULL_ACCTS_ORG_DATA`).

Do not check the [To Pull all Active Groups](#) checkbox. Click the [Execute](#) button.

By executing this report after deleting existing Hub group data and without checking the box to pull active groups, the report will retrieve account information (both internal and external) from Treasury using the Account API (Treasury URL). The retrieved information is then saved in the Account Root BOBF tables.

3. Execute transaction `/GINH/ACCOUNT_HANDLE` (relevant report `/GINH/ACCTS_SET_EXCL_INTER`).
 1. First, leave the [Account Id](#) field blank and click the [Execute](#) button.
Use the checkboxes in the leftmost column to select accounts that are not relevant to your agency, then click the [Set Exclude](#) button.
Excluded accounts will be skipped by reports that persist group data from Treasury into your Hub system and will not appear in the F4 Help when selecting account IDs.
 2. Next, enter your own account in the [Account Id](#) field and click the [Execute](#) button.
Select your account and mark it as "Internal" by clicking the [Set Internal](#) button.
4. Use transaction `/GINH/ACCOUNT_PULL` again - this time *with* the [To Pull all Active Groups](#) checkbox and the [Pull Group Data for All Account ID's](#) option active - to pull a list of all accounts.

Note

Depending on the number of agency accounts that are not excluded (see step 3a) and the amount of group data of these agencies, the system may encounter performance problems when pulling all active groups and all group data. You can avoid performance issues by pulling groups for account IDs separately using transaction `/GINH/GRP_PULL` (report `/GINH/PULL_GRP_ORG_DATA`) instead.

5. Schedule transaction `/GINH/ACCOUNT_PULL` as a background job - with the [To Pull all Active Groups](#) checkbox and the [Pull Group Data for Changed Account ID's](#) option active - to keep your data up-to-date.

Related Information

[Periodic Tasks \[page 185\]](#)

[Authorization Objects \[page 155\]](#)

5.2.13 Hub Attachment Configuration

This section describes SAP Treasury G-Invoicing for SAP S/4HANA configuration relevant to Hub attachment functionality.

5.2.13.1 Define Content Repositories

In this Customizing activity, you define a content repository of type ARCHLINK.

Procedure

1. Execute transaction SPRO and access Customizing node ► [ABAP Platform](#) ► [Application Server](#) ► [Basis Services](#) ► [ArchiveLink](#) ► [Basic Customizing](#) ► [Define Content Repositories](#) ►.
2. Maintain content repository *GI*.
3. Click the [Full Administration](#) button.
4. Maintain the following settings:

Option	Description
Description	A description of the content repository
Document Area	ARCHLINK ArchiveLink
Storage Type	04 HTTP content server
Version Number	0046
HTTP Server	The server name of the content repository
Port Number	1090
HTTP Script	ContentServer/ContentServer.dll

5. Click the [CS Admin.](#) button.
6. On the [Details](#) tab, make sure the status light is green ([Customizing ok](#)).

5.2.13.2 Edit Links

In this Customizing activity, you define a link for content repository GI.

Context

Procedure

1. Execute transaction SPRO and access Customizing node ► [ABAP Platform](#) ► [Application Server](#) ► [Basis Services](#) ► [ArchiveLink](#) ► [Basic Customizing](#) ► [Edit Links](#) ►.

2. Maintain object type /GINH/ATT with the following attributes:

Option	Description
Doc. Type	ABAP
Link Status Archive	X
Cont.Rep.ID	GI
Relationship	TOA01

5.2.13.3 Maintain Virus Scan Profile for Attachments

In this customizing step, you maintain virus scan profiles for document attachments used in the G-Invoicing Hub



Prerequisites

The virus scan profile has been set up in transaction VSCANPROFILE.

Context

The G-Invoicing Hub supports document attachments to orders and performances. These attachments originate from the buyer or seller during the course of order processing in ERP as well as in the Hub. You must enter a virus scan profile for attachments.

Procedure

1. In Customizing, access  [G-Invoicing Hub \(US Federal Government\)](#)  [Maintain Virus Scan Profile for Attachments](#) .
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Virus Scan Profile	Enter a Scan Profile.

4. Save your changes.

5.2.13.4 Add the Required MIME Types to the Virus Scan Profile

Context

It is recommended that you configure the virus scan profile used for G-Invoicing to support the required MIME file types as attachments to orders and performances in the Hub.

Procedure

1. Determine the virus scan profile configured in your system. For instructions, see [Maintain Virus Scan Profile for Attachments \[page 105\]](#).
2. In customizing, access [ABAP Platform](#) > [Application Server](#) > [System Administration](#) > [Virus Scan Interface](#) > [Define Virus Scan Profiles](#).
3. Select your system's virus scan profile in the right panel and double-click [Profile Configuration Parameters](#) in the left panel.
4. Add parameter **CUST_CHECK_MIME_TYPE** with value **1**.
5. Double-click [MIME Types](#) in the left panel.
6. Add all of the following MIME types:
 - application/msexcel
 - application/msword
 - application/octet-stream
 - application/pdf
 - application/vnd.ms-excel
 - application/vnd.ms-excel.sheet.binary.macroenabled.12
 - application/vnd.ms-outlook
 - application/vnd.ms-powerpoint
 - application/vnd.ms-word
 - application/vnd.openxmlformats-officedocument.presentationml.*
 - application/vnd.openxmlformats-officedocument.spreadsheetml*
 - application/vnd.openxmlformats-officedocument.wordprocessingml.*
 - application/x-msaccess
 - image/bmp
 - image/gif
 - image/jpeg
 - image/png
 - text/plain
 - text/csv

- application/msaccess

Related Information

[Maintain Virus Scan Profile for Attachments \[page 105\]](#)

5.2.13.5 Define the State of Attachments in Purchase Orders and Sales Orders

Context

You can use enhancement spot /GINB/GINV_CUSTOM_UTIL to define the state of attachments in purchase orders and sales orders.

Procedure

1. Access enhancement spot /GINB/GINV_CUSTOM_UTIL. One method of accessing enhancement spots is to use transaction [SPAU_ENH](#).
2. For BAdi Definition /GINB/PO_ATTACHMENT_CONTROL, ensure that example class /GINB/CL_EXM_PO_ATTACH_CONTROL is implemented.
3. For BAdi Definition /GINB/SO_ATTACHMENT_CONTROL, ensure that example class /GINB/CL_EXM_SO_ATTACH_CONTROL is implemented.

5.2.14 Maintain Settings for Email Notification Framework Functionality

This section describes SAP Treasury G-Invoicing for SAP S/4HANA configuration relevant to email notification framework functionality.

5.2.14.1 Enable Background RFC Support for Email Notification Framework Functionality

Context

Ensure that background RFC (bgRFC) support is available for the email notification framework.

Procedure

1. Ensure that a Supervisor Destination is maintained. For more information, see [1616303](#) - *No further processing of bgRFC units*.
2. Verify the following inbound destination, or create it if necessary.
 1. Execute transaction SBGRFCCONF.
 2. Select the *'Define Inbound destination'* tab.
 3. Click *Create*.
 4. Add destination **/GINH/NOTIFICATION**.
 5. Configure the new inbound destination on the *Scheduler Destination* tab.

Note

See [2309399](#) - *How to use SBGRFCCONF effectively?* for more details on bgRFC configuration.

5.2.14.2 Add Prerequisite Table Entries for Email Notification Framework Functionality

Context

The email notification framework functionality, which is new to FPS03, requires entries in certain tables. Make sure you have copied entries from client 000 to your target client as described in [Post-Installation Tasks \[page 32\]](#). Follow these steps to confirm that the necessary entries are present, and to add them if they are missing.

Procedure

1. Execute transaction SE16n in the Hub system.

2. Verify that the following table entries are present, or add them if necessary:

Table /BOBF/TRA_PI_ACT

PLUGIN_NAME	IS_ACTIVE
/GINH/NOTIFICATION	X

Table /BOBF/TRA_PI

PLUGIN_NAME	PLUGIN_CLASS
/GINH/NOTIFICATION	/GINH/CL_BOPF_TRA_PLUGIN

5.2.14.3 Maintain the Sender Email Address for Email Notifications

Context

Specifying the email address from which email notifications will be sent by the email notification framework.

Procedure

1. In the Customizing, access [G-Invoicing Hub \(US Federal Government\) > Maintain Configurable Constants](#).
2. Add or modify the following constants:

Constant Name	Constant Value
ENS_SENDER_ADDRESS	The email ID for the sender of email notifications specific to your implementation. This constant is mandatory.
ENS_SENDER_VISIBLE_NAME	A display name for email for the sender of the email notifications. This constant is optional.

Related Information

[Maintain Configurable Constants \[page 97\]](#)

5.2.14.4 Review Delivered Scenario Definitions

Context

In this customizing activity, you can display SAP-delivered scenarios for notifications and key attributes configured for each scenario.

The following attributes are provided:

- *Scenario ID*: identifier for notification scenario
- *Scenario Description*
- *Scenario Category*: indicates whether the scenario is relevant for orders or performances
- *Agency Identifier*: indicates whether the scenario is relevant for requesting-agency transactions or servicing-agency transactions
- *SAP Template ID*: provides the SAP-delivered email template for the scenario

Procedure

1. In the Customizing, access ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Notification Scenarios](#) ► [Display Notification Scenarios](#) ►.
2. The following delivered entries are displayed:

Scenario Name	Description	Scenario Category	Agency Identifier	SAP Template ID	Purpose
ORDRB00003	Status Change to OPEN for BIO Order on Requesting Side	ORD Order	R Requesting Agency	/GINH/ORDER_OPEN	For sending notifications
ORDRB00004	Status Change to Rejected for BIO Order on Requesting Side	ORD Order	R Requesting Agency	/GINH/ORDER_REJECTED	For sending notifications
ORDRB00009	Successful Publish of BIO Order(to SP2) on Requesting Side	ORD Order	R Requesting Agency		For auto-assignment or auto-subscription
ORDRS00005	New SFO Order Pull on Requesting Side	ORD Order	R Requesting Agency	/GINH/ORDER_RECEIVED	For sending notifications

Scenario Name	Description	Scenario Category	Agency Identifier	SAP Template ID	Purpose
ORDRS00006	Modified SFO Order Pull on Requesting Side	ORD Order	R Requesting Agency	/GINH/ORDER_RECEIVED	For sending notifications
ORDRS00012	Successful Publish of SFO Order to OPEN Status on Requesting Side	ORD Order	R Requesting Agency		For auto-assignment or auto-subscription
ORDSB00001	New BIO Order Pull on Servicing Side	ORD Order	S Servicing Agency	/GINH/ORDER_RECEIVED	For sending notifications
ORDSB00002	Modified BIO Order Pull on Servicing Side	ORD Order	S Servicing Agency	/GINH/ORDER_REJECTED	For sending notifications
ORDSB00011	Successful Publish of BIO Order to OPEN Status on Servicing Side	ORD Order	S Servicing Agency		For auto-assignment or auto-subscription
ORDSS00007	Status Change to OPEN for SFO Order on Servicing Side	ORD Order	S Servicing Agency	/GINH/ORDER_OPEN	For sending notifications
ORDSS00008	Status Change to Rejected for SFO Order on Servicing Side	ORD Order	S Servicing Agency	/GINH/ORDER_REJECTED	For sending notifications
ORDSS00010	Successful Publish of SFO Order(to SP2) on Servicing Side	ORD Order	S Servicing Agency		For auto-assignment or auto-subscription
PERR000001	Creation of D/P Performance (FOB Dest.) on Requesting Side	PER Performance	R Requesting Agency	/GINH/PER_R_DP_FOB_DEST	For sending notifications
PERR000004	Successful Publish of R/A Performance to Treasury on Requesting Side	PER Performance	R Requesting Agency		For sending notifications

Scenario Name	Description	Scenario Category	Agency Identifier	SAP Template ID	Purpose
PERRR00001	Reminder for Creation of D/P Performance (FOB Dest.) on Requesting Side	PER Performance	R Requesting Agency	/GINH/ PER_R_DP_FOB_DEST	For sending notifications
PERS000002	Partial R/A Acceptance for a D/P Performance on Servicing Side	PER Performance	S Servicing Agency	/GINH/ PER_S_PAR-TIAL_RA	For sending notifications
PERS000003	Successful Publish of D/P Performance to Treasury on Servicing Side	PER Performance	S Servicing Agency		For sending notifications
PERSR00002	Reminder for Partial R/A Acceptance for a D/P Performance on Servicing Side	PER Performance	S Servicing Agency	/GINH/ PER_S_PAR-TIAL_RA_REM	For sending notifications

Note

If entries are not available, copy them from client 000 as described in [Post-Installation Tasks \[page 32\]](#).

3. Double-click on an entry to review its details.

5.2.14.5 Maintain Function Modules Triggered by Scenarios

Context

In this Customizing activity, you define function modules to call for each scenario after a transaction is saved.

You can add multiple function modules to be executed in sequential order to be processed in the background RFC.

- Function module /GINH/FM_SEND_EMAIL_BY_KEY is used to send notifications.
- Function module /GINH/FM_PNTR_ASSGN_USR_TO_ORD is used to assign and subscribe [Point Of Contact](#), [Program Officer](#), [Funding Officer](#) and [Prepared by](#) users to an order.
- Function module /GINH/FM_ASSGN_GTC_USR_TO_ORD is used to assign and subscribe the order to the list of users who are already assigned to the corresponding GT&C.

- Function module `/GINH/FM_BADI_ASSGN_USR_TO_ORD` includes a BAdI. Based on the custom logic maintained in the BAdI implementation, the system determines the list of users to be assigned and subscribed to an order.

If there are no function modules maintained for a scenario, the system will not execute email notification functionality and no notifications will be sent for that scenario.

You can build and add additional functions to this configuration that will be executed for a scenario after a performance or order is saved. Any new function modules to trigger notifications that are configured in this customizing must have the same interface parameters as defined in function module `/GINH/FM_SEND_EMAIL_BY_KEY`.

Procedure

1. In the Customizing, access [► G-Invoicing Hub \(US Federal Government\) ► Notification Framework ► Notification Trigger ► Maintain Function Modules for Notification Trigger for Scenarios ►](#).
2. To create a new trigger, click the [New Entries](#) button.
3. Enter the [Scenario ID](#), the name of the function module to be triggered for that scenario, and the execution sequence.
4. Save your entry.

Example

For SAP-delivered notification scenarios for triggering emails, the following entries must be maintained in this configuration:

Scenario ID	Function Module to Trigger	Execution Sequence
ORDRB00003	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDRB00004	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDRB00009	/GINH/FM_SEND_EMAIL_BY_KEY	20
ORDRS00005	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDRS00006	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDRS00012	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDSB00001	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDSB00002	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDSB00011	/GINH/FM_SEND_EMAIL_BY_KEY	20

Scenario ID	Function Module to Trigger	Execution Sequence
ORDSS00007	/GINH/ FM_ASSGN_GTC_USR_TO_ORD	20
ORDSS00007	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDSS00008	/GINH/FM_SEND_EMAIL_BY_KEY	10
ORDSS00010	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERR000001	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERR000004	/GINH/ FM_BADI_ASSGN_USR_TO_ORD	20
PERR000004	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERR000005	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERR000006	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERRR00001	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERS000002	/GINH/FM_SEND_EMAIL_BY_KEY	10
PERS000003	/GINH/ FM_ASSGN_GTC_USR_TO_ORD	40
PERS000003	/GINH/FM_SEND_EMAIL_BY_KEY	20
PERSR00002	/GINH/FM_SEND_EMAIL_BY_KEY	10

5.2.14.6 Maintain Scenario Settings

Scenario settings are maintained separately for orders and for performances. For each, you can:

- Activate or deactivate a scenario
If the flag to activate a scenario is not set, no notification is sent for that scenario
- Define the recipients who can receive notifications at the object level
Flags can be selected for GT&C, order, and performance objects. Depending on the settings maintained for the scenario, recipients will receive notification. All these recipients will receive notifications in the form of emails.
- Define email setting
Settings such as email sensitivity, importance, and encryption can be maintained.
For more on setting up encryption, visit <https://help.sap.com/nw>. From there, select the relevant SAP NetWeaver platform and version, then search for "Secure E-Mails with Digital Signature and Encryption with S/MIME" (include the quotation marks). The first result will take you to the relevant chapter for your NetWeaver release.

- Define a custom template that replaces the SAP-delivered template for the notifications
- Select a user profile to exclude set of email IDs or SAP user IDs for notifications

Related Information

[Maintain Order Scenario Settings \[page 115\]](#)

[Maintain Performance Scenario Settings \[page 117\]](#)

[Maintain User Profiles for the Email Notification Framework \[page 118\]](#)

5.2.14.6.1 Maintain Order Scenario Settings

Prerequisites






The scenario you wish to maintain must be defined and available. See [Review Delivered Scenario Definitions \[page 110\]](#).

Context

In this customizing activity, you can maintain key attributes to drive order notifications, specifically, order email notifications. For each order notification scenario, you can maintain:

- whether the scenario is active
- the recipients at the GT&C level for receiving the email notification
- the recipients at order level for receiving the email notification
- user profile for exclusion from the email notification
- custom email template for the scenario

Procedure

1. In the Customizing, access  [G-Invoicing Hub \(US Federal Government\)](#)  [Notification Framework](#)  [Notification Scenarios](#)  [Maintain Email Notification Scenario Settings – Order](#) .
2. Select a scenario.
3. Double-click [Maintain Notification Scenario Settings](#).
 - **Scenario Active?:** If this attribute is checked, the notification is initiated for the scenario. Otherwise, no notification is sent for this scenario.

Note

Only notification scenarios maintained as Active here will appear in the Notification Scenario Configuration app. See [Activating and Deactivating Notification Scenarios](#).

- *Email template*: If a custom email template is maintained here, the SAP email template provided for the scenario is overridden by the custom template.
- *Send PDF as attachment*: If selected, the 7600B PDF form for the order is included in the email as an attachment.
- *GT&C Recipients*:
 - *Email Prepared By*: If selected, includes the email ID of "Prepared By" on the GT&C for the email notification.
 - *Email Initial Approver*: If selected, includes the email ID of "Initial Approver" on the GT&C for the email notification.
 - *Email Final Approver*: If selected, includes the email ID of "Final Approver" on the GT&C for the email notification.
- *Order Recipients*:
 - *Email Prepared By*: If selected, includes the email ID of "Prepared By" on the order for the email notification.
 - *Email Point of Contact*: If selected, includes the email ID of "Point of Contact" on the order for the email notification.
 - *Email Funding Official*: If selected, includes the email ID of "Funding Official" on the order for the email notification.
 - *Email Program Official*: If selected, includes the email ID of "Program Official" on the order for the email notification.
 - *Email Delivery/Shipping Information for Product POC*: If selected, includes the email ID of "Delivery/Shipping Information for Product POC" on the order for the email notification.
- *Exclusion User Profile*: If provided, users configured in the user profile are excluded for the email notification. To configure user profiles, use the IMG path ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Notification Scenarios](#) ► [Email Recipients](#) ► [User Profiles](#) ►.
- *Email Settings*: These are technical settings to be used while triggering emails and include the following attribute:
 - *Email Sensitivity*: A selection list sourced from standard email sensitivity options.
 - *Email Importance*: Selection List sourced from standard email importance options
 - *Encrypt Email*: If this attribute is enabled, emails are encrypted.

Note

If the Encrypt Email attribute is enabled but encryption configurations are not set up, email notifications will not be sent.

For more on setting up encryption, visit <https://help.sap.com/nw>. From there, select the relevant SAP NetWeaver platform and version, then search for "Secure E-Mails with Digital Signature and Encryption with S/MIME" (include the quotation marks). The first result will take you to the relevant chapter for your NetWeaver release.

- *Send Immediately*

5.2.14.6.2 Maintain Performance Scenario Settings

Prerequisites

The scenario you wish to maintain must be defined and available. See [Review Delivered Scenario Definitions \[page 110\]](#).

Context

In this customizing activity, you can maintain key attributes to performance notifications - specifically, performance email notifications. For each performance notification scenario, you can maintain:

- whether the scenario is active
- the recipients at the order level for receiving the email notification
- the recipients at performance level for receiving the email notification
- user profiles for exclusion from the email notification
- custom email templates for the scenario

Procedure

1. In the Customizing, access ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Notification Scenario](#) ► [Maintain Email Notification Scenario Settings – Performance](#) ►.
2. Select a scenario.
3. Double-click [Maintain Notification Scenario Settings](#).
 - **Scenario Active?:** If this attribute is checked, the notification is initiated for the scenario. Otherwise, no notification is sent for this scenario.

Note

Only notification scenarios maintained as Active here will appear in the Notification Scenario Configuration app. See [Activating and Deactivating Notification Scenarios](#).

- **Email template:** If a custom email template is maintained here, the SAP email template provided for the scenario is overridden by the custom template.
- **Order Recipients:**
 - **Email Prepared By:** If selected, includes the email ID of “Prepared By” on the order for the email notification.
 - **Email Point of Contact:** If selected, includes the email ID of “Point of Contact” on the order for the email notification.

- *Email Funding Official*: If selected, includes the email ID of "Funding Official" on the order for the email notification.
- *Email Program Official*: If selected, includes the email ID of "Program Official" on the order for the email notification.
- *Email Delivery/Shipping Information for Product POC*: If selected, includes the email ID of "Delivery/Shipping Information for Product POC" on the order for the email notification.
- *Performance Recipients*:
 - *Email Prepared By*: If selected, includes the email ID of "Prepared By" on the performance for the email notification.
- *Exclusion User Profile*: If provided, users configured in the user profile are excluded for the email notification. To configure user profiles, use the IMG path ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Notification Scenarios](#) ► [Email Recipients](#) ► [User Profiles](#) ►.
- *Email Settings*: These technical settings to be used while triggering emails include:
 - *Email Sensitivity*: A selection list sourced from standard email sensitivity options.
 - *Email Importance*: A selection list sourced from standard email importance options.
 - *Encrypt Email*: If this attribute is enabled, emails are encrypted.

📌 Note

If the Encrypt Email attribute is enabled but encryption configurations are not set up, email notifications will not be sent.

For more on setting up encryption, visit <https://help.sap.com/nw>. From there, select the relevant SAP NetWeaver platform and version, then search for "Secure E-Mails with Digital Signature and Encryption with S/MIME" (include the quotation marks). The first result will take you to the relevant chapter for your NetWeaver release.

- *Send Immediately*

5.2.14.7 Maintain User Profiles for the Email Notification Framework

User profiles allow you to define whether a profile contains list of email addresses or SAP user IDs. User profile settings allow to define whether notifications must be sent to SAP Inbox or email addresses.

User profiles can be assigned

- to group and ALC combinations (see [Determine How User Profiles Are Selected \[page 121\]](#))
- as exclusion profiles for order or performance scenarios (see [Maintain Scenario Settings \[page 114\]](#))

Inclusion and Exclusion for User Profiles

- If a scenario is configured with an exclusion profile, all the user IDs or email IDs in the chosen profile are filtered out, so notifications are not sent to those user IDs or email IDs even when they would otherwise be included because of being part of the object level, such as GTC initial approver.

- If a scenario is configured with an exclusion profile that contains user IDs (with notifications to SAP Inbox) and the user profile determined for the group and ALC combination has email IDs (inclusion), the exclusion profile does not exclude any user IDs as there are no user IDs determined by the inclusion criteria.
- If a scenario is configured with an exclusion profile that contains email IDs and the user profile determined for the group and ALC combination has email IDs (inclusion), notification framework does exclude all email IDs that are configured as part of exclusion profile from the notification.
- If a scenario is configured with an exclusion profile that contains email IDs and the user profile determined for the group and ALC combination does not have SAP user IDs with notification to SAP inbox selected (inclusion), the notification framework excludes all email IDs that are configured as part of exclusion profile from the notification. In this case, both the inclusion and exclusion user profiles are resolved as email IDs.

5.2.14.7.1 Maintain User Profile Settings

Context

User profile configuration groups are lists of SAP users or email IDs to be used as email recipients. In this customizing activity, user profiles can be defined, and the following attributes can be provided:

- *User Profile*: Identifier for the user profile.
- *SAP User*: If selected, indicates that the user profile contains SAP user IDs. Otherwise, the user profile contains email IDs.
- *Notification to SAP Inbox*: If selected, the notification sent to this user profile is directed to the SAP Inbox instead of e-mail.
- *Description*: Description of the user profile.

Procedure

1. In Customizing, select [G-Invoicing Hub \(US Federal Government\)](#) > [Notification Framework](#) > [Email Recipients](#) > [User Profiles](#) > [Maintain User Profile Settings](#) .
2. To create a new user profile, click [New Entries](#).
3. Maintain the following values:
 - *User Profile*: Identifier for the user profile.
 - *SAP User*: If this checkbox is selected, user profile is considered as SAP user profile can only be defined as a set of SAP user IDs. User profile can only be defined as email ids when this flag is not selected in the configuration.
 - *Notification to SAP Inbox*: Notifications are sent to the SAP Inbox (transaction code `SBWP`) when this flag is selected, and notifications are sent to the email IDs of the SAP users when this flag is not selected. This flag is relevant only when the SAP User flag is selected. Notification to the SAP Inbox is always sent via BCC (blind carbon copy).

- *Description*: Description of the user profile.

ⓘ Note

You can only delete a user profile if the user profile does not have any SAP user IDs or email IDs set up in the configuration.

4. Save your entries.

5.2.14.7.2 Maintain Email IDs for User Profiles

Prerequisites

The user profile is already defined and available. See [Maintain User Profile Settings \[page 119\]](#).

Context

In this customizing activity, you maintain email IDs for a user profile that is configured for emails.

Procedure

1. In the Customizing, choose [G-Invoicing Hub \(US Federal Government\) > Notification Framework > Email Recipients > User Profiles > Maintain Email IDs for User Profiles](#).
2. Only profiles that are configured for email addresses are available for selection. Select a user profile and choose [Maintain Email IDs](#).
3. Click [New Entries](#) to add email IDs to the selected user profile.
4. For each entry, maintain [Email Address](#) (mandatory) and [Display Name of an address](#) (optional).

The display name's purpose is to display a value other than the email address itself. For example, if a distribution list is maintained as part of the email ID, the DL (distribution list) name could be displayed in the email instead of the DL (distribution list) ID. For exclusion profiles, display names have no significance.

5. Save your entries.

5.2.14.7.3 Maintain User IDs for User Profiles

Prerequisites

The user profile is already defined and available. See [Maintain User Profile Settings \[page 119\]](#).

Context

In this customizing activity, you maintain user IDs for a user profile that is configured for SAP User IDs.

Procedure

1. In the Customizing, choose [G-Invoicing Hub \(US Federal Government\)](#) [Notification Framework](#) [Email Recipients](#) [User Profiles](#) [Maintain User IDs for User Profiles](#).
2. Only profiles that are configured for user IDs are available for selection. Select a user profile and choose [Maintain User IDs](#).
3. Click [New Entries](#) to add user IDs to the selected user profile.
4. For each entry, maintain [User ID](#) (mandatory) and [Display Name of an address](#) (optional).

Display names is only relevant if the user ID is assigned to a user profile and the user profile setting does not have the option to notify the SAP inbox selected.
5. Save your entries.

5.2.14.7.4 Determine How User Profiles Are Selected

Prerequisites

The user profile you wish to assign is already defined and available. See [Maintain User Profile Settings \[page 119\]](#).

Context

In this Customizing activity, you define user profile assignments for a combination of *Scenario ID*, *Group*, and *ALC*. The notification framework derives the user profile according to the following sequence for each scenario:

1. Determine the user profile for the specific group and ALC based on the transaction (order or performance related).
2. Determine the user profile for the specific group based on the transaction (order or performance related) and a generic ALC (blank).
3. Determine the user profile for the specific ALC based on the transaction (order or performance related) and a generic group (blank).
4. Determine the user profile for the generic group (blank) and generic ALC (blank).

The framework selects only one user profile. As soon the framework selects a suitable user profile according to the above sequence, selection is discontinued.

Procedure

1. In the Customizing, select ► *G-Invoicing Hub (US Federal Government)* ► *Notification Framework* ► *Email Recipients* ► *Maintain User Profile for Group & ALC* .
2. Choose *New Entries* to maintain a determination record for the user profile based on *Group* and *ALC*.
3. Maintain the following attributes:

- *Scenario ID*: notification scenario ID
- *Scenario Description*: description of the scenario (display only)
- *Group ID*

Note

You may maintain the Group ID as blank (space) to indicate a generic value.

- *Group Name*: name of the selected group (display only)
- *ALC*

Note

You may maintain the ALC as blank (space) to indicate a generic value.

- *ALC Description*: description of the selected ALC (display only)
- *User Profile*
- *User Profile Description*: description of selected user profile (display only)

5.2.14.8 BAdI: Update recipients for email notifications

This BAdI allows you to modify the recipients of email notifications.

Context

BAdI /GINH/BADI_ENS includes the following method:

- `CHANGE_RECIPIENTS`: This method allows you to update recipients.

Note

The BAdI is triggered only when function module /GINH/FM_SEND_EMAIL_BY_KEY is maintained as a trigger for the object.

Standard Settings

For more information about the standard settings (filters, fallback class, single or multiple use), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction SE18)

- Interface: /GINH/IF_ENS

Procedure

1. In the Customizing for the G-Invoicing Hub (US Federal Government), navigate to ► [G-Invoicing Hub \(US Federal Government\)](#) ► [Notification Framework](#) ► [Email Recipients](#) ► [Business Add-In \(BAdI\)](#) ► [Update recipients for email notifications](#) ►. or ► [Hub BAdIs](#) ► [Update recipients for email notifications](#) ►.
2. In the dialog box, enter a name for the enhancement implementation, short text, and composite enhancement implementation. If no composite exists, create a new one by choosing [Create](#).
3. Save your entries and assign the implementation to a development class.
4. Select the [BAdI](#) tab and choose [Create BAdI](#). In the dialog box, enter the BAdI definition, BAdI implementation, implementation class, and description. Then press [Enter](#).
5. On the next screen, expand the implementation node and double-click [Class](#).
6. With your pointer on the method, double-click to enter method processing.
7. Enter the code for the implementation between the method `<Interface name> ~ <Name of method>` and `endmethod` statements. The sample implementation is copied automatically.
8. Save and activate all objects.
9. Method `CHANGE_RECIPIENTS` is provided. This method allows you to change recipients for notifications.

Example

The following example implementation is available:

- /GINH/CL_EI_ENS

ⓘ Note

This example class does not make any changes.

5.2.14.9 Schedule the Report to Trigger Email Reminders

Report /GINH/REMINDER_EMAIL_NOTIF needs to be scheduled as a background job if you wish the system to support delivered performance reminder notification scenarios.

Prerequisites

- The scenarios for which the background job will be scheduled must be active. See [Maintain Performance Scenario Settings \[page 117\]](#).
- Function module /GINH/FM_SEND_EMAIL_BY_KEY, which sends email per key for each scenario, must be configured. See [Maintain Function Modules Triggered by Scenarios \[page 112\]](#).

Context

This program needs to be scheduled as a background to execute every day (or at some other frequency the works for you) with a maintained variant. You can also execute this program on an ad-hoc basis using transaction /GINH/PER_REM_NOTIFY to send performance reminder notifications at any time.

Use standard authorization object S_TCODE to provide authorization to transaction /GINH/PER_REM_NOTIFY.

ⓘ Note

The program does not check for duplication of notifications for the same day.

The following delivered scenarios require a program to be scheduled to run in the background:

- **PERRR00001** - Reminder for Creation of D/P Performance (FOB Dest.) on Requesting Side
This scenario prompts the buyer to proactively review and respond to a performance from an FOB destination that has not been accepted before it is constructively accepted. For example, if constructive receipt days is five days from performance creation date, the reminder email can be configured to be sent starting two days before constructive receipt, which is three days from performance creation date. For this scenario, either the *Requesting ALC ID*, the *Order Number*, or the *GTC Number* must be passed as input to the program, along with the *Number of days* (a mandatory field). The input can either be passed as a single value or multiple values.
- **PERSR00002** - Reminder for Partial R/A Acceptance for a D/P Performance on Servicing Side
This scenario prompts the seller to reach out to the buyer in a timely manner when a partial acceptance of a performance has not been handled, in order to resolve the issue or initiate action to returning the disputed amount.

For this scenario, either the *Servicing ALC ID*, the *Order Number*, or the *GTC Number* must be provided as input. The input can either be passed as a single value or multiple values.

Input Details

- A unique GUID is generated for each run of this report. All the logs are stored against the generated GUID. For background runs, logs can be displayed in SLG1 by providing **/GINH/LOG** as the object. For foreground runs, logs can be displayed using the **LOGS** button in the output screen of the report.
- For batch runs, data is split in parallel processors for execution, so there may be some delay in log generation.

Related Information

[Periodic Tasks \[page 185\]](#)

5.2.14.10 Maintain Email Notification Templates

Several email templates for use with the email notification framework are delivered, but you can create custom templates if you require them.

Context

The following email templates are delivered:

- /GINH/ORDER_RECEIVED
- /GINH/ORDER_OPEN
- /GINH/ORDER_REJECTED
- /GINH/PER_R_DP_FOB_DEST
- /GINH/PER_S_PARTIAL_RA
- /GINH/PER_S_PARTIAL_RA_REM

Procedure

1. To create a new email template for a scenario, execute program SMTG_WB_START.
2. Create a copy of the SAP-delivered email template for the scenario.
3. Email notification templates contains CDS views to be executed to select order or performance information. If needed, you can extend SAP-delivered CDS views via standard CDS view extension.

4. On the [Texts](#) tab, maintain both the [Body HTML](#) and [Body Plain Text](#) sections in order to produce emails with content that is correct content for both email and SAP Inbox notifications, respectively. Be sure to define any additional variable you require in the [Variables](#) section.

5.3 Document Compliance Customizing

Document compliance functionality is used to interface between ECC-generated objects like POs and SOs and corresponding Orders and Performances in the Hub.

For more information, visit [What Is SAP Document and Reporting Compliance?](#) on the SAP Help Portal.

5.3.1 Activate the Document Compliance Business Function (CA_EDOC)

The Document Compliance (CA_EDOC) business function allows you to access and use Document Compliance features.

Context

Once this switch is activated, the [Submit](#) button is visible in the eDocument cockpit for all the various G-Invoicing-relevant processes (purchase orders, sales orders, billing documents, settlements, downpayments and so on).

Procedure

1. Execute transaction [SFW5](#).
2. Select the checkbox in the [Planned State](#) column of business function CA_EDOC (Document Compliance Business Function).
3. Choose [Activate Changes](#).

5.3.2 Activate Source Type Documents for Company Code

In this Customizing step, you activate the eDocument function for a combination of company code and a source document type.

Context

eDocuments can be triggered in the G-Invoicing solution. For that, you can specify required company codes and source types for which the system should trigger the eDocument. You can activate the eDocument for several types of source documents belonging to one application. Therefore, ensure that the selection of source documents types of one application is not redundant.

For example, for a company code, you activate that eDocuments are created out of outbound delivery documents. It would be redundant to activate eDocuments for post-goods issue, which is the subsequent document in the workflow in Sales and Distribution (SD).

For a company code, you can define for which type of source document you want eDocuments to be created. You can define multiple entries for one company code.

The eDocument is only generated if the Active flag is set.

Procedure

1. Execute transaction SM30. Enter EDOCOMPANYACTIV for the view name and click [Maintain](#).
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
CoCd	Select the company code from the list.
Source Type	Select the source type from the list.
Active	Check the indicator to state whether the entry is active or not.

4. Save your changes.

Example

CoCd	Source Type	Active
9000	EDOCUMENT	<input type="checkbox"/>
9000	FI_INVOICE	<input type="checkbox"/>

CoCd	Source Type	Active
9000	INV_VERIF	<input type="checkbox"/>
9000	PURCH_ORD	<input type="checkbox"/>
9000	SALES_DOC	<input type="checkbox"/>
9000	SD_INVOICE	<input type="checkbox"/>
9000	SRC_FILE	<input type="checkbox"/>

5.3.3 Define Interface Type for eDocument

In this Customizing step, you specify the interface type that you want to use for the generation of eDocument files (in XML format) as well as for the sending of these files to external systems.

Context

For a company code, you can define for which type of source document you want eDocuments to be created. You can define multiple entries for one company code. The eDocument is only generated if the Active flag is set.

Set the interface type as illustrated in the Example section below.

Procedure

1. Execute transaction SM30. Enter `EDOINTTYPEV` for the view name and click [Maintain](#).
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
CoCd	Select the company code from the list.
eDocument Type	Select the eDocument type from the list.
Interface Type	Select the interface type from the list.

4. Save your changes.

Example

CoCd	eDocument Type	Interface Type
9000	US_IGT_DPA	Customer-Specific
9000	US_IGT_INV	AIF Proxy (for web services)
9000	US_IGT_IPO	Customer-Specific
9000	US_IGT_ISO	Customer-Specific
9000	US_IGT_PO	AIF Proxy (for web services)
9000	US_IGT_SET	Customer-Specific
9000	US_IGT_SIN	Customer-Specific
9000	US_IGT_SNV	AIF Proxy (for web services)
9000	US_IGT_SO	AIF Proxy (for web services)
9000	US_IGT_SEO	AIF Proxy (for web services)

5.3.4 Assign eDocument Type to Billing Document Type

In this Customizing step, you define if a billing document type is relevant for eDocument creation by assigning an eDocument type to it.

Context

In this view you can only maintain billing types that have no accounting document assignment, such as pro forma invoices. You assign eDocument types to billing types with accounting document in the Assign eDocument Type to Accounting Document Type Customizing activity.

Procedure

1. Execute transaction **SM30**. Enter **TVFKEDOCV** for the view name and click [Maintain](#).
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
Ctr	Select the country code from the list.

Field Name	Activity
BillT	Select the billing type from the list.
eDocument Type	Select the eDocument type from the list.

4. Save your changes.

Example

Ctr	BillT	eDocument Type
US	F2	US_IGT_INV
US	F5	US_IGT_INV
US	S1	US_IGT_INV

5.3.5 Assign eDocument Type to Purchase Order Document Type

In this Customizing activity, you define if a purchase order document type is relevant for eDocument creation assigning an eDocument type to it.

Context

The system creates eDocuments for the specified purchase order document types based on the settings that you do in this Customizing activity.

Depending on the business scenario you have in your company, you may need to use the same combination of country/region and purchase order document type for two different eDocument types. In this case, you can change the standard eDocument determination for source documents by implementing the eDocument type after standard determination (CHANGE_EDOCUMENT_TYPE) method of the eDocument Adaptor (EDOC_ADAPTOR) Business Add-In (BAI).

Procedure

1. Execute transaction SM30. Enter EDOT161VV_PO for the view name and click [Maintain](#).
2. Enter the country code key (that is, US) and click [Enter](#).
3. Click [New Entries](#).

4. Enter the following data:

Field Name	Activity
Type	Select the document type from the list.
eDocument Type	Select the eDocument type from the list.

5. Save your changes.

Example

Type	eDocument Type
NB	US_IGT_PO

5.3.6 Assign eDocument Type to Accounting Document Type

In this Customizing activity, you define that an accounting document type is relevant for eDocument creation.

Context

You use this Customizing activity to define if an accounting document type is relevant for eDocument creation by assigning an eDocument type to it..

The system creates eDocuments for the specified source documents based on the settings you do in this Customizing activity. Depending on the business scenario you have in your company, you may need to use the same combination of country/region and source document type for two different eDocument types.

Procedure

1. Execute transaction `SM30`. Enter `T003EDOCV` for the view name and click [Maintain](#).
2. Enter the country code key (that is, US) and click [Enter](#).
3. Click [New Entries](#).
4. Enter the following data:

Field Name	Activity
Type	Select the document type from the list.
eDocument Type	Select the eDocument type from the list.

5. Save your changes.

Example

Type	eDocument Type
DZ	US_IGT_SEO
KZ	US_IGT_SEO

5.3.7 Assign eDocument Type to Sales Document Type

In this Customizing activity, you define if a sales document type is relevant for eDocument creation assigning an eDocument type to it.

Context

The system creates eDocuments for the specified sales document types based on the settings that you do in this Customizing activity.

Note

Currently only sales document types belonging to the sales document category "C" (Order) are supported.

Depending on the business scenario you have in your company, you may need to use the same combination of country/region and sales document type for two different eDocument types. In this case, you can change the standard eDocument determination for source documents by implementing the eDocument type after standard determination (CHANGE_EDOCUMENT_TYPE) method of the eDocument Adaptor (EDOC_ADAPTOR) Business Add-In (BAI).

Procedure

1. Execute transaction SM30. Enter EDOTVAKV for the view name and click [Maintain](#).
2. Specify the Work Area.
3. Enter country code key (that is, US) and click [Enter](#).
4. Click [New Entries](#).
5. Enter the following data:

Field Name	Activity
Sales Doc Type	Select the document type from the list.
eDocument Type	Select the eDocument type from the list.

6. Save your changes.

Example

Sales Doc Type	eDocument Type
RONA	US_IGT_SO
ROWA	US_IGT_SO
ROWB	US_IGT_SO
OR	US_IGT_SO

5.3.8 Assign eDocument Status to Process Status

In this customizing step you assign eDocument status to process status.

Context

By default, each process status of an eDocument type is assigned to one of the three existing eDocument statuses:

- Green: Completed
- Yellow: In process
- Red: Action required

An eDocument's status changes as it gets processed. The purpose of the eDocument status is to help you identify at a glance when an eDocument requires that you perform an action on it.

You can change the standard assignment for each process status so that it better meets your business processes.

Example

You can define, for example, that eDocuments of a given eDocument type that are in process status cancelled (CANC) and rejected (REJE) still require your attention. Therefore you would like these process statuses to have the eDocument status In process (yellow icon), instead of eDocument status Completed (green icon).

Procedure

1. In Customizing for Cross-Application Components, go to ► [General Application Functions](#) ► [eDocuments](#) ► [General Settings](#) ► [Assign eDocument Status to Process Status](#) ►.
2. Click [New Entries](#).
3. Enter the following data:

Field Name	Activity
eDoc Process	Select the eDoc Process from the list.
Process Status	Select the process status from the list.
Status	Select the status from the list.

4. Save your changes.

Example

eDoc Process	Process Description	Process Status	Process Status Description	Status
US_IGT_DPA	G-Inv Down Payment In	CREATED	Document Created	In-Process
US_IGT_INV	G-Inv Billing Document Out	SEND_REQ	eDocument Submitted	In-Process
US_IGT_INV	G-Inv Billing Document Out	SEND_FAIL	eDocument Sending Error	Action required
US_IGT_PO	G-Inv Purchase Order Out	SENT	eDocument Submitted	Completed

5.4 AIF Customizing

The SAP Application Interface Framework (AIF) is used to manage and monitor all applications interfaces centrally.

The system uses AIF to map the transactional data to the required XML format and submit the XML to the G-Invoicing Hub. Standard AIF customizing setting can be found in the SAP Application Interface Framework documentation on the SAP Help Portal.

See [Define Namespace \[page 135\]](#) for the G-Invoicing-specific customizing entries that are already delivered as part of the G-Invoicing solution.

SAP Note [3158861](#) - G-invoicing: AIF configuration provides additional details regarding AIF customizing for G-Invoicing.

For more information regarding AIF Customizing please refer to the [AIF Customizing Help Document](#).

5.4.1 Define Namespace

In this customizing step, you can define namespaces for the logical structuring of objects and configurations in the SAP Application Interface Framework.

Context

All interfaces, value mappings, fix values, checks, and actions have to be assigned to a namespace. Refer to SAP standard customizing guides for more information.

The G-invoicing-specific namespace as listed below is already delivered as part of the G-Invoicing solution.

Procedure

1. In the Customizing, navigate to ► [Cross-Application Components](#) ► [General Application Functions](#) ► [SAP Application Interface Framework](#) ► [Interface Development](#) ► [Define Namespace](#) ►.
2. Maintain the following value:

NS	Namespace Description
/GINB	G-Invoicing Namespace

5.4.2 Define Interfaces

In this Customizing activity, you define interfaces in the SAP Application Interface Framework.

Context

You have to set up the interface according to the communication technology you are using (for example, the SAP NetWeaver PI). Once an interface is defined, you can maintain its mapping and assign actions. Refer to the SAP standard customizing guide and to the SAP note [3346882](#) for more information.

The G-invoicing-specific interfaces as listed below are already delivered as part of the G-Invoicing solution.

Procedure

1. In Customizing, go to ► [Cross-Application Components](#) ► [General Application Functions](#) ► [SAP Application Interface Framework](#) ► [Interface Development](#) ► [Define Interfaces](#) ►.
2. Select the namespace as /GINB and click [Continue](#).
3. Maintain the entries below.

Note

Any fields left blank or not mentioned in the table below are not required for G-Invoicing functionality. For more information on defining AIF interfaces, including details about all available fields, see [the general AIF interface documentation](#).

Interface Name	Version	Description	SAP Data Structure	Raw Data Structure
BD_OUT	00001	G-Invoicing Incoming Logistics Invoice	/GINB/ PERF_BD_AIF_OUT	/GINB/ PERF_BD_AIF_OUT
DWN_PYT	00001	G-Invoicing: Down-payment Processing	/GINB/ DWPYT_AIF_DATA	/GINB/ PERF_AIF_DATA_DP
LIV_IN	00001	G-Invoicing Incoming Logistics Invoice	/GINB/ SINV_AIF_DATA	/GINB/ PERF_AIF_DATA
LIV_OUT	00001	G-Invoicing Incoming Logistics Invoice	/GINB/ PERF_LIV_AIF_OUT	/GINB/ PERF_LIV_AIF_OUT
PO_OUT	00001	G-Invoicing Purchase Order Out	/GINB/S_AIF_OR- DER_DATA_SAP_V1	/GINB/S_AIF_OR- DER_DATA_RAW_V1
SET_IN	00001	G-Invoicing Incoming Settlements	/GINB/ SET_AIF_DATA	/GINB/ PERF_AIF_DATA_SET
SET_OUT	00001	G-Invoicing Settlement Out	/GINB/ S_SET_OUT_AIF_SAP	/GINB/ S_PERF_AIF_DATA_SET_OUT
SO_OUT	00001	G-Invoicing Sales Order Out	/GINB/S_AIF_SOR- DER_DATA_SAP_V1	/GINB/S_AIF_SOR- DER_DATA_RAW_V1

5.4.3 Specify Interface Engine

In this Customizing step, you can define which engines should be used to handle interface messages in, for example, Monitoring and Error Handling or the Message Summary.

Context

Depending on the interface's base technology—for example, IDoc or proxy—you have to maintain the corresponding engines. Please refer the standard SAP customizing guide and to the SAP note [3346882](#) for more information.

The G-invoicing-specific interfaces engines as listed below are already delivered as part of the G-Invoicing solution.

Procedure

1. In the Customizing, go to ► [Cross-Application Components](#) ► [General Application Functions](#) ► [SAP Application Interface Framework](#) ► [Interface Development](#) ► [Additional Interface Properties](#) ► [Specify Interface Engines](#) .
2. Select namespace /GINB and click [Continue](#).

Interface Name	Version	Description	ApplEngine	PersEngine	Sel.Engine	Log Engine
BD_OUT	00001	G-Invoicing In-coming Logistics Invoice	XML	XML	AIF Application Tables	AIF Application Log
DWN_PYT	00001	G-Invoicing: Downpayment Processing	XML	XML	AIF Application Tables	AIF Application Log
LIV_IN	00001	G-Invoicing In-coming Logistics Invoice	XML	XML	AIF Application Tables	AIF Application Log
LIV_OUT	00001	G-Invoicing In-coming Logistics Invoice	XML	XML	AIF Application Tables	AIF Application Log
PO_OUT	00001	G-Invoicing Purchase Order Out	XML	XML	AIF Application Tables	AIF Application Log

Interface Name	Version	Description	ApplEngine	PersEngine	Sel.Engine	Log Engine
SET_IN	00001	G-Invoicing In-coming Settlements	XML	XML	AIF Application Tables	AIF Application Log
SET_OUT	00001	G-Invoicing Settlement Out	XML	XML	AIF Application Tables	AIF Application Log
SO_OUT	00001	G-Invoicing Sales Order Out	XML	XML	AIF Application Tables	AIF Application Log

5.4.4 Define Serialization Settings

Serialization ensures that the messages are processed in the right order within the SAP Application Interface Framework.

Context

Please refer to the standard SAP customizing guide for more information.

The G-invoicing-specific serialization settings as listed below are already delivered as part of the G-Invoicing solution.

Procedure

1. Define the serialization object.
 1. In the Customizing for [Cross-Application Components](#) [General Application Functions](#) [SAP Application Interface Framework](#) [Interface Development](#) [Additional Interface Properties](#) [Define Serialization Settings](#).
 2. Select the namespace as /GINB and click [Continue](#).

Ser. Obj.	Serial. Ty.	Serialization Table	Enqueue Obj. Serial	Enqueue Obj. Locking	Max. No. Retries	Waitg.Time in Sec.
/GINB/LIV	No Serializa-tion	/GINB/LIV_IDX	/GINB/LIV_LOCK	/GINB/LIV_LOCK	5	30

2. Assign the serialization object to an interface.

1. Select serialization object `/GINB/LIV` from the previous step.
2. Use left pane navigation and click on Assign serialization object to interface

NS	Interface	Version
/GINB	LIV_IN	00001

3. Assign key fields for serialization.
 1. Select the `/GINB LIV_IN 0001` from the previous step.
 2. Use the left-pane navigation and click on [Assign key fields for serialization](#).

NS	Interface	Version	NS	Ser.Obj.	Field Name	Fld. SN.
/GINB	LIV_IN	00001	/GINB	/GINB/LIV	EBELN	1


4. Assign key fields for locking.
 1. Select the `/GINB LIV_IN 0001` from the previous step.
 2. Use the left-pane navigation and click on [Assign key fields for locking](#).

Field Name for Enqueue Object	Fld. SN.
EBELN	1

5.4.5 Define Interface ECH Fields




In this Customizing step, you define additional settings for the Error and Conflict Handler (ECH) interfaces that use the ECH selection engine.

Context

Refer to the standard SAP customizing guide and to the SAP note [3346882](#)  for more information.

The G-invoicing-specific ECH selection engine as listed below is already delivered as part of the G-Invoicing solution.

Procedure

1. In the Customizing for [Cross-Application Components](#)  [General Application Functions](#)  [SAP Application Interface Framework](#)  [Interface Development](#)  [Additional Interface Properties](#)  [Assign ECH Component](#) .

2. Select namespace /GINB and click [Continue](#).

Interface Name	Version	Description
BD_OUT	00001	G-Invoicing Incoming Logistics Invoice
DWN_PYT	00001	G-Invoicing: Downpayment Processing
LIV_IN	00001	G-Invoicing Incoming Logistics Invoice
LIV_OUT	00001	G-Invoicing Incoming Logistics Invoice
PO_OUT	00001	G-Invoicing Purchase Order Out
SET_IN	00001	G-Invoicing Incoming Settlements
SET_OUT	00001	G_invoicing Settlement Out
SO_IN	00001	G-Invoicing Incoming Sales Order
SO_OUT	00001	G-Invoicing Sales Order Out

5.4.6 Define Structure Mapping

In this Customizing step, you define the mapping for an interface and assign the actions that will be executed when processing a data message of that interface.

Context

The structure mapping is always dependent on the combination of a namespace, interface name, and interface version. Refer to the standard SAP customizing guide for more information.

The G-invoicing-specific customizing as listed below is already delivered as part of the G-Invoicing solution.

Procedure

1. In the Customizing for [Cross-Application Components](#) [General Application Functions](#) [SAP Application Interface Framework](#) [Interface Development](#) [Define Structure Mapping](#).
2. Select namespace /GINB, interface name BD_OUT, and version 00001. Click [Continue](#).
 1. Select **Source Structure** from the left pane navigation

Source Structure

RAWDOC

2. Select **Source Structure** RAWDOC from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

Destination Structure

Move Corresponding fields

RAWDOC

X

3. Click [Assign Actions](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	CR_BD_PERF	RAWDOC	

3. Select namespace /GINB, interface name DWN_PYT, version 00001 and click [Continue](#).

1. Select **Source Structure** from the left pane navigation

Source Structure

RAWDOC

2. Select **Source Structure** RAWDOC from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

Destination Structure

Move Corresponding fields

RAWDOC

X

3. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	CREATE_DP	SAPDATA	

4. Select namespace /GINB, interface name LIV_IN, version 00001 and click [Continue](#).

1. Select [Source Structure](#) from the left pane navigation.

Source Structure

PERF_DETAILS

PERF_HEADER

Source Structure

RAWDOC

2. Select [Source Structures](#) PERF_DETAILS from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module after mapping	Move Corresponding fields	Copy Fields	Indirect Mapping
1	ITEMS	/GINB/ AM_ITEM_EXT			X
2	ACC				X

3. Select destination structure ITEMS from the previous step and click [Define field mapping](#) from the left pane navigation.

Field in Destination Structure	Field Name 1	Field Name 2
ITEM_AMOUNT	QUANTITY	UNITPRICEAMOUNT
PO_UNIT	UNITOFMEASURE	
QUANTITY	QUANTITY	

4. Select destination structure ACC from the previous step and click [Define field mapping](#) from the left pane navigation.

Field in Destination Structure	Field Name 1	Field Name 2
PO_UNIT	UNITOFMEASURE	PO_UNIT

5. Select source structure PERF_HEADER from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module after mapping	Move Corresponding fields	Copy Fields	Indirect Mapping
1	HEADER	/GINB/ BM_INV_HEADE R			X
2	EXT				X
3	STATUS				X

6. Select destination structure `HEADER` from the previous step and click [Define field mapping](#) from the left pane navigation

Field in Destination Structure	Field Name 1	Field Name 2	Sub-table
COMP_CODE	%9000		
CURRENCY	%USD		
DOC_DATE	TRANSFERDATE		
INVOICE_IND	%X		
PSTNG_DATE			

7. Select destination structure `EXT` from the previous step and click [Define field mapping](#) from the left pane navigation.

Field in Destination Structure	Field Name 1	Field Name 2
STRUCTURE	%/GINB/S_BAPI_IVEXT	
VALUEPART1	PERFORMANCENUMBER	ORDERNUMBER

8. Select source structure `RAWDOC` from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module after mapping	Move Corresponding fields	Copy Fields	Indirect Mapping
1	SAPDATA	/GINB/ BM_ACC_ITEM			

9. Select destination structure `SAPDATA` from the previous step and click [Define field mapping](#) from the left pane navigation.

Field in Destination Structure	Field Name 1	Field Name 2	Sub-table
ACC			PERF_DETAILS
STATUS			PERF_HEADER
EXT			PERF_HEADER
HEADER			PERF_HEADER

Field in Destination Structure	Field Name 1	Field Name 2	Sub-table
ITEMS			PERF_DETAILS

10. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	CREATE_LIV	SAPDATA	

5. Select namespace /GINB, interface name LIV_OUT, version 00001 and click [Continue](#).

1. Select [Source Structures](#) from the left pane navigation.

Source Structure
ATTACHMENTS
PERF_DETAILS
PERF_HEADER
RAWDOC

2. Select source structure ATTACHMENTS from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Move Corresponding fields	Copy Fields	Indirect Mapping
1	ATTACHMENTS		X	X

3. Select the destination structure ATTACHMENTS and click [Define field Mapping](#).

Field in Destination Structure	Sub-table
Content	Content

4. Select source structure PERF_DETAILS from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Move Corresponding fields	Copy Fields	Indirect Mapping
1	PERF_DETAILS	X		

5. Select source structure `PERF_HEADER` from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Move Corresponding fields	Copy Fields	Indirect Mapping
1	PERF_HEADER	X		

6. Select source structure `RAWDOC` from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Move Corresponding fields	Copy Fields	Indirect Mapping
1	RAWDOC	X		

7. Select the destination structure `RAWDOC` and click [Define field Mapping](#).

Field in Destination	Sub-table
ATTACHMENTS	ATTACHMENTS
PERF_DETAILS	PERF_DETAILS
PERF_HEADER	PERF_HEADER

8. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	CR_LIV_PERF	RAWDOC	

6. Select namespace `/GINB`, interface name `PO_OUT`, version `00001` and click [Continue](#).

1. Select [Source Structure](#) from the left pane navigation

Source Structure
EDOC_DATA
ORDER_INFO
PO_DATA

2. Select source structure `EDOC_DATA` from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module After mapping	Move Corresponding fields
1	EDOC_DATA			X

3. Select source structure ORDER_INFO from the previous step to select source and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module After mapping	Move Corresponding fields
1	ORDER_INFO			X

4. Select source structure PO_DATA from the previous step to select source and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module After mapping	Move Corresponding fields
1	ORDER	/GINB/BM_PO_MAP		
2	ORDER_INFO			

5. Select destination structure ORDER_INFO from previous step and click [Field Mapping](#).

Field in Destination Structure	Field Name1
ECC_ORD_NUM	DOCUMENT_HEADER-PO_NUMBER
ORD_TYPE	%PO

6. Click [Assign Actions](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	SUBMIT_ORDER	ORDER	X

7. Select namespace /GINB, interface name SET_IN, version 00001 and click [Continue](#).

1. Select [Source Attribute](#) from the left pane navigation.

Source Structure
RAWDOC

2. Select source structure RAWDOC from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module After mapping	Move Corresponding fields
1	RAWDOC		/GINB/AM_SETTLEMENT	

3. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	CREATE_SET	SAPDATA	

8. Select namespace /GINB, interface name SET_OUT, version 00001 and click [Continue](#).

1. Select [Source Attribute](#) from the left pane navigation.

Source Structure
RAWDOC

2. Select source structure RAWDOC from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module After mapping	Move Corresponding fields
1	SAPDOC			X

3. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop Processing
1	/GINB	SUBMIT_SET_OUT	SAPDOC	

9. Select namespace /GINB, interface name SO_OUT, version 00001 and click [Continue](#).

1. Select [Source Attribute](#) from the left pane navigation.
2. Select source structure EDOC_DATA from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

SMapNr	Destination Structure	Function module before mapping	Function module after mapping	Move Corresponding fields
1	EDOC_DATA			'X

3. Click [Define Field Mapping](#) from the left pane navigation.
4. Repeat to Step 9. Select source structure SO_DATA from the previous step and click [Assign Destination Structure](#) from the left pane navigation.

5. Select ORDER_INFO and click [Define Field Mapping](#) from the left pane navigation.

Fields in Dest Struc	Field name 1
ECC_ORD_NUM	DOCUMENT_HEADER-VBELN
ORD_TYPE	%SO

6. Click [Assign Actions Structure](#) from the left pane navigation.

Action Number	Name Space	Action	Record Type	Stop processing on Error
1	/GINB	SUBMIT_ORDER	ORDER	X

5.4.7 Define Fix Values

In this Customizing activity, you define fix values in the SAP Application Interface Framework. The fix values that are defined here are reusable and can be maintained and changed in a central place.

Context

Within the SAP Application Interface Framework, fix values are used in structure and value mappings to assign a constant value to a field in the destination structure. Additionally, they can also be used in checks to refer to a constant value.

You should be aware of the different use of the term fix value, which refers to an object in the SAP Application Interface Framework, and the term constant value, which refers to a value that is fixed.

Refer to the standard SAP customizing guide for more information.

The G-invoicing-specific fix value definitions as listed below are already maintained as part of the G-Invoicing solution.

Procedure

1. In Customizing, go to [Cross-Application Components](#) [General Application Functions](#) [SAP Application Interface Framework](#) [Interface Development](#) [Define Fix Values](#).
2. Select namespace /GINB and click [Continue](#).

Name of Fix value	Fix value Description	Value
BUS_TRAN	Business Transaction	RFBU
OBJ_TYP	Reference procedure	BKPFF
TCODE_FBA7	Transaction Code	FBA7
INVOICESTATUS	Invoice status	A
TAXCODE	Default Tax Code	IO

5.4.8 Define Actions

In this Customizing step, you define the steps for message processing in the SAP Application Interface Framework.

Context

Refer to the standard SAP customizing guide for more information.

The G-invoicing-specific action definitions as listed below is already delivered as part of the G-Invoicing solution.

Procedure

1. In the Customizing for [Cross-Application Components](#) [General Application Functions](#) [SAP Application Interface Framework](#) [Interface Development](#) [Define Actions](#).
2. Select namespace /GINB and click *Continue*.

Action	Action Description	Init Fun	Commit Mode	Commit level	Read Old Msg	Main Component Type
CREATE_DP	Create Down Payment		COMMIT WORK	After Each Function		/GINB/ S_DP_DATA
CREATE_LIV	Create Invoice		COMMIT WORK	After Each Function		/GINB/ S_SINV_DATA
CREATE_SET	Create Settlement		COMMIT WORK	After Each Function		/GINB/ S_SET_DATA

Action	Action Description	Init Fun	Commit Mode	Commit level	Read Old Msg	Main Component Type
CR_BD_PERF	Create Performance from Billing Doc		COMMIT WORK	After Each Function		/GINB/ PERF_LIV_AIF_OUT
CR_LIV_PERF	Create Performance from LIV		COMMIT WORK	After Each Function		/GINB/ PERF_LIV_AIF_OUT
SUBMIT_ORDER	Submit Order Data to HUB		COMMIT WORK	After Each Function		/GINB/ S_ORD_DET_EXT
SUBMIT_SET_OUT	Submit Settlement Out		COMMIT WORK	After Each Function		/GINB/ S_AIF_SET_OUT_SAP

3. Define functions.

1. Select action CREATE_DP, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/FM_CREATE_DP	X	

2. Select action CREATE_LIV, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/FM_CREATE_LIV	X	

3. Select action CREATE_SET, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/FM_CREATE_SET	X	

4. Select action CR_BD_PERF, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
10	/GINB/ FM_SEND_BD_PER_HUB	X	

Function Number	Function Module Name	Stop processing on Error	Restart Always
20	/GINB/ FM_SEND_BD_TO_HUB_F OR_CM	X	

5. Select action CR_LIV_PERF then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/ FM_SEND_PER_HUB	X	

6. Select SUBMIT_ORDER, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/FM_SUBMIT_OR- DER	X	

7. Select SUBMIT_SET_OUT, then click [Define Functions](#) on the left pane navigation.

Function Number	Function Module Name	Stop processing on Error	Restart Always
1	/GINB/FM_SUB- MIT_SET_OUT	X	

5.4.9 Maintain Runtime Configuration Groups

Context

Runtime configuration defines the way in which messages submitted to the SAP AIF Framework are processed. For G-Invoicing, messages are always scheduled and executed in background, using RunCfgrID 001.

Procedure

1. Execute transaction [SM30](#).
2. Enter [/AIF/V_PERS_RTG](#) in the [Table/View](#) field and click [Maintain](#).

3. Enter **/GINB** for the namespace and click [Continue](#).
4. Maintain the following entries:

RunCfgID	Runtime Configuration Description	RunCfgAct	Scheduled
001	Run Time Config Asynchronous for G-Invoicing	Active (Checked)	Active (Checked)
002	Run Time Config Synchronous for G-Invoicing	Active (Checked)	Not active (Unchecked)

5. Save your entries.

6 Security Information for SAP Treasury G-Invoicing for SAP S/4HANA

This section deals with security topics relevant for SAP Treasury G-Invoicing for SAP S/4HANA.

6.1 Other Required Documents for Security

This section provides an overview of other security-related documents.

SAP Treasury G-Invoicing for SAP S/4HANA is based on SAP ECC and SAP Netweaver. This means that the corresponding security guides also apply.

Resource	Where to Find It
SAP ECC Security Guide	Visit https://help.sap.com/doc/4c39d7531a4d444de10000000a174cb4/2.6/en-US/frame-set.htm . From there, select your version of SAP ECC and under Product Documentation, choose Security Guide.
SAP Netweaver Security Guide	Visit https://help.sap.com/nw . From there, select the relevant SAP NetWeaver platform and version. Under Security, choose SAP NetWeaver Security Guide.
Data Protection and Privacy in SAP Treasury G-Invoicing for SAP S/4HANA	Data Protection and Privacy [page 161]

6.2 User Management

This section provides an overview of how you manage and authenticate users in SAP Treasury G-Invoicing for SAP S/4HANA.

As a prerequisite, you have created business users and user groups in your identity provider (IdP). SAP Treasury G-Invoicing for SAP S/4HANA uses the user management and authentication mechanisms provided for SAP S/4HANA and SAP Netweaver. The security recommendations and guidelines for user administration and authentication as described in the security guide for SAP S/4HANA and SAP NetWeaver also apply to SAP Treasury G-Invoicing for SAP S/4HANA.

6.2.1 User Types

This section describes the types of users relevant for SAP Treasury G-Invoicing for SAP S/4HANA. The types listed here are necessary for the operation of SAP Treasury G-Invoicing for SAP S/4HANA.

User Type	Description
Individual user	<p>Standard users that have access to G-Invoicing can perform one or more of the following roles:</p> <ul style="list-style-type: none">• Buyer or Requester• Seller or supplier• Admin user

It is often necessary to specify different security policies for different types of users. For example, your policy may specify that individual users who perform tasks interactively have to change their passwords on a regular basis, but not those users under which background processing jobs run.

6.2.2 User Administration Tools

This section lists the tools available for user management and administration for SAP Treasury G-Invoicing for SAP S/4HANA.

Tool	Description
Transaction SU01 - User maintenance for with SAP ABAP Based systems	<p>For more information about the authorization objects provided by SAP Treasury G-Invoicing for SAP S/4HANA, see Authorization Objects [page 155].</p>
Role maintenance with the profile generator for ABAP-based systems (transaction PFCG).	<p>For more information about the roles provided by SAP Treasury G-Invoicing for SAP S/4HANA, see Standard Roles [page 160].</p> <p>Also, see the security guide for SAP NetWeaver at https://help.sap.com/nw. Choose the relevant SAP NetWeaver platform and search for user and role administration of application server ABAP.</p>

6.2.3 User Data Synchronization

This section describes how to synchronize user data in SAP Treasury G-Invoicing for SAP S/4HANA.

User data synchronization for the G-Invoicing Hub can be achieved by using the SAP standard tool, LDAP. For complete documentation on LDAP, visit <https://help.sap.com/viewer/b3ee5778bc2e4a089d3299b82ec762a7/2.0.03/en-US/868f8b988e2d42ccb89ccaf263cd9986.html>.

6.2.4 Authentication and Single Sign-On

This section describes how authentication and single sign-on for users are implemented in SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA supports the Single Sign-On (SSO) mechanisms provided by SAP NetWeaver. Therefore, the security recommendations and guidelines for user administration and authentication as described in the SAP NetWeaver Security Guide also apply.

6.3 Role and Authorization Concept

This section describes the roles and authorizations available in SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA uses the authorization concept provided by the SAP NetWeaver AS ABAP. Therefore, the recommendations and guidelines for authorizations as described in the SAP NetWeaver AS Security Guide ABAP also apply.

The SAP NetWeaver authorization concept is based on assigning authorizations to users based on roles. For role maintenance, use the profile generator (transaction PFCG) on the AS ABAP.

Note

For more information about how to create roles, see the security guide for SAP NetWeaver at <https://help.sap.com/nw>. Choose the relevant SAP NetWeaver platform and version, and on the product page, search for User and Role Administration of Application Server ABAP. Under User and Role Administration of Application Server ABAP, choose Configuration of User and Role Administration.

6.3.1 Authorization Objects

The section lists the security-relevant authorization objects that are used by SAP Treasury G-Invoicing for SAP S/4HANA.

Each authorization objects described here has Group Identifier and Activity authorization fields. The Group Identifier field controls the groups that can access the authorization object. The Activity field controls what activities these groups can do with that authorization object. The authorization object and values are assigned to an authorization role that is then assigned to a user.

Users with SAP_ALL or SAP_NEW roles have access to all objects. These super user roles overrule the G-Invoicing authorization objects.

The following authorization activities are used in SAP Treasury G-Invoicing for SAP S/4HANA authorization objects:

Authorization Object Activity	Functionality
01 Add or Create	For Order object Send Empty For Performance object Create Acceptance
03 Display	Display
10 Post	Sync To ERP
10 Execute	Execute BOPF transaction. This activity required if you are assigning the Accept, Reject, Create Acceptance, Close, or Reopen activity to an authorization role.
37 Accept	Accept/Approve Order
39 Check	Check Order
60 Import	Pull From Treasury
61 Export	Push To Treasury
96 Reject	Reject Order/Performance
C4 Close Out	Close Order
C5 Reopen	Reopen Order

The authorization objects for G-Invoicing Hub functionality are:

Authorization Object	Field	Value	Description
/GINH/ACCT	ACTVT (Activity)	Display	Required to execute transaction /GINH/ACCOUNT_HANDLE
		Flag	
		Discard	
/GINH/ADMN	ACTVT (Activity)	Flag	Auth object for performance deletion report
		Display	
		Discard	
/GINH/ARCH	ACTVT (Activity)	Execute	Auth Object for archiving
/GINH/ATTR	ACTVT (Activity)	Add or Create	Authorization object for Attachments For Requesting Group
		Delete	
	/GINH/UPTY	Add or Create	Upload type for authorization object checks
		Delete	

Authorization Object	Field	Value	Description
/GINH/ATTS	ACTVT (Activity)	Add or Create Delete	Authorization object for Attachments For Servicing Group
	/GINH/UPTY	Add or Create Delete	Upload type for authorization object checks
/GINH/ERR	ACTVT (Activity)	Display	Auth Object for ERP and HUB error report on requesting side
/GINH/ERS	ACTVT (Activity)	Display	Auth Object for ERP and HUB error report on servicing side
/GINH/GRP	ACTVT (Activity)	Display Execute Import	Group Authorization Object, required to execute transactions /GINH/GRP_PULL and /GINH/DISP_GROUPS
/GINH/GTCA	ACTVT (Activity)	Add or Create Change Display Lock Delete Execute Check Prompts	G-Invoicing: GT&C authorization object
/GINH/GTCR	ACTVT (Activity)	Display Import	Auth Object for Requesting GT&C
/GINH/GTCS	ACTVT (Activity)	Display Import	Auth Object for Servicing GT&C
/GINH/NADM	ACTVT (Activity)	Maintain	Admin role to assign/subscribe order for other user for UI

Authorization Object	Field	Value	Description
/GINH/ORDR	ACTVT (Activity)	Add or Create	Auth Object for Requesting Order
		Display	
		Post	
		Execute	
		Accept	
		Import	
		Export	
		Reject	
		Close Out	
		Reopen	
/GINH/ORDS	ACTVT (Activity)	Add or Create	Auth Object for Servicing Order
		Display	
		Post	
		Execute	
		Accept	
		Check	
		Import	
		Export	
		Reject	
		Close Out	
		Reopen	
/GINH/PERA	ACTVT (Activity)	CHANGE	Performance Accounting Period Auth Object
/GINH/PERR	ACTVT (Activity)	Add or Create	Auth Object for Requesting Performance
		Display	
		Post	
		Execute	
		Import	
		Export	
		Reject	

Authorization Object	Field	Value	Description
/GINH/PERS	ACTVT (Activity)	Add or Create	Auth Object for Servicing Performance
		Display	
		Post	
		Execute	
		Import	
		Export	
/GINH/RELR	ACTVT (Activity)	Release	Authorization Object to hold and release perfs (Requesting)
		Flag	
/GINH/RELS	ACTVT (Activity)	Release	Authorization object to release "On Hold" perfs (Servicing)
/GINH/USR	ACTVT (Activity)	Add or Create	Authorization Object for the User actions
		Change	
		Display	

The authorization objects for G-Invoicing functionality in the ECC system are:

Authorization Object	Field	Value	Description
/GINB/PSC	ACTVT (Activity)	Add or Create	Auth Object - G Invoicing Product & Service Codes Processing
		Change	
		Display	
		Delete	
		Upload	
/GINB/PERS	ACTVT (Activity)	Execute	Auth object for deferred performance servicing side
/GINB/ORDS	ACTVT (Activity)	Execute	Authorization object for executing the Check for and Resolve G-Invoicing Sales Order Data Inconsistencies report
/GINB/ORDR	ACTVT (Activity)	Execute	Authorization object for executing the Check for and Resolve G-Invoicing Purchase Order Data Inconsistencies report

6.3.2 Standard Roles

This section describes the standard roles used by SAP Treasury G-Invoicing for SAP S/4HANA.

Role	Description
/GINU/BR_GTC_REQ_SPECIALISTNEW	Requesting side GT&C specialist
/GINU/BR_GTC_SER_SPECIALISTNEW	Servicing side GT&C specialist
/GINU/BR_ORD_REQ_SPECIALISTNEW	Requesting side order specialist
/GINU/BR_ORD_SER_SPECIALISTNEW	Servicing side order specialist
/GINU/BR_PER_REQ_SPECIALISTNEW	Requesting side performance specialist
/GINU/BR_PER_SER_SPECIALISTNEW	Servicing side performance specialist
/GINU/BR_GTC_REQ_SPECIALISTNEW	Requesting side GT&C specialist
/GINU/BR_GINV_ADMIN	Business role for G-Invoicing Admin
/GINU/BR_CONF_MODELRLR	Role for accessing the Notification Scenarios configuration app

6.4 Network and Communication Security

This section provides an overview of the network topology and communication protocols used by SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is developed on the SAP NetWeaver platform and SAP ERP. The security guidelines and recommendations described in the security guide for SAP NetWeaver platform and SAP ERP also apply for SAP Treasury G-Invoicing for SAP S/4HANA.

6.4.1 Communication Destinations

This section shows an overview of the communication destinations used by SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing solution requires communication destination to be maintained in:

- S/4: Standard RFC destinations (from S/4 to Hub)
- Hub : Standard RFC destinations (from Hub to S/4)
- Hub : Standard RFC destinations (from Hub to Treasury)

Information on how to maintain RFC destinations is available at https://help.sap.com/doc/saphelp_nw73/7.3.16/en-US/48/99b539ee2b73e7e10000000a42189b/frameset.htm.

6.4.2 Internet Communication Framework (ICF) Security

This section describes how SAP Treasury G-Invoicing for SAP S/4HANA uses Internet Communication Framework (ICF) services.

Use the SAP standard transaction code SICF and activate following services required for the SAP Treasury G-Invoicing for SAP S/4HANA solution:

Service for BSP functions

Use the transaction SICF and activate following services:

- GTC
- ORDER
- PERFORMANCE
- REUSELIB
- SVCLOGS

These services can be found under the `ginu` namespace.

Services for OData

Use the transaction SICF and activate following services:

- GTC_SRV
- ORDER_SRV
- PERFORMANCE_SRV
- SERVICELOG_SRV
- /GINH/CHANGE_DOCUMENTS_SRV
- /GINH/NOTIFICATIONS_SRV

For information on how to add OData services, see the SAP Knowledge Base Article "[2595454](#) - HOW TO: Add, Activate and Maintain OData Services".

If your firewalls use URL filtering, also note the URLs used for the services and adjust your firewall settings accordingly.

For more information, see the available user assistance for SAP NetWeaver. To find the relevant documents, go to SAP Help Portal at <https://help.sap.com/nw> and open the product page for your SAP NetWeaver release. Search for *activating and deactivating ICF services and ICF security*.

6.5 Data Protection and Privacy

This section provides information about how SAP Treasury G-Invoicing for SAP S/4HANA complies with data protection requirements.

6.5.1 Introduction

Data protection is associated with numerous legal requirements and privacy concerns. In addition to compliance with general data protection and privacy acts, it is necessary to consider compliance with industry-specific legislation in different countries. SAP provides specific features and functions to support compliance with regard to relevant legal requirements, including data protection, which are documented in these templates along with the assumptions that have been guiding the implementation in the software. By nature of legal requirements the conclusion whether these features are covering customer specific demands as well as the conclusion whether additional measures have to be taken is solely with the customer.

Note

SAP does not provide legal advice in any form. SAP software supports data protection compliance by providing security features and specific data protection-relevant functions, such as simplified blocking and deletion of personal data. In many cases, compliance with applicable data protection and privacy laws will not be covered by a product feature. Definitions and other terms used in this document are not taken from a particular legal source.

Caution

The extent to which data protection is supported by technical means depends on secure system operation. Network security, security note implementation, adequate logging of system changes, and appropriate usage of the system are the basic technical requirements for compliance with data privacy legislation and other legislation.

Generic Fields

You need to make sure that no personal data enters the system in an uncontrolled or non-purpose related way, for example, in free-text fields, through APIs, or customer extensions. Note that these are not subject to the read access logging (RAL) example configuration.

Note

In particular, there is a field in the approval-rejection workflow where comments can be maintained. No personal data should be entered into these fields.

6.5.2 Archiving

Data archiving is used to delete data at the end of its lifecycle and to block and delete personal data. Archiving moves personal data from the database to archive files if the end of purpose is reached. In doing

so, the personal data is implicitly marked as blocked. Blocked data has access restrictions to prevent further unauthorized processing.

Data archiving is used to remove mass data from the database that is no longer required in the system but must be kept in a format that can be analyzed. For most of the archiving objects, the SAP data archiving concept is based on the Archive Development Kit (ADK).

For more information, see the SAP NetWeaver Library on SAP Help Portal at <http://help.sap.com/nw>. Choose **SAP NetWeaver Platform** > **Application Help** > **Function-Oriented View** > **Solution Life Cycle Management** > **Data Archiving**.

For more information about which archiving objects in G-Invoicing are enabled for ILM, see the documentation for the relevant archiving objects.

This archiving documentation only addresses G-Invoicing objects in the Hub. For documentation of ECC objects, please refer to respective module documentation

The following table shows the available archiving objects:

Objects in G-Invoicing	Archiving Object
General Terms and Conditions	/GINH/GTC
G-Invoicing Order	/GINH/ORD
G-Invoicing Performances	/GINH/PERF

6.5.2.1 Archiving GT&Cs with /GINH/GTC

You can use the archiving object /GINH/GTC to archive GT&Cs with CLZ - Closed Order status..

Checks

The following checks need to be carried out before GT&Cs can be archived:

- The GT&C should be Closed - CLZ.

Archiving Tables for Archiving Object /GINH/GTC

When you archive using /GINH/GTC, data is archived from the following tables:

Table	Description
/GINH/D_GTC_AGRM	GT&C Agreement Information Nodes
/GINH/D_GTC_APRV	Approval Nodes
/GINH/D_ATF_ROOT	Attachment Root Node
/GINH/D_ATF_CONT	Attachment Information
/GINH/D_GTC_PART	Partner Information Nodes
/GINH/D_GTC_ALC	Agency Location Code
/GINH/D_GTC_BUSI	GT&C Business Unit
/GINH/D_GTC_COST	GT&C Cost Center
/GINH/D_GTC_DEPT	GT&C Department
GINH/D_GTC_SUBG	GT&C Sub Group

Programs

The following programs are delivered with /GINH/GTC_ARCHIVING:

Program	Function
/GINH/GTC_ARCH_WRITE	Write
/GINH/GTC_ARCH_DEL	Delete
/GINH/GTC_ARCH_READ	Read

Write Program

The write program supports the ADK interruption concept: that is, you can interrupt the write phase and continue at a later point. For more information, see the application documentation for data archiving under [► Data Archiving in the ABAP Application System ► Data Archiving with Archive Development Kit \(ADK\) ► Archive Administration ► Interrupting and Continuing Archiving Sessions ►](#). A compact log with information about the data processed is written in both the write and delete runs. Alternatively, you can enable the output of a detailed log containing additional information.

Delete Program

The standard variants SAP&PROD (production mode) and SAP&TEST (test mode) are delivered for the delete program. Progress confirmation is output in the job log and in the dialog (status line) at regular intervals in both the write run and delete run.

Characteristics

Archiving Object/GINH/GTC

Defining Preprocessing Variants

Write Mode enable simulate Check Box

Delete Mode not required

Defining Write Variants

Variant - Test Mode SAP&TEST

Variant - PROD Mode SAP&TEST

Archiving Business Objects

Business Object for Performance /GINH/GTC

Related Information

[ILM-Based Information for Archiving Objects \[page 170\]](#)

[Archiving Object Customizing \[page 170\]](#)

[Authorization Objects \[page 155\]](#)

6.5.2.2 Archiving Orders with /GINH/ORD

You can use the archiving object /GINH/ORD to archive orders with CLZ - Closed Order status. You use the program /GINH/ORD_ARCHIVING.

Checks

The following checks need to be carried out before orders can be archived:

- The order should be Closed - CLZ.

Archiving Tables for Archiving Object /GINH/ORD

When you archive using /GINH/ORD, data is archived from the following tables:

Archiving Table	Description
/GINH/D_ORD_LINE	Order line item
/GINH/D_ORD_PAR	Partner Function
/GINH/D_ATF_ROOT	Attachment Root Node
/GINH/D_ATF_CONT	Attachment Information
/GINH/D_ORD_SCH	Schedule Line
/GINH/D_ORD_SHIP	Ship to party
/GINH/D_ORD_SLA	SLOA Fields
/GINH/D_ORD_PPP	
/GINH/D_ORD_FUND	Funding information
GINH/D_ORD_ERR	Order Error Details

Programs

The following programs are delivered with /GINH/ORD_ARCHIVING:

Program	Function
/GINH/ORD_ARCH_WRITE	Write
/GINH/ORD_ARCH_DEL	Delete
/GINH/ORD_ARCH_READ	Read

Write Program

The write program supports the ADK interruption concept, that is, you can interrupt the write phase and continue at a later point. For more information, see the application documentation for data archiving under

► [Data Archiving in the ABAP Application System](#) ► [Data Archiving with Archive Development Kit \(ADK\)](#)

► [Archive Administration](#) ► [Interrupting and Continuing Archiving Sessions](#) ►. A compact log with information about the data processed is written in both the write and delete runs. Alternatively, you can enable the output of a detailed log containing additional information.

Deletion Program

The standard variants SAP&PROD (production mode) and SAP&TEST (test mode) are delivered for the delete program. Progress confirmation is output in the job log and in the dialog (status line) at regular intervals in both the write run and delete run.

Characteristics

Archiving Object/GINH/ORD

Defining Preprocessing Variants

Write Mode enable simulate Check Box

Delete Mode not required

Defining Write Variants

Variant - Test Mode SAP&TEST

Variant - PROD Mode SAP&TEST

Archiving Business Objects

Business Object for Performance /GINH/ORDERS

Related Information

[ILM-Based Information for Archiving Objects \[page 170\]](#)

[Archiving Object Customizing \[page 170\]](#)

[Authorization Objects \[page 155\]](#)

6.5.2.3 Archiving Performances with /GINH/PERF

You can use the archiving object /GINH/PERF to archive performances that have the status INF–Informational or STL–Settled. The corresponding order status should be Closed CLZ. You use the program /GINH/PERF_ARCHIVING.

Checks

The following checks need to be carried out before performances can be archived:

- The corresponding order should be Closed - CLZ.
- The performance must have the status INF–Informational or STL–Settled.

Archiving Tables for Archiving Object /GINH/PERF

When you archive using /GINH/PERF, data is archived from the following tables:

Archiving Table	Description
/GINH/D_PER_DTL	Performance Detail Nodes
/GINH/D_PER_ERR	Performance Error Nodes
/GINH/D_ATF_ROOT	Attachment Root Node
/GINH/D_ATF_CONT	Attachment Information
/GINH/PER_DET_AG	Aggregation node for performance details

Programs

The following programs are delivered with /GINH/PERF_ARCHIVING:

Program	Function
/GINH/PERF_ARCH_WRITE	Write
/GINH/PERF_ARCH_DEL	Delete
/GINH/PERF_ARCH_READ	Read

Write Program

The write program supports the ADK interruption concept: that is, you can interrupt the write phase and continue at a later point. For more information, see the application documentation for data archiving under

► [Data Archiving in the ABAP Application System](#) ► [Data Archiving with Archive Development Kit \(ADK\)](#)
► [Archive Administration](#) ► [Interrupting and Continuing Archiving Sessions](#) ►. A compact log with information about the data processed is written in both the write and delete runs. Alternatively, you can enable the output of a detailed log containing additional information.

Delete Program

The standard variants SAP&PROD (production mode) and SAP&TEST (test mode) are delivered for the delete program. Progress confirmation is output in the job log and in the dialog (status line) at regular intervals in both the write run and delete run.

Characteristics

Archiving Object/GINH/PERF

Defining Preprocessing Variants

Write Mode enable simulate Check Box

Delete Mode not required

Defining Write Variants

Variant - Test Mode SAP&TEST

Variant - PROD Mode SAP&TEST

Archiving Business Objects

Business Object for Performance /GINH/PERFORMANCE

Related Information

[ILM-Based Information for Archiving Objects \[page 170\]](#)

[Archiving Object Customizing \[page 170\]](#)

[Authorization Objects \[page 155\]](#)

6.5.2.4 ILM-Based Information for Archiving Objects

Archiving objects require information on the retention period of the related data. To facilitate the storage of this information, the information is bound to SAP ILM objects.

To display the defined archiving ILM objects, execute transaction `IRM_CUST`, select [OT_FOR_BS](#), and click [ILM Objects](#).

You can select individual ILM objects and click the folder under ILM Object (Dialogue Structure) to display or maintain various standard settings.

ILMARA Audit Area Processing

All archiving objects are assigned to corresponding ILM objects. Using transaction ILMARA, you can assign ILM objects to audit areas. Subsequently, you can create rules using transaction IRMPOL for each audit area, termed policies.

6.5.2.5 Archiving Object Customizing

AOBJ (Archiving object definition) is a standard SAP parameter transaction code. An archiving object specifies which data to archived and how. The archiving object directs the SAP Archiving system to get the correct tables to be associated with the specific business object.

Execute transaction AOBJ, select `/GINH/TCH`, and click on Structure Definition and other object nodes where standard settings have been maintained.

- Double-click the [Customizing Settings](#) node to maintain the Archive File size and standard Test and Live Mode variants.
- Double-click the [Read Programs](#) node to maintain the Archive Read program.

6.5.3 Glossary

The following terms are general to SAP products. Not all terms may be relevant for this SAP product.

Term	Definition
Artificial Intelligence (AI)	The simulation of human intelligence processes by machines and computer systems – typically by learning, coming to its own conclusions, appearing to understand complex content, engaging in natural dialogs with people, enhancing human cognitive performance (also known as cognitive computing) or replacing people on execution of nonroutine tasks. Applications include autonomous vehicles, automatic speech recognition and generation and detecting novel concepts and abstractions (useful for detecting potential new risks and aiding humans to quickly understand very large bodies of ever-changing information)
Automated Decision Making	The ability to make decisions by technological means without human involvement.
Blocking	A method of restricting access to data for which the primary business purpose has ended.
Business Purpose	The legal, contractual, or in other form justified reason for the processing of personal data to complete an end-to-end business process. The personal data used to complete the process is predefined in a purpose, which is defined by the data controller. The process must be defined before the personal data required to fulfill the purpose can be determined.
Consent	The action of the data subject confirming that the usage of his or her personal data shall be allowed for a given purpose. A consent functionality allows the storage of a consent record in relation to a specific purpose and shows if a data subject has granted, withdrawn, or denied consent.
Data Subject	Any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.
Deletion	Deletion of personal data so that the data is no longer available.
End of Business	Defines the end of active business and the start of residence time and retention period.

Term	Definition
End of Purpose (EoP)	The point in time when the processing of a set of personal data is no longer required for the primary business purpose, for example, when a contract is fulfilled. After the EoP has been reached, the data is blocked and can only be accessed by users with special authorizations (for example, tax auditors).
End of Purpose (EoP) check	A method of identifying the point in time for a data set when the processing of personal data is no longer required for the primary business purpose . After the EoP has been reached, the data is blocked and can only be accessed by users with special authorization, for example, tax auditors.
Personal data	Any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.
Processing of Personal Data	Processing means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.
Purpose	The information that specifies the reason and the goal for the processing of a specific set of personal data. As a rule, the purpose references the relevant legal basis for the processing of personal data.
Residence period	The period of time between the end of business and the end of purpose (EoP) for a data set during which the data remains in the database and can be used in case of subsequent processes related to the original purpose. At the end of the longest configured residence period, the data is blocked or deleted. The residence period is part of the overall retention period.
Retention period	The period of time between the end of the last business activity involving a specific object (for example, a business partner) and the deletion of the corresponding data, subject to applicable laws. The retention period is a combination of the residence period and the blocking period.

Term	Definition
Sensitive personal data	<p>A category of personal data that usually includes the following type of information:</p> <ul style="list-style-type: none"> • Special categories of personal data, such as data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data, data concerning health or sex life or sexual orientation. • Personal data subject to professional secrecy • Personal data relating to criminal or administrative offenses • Personal data concerning insurances and bank or credit card accounts
Technical and organizational measures (TOM)	<p>Some basic requirements that support data protection and privacy are often referred to as technical and organizational measures (TOM). The following topics are related to data protection and privacy and require appropriate TOMs, for example:</p> <ul style="list-style-type: none"> • Access control: Authentication features • Authorizations: Authorization concept • Read access logging • Transmission control / Communication security • Input control / Change logging • Availability control • Separation by purpose: Is subject to the organizational model implemented and must be applied as part of the authorization concept.

6.5.4 Read Access Logging

Read Access Logging is considered as an additional safeguard in the protection of personal data, because it helps to identify potential illegitimate access to personal data. Read access to sensitive personal data is partially based on legislation, and it is subject to logging functionality. Read access logging (RAL) is used to monitor and log read access to sensitive personal data that was disclosed via user interface, which can be extended to read access to other personal data. Data may be categorized as sensitive by law, by external company policy, or by internal company policy. When these read accesses are logged, you should be able to check which user accessed personal data on which access channel and the date and time, depending on the configuration. Read access logging enables you to answer questions about who accessed particular data within a specified time frame. That logging also includes downloading attachments or files, logs for such events shall contain information to identify the attachment. Additionally, as for Read Access Logging across system boundaries, the respective "access" shall be logged as soon as sensitive personal data crosses the boundary from a trusted to an un-trusted area. Here are some examples of such questions:

- Who accessed the data of a given business entity, for example a bank account?
- Who accessed personal data, for example of a business partner?
- Which employee accessed personal information, for example religion?
- Which accounts or business partners were accessed by which users?

Furthermore, log records can be viewed and queried, but access to them is restricted by adequate authorizations. The personal data for which read access shall be logged and the retention period of logs, can be configured.

In read access logging (RAL), you can configure which read-access information to log and under which conditions. SAP delivers sample configurations for applications. The application component scenario logs data to describe business processes.

For the following configurations, fields are logged in combination with additional fields in the following business contexts:

Configuration	Fields Logged	Business Context
<Name of Configurations 1>	<Fields 1>	<Describe business context 1>
<Name of Configurations 1>	<Fields 2>	<Describe business context 1>
<Name of Configurations 2>	<Fields 1>	<Describe business context 1>
<Name of Configurations 2>	<Fields 1>	<Describe business context 2>

Read access logging is currently available in, but not limited to the following channels:

- Remote Function Calls (sRFC, aRFC, tRFC, qRFC, bgRFC)
- Dynpro
- Web Dynpro
- Web services
- Gateway (for OData)

The template below shows how these fields are logged and may be combined with additional fields in the following business contexts.

6.5.5 Deletion of Personal Data

Simplified Blocking and Deletion

The processing of personal data is subject to applicable laws related to the deletion of this data when the specified, explicit, and legitimate purpose for processing this personal data has expired. If there is no longer a legitimate purpose, that requires the retention and use of personal data, it must be deleted irrecoverably. Blocking is necessary when the original retention period has expired but additional applicable extended and

overruling (mandated by law) retention periods are still in place. After the expiration of the longest retention period, the data must be deleted.

Deletion of Personal Data

When considering compliance with data protection regulations, it is also necessary to consider compliance with industry-specific legislation in different countries. A typical potential scenario in certain countries is that personal data shall be deleted after the specified, explicit, and legitimate purpose for the processing of personal data has ended, but only if no other retention periods are defined in legislation, for example, retention periods for financial documents. Legal requirements in certain scenarios or countries also often require blocking of data in cases where the specified, explicit, and legitimate purposes for the processing of this data have ended, however, the data still has to be retained in the database due to other legally mandated retention periods. Sometimes, transactional data are personal data with relation to a master data object, e.g. a sales order with reference to a business partner. Therefore, the challenge for deletion and blocking is first to handle transactional data and finally other data, such as business partner data.

This SAP product might process data (personal data) that is subject to the data protection laws applicable in specific countries.

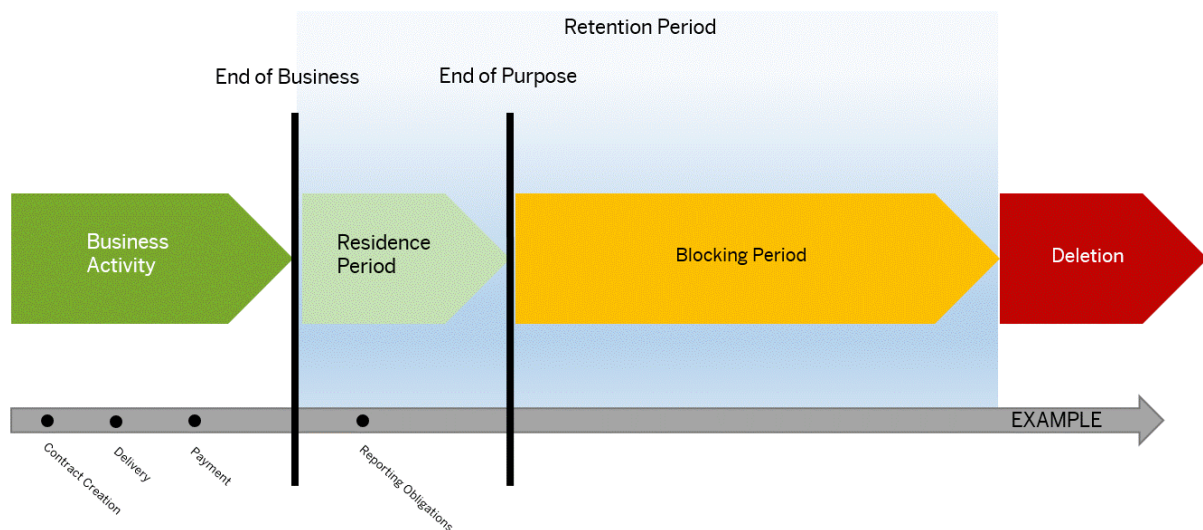
Deletion

To enable even complex scenarios, SAP simplifies existing deletion functionalities to cover data objects that are personal data by default. For this purpose, SAP uses SAP Information Lifecycle Management (ILM) to help you set up a compliant information lifecycle management process in an efficient and flexible manner. The functions that support the simplified blocking and deletion of personal data are not delivered in one large implementation, but in several waves. Scenarios or products that are not specified in SAP Note [1825608](#) (central Business Partner) and SAP Note [2007926](#) (ERP Customer and Vendor) are not yet subject to simplified blocking and deletion. Nevertheless, it is also possible to destroy personal data for these scenarios or products. In these cases, you have to use an existing archival or deletion functionality or implement individual retention management of relevant business data throughout its entire lifecycle. The ILM component supports the entire software lifecycle including storage, retention, blocking, and deletion of data.

End-of-Purpose Check (EoP Check):

An end of purpose (EoP) check determines whether data is still relevant for business activities based on the retention period defined for the data. The retention period is part of the overall lifecycle of personal data which consists of the following phases:

- **Business activity:** The relevant data is used in ongoing business, for example contract creation, delivery or payment.
- **Residence period:** The relevant data remains in the database and can be used in case of subsequent processes related to the original purpose, for example reporting obligations.
- **Blocking period:** The relevant data needs to be retained for legal reasons. During the blocking period, business users of SAP applications are prevented from displaying and using this data; it can only be processed in case of mandatory legal provisions.
- **Deletion:** The data is deleted and no longer exists in the database.



Blocking of data can impact system behavior in the following ways:

- **Display:** The system does not display blocked data.
- **Change:** It is not possible to change a business object that contains blocked data.
- **Create:** It is not possible to create a business object that contains blocked data
- **Copy/Follow-Up:** It is not possible to copy a business object or perform follow-up activities for a business object that contains blocked data.
- **Search:** It is not possible to search for blocked data or to search for a business object using blocked data in the search criteria.

It is possible to display blocked data if a user has special authorization; however, it is still not possible to create, change, copy, or perform follow-up activities on blocked data.

6.5.6 Change Log

Creation and change of personal data need to be documented. Therefore, for review purposes or as a result of legal regulations, it may be necessary to track the changes made to this data. When these changes are logged, you should be able to check which user made which change, the date and time, the previous value, and the current value, depending on the configuration. Furthermore, log records can be viewed and queried, but access to them is restricted by adequate authorizations. The personal data for which changes shall be logged and the retention period of logs, can be configured..

Displaying Change Logs in SAP Treasury G-Invoicing for SAP S/4HANA

In the *worklist* of SAP Treasury G-Invoicing for SAP S/4HANA, you can access a change log for each change request and activity.

Note

Change logs can only be displayed if the user is assigned the authorization role `SAP_AUTH_MOC_ADMIN`.

Under ► *Evaluate New Audit Trail* ► *Enhancement Mode* ▢ (transaction S_AUT10), you can see all changes that have been processed for the change document objects in SAP Treasury G-Invoicing for SAP S/4HANA, S_/IAM/ACT (activity) and /IAM/ISSUE (change request).

See Also

For more information on change documents see the documentation at <http://help.sap.com/netweaver>. Choose the relevant SAP NetWeaver version and open the following documentation:

- Under *Application Help*, go to ► *SAP NetWeaver Library: Function-Oriented View* ► *Application Server ABAP* ► *Other Services* ► *Services for Application Developers* ► *Change Documents* ▢.
- Open the *SAP NetWeaver Security Guide* and go to ► *Security Aspects for Lifecycle Management* ► *Auditing and Logging* ▢.

6.6 Security for Third-Party Applications

This section describes security aspects of third-party applications used in SAP Treasury G-Invoicing for SAP S/4HANA.

There are no third-party applications used as part of SAP Treasury G-Invoicing for SAP S/4HANA solution.

7 Operating SAP Treasury G-Invoicing for SAP S/4HANA

This section contains general information about how to operate SAP Treasury G-Invoicing for SAP S/4HANA.


Note

This section does not replace the operations handbook in which customers or the operations organization documents specific tasks, involved parties, and interaction procedures.

7.1 Other Required Documents for Operations

This section lists other documents that you need in order to operate SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is based on SAP S/4HANA, SAP Netweaver, and SAP Fiori. The general operations information that is covered in the related operations guides also applies to SAP Treasury G-Invoicing for SAP S/4HANA.

Document	Where to Find It
SAP S/4HANA On Premise Documentation Resources	https://help.sap.com/docus/SAP_S4HANA_ON-PREMISE
Operations Guide for SAP ECC	https://help.sap.com/viewer/product/SAP_ERP/6.00.latest/en-US?task=implement_task On the Implement tab, select the Application Operations Guide
SAP Fiori Operations information	https://help.sap.com/viewer/78fa993927804983ba1fb5010ca0c1a2/FES5.0.00/en-US
G-Invoicing Application Help	Application Help
US Treasuring G-Invoicing Documentation Resources	https://www.fiscal.treasury.gov/g-invoice/resources.html
SAP Application Interface Framework Documentation Resources	https://www.sap.com/products/application-interface-mgmt.html 
SAP Document Compliance Resources	https://help.sap.com/viewer/product/SAP_E_DOCUMENT/6.18.17/en-US?task=discover_task

7.2 CDS View at Performance Line-Item Level with Order Schedule Line

You can use the CDS view described below to generate reports at the performance line-item level that include the order schedule line. For more information on how to make use of CDS views, see [Creating an Appropriate CDS View Extension](#) in the standard SAP documentation.

View Name	/GINH/C_PerfDetlToOrdMap
SQL View Name	/GINH/CPerfDtOrd
Tables Involved	<ul style="list-style-type: none">• Performance: /GINH/D_PER_ROOT• Performance Details Line: /GINH/D_PER_DETL• Order: /GINH/D_ORD_ROOT• Order Line: /GINH/D_ORD_LINE• Order Schedule Line: /GINH/D_ORD_SCH• Order Funding Info Details: /GINH/D_ORD_FUND• Order Billing Advance Delivery Details: /GINH/ORD_BILL_ADV_DEL

7.3 Monitoring

This section describes monitoring tasks for SAP Treasury G-Invoicing for SAP S/4HANA.

7.3.1 Alert Monitoring

This section describes available monitoring tools for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms for Alert Monitoring.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.3.2 Error Monitoring

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution, and it utilizes standard SAP mechanisms for error logging.

For general information on error logging, refer to the standard [SAP Application Operations guide](#) found at the [SAP Help Portal](#).

AIF Error Handling

For information specific to AIF error handling, refer to the [Error Handling](#) topic in the SAP Application Interface Framework documentation. For information specific to the communication between the HUB and Treasury, please refer to [Service Logs \[page 181\]](#).

The G-Invoicing Error Monitoring Cockpit

G-Invoicing provides an Error Monitoring Cockpit that allows users to review all errors related to G-Invoicing documents, regardless of whether they originate from ERP, the Hub, or Treasury. Within this cockpit, errors are presented in an easy-to-read and easy-to-interpret manner. See [Access the G-Invoicing Error Monitoring Cockpit](#).

HTTP Errors from Treasury During Order or Performance Sync

G-Invoicing captures any HTTP errors that may be returned by Treasury when an attempt is made to sync an order or performance with Treasury. Captured errors are stored in the Hub and viewable in the error details in the service log, as well as in the Error Monitoring Cockpit.

HTTP 500 Error Handling

During a PUSH operation from an order or performance document, when Treasury returns an HTTP 500 error, it is stored in the Hub as an "Application Server Error" and can be viewed in Error Monitoring Cockpit.

HTTP 404/405 Error Handling

During a PUSH operation from an order or performance document, when Treasury returns an HTTP 404/405 error, it is stored in the Hub with the text "The server has not found anything matching the Request-URI". The buyer or seller Hub status is also changed to "error-(Hub Status)", and the error details are shown in the tab. In addition to this, the user can also view the error details in Error Monitoring Cockpit.

When a HTTP 404/405 error is encountered, a sync lock is also set for the document only during the POST method for orders or performances and during the PUT method for orders with the status "Modified".

HTTP Error during PULL Method

During a PULL operation from an order or performance document, if Treasury returns an HTTP 500/404/405 error, it is stored in the Hub and can be viewed in the Error Monitoring Cockpit.

7.3.2.1 Service Logs

As the consumer of the APIs exposed by the US Treasury for G-Invoicing, the SAP G-Invoicing Hub captures a database record containing a snapshot of the transmission detail whenever a call to an API is made during transaction processing. This data is available in the Service Log app which provides a detailed technical record of the communication between the SAP G-Invoicing Hub and the US Treasury system API. The data presented in the app is ordered sequentially by date and time so a technical user can identify the API, success/error detail, involved user, and data of the call itself for the purposes of troubleshooting or auditing.

Each of the following fields is logged by the SAP G-Invoicing Hub during communication with an API exposed by Treasury. Several fields are available by standard as filters for the SAP G-Invoicing Hub app.

Field	Available as Filter?	Business Context	Examples or Further Information
Object	Yes	Key for the Hub object type that corresponds to a specific API exposed by Treasury	<ul style="list-style-type: none"> • GTC GT&C • ORD Order • PER Performance • GRP Group • ATT Attachment
Object ID	Yes	Key for the corresponding object at the time of the call	<ul style="list-style-type: none"> • GT&C number • For Orders, this can be the temporary Hub order number corresponding to the back-end ERP Purchase/Sales Order or the US Treasury order number. • For Performance, this can correspond to the back-end ERP invoice/account document or the US Treasury Order number. • For other objects, a unique GUID is generated at runtime.
HTTP Method	Yes	HTTP semantic/verb associated with the API call	For example: <ul style="list-style-type: none"> • GET • POST • PUT • DELETE

Field	Available as Filter?	Business Context	Examples or Further Information
HTTP Status	Yes	The corresponding HTTP status code that was issued by the Treasury API in response to the request from the SAP G-Invoicing Hub	For example: <ul style="list-style-type: none"> • 200 - OK • 400 - Bad Request • 403 - Forbidden • 404 - Not Found • 500 - Internal Service Error
Username	Yes	The user ID at runtime that initiated the API call	
Date/time	Yes	The date and time of the system when the API call was initiated	
Outbound XML	No	Raw XML payload prepared by the SAP G-Invoicing add-on that was then sent to the specified Treasury API	SAP G-Invoicing Hub is always the consumer of the API, which means that this is the HTTP Request prepared by Hub. Note that in the case of a GET request, the outbound XML may be blank.
Inbound XML	No	Raw XML payload that was returned from the specified Treasury API in response to the call from the SAP G-Invoicing add-on solution	Consistent with the above role, this is the HTTP Response from the API from Treasury that is returned to the Hub

Data Maintenance for Service Logs with Program /GINH/CLEAR_SERVICE_LOGS

As indicated above, the data for the service log is stored in the database of the SAP G-Invoicing Hub system, and an entry is added each time there is communication between the Hub and Treasury via the API. This means the volume of data corresponds to the processing of business transactions related to intergovernmental orders and grows substantially.

Program /GINH/CLEAR_SERVICE_LOGS allows for data to be cleared based on the age of the entry, providing a mechanism to manage the volume of the Service Log data. This program can be run on demand or automated through a batch job.

Additional Information

For more information regarding potential errors and their significance, as well as details regarding the message formatting, please refer to the [interface documentation](#) maintained by the Bureau of the Fiscal Service.

7.3.3 Workload Monitoring

This section describes aspects of workload monitoring for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms for workload monitoring.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.3.4 Interface Monitoring

This section describes aspects of interface monitoring relevant for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms for interface monitoring.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.3.5 Background Job Monitoring

This section describes all background jobs used by SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms for Background Job monitoring.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.4 Administration and Management

This section describes administrator tasks for SAP Treasury G-Invoicing for SAP S/4HANA.

7.4.1 Starting and Stopping

This section describes how to start and stop SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.4.2 Technical Configuration

This section describes aspects of technical configuration for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms.

Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.4.2.1 Set up and configure Virus Scan profiles in the Hub

SAP Treasury G-Invoicing for SAP S/4HANA supports the uploading of attachments. For example, you can upload files such as quality specifications and attach them to deals.

However, if you want to use this upload feature, you must either deactivate the virus scan or set up your own virus scan provider in the Hub. You can configure these settings using the virus scan profile in the virus scan interface, which is located in Customizing for SAP NetWeaver under ► [SAP Gateway](#) ► ► [OData Channel](#) ► [Administration](#) ► [General Settings](#) ► [Define Virus Scan Profiles](#) ►.

For more information about the virus scan profile and configuring virus scan providers, see the following documentation:

- SAP Library at <http://help.sap.com/nw>. Choose the relevant SAP NetWeaver version and, under Application Help, choose SAP NetWeaver Library: ► [Function-Oriented View](#) ► ► [Security](#) ► [System Security](#) ► [Virus Scan Interface](#) ►.
- SAP Note [786179](#) ►
- SAP Note [1494278](#) ►
- SAP Note [1946234](#) ►
- [Maintain Virus Scan Profile for Attachments \[page 105\]](#)

7.4.2.2 Set up archive links

You must set up ArchiveLink for attachments for SAP Treasury G-Invoicing for SAP S/4HANA.

See [Define Content Repositories \[page 104\]](#).

7.4.3 Backup and Restore

This section describes procedures for backing up and restoring SAP Treasury G-Invoicing for SAP S/4HANA.

You need to back up your system landscape regularly to ensure that you can restore and recover it in case of failure.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms. Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.4.4 Periodic Tasks

This section describes periodic tasks that must be completed for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms. Please refer to the standard SAP Operations Guide for more information if you need to define periodic tasks, found at the [SAP Help Portal](#).

The following transactions are available to be run in the background if desired.

Transaction Code	Description	Program Name
/GINH/GTC_ARCH_DEL	GT&C Archiving Delete	/GINH/GTC_ARCH_DEL
/GINH/GTC_ARCH_READ	GT&C Archiving Read	/GINH/GTC_ARCH_READ
/GINH/GTC_ARCH_WRITE	GT&C Archiving Write	/GINH/GTC_ARCH_WRITE
/GINH/GTC_PULL_R	GTC Pull Treasury To Hub-Requesting	/GINH/GTC_PULL_R_DOCUMENTS
/GINH/GTC_PULL_S	GTC Pull Treasury To Hub-Servicing	/GINH/GTC_PULL_S_DOCUMENTS
/GINH/ORD_ARCH_DEL	Order Archiving Delete	/GINH/ORD_ARCH_DEL
/GINH/ORD_ARCH_READ	Order Archiving Read	/GINH/ORD_ARCH_READ
/GINH/ORD_ARCH_WRITE	Order Archiving Write	/GINH/ORD_ARCH_WRITE
/GINH/ORD_PULL_R_DOC	Pull Orders from Treasury - Requesti	/GINH/ORDERS_PULL_R_DOCU- MENTS
/GINH/ORD_PULL_S_DOC	Pull Orders from Treasury-Servicing	/GINH/ORDERS_PULL_S_DOCU- MENTS
/GINH/ORD_PUSH_R_DOC	Push Orders to Treasury - Requesting	/GINH/ORDERS_PUSH_R_DOCU- MENTS

Transaction Code	Description	Program Name
/GINH/ORD_PUSH_S_DOC	Push Orders to Treasury - Servicing	/GINH/ORDERS_PUSH_S_DOCUMENTS
/GINH/PERF_ARCH_DEL	Performance Archiving Delete	/GINH/PERF_ARCH_DEL
/GINH/PERF_ARCH_READ	Performance Archiving Read	/GINH/PERF_ARCH_READ
/GINH/PERF_ARCH_WRIT	Performance Archiving Write	/GINH/PERF_ARCH_WRITE
/GINH/PERF_PULL_R	Perf Pull Treasury To Hub-Requesting	/GINH/PERF_PULL_R_DOCUMENTS
/GINH/PERF_PULL_S	Perf Pull Treasury To Hub-Servicing	/GINH/PERF_PULL_S_DOCUMENTS
/GINH/R_PER_DPATOERP	Down Payment To ERP - Requesting	/GINH/R_PERF_DPA_TO_ERP
/GINH/R_SND_ORDTOERP	Send To ERP - Order (Requesting)	/GINH/R_SEND_ORD_TO_ERP
/GINH/R_SND_PERTOERP	Sent To ERP-Performance(Requesting)	/GINH/R_SEND_PERF_TO_ERP
/GINH/S_PER_DPATOERP	Perf Down Payment to ERP - Servicing	/GINH/S_PERF_DPA_TO_ERP
/GINH/S_SND_ORDTOERP	Send To ERP - Order (Servicing)	/GINH/S_SEND_ORD_TO_ERP
/GINH/S_STL_PERONERP	Settlement Perf on ERP-Servicing	/GINH/S_SETTLE_PERF_ON_ERP
/GINH/ACCOUNT_PULL	Pull agency accounts from Treasury into the Hub	/GINH/PULL_ACCTS_ORG_DATA
/GINH/GRP_PULL	Pull group and organization data from Treasury to the Hub based on Agency ID	/GINH/PULL_GRP_ORG_DATA
/GINH/PER_REM_NOTIFY	Reminder Report: Trigger Email Notifications	/GINH/REMINDER_EMAIL_NOTIF

7.4.5 Load Balancing and Scalability

This section describes aspects of load balancing and scalability that are relevant for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms. Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

7.4.6 High Availability

This section describes aspects of high availability that are relevant for SAP Treasury G-Invoicing for SAP S/4HANA.

SAP Treasury G-Invoicing for SAP S/4HANA is an embedded Add-On solution and utilizes standard SAP mechanisms. Please refer to the standard SAP Operations Guide for more information found at the [SAP Help Portal](#).

8 Troubleshooting

This section describes troubleshooting topics for SAP Treasury G-Invoicing for SAP S/4HANA.

Below are some issues that may arise when working with SAP Treasury G-Invoicing for SAP S/4HANA, including suggestions on how to resolve them. If you encounter any problems with SAP Treasury G-Invoicing for SAP S/4HANA that you cannot resolve, please report an incident on SAP Support Portal. To report an incident, go to SAP Support Portal at <http://support.sap.com/incident> and use component IS-PS-GIV.

Issue	Possible Cause	Troubleshooting
Launch G-Invoice Hub, unable to see any tiles (GT&C, Order, or Performance tiles).	Authorization issue.	Assign proper authorization to the user.
GT&C-specific error message when creating treasury order.	GT&C isn't maintained properly.	Check if the GT&C in question is correctly maintained in Treasury, approved by both agencies, and open for order
GT&C (to be used) is not shown in the drop-down list in G-Invoicing tab when creating a purchase order or purchase requisition (T-Code ME21N or ME51N).	User may be missing required authorization to use this GT&C.	Check user's authorization profile and grant required authorization to use this GT&C.
Unable to enter G-Invoicing-specific data because the G-Invoicing tab is not visible when creating purchase order or requisition.	Incorrect document type.	Check the document type used to create the purchase order or requisition and ensure its relevant for G-Invoicing.
G-Invoicing purchase order is not visible in the eDoc Cockpit.	Purchase order may not be saved or released.	Check PO release strategy (if any is in place) and ensure PO is released and saved.
G-Invoicing order is not visible in the Hub.	Check the display filters in Hub.	Adjust the display filters values in the Hub UI.
G-Invoicing order isn't updated in the Hub with purchase order details.	Order update may have failed.	Check for the error log in the edoc cockpit for the given order or purchase order.
Unable to change G-Invoicing purchase order after creation (via T-Code ME22N).	Corresponding Treasury order may not be open for changes.	Check the Treasury order status in the Hub corresponding to the G-Invoicing purchase order and ensure that it is Open or in Error status after syncing with Treasury.
GT&C (in question) is not shown in the drop-down list in G-Invoicing tab when creating a sales order (T-Code VA01).	User may be missing required authorization to use this GT&C.	Check user's authorizations profile and grant required authorization to use this GT&C.



Issue	Possible Cause	Troubleshooting
Servicing agency is unable to see Treasury order in the Hub as created by requesting agency.	Treasury order may not have been pulled by the servicing agency.	Servicing agency needs to pull the Treasury order from their side.
Unable to enter G-Invoicing-specific data because G-Invoicing tab is not visible when creating sales order.	Incorrect sales document type.	Check the sales document type used to create the purchase order or requisition and ensure that it is relevant for G-Invoicing
Servicing agency unable to change the sales order (T-code VA02) after it was created and saved.	Sales order status may not allow changes.	Check sales order status in the Hub. It must be either in Open or Error status in order to for it to be changed.
Unable to see Delivered Performance in the Hub as delivered by servicing agency for the given order.	Order update for the Delivered Performance may have failed.	Servicing agency should check the error log in the eDoc Cockpit for the Delivered Performance.
Requesting agency is unable to see Performance in the Hub as delivered by servicing agency.	Delivered Performance may not have been pulled in.	Requesting agency needs to pull the delivered performance from their side.
Invoice for G-Invoicing order is not picked up by settlement.	Order has not been fully delivered.	Ensure order has fully delivered performances.

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