ONESOURCE INDIRECT TAX INTEGRATION FOR SAP

CONFIGURATION GUIDE FOR ONESOURCE TABLES

PRODUCT VERSION 6.4.0.1

Document Version 1

THOMSON REUTERS

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The software documented within is Patent Pending in the United States.

DOCUMENT HISTORY

Version Number	Version Date	Summary
v1	April 1, 2016	First version of this guide for ONESOURCE Indirect Tax Integration for SAP 6.4.0.1

Table of Contents

INTRODUCTION

WELCOME TO ONESOURCE INDIRECT TAX INTEGRATION FOR SAP

Corporations using SAP as their Enterprise Resource Planning (ERP) system can simplify their worldwide Indirect Tax requirements by implementing ONESOURCE Indirect Tax Suite. The suite includes Determination, Integration for SAP, Reporting, and Compliance. The benefits provided by ONESOURCE Indirect Tax Suite are:

- Fast, accurate sales, use, consumer's use tax, and VAT results.
- Monthly tax rate and rules updates for over 175 countries.
- Integrated tax calculation with SAP minimizing user decisions and tax errors.
- Removal of the need to change SAP tax codes each time a rate/rule changes, eliminating business interruptions, and running out of tax codes in SAP.
- Complete audit database from which you can generate both standard and custom reports as well as returns.

ONESOURCE Indirect Tax Integration for SAP 6 is a totally new interface designed, built, and maintained by Thomson Reuters. It's a new global tax integration solution designed from the ground up with integration pointing into SAP ECC application modules as desired. It consists of a data collector, tax interface, and return process of tax results to the calling application with G/L integration in support of downstream SAP processes such as standard VAT reports and returns processing. It makes use of the SOAP (Simple Object Access Protocol) provided by SAP to communicate with ONESOURCE Indirect Tax Determination. The new Integration enables worldwide tax calculations, including VAT, US Sales and Use Tax, and other country-specific taxation.

The interface is entirely built within the SAP Development Workbench, including a user menu for all interface related configurations, setups, and reports. The interface has a new field mapping solution allowing a Tax Business Analyst to map SAP data to Determination and vice versa via a customization table, eliminating most of the user-exit coding of the past. Tax calculation logs can be accessed via a transaction with a search function from within SAP greatly simplifying tax setup, analysis, and troubleshooting.

WHO SHOULD READ THIS GUIDE?

If you are responsible for overseeing setting up ONESOURCE Indirect Tax Integration for SAP, you will need to coordinate help from the following people:

- SAP Business Systems Analyst
- SAP Configuration Consultant
- SAP Technical Resource (ABAP Programmer)
- SAP Security Contact
- Tax Professional

Make this guide available to each of these contributors to ensure you have a successful installation.

PREREQUISITES

For a seamless and successful deployment of Integration for SAP we highly recommend that you follow this sequence of documents:

- User Guide
- Installation and Programmers Guide
- Configuration Guides

When working on Integration for SAP you must have a deep knowledge of the SAP tax features, covering all aspects of FI, MM, and SD and have spent significant time either as an expert configurator or consultant in these areas. Because the setup of tax integration with ONESOURCE Indirect Tax also includes technical work in the ABAP Workbench, such as data dictionary changes and ABAP coding, you must be able to understand and interpret these changes as well. We recommend that you assemble a team to implement this product because it requires both functional and technical input. Your team should include someone who thoroughly understands business requirements and processes, as well as someone who can implement the required software changes.

Please take the following into account before setting up the Integration for SAP:

- This guide assumes a fresh install of the Integration for SAP. Customers who are upgrading from a prior 5.x version of Integration should contact Thomson Reuters Indirect Tax.
- Minimum SAP system version must be ECC 6.0, EHP 5. Please see tested platforms by Thomson Reuters in Platform Information section.
- Minimum Determination version must be at 5.5 or greater due to the use of the Tax Code Qualifier function.
- It is assumed that the persons who install, configure, and use the tax interface in SAP have some basic understanding of the overall ONESOURCE Indirect Tax Suite of products and how they interact with each other.

RESOURCES

Resource	Description
Customer Support	Look for answers in the Knowledge Base, or to open a support ticket.
User Guide	This is an overview of the architecture, basic business processes and touch points as they relate to Sales and Use tax, as well as VAT scenarios in FI, SD, and MM. The target audiences are the Business Systems Analysts, Consultants, and Tax Professionals who setup the tax processes in SAP.
Installation and Programmers Guide	This guide instructs on how to install the Integration for SAP. The target audience is the Basis person that will process the application of the transports to the SAP system and the ABAP programmers that will perform the required include statements within the user exits and other coding blocks. There is also discussion in this manual for the ABAP programmer regarding customization logic and how custom additions to the programs should be added to the system if needed in the future. This guide describes the supported combinations of operating systems, databases, and application servers/web containers. This guide lists the end-of-life dates for ONESOURCE Indirect Tax Integrations for SAP. Consult this guide to see which combinations of software we test with Integrations.
Configuration Guide SAP tables	This guide instructs how to configure and setup SAP tables and processes to enable tax calculations to meet your unique requirements.
Configuration Guide ONESOURCE tables	This guide instructs how to configure and setup our ONESOURCE Indirect Tax tables and processes to enable tax calculations to meet your unique requirements.
Configuration Guide for Special Functions	This guide instructs how to configure and setup SAP and Integration tables and processes to enable tax calculations to meet your unique requirements for special functions within SAP such as Plants Abroad, Down Payments, Cash Discounts, Deferred Taxes, Service Entry Sheets, etc.

SUPPORT PROTOCOL

The ONESOURCE Indirect Tax Integration for SAP is built, maintained, and owned by Thomson Reuters Tax & Accounting Indirect Tax. The business unit has a dedicated group of SAP Business Systems Analysts, ABAP Programmers, and Quality Assurance people who have built this product. We follow SAP best practices, development standards, and strive to minimize the impact this solution will have on your SAP environment. With any 3rd party Add-On in SAP, the vendor providing the solution is responsible for support of that Add-On. In the case of an issue with the ONESOURCE Indirect Tax Integration for SAP please follow these simple steps to open a support ticket with Thomson Reuters:

1. Identify the potential issue and gather all necessary facts (log files, scenarios, configurations, screen prints).
2. Provide steps to reproduce the scenario leading to the issue.
3. Provide system environment information such as your SAP Version, EHP and SP level, as well as the Integration version.
4. Open a support ticket with Indirect Tax at https://www.onesourceidtsupport.com.

STYLE CONVENTIONS

Style conventions provide a guide as to how to interpret information.

Bold text indicates most user interface elements, such as:

- Data you are expected to enter, such as in a text field
- Pages, buttons, tabs, and field names
- Dialog boxes, drop-down lists, selections within lists, and check box titles
- Windows
- Menu items

Italic text indicates the following:

- File and folder names
- Software programming terminology and executable files
- Document titles

CAPITALIZED text indicates keyboard commands, such as ENTER, or database components.

`Courier` text indicates command-line input/output.

<brackets> indicate user entry. For example, <host> indicates you should replace the text and angle brackets with your server name.

Book titles are shown in italics and sections within a book are in quotation marks, such as “Tips and Tricks” in the *ONESOURCE Indirect Tax User Guide*.

Indicates suggestions or additional, detailed information.

Indicates important text that should be carefully reviewed before proceeding.

ONESOURCE INDIRECT TAX CONFIGURATION REQUIREMENTS

This chapter covers the configuration requirements within the Integration module and includes the following sections:

COMMON CONCEPTS

Many of the configuration tables in the Standard Setup, Customer Setup, and Reports sections of the User Menu contain columns that are of the same function. Rather than explain them for each table repetitively we will discuss the column function in this section as its function applies to all tables in the same way.

STANDARD CHECK BOX COLUMN

This column is used to identify a mapping line as being from the standard mappings that are provided by Thomson Reuters as pre-delivered content. As a customer you will not be able to check this field in the configuration tables. The field can be ignored for your purpose. Notice in the standard version of the table all of the lines in this view have the box checked. This is a tool that will make it easier for debugging your system and also to allow for updates in the future. Rows marked as standard will be updated with software updates. Rows that are not marked as standard will not be changed with a software update thereby leaving your custom configuration intact.

SORT ORDER COLUMN

Many of the configuration screens have a Sort Order field. The system processes the line with the lowest Sort Order first and then the line with the next highest Sort Order and so on. The Sort Order field for customer updated tables must be greater than or equal to sequence 1000001 thru 999999. Sort Order fields that are part of the standard tables use Sort Order sequence from 0 to 100000. This way customer configuration is of a higher sort number and will be used to override or augment the standard mappings that we provide as part of the standard setup.

For the Proxy only: The line with the lowest Sort Order is checked first to see if it is valid for the current situation. If it is valid then it is selected. If it is not valid then the line with the next highest Sort Order is checked and so on.

ACTIVE FLAG COLUMN

This check box column is used to turn on or off the line in the configuration table. If checked then the configuration is active. If the box is unchecked then the configuration line will still remain in the table for future use but it will not be used. This can be very helpful when debugging an error in the configuration or testing different options to solve a business need.

JOURNEY NAME COLUMN

In this column you would first establish which journey you want to use for the new configuration. In order to choose the correct journey name you would ask yourself if this field is part of what you want to send to the request data going to Determination, or is it part of the data that will be coming back on the response. Is it data at the header level of a document or is it data stored at the line level? Is this an SD order, billing, PO, LIV invoice, or FI generated document, etc.?

ROUTE NAME COLUMN

With this column a system user can direct a specific configuration to only be applicable to a single route by entering the route name in this column. The mapping will then only be applicable if the listed route is used in the transaction.

ROUTE GROUP COLUMN

With this column a system user can reduce the number of repetitive mapping lines if the same configuration is required for several routes within the same journey. In this case the user would first populate the route group table, then assign a list of routes to the route group, and then use this route group in the configuration table in order to assign the same value to the desired group of routes.

You would not use both the route name column on the same line as the route group column in order to designate the path of the transaction.

COMPANY CODE COLUMN

Configurations can also be limited by company code using this column to designate the applicable company code.

COUNTRY GROUP COLUMN

In this column you have the option to specify your configuration line to further limitation based on group of countries based on the creation and assignment of a country group name. To do this you would first create a country group name as noted in the Country Group table, and then assign a country or list of countries to the newly named country group in the country group assignment table.

DESCRIPTION COLUMN

This column is used to describe the mapping for ease of tracking and reference notes.

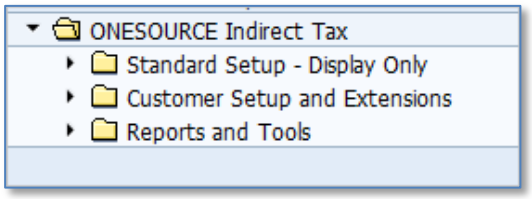
An asterisk (*) can be used as a wildcard for most of the columns indicating that any value is an allowed match.

PRODUCT COLUMN

The product column has been added (directly to the right of the Standard checkbox on some standard view tables) because of the release of the new Goods Movement Product that was re-designed to work with our new Integration approach. With many of our tables being shared by the two product offerings we need a way to segregate the table entries by product so that future updates to the product will not conflict and overwrite lines through the transport process. At this point you will see either “GM” for lines associated with the Goods Movement product and “GN” for lines that were added as needed for the Global Next Integration. As other products may be added to this new structure and table logic in the future, new product designators will be added so as to keep them straight and avoid any conflicts to future product release updates. You will not need to be concerned with this column as it is only used on standard setup (display only) views of the tables and is used internally in the upgrade transport creation process.

THE USER MENU

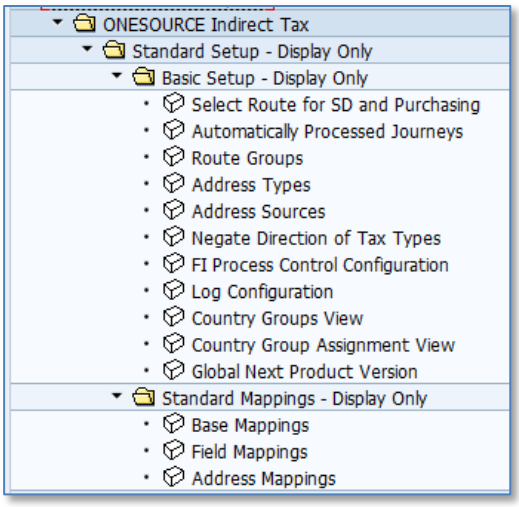
The ONESOURCE Indirect Tax menu is accessed through the **User Menu** (Ctrl+F10) and is only available to you if you have been granted access through your security profile to the correct user role. You will not see the ONESOURCE menu if you click on the standard SAP menu option.



The menu for ONESOURCE Indirect Tax is broken up into sub areas like ONESOURCE Indirect Tax, Standard Setup - Display Only, Customer Setup and Extensions, and Reports and Tools.

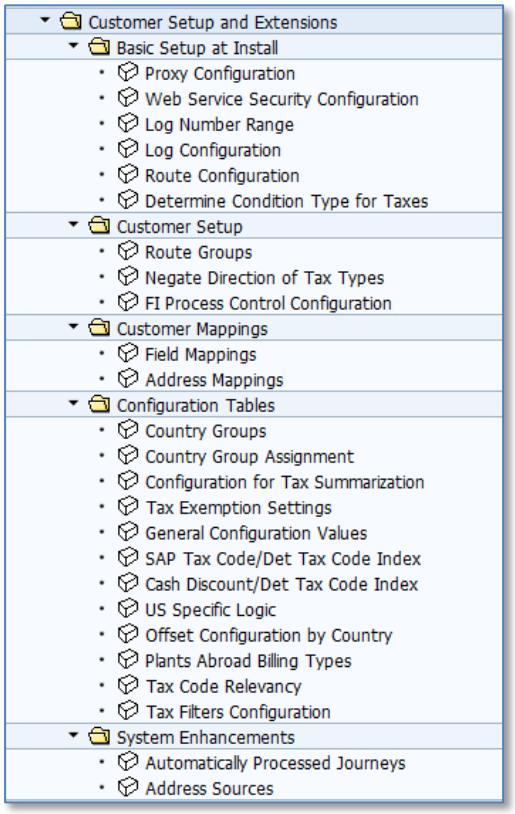
STANDARD SETUP DISPLAY ONLY MENU

Within the new ONESOURCE Indirect Tax menu the first section is a list of table configurations that are provided as standard setup for Integration. The tables are intentionally view only and are not changeable by the system user. However, in most of those tables a matching table is provided in the next section of the menu, which gives the system user the ability to override or augment the configuration in the standard setup view. By segregating the standard setup from user additions and overrides we can provide better support to our users by our Professional Services and Customer Support teams. Segregating the tables will allow them to make quicker identification of problems for issue resolution. It also allows Thomson Reuters to deliver new functionality at a later point without negatively impacting customer’s configurations and setups. They also allow the system user to quickly identify their additions in a separate area.



CUSTOMER SETUP AND EXTENSIONS

This menu is used by the user to access the ONESOURCE configuration tables that are stored in the /IDT/ namespace of SAP. The menu is broken down further into sub areas in order to organize the tables by configuration area or task. A system user role may only have display access to this area however an administrator role authorization will have ability to display, change, and create depending on the table's properties.



- **Basic Setup at Install**: Is used by the ABAP programmer that is doing the installation of the software in order to set the proxy configuration pointing to the Determination calculation URL and create the number range that is needed for log entries in the system.
- **Customer Setup**: Is used to set up the customer view of several tables that are also within the standard setup display only section. Users can override or add to the standard tables in this area.
- **Customer Mappings**: This section is where the customer would add their custom field and address mappings to the system. Here you can add to or override mappings that are provided as part of the standard display only mappings.
- **Configuration Tables**: Is used by the Tax Business Analyst and contains all of the tables that you will need to consider for configuration of your installation. All of the tables you see in this section have a single view for customer input.
- **System Enhancements**: Is used in customizing functions when or if you need to create additional advanced program enhancements to accommodate additional Integration logic that is not already part of the standard product.

REPORTS AND TOOLS

This menu is where we will establish the transaction codes for access to specific Log reports for tax transactions as well as any specialty reports and tools that are created by ONESOURCE Indirect Tax. Other reports or functions may be added to this menu in future releases of product updates.

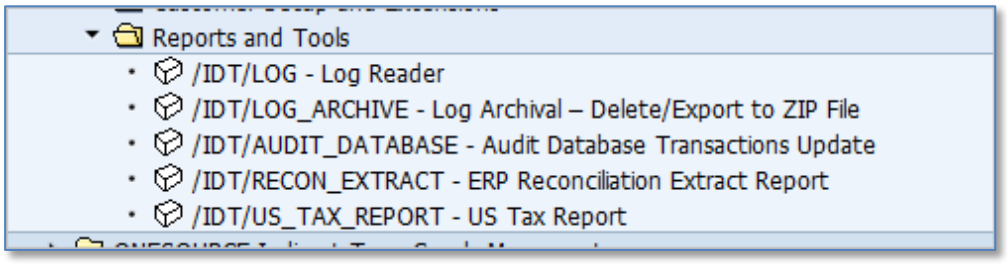
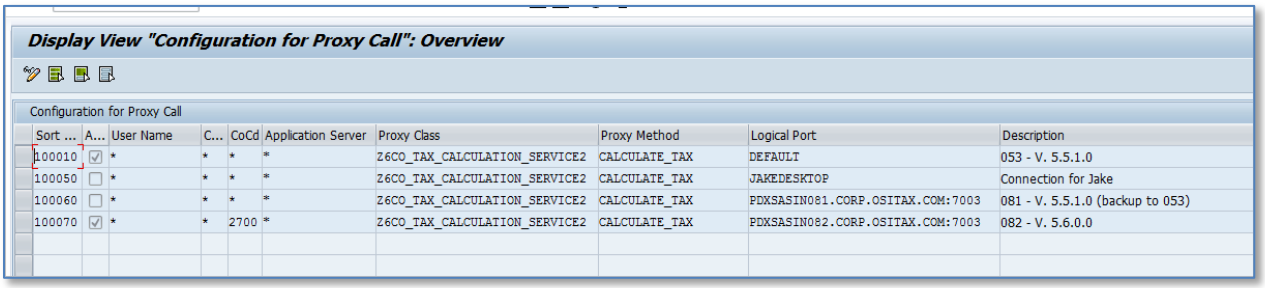


TABLE CONFIGURATION FOR INSTALLATION

The following three setups are dependent on prior installation of the Integration as outlined in the *ONESOURCE Integration for SAP Installation and Programmers Guide.*

ONESOURCE PROXY CONFIGURATION

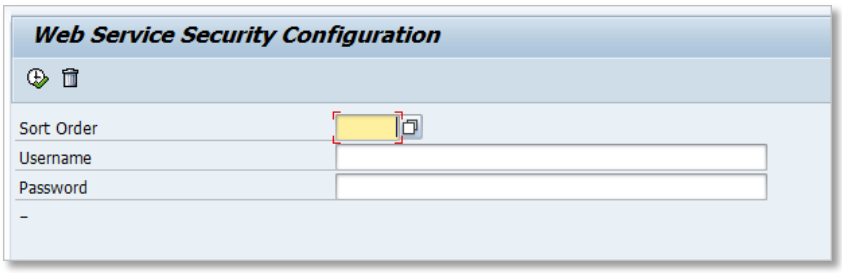
Transaction Code: **/N/IDT/PROXY_CONFIG**



In the Proxy Configuration you will enable the interface to call Determination by configuring Integration to point to the proxy class, method, and port you created during the install process. A column for User Name has been added to this table so that a user could configure a proxy configuration specific to a given system user in order to do separate testing of a new proxy set up. The set-up of the proxy is discussed further in the ***Installation and Programmers Guide*.**

WS SECURITY CONFIGURATION

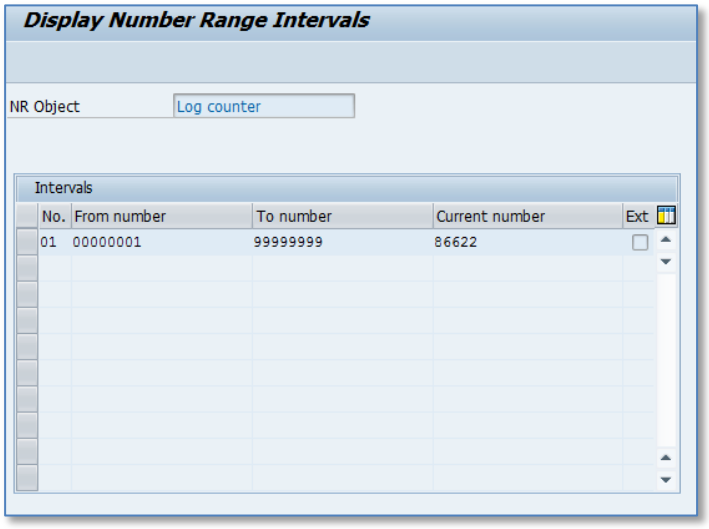
Transaction Code: **/N/IDT/WS**



A new transaction code: **/N/IDT/WS** has also been created in order for the user to establish the special user name and password for each line on the Proxy Configuration table based on the sort order number of the proxy configuration line. This is an optional configuration that is only needed if the user has elected to utilize the newly provided BAdI for proxy security setting. The data in the transaction is obfuscated in table **/IDT/D_WS**. We recommend that you also review the Determination documentation on setting up the security on the Determination side as these two functions must work together. All configurations for this subject matter on the set up of proxy security using this optional table and new BAdI for proxy security is discussed in the ***Installation and Programmers Guide.***

LOG NUMBER RANGE

Transaction Code: **/N/IDT/LOG_NUMBR_RANGE**



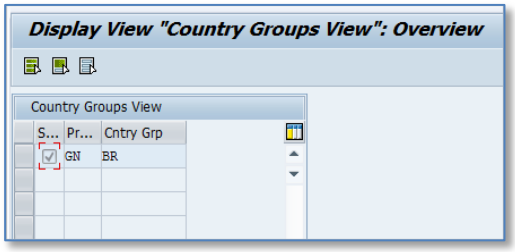
The SOAP request and response can be logged in SAP in XML format. Each log is assigned a unique log number for management in the system and ease of sharing with other users when troubleshooting.

GROUP CONFIGURATION

In this section we talk about the set-up of groups and how they can streamline your mapping and reduce duplication.

COUNTRY GROUPS

Transaction Code: **/N/IDT/COUNTRY_GROUPS_V**

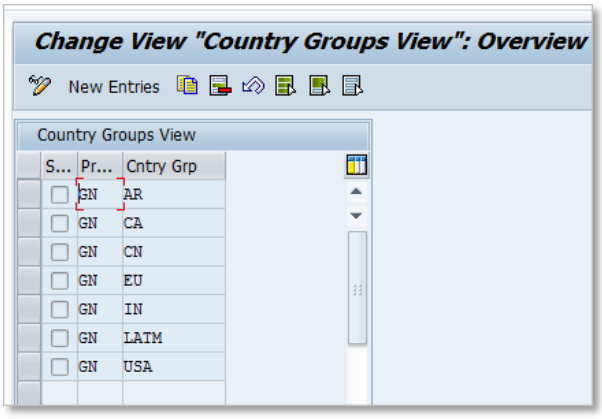


The Country Group table is the first of the tables that you will want to consider doing your own customized configuration of the system and allows you to streamline your other configurations by automatically replicating the same logic for a group of countries at the same time. This can be extremely helpful in the configuration of the region specific rules where you want to maintain the same consistent table mapping of fields for a large list of possible countries, i.e. Europe, North America, Asia, etc. The use of country groups can dramatically reduce the amount of lines in your mapping and get rid of duplicity across like country set up.

The standard view of this table was set up because we are now sending as part of our content Brazil configuration that is using the Country Group “BR” in the standard mappings. Other country groups could be possibly configured here if needed to segregate country specific content in the future.

Transaction Code: **/N/IDT/COUNTRY_GROUPS**

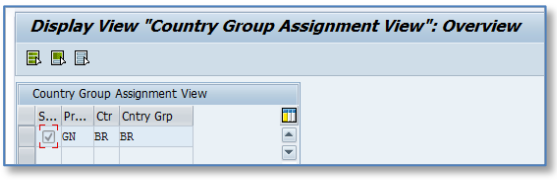
This view of the table is where you will add your own country group configuration to the table for use in other tables such as field mapping. Example as seen below is not standard content shipped with the product. Your table will be shipped blank when first installed for the first time. You will need to enter any group names you deem needed for your install.



COUNTRY GROUP ASSIGNMENT

Transaction Code: **/N/IDT/CNTRY_GRP_ASSIG_V**

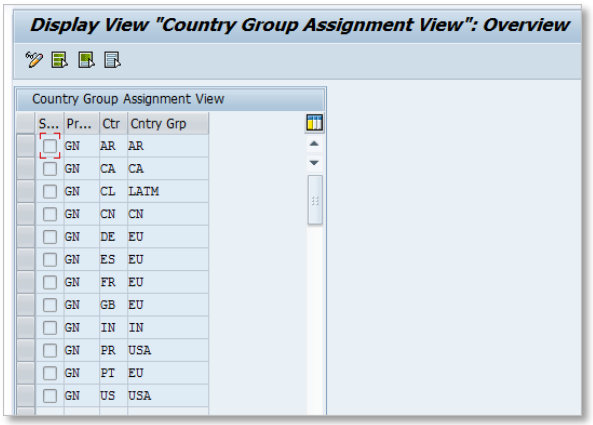
The standard view of the table is displayed below:



Transaction Code: **/N/IDT/CNTRY_GRP_ASSIG**

After setting up the country group names in the prior table you are now ready to match a group of two digit country codes to each of the country group names. In the example that we show here we have mapped several countries to the EU country group, and others their respective country groups. A country can only belong to one country group at a time. If you try to assign a country to more than one country group you will most likely encounter system errors as our program logic is not designed to handle multiple assignments at this time.

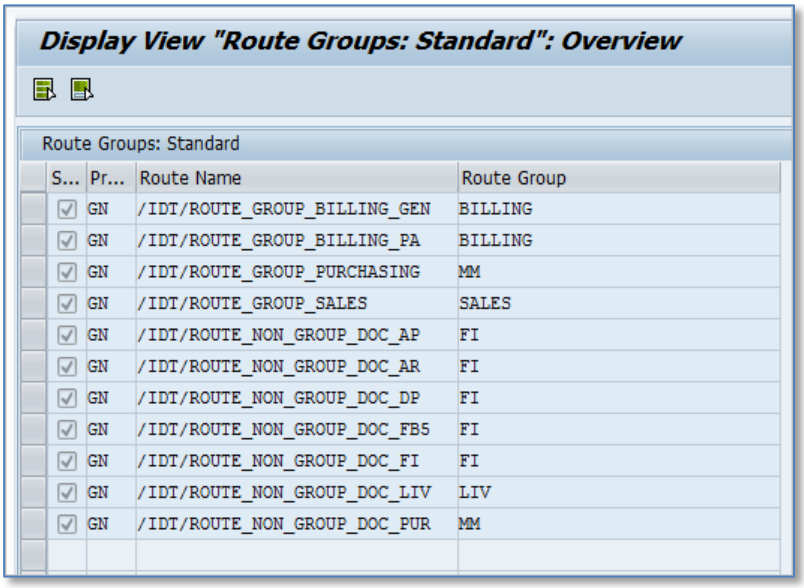
The country used for matching up to the country group during transaction processing is the Company Code country of that transaction.



Note that the country BR (Brazil) is used in the standard view of this table and should not be assigned to another country group at this time as it will cause program errors assigning to more than one group name.

ROUTE GROUPS

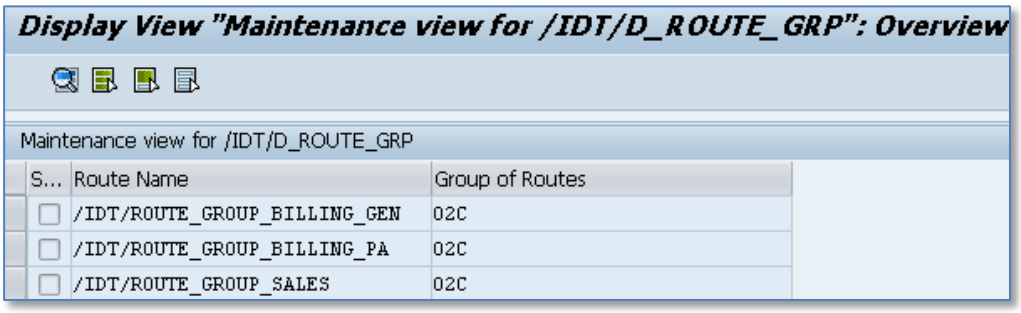
Transaction Code: **/N/IDT/ROUTE_GROUP_V**



S...	Pr...	Route Name	Route Group
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	BILLING
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	BILLING
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	MM
☑	GN	/IDT/ROUTE_GROUP_SALES	SALES
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_AP	FI
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_AR	FI
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_DP	FI
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_FB5	FI
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_FI	FI
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_LIV	LIV
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_PUR	MM

We ship a set of preconfigured route groups to assist in the configurations, mainly in the standard field mappings. The above list of routes are logically grouped into route groups based on common business processes like creating sales order, sales billing, purchasing, LIV, and financial transactions. Additionally customers can create their own route groupings.

Transaction Code: **/N/IDT/ROUTE_GROUP**



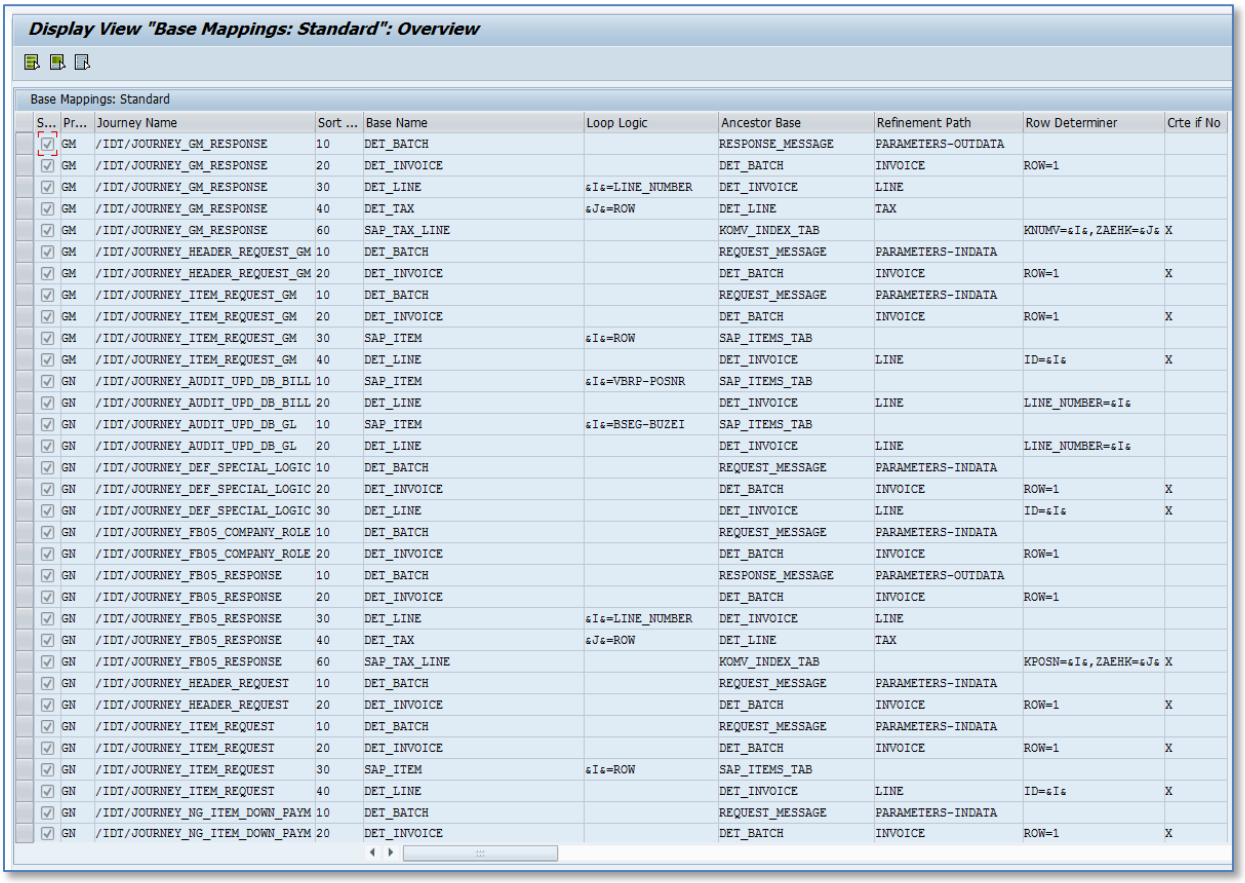
S...	Route Name	Group of Routes
☐	/IDT/ROUTE_GROUP_BILLING_GEN	O2C
☐	/IDT/ROUTE_GROUP_BILLING_PA	O2C
☐	/IDT/ROUTE_GROUP_SALES	O2C

You as a customer can create your own route groupings by adding route and naming a group. In the example above we have grouped three routes into a logical group of O2C.

BASE, ROUTE, AND JOURNEY CONFIGURATION

BASE MAPPINGS

Transaction Code: **/N/IDT/BASE_MAPPING_V**



Display View "Base Mappings: Standard": Overview

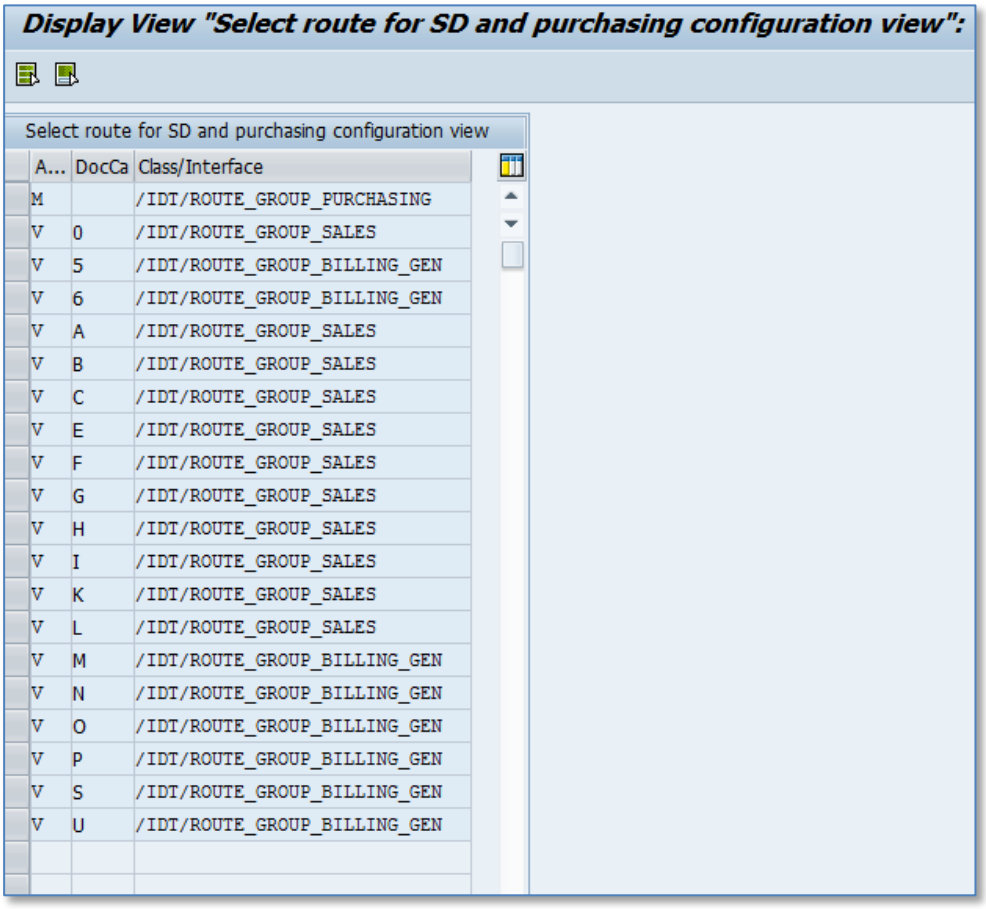
Base Mappings: Standard

S...	Pr...	Journey Name	Sort ...	Base Name	Loop Logic	Ancestor Base	Refinement Path	Row Determiner	Crte if No
☑	GM	/IDT/JOURNEY_GM_RESPONSE	10	DET_BATCH		RESPONSE_MESSAGE	PARAMETERS-OUTDATA		
☑	GM	/IDT/JOURNEY_GM_RESPONSE	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	
☑	GM	/IDT/JOURNEY_GM_RESPONSE	30	DET_LINE	&I&=LINE_NUMBER	DET_INVOICE	LINE		
☑	GM	/IDT/JOURNEY_GM_RESPONSE	40	DET_TAX	&J&=ROW	DET_LINE	TAX		
☑	GM	/IDT/JOURNEY_GM_RESPONSE	60	SAP_TAX_LINE		KOMV_INDEX_TAB		KNUMV=&I&,ZAEHK=&J&	X
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X
☑	GM	/IDT/JOURNEY_ITEM_REQUEST_GM	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GM	/IDT/JOURNEY_ITEM_REQUEST_GM	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X
☑	GM	/IDT/JOURNEY_ITEM_REQUEST_GM	30	SAP_ITEM	&I&=ROW	SAP_ITEMS_TAB			
☑	GM	/IDT/JOURNEY_ITEM_REQUEST_GM	40	DET_LINE		DET_INVOICE	LINE	ID=&I&	X
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_BILL	10	SAP_ITEM	&I&=VBRP-POSNR	SAP_ITEMS_TAB			
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_BILL	20	DET_LINE		DET_INVOICE	LINE	LINE_NUMBER=&I&	
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	10	SAP_ITEM	&I&=BSEG-BUZEI	SAP_ITEMS_TAB			
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	20	DET_LINE		DET_INVOICE	LINE	LINE_NUMBER=&I&	
☑	GN	/IDT/JOURNEY_DEF_SPECIAL_LOGIC	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GN	/IDT/JOURNEY_DEF_SPECIAL_LOGIC	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X
☑	GN	/IDT/JOURNEY_DEF_SPECIAL_LOGIC	30	DET_LINE		DET_INVOICE	LINE	ID=&I&	X
☑	GN	/IDT/JOURNEY_FB05_COMPANY_ROLE	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GN	/IDT/JOURNEY_FB05_COMPANY_ROLE	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	10	DET_BATCH		RESPONSE_MESSAGE	PARAMETERS-OUTDATA		
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	30	DET_LINE	&I&=LINE_NUMBER	DET_INVOICE	LINE		
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	40	DET_TAX	&J&=ROW	DET_LINE	TAX		
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	60	SAP_TAX_LINE		KOMV_INDEX_TAB		KPOSN=&I&,ZAEHK=&J&	X
☑	GN	/IDT/JOURNEY_HEADER_REQUEST	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GN	/IDT/JOURNEY_HEADER_REQUEST	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X
☑	GN	/IDT/JOURNEY_ITEM_REQUEST	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GN	/IDT/JOURNEY_ITEM_REQUEST	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X
☑	GN	/IDT/JOURNEY_ITEM_REQUEST	30	SAP_ITEM	&I&=ROW	SAP_ITEMS_TAB			
☑	GN	/IDT/JOURNEY_ITEM_REQUEST	40	DET_LINE		DET_INVOICE	LINE	ID=&I&	X
☑	GN	/IDT/JOURNEY_NG_ITEM_DOWN_PAYM	10	DET_BATCH		REQUEST_MESSAGE	PARAMETERS-INDATA		
☑	GN	/IDT/JOURNEY_NG_ITEM_DOWN_PAYM	20	DET_INVOICE		DET_BATCH	INVOICE	ROW=1	X

The Base object makes possible the use of configurable field mappings. It is a way to dynamically represent relationships between different levels of the XML structure and how they relate to each other. This allows a configuration driven code, rather than hard coding structure relationships. It also allows Thomson Reuters make changes in the interface easier. This table is view only and not modifiable by the customer. You can see in the view above that there are base mappings listed here for the Global Next product but also several at the top for the Goods Movement (GM) product. If you do not have the GM product installed in your system you will likely not see the GM line mappings as they are now only added when you transport in the Goods Movement product to overlay over the standard Global Next table structures.

SELECT ROUTE FOR SD AND PURCHASING

Transaction Code: **/N/IDT/SELECT_ROUTE_V**

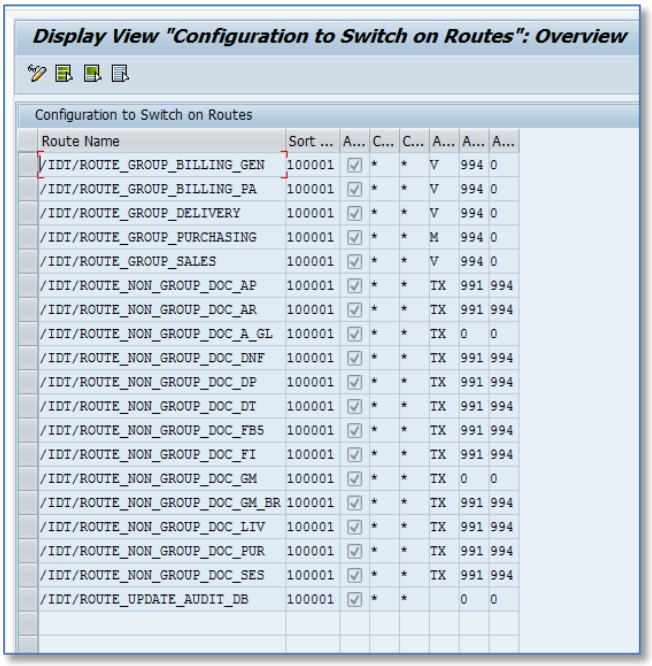


A...	DocCa	Class/Interface
M		/IDT/ROUTE_GROUP_PURCHASING
V	0	/IDT/ROUTE_GROUP_SALES
V	5	/IDT/ROUTE_GROUP_BILLING_GEN
V	6	/IDT/ROUTE_GROUP_BILLING_GEN
V	A	/IDT/ROUTE_GROUP_SALES
V	B	/IDT/ROUTE_GROUP_SALES
V	C	/IDT/ROUTE_GROUP_SALES
V	E	/IDT/ROUTE_GROUP_SALES
V	F	/IDT/ROUTE_GROUP_SALES
V	G	/IDT/ROUTE_GROUP_SALES
V	H	/IDT/ROUTE_GROUP_SALES
V	I	/IDT/ROUTE_GROUP_SALES
V	K	/IDT/ROUTE_GROUP_SALES
V	L	/IDT/ROUTE_GROUP_SALES
V	M	/IDT/ROUTE_GROUP_BILLING_GEN
V	N	/IDT/ROUTE_GROUP_BILLING_GEN
V	O	/IDT/ROUTE_GROUP_BILLING_GEN
V	P	/IDT/ROUTE_GROUP_BILLING_GEN
V	S	/IDT/ROUTE_GROUP_BILLING_GEN
V	U	/IDT/ROUTE_GROUP_BILLING_GEN

This table controls which route is responsible for what process in SAP by mapping the route to the document category within Sales/Distribution (application V in first column) and Purchasing (application M). This table is view only and not modifiable by the customer.

ONESOURCE ROUTE CONFIGURATION

Transaction Code: **/N/IDT/ROUTE_CONFIG**



Route Name	Sort ...	A...	C...	C...	A...	A...	A...
/IDT/ROUTE_GROUP_BILLING_GEN	100001	☑	*	*	V	994	0
/IDT/ROUTE_GROUP_BILLING_PA	100001	☑	*	*	V	994	0
/IDT/ROUTE_GROUP_DELIVERY	100001	☑	*	*	V	994	0
/IDT/ROUTE_GROUP_PURCHASING	100001	☑	*	*	M	994	0
/IDT/ROUTE_GROUP_SALES	100001	☑	*	*	V	994	0
/IDT/ROUTE_NON_GROUP_DOC_AP	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_AR	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_A_GL	100001	☑	*	*	TX	0	0
/IDT/ROUTE_NON_GROUP_DOC_DNF	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_DP	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_DT	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_FB5	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_FI	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_GM	100001	☑	*	*	TX	0	0
/IDT/ROUTE_NON_GROUP_DOC_GM_BR	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_LIV	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_PUR	100001	☑	*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_SES	100001	☑	*	*	TX	991	994
/IDT/ROUTE_UPDATE_AUDIT_DB	100001	☑	*	*		0	0

As of the transports for the 6.3.0.0 release this table will be shipped blank and you will need to enter all the fields as shown in the screenshot above.

This table is used to turn on or off the various routes in the system and also tie the route to the required **Condition Formula** (AltCty) and **Condition Base Value** (AltCBV) that is referenced in the pricing/tax procedure. You will need to maintain the condition formula values based on the formulas created in the ***Install Guide*** *-> "Creating Condition Value Formulas"* before executing any transactions in SAP.

Additionally, this table can be used to control whether the Integration is to be used for a given module of SAP by country group or company code assignment. In above example we have assumed Integration is used in all countries and all business processes. However configure this as your business might require, for example native SAP tax calculation for AP and LIV/Purchasing but use ONESOURCE Integration for SAP in SD and AR/Billing areas. More specifically you may wish to:

- Maintain some company codes to use Integration 6.x only for Sales transaction and not for Purchasing and Accounts Payable.
- Maintain some company codes set to use an older version of Integration for some company codes and the New Integration 6.x for others.
- Use native SAP calculations for some modules and Integration 6.x for others.
- Manage their conversion of company codes gradually to the new version over time.

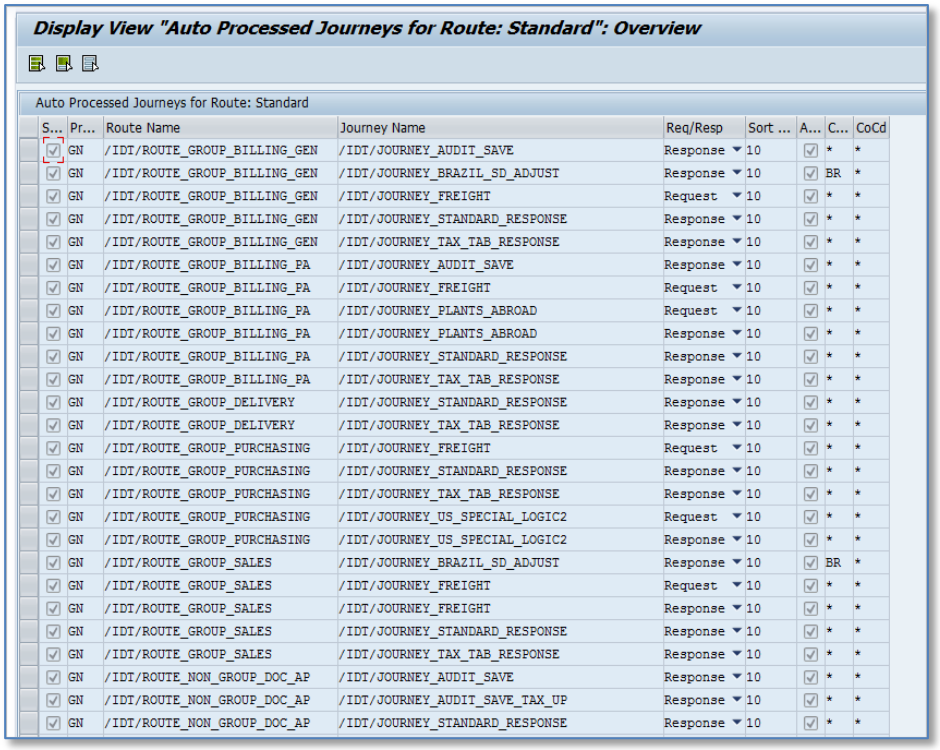
Customers upgrading to 6.3 from previous version of Global Next, delete the existing entries and re-create. You can use the table below as a guide to copy and paste to your configuration for either new customer or update as needed. Modify AltCTy as needed.

Route Name	Sort order	Active	Country Group	COCD	App	AltCTy	AltCBV
/IDT/ROUTE_GROUP_BILLING_GEN	100001		*	*	V	994	0
/IDT/ROUTE_GROUP_BILLING_PA	100001		*	*	V	994	0
/IDT/ROUTE_GROUP_DELIVERY	100001		*	*	V	994	0
/IDT/ROUTE_GROUP_PURCHASING	100001		*	*	M	994	0
/IDT/ROUTE_GROUP_SALES	100001		*	*	V	994	0
/IDT/ROUTE_NON_GROUP_DOC_AP	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_AR	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_A_GL	100001		*	*	TX	0	0
/IDT/ROUTE_NON_GROUP_DOC_DNF	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_DP	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_DT	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_FB5	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_FI	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_GM	100001		*	*	TX	0	0
/IDT/ROUTE_NON_GROUP_DOC_GM_BR	100001		BR	*	TX	0	0
/IDT/ROUTE_NON_GROUP_DOC_LIV	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_PUR	100001		*	*	TX	991	994
/IDT/ROUTE_NON_GROUP_DOC_SES	100001		*	*	TX	991	994
/IDT/ROUTE_UPDATE_AUDIT_DB	100001		*	*		0	0

AUTOMATICALLY PROCESSED JOURNEYS

The Auto processed Journey view ties journeys to routes for processing. A route can be made up of multiple journeys. The table controls which processes are active in what country groups and company codes.

Transaction Code: **/N/IDT/AUTO_JOURNEYS_V**

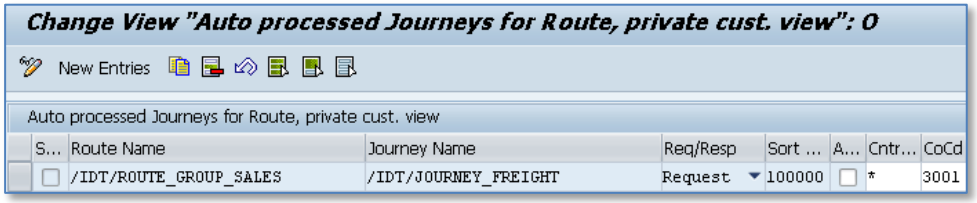


Display View "Auto Processed Journeys for Route: Standard": Overview

Auto Processed Journeys for Route: Standard

S...	Pr...	Route Name	Journey Name	Req/Resp	Sort ...	A...	C...	CoCd
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	/IDT/JOURNEY_AUDIT_SAVE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	/IDT/JOURNEY_BRAZIL_SD_ADJUST	Response	10	☑	BR	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	/IDT/JOURNEY_FREIGHT	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	/IDT/JOURNEY_TAX_TAB_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_AUDIT_SAVE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_FREIGHT	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_PLANTS_ABROAD	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_PLANTS_ABROAD	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	/IDT/JOURNEY_TAX_TAB_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_DELIVERY	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_DELIVERY	/IDT/JOURNEY_TAX_TAB_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	/IDT/JOURNEY_FREIGHT	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	/IDT/JOURNEY_TAX_TAB_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	/IDT/JOURNEY_US_SPECIAL_LOGIC2	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	/IDT/JOURNEY_US_SPECIAL_LOGIC2	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_BRAZIL_SD_ADJUST	Response	10	☑	BR	*
☑	GN	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_FREIGHT	Request	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_FREIGHT	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_TAX_TAB_RESPONSE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_AP	/IDT/JOURNEY_AUDIT_SAVE	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_AP	/IDT/JOURNEY_AUDIT_SAVE_TAX_UP	Response	10	☑	*	*
☑	GN	/IDT/ROUTE_NON_GROUP_DOC_AP	/IDT/JOURNEY_STANDARD_RESPONSE	Response	10	☑	*	*

Transaction Code: **/N/IDT/AUTO_JOURNEYS**



Change View "Auto processed Journeys for Route, private cust. view": O

New Entries

Auto processed Journeys for Route, private cust. view

S...	Route Name	Journey Name	Req/Resp	Sort ...	A...	Cntr...	CoCd
☐	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_FREIGHT	Request	100000	☐	*	3001

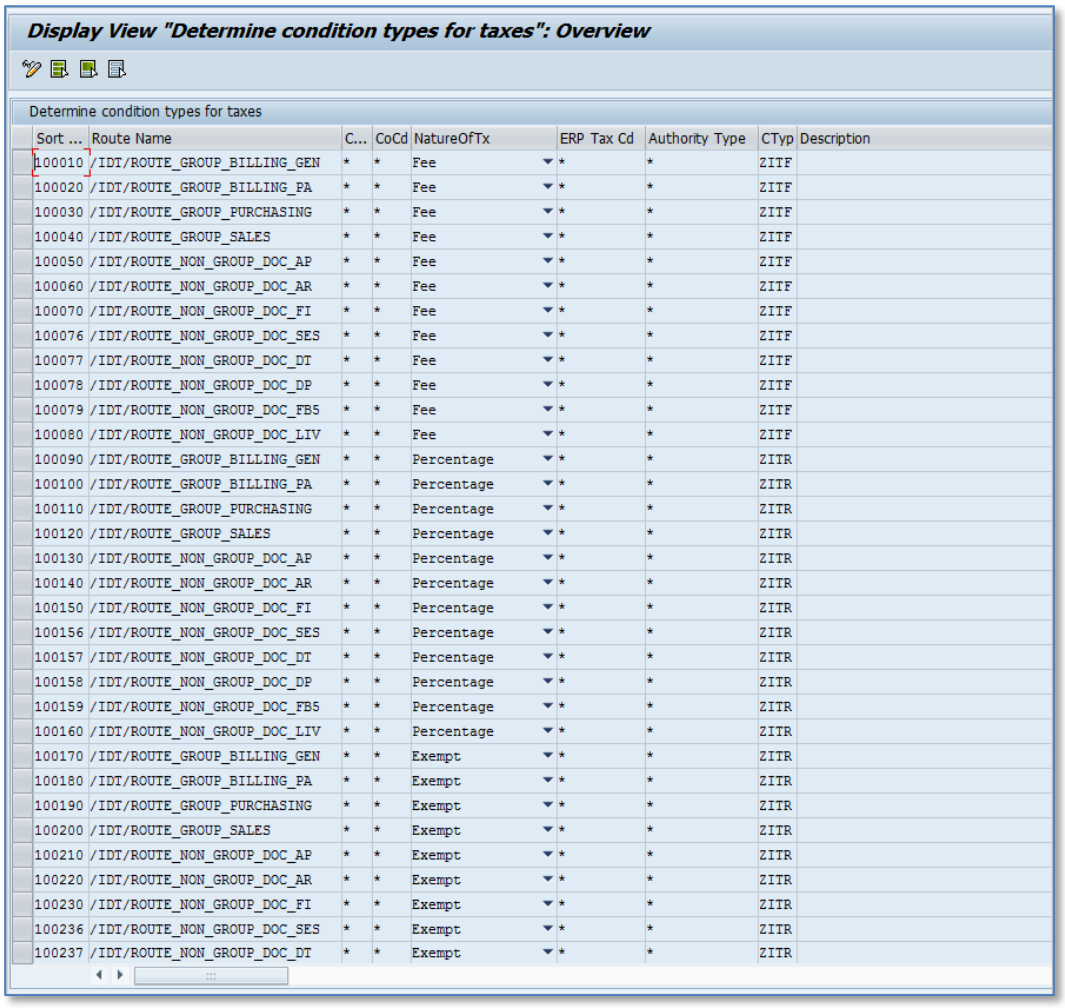
You can override our standard delivered mappings in this custom view. In above sample we turned **Freight** processing off for company code 3001.

OTHER CONFIGURATION TABLES

This is a list of various tables used for setup of your system.

DETERMINE CONDITION TYPE FOR TAXES

Transaction Code: **/N/IDT/DETER_COND_TYPE**



Display View "Determine condition types for taxes": Overview

Determine condition types for taxes

Sort ...	Route Name	C...	CoCd	NatureOfTx	ERP Tax Cd	Authority Type	CTyp	Description
100010	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Fee	*	*	ZITF	
100020	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Fee	*	*	ZITF	
100030	/IDT/ROUTE_GROUP_PURCHASING	*	*	Fee	*	*	ZITF	
100040	/IDT/ROUTE_GROUP_SALES	*	*	Fee	*	*	ZITF	
100050	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Fee	*	*	ZITF	
100060	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Fee	*	*	ZITF	
100070	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Fee	*	*	ZITF	
100076	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Fee	*	*	ZITF	
100077	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Fee	*	*	ZITF	
100078	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Fee	*	*	ZITF	
100079	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Fee	*	*	ZITF	
100080	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Fee	*	*	ZITF	
100090	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Percentage	*	*	ZITR	
100100	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Percentage	*	*	ZITR	
100110	/IDT/ROUTE_GROUP_PURCHASING	*	*	Percentage	*	*	ZITR	
100120	/IDT/ROUTE_GROUP_SALES	*	*	Percentage	*	*	ZITR	
100130	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Percentage	*	*	ZITR	
100140	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Percentage	*	*	ZITR	
100150	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Percentage	*	*	ZITR	
100156	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Percentage	*	*	ZITR	
100157	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Percentage	*	*	ZITR	
100158	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Percentage	*	*	ZITR	
100159	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Percentage	*	*	ZITR	
100160	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Percentage	*	*	ZITR	
100170	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Exempt	*	*	ZITR	
100180	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Exempt	*	*	ZITR	
100190	/IDT/ROUTE_GROUP_PURCHASING	*	*	Exempt	*	*	ZITR	
100200	/IDT/ROUTE_GROUP_SALES	*	*	Exempt	*	*	ZITR	
100210	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Exempt	*	*	ZITR	
100220	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Exempt	*	*	ZITR	
100230	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Exempt	*	*	ZITR	
100236	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Exempt	*	*	ZITR	
100237	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Exempt	*	*	ZITR	

Determine condition types for taxes

Sort ...	Route Name	C...	CoCd	NatureOfTx	ERP Tax Cd	Authority Type	CTyp	Description
100238	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Exempt	*	*	ZITR	
100239	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Exempt	*	*	ZITR	
100240	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Exempt	*	*	ZITR	

We require that you use the table as shown previously and make sure that initially you have it configured as shown. This would be the standard and usual configuration for this table. This table was preconfigured as part of the installation transports, but without the **Condition Type** (CTyp) field populated. As of release 6.3.0.0 we have elected to not populate this table as many of our upgrade customers have additional

configuration that they have added to this table that our transport was clearing. You will need to input these route names and condition type values as part of the initial system setup before executing any transactions in SAP. You will use the condition types that were setup in *Configuration Guide for SAP Tables*. Your condition type column should look like our example above if you elected to use the same ZITR, ZITE, ZITD, ZITF conditions as noted in the guide. However if these condition type names were already taken in your system prior to your install, yours may be different. The condition types maintained here will drive what condition is used when displaying tax results in the transaction.

Customers upgrading to 6.3 from previous version of Global Next, delete the existing entries and re-create. You can use the table on the next page as a guide to copy and paste to your configuration for either new customer or update as needed.

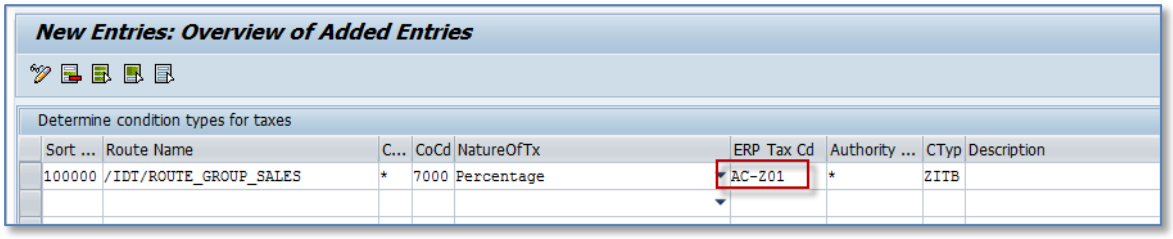
New Authority Type Column

As of release 6.3.0.0 a new column was also added to the table in order to tie the condition type to a specific tax authority in SAP. This was due to logic needed to support the use of multiple condition types being returned to SAP for direct linkage to tax authorities used for complex scenarios for Brazil. With the new Brazil logic now applicable with this release, the mapping is critical for being able to drive needed results to the various Nota Fiscal forms. For a non-Brazil implementation you will not need to utilize this new column and your table would need to be populated like the example shown above with an "*" in this new field. Please refer to our new "**Brazil Enablement**" chapter in the ***Configuration Guide for Special Functions*** for further information as to how to add records to this table that are specific to Brazil condition types and tax authorities.

The condition types mapped should match the **Nature of Tax** meaning from Determination:

Percentage: Condition with a condition category of "A" for *Percentage* (ZITR in our sample)
Fee: Condition with a condition category of "B" for *Fixed amount* (ZITF in our sample)
Exempt: This would match best with a percentage based condition (ZITR)

In some complex situations or based on some countries tax law, a specific condition type might need to be used to drive reporting, printing, or legal processes. For these cases the ERP_Tax_Code field is optionally available in this table. You would be able to setup a Tax Code Qualifier that is tied to a ERP_Tax_Code uniquely identifying that scenario. Based on that result you could then map to a special condition type. This condition type should be setup like ZITR or ZITF using the same template as outlined in the SAP configuration section.

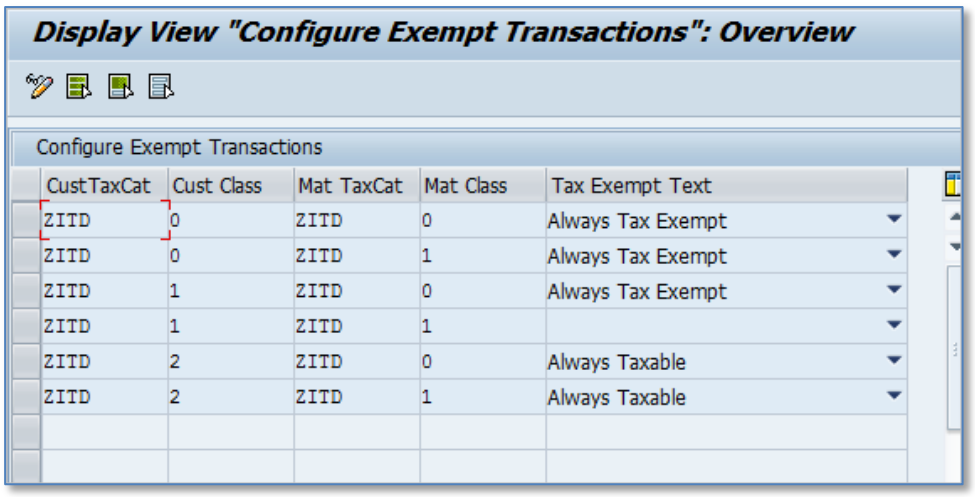


Above sample applies to company code 7000 only, if the result ERP_TAX_CODE is AC_Z01 then the condition type assigned in the Orders pricing procedure will be ZITB.

Sort	Route Name	Cntry Grp	CoCd	NatureOfTx	ERP Tax Cd	Authority	Ctyp	Description
	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_GROUP_PURCHASING	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_GROUP_SALES	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_GROUP_DELIVERY	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Fee	*	*	ZITF	
	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_GROUP_PURCHASING	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_GROUP_SALES	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_GROUP_DELIVERY	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Percentage	*	*	ZITR	
	/IDT/ROUTE_GROUP_BILLING_GEN	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_GROUP_BILLING_PA	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_GROUP_PURCHASING	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_GROUP_SALES	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_GROUP_DELIVERY	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_AP	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_AR	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_FI	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_SES	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_DT	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_DP	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_FB5	*	*	Exempt	*	*	ZITR	
	/IDT/ROUTE_NON_GROUP_DOC_LIV	*	*	Exempt	*	*	ZITR	

TAX EXEMPTION SETTINGS

Transaction Code: **/N/IDT/EXEMPT_SETTINGS**



In standard SAP taxing scenarios the customer (TSKD-TAXKD) and material (TSKM-TAXKM) tax indicators would be used in condition records to drive taxability via a tax code. With Integration for SAP's use of a driver and results tax code, a custom table had to be created to manage the same concept. We still use the data in the master records. The customer master tax indicator with potential values of taxable (1), not taxable (0), or force a tax calculation (2), and others. The same is true for material master tax indicator. A force code is not applicable for the material as Determination will override this for the materials.

You will need to maintain this table as part of the initial system setup before executing any transaction in SAP. This is one of 3 tables that need to be maintained immediately after transport of the system.

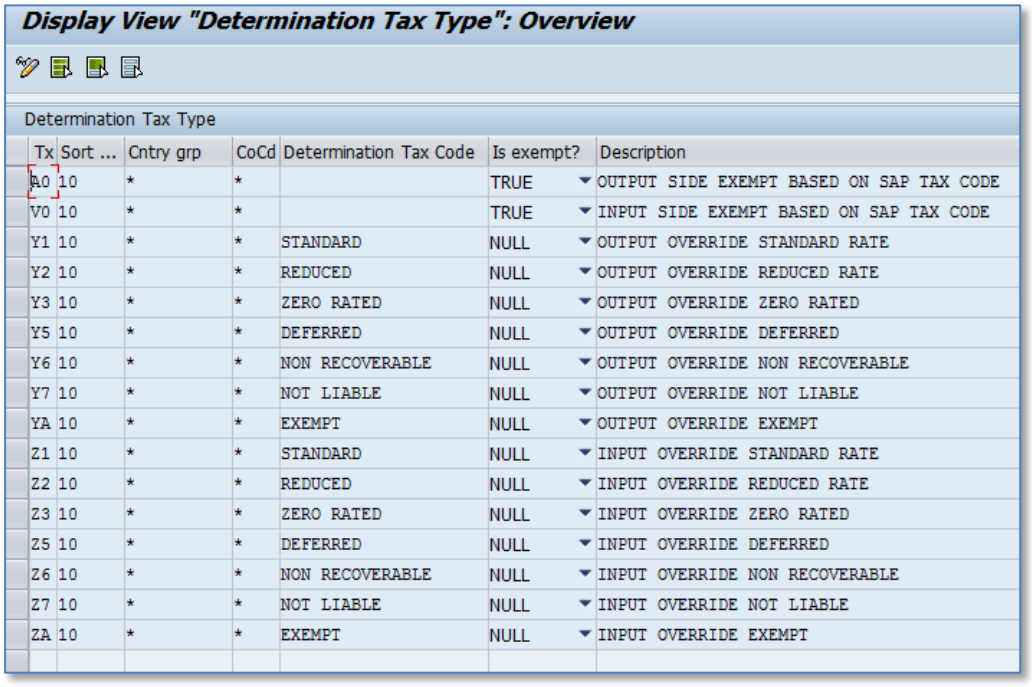
The combination of these indicators drives taxability in Determination via the XML field **IS_EXEMPT**. This field can have three different values:

Blank	Determination decides if the transaction is taxable or not based on current Determination rules configured.
Always tax exempt	Force an exemption and override what Determination would decide.
Always taxable	Force a tax calculation and override what Determination would decide.

Best practice is to set all of your customers and materials to be taxable and let Determination control the taxability and therefore the return of correct taxing and exemption information for correct invoice printing, reporting, and compliance functions.

SAP TAX CODE/DET TAX CODE INDEX

Transaction Code: **/N/IDT/DET_TAX_CODE**



Display View "Determination Tax Type": Overview

Determination Tax Type

Tx	Sort ...	Cntry grp	CoCd	Determination Tax Code	Is exempt?	Description
A0	10	*	*		TRUE	OUTPUT SIDE EXEMPT BASED ON SAP TAX CODE
V0	10	*	*		TRUE	INPUT SIDE EXEMPT BASED ON SAP TAX CODE
Y1	10	*	*	STANDARD	NULL	OUTPUT OVERRIDE STANDARD RATE
Y2	10	*	*	REDUCED	NULL	OUTPUT OVERRIDE REDUCED RATE
Y3	10	*	*	ZERO RATED	NULL	OUTPUT OVERRIDE ZERO RATED
Y5	10	*	*	DEFERRED	NULL	OUTPUT OVERRIDE DEFERRED
Y6	10	*	*	NON RECOVERABLE	NULL	OUTPUT OVERRIDE NON RECOVERABLE
Y7	10	*	*	NOT LIABLE	NULL	OUTPUT OVERRIDE NOT LIABLE
YA	10	*	*	EXEMPT	NULL	OUTPUT OVERRIDE EXEMPT
Z1	10	*	*	STANDARD	NULL	INPUT OVERRIDE STANDARD RATE
Z2	10	*	*	REDUCED	NULL	INPUT OVERRIDE REDUCED RATE
Z3	10	*	*	ZERO RATED	NULL	INPUT OVERRIDE ZERO RATED
Z5	10	*	*	DEFERRED	NULL	INPUT OVERRIDE DEFERRED
Z6	10	*	*	NON RECOVERABLE	NULL	INPUT OVERRIDE NON RECOVERABLE
Z7	10	*	*	NOT LIABLE	NULL	INPUT OVERRIDE NOT LIABLE
ZA	10	*	*	EXEMPT	NULL	INPUT OVERRIDE EXEMPT

Above is an illustration example for explanation purpose only, this table is shipped empty. There are two main functions that this configuration can provide:

1. Map tax codes that are designated as exempt override codes using the **IS_EXEMPT** XML field.

2. Maps override tax codes utilizing the **TAX_CODE** XML field.

The benefit of using designated override tax codes is that they can be easily identified and reported on. You might want to review at month end closing which transactions were overridden and why, if the taxing decision made was the correct one, or if an adjustment is required. The use of override tax codes could also indicate a need to revisit tax policy setup, configurations, and processes as they indicate an opportunity for better tax automation.

Exempt Status Override

There may be situations where a user may need to override a tax calculation as being totally exempt from tax above what Determination would calculate based on the tax indicators on the customer, material, or exemption certificate processing in Determination. If this is the case then a tax code would need to be established and act as a driver tax code that would drive the transaction to an exempt status without the use of a Determination tax rule. It is exempt based on the tax code. In this situation the system will bring back a response from Determination that will have a tax block that is designated as IS_EXEMPT = true in the XML response and would not show that a tax rule was accessed in Determination.

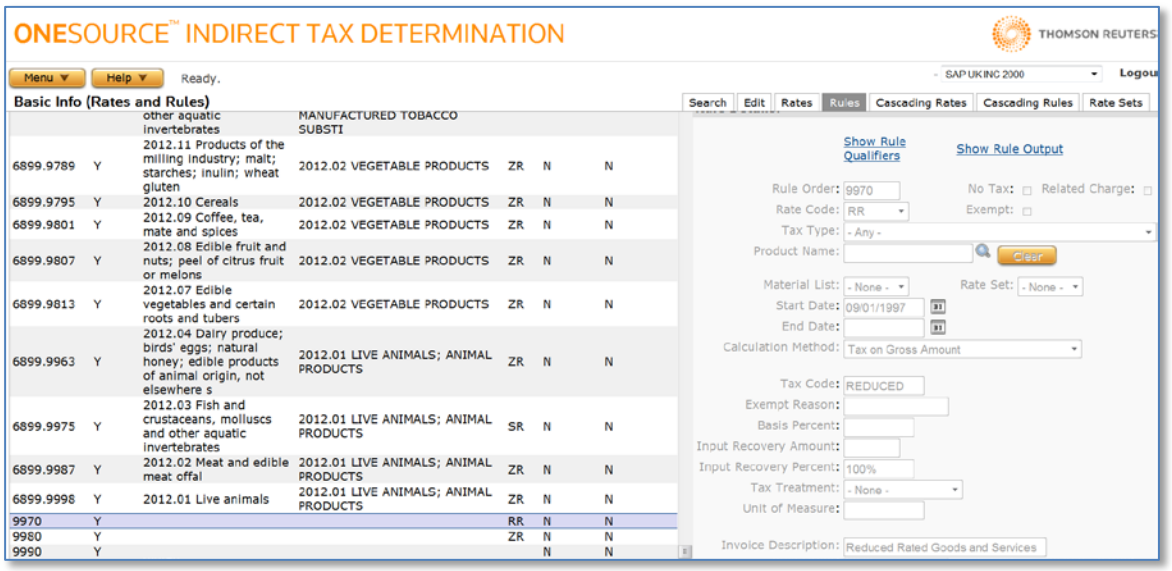
In our example we have established A0 as an output tax exempt code and V0 as an input tax exempt tax code by designating them in the "**Is Exempt?"** column as *TRUE*. These two codes could then be used in place of the O1 or I1 driver tax codes on a specific transaction and would tell Determination to ignore the normal logic and consider the line exempt for all taxes on that line.

Tax Rate or Treatment Override

There may be situations where business requires overriding a tax code to something other than what is returned based on the tax policy maintained in Determination. For example in a finance transaction (i.e. FB60) not enough details are available to match a vendor invoice to the tax charged by the supplier. However, it is assumed that the invoice was correctly coded when issued, so the user needs to be able to override the taxing decision made by Determination

This can be achieved in providing a value in the XML TAX_CODE field that either matches an already established "9000" rule in Determination or custom rule.

In below example we have a Thomson Reuters provided 9970 rule that is coded as reduced rated. If the TAX_CODE in the XML request has the value *REDUCED*, then this rule is used.



To have a specific **SAP tax code** use the 9970 rule for a reduced tax calculation, that tax code would be mapped in our configuration table in **Determination Tax Code** to a value of REDUCED. In our screenshot shown above, this is the case for Y2 and Z2, both would use rule 9970.

US SPECIFIC LOGIC TABLE

Transaction Code: **/N/IDT/US_LOGIC**

Display View "AP Company Role Override and Special Logic": Overview

AP Company Role Override and Special Logic

SFCntryGrp	SF Cntry	STCntryGrp	ST Cntry	Tx	Sort ...	A...	CoCd	Comp.Role	Tax category	O...	Offset Acc	Description
*	*	*	US	C1	100010	☑	3000	Buyer	Consumer Use Tax	☑	NVV	
*	*	*	US	I1	100010	☑	3000	Seller	Sales Tax (Customer Use Tax...	☐		
*	*	*	US	U1	100010	☑	3000	Buyer	Consumer Use Tax	☑	NVV	
*	*	*	US	V0	100010	☑	3000	Seller	Sales Tax (Customer Use Tax...	☐		
*	*	*	US	V1	100010	☑	3000	Seller	Sales Tax (Customer Use Tax...	☐		
*	*	*	US	ZZ	100010	☑	3000	Buyer	Consumer Use Tax	☑	NVV	

This table is used for specific logic used for US and US territory Sales and Consumer Use tax self-pay accruals. This table ties the tax codes used for US Sales and Use tax to the correct Company Role and Tax category fields as well as telling the program that an offsetting account entry is needed to balance the Consumer Use Tax self-accrual.

To configure this table you will need to identify:

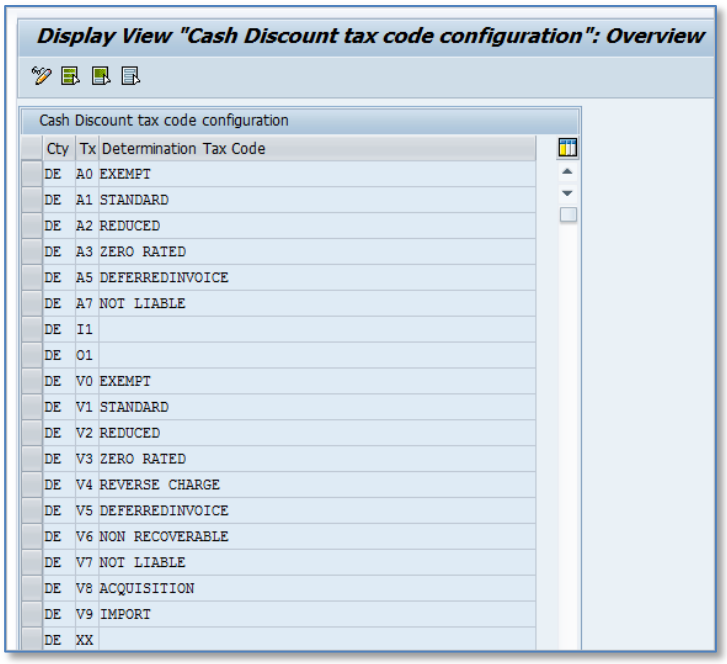
1. Relevant company codes that are located in the US or US territory and are configured for Sales and Use tax. You will also need to identify what customers in specific countries are shipping into the US that are calculating and charging US sales tax. They will be needed in order to configure the ship-from country and country group columns on the left side of the table.
2. Identify all of the tax codes used for Sales and Use tax on each company code per step 1.
3. All tax codes used for Sales tax should be designated as using the **Seller** Company role.
4. All tax codes used for Consumer Use tax should be designated as using **Buyer** Company role.
5. All Consumer Use tax codes should also have the check box checked to create the offsetting entry to expense the use tax to account key NVV (another account key can be selected but must be created with like configuration to the standard SAP account key NVV if desired).

This table is normally shipped as blank and only has a customer view for customer input. In order to use the I1 and U1 tax codes for the US company codes you will need to configure this table similar to our example that we show here. In our example we used "*" for the ship from country group and ship from country columns. You may elect to use this wild card assignment or can specifically list different countries based on your accounting policy and tax code and account key assignments.

CASH DISCOUNT/DET TAX CODE INDEX

Transaction Code: **/N/IDT/CASH_DISCOUNT**

This table has been created in order to support functionality for countries that require a tax calculation adjustment on cash discounts taken at time of payment. (See Appendix 1 section on "Cash Discounts Taken/Received at Payment for country configuration requirements) For purposes of demonstration we will use configuration for Germany as an example. The table is used to map the original tax code from the cash discount document line to a determination tax code in order to be able to drive the TCQ correctly for cash discounts adjustments. See sample view of the table below:



This is an example and will be different for your country configuration based on the list of tax codes that you have elected to set up for the specific country. Only countries that are configured to accept cash discount tax adjustments at time of payment are needed in this table.

The table will be shipped empty upon your installation of the Integration and the user must configure for each country configured for cash discount at time of payment. To configure this table the following steps should be addressed:

1. Identify all tax codes that you have established for the related country required in the table and enter a line for the country and the tax code.

2. Identify and input the applicable Determination LINE.TAX_CODE that matches the SAP tax code function. For example for a A1 standard rated output tax the Determination tax code would be “STANDARD”.

Customers would also need to make sure that they have either a custom rule or a 9000 rule established for each of the SAP tax code to Determination tax codes mappings in the list. There are 9000 rules established for some of the required tax type but some custom rules will likely be required in Determination to round out the list from what is missing in standard content.

Logic for use of this table:

If the line item tax code on the invoice being adjusted for cash discount matches an entry in this table, then

a) Pass the country of the company code and the Determination tax code from the line in this table to the request in order for Determination to calculate the correct tax on the adjustment based on the custom rule logic set up in determination.

b) Populate attribute 41 at the line level in the request to Determination with a 2 digit code of the two digit SAP tax code from the table. Example: tax code is A1 and attribute 41 request would be populated with “A1”.

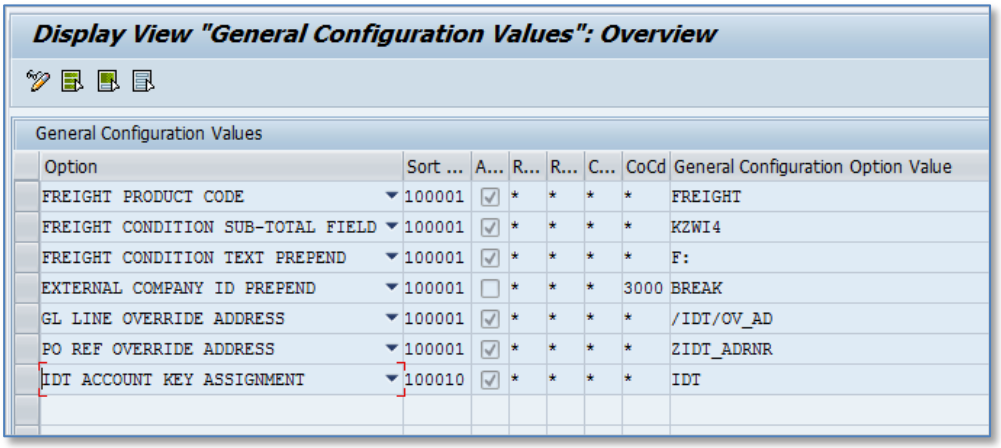
Population of Line Level Attribute41 Within the Request to Determination

This two digit logic would be required so that the TCQ could establish the correct tax code between an A1 and an Y1 tax code. Without the extra designation using this attribute there would be no difference between a Determination tax code of “standard” representing a request for an A1 code from a driver tax code on the original invoice line of Y1.

Additional tax code qualifiers would need to be set up for this cash discounts mapping that utilize the standards TCQ and add the attribute 41 to the conditions on the TCQ. See further explanation of this in the section on tax code qualifiers.

GENERAL CONFIGURATION VALUES

Transaction Code: **/N/IDT/GEN_CONFIG_VALS**



Display View "General Configuration Values": Overview

General Configuration Values

Option	Sort ...	A...	R...	R...	C...	CoCd	General Configuration Option Value
FREIGHT PRODUCT CODE	100001	☑	*	*	*	*	FREIGHT
FREIGHT CONDITION SUB-TOTAL FIELD	100001	☑	*	*	*	*	KZWI4
FREIGHT CONDITION TEXT PREPEND	100001	☑	*	*	*	*	F:
EXTERNAL COMPANY ID PREPEND	100001	☐	*	*	*	3000	BREAK
GL LINE OVERRIDE ADDRESS	100001	☑	*	*	*	*	/IDT/OV_AD
PO REF OVERRIDE ADDRESS	100001	☑	*	*	*	*	ZIDT_ADRNR
IDT ACCOUNT KEY ASSIGNMENT	100010	☑	*	*	*	*	IDT

This table is provided in order to map a variety of general settings for Integration. This table is provided empty, the picture above is for illustration and explanation purposes filled with sample data (yours might be different).

Freight

To allow Determination to asses taxes on the portion of a price associated with freight we need to send freight specific information. This is done by creating a related line to the product line for freight in the request XML. If the requirements for freight are fulfilled based on this table configuration then the following logic applies:

Request:

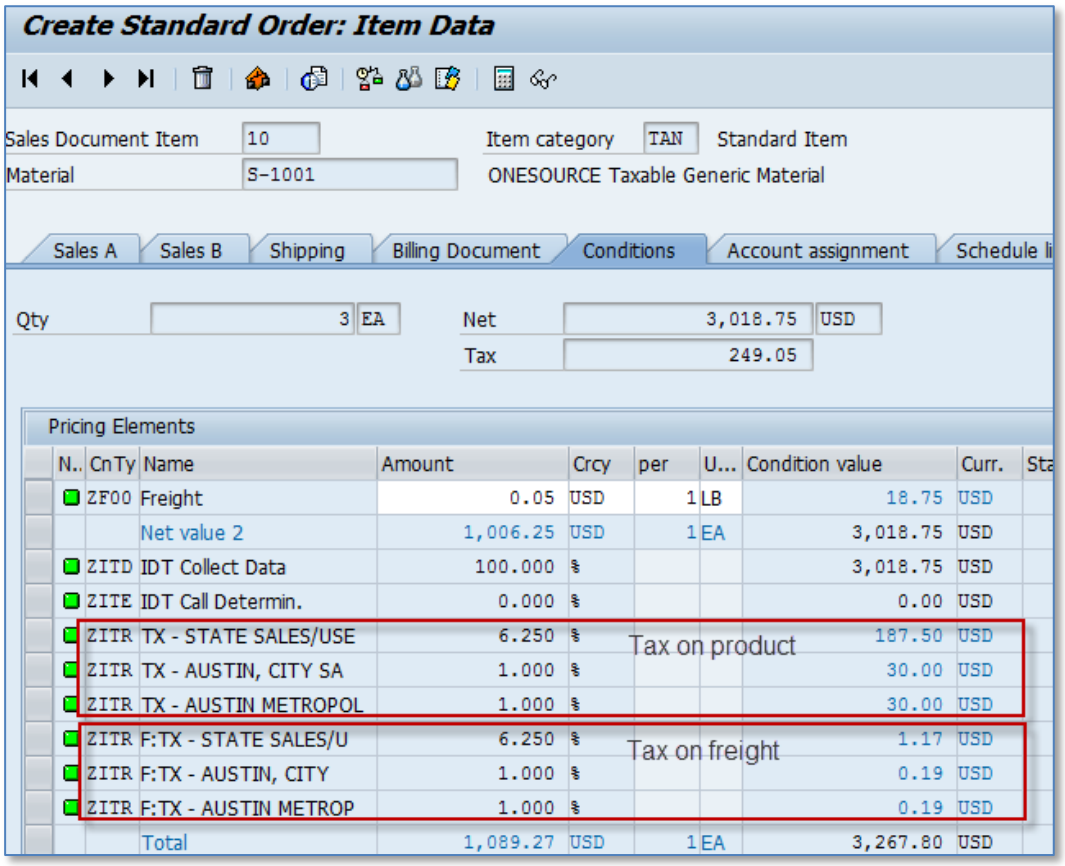
- Create a freight line in the XML request by copying the existing product line to a freight line
- Sets the related line number on the freight line to the non-freight line's line number
- Sets the description on the freight line to "Freight for line <original line number>"
- Sets the freight line's line number to the non-freight line's number plus one million (this way we can tell which lines coming back from Determination are freight)
- Sets the product code to the freight product code configured

Response:
Determination is returning the freight line as a related line to the non-freight line. Both are then returned as separate lines. The authority names for freight authorities can be prepended based on configuration. Each taxing authority is returned uniquely; if there are 4 taxing authorities involved there could be 8 lines in total; 4 for product and 4 for freight.

When there is Freight in a transaction, the Line ID for the freight line that is following the product line should be '2' as it is a unique key in audit database. The line number should be prepended with '1'.
If the line number of the product line or Line ID 1 is 000010, then the Freight line number should be 1000010 and line ID is '2'.

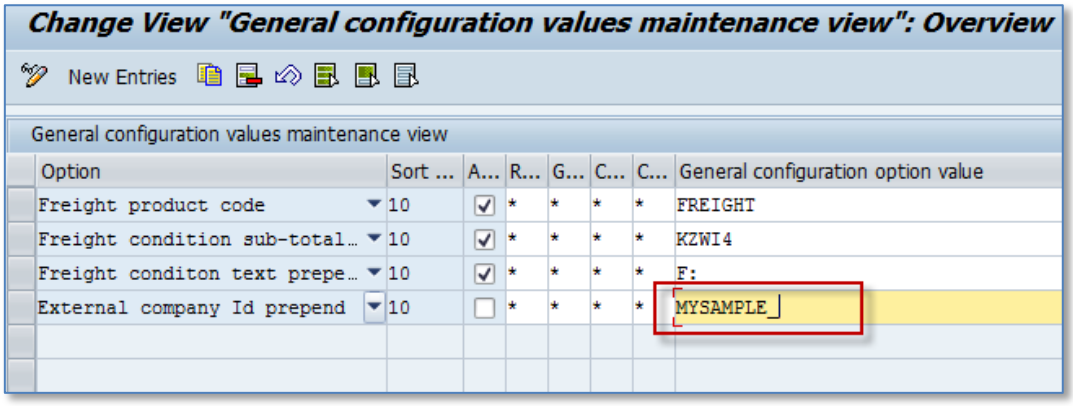
Configuration Option	Description
Freight product code	A product code used in Determination to drive taxability for freight. This code will be sent in the PRODUCT_CODE field of the XML request in the freight line.
Freight condition sub-total	The sub-total field configured in the pricing procedure indicating the freight price values.
Freight condition text prepend	A prepend text to indicate freight in the condition screen, for example **F:**. It is recommended to keep this short since the display field in SAP is 20 characters long.

Sales order line example with product and freight taxability:



External Company ID Prepend

When transaction data is passed to Determination the EXTERNAL_COMPANY_ID XML element determines which company's rules, rates, and other processing logic are applied. The standard source of the EXTERNAL_COMPANY_ID is the SAP Company Code to which the transacting business process belongs to. In instance where one Determination is covering multiple installations of SAP where you might have the same company code numbers in multiple systems this would lead to inconsistencies. To prevent the mix up of data when this occurs, the system would need to uniquely identify each company code. The prepend option enables this as you can add a value to each systems company code.



In this example the value **MYSAMPLE_** would be prepended to any transaction from this system. So in the case of a transaction for company code 3000 the value send to Determination would be **MYSAMPLE_3000**.

It is required that the External Company ID in Determination is configured to match the field value of the prepended company code if using this feature.

Override Addresses

The two override address options on the General Configuration table are used to establish the name of the new IDT address fields that can be added to the MIRO invoice entry line item detail. Here you would identify the name of the field that you added in the other setup and configuration this optional MIRO feature. If you wish to have the ability to change the ship to address at time of MIRO invoice entry then this would be required configuration in order to tell the system the new field name within the program. See other configuration sections noted below in "*Adding IDT Address Field to Invoice Line Item Entry Screens*" and "*Adding the /IDT/Address field to the MIRO PO Reference Tab"* which are both located at the bottom of Appendix 1.

IDT Account Key Assignment

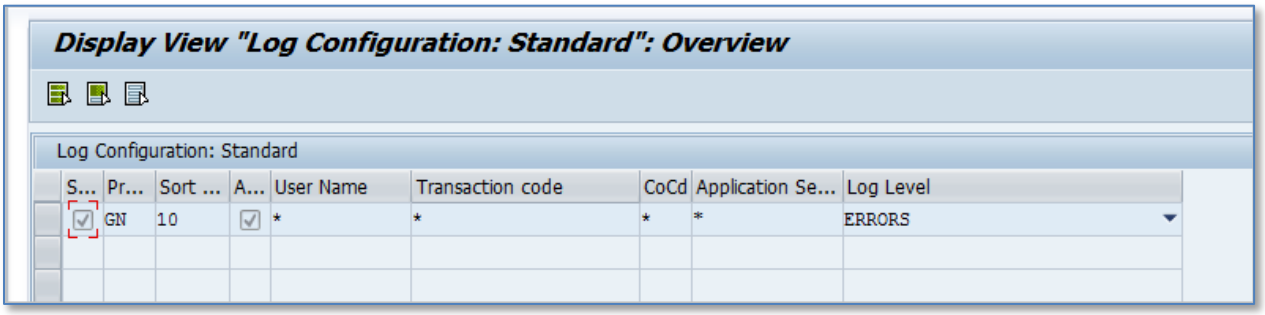
The IDT Account Key Assignment option in this table is used to set up a default account key of IDT for certain program uses. Currently this is used if you wish to set up certain tax codes as not being relevant to tax and not make a call to Determination. This is noted in the configuration instructions for the Tax relevancy table. See section "*Tax Relevancy Table"*

CONFIGURE LOGS

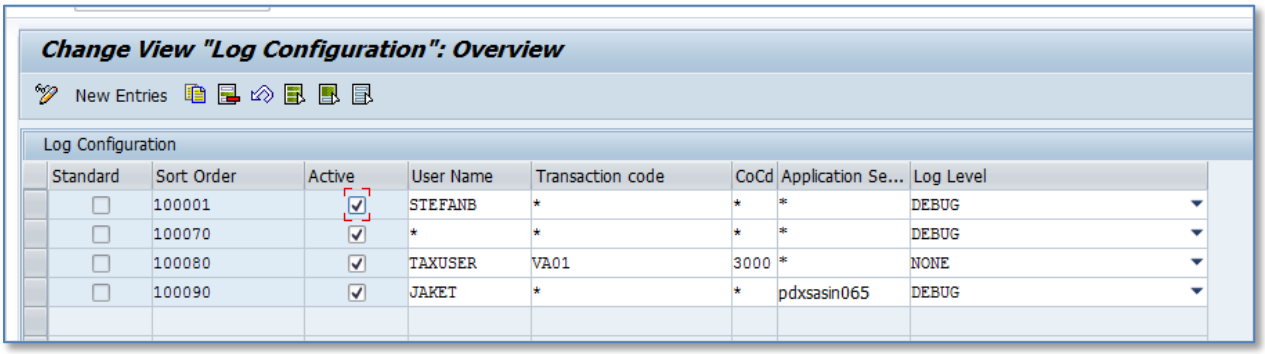
This table gives you significant flexibility on the setup and use of logs in the system. New with this Integration, the logs are now written to custom tables in SAP and a user can locate and search the list of logs quickly and easily. Changes to the type of logging that you need in your system are now fast and easy with no down time or interruption. Log configuration changes will go into effect immediately after saving the change. This table is delivered so that maintenance in a production system is allowed. Your SAP Security Administrator can set this up for you. Access can be controlled via the transaction code **/N/IDT/LOG_CONFIG**.

There are two views to this table. **/N/IDT/LOG_CONFIG_V** transaction is located in the standard tables section of the menu and is populated with one line as part of the installation of the product. Transaction **/N/IDT/LOG_CONFIG** is in the Customer user menu and is where system users can manage their own setting for log level by person, transaction code, company code, etc.

Transaction Code: **/N/IDT/LOG_CONFIG_V**



Transaction Code: **/N/IDT/LOG_CONFIG**



For the Customer view of this table the sort order begins with 100001 thru 999999.

The different configuration options are as follows:

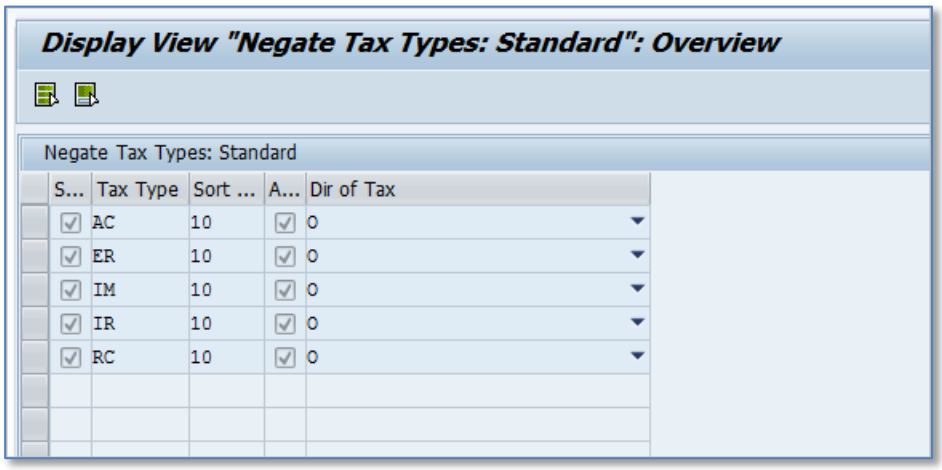
Column	Description
User Name	The SAP system logon ID of the user logging should apply to.
Transaction Code	Transaction code to be logged.
Company Code	Company Code
Application Server	To isolate a network connection issue, you may want to limit your Log Level to a given SAP server that may be experiencing a problem.
Log Level	NONE – no logging at all ERRORS – only severe errors DEBUG – all request/response XML details

When configuring logging, performance implications should always be taken into account as well as space considerations. All logs are written to table **/IDT/D_LOG**. This table can grow quickly and should be monitored. See information in the User Guide on the log archive function.

The standard line with sort order of 10 is provided in this table as part of the transport. It is considered the default for a production system and therefore set to log level “ERRORS”.

NEGATE DIRECTION OF TAX TYPES

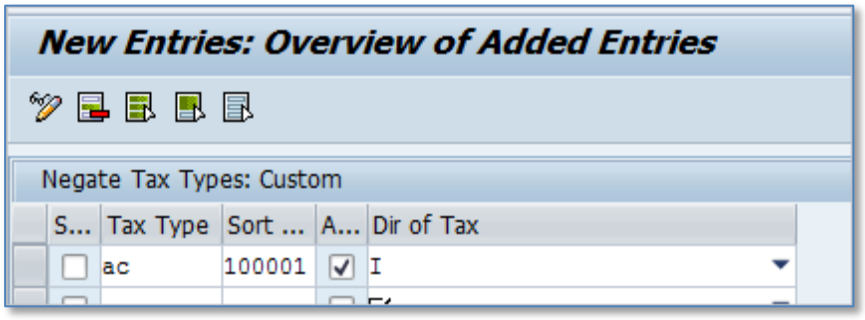
Transaction code: **/N/IDT/NEG_TAX_TYPE_V**



This table is used to negate one side of double sided tax entries. Certain tax types like acquisition tax or reverse charge scenarios calculate a self-pay accrual as an outgoing tax accrual and an incoming side for the recovery amount. Two tax blocks are returned from Determination in these scenarios and one side of the entry must be negated so that the net balance from the Determination tax calculation correctly nets to

zero with a debit and credit to the correct General Ledger accounts that are assigned. In this standard view of the table the user cannot change the entry but it is available for viewing and is populated with the five tax types that are used for the double sided entry scenario. The output direction for these tax blocks are identified as the ones requiring the negation entry.

Transaction code: **/N/IDT/NEG_TAX_TYPE**



This view of the table is available in the user configuration section of the menu for use by the customer to either override a line item from the standard view of the table or to assign a new entry. The table is shipped blank and a user will not likely need to make any adjustments using this table. In the print screen above we show the example of an entry in the customer view of the negation table that changes the standard table view for the AC tax type. Here the negation has been switched to the "I" direction rather than the O direction. This is just an example of how this customer view of this table could be used if needed.

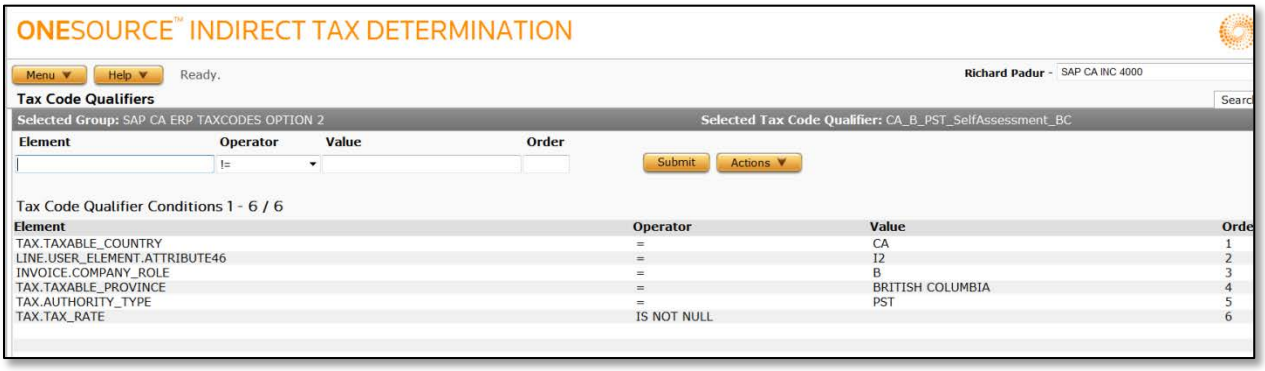
OFFSET CONFIGURATION BY COUNTRY

Often with Canada taxes, a vendor may charge the Federal level GST but they are not registered in a specific province to collect PST. In this situation the person receiving the invoice may be required to self-accrue the PST for their province. A new table **/IDT/D_PART_SA** has now been created to address the need for an offset posting to be created for the accrual of the required tax. This new table can be used for the self-accrual of Canada PST for various provinces but it can also be used to establish other self-accrual entries in situations where the Determination has returned only one tax block and must be offset with another side to the entry other than the customer or vendor account. This was often handled in the past with the system user creating a second custom authority and special rules to reverse the sign on the custom authority in order to post the credit to the tax liability account and also the debit with an offsetting custom authority to the expense account. This new table can eliminate the use of a second custom authority in such cases however it should only be used for items that are being accrued from a Vendor invoice as a non-recoverable and charged to expense, as the offset line is not included in the audit database or tracked for recoverability of the item. This table cannot be used at this time for offsetting items charged to a customer through an SD sales order.

Tax Code and TCQ Configuration

In order for the new table to work you will first need to configure a new tax code that will be used to trigger the self-accrual input tax of the specific authority's tax liability. In the example below we established I2 tax code as a driver input tax code and also created a Tax Code Qualifier to assign the same tax code

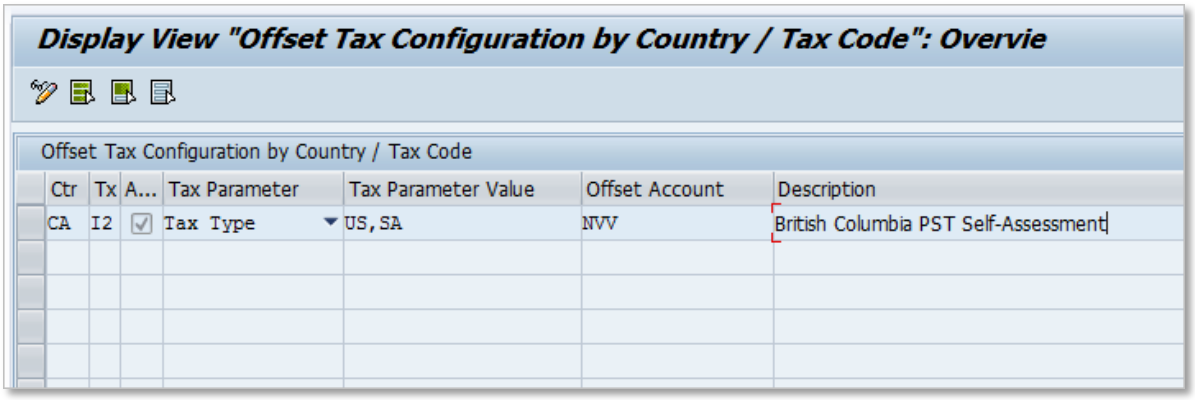
number as the final tax code in the transaction for the PST self-accrual. A data entry person in Accounts Payable would need to be trained to recognize when the vendor should have charged PST for the province and know how to input the new tax code that drives the self-accrual process. (With proper use of access sequences in the calculation schema, a system could be configured to include a vendor and ship to address sequence logic to allow for an automated assignment of the new tax code for default processing.)



When the entry is triggered from the table below the **LINE.USER_ELEMENT.ATTRIBUTE46** is populated with the tax code that was used. This attribute is then also used in the tax code qualifier conditions in order to drive the final tax code to the same final tax code for reporting purposes. See example above of the TCQ for the self-accrual input tax code for Canada PST in British Columbia.

Table Configuration

Transaction code: **/N/IDT/OFFSET_CONFIG**



Now that you have created the tax code and the TCQ then next process is to configure this table as shown above with two options for setting the tax parameter and tax parameter value:

Option 1: Tax parameter set on tax type allows you to then set up to 10 values in the tax parameter value field. Each must be separated by a comma. This option can be used if you want to drive the mapping based on a set of tax parameter values that are used for the various applicable transactions.

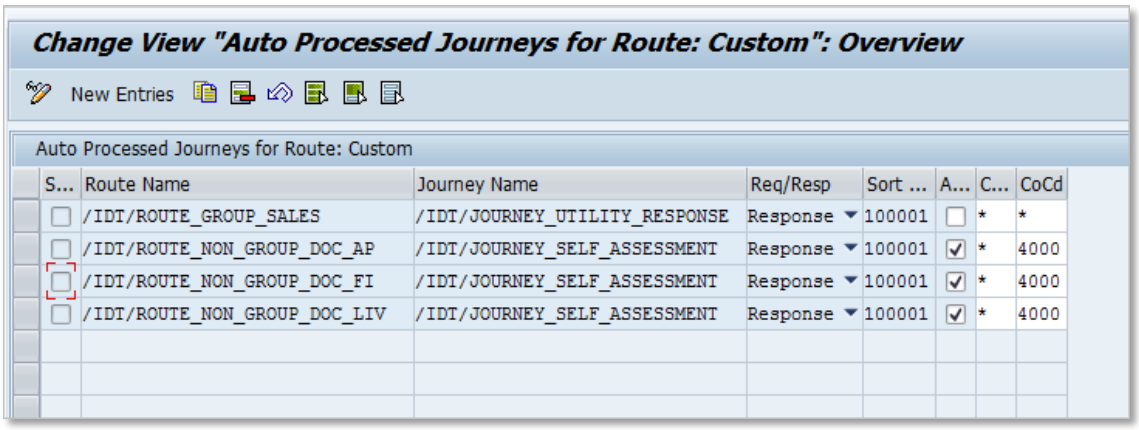
Option 2: Tax parameter set on authority type allows you to then set up the table entry based on the authority (in this case PST) that you want to self-accrue for the transaction.

The offset account must always be either to a NVV type of account key that drives the posting to the expense account, or you must set this to an account key assignment that will post to another expense account from the P&L. This side of the entry coming from this table is never posted to the audit database and must be used only for expensing the debit posting side and never assigned to a recoverable tax account on the Balance Sheet or to a liability account that must be reflected in audit.

Required Route Configuration with New Journey for Offset

A new journey has been established for this self-accrual offset table process and mapping must be done in the /IDT/AUTO_JOURNEYS custom view of the table in order to activate this function for given processes within the system. See below an example of the required additions you must enter to this table in order to activate the use of the offset functionality:

Transaction: **/IDT/AUTO_JOURNEYS**

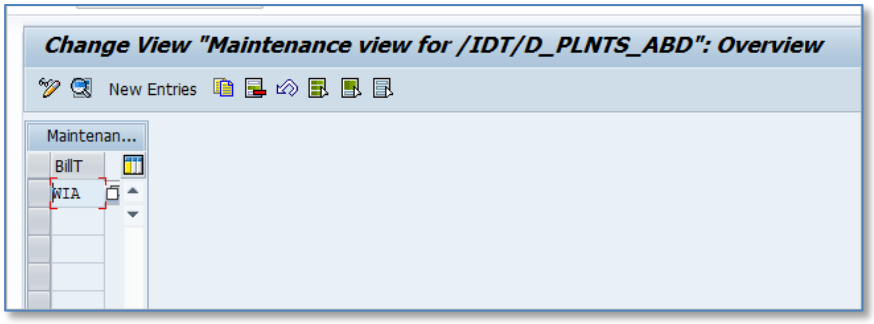


S...	Route Name	Journey Name	Req/Resp	Sort ...	A...	C...	CoCd
☐	/IDT/ROUTE_GROUP_SALES	/IDT/JOURNEY_UTILITY_RESPONSE	Response	100001	☐	*	*
☐	/IDT/ROUTE_NON_GROUP_DOC_AP	/IDT/JOURNEY_SELF_ASSESSMENT	Response	100001	☑	*	4000
☐	/IDT/ROUTE_NON_GROUP_DOC_FI	/IDT/JOURNEY_SELF_ASSESSMENT	Response	100001	☑	*	4000
☐	/IDT/ROUTE_NON_GROUP_DOC_LIV	/IDT/JOURNEY_SELF_ASSESSMENT	Response	100001	☑	*	4000

The new journey /IDT/JOURNEY_SELF_ASSESSMENT must be mapped in this table for each of the routes that you need the offset to work within. The FI, LIV, and non-group A/P routes have been mapped to activate this response logic for vendor invoices. If you have other processes that you may also have need for a offset function then other routes may also be required. In this example above we did the mapping for only company code 4000 for a Canada scenario however you may wish to leave this with an "*" in order to cover all possible company code requirements.

PLANTS ABROAD BILLING TYPES

Transaction code: **/N/IDT/PLANTS_ABROAD**



This table is used by the Plants Abroad Journey to identify which billing types are to be used for the Plants Abroad calculation. The table is customer view only and is shipped blank. The user will need to populate the table with the correct billing type for their specific Plants Abroad calculation and configuration settings. In the standard set up scenario this would be billing type WIA however a user could elect to create a different billing type for this purpose and would need to enter the new billing type here for the Plants Abroad journey to pick it up correctly.

To remove an entry from this table switch over to change mode on the table, select the line you wish to delete and then click on the delete button (shift F2).

To add an entry to this table switch over to change mode on the table, select the **New Entries** option from the app menu and enter the new billing type from the drop down list. Hit **ENTER** to save the entry.

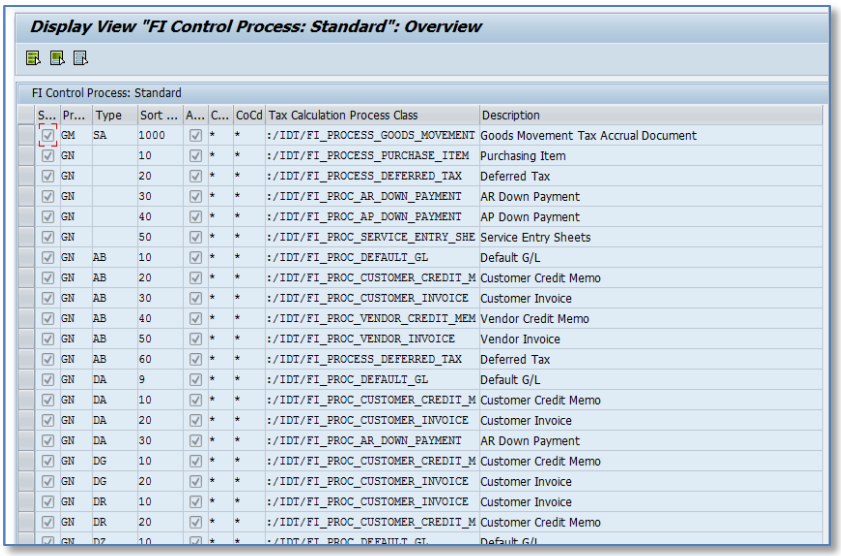
FI PROCESS CONTROL CONFIGURATION

This is a very important table for your configuration and you will end up spending a bit of time in the customer view of this table in order to make sure all of your document types are addressed. We have supplied a number of document types in the standard view however there are likely many SAP supplied document types and custom document types that you will need to add.

This table defines what “FI Processes” might run for a specific document type on the transaction and lists them in order of preference.

Each “FI process” then has logic to see if it is appropriate for the current transaction.

Transaction code: **/N/IDT/FI_CONTROL_V**



S...	Pr...	Type	Sort ...	A...	C...	CoCd	Tax Calculation Process Class	Description
☑	GM	SA	1000	☑	*	*	:/IDT/FI_PROCESS_GOODS_MOVEMENT	Goods Movement Tax Accrual Document
☑	GN		10	☑	*	*	:/IDT/FI_PROCESS_PURCHASE_ITEM	Purchasing Item
☑	GN		20	☑	*	*	:/IDT/FI_PROCESS_DEFERRED_TAX	Deferred Tax
☑	GN		30	☑	*	*	:/IDT/FI_PROC_AR_DOWN_PAYMENT	AR Down Payment
☑	GN		40	☑	*	*	:/IDT/FI_PROC_AP_DOWN_PAYMENT	AP Down Payment
☑	GN		50	☑	*	*	:/IDT/FI_PROC_SERVICE_ENTRY_SHE	Service Entry Sheets
☑	GN	AB	10	☑	*	*	:/IDT/FI_PROC_DEFAULT_GL	Default G/L
☑	GN	AB	20	☑	*	*	:/IDT/FI_PROC_CUSTOMER_CREDIT_M	Customer Credit Memo
☑	GN	AB	30	☑	*	*	:/IDT/FI_PROC_CUSTOMER_INVOICE	Customer Invoice
☑	GN	AB	40	☑	*	*	:/IDT/FI_PROC_VENDOR_CREDIT_MEM	Vendor Credit Memo
☑	GN	AB	50	☑	*	*	:/IDT/FI_PROC_VENDOR_INVOICE	Vendor Invoice
☑	GN	AB	60	☑	*	*	:/IDT/FI_PROCESS_DEFERRED_TAX	Deferred Tax
☑	GN	DA	9	☑	*	*	:/IDT/FI_PROC_DEFAULT_GL	Default G/L
☑	GN	DA	10	☑	*	*	:/IDT/FI_PROC_CUSTOMER_CREDIT_M	Customer Credit Memo
☑	GN	DA	20	☑	*	*	:/IDT/FI_PROC_CUSTOMER_INVOICE	Customer Invoice
☑	GN	DA	30	☑	*	*	:/IDT/FI_PROC_AR_DOWN_PAYMENT	AR Down Payment
☑	GN	DG	10	☑	*	*	:/IDT/FI_PROC_CUSTOMER_CREDIT_M	Customer Credit Memo
☑	GN	DG	20	☑	*	*	:/IDT/FI_PROC_CUSTOMER_INVOICE	Customer Invoice
☑	GN	DR	10	☑	*	*	:/IDT/FI_PROC_CUSTOMER_INVOICE	Customer Invoice
☑	GN	DR	20	☑	*	*	:/IDT/FI_PROC_CUSTOMER_CREDIT_M	Customer Credit Memo
☑	GN	DZ	10	☑	*	*	:/IDT/FI_PROC_DEFAULT_GL	Default G/L

The standard view of this table contains some of the mappings of standard document types as they relate to the hierarchy of tax calculations used for the document type. You will see that there are multiple tax calculation process classes assigned to a given document type code, for example: SA document type could use the following six process class:

1. /IDT/FI_PROC_DEFAULT_GL
2. /IDT/FI_PROC_CUSTOMER_CREDIT_M
3. /IDT/FI_PROC_CUSTOMER_INVOICE
4. /IDT/FI_PROC_VENDOR_CREDIT_MEM
5. /IDT/FI_PROC_ VENDOR _INVOICE
6. /IDT/FI_PROC_LIV_CREDIT_MEMO
7. /IDT/FI_PROC_LIV_INVOICE
8. /IDT/FI_PROCESS_DEFERRED_TAX
9. /IDT/FI_PROCESS_FB05

The sort order of these classes is dependent on the given document type. A document type for a credit memo would use the credit memo class as higher in this sort order than an invoice class. A document type for an invoice would use the invoice class first followed by the credit memo class. Not all classes are assigned to the table depending on where the document is used. Example: for a customer document type, you would not assign a vendor class and vice versa. The list should sort from the most specific to the most general being at the top of the sort. This is why you see the deferred tax and FB05 process classes listed last on the sort order for SA document type as they are the most complex and specific.

The table below lists the various tax calculation process classes including a brief description.

TAX CALCULATION PROCESS CLASS	DESCRIPTION
/IDT/FI_PROC_DEFAULT_GL	Used for general FI transactions that do not contain either a customer or a vendor
/IDT/FI_PROC_CUSTOMER_CREDIT_M	Used for a customer credit memo or returns type of document
/IDT/FI_PROC_CUSTOMER_INVOICE	Used for a customer invoice type of document
/IDT/FI_PROC_VENDOR_CREDIT_MEM	Used for a vendor credit memo or returns type of

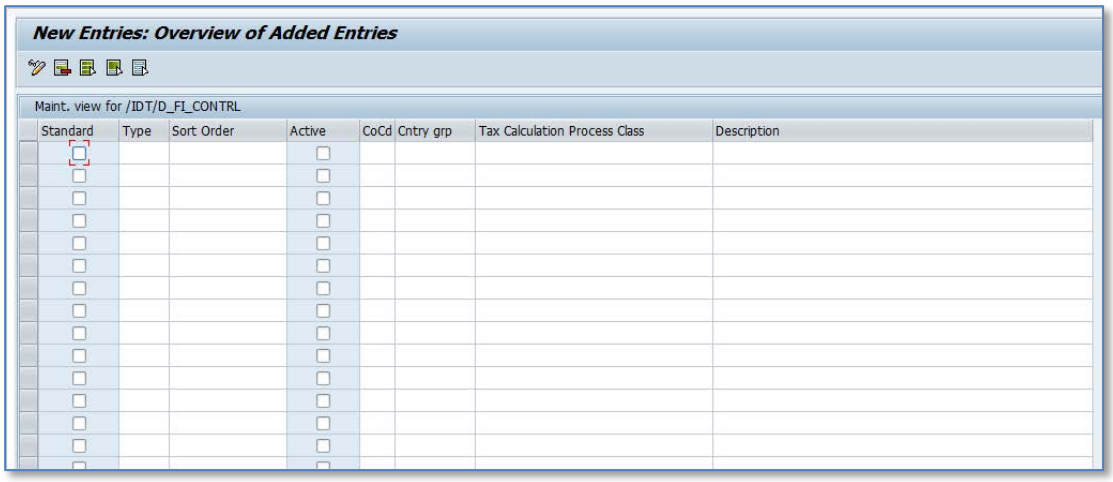
	document
/IDT/FI_PROC_VENDOR_INVOICE	Used for a vendor invoice type of document
/IDT/FI_PROC_LIV_CREDIT_MEMO	Used for a LIV vendor credit memo process
/IDT/FI_PROC_LIV_INVOICE	Used for a LIV vendor invoice process
/IDT/FI_PROCESS_DEFERRED_TAX	Used for either a customer or vendor document that uses the deferred tax process
/IDT/FI_PROCESS_FB05	Used for a document that could be for customer invoice or credit memo, vendor invoice or credit memo, deferred tax or cash discount.

The table is part of the standard settings and set as shown as part of the initial transport process however your system may be configured to use more than this list of document types or you may have created your own customer document types. The standard view of the table as provided is not all inclusive and you must add entries to the customer view of this table based on your specific needs.

If you go back and review the print screen of the standard view of this table you will see that there are two lines at the beginning that are populated without a document type being specified. The two lines are added to the table for specific situations where the document type is not available at the time of the document line being called. This happens within the calculation for a purchase order line item and for a deferred tax processing line item. Both of these classes are added to this table for specific processing needs that occur when the tie to a document type is not possible due to system logic within SAP. You will not need to worry about these two lines nor will you have to adjust them within the customer view of this table. They are internal to our processing logic.

Transaction code: **/N/IDT/FI_CONTROL**

This transaction will take you to the Customer view of this table in the Customer Setup menu. In this view of the table you can add your own lines for any missing document types that you need to configure, and for missing class configuration for all document types you are using. Note that the sort order range again uses numbers starting at 100001 thru 999999. In the sort order the program starts with the highest number and the most applicable highest number in the mapping is used.

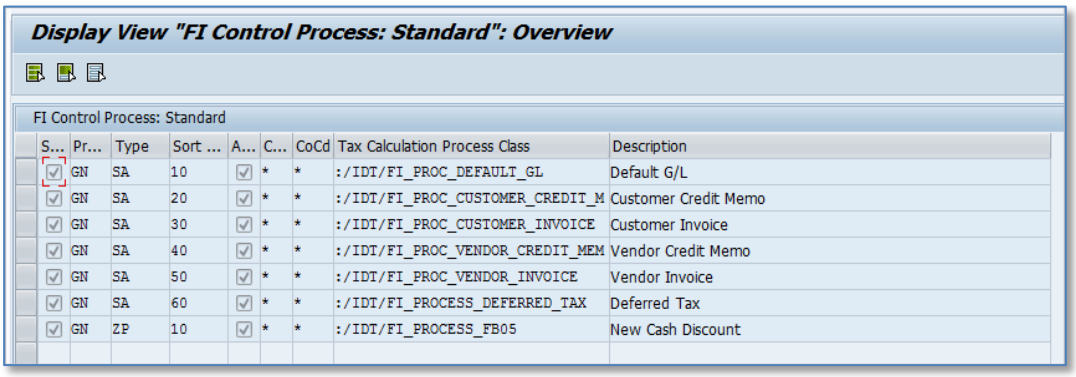


The table initially comes up in display mode. Switch to **CHANGE** mode and select **NEW ENTRIES**. This table is shipped blank for user input. Because this is a Customer view you will not be able to check the standard checkbox as this is only used on the standard view of the table.

Overriding the Standard Table

If you wish to remove or override a line that is on the standard view of the table you will need to replicate the full set of classes that you want in your new mapping for the given document number. (Excluding the line you wish to remove) For example:

View of the standard table for SA document Type.

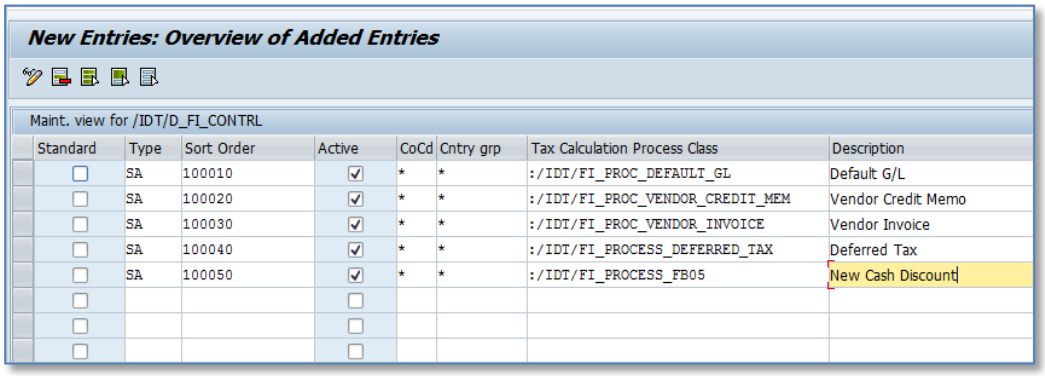


Display View "FI Control Process: Standard": Overview

FI Control Process: Standard

S...	Pr...	Type	Sort ...	A...	C...	CoCd	Tax Calculation Process Class	Description
☑	GN	SA	10	☑	*	*	:/IDT/FI_PROC_DEFAULT_GL	Default G/L
☑	GN	SA	20	☑	*	*	:/IDT/FI_PROC_CUSTOMER_CREDIT_M	Customer Credit Memo
☑	GN	SA	30	☑	*	*	:/IDT/FI_PROC_CUSTOMER_INVOICE	Customer Invoice
☑	GN	SA	40	☑	*	*	:/IDT/FI_PROC_VENDOR_CREDIT_MEM	Vendor Credit Memo
☑	GN	SA	50	☑	*	*	:/IDT/FI_PROC_VENDOR_INVOICE	Vendor Invoice
☑	GN	SA	60	☑	*	*	:/IDT/FI_PROCESS_DEFERRED_TAX	Deferred Tax
☑	GN	ZP	10	☑	*	*	:/IDT/FI_PROCESS_FB05	New Cash Discount

If you have configured your system differently so that customer credit memo and invoices are using a custom document type rather than SA for your given transaction you would want to remove the line 20 and 30 from this list. To do so the entry in your customer setup view of the table would look like this example below.



New Entries: Overview of Added Entries

Maint. view for /IDT/D_FI_CONTRL

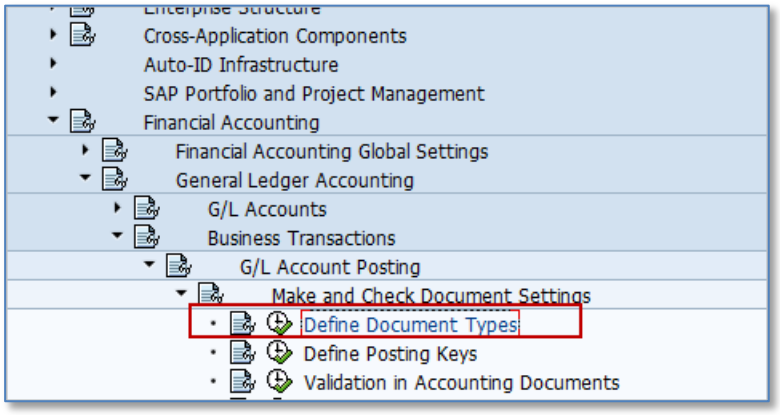
Standard	Type	Sort Order	Active	CoCd	Cntry grp	Tax Calculation Process Class	Description
☐	SA	100010	☑	*	*	:/IDT/FI_PROC_DEFAULT_GL	Default G/L
☐	SA	100020	☑	*	*	:/IDT/FI_PROC_VENDOR_CREDIT_MEM	Vendor Credit Memo
☐	SA	100030	☑	*	*	:/IDT/FI_PROC_VENDOR_INVOICE	Vendor Invoice
☐	SA	100040	☑	*	*	:/IDT/FI_PROCESS_DEFERRED_TAX	Deferred Tax
☐	SA	100050	☑	*	*	:/IDT/FI_PROCESS_FB05	New Cash Discount
☐			☐				
☐			☐				
☐			☐				

Because of the way the table sort order works it will pick up the last applicable line entry starting with the customer view of the table (100050,100040,etc.) and ending with the last sort order applicable from the standard view setup (50,40,30,20, etc.) for the given document type.

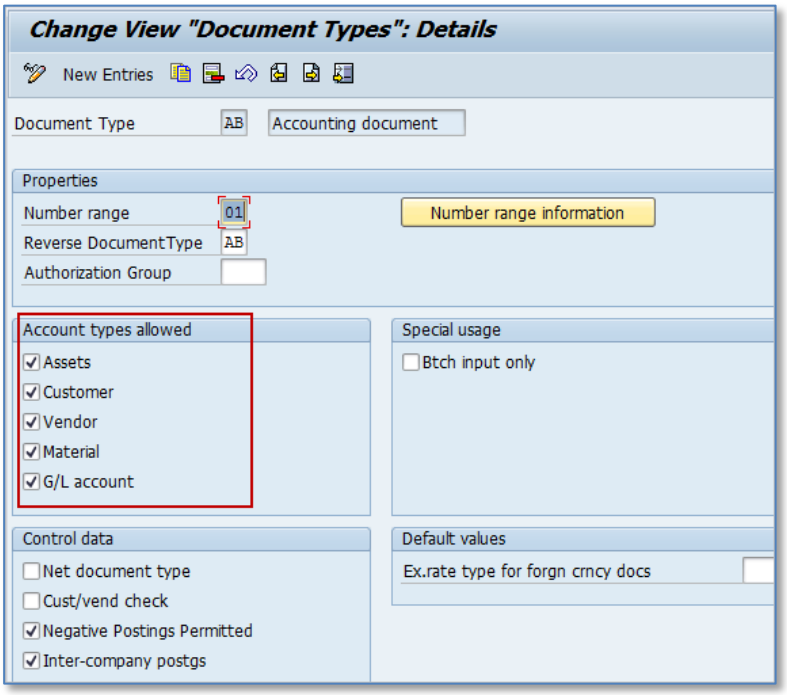
It is important that you check your system configuration for each document type and make sure that this table has the appropriate classes listed for the document type you are using based on the list of Account

Types that have been checked as “allowed” for the document type. To do this, go to the following transaction:

Transaction: **SPRO** navigate to **> Financial Accounting > General Ledger Accounting > Business Transactions >G/L Account Posting > Make and Check Document Settings > Define Document Types.**



Select your document type and double click to go to the first screen on the document type.



Review the account types that have been allowed for the given document type. If Customer has been checked then you will want to have the Customer Invoice and Customer Credit memo class listed for this document type in the **/IDT/FI_CONTROL** table. Likewise if Vendor is checked then add the Vendor Invoice and Vendor Credit memo Class. If G/L account is checked then you will likely need the Default

G/L class. If this document type will be relevant for deferred taxes or cash discount processing then the respective classes will also need to be added to the list for this document type in the table.

If you do not do this check and verification process you will likely have issues with the document type not behaving correctly and incorrect tax processing assigned.

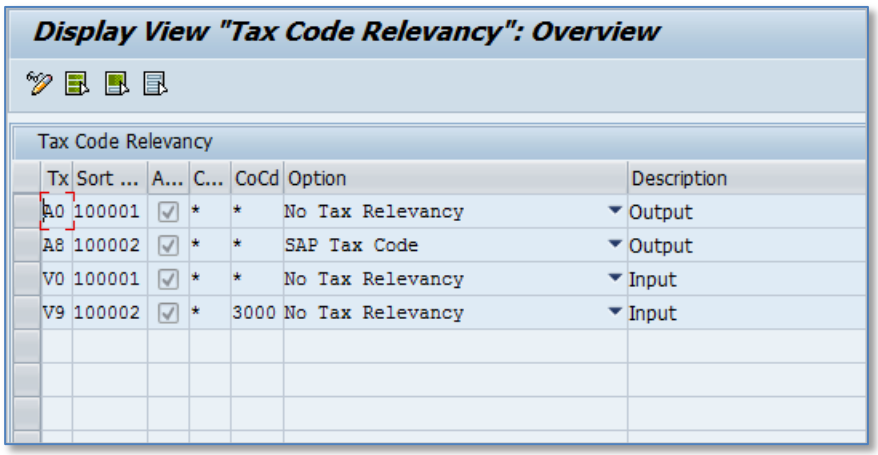
TAX RELEVANCY TABLE

A customer may wish to set a given tax code as one that is not relevant to tax using ONESOURCE Indirect Tax for a couple of reasons:

- The tax code is not relevant to tax at all and the user does not want the tax code included in any calls to Determination.
- The tax code is one that will be used in a specific module of SAP using SAP's native or internal tax processes and will not be used for a call to Determination for an external tax calculation.

For both of these situations a table has been added so a user can identify these tax codes to prevent a call to Determination. This table is available in the Customer Setup and Extensions Configuration Tables menu.

Transaction Code: **/N/IDT/TAX_CODE_REL**



By adding a given tax code for a specific list of countries or company codes you are telling the system to not include this tax code in any request call to Determination for your country/company code combination. A user can note in the Option column if the exclusion is because the tax code is exempt for tax completely, or if the tax code is to only be used by SAP internal or native tax processing separately from a call to our Determination tax engine.

This table has only a customer view and will be shipped empty upon download of the software.

Tax codes that are added to this table should be used like a driver tax code to tell the system the item as a whole is not relevant to a tax calculation. This is different than the use of a tax code that is brought back

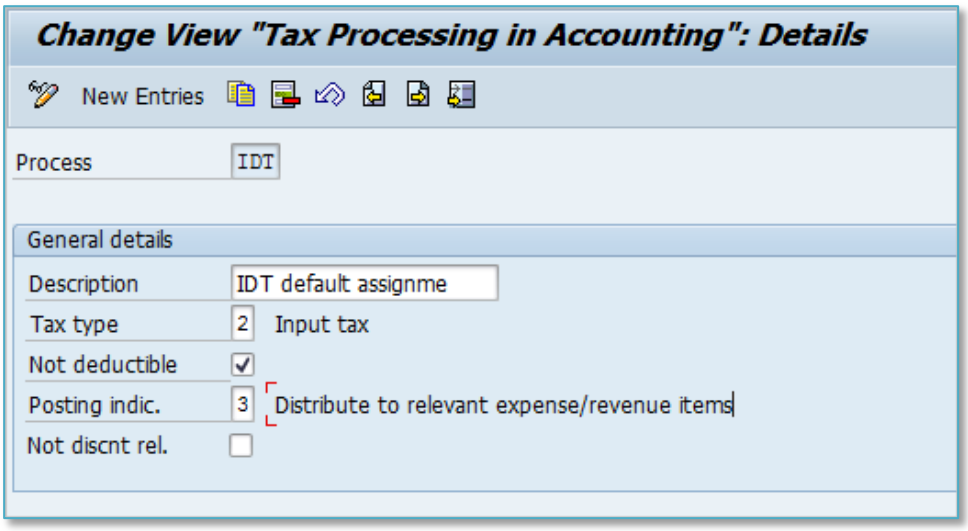
from a tax call as being exempt from tax after a call has already been completed by determination. In such a case a user should have two different tax codes.

- One should be used via the tax code qualifier as an exempt tax amount or zero tax. Entries using an “Exempt” tax code will create a call and calculation in Determination that will go to audit along with other tax codes on the same transaction. They would not be included in this table. Such would be the case if a trans-editor sent a tax block for one tax authority as taxable and a second tax block on the line as exempt for another tax authority for possibly a regional, city, or district level tax.

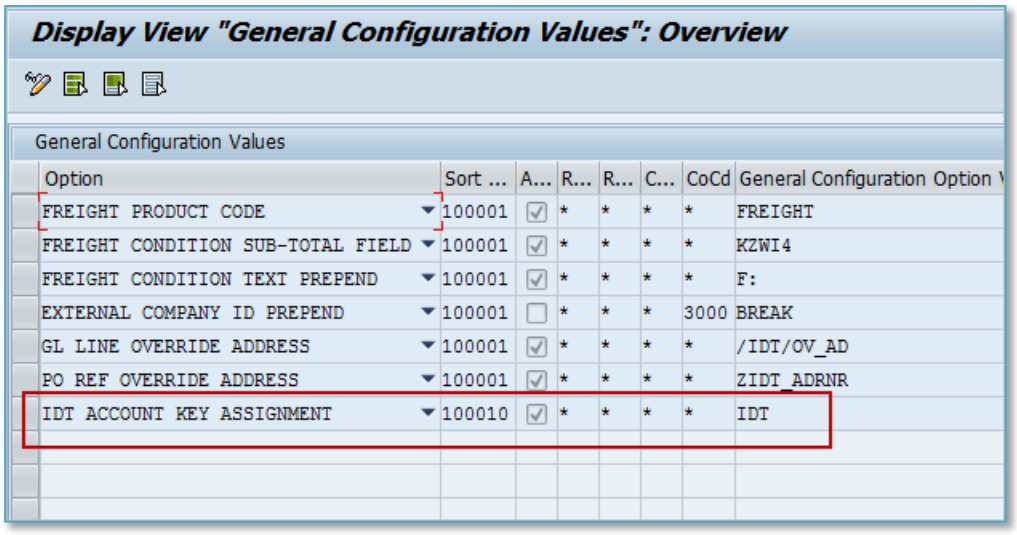
- A tax code as Not Relevant to tax would be used on the line as a driver and would not make a call for the whole line item on the order. It would be used on this table to tell the system to not make a call at all for this item. No tax will be calculated and nothing sent to the audit database for this line.

The program looks for an account key associated with this non relevant tax code as part of an internal check. We therefore need a “dummy” account key to internally have the program find and use for the non-relevant tax code assignment. We can do this by creating a new configuration within the general configuration table and create the dummy account key using transaction code **OBCN**.

1. Set up “IDT” account key in **OBCN** with same configuration as current NVV account key.



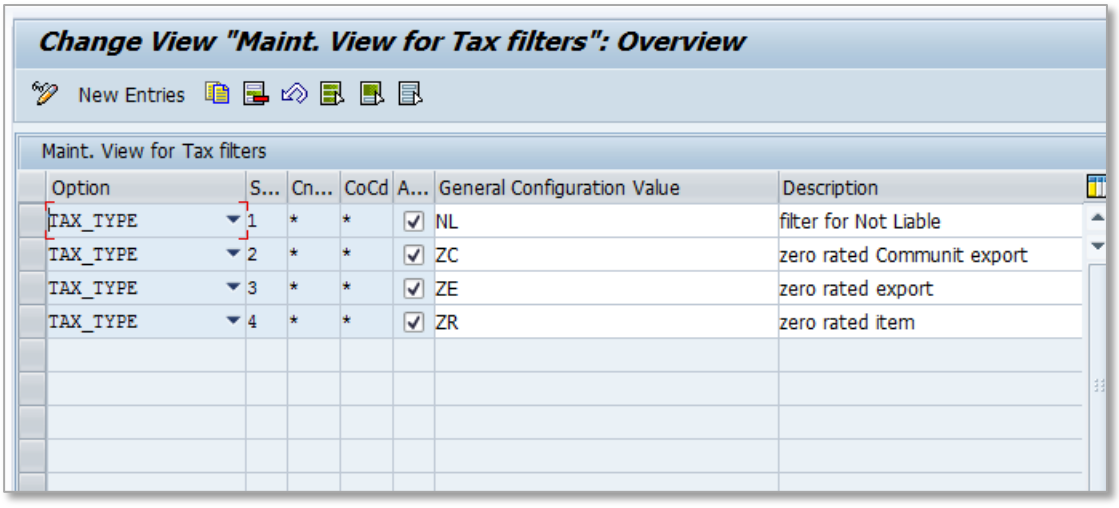
2. Add line to transaction /N/IDT/GEN_CONFIG_VALS



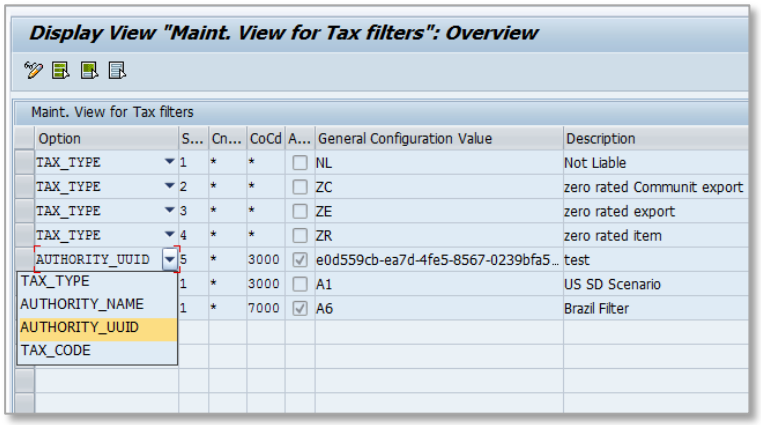
TAX FILTERS TABLE

The tax filters table was added to the system with release 6.4.0.0 as a replication of the tax filters option that was provided in the prior 5.x Integration as part of the TaxMappings.xml and its Extension file. This was originally provided in order to filter out or remove from SAP a zero rated tax result that was returned from Determination. Such zero rated tax types as NL, ZC, ZE, ZR could be mapped to remove the additional tax block from the calculation. However this removal only applied to the SAP side and would still carry over this zero value block into the Determination audit data. As such it was only used to remove zero valued tax results. The new transaction and table with sample data is shown below:

Transaction Code: **/N/IDT/TAX_FILTERS**



With this new feature as provided in the Customer Configurations Tables menu, a user can once again filter out these tax types. The prior version of this also allowed the option of filtering based on other objects such as by tax code or authority name. The new table also allows for this via a drop down list in the options column of the table. See example below:



If the AUTHORITY_NAME option is selected then the user could input in the General Configuration Value column the name of the tax authority that is being brought back in the XML thereby filtering based on the authority name. Similarly, the TAX_CODE option could be used if a filter omission of a given tax code is desired.

The AUTHORITY_UUID option was added as a more stable mapping based on the UUID number of the tax authority. Whereas the AUTHORITY_NAME field value can change over time, the UUID number does not change. We recommend that if you desire to filter based on the authority that you change your mapping to use the AUTHORITY_UUID instead to avoid a future issue with the name change. See example above. The UUID can be copied from the XML in the log file.

The second column of this table is the sequence number column. A user would populate this in numerical order for each line of the table. This table is a customer use table and is shipped blank with no entries. If you want to filter any results based on the criteria you will need to enter new lines to this table.

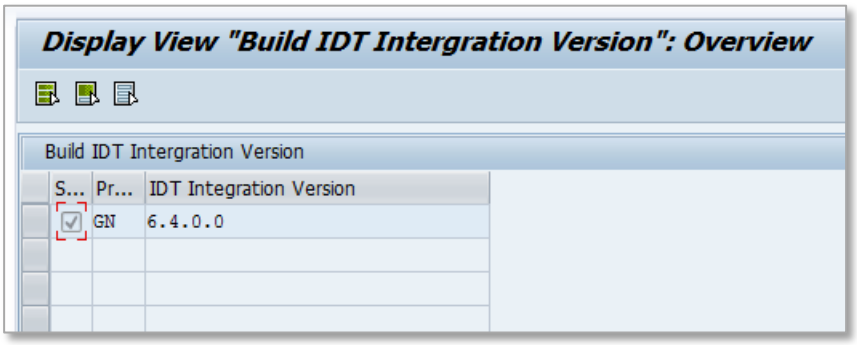
Expected Results:
Suppressed taxes will not appear on transactions/documents.
Suppressed taxes will not be saved in BSEG/BSET.
Suppressed taxes will not be shown in normal XML log (NON_AUDITED log).
But suppressed taxes will be shown in audit log. Meaning AUDIT logs will be shown with ALL the taxes.
Audit database will contain all the taxes including suppressed and non-suppressed.

It is very important that you understand that mapping a tax type to this table that is bringing back a value other than zero will cause a reconciliation issue between your general ledger and the Determination audit database. If you filter a non-zero tax value the entry will not display in the G/L but it will display in Determination audit. The Reconciliation report from the reporting module will end up showing a reconciling item difference between the two systems that you will later need to deal with in downstream compliance and reporting processes. It is best to not use this filter function for non-zero calculations.

PRODUCT VERSION TABLE

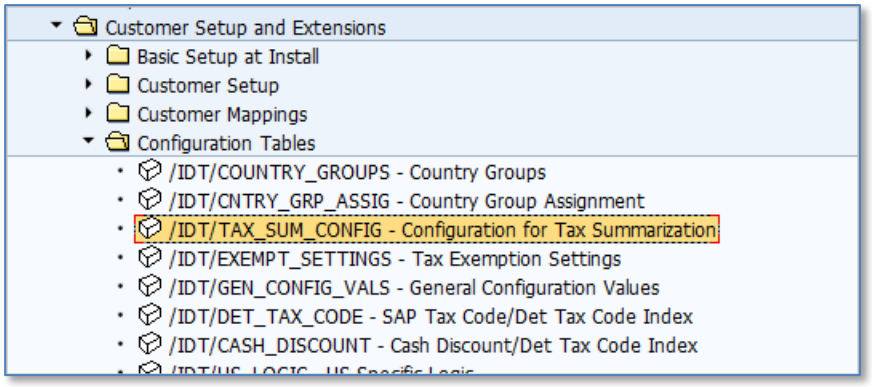
The product version table was added to the system in a prior release but until 6.4 it was hidden for internal uses. As of release 6.4 this table is now available for viewing within the Basic Setup-Display only menu. The table contains the most current version information based on the transport of the version to your system. There should be one line on this table per product and will show you which upgrade version of the product you are currently using. (If you also have the Goods Movement product installed then you would see a line for product GM along with a version number.) It is not a table that the user will need to be concerned with configuration but is used for support information.

Transaction Code: **/IDT/VERSION** - Global Next Product Version

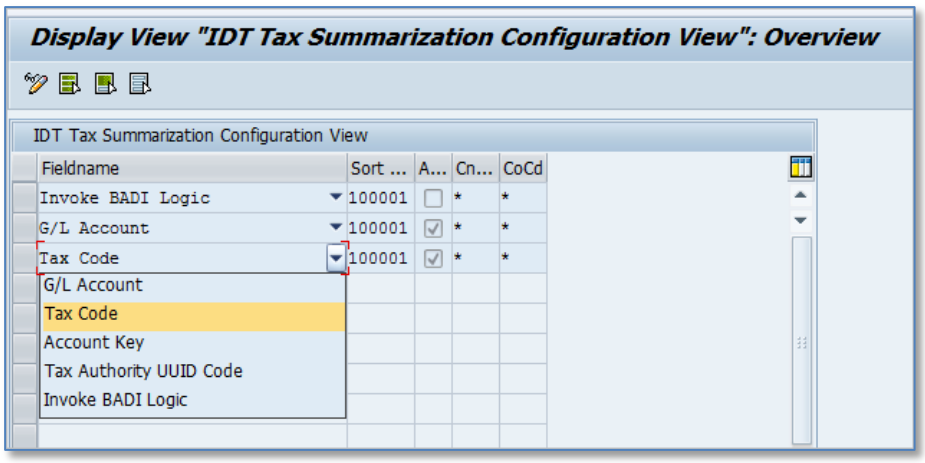


SUMMARIZATION OF TAX LINES ON BSEG AND BSET TABLES

SAP has a limit of 999 lines on documents and users often have a need to summarize or consolidate like lines in order to maximize the size of the entry. In order to decrease the number of tax lines on a large order we have provided a new table that can be used to control summarization of the tax data lines on the accounting document for like information. This new table is a single customer view table located within the Customer Configuration Tables menu. A user can summarize tax data lines for both the BSEG and BSET tables based on General Ledger account, Tax Code, Account Key, and UUID tax authority. This feature will not summarize the expense lines. The table is part of the initial transport and is shipped blank for users to be able to configure.



Transaction: **/N/IDT/TAX_SUM_CONFIG**



This table is shipped blank and the user can elect to input a summarization like the example shown above. The table can be configured for specific country groups and company codes. In the example above all four fieldname options are shown and this would provide the most detailed example with the least amount of line item summarization based on all four criteria at once. One could also elect to have the maximum amount of summarization by only entering the first line of G/L Account. In all cases it is imperative that you start by using the G/L account fieldname first in your selected setup. This table summarization logic will also keep debit and credit entries summarized as separate totals in order to avoid

any possible logic errors where the net of the lines sums to zero. If you elect to add additional levels of summarization then the tax code, account key and UUID options may also be selected.

If you have assigned multiple tax codes to the same G/L account in your T007L account assignment table then you may encounter an error if you have summarization turned on for G/L account only. Error FF716 “Error in assigning the Tax Group” may occur when trying to process a document. If you encounter this error and have multiple tax codes assigned to the same G/L account then you must select the summarization by both the G/L account AND the Tax code in order to avoid this error. See above screen shot for example shown with both selected.

A new BAdI function has also been added to this table as one of the options. A user can elect to use it to add other custom ABAP enhancements to the summation logic such as limits based on the number of tax lines on the document, document type, or any other logic that the user wishes to add to the summarization beyond the four options noted above. For example, you may wish to only have summarization occur on the transaction if there are more than 100 revenue/expense lines on the document.

The new BAdI is **/IDT/BADI_ADJUST_TAX_SUMMATION**. You can learn more about utilizing this addition via the *Installation and Programmer’s Guide*. This BAdI was added as of release 6.2.0.1. If you select this option from the drop down list on the table then you can activate it and program your required logic within the BAdI using an ABAP program. The BAdI must be selected and activated in this table for the logic to be applied for your selected company code(s).

Currently this table will summarize BSEG and BSET table tax lines only for LIV and FI module transactions being posted to the General Ledger. We have not extended this functionality to SD billing documents. The process will be extended to billing documents in a future release of the product.

Consideration When Using Summarization

If you elect to summarize data on the BSEG and BSET tables then your VAT report will reflect this summarized level for reporting. This will need to be considered when looking at downstream reporting processes and where you will get your information for reporting and compliance. The Audit database in determination as well as the BSEG and BSET tables will have summarized data at the level that you have selected and depending on how you have assigned tax codes and G/L account numbers you may require a finer breakout for reporting and compliance needs than you have allowed with this configuration. If this is an issue then you may be able to get full detail data on your transaction by using the data stored in the **/IDT/TAX_DATA** table.

The **/IDT/TAX_DATA** however may not have all of the fields that you require. Currently the tax amount is not repopulated there and a user may elect to add additional fields to the **/IDT/TAX_DATA** table in order to have the required fields for detailed reporting using this table. Use of summarization will require that you play with this feature given your specific transaction size, complexity, and tax policy. Several iterations of testing and adjustments may be required.

Summarization for Partial Payments on Deferred Tax Invoices

If a deferred tax invoice with multiple line items is processed with a partial payment the system will potentially incorrectly transfer to the target tax account the full amount of the line items rather than the partial payment amount. This occurs at time of the f.38 transfer program being run, and only on invoices that have multiple lines on them that are charged to the same tax code.

Workaround: If you use partial payments on deferred tax invoices this issue can be avoided by setting the tax summarization table configuration to summarize tax lines at both the tax code and G/L account level. By doing this the lines on the invoice will be summarized into one tax line for the authority and the F.38 program will then handle the amount correctly and only transfer the partial payment amount to the target tax code.

TAX DATA MAPPING

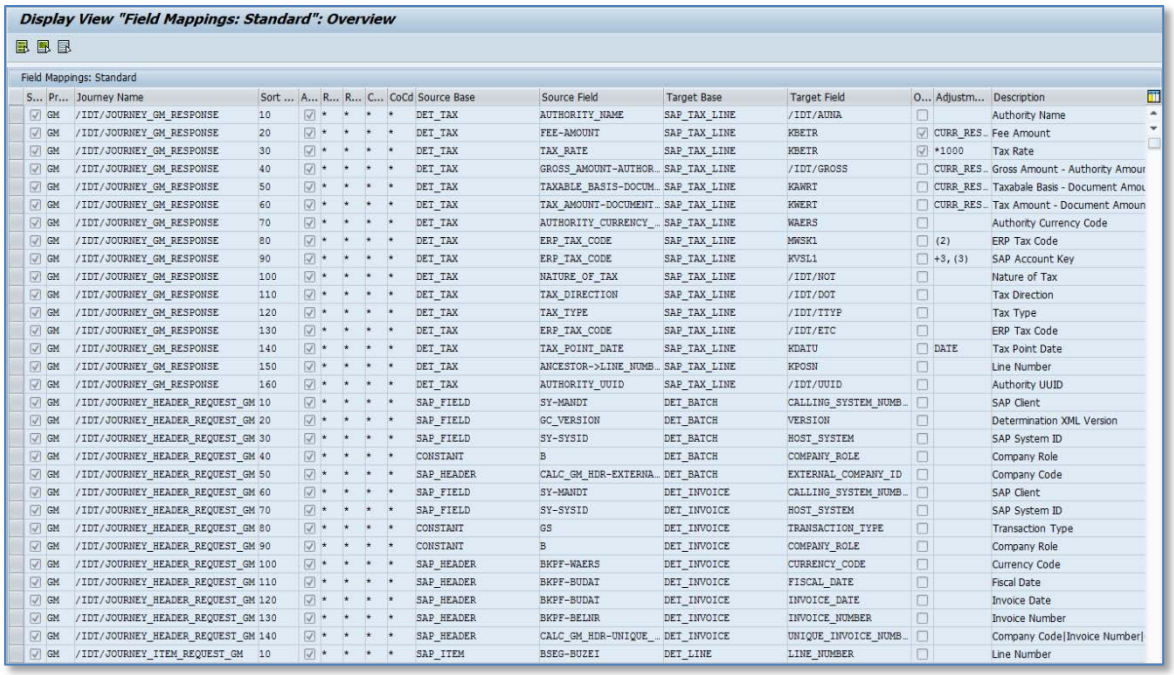
The tax data mapping by means of the Flexible Field Mapping and Address Mapping can be considered the heart of your system configuration and the one that you will spend the most time working with in your setup of the Integration. The field mapping table provides the ability for mapping SAP fields to the Determination request data and from the response data back to SAP without the need to write any custom code. This allows the Tax Business Analyst who configures a company's tax policy in SAP and Determination to leverage both sides to their full potential.

FLEXIBLE FIELD MAPPINGS

The Flexible Field Mapping consists of two views, the standard view delivered by Thomson Reuters with the default field mappings delivered as part of Integration, and a custom view. The custom view allows you to add new mappings or override existing mappings delivered in the standard view.

STANDARD VIEW

Transaction Code: **/N/IDT/FIELD_MAPPING_V**

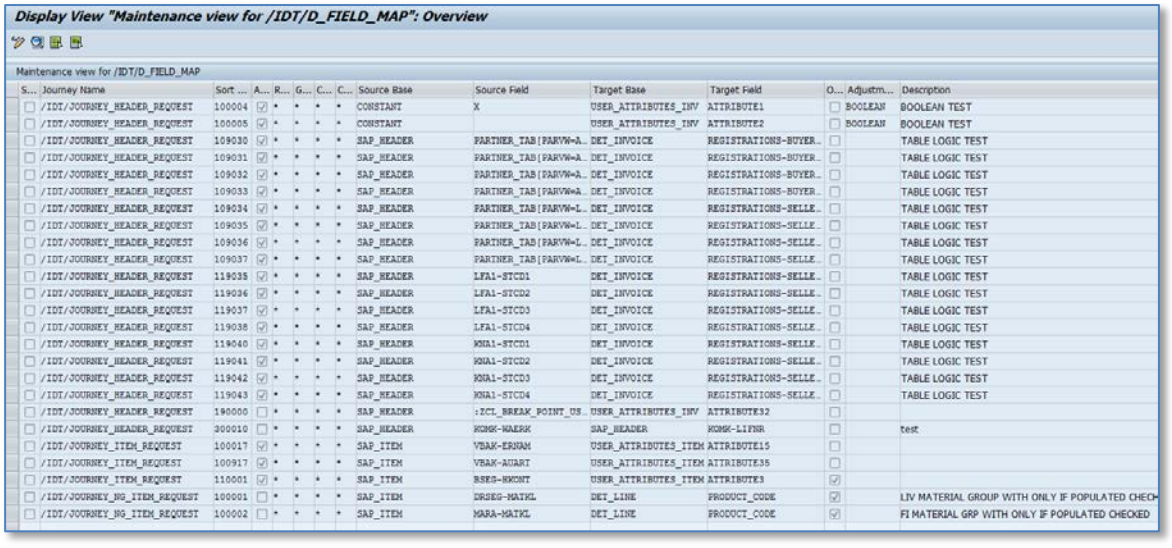


S...	Pr...	Journey Name	Sort ...	A...	R...	R...	C...	CoCd	Source Base	Source Field	Target Base	Target Field	O...	Adjustm...	Description
☑	GM	/IDT/JOURNEY_GM_RESPONSE	10	☑	*	*	*	*	DET_TAX	AUTHORITY_NAME	SAP_TAX_LINE	/IDT/AUNA	☐		Authority Name
☑	GM	/IDT/JOURNEY_GM_RESPONSE	20	☑	*	*	*	*	DET_TAX	FEE-AMOUNT	SAP_TAX_LINE	KBETR	☑	CURR_RES..	Fee Amount
☑	GM	/IDT/JOURNEY_GM_RESPONSE	30	☑	*	*	*	*	DET_TAX	TAX_RATE	SAP_TAX_LINE	KBETR	☑	*1000	Tax Rate
☑	GM	/IDT/JOURNEY_GM_RESPONSE	40	☑	*	*	*	*	DET_TAX	GROSS_AMOUNT-AUTHOR..	SAP_TAX_LINE	/IDT/GROSS	☐	CURR_RES..	Gross Amount - Authority Amour
☑	GM	/IDT/JOURNEY_GM_RESPONSE	50	☑	*	*	*	*	DET_TAX	TAXABLE_BASIS-DOCUM..	SAP_TAX_LINE	KAWRT	☐	CURR_RES..	Taxabale Basis - Document Amou
☑	GM	/IDT/JOURNEY_GM_RESPONSE	60	☑	*	*	*	*	DET_TAX	TAX_AMOUNT-DOCUMENT..	SAP_TAX_LINE	KWERT	☐	CURR_RES..	Tax Amount - Document Amoun
☑	GM	/IDT/JOURNEY_GM_RESPONSE	70	☑	*	*	*	*	DET_TAX	AUTHORITY_CURRENCY_..	SAP_TAX_LINE	WAERS	☐		Authority Currency Code
☑	GM	/IDT/JOURNEY_GM_RESPONSE	80	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	MWSK1	☐	(2)	ERP Tax Code
☑	GM	/IDT/JOURNEY_GM_RESPONSE	90	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	KVSL1	☐	+3, (3)	SAP Account Key
☑	GM	/IDT/JOURNEY_GM_RESPONSE	100	☑	*	*	*	*	DET_TAX	NATURE_OF_TAX	SAP_TAX_LINE	/IDT/NOT	☐		Nature of Tax
☑	GM	/IDT/JOURNEY_GM_RESPONSE	110	☑	*	*	*	*	DET_TAX	TAX_DIRECTION	SAP_TAX_LINE	/IDT/DOT	☐		Tax Direction
☑	GM	/IDT/JOURNEY_GM_RESPONSE	120	☑	*	*	*	*	DET_TAX	TAX_TYPE	SAP_TAX_LINE	/IDT/TTYP	☐		Tax Type
☑	GM	/IDT/JOURNEY_GM_RESPONSE	130	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	/IDT/ETC	☐		ERP Tax Code
☑	GM	/IDT/JOURNEY_GM_RESPONSE	140	☑	*	*	*	*	DET_TAX	TAX_POINT_DATE	SAP_TAX_LINE	KDATU	☐	DATE	Tax Point Date
☑	GM	/IDT/JOURNEY_GM_RESPONSE	150	☑	*	*	*	*	DET_TAX	ANCESTOR->LINE_NUMB..	SAP_TAX_LINE	KPOSN	☐		Line Number
☑	GM	/IDT/JOURNEY_GM_RESPONSE	160	☑	*	*	*	*	DET_TAX	AUTHORITY_UUID	SAP_TAX_LINE	/IDT/UUID	☐		Authority UUID
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	10	☑	*	*	*	*	SAP_FIELD	SY-MANDT	DET_BATCH	CALLING_SYSTEM_NUMB..	☐		SAP Client
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	20	☑	*	*	*	*	SAP_FIELD	GC_VERSION	DET_BATCH	VERSION	☐		Determination XML Version
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	30	☑	*	*	*	*	SAP_FIELD	SY-SYSID	DET_BATCH	HOST_SYSTEM	☐		SAP System ID
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	40	☑	*	*	*	*	CONSTANT	B	DET_BATCH	COMPANY_ROLE	☐		Company Role
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	50	☑	*	*	*	*	SAP_HEADER	CALC_GM_HDR-EXTERNA..	DET_BATCH	EXTERNAL_COMPANY_ID	☐		Company Code
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	60	☑	*	*	*	*	SAP_FIELD	SY-MANDT	DET_INVOICE	CALLING_SYSTEM_NUMB..	☐		SAP Client
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	70	☑	*	*	*	*	SAP_FIELD	SY-SYSID	DET_INVOICE	HOST_SYSTEM	☐		SAP System ID
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	80	☑	*	*	*	*	CONSTANT	GS	DET_INVOICE	TRANSACTION_TYPE	☐		Transaction Type
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	90	☑	*	*	*	*	CONSTANT	B	DET_INVOICE	COMPANY_ROLE	☐		Company Role
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	100	☑	*	*	*	*	SAP_HEADER	BKPF-WAERS	DET_INVOICE	CURRENCY_CODE	☐		Currency Code
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	110	☑	*	*	*	*	SAP_HEADER	BKPF-BUDAT	DET_INVOICE	FISCAL_DATE	☐		Fiscal Date
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	120	☑	*	*	*	*	SAP_HEADER	BKPF-BUDAT	DET_INVOICE	INVOICE_DATE	☐		Invoice Date
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	130	☑	*	*	*	*	SAP_HEADER	BKPF-BELNR	DET_INVOICE	INVOICE_NUMBER	☐		Invoice Number
☑	GM	/IDT/JOURNEY_HEADER_REQUEST_GM	140	☑	*	*	*	*	SAP_HEADER	CALC_GM_HDR-UNIQUE_..	DET_INVOICE	UNIQUE_INVOICE_NUMB..	☐		Company Code|Invoice Number|
☑	GM	/IDT/JOURNEY_ITEM_REQUEST_GM	10	☑	*	*	*	*	SAP_ITEM	BSEG-BUZEI	DET_LINE	LINE_NUMBER	☐		Line Number

This view allows you to review the preconfigured and delivered mappings provided by Thomson Reuters. This can be helpful when trying to understand a tax result or in building your own mappings. We will explain the different columns and their use in the custom view section below.

CUSTOM VIEW

Transaction Code: **/N/IDT/FIELD_MAPPINGS**



S...	Journey Name	Sort ...	A...	R...	G...	C...	C...	Source Base	Source Field	Target Base	Target Field	O...	Adjustm...	Description
☐	/IDT/JOURNEY_HEADER_REQUEST	100004	☑	*	*	*	*	CONSTANT	X	USER_ATTRIBUTES_INV	ATTRIBUTE1	☐	BOOLEAN	BOOLEAN TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	100005	☑	*	*	*	*	CONSTANT		USER_ATTRIBUTES_INV	ATTRIBUTE2	☐	BOOLEAN	BOOLEAN TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109030	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=A..	DET_INVOICE	REGISTRATIONS-BUYER..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109031	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=A..	DET_INVOICE	REGISTRATIONS-BUYER..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109032	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=A..	DET_INVOICE	REGISTRATIONS-BUYER..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109033	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=A..	DET_INVOICE	REGISTRATIONS-BUYER..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109034	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=L..	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109035	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=L..	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109036	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=L..	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	109037	☑	*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=L..	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119035	☑	*	*	*	*	SAP_HEADER	LFA1-STCD1	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119036	☑	*	*	*	*	SAP_HEADER	LFA1-STCD2	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119037	☑	*	*	*	*	SAP_HEADER	LFA1-STCD3	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119038	☑	*	*	*	*	SAP_HEADER	LFA1-STCD4	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119040	☑	*	*	*	*	SAP_HEADER	KNA1-STCD1	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119041	☑	*	*	*	*	SAP_HEADER	KNA1-STCD2	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119042	☑	*	*	*	*	SAP_HEADER	KNA1-STCD3	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	119043	☑	*	*	*	*	SAP_HEADER	KNA1-STCD4	DET_INVOICE	REGISTRATIONS-SELLE..	☐		TABLE LOGIC TEST
☐	/IDT/JOURNEY_HEADER_REQUEST	190000	☐	*	*	*	*	SAP_HEADER	:ZCL_BREAK_POINT_US..	USER_ATTRIBUTES_INV	ATTRIBUTE32	☐		
☐	/IDT/JOURNEY_HEADER_REQUEST	300010	☐	*	*	*	*	SAP_HEADER	KOMK-WAERK	SAP_HEADER	KOMK-LIFNR	☐		test
☐	/IDT/JOURNEY_ITEM_REQUEST	100017	☑	*	*	*	*	SAP_ITEM	VBAK-ERNAM	USER_ATTRIBUTES_ITEM	ATTRIBUTE15	☐		
☐	/IDT/JOURNEY_ITEM_REQUEST	100917	☑	*	*	*	*	SAP_ITEM	VBAK-AUART	USER_ATTRIBUTES_ITEM	ATTRIBUTE35	☐		
☐	/IDT/JOURNEY_ITEM_REQUEST	110001	☑	*	*	*	*	SAP_ITEM	BSEG-HKONT	USER_ATTRIBUTES_ITEM	ATTRIBUTE3	☑		
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	100001	☐	*	*	*	*	SAP_ITEM	DRSEG-MATKL	DET_LINE	PRODUCT_CODE	☑		LIV MATERIAL GROUP WITH ONLY IF POPULATED CHECK
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	100002	☐	*	*	*	*	SAP_ITEM	MARA-MATKL	DET_LINE	PRODUCT_CODE	☑		FI MATERIAL GRP WITH ONLY IF POPULATED CHECKED

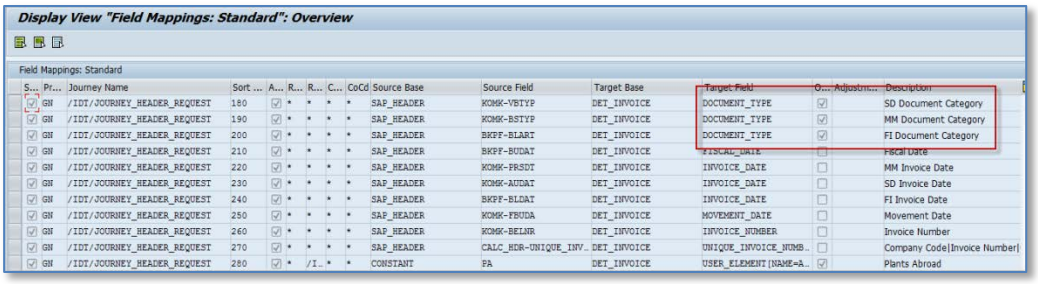
As mentioned above this table allows you for your own custom mappings as they relate to your company's tax requirements, policy, and compliance needs. Next we will identify the columns on this table and how they are used to map your desired fields. The Common Concepts outlined earlier might be helpful when working with the field mapping as well as the Appendix 2: References. For simplification, column fields already discussed in the Common Concepts topic are not included in below table.

Column Field	Explanation
Journey Name	You would first establish which journey you want to use for the new mapping. In order to choose the correct journey you would ask yourself if this field is part of what you want to send via the request data going to Determination, or is it part of the data that will be coming back on the response? Is it data at the header level of a document or is it data stored at the line level? Is this an SD order, billing, PO, LIV invoice, or FI generated document, etc.
Source Base	This field defines the primary level of where the source data resides, i.e. document or line level in SAP, or invoice, line, and tax level in Determination. There are some special purpose source bases provided too.
Source Field	Here you specify the applicable source fields for the source base. The source fields on the request journey side are the available fields from the SAP tables as listed in the Appendix and all of its fields. The response journey represents the Determination tax calculation OUTPUT structure.
Target Base	You define what structure the field needs to assigned to or retrieved from. When mapping data to Determination you can use all INPUT XML main structures of Batch, Invoice, and Line. When mapping data from the response back to SAP you can map to the Thomson Reuters provided tax data table.
Target Field	In this column you specify the applicable target fields for the target base. The target fields on the request journey are Determination Batch, Invoice and Line XML elements. Target fields on the response are based on the tax data table including custom appended fields by the customer.
Only if Populated Flag (OnlyIfPopu)	Used to support conditional mapping in cases where multiple source fields point to the same Determination target field. See sample below.
Adjustment	Allows for some limited string manipulations and other type of changes to a field. See detailed use cases below.
Simple Expression	Allows for a code expression to be added as a qualifier. Only if the expression is fulfilled the mapping will be taken into account. See Simple Expressions for details.

Only if Populated Flag

This column is checked when multiple mappings from different tables are mapped to a single Determination element. This is used so that the highest sort order mapping would not override the lower sort order if that field has a value. The use of this field also provides a type of conditional logic to prevent a NULL value from being mapped to a field.

An example of its use is shown below where three different fields from SAP are mapped to the same Determination request field depending on their source module; SD, MM, or FI. In these situations only one of the three scenarios would occur on a given transaction.



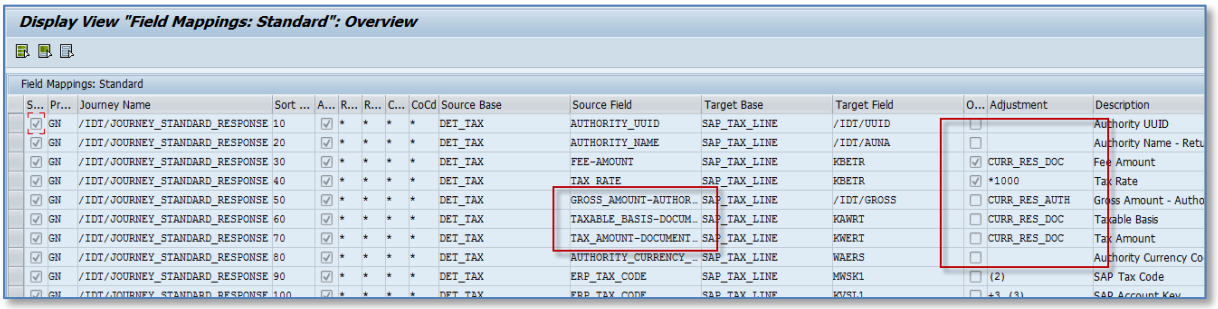
Consider this secnario based on above example. If the process is FI and the flag would not have been set for SD and MM, the prior mappings would have been taken into account, returning an empty (NULL) value to Determination. By checking the flag the SD and MM fields will be ignored and the FI document type will be mapped to Determination.

Adjustment

This column is used for any kind of adjustments that needs to be done in order to correct or change the field mapping from one format to another. An example of this is where we use the adjustment column to ignore the first three digits of the **ERP_Tax_Code** and use the next three digits to populate the SAP Account key. Another example would be where we need to convert a value to an amount instead of text, or convert the format for a date.
Options for the adjustment field include the following:

Adjustment	Explanation
SIGN	This will reverse the position of the signage, i.e. turn 100- to -100 and vice versa. (100- is valid in SAP but not in Determination.) It moves the SAP negative sign to the right position in the request so Determination can read the value correctly. **SIGN** should be used for all fields of type amount or quantity in the request. It isn't needed in the response.
CURR_REQ_DOC	This will adjust the document currency amount on a request to Determination: used for amount like fields to adjust to the right currency decimal places based on SAP table V_CURX
CURR_RES_AUTH	This will adjust the authorization currency amount on a response from Determination: used for amount like fields to adjust to the right currency decimal places based on SAP table V_CURX
CURR_RES_DOC	This will adjust the document currency amount on a response from Determination: used for amount like fields to adjust to the right currency decimal places based on SAP table V_CURX
BOOLEAN	This will turn an SAP value of X into a TRUE or ' ' (null) to FALSE for Determination.
DATE	This is required to turn the Determination date format into the SAP date format.
* (multiplier)	This will multiply the value by the number after the *, i.e. *1000 would convert a Determination tax rate of 0.2 to 200 which then is displayed in SAP as 20.00 %.
String manipulation	Allows for simple string manipulations on a value, i.e. +3,(3) would move to fourth position (offset first 3) and use the next 3 values. So for an ERP_TAX_CODE returned by Determination of A1-MWS it would only return the value MWS.

When "SIGN" is used with any of the CURR adjustments the sign adjustment must follow the CURR adjustment with a comma separator between them and no spaces.



In this example you will see the three CURR adjustments used in the field mapping table.

CALCULATED FIELDS

In some cases the field use isn't based on the exact value in the business process, but rather augmented either via a configuration setting or code. These special fields are necessary due to Determination requirements. The two calculated source bases we use are CALC_HDR and CALC_ITEM with the below calculated fields.

Header Level	
Source Field	**Explanation**
CALC_HDR_ROLE	Indicating if this is a Seller or Buyer role, depending on the setup for US specific processing in /N//DT/US_LOGIC
CALC_HDR_EXTERNAL_COMPANY_ID	Usually the SAP Company Code, prepend possible via configuration in /IDT/GEN_CONFIG_VALS
CALC_HDR_UNIQUE_INVOICE_NUMBER	For uniqueness in the Determination audit database this field has to be supplied. It is a concatenation of the Company Code, Document Number, Role, and the Fiscal Year. The values are separated by a pipe value. For example: 2100|0090001798|S|2014
CALC_HDR_TAX_CATEGORY	Based on US Specific configuration done in /N /IDT/US_LOGIC

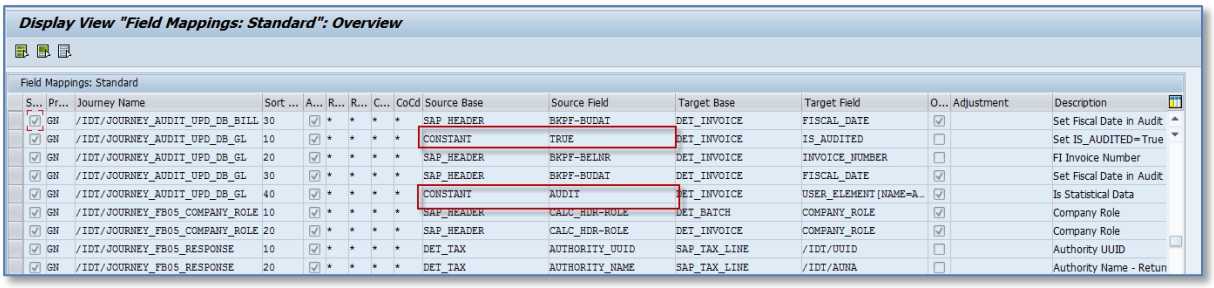
Item Level	
Source Field	**Explanation**
CALC_ITEM_DET_TAX_CODE	Value based on configuration done in /N/IDT/DET_TAX_CODE for the SAP Tax Code processed
CALC_ITEM_IS_EXEMPT	Driven by the configuration in /N/IDT/EXEMPT_SETTINGS or

Item Level	
	/N/IDT/DET_TAX_CODE
CALC_ITEM_AMOUNT	When calculating tax the Document Currency is used, but when the audit call is made the Company Code Currency amount will be used to store the tax liability. Additionally the amount is adjusting for positive or negative scenarios.
CALC_ITEM_QUANTITY	Similar to amounts SAP doesn't use decimal notations for quantities, this value adjust for this.
CALC_ITEM_IS_CREDIT	To account for cancellations, reversals, etc. of an original document in audit the IS_CREDIT flag has to be set to TRUE. When done so the original amounts of the business transaction are reversed by -1.

You can see examples of the use of the calculated field function by looking at the standard field mapping table **/IDT/FIELD_MAPPING_V** and searching down the Source Field column of our standard mappings.

CONSTANTS

A constant can be any value not based on business transaction data. For example to indicate to Determination that a transaction needs to be persisted in the audit database we would need to set the XML field IS_AUDITED = true. To do so the following mapping can be used (part of standard delivered mapping already).



S...	Pr...	Journey Name	Sort ...	A...	R...	R...	C...	CoCd	Source Base	Source Field	Target Base	Target Field	O...	Adjustment	Description
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_BILL	30	☑	*	*	*	*	SAP_HEADER	BKPF-BUDAT	DET_INVOICE	FISCAL_DATE	☑		Set Fiscal Date in Audit
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	10	☑	*	*	*	*	CONSTANT	TRUE	DET_INVOICE	IS_AUDITED	☐		Set IS_AUDITED=True
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	20	☑	*	*	*	*	SAP_HEADER	BKPF-BELNR	DET_INVOICE	INVOICE_NUMBER	☐		FI Invoice Number
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	30	☑	*	*	*	*	SAP_HEADER	BKPF-BUDAT	DET_INVOICE	FISCAL_DATE	☑		Set Fiscal Date in Audit
☑	GN	/IDT/JOURNEY_AUDIT_UPD_DB_GL	40	☑	*	*	*	*	CONSTANT	AUDIT	DET_INVOICE	USER_ELEMENT[NAME=A..	☑		Is Statistical Data
☑	GN	/IDT/JOURNEY_FB05_COMPANY_ROLE	10	☑	*	*	*	*	SAP_HEADER	CALC_HDR-ROLE	DET_BATCH	COMPANY_ROLE	☑		Company Role
☑	GN	/IDT/JOURNEY_FB05_COMPANY_ROLE	20	☑	*	*	*	*	SAP_HEADER	CALC_HDR-ROLE	DET_INVOICE	COMPANY_ROLE	☑		Company Role
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	10	☑	*	*	*	*	DET_TAX	AUTHORITY_UUID	SAP_TAX_LINE	/IDT/UUID	☐		Authority UUID
☑	GN	/IDT/JOURNEY_FB05_RESPONSE	20	☑	*	*	*	*	DET_TAX	AUTHORITY_NAME	SAP_TAX_LINE	/IDT/AUNA	☐		Authority Name - Retun

By entering the word "CONSTANT" in the source base field the mapping line will then replicate whatever you input in the source field as the value to be populated into the target field. This can be especially powerful and useful when used in combination with a specific route or use of conditional logic in the simple expression column.

Use of a Constant with a Simple Expression

If you desire to have the constant value populated based on the success of a simple expression, we have added additional logic for variables to allow either header or line level fields to be used in the simple expression. (See section below on Simple Expressions then return to this explanation)

These variables will come from the Journey. In general, the sample expression uses variables defined from the source base.

For example, when using the header journey and the SAP_HEADER source base the simple expression can contain variables like &KOMK-AUDAT& as in the expression:

&KOMK-AUDAT& NE IS_INITIAL
This works because &KOMK-AUDAT& is a valid value in the source base.
In the item Journey and the SAP_ITEM source base the simple expression can contain variables like
&VBAP-MATNR& as in the expression:
&VBAP-MATNR& = 'S-1002'
This works because &VBAP-MATNR& is a valid value for each line in the source base. And it can be evaluated for each line in the source base because it works within the looping logic.
When the source base is constant this new logic uses the journey to provide meaning for the variables as in these two expressions when the source base is constant:
For the header journey:
&VBAK-XEGDR& NE IS_INITIAL
For an item journey:
&[ROW=1]HDR>VBAK-XEGDR& EQ IS_INITIAL
In both cases the meaning of the variables comes from the journey and not from the source base.

TABLE DRIVEN MAPPINGS

In some cases the Determination tax calculation XSD definition uses complex structures which are represented in the SAP proxy as tables. To handle field mappings for these tables, a more complex approach has to be taken by first defining what table to work with, then to designate the proper field within the table and lastly to assign a value to that field. For example:

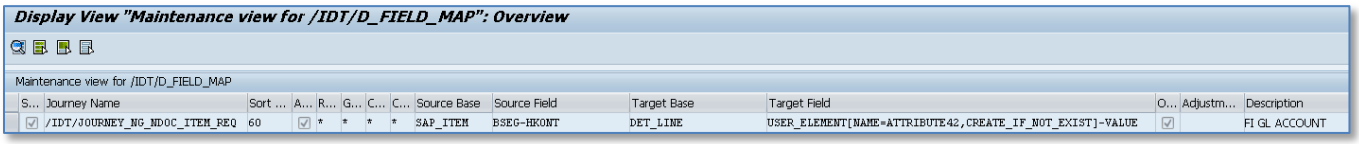
```
USER_ELEMENT[NAME=ATTRIBUTE42,CREATE_IF_NOT_EXIST]-VALUE
```

This would map a VALUE to ATTRIBUTE42 in the USER_ELEMENT structure of the XSD if it doesn't yet already exist. See Appendix 2: References for more details.

In order to better understand how this works let us look at a few scenarios.

Example 1: User Element

One of the most commonly used custom field mappings will be for user elements, especially now that Invoice and Line level elements can be used with the Integration. To map a user element you follow the following syntax:



The corresponding mapping in the Target Field would be:

```
USER_ELEMENT[NAME=ATTRIBUTE42,CREATE_IF_NOT_EXIST]-VALUE
```

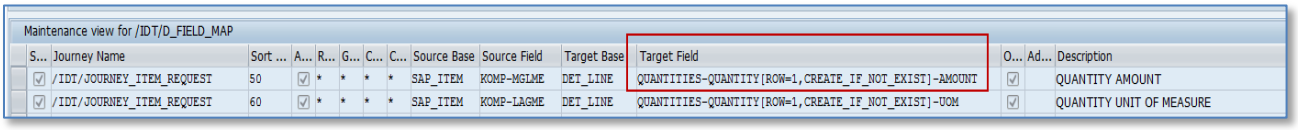
Our target is the VALUE field in the first ROW of the table USER_ELEMENT. The NAME represents the attribute to be used for the mapping in the range from ATTRIBUTE1 to ATTRIBUTE40 (range 41-50 is reserved by Thomson Reuters). A control flag CREATE_IF_NOT_EXIST can be used to only add the value if none already exists. Finally we state the target field VALUE to which the data needs to be assigned to.

Below is a resulting line level XML structure sample:

```
<USER_ELEMENT>
  <NAME>ATTRIBUTE42</NAME>
  <VALUE>TA</VALUE>
</USER_ELEMENT>
```

Example 2: Quantity

We need to provide the quantity sold in SAP to Determination for taxing. The data in the SAP field is KOMP-MGLME which we want to map that to the quantity amount element in Determination.


Maintenance view for /IDT/D_FIELD_MAP

S...	Journey Name	Sort ...	A...	R...	G...	C...	C...	Source Base	Source Field	Target Base	Target Field	O...	Ad...	Description
☑	/IDT/JOURNEY_ITEM_REQUEST	50	☑	*	*	*	*	SAP_ITEM	KOMP-MGLME	DET_LINE	QUANTITIES-QUANTITY[ROW=1,CREATE_IF_NOT_EXIST]-AMOUNT	☑		QUANTITY AMOUNT
☑	/IDT/JOURNEY_ITEM_REQUEST	60	☑	*	*	*	*	SAP_ITEM	KOMP-LAGME	DET_LINE	QUANTITIES-QUANTITY[ROW=1,CREATE_IF_NOT_EXIST]-UOM	☑		QUANTITY UNIT OF MEASURE

To do this we use the target field notation as below:

```
QUANTITIES-QUANTITY[ROW=1,CREATE_IF_NOT_EXIST]-AMOUNT
```

Our target is the AMOUNT field in the first ROW of the table QUANTITIES-QUANTITY. To add our value to the AMOUNT field we have to point to that row with the ROW=1 pointer, additionally we can make use of the control flag CREATE_IF_NOT_EXIST to only add the amount value if none already exists. Finally we state the target field the value needs to be assigned too.

Based on the two mappings in the above picture this would lead to the following data being sent in the line level XML structure for QUANTITIES.

```
<QUANTITIES>
  <QUANTITY>
  <AMOUNT>23</AMOUNT>
  <UOM>EA</UOM>
  </QUANTITY>
  <QUANTITY>
  <AMOUNT>11</AMOUNT>
  <UOM>CTN</UOM>
  </QUANTITY>
</QUANTITIES>
```

As one can see multiple units of measures can be sent to Determination for evaluation. See the Determination online help topic *Units of Measure Conversion* for more details.

Example 3: Currency Conversion

Another table based structure is the CURRENCY_CONVERSION_STEPS XML that holds the tax exchange rate date in the response (OUTPUT XML). This field is mapped in our standard already:

The corresponding mapping in the Source Field would be:

```
CURRENCY_CONVERSION[ROW=1]-TAX_EXCHANGE_RATE_DATE
```

In the above example our source field is TAX_EXCHANGE_RATE_DATE, in the table CURRENCY_CONVERSION. We map to the first value with ROW=1. If there is no ROW in the table, it does not return any value.

Below is a sample tax level XML structure for CURRENCY_CONVERSION

```
<CURRENCY_CONVERSION>
  <TAX_EXCHANGE_RATE_DATE>2013-11-19
  </TAX_EXCHANGE_RATE_DATE>
</CURRENCY_CONVERSION>
```

Example 4: Registrations

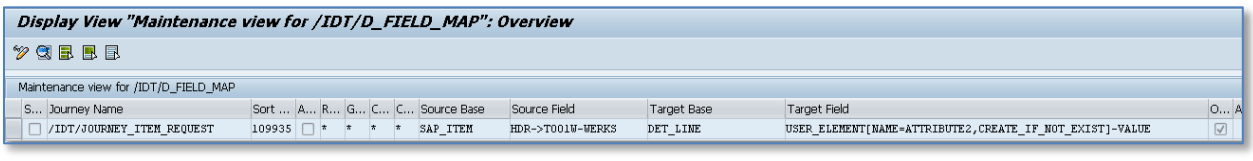
Another common table based mapping is for the use of VAT Registration numbers. Please see the Registration Number Mapping section for details on this subject.

POINTERS

HDR->

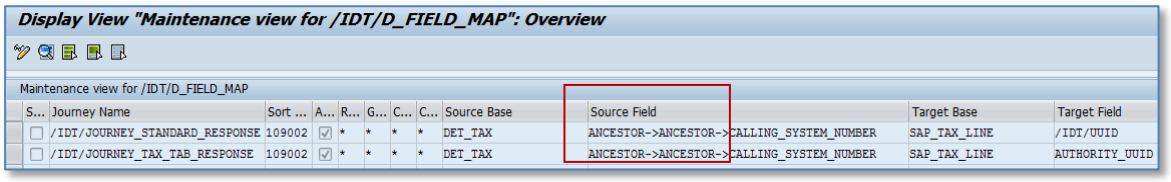
The HDR-> pointer is used only for request journeys that relate to grouped transactions like creation of a sales order, billing document, or purchase order. This pointer is used in Item level request mapping to indicate that the field used is at header level, i.e. HDR->T001W-WERKS would indicate the plant from the header table to be mapped at the item level. Journeys where the use of the HDR- pointer would be applicable include:

/IDT/JOURNEY_ITEM_REQUEST



ANCESTOR->

This solution allows a user to map not only data from the <TAX> block back to SAP, but also from the <LINE> and <INVOICE> level. To do so one would use pointer of **ANCESTOR->** to indicate the position of the field is the next level up. You can string multiple pointers together to point to two levels up, i.e. ANCESTOR->ANCESTOR-> would point to the invoice level.



Pointer used in response mapping to indicate that the field used is at a higher level in the structure, i.e. ANCESTOR->ANCESTOR->CALLING_SYSTEM_NUMBER would be used to map from an invoice level field in the tax data level.

Level 1 would be the <BATCH>
Level 2 would be the <INVOICE> Level
Level 3 would be the <LINE> Level
Level 4 would be the <TAX> block Level
We are not supporting the BATCH level at this time; all relevant fields are also available at the INVOICE level.

ITEMS->

The ITEMS-> pointer is used for request journeys in header and item user exits.

As an example this feature could be used in the following two scenarios:

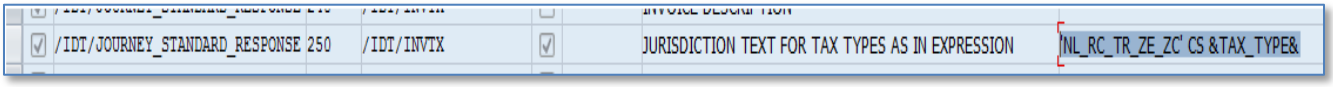
1. If you need to determine at the header level a field that is stored at the line item level in order to pass that to the request.
2. If you want to look at a line that is a consequence of another line like a freight charge or surcharge and you need to refer to the parent line to get some information needed to properly calculate tax on the related child line.

In order to accomplish either of these scenarios via ABAP programming, you can use this new field in the header called “Items”. This Items field is a pointer that allows you to get the item data needed for the above two purposes. It increases the function of the user exit and simple expressions to use for some fringe cases where this may be needed. You may never need this but it is available if needed.
This is used by an ABAP programmer creating a field mapping user exit that they would then populate into the field mapping table.

See the *Installation and Programmers Guide* section “*User-Exit in Field Mapper”* for an example on how to use this new feature.

SIMPLE EXPRESSIONS

Simple expressions are just like a line of code, but they are added to the field mapping line as a qualifier, only if the expression is fulfilled the mapping will be taken into account.



The syntax of a simple expression is as follows:

```
Source Field | Operand | Check Value (Field)
```

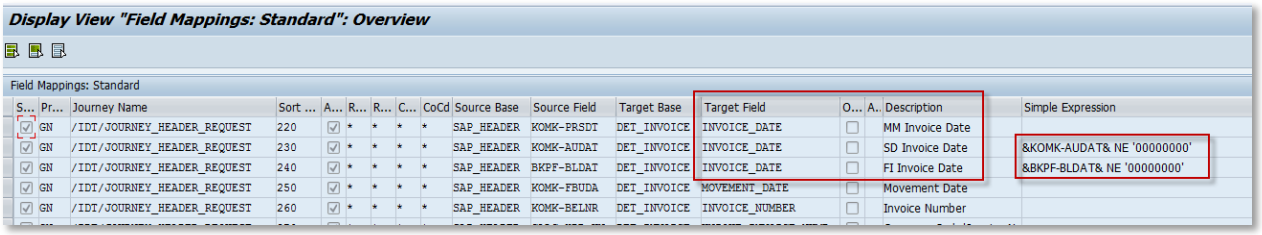
Some requirements are:

- SAP table-field names must always be wrapped with ampersands (&)
- Values must always be wrapped with single quotes (‘)
- Operations can be stringed together by AND or OR commands
- Supported operands are:

o	EQ, =	Equal To
o	NE, <>, ><	Not Equal To
o	LT, <	Less Than
o	LE, <=	Less Than or Equal To
o	GT, >	Greater Than
o	GE, >=	Greater than or Equal To
o	CO	Contains Only
o	CN	Contains Not only
o	CA	Contains Any
o	NA	Contains Not Any
o	CS	Contains String
o	NS	Contains No String
o	CP	Matches Pattern
o	NP	Does Not Match Pattern
o	IS_INITIAL	Field is initial value

IS_INITIAL is a special command that can be used with EQ or NE in order to further delineate if a field has been populated or if it has been set to the initial value of blank for this transaction.

Date fields however cannot use IS_INITIAL because the original value stored in SAP is not blank for date formats but instead is initially formatted as '00000000'. If you are mapping for a date field use the example below where the date field is not equal to '00000000'. We recommend you use this format and not activate the “only if populated” flag.



Other example for operands listed above:

Expression	Explanation
&KOMK-VKBUR& = '1030'	Only maps the field if the Sales Office value is 1030.
&VBAK-ERDAT& NE &SY-DATUM&	Only uses the mapping if the system date isn't the same as the documents create date.
(&KOMK-WAERK& = 'USD' and &VBAK-ERDAT& = &SY-DATUM&) OR &SY-TCODE& CP 'VA'	Maps the field if the Document Currency is USD and the Document Create date is the system date OR if the transaction code starts with the letters "VA"
'NL_RC_TR_ZE_ZC' CS &TAX_TYPE&	Only uses the mapping of the Tax Type contains any of these values: NL, RC, TR, ZE, or ZC.

USER-EXIT BASED FIELD MAPPING

The Field Mapping allows dynamic mapping of SAP source fields to Determination and vice versa. In most cases the options of doing mappings by journey, routes, route groups, country groups, or company code are enough to meet most customer requirements; especially in combination with the Simple Expression feature that allows for some ABAP syntax to be added in the mapper directly. However, in some complex situations, or when the Thomson Reuters provided source bases aren't covering a table required for a custom mapping, a customer might implement a user-exit based mapping. How to program a user-exit based field mapping see the *Installation and Programmers Guide* section "*User-Exit in Field Mapper*".

Important Note on Field Mapping Errors

If you are doing a field mapping or address mapping and then encounter a program dump error screen this is because you have mapped an incorrect combination of journey, route, and source/target field in the mapping line. If you encounter this program dump you can simply check off the "Active" flag on the mapping line and repeat your process. If you do not get a program dump after the active flag is unchecked then you know you have identified the culprit mapping line that is causing the problem. Once the line in question is identified you can investigate what the error situation is and how to fix it. The program dump error will be replaced by a more specific and eloquent set of error messages at the bottom of the screen as we add other error message logic in a future release of the product.

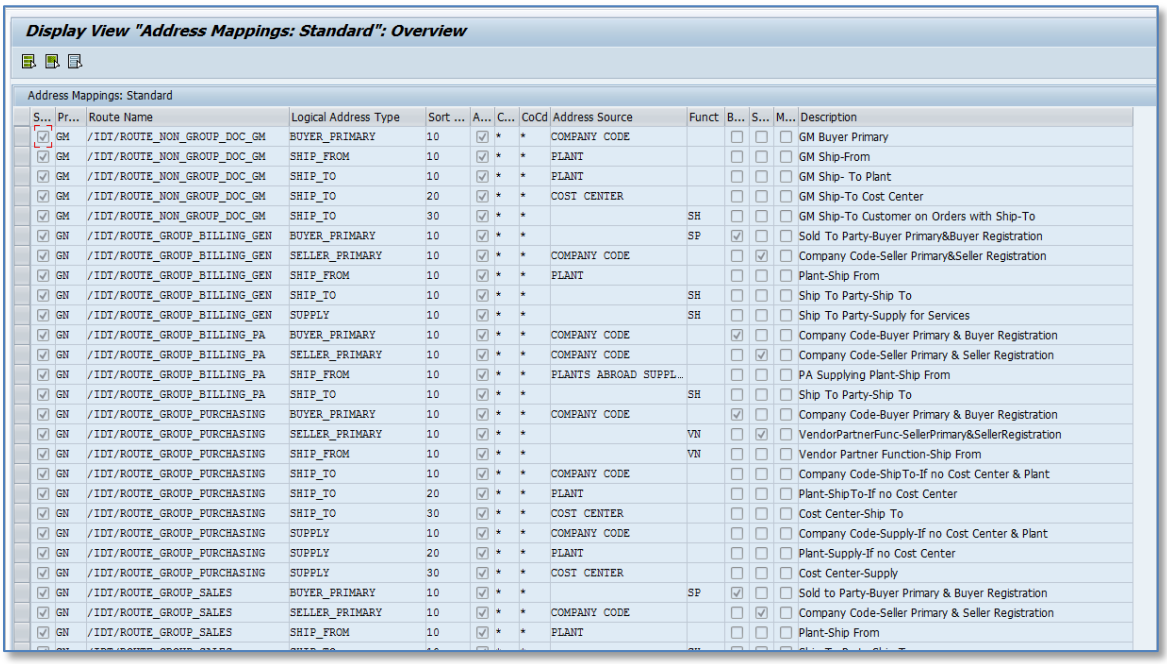
ADDRESS MAPPING

The Address Mapping could be considered a “cousin” of the Field Mapping in that it functions much like the field mapping logic however it relates solely to the function of address and registrations.

ADDRESS MAPPING TABLE

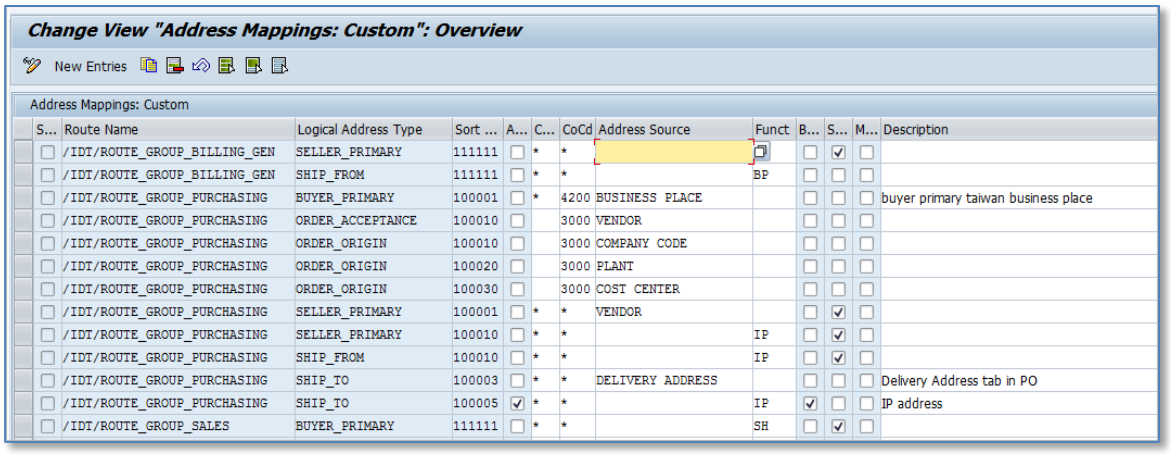
A Standard View with default mappings has been provided.

Transaction Code: **/N/IDT/ADDRESS_MAP_V**



S...	Pr...	Route Name	Logical Address Type	Sort ...	A...	C...	CoCd	Address Source	Funct	B...	S...	M...	Description
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☐	☐	GM Buyer Primary
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	GM Ship-From
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	10	☑	*	*	PLANT		☐	☐	☐	GM Ship- To Plant
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	20	☑	*	*	COST CENTER		☐	☐	☐	GM Ship-To Cost Center
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	30	☑	*	*		SH	☐	☐	☐	GM Ship-To Customer on Orders with Ship-To
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	BUYER_PRIMARY	10	☑	*	*		SP	☑	☐	☐	Sold To Party-Buyer Primary&Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary&Seller Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	Plant-Ship From
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SHIP_TO	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Ship To
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SUPPLY	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Supply for Services
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☑	☐	☐	Company Code-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary & Seller Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SHIP_FROM	10	☑	*	*	PLANTS ABROAD SUPPL...		☐	☐	☐	PA Supplying Plant-Ship From
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SHIP_TO	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Ship To
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☑	☐	☐	Company Code-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SELLER_PRIMARY	10	☑	*	*		VN	☐	☑	☐	VendorPartnerFunc-SellerPrimary&SellerRegistration
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_FROM	10	☑	*	*		VN	☐	☐	☐	Vendor Partner Function-Ship From
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	10	☑	*	*	COMPANY CODE		☐	☐	☐	Company Code-ShipTo-If no Cost Center & Plant
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	20	☑	*	*	PLANT		☐	☐	☐	Plant-ShipTo-If no Cost Center
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	30	☑	*	*	COST CENTER		☐	☐	☐	Cost Center-Ship To
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	10	☑	*	*	COMPANY CODE		☐	☐	☐	Company Code-Supply-If no Cost Center & Plant
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	20	☑	*	*	PLANT		☐	☐	☐	Plant-Supply-If no Cost Center
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	30	☑	*	*	COST CENTER		☐	☐	☐	Cost Center-Supply
☑	GN	/IDT/ROUTE_GROUP_SALES	BUYER_PRIMARY	10	☑	*	*		SP	☑	☐	☐	Sold to Party-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_SALES	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary & Seller Registration
☑	GN	/IDT/ROUTE_GROUP_SALES	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	Plant-Ship From

The corresponding Custom View can be accessed via Transaction Code: **/N/IDT/ADDRESS_MAPPING**



S...	Route Name	Logical Address Type	Sort ...	A...	C...	CoCd	Address Source	Funct	B...	S...	M...	Description
☐	/IDT/ROUTE_GROUP_BILLING_GEN	SELLER_PRIMARY	111111	☐	*	*			☐	☑	☐	
☐	/IDT/ROUTE_GROUP_BILLING_GEN	SHIP_FROM	111111	☐	*	*		BP	☐	☐	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	BUYER_PRIMARY	100001	☐	*	4200	BUSINESS PLACE		☐	☐	☐	buyer primary taiwan business place
☐	/IDT/ROUTE_GROUP_PURCHASING	ORDER_ACCEPTANCE	100010	☐		3000	VENDOR		☐	☐	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	ORDER_ORIGIN	100010	☐		3000	COMPANY CODE		☐	☐	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	ORDER_ORIGIN	100020	☐		3000	PLANT		☐	☐	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	ORDER_ORIGIN	100030	☐		3000	COST CENTER		☐	☐	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	SELLER_PRIMARY	100001	☐	*	*	VENDOR		☐	☑	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	SELLER_PRIMARY	100010	☐	*	*		IP	☐	☑	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	SHIP_FROM	100010	☐	*	*		IP	☐	☑	☐	
☐	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	100003	☐	*	*	DELIVERY ADDRESS		☐	☐	☐	Delivery Address tab in PO
☐	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	100005	☑	*	*		IP	☑	☐	☐	IP address
☐	/IDT/ROUTE_GROUP_SALES	BUYER_PRIMARY	111111	☐	*	*		SH	☐	☑	☐	

Here you can maintain your own address mappings or augment existing ones. You can also define alternate registration sources, other than what is pre-delivered. See the "Registration Number Mapping" topic for more details.

Explanation of the columns in the address mapping table:

Column	Explanation
Logical address type	In this column you specify one of the logical address types that are listed in the standard delivery /N/IDT/ADDRESS_TYPES_V, it represents Determination target address structure.
Address source	Defines the applicable address source within SAP. NOTE: Address Source can't be used at the same time as the Partner Function column (Funct)
Function (Funct)	This column is a drop down list of applicable partner functions from SAP Table TPAR and can be used to map your address instead of one of the address sources described prior. NOTE: Address Source can't be used at the same time as the Partner Function column (Funct)
VAT Registration number check boxes	The three columns of check boxes are used to indicate the target mapping for Buyer, Seller, or Middleman VAT Registrations.

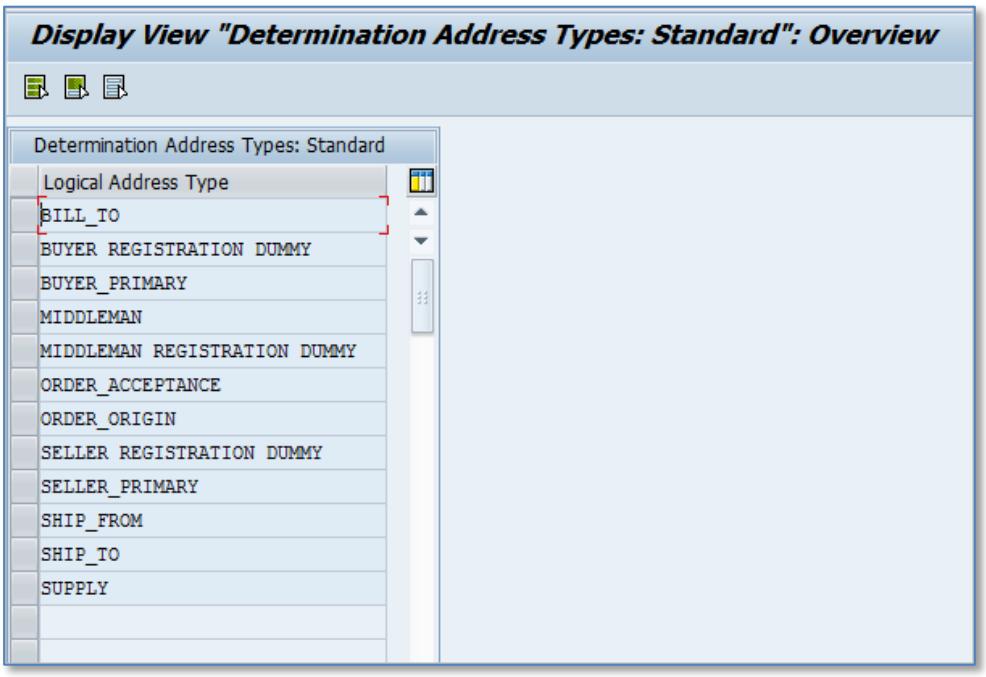
Integration will always provide a list of registration numbers based on the primary registration and the foreign registrations maintained on the source master record. For foreign registrations we select the ones that match the countries represented across all address sources used in the business process.

There are no default mappings provided for ORDER_ORIGIN and ORDER_ACCEPTANCE addresses. Customers must add custom mappings to make use of them, especially in the US.

ADDRESS TYPES

The Address Types table represents the addresses supported in the Determination XML structure. There are three special address types for use with Registrations, see "Registration Number Mapping" for their specific use. This table is provided as a standard default only. There is no corresponding custom table for this as address types can only be changed via a tax calculation interface change in Determination.

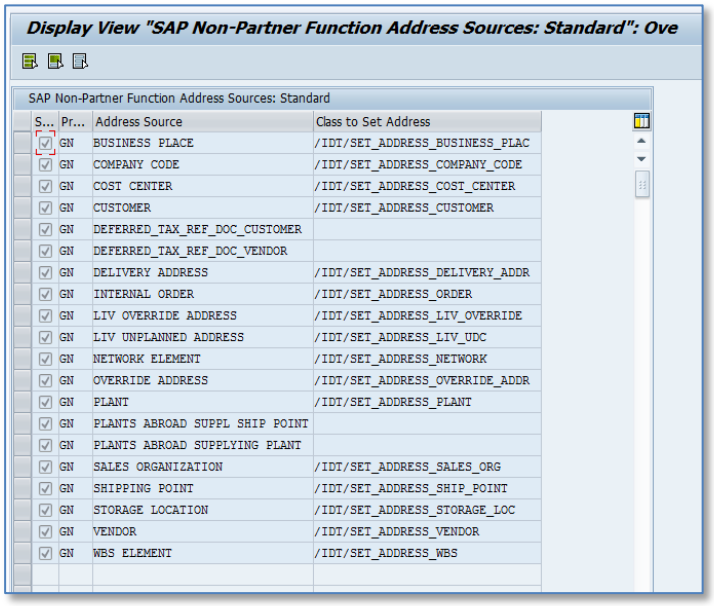
Transaction Code: **/N/IDT/ADDRESS_TYPES_V**



ADDRESS SOURCES

The Address Source table represents a list of SAP address entities supported with Integration. Behind each address source, code has been implemented that knows how to gather the necessary data based on the business process used. The address sources are in addition to the partner function based addresses supported in the address mapping.

Transaction Code: **/N/IDT/ADDRESS_SOURC_V**



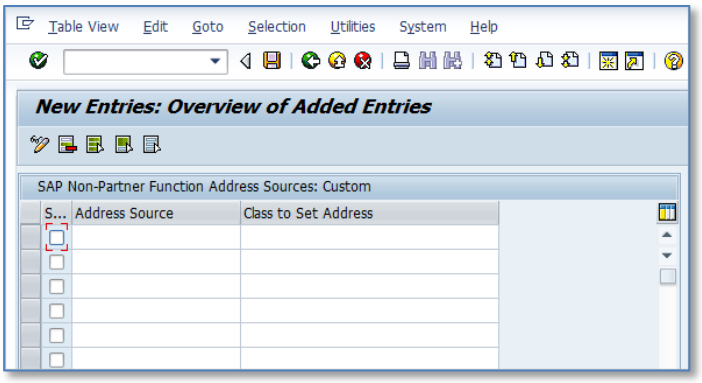
S...	Pr...	Address Source	Class to Set Address
☑	GN	BUSINESS PLACE	/IDT/SET_ADDRESS_BUSINESS_PLAC
☑	GN	COMPANY CODE	/IDT/SET_ADDRESS_COMPANY_CODE
☑	GN	COST CENTER	/IDT/SET_ADDRESS_COST_CENTER
☑	GN	CUSTOMER	/IDT/SET_ADDRESS_CUSTOMER
☑	GN	DEFERRED_TAX_REF_DOC_CUSTOMER	
☑	GN	DEFERRED_TAX_REF_DOC_VENDOR	
☑	GN	DELIVERY ADDRESS	/IDT/SET_ADDRESS_DELIVERY_ADDR
☑	GN	INTERNAL ORDER	/IDT/SET_ADDRESS_ORDER
☑	GN	LIV OVERRIDE ADDRESS	/IDT/SET_ADDRESS_LIV_OVERRIDE
☑	GN	LIV UNPLANNED ADDRESS	/IDT/SET_ADDRESS_LIV_UDC
☑	GN	NETWORK ELEMENT	/IDT/SET_ADDRESS_NETWORK
☑	GN	OVERRIDE ADDRESS	/IDT/SET_ADDRESS_OVERRIDE_ADDR
☑	GN	PLANT	/IDT/SET_ADDRESS_PLANT
☑	GN	PLANTS ABROAD SUPPL SHIP POINT	
☑	GN	PLANTS ABROAD SUPPLYING PLANT	
☑	GN	SALES ORGANIZATION	/IDT/SET_ADDRESS_SALES_ORG
☑	GN	SHIPPING POINT	/IDT/SET_ADDRESS_SHIP_POINT
☑	GN	STORAGE LOCATION	/IDT/SET_ADDRESS_STORAGE_LOC
☑	GN	VENDOR	/IDT/SET_ADDRESS_VENDOR
☑	GN	WBS ELEMENT	/IDT/SET_ADDRESS_WBS

List of the predefined address sources delivered with Integration.

You will see that we now have a new column for “Class to Set Address” that is populated with the name of the programming class that contains the program logic for this address source. If you have need to change the address source so that it pulls the address based on a different master data field you can make your modifications to this class as noted in the table.

Any customization that you may have done in your system prior to Integration release 6.3.0.0 will likely be ignored with the creation of these new classes. When upgrading to release 6.3.0.0 from a prior release of our product you should update any customizations by making the changes to the class we have noted in this table as opposed to how you modified the address source prior in your system.

You can create custom address sources via Transaction Code: **/N/IDT/ADDRESS_SOURCES**



You would name your custom address source in this screen and then program the logic on how that address has to be found from the business transaction. Once done so you can map the source in the address mapping. See the ***Install and Programmers Guide*** topic "*Custom Address Source"* for a programming example.

REGISTRATION NUMBER MAPPING

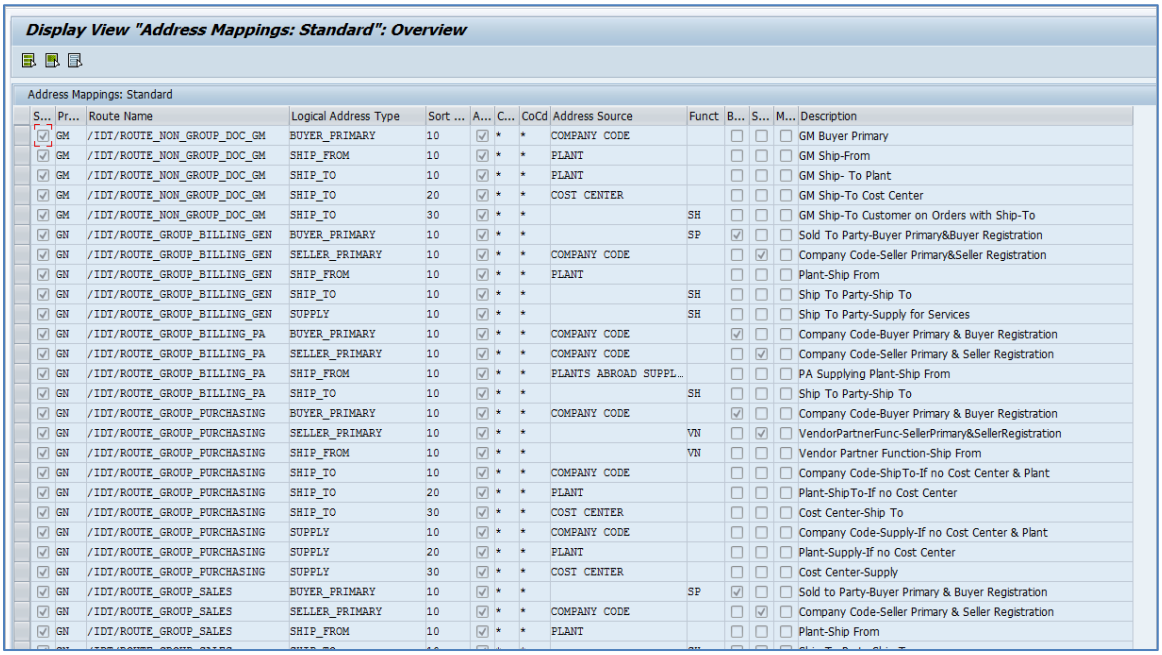
Providing the proper set of registration numbers to Determination is important in the taxing decision. Integration for SAP provides a flexible approach to meet that requirement by combining the Address Mapping and Field Mapping features.

ADDRESS MAPPING BASED

Mapping for VAT registration numbers based on the partner function are managed through the address mapping table with the use of three check boxes (Buyer, Seller, and Middleman roles) at the far right side of the table. You will see that we have set standard mapping for these in the standard view only table but that a user can append or override them using the customer address mapping table.

Transaction Code: **/N/IDT/ADDRESS_MAP_V**

A partial view of the Standard Address Mapping is provided here.



Display View "Address Mappings: Standard": Overview

Address Mappings: Standard

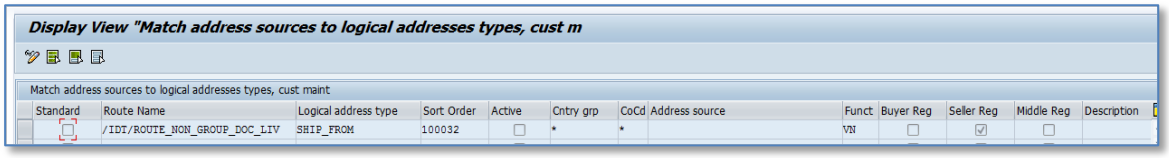
S...	Pr...	Route Name	Logical Address Type	Sort ...	A...	C...	CoCd	Address Source	Funct	B...	S...	M...	Description
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☐	☐	GM Buyer Primary
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	GM Ship-From
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	10	☑	*	*	PLANT		☐	☐	☐	GM Ship- To Plant
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	20	☑	*	*	COST CENTER		☐	☐	☐	GM Ship-To Cost Center
☑	GM	/IDT/ROUTE_NON_GROUP_DOC_GM	SHIP_TO	30	☑	*	*		SH	☐	☐	☐	GM Ship-To Customer on Orders with Ship-To
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	BUYER_PRIMARY	10	☑	*	*		SP	☑	☐	☐	Sold To Party-Buyer Primary&Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary&Seller Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	Plant-Ship From
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SHIP_TO	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Ship To
☑	GN	/IDT/ROUTE_GROUP_BILLING_GEN	SUPPLY	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Supply for Services
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☑	☐	☐	Company Code-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary & Seller Registration
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SHIP_FROM	10	☑	*	*	PLANTS ABROAD SUPPL...		☐	☐	☐	PA Supplying Plant-Ship From
☑	GN	/IDT/ROUTE_GROUP_BILLING_PA	SHIP_TO	10	☑	*	*		SH	☐	☐	☐	Ship To Party-Ship To
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	BUYER_PRIMARY	10	☑	*	*	COMPANY CODE		☑	☐	☐	Company Code-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SELLER_PRIMARY	10	☑	*	*		VN	☐	☑	☐	VendorPartnerFunc-SellerPrimary&SellerRegistration
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_FROM	10	☑	*	*		VN	☐	☐	☐	Vendor Partner Function-Ship From
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	10	☑	*	*	COMPANY CODE		☐	☐	☐	Company Code-ShipTo-If no Cost Center & Plant
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	20	☑	*	*	PLANT		☐	☐	☐	Plant-ShipTo-If no Cost Center
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SHIP_TO	30	☑	*	*	COST CENTER		☐	☐	☐	Cost Center-Ship To
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	10	☑	*	*	COMPANY CODE		☐	☐	☐	Company Code-Supply-If no Cost Center & Plant
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	20	☑	*	*	PLANT		☐	☐	☐	Plant-Supply-If no Cost Center
☑	GN	/IDT/ROUTE_GROUP_PURCHASING	SUPPLY	30	☑	*	*	COST CENTER		☐	☐	☐	Cost Center-Supply
☑	GN	/IDT/ROUTE_GROUP_SALES	BUYER_PRIMARY	10	☑	*	*		SP	☑	☐	☐	Sold to Party-Buyer Primary & Buyer Registration
☑	GN	/IDT/ROUTE_GROUP_SALES	SELLER_PRIMARY	10	☑	*	*	COMPANY CODE		☐	☑	☐	Company Code-Seller Primary & Seller Registration
☑	GN	/IDT/ROUTE_GROUP_SALES	SHIP_FROM	10	☑	*	*	PLANT		☐	☐	☐	Plant-Ship From

You will see by the table example above that there are boxes checked to map the VAT registration numbers for each of the various routes in the table. Each route will need a mapping for a buyer role and a seller role. The middleman role has not been mapped in the standard mapping; however you can elect to map a middleman role based on your requirements.

A corresponding custom view for your own additions and augmentations is accessible via Transaction Code: **/N/IDT/ADDRESS_MAPPING**

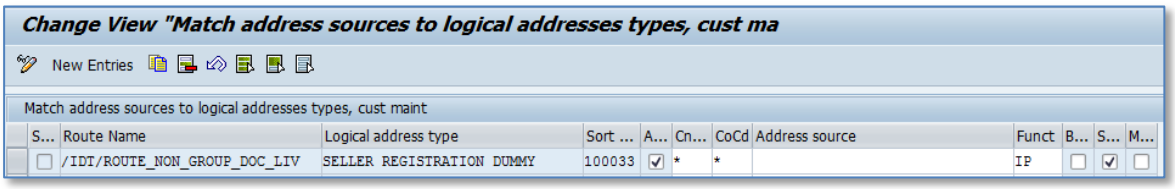
Address and Registration Source Same

In some cases you might desire a different partner function as the source for registrations than what is delivered in the standard. In these cases you can add a new mapping to the custom Address Mapping table and check the proper registration source. In that case that source serves as the address and registrant source.



Address and Registration Source Different

When the address source needs to be different than the VAT Registration source you can add a mapping using a DUMMY address mapping which serves only as the registration source. The DUMMY base does not carry with it the address, but can be used for the mapping of the registration numbers.



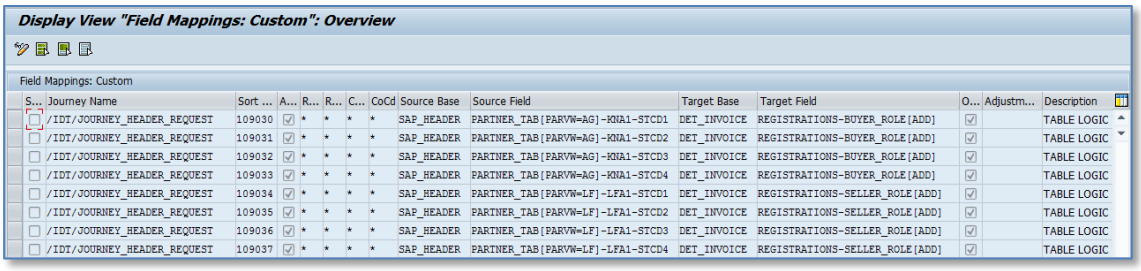
In our standard mapping for LIV transactions the address and registration source for the SELLER_PRIMARY is the Vendor. In above sample the registration source has been switched to the Invoicing Party (IP), while the address source is still the Vendor by using the SELLER REGISTRATION DUMMY address type.

Determination Source

The VAT Registration mapping that is shown here is all done via the address mapping table and the field mapping table within in SAP. However you may also elect to maintain the VAT Registration Numbers for each of your companies via the configuration within the Determination. In that case you would “remove” the check mark from the VAT registration columns on any of the VAT registration mapping lines that use the company code address by creating custom copies of the Thomson Reuters provided mappings. Once done, the VAT Registration is then taken from Determination company configuration setup instead of SAP.

FIELD MAPPING BASED

The address mapping based registration solution provides means to source the primary and foreign registrations from SAP. However in some cases registration numbers might be stored in the additionally provided Tax Number 1 thru 4 (or 5 depending on SAP EHP) fields. This is mainly the case when there are Federal and lower level (Provincial) registrations required, like for example in Canada.


Display View "Field Mappings: Custom": Overview

Field Mappings: Custom

S...	Journey Name	Sort ...	A...	R...	R...	C...	CoCd	Source Base	Source Field	Target Base	Target Field	O...	Adjustm...	Description
	/IDT/JOURNEY_HEADER_REQUEST	109030		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=AG]-KNA1-STCD1	DET_INVOICE	REGISTRATIONS-BUYER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109031		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=AG]-KNA1-STCD2	DET_INVOICE	REGISTRATIONS-BUYER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109032		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=AG]-KNA1-STCD3	DET_INVOICE	REGISTRATIONS-BUYER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109033		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=AG]-KNA1-STCD4	DET_INVOICE	REGISTRATIONS-BUYER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109034		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=LF]-LFA1-STCD1	DET_INVOICE	REGISTRATIONS-SELLER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109035		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=LF]-LFA1-STCD2	DET_INVOICE	REGISTRATIONS-SELLER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109036		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=LF]-LFA1-STCD3	DET_INVOICE	REGISTRATIONS-SELLER_ROLE[ADD]			TABLE LOGIC
	/IDT/JOURNEY_HEADER_REQUEST	109037		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=LF]-LFA1-STCD4	DET_INVOICE	REGISTRATIONS-SELLER_ROLE[ADD]			TABLE LOGIC

To map these sources a field mapping based entry has to be made from two parts.
The source field definition:

```
PARTNER_TAB[PARVW=AG]-KNA1-STCD1
```

The target field definition:

```
REGISTRATIONS-BUYER-ROLE[ADD]
```

Expression	Explanation
PARTNER_TAB	Used to reference a partner address.
PARVW	Defines which partner function to use when looking at the partner address. The value PARVW must be followed by an '=' sign and then the two digit German partner function code to use.
Source Table	Either KNA1 (Customer) or LFA1 (Vendor).
Source Field	Any of STCD1, STCD2, STCD3 and STCD4 (and STCD5 in EHP6 and above).
Target Field	The structure to use REGISTRATIONS and the role to be mapped to. This has to follow by the [ADD] action to make sure a new row will be added with the value mapped.

Depending on which partner function you want to use in your mapping you will need to insert the German translation of the partner code. Use SM30 transaction to view the V_TPAUN table and see the partner function codes that are used based on language and your system configuration. You will need to use the German translation of the code for the mapping.

For customer mapping the target would be the REGISTRATIONS-BUYER_ROLE. The source field would be entered as shown below for the route groups involving customers:

```
PARTNER_TAB[PARVW=AG]-KNA1-STCD1
```

For vendor mapping the target would be the REGISTRATIONS-SELLER_ROLE. The source field would be entered as shown below for the route groups involving vendors:

```
PARTNER_TAB[PARVW=LF]-LFA1-STCD1
```

Based on the SD based mapping above a registration collection sent to Determination could look like this:

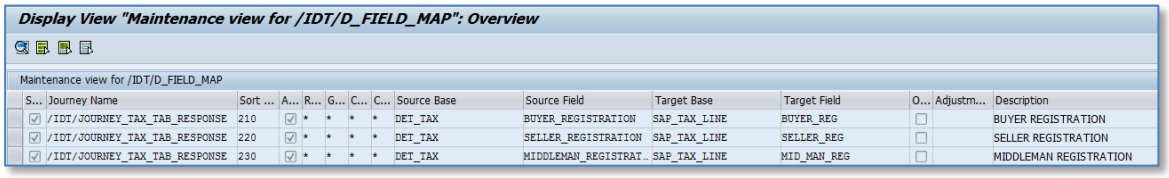
```
<REGISTRATIONS>
  <BUYER_ROLE>123123123RT</BUYER_ROLE>
```

```
    <BUYER_ROLE>PST-1234-5678</BUYER_ROLE>
    <SELLER_ROLE>231231235RT</SELLER_ROLE>
</REGISTRATIONS>
```

In all the examples shown above, the mapping is at the Determination Invoice level however you may need to consider also mapping at the line level if you have scenarios where you may change a partner at the line level.

Determination Response Based

Determination will return the three possible VAT registration numbers used to make the taxing decision for possible use in invoice printing, reporting, and compliance. A standard mapping is provided to have them written back to the Thomson Reuters Tax Data table.



Display View "Maintenance view for /IDT/D_FIELD_MAP": Overview

Maintenance view for /IDT/D_FIELD_MAP

S...	Journey Name	Sort ...	A...	R...	G...	C...	C...	Source Base	Source Field	Target Base	Target Field	O...	Adjustm...	Description
☑	/IDT/JOURNEY_TAX_TAB_RESPONSE	210	☑	*	*	*	*	DET_TAX	BUYER_REGISTRATION	SAP_TAX_LINE	BUYER_REG	☐		BUYER REGISTRATION
☑	/IDT/JOURNEY_TAX_TAB_RESPONSE	220	☑	*	*	*	*	DET_TAX	SELLER_REGISTRATION	SAP_TAX_LINE	SELLER_REG	☐		SELLER REGISTRATION
☑	/IDT/JOURNEY_TAX_TAB_RESPONSE	230	☑	*	*	*	*	DET_TAX	MIDDLEMAN_REGISTRAT..	SAP_TAX_LINE	MID_MAN_REG	☐		MIDDLEMAN REGISTRATION

Registration Based on Business Place Configuration

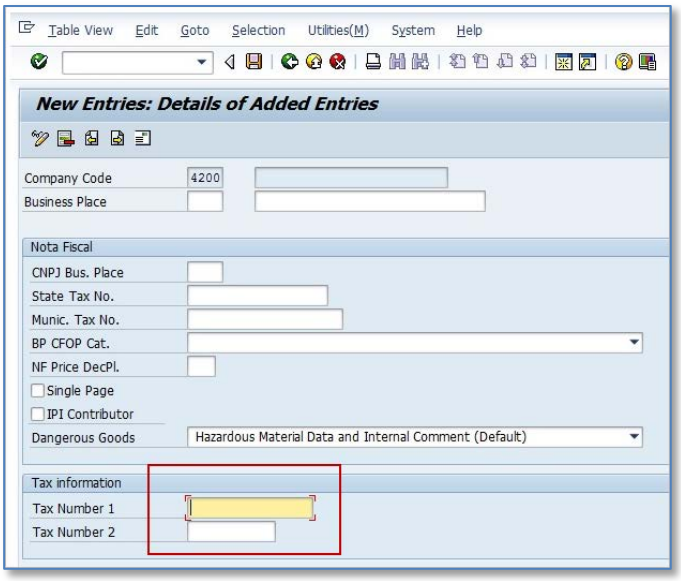
For many non-EU countries (Brazil, India, Taiwan, Korea, etc...) registration information is not stored in T001N or T001 tables in SAP, but stored in the Business place in SAP.

Transaction: **SPRO** navigate to **> Cross Application Components > General Application Functions > Place of Business > Define Business Place**.

Within a company code there can be many business places with different registration information for each depending on the country tax policy. The Business Place is selected during transaction processing and tied through configuration to the sales office for sales order processing.

See screen print below that shows the two fields used within the business place configuration in order to store the VAT registration numbers. For purpose of this example we are using the Tax 2 field.

Table name: **J_1BBRANCH**
Field names **STCD1** and **STCD2**



Utilize fields from the **J_1BBRANCH** table within the Flexible Field Mapper for the following journeys:

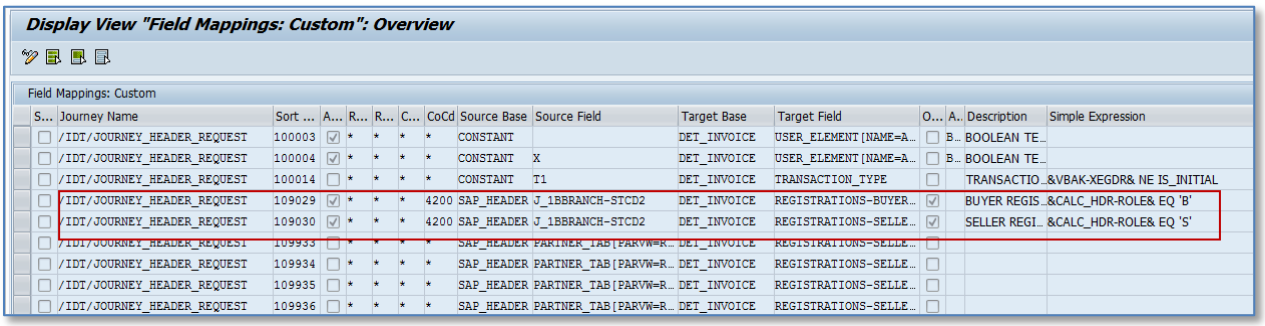
- /IDT/JOURNEY_HEADER_REQUEST
- /IDT/JOURNEY_ITEM_REQUEST
- /IDT/JOURNEY_NG_ITEM_REQUEST

NOTE:
The source of Business Place is different per transaction, it is therefore recommended to map fields from the J_1BBRANCH table source to Determination, and not from the transaction tables. If using the value from the transaction then it would be as follows:

- FB60 - BSEG-BUPLA for the vendor line
- FB70 - BSEG-BUPLA for the customer line
- FB01 like - BKPF-BRNCH
- MIRO - RBKP-BUPLA

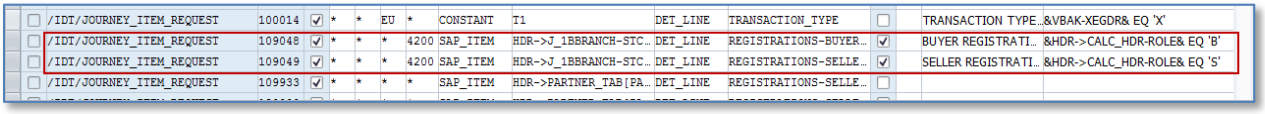
Sample mappings for the registration from the business place are shown below for the three journey mentioned above.

Header request journey mapping



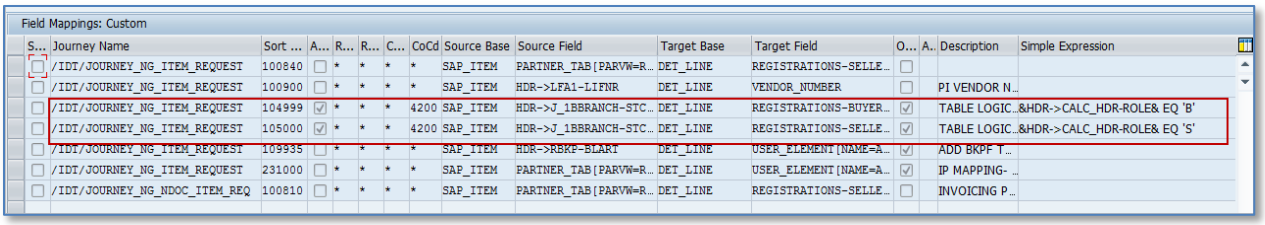
S...	Journey Name	Sort ...	A...	R...	R...	C...	CoCd	Source Base	Source Field	Target Base	Target Field	O...	A..	Description	Simple Expression
	/IDT/JOURNEY_HEADER_REQUEST	100003	☑	*	*	*	*	CONSTANT		DET_INVOICE	USER_ELEMENT[NAME=A...		B...	BOOLEAN TE...	
	/IDT/JOURNEY_HEADER_REQUEST	100004	☑	*	*	*	*	CONSTANT	X	DET_INVOICE	USER_ELEMENT[NAME=A...		B...	BOOLEAN TE...	
	/IDT/JOURNEY_HEADER_REQUEST	100014		*	*	*	*	CONSTANT	T1	DET_INVOICE	TRANSACTION_TYPE			TRANSACTIO...	&VBAK-XEGDR& NE IS_INITIAL
	/IDT/JOURNEY_HEADER_REQUEST	109029	☑	*	*	*	4200	SAP_HEADER	J_1BBRANCH-STCD2	DET_INVOICE	REGISTRATIONS-BUYER...	☑		BUYER REGIS...	&CALC_HDR-ROLE& EQ 'B'
	/IDT/JOURNEY_HEADER_REQUEST	109030	☑	*	*	*	4200	SAP_HEADER	J_1BBRANCH-STCD2	DET_INVOICE	REGISTRATIONS-SELLE...	☑		SELLER REGI...	&CALC_HDR-ROLE& EQ 'S'
	/IDT/JOURNEY_HEADER_REQUEST	109933		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=R...	DET_INVOICE	REGISTRATIONS-SELLE...				
	/IDT/JOURNEY_HEADER_REQUEST	109934		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=R...	DET_INVOICE	REGISTRATIONS-SELLE...				
	/IDT/JOURNEY_HEADER_REQUEST	109935		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=R...	DET_INVOICE	REGISTRATIONS-SELLE...				
	/IDT/JOURNEY_HEADER_REQUEST	109936		*	*	*	*	SAP_HEADER	PARTNER_TAB[PARVW=R...	DET_INVOICE	REGISTRATIONS-SELLE...				

Item request journey mapping



☐	/IDT/JOURNEY_ITEM_REQUEST	100014	☑	*	*	EU	*	CONSTANT	T1	DET_LINE	TRANSACTION_TYPE	☐		TRANSACTION TYPE…	&VBAK-XEGDR& EQ 'X'
☐	/IDT/JOURNEY_ITEM_REQUEST	109048	☑	*	*	*	4200	SAP_ITEM	HDR->J_1BBRANCH-STC…	DET_LINE	REGISTRATIONS-BUYER…	☑		BUYER REGISTRATI…	&HDR->CALC_HDR-ROLE& EQ 'B'
☐	/IDT/JOURNEY_ITEM_REQUEST	109049	☑	*	*	*	4200	SAP_ITEM	HDR->J_1BBRANCH-STC…	DET_LINE	REGISTRATIONS-SELLE…	☑		SELLER REGISTRATI…	&HDR->CALC_HDR-ROLE& EQ 'S'
☐	/IDT/JOURNEY_ITEM_REQUEST	109933	☑	*	*	*	*	SAP_ITEM	HDR->PARTNER_TAB[PA…	DET_LINE	REGISTRATIONS-SELLE…	☐			

NG Item request journey mapping: note use of HDR-> in this one also.



Field Mappings: Custom

S…	Journey Name	Sort …	A…	R…	R…	C…	CoCd	Source Base	Source Field	Target Base	Target Field	O…	A…	Description	Simple Expression
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	100840	☐	*	*	*	*	SAP_ITEM	PARTNER_TAB[PARVW=R…	DET_LINE	REGISTRATIONS-SELLE…	☐			
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	100900	☐	*	*	*	*	SAP_ITEM	HDR->LFA1-LIFNR	DET_LINE	VENDOR_NUMBER	☐		PI VENDOR N…	
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	104999	☑	*	*	*	4200	SAP_ITEM	HDR->J_1BBRANCH-STC…	DET_LINE	REGISTRATIONS-BUYER…	☑		TABLE LOGIC…	&HDR->CALC_HDR-ROLE& EQ 'B'
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	105000	☑	*	*	*	4200	SAP_ITEM	HDR->J_1BBRANCH-STC…	DET_LINE	REGISTRATIONS-SELLE…	☑		TABLE LOGIC…	&HDR->CALC_HDR-ROLE& EQ 'S'
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	109935	☐	*	*	*	*	SAP_ITEM	HDR->RBKP-BLART	DET_LINE	USER_ELEMENT[NAME=A…	☑		ADD BKPF T…	
☐	/IDT/JOURNEY_NG_ITEM_REQUEST	231000	☐	*	*	*	*	SAP_ITEM	PARTNER_TAB[PARVW=R…	DET_LINE	USER_ELEMENT[NAME=A…	☑		IP MAPPING- …	
☐	/IDT/JOURNEY_NG_NDOC_ITEM_REQ	100810	☐	*	*	*	*	SAP_ITEM	PARTNER_TAB[PARVW=R…	DET_LINE	REGISTRATIONS-SELLE…	☐		INVOICING P…	

The HDR-> pointer is used when mapping the field from the Header record to the line item on the order and is required for the latter two journey mappings as shown above.

Other standard SAP configuration set up would be required to create the business place for the specified company code and country as well as tying it to the sales organization and sales area structures in SD module, etc. We have not shown all Business Place standard SAP configurations in this example.

A new address source for custom address mapping of BUSSINES PLACE address has also been created as part of this solution. Use transaction /N/IDT/ADDRESS_MAPPING to enable this feature if you also desire to map the address from the business place master data in addition to the registration numbers shown here. See Address Mapping table instructions noted above.

DETERMINATION SETUP

TAX CODE QUALIFIER CONFIGURATION

SAP TAX CODE SETUP

Before we get into the configuration details there are prerequisite steps that must be completed prior to this process. They include:

1. Analysis and documentation of your tax policy needs for a given country configuration.

2. Identify the list of needed tax code and account keys required. This is often an exercise in reverse engineering as we recommend that you look first at what will be required for your compliance reporting needs and where specific tax code and tax type breakouts may be needed in order to get the data summarized into the correct “buckets” for the specific country’s reporting. This may also need to take into consideration your company structure, sales and purchasing models, tax exempt situations, shipping methods, tax laws, etc.

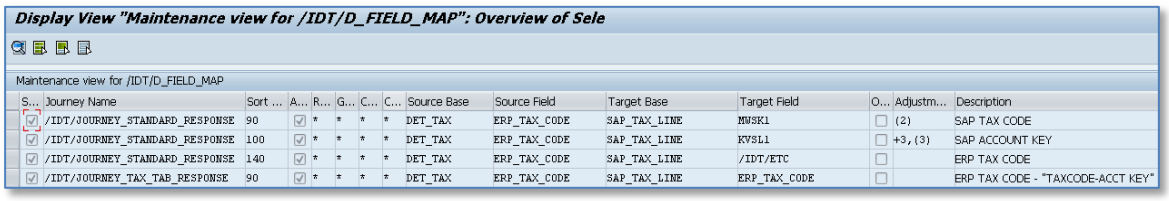
3. Decide on other needed tax codes for items such as separate tax codes to be used for override transactions, fallback tax codes, and driver tax code.

4. Create the needed tax codes and account keys in SAP.

5. Create your G/L accounts that you want to use for the tax code account assignments. Consider that this step may also be a reverse engineering exercise in order to identify required accounts for better reconciliation needs and prerequisites to easier compliance reporting.

TAX CODE CONCEPTS

One of the key designs of Integration for SAP is the assignment of a Results Tax Code in SAP based on the Determination tax calculation. Instead of using SAP’s standard process of a tax code having a fixed rate, we will instead setup SAP tax codes without a rate maintained on them. This will eliminate the need for creating new tax codes in SAP each time a tax rate changes, greatly simplifying system maintenance and user training. Once Determination returns the tax results, including the rate, we will use that results structure to update SAP with the proper tax code, account key, and other tax details.


Display View "Maintenance view for /IDT/D_FIELD_MAP": Overview of Sele

Maintenance view for /IDT/D_FIELD_MAP

S...	Journey Name	Sort ...	A...	R...	G...	C...	C...	Source Base	Source Field	Target Base	Target Field	O...	Adjustm...	Description
☑	/IDT/JOURNEY_STANDARD_RESPONSE	90	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	MWSK1	☐	(2)	SAP TAX CODE
☑	/IDT/JOURNEY_STANDARD_RESPONSE	100	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	KVSL1	☐	+3,(3)	SAP ACCOUNT KEY
☑	/IDT/JOURNEY_STANDARD_RESPONSE	140	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	/IDT/ETC	☐		ERP TAX CODE
☑	/IDT/JOURNEY_TAX_TAB_RESPONSE	90	☑	*	*	*	*	DET_TAX	ERP_TAX_CODE	SAP_TAX_LINE	ERP_TAX_CODE	☐		ERP TAX CODE - "TAXCODE-ACCT KEY"

The ERP Tax Code is repopulated as the final SAP Tax Code and Account Assignment key through our standard mapping table and code. SAP then uses this information to establish the correct general ledger

account to be used for the GL accounting document. For an overview of the process see the *User Guide -> New logic for the assignment of General Ledger Accounts*.

Driver Tax Codes

We recommend that you setup tax code O1 as the driver tax code for output tax on sales orders, I1 as the driver tax code on input tax on purchases, and if you are configuring for US tax, the U1 tax code for self-accrued consumer use tax. These three tax codes are not used in the account assignment table T030K. They are used during the initial document creation process and can either be assigned using condition records, info records, or manually. The sole purpose of this set of tax codes is to initiate the tax call to Determination. These tax codes don't have to be mapped in T030K to a General Ledger account.

Results Tax Codes

These are tax codes which are maintained in SAP for the purpose of posting to General Ledger accounts and downstream processes like reporting and compliance. These tax codes are setup without a tax rate in SAP. At time of the tax calculation Determination will assign an ERP_TAX_CODE based on the results of the Tax Code Qualifier evaluation back to SAP. Integration then takes the ERP_TAX_CODE value and assigns it to the SAP transaction by overriding the driver tax code with the results tax code and account key.

Fallback Tax Codes

The process of driving a tax calculation to the final tax code and account key assignment involves the standard setup in SAP of tax codes, account assignment keys, general ledger accounts, and the account assignment table as well as the Tax Code Qualifier process in Determination. If any side of the needed configuration is missing you will likely get an error message and an incomplete document that will not post correctly to accounting halting your business process. In order to avoid a possible error due to a missing or incorrect setup we recommend the use of a fallback tax code. A fallback TCQ would be at the bottom of the sort order as an assignment of last resort if none of the other TCQ assignments apply. It would allow the entry to post to a temporary account assignment rather than block the transaction. This logic is purely optional and one that you may or may not choose to use in your configuration.

If a fallback account is created and assigned to the fallback TCQ then procedures should be established to ensure that you are monitoring this account in order to correct entries that may fall to this default setting. In order to set this up for your system you will need to:

- Create a new tax liability account on the G/L for fall back posting to account assignment.
- Create both a fallback input tax code and a fallback output tax code.
- Add table entries to the T030K account assignment table based on the account key and tax code.
- Setup TCQ to drive the transaction to the new account.

Special Note on Assigning Tax Codes

For US and Canada TCQ and tax code assignments, users may encounter error number FF-753 in situations where multiple tax codes are assigned to a single line item. This can occur when one authority is exempt (AO) and other are taxed (A1), or in Canada where we have GST (A1) and PST (A2). This is discussed in OSS note 495737. When error message FF-753 is set to error mixing of tax codes on the

same line isn't possible. If you encounter this issue and elect to not change FF-753 per this OSS note then different TQC and tax code assignment logic is needed that allows for the tax code to be the same but instead creating additional account assignment codes for your tax authority assignments. Two optional templates are available via the ONESOURCE Indirect Tax and Compliance Support website for use in this situation for both US and Canada. Knowledge Base article [1233](#) "ONESOURCE Indirect Tax Integration for SAP Tax Code Qualifier Examples" provides details and samples on this.

TAX CODE QUALIFIERS EXAMPLES

Once you have completed above steps, you are now ready to tie it all together from end to end by configuring your Tax Code Qualifiers (TCQ) in Determination. Please consult the Determination Online Help to familiarize yourself with the TCQ feature and function.

The following information is an example of how you might want to configure the Tax Code Qualifiers for a Great Britain company code. This is provided as a possible tool for set up of your system for GB and other countries but your configuration may be different according to your needs.

BASIC SETUP

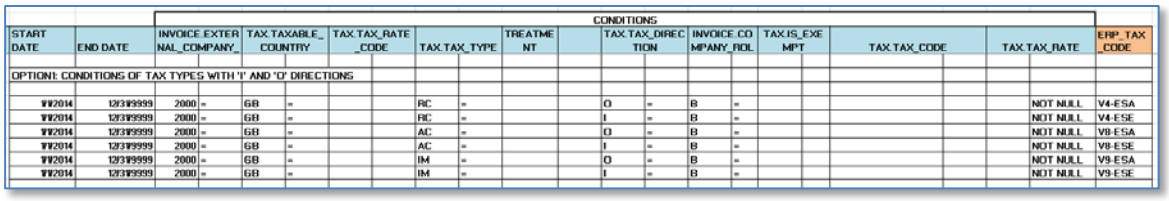
For the below sample the assumption has been made that the tax code should drive the rate and the tax treatment should be reflected in the account assignment key. Thereby a V1 is standard rate, V2 reduced rate etc. In this sample the "A" tax codes are output tax, the "Y" tax codes are used as override output tax codes. The "V" tax codes are input tax and the "Z" tax codes are used as override input tax codes. These are the single direction tax code assignments as opposed to those that require both an 'I' and 'O' direction like reverse charge, acquisition etc.

		CONDITIONS																				
START DATE	END DATE	INVOICE.EXTERNAL_COMPANY_		TAX.TAXABLE_COUNTRY		TAX.TAX_RATE_CODE		TAX.TAX_TYPE		TREATMENT		TAX.TAX_DIRECTION		INVOICE.COMPANY_ROLE		TAX.IS_EXEMPT		TAX.TAX_CODE		TAX.TAX_RATE		ERP_TAX_CODE
1/1/2014	12/31/9999	2000	=	GB	=									S	=	TRUE	=					A0-MWS
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	S	=					S	=						NOT NULL	A1-MWS
1/1/2014	12/31/9999	2000	=	GB	=	RR	=	S	=					S	=						NOT NULL	A2-MWS
1/1/2014	12/31/9999	2000	=	GB	=	ZR	=	S	=					S	=						NOT NULL	A3-MWS
1/1/2014	12/31/9999	2000	=	GB	=	NL	=	S	=					S	=						NOT NULL	A7-MWS
1/1/2014	12/31/9999	2000	=	GB	=	SR	=		=	D	=				=						NOT NULL	A5-MWS
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	S	=					S	=			STANDARD	=		NOT NULL	Y1-MWS
1/1/2014	12/31/9999	2000	=	GB	=	RR	=	S	=					S	=			REDUCED	=		NOT NULL	Y2-MWS
1/1/2014	12/31/9999	2000	=	GB	=	ZR	=	S	=					S	=			ZERO RATED	=		NOT NULL	Y3-MWS
1/1/2014	12/31/9999	2000	=	GB	=	NL	=	S	=					S	=			NOT LIABLE	=		NOT NULL	Y7-MWS
1/1/2014	12/31/9999	2000	=	GB	=	SR	=		=	D	=			S	=			DEFERRED	=		NOT NULL	Y5-MWS
1/1/2014	12/31/9999	2000	=	GB	=													EXEMPT	=		NOT NULL	YA-MWS
1/1/2014	12/31/9999	2000	=	GB	=									B	=	TRUE	=					V0-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	S	=					B	=						NOT NULL	V1-VST
1/1/2014	12/31/9999	2000	=	GB	=	RR	=	S	=					B	=						NOT NULL	V2-VST
1/1/2014	12/31/9999	2000	=	GB	=	ZR	=	S	=					B	=						NOT NULL	V3-VST
1/1/2014	12/31/9999	2000	=	GB	=	NL	=	S	=					B	=						NOT NULL	V7-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	NR	=					B	=						NOT NULL	V6-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=		=	D	=			B	=						NOT NULL	V5-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	S	=					B	=			STANDARD	=		NOT NULL	Z1-VST
1/1/2014	12/31/9999	2000	=	GB	=	RR	=	S	=					B	=			REDUCED	=		NOT NULL	Z2-VST
1/1/2014	12/31/9999	2000	=	GB	=	ZR	=	S	=					B	=			ZERO RATED	=		NOT NULL	Z3-VST
1/1/2014	12/31/9999	2000	=	GB	=	NL	=	S	=					B	=			NOT LIABLE	=		NOT NULL	Z7-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=	NR	=					B	=			NONRECOVERABLE	=		NOT NULL	Z6-VST
1/1/2014	12/31/9999	2000	=	GB	=	SR	=		=	D	=			B	=			DEFERRED	=		NOT NULL	Z5-VST
1/1/2014	12/31/9999	2000	=	GB	=													EXEMPT	=			ZA-VST

MULTIPLE TAX DIRECTIONS

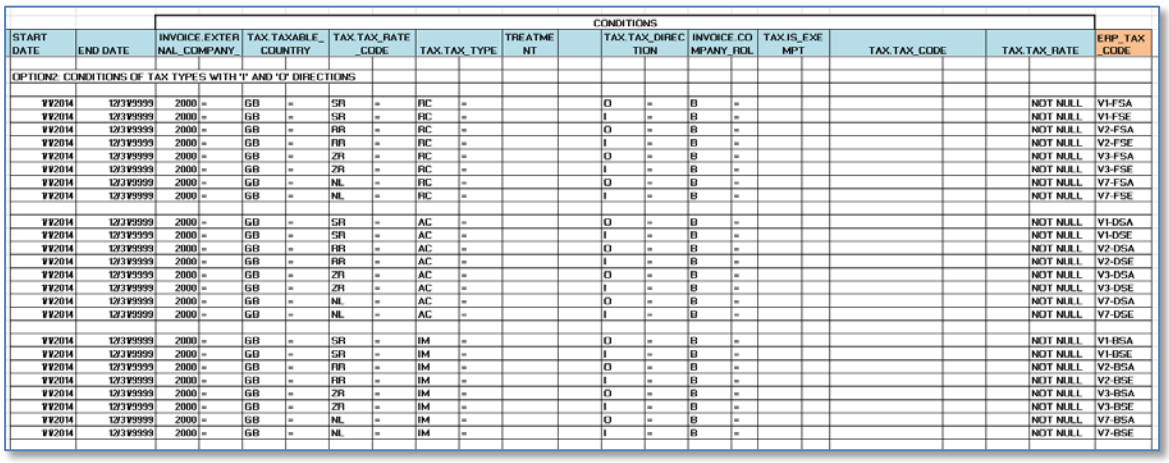
For situations where both an Input (I) and Output (O) direction are needed:

Option 1:
This option assumes that the tax code is designating the tax treatment and not the tax rate.



		CONDITIONS																
START DATE	END DATE	INVOICE.EXTERNAL_COMPANY_		TAX.TAXABLE_COUNTRY		TAX.TAX_RATE_CODE		TAX.TAX_TYPE		TREATMENT		TAX.TAX_DIRECTION		INVOICE.COMPANY_ROL		TAX.IS_EXEMPT	TAX.TAX_CODE	TAX.TAX_RATE	ERP_TAX_CODE
OPTION1: CONDITIONS OF TAX TYPES WITH 'I' AND 'O' DIRECTIONS																			
¥¥2014	12319999	2000	=	GB	=			AC	=			O	=	B	=			NOT NULL	V4-ESA
¥¥2014	12319999	2000	=	GB	=			AC	=			I	=	B	=			NOT NULL	V4-ESE
¥¥2014	12319999	2000	=	GB	=			AC	=			O	=	B	=			NOT NULL	V8-ESA
¥¥2014	12319999	2000	=	GB	=			AC	=			I	=	B	=			NOT NULL	V8-ESE
¥¥2014	12319999	2000	=	GB	=			IM	=			O	=	B	=			NOT NULL	V9-ESA
¥¥2014	12319999	2000	=	GB	=			IM	=			I	=	B	=			NOT NULL	V9-ESE

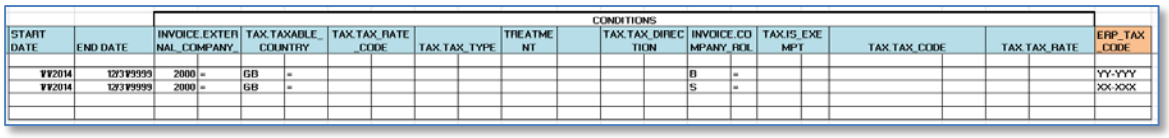
Option 2:
This option assumes that the tax code is designating the tax rate and not the tax treatment.



		CONDITIONS																
START DATE	END DATE	INVOICE.EXTERNAL_COMPANY_		TAX.TAXABLE_COUNTRY		TAX.TAX_RATE_CODE		TAX.TAX_TYPE		TREATMENT		TAX.TAX_DIRECTION		INVOICE.COMPANY_ROL		TAX.IS_EXEMPT	TAX.TAX_CODE	TAX.TAX_RATE	ERP_TAX_CODE
OPTION2: CONDITIONS OF TAX TYPES WITH 'I' AND 'O' DIRECTIONS																			
¥¥2014	12319999	2000	=	GB	=	SR	=	RC	=			O	=	B	=			NOT NULL	V1-FSA
¥¥2014	12319999	2000	=	GB	=	SR	=	RC	=			I	=	B	=			NOT NULL	V1-FSE
¥¥2014	12319999	2000	=	GB	=	RR	=	RC	=			O	=	B	=			NOT NULL	V2-FSA
¥¥2014	12319999	2000	=	GB	=	RR	=	RC	=			I	=	B	=			NOT NULL	V2-FSE
¥¥2014	12319999	2000	=	GB	=	ZR	=	RC	=			O	=	B	=			NOT NULL	V3-FSA
¥¥2014	12319999	2000	=	GB	=	ZR	=	RC	=			I	=	B	=			NOT NULL	V3-FSE
¥¥2014	12319999	2000	=	GB	=	NL	=	RC	=			O	=	B	=			NOT NULL	V7-FSA
¥¥2014	12319999	2000	=	GB	=	NL	=	RC	=			I	=	B	=			NOT NULL	V7-FSE
¥¥2014	12319999	2000	=	GB	=	SR	=	AC	=			O	=	B	=			NOT NULL	V1-DSA
¥¥2014	12319999	2000	=	GB	=	SR	=	AC	=			I	=	B	=			NOT NULL	V1-DSE
¥¥2014	12319999	2000	=	GB	=	RR	=	AC	=			O	=	B	=			NOT NULL	V2-DSA
¥¥2014	12319999	2000	=	GB	=	RR	=	AC	=			I	=	B	=			NOT NULL	V2-DSE
¥¥2014	12319999	2000	=	GB	=	ZR	=	AC	=			O	=	B	=			NOT NULL	V3-DSA
¥¥2014	12319999	2000	=	GB	=	ZR	=	AC	=			I	=	B	=			NOT NULL	V3-DSE
¥¥2014	12319999	2000	=	GB	=	NL	=	AC	=			O	=	B	=			NOT NULL	V7-DSA
¥¥2014	12319999	2000	=	GB	=	NL	=	AC	=			I	=	B	=			NOT NULL	V7-DSE
¥¥2014	12319999	2000	=	GB	=	SR	=	IM	=			O	=	B	=			NOT NULL	V1-BSA
¥¥2014	12319999	2000	=	GB	=	SR	=	IM	=			I	=	B	=			NOT NULL	V1-BSE
¥¥2014	12319999	2000	=	GB	=	RR	=	IM	=			O	=	B	=			NOT NULL	V2-BSA
¥¥2014	12319999	2000	=	GB	=	RR	=	IM	=			I	=	B	=			NOT NULL	V2-BSE
¥¥2014	12319999	2000	=	GB	=	ZR	=	IM	=			O	=	B	=			NOT NULL	V3-BSA
¥¥2014	12319999	2000	=	GB	=	ZR	=	IM	=			I	=	B	=			NOT NULL	V3-BSE
¥¥2014	12319999	2000	=	GB	=	NL	=	IM	=			O	=	B	=			NOT NULL	V7-BSA
¥¥2014	12319999	2000	=	GB	=	NL	=	IM	=			I	=	B	=			NOT NULL	V7-BSE

DEFAULT TAX CODE SAMPLE

The set below is used for fallback scenario and are recommended to always include at the very bottom of the sort order as a catch. The tax code can be mapped in SAP to a fallback account to be reviewed regularly by the tax administrator for analysis and correction.



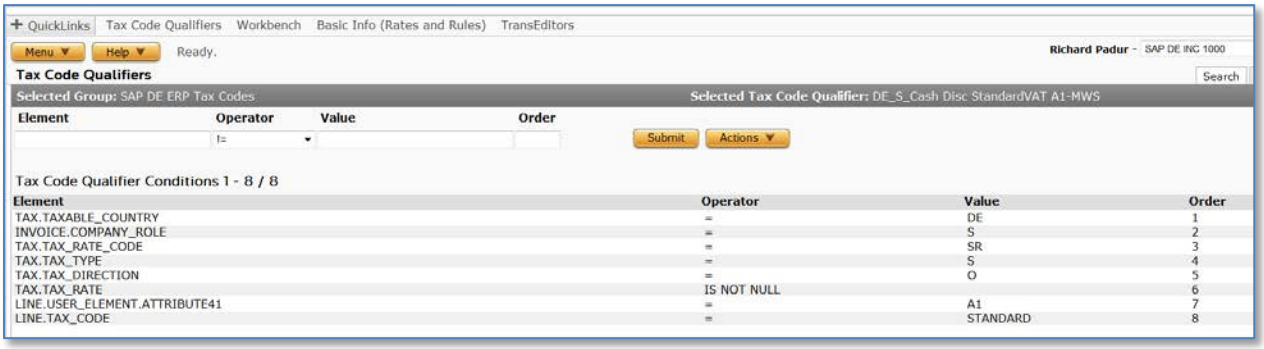
		CONDITIONS																
START DATE	END DATE	INVOICE.EXTERNAL_COMPANY_		TAX.TAXABLE_COUNTRY		TAX.TAX_RATE_CODE		TAX.TAX_TYPE		TREATMENT		TAX.TAX_DIRECTION		INVOICE.COMPANY_ROL		TAX.IS_EXEMPT	TAX.TAX_CODE	TAX.TAX_RATE	ERP_TAX_CODE
¥¥2014	12319999	2000	=	GB	=									B	=				YY-YYY
¥¥2014	12319999	2000	=	GB	=									S	=				XX-XXX

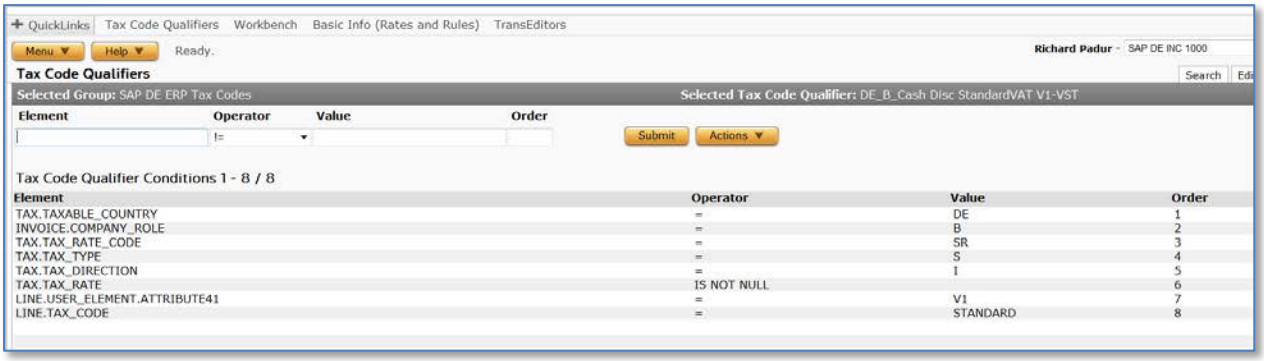
DOWNLOAD SAMPLES

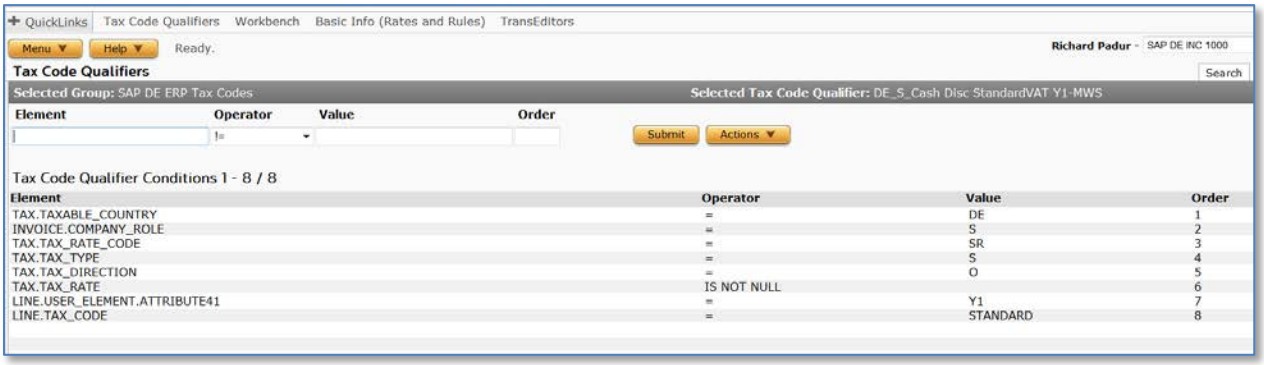
You can download samples of exported Tax Code Qualifiers provide by Thomson Reuters from the ONESOURCE Support Network, Knowledge Base Article 1233.

CASH DISCOUNT AT TIME OF PAYMENT: ADDITIONAL TAX CODE QUALIFIERS NEEDED

If you are using cash discounts at time of payment on any of your country configuration in SAP then you will need to address this step. Tax code qualifiers will need to be replicated in the TCQ table so that a "standard" Determination tax code condition with attribute 41 condition at the line level of "A1" would drive to an ERP Tax Code of A1-MWS. Likewise the Attribute 41 of Y1 would drive to ERP tax code of Y1-MWS. You would need to set up an additional TCQ for each entry in the cash discount adjustment table. Each TCQ would be a mirror or your original but would have the additional conditions of tax_line_attribute41 = XX where XX would be the original tax code. It would also have a condition for the Determination tax code as it is used in the override tax code instructions. An example is shown below.







Special note: The sort order of the TCQ list is important to correct assignment. Cash discount adjustment TCQ's should be higher in the list than their non-cash discount counterparts. Likewise the override version needs to be listed before the non-override. An example of the correct order is shown below:

Position 1: Cash Discount Override Y1 TCQ
Position 2: Cash Discount A1 TCQ
Position 3: Override Y1 TCQ
Position 4: A1 TCQ

MAINTAINING ZONE ALIASES

You may need region codes for countries that tax at levels below country level. ONESOURCE Indirect Tax has enhanced its international tax data to include additional codes (2-digit, 3-digit, ISO) where appropriate.
In many cases, our codes do not match the codes maintained in SAP. For example, Indian state codes are numeric in SAP (for example, 22 = Tamil Nadu) whereas in ONESOURCE Indirect Tax the same one has a code of TN. Therefore, when SAP sends state code 22 to Integration for address determination, it does not match the zone maintained in Determination.
ONESOURCE Indirect Tax enables you to map codes maintained by the ERP system to those maintained in the Determination using the Zone Alias feature.

ZONES FOR MISMATCHED DETERMINATION AND SAP CODES

Identify zones for which Determination codes do not match SAP codes. The region codes for India, Argentina, and several other countries do not match the state/province codes in Determination.

Identify Region Codes in SAP

1. To display region codes for countries in SAP, navigate to:

   Transaction**: SPRO** navigate to **SAP NetWeaver** > **General Settings >Insert Regions.**

   The images show a portion of the region codes for the countries India and Argentina.

2. Locate the region codes you need to map to Determination and write them down.

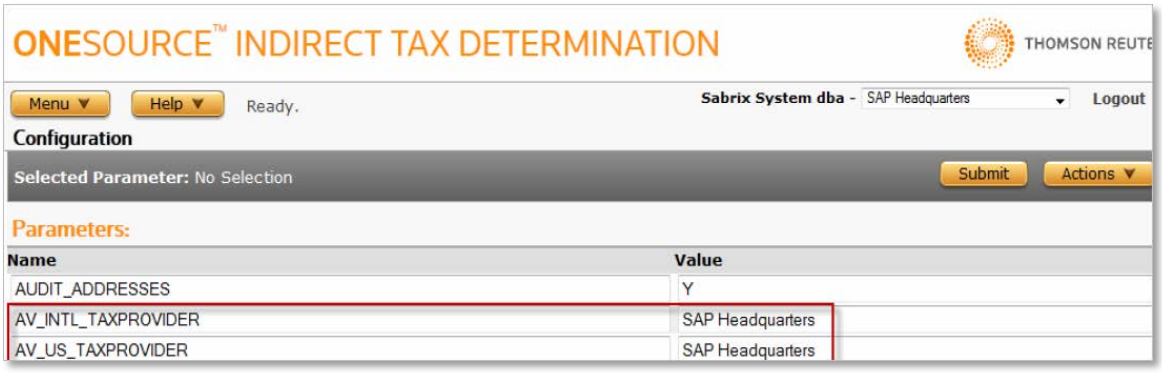
Country	Region	Description
IN	01	Andra Pradesh
IN	02	Arunachal Prade
IN	03	Assam
IN	04	Bihar
IN	05	Goa
IN	06	Gujarat
IN	07	Haryana
IN	08	Himachal Prades
IN	09	Jammu und Kasl
IN	10	Karnataka
IN	11	Kerala
IN	12	Madhya Pradesh

Country	Region	Description
AR	00	Capital Federal
AR	01	Prov. Buenos Air
AR	02	Capital Federal
AR	03	Buenos Aires
AR	04	Catamarca
AR	05	Córdoba
AR	06	Corrientes
AR	07	Entre Rios
AR	08	Jujuy
AR	09	Mendoza
AR	10	La Rioja
AR	11	Salta
AR	12	San Juan

In this example, India Region Codes are shown on the left and Argentina Region Codes on the right.

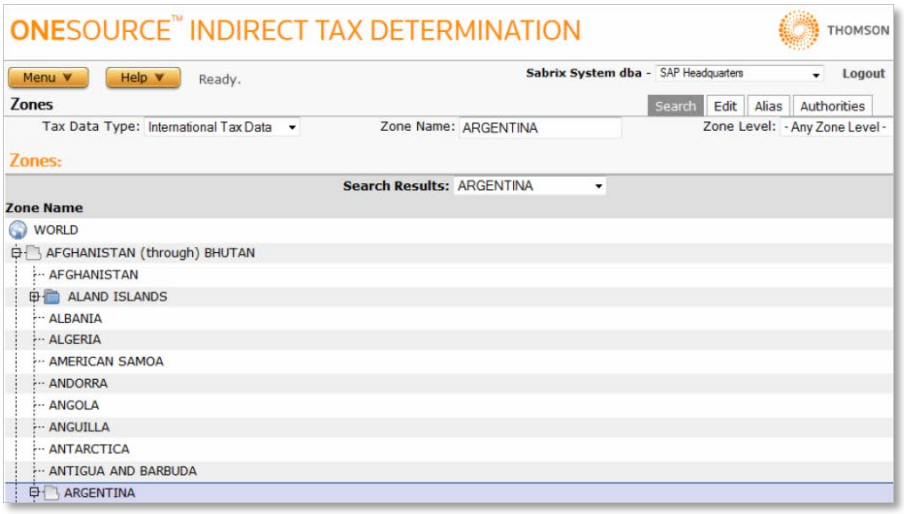
Set Address Validation Configuration Parameters

1. Log into the Determination and navigate to **System > CONFIGURATION**.
2. Change companies to the parent company in your Determination hierarchy. Select the company from the drop-down list in the upper right-hand corner of the page. In the example below, the example parent company is SAP Headquarters.
3. Set the parameters AV_INTL_TAXPROVIDER and AV_US_TAXPROVIDER parameters to the selected company and click **Submit**.



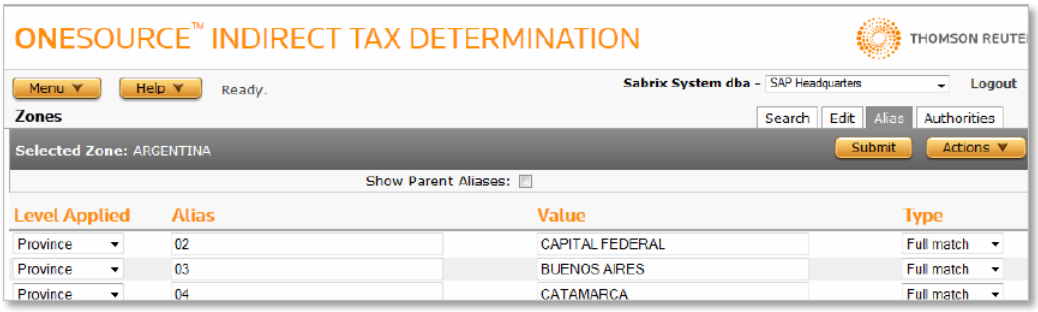
Create Zone Aliases

1. Navigate to **Tax Data > Zones**.
2. Search for and select a country to create an alias (for example, Argentina).



3. Once the desired country is selected, click the Alias tab.

4. Enter the desired aliases and click **Submit**. For example, you might create the following aliases in Argentina:



Alias represents the code maintained in SAP. *Value* represents the name maintained in the Determination Zone Tree. In the example above, the selected Zone is Argentina. Always configure aliases at the Country level, and apply each alias at the Province level.

APPENDIX1: OTHER FEATURES

RECONCILIATION EXTRACT REPORT

The ONESOURCE Indirect Tax Integration for SAP Reconciliation Extract enables an organization using the ONESOURCE Indirect Tax Integration for SAP for their tax calculations to extract the necessary data from the SAP FI module to use in the ONESOURCE Indirect Tax Reporting Reconciliation Report.

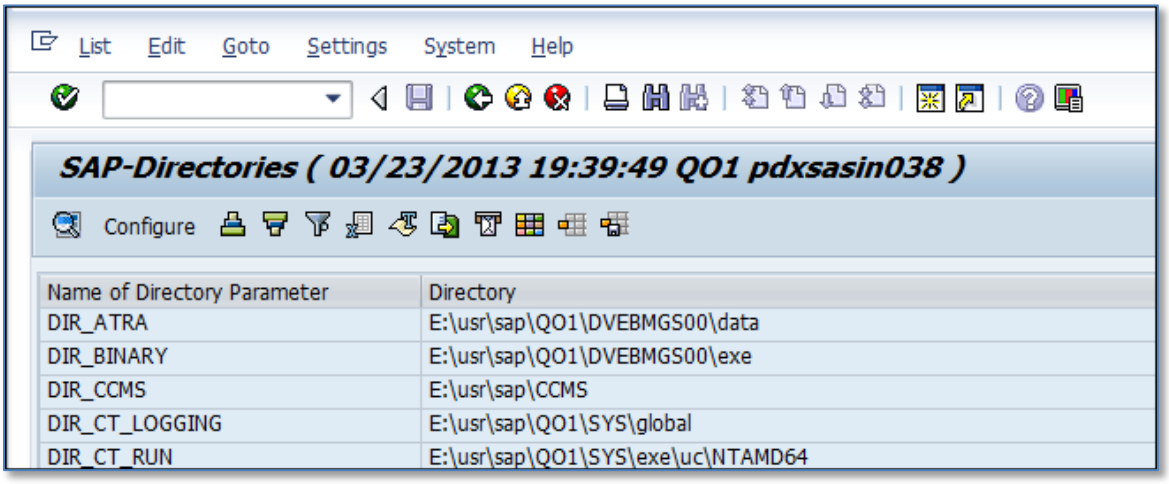
The Reconciliation Report in ONESOURCE Indirect Tax Reporting will compare the imported data from the SAP Reconciliation Extract with the data in Audit. The Reconciliation Report will indicate transactions missing in the ERP (SAP), transactions missing in Audit, as well as differences in tax amounts.

The following steps are necessary if you want to use the Reconciliation Extract Report:

APPLICATION SERVER DIRECTORY

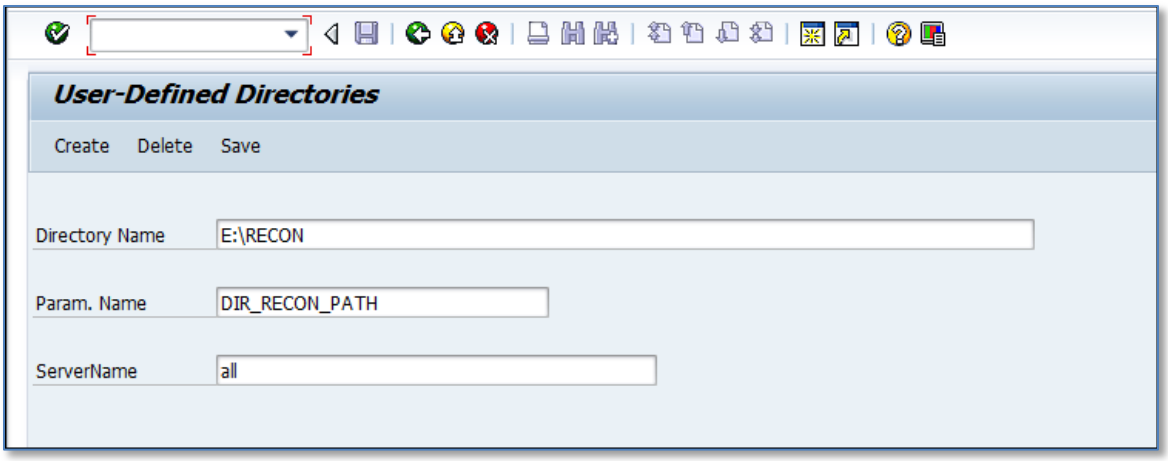
The reconciliation extract process can either write a file to the person's desktop (presentation server) or the SAP Application Server. If using the Application Server it is recommended that a file directory is created on the SAP file system specifically for Reconciliation, and then mapped as a default. To do so follow these steps:

Transaction **AL11:**



Name of Directory Parameter	Directory
DIR_ATRA	E:\usr\sap\QO1\DVEBMGS00\data
DIR_BINARY	E:\usr\sap\QO1\DVEBMGS00\exe
DIR_CCMS	E:\usr\sap\CCMS
DIR_CT_LOGGING	E:\usr\sap\QO1\SYS\global
DIR_CT_RUN	E:\usr\sap\QO1\SYS\exe\uc\NTAMD64

Click on **Configure** to add a new directory definition/path:

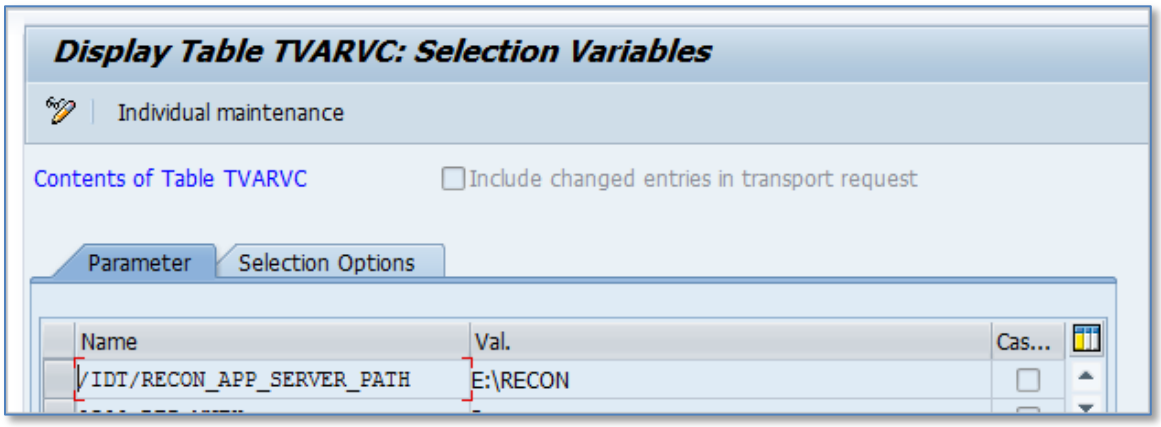


Save your entry.

Now that you have defined the directory you can also set it as a default in the Reconciliation Extract selection screen as follows:

Transaction **STVARV**:

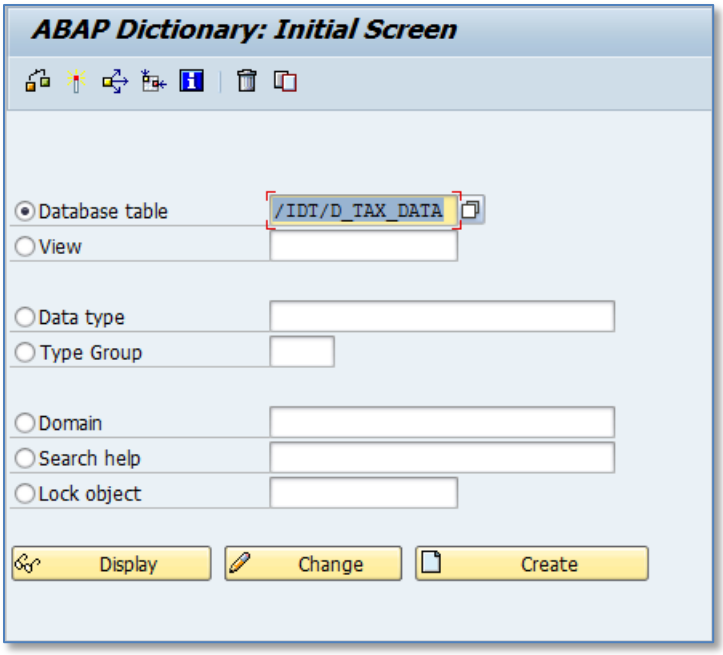
Add a new entry for parameter name of **/IDT/RECON_APP_SERVER_PATH** with the value of the server path you created in the previous step.



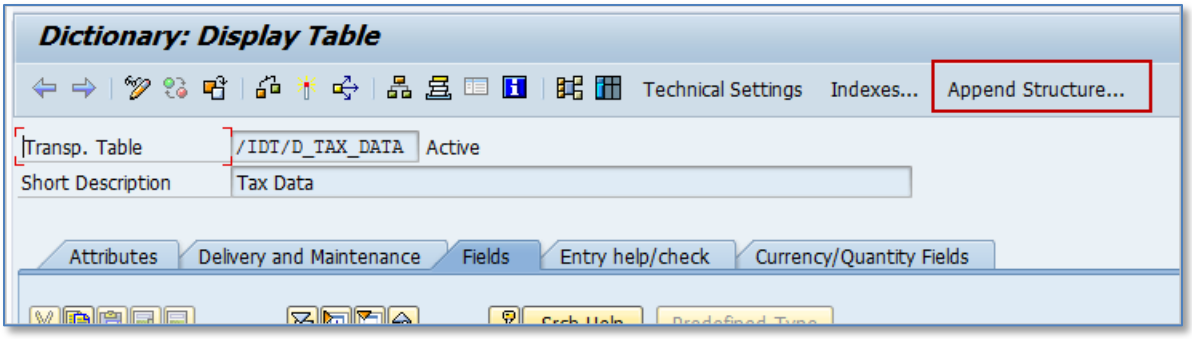
ADDING CUSTOM FIELDS TO /IDT/D_TAX_DATA TABLE

A system user may have need to add other fields to the /IDT/D_Tax_Data table for reporting or reconciliation processes. Their ABAP programmer can append the table with their own custom field and then use the field mapping table feature to be able to populate the new field per their needs. A simple procedure of appending the table is outlined below:

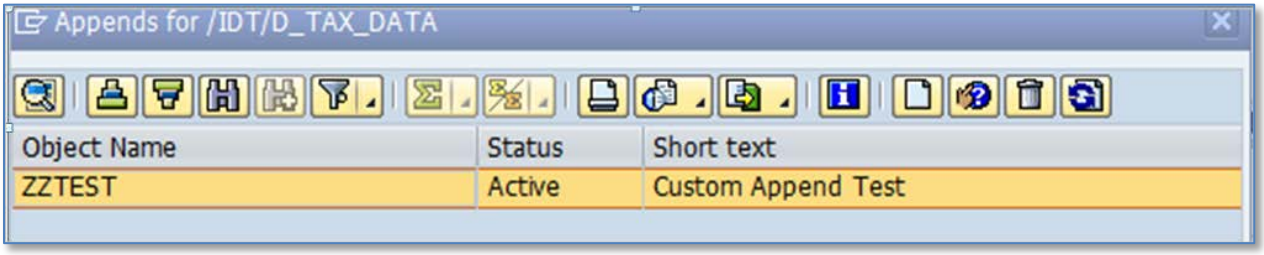
Transaction: **SE11**



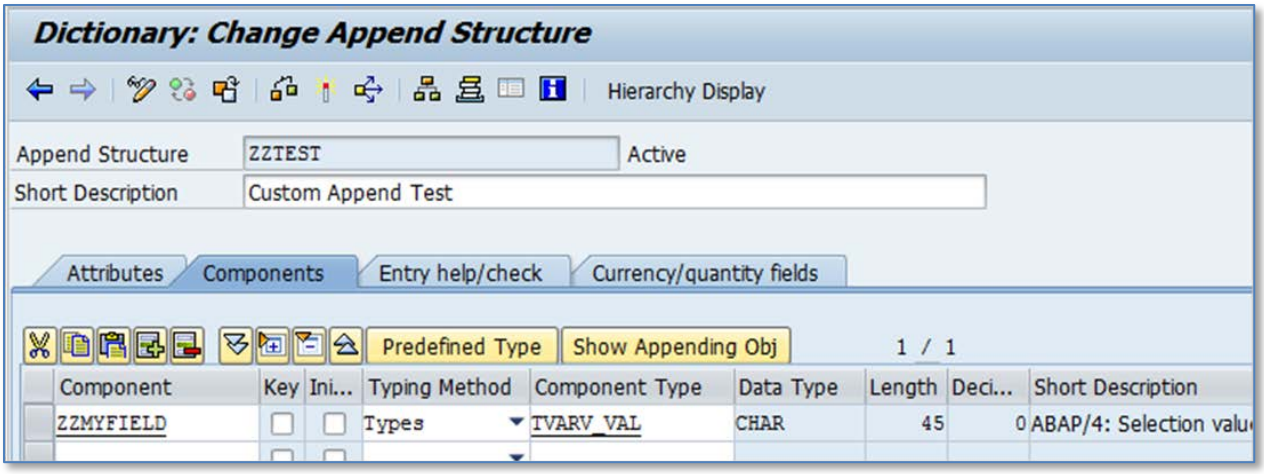
Select "**Display**". Once in the table, use the "**Append Structure** (**F5**)" menu option.



Create a new append in the customer name space or using ZZ* naming convention. Include the change in a transport:



Add custom fields as desired:



Save and activate the changes.

The newly added fields now can be used in the Global Next Flexible Field Mapper to map data to.

SPECIAL NOTE ON VF06 BACKGROUND BATCH JOBS

When creating an invoice in VF01, there are 2 entries in the XML logs, the regular one and the one that posts to audit. If the invoices are created in the background in VF06, only one entry is listed in the log (the one that posts to audit) and the transaction code column does not populate the transaction code.
This can be confusing if a user is using the information on the transaction code. A key problem is that SY-TCODE is blank for background jobs. There is generally no screen and thus no need for a transaction code in background jobs. This is a known limitation in SAP. Customers who use the SY-TCODE field must consider that SAP will return a NULL value at times. They can add a fall back custom field mapping using a constant for situations when SAP returns a null value.

APPENDIX 2: REFERENCES

This section lists all customer facing Journeys, Routes, Bases and Tables with an explanation of their purpose and use.

LIST OF JOURNEYS

Most Journeys are used in the field mapping process to assist in determining for which business process what fields should be used for taxability determination. Some Journeys are used internally for unique treatment of a process, like Freight and Plants Abroad for example, these are mostly likely not used in the field mapping.

Journey	Description
/IDT/JOURNEY_HEADER_REQUEST	This Journey manages header data going from SAP to Determination. In field mappings this Journey passes data to link specific header SAP fields to corresponding invoice level XML elements of Determination.
/IDT/JOURNEY_HEADER_REQUEST_GM	This Journey manages header data going from SAP to Determination for the Goods Movement product transactions. In field mappings this Journey passes data to link specific header SAP fields to corresponding invoice level XML elements of Determination for materials movement transactions in MM.
/IDT/JOURNEY_HEADER_REQ_BR_GM	This Journey manages the header data going from SAP to Determination for the Brazil material transaction MBOA for receiving inbound transaction on Intra Co STO process.
/IDT/JOURNEY_GET_CONDITION_DTL	This journey is used internally and gets the relevant tax data from the KONV table and uses that for getting the taxes on the NF document when a PGI is done on the delivery document. Brazil function only.
/IDT/JOURNEY_ITEM_REQUEST	This Journey manages header and item data going from SAP to Determination. In field mappings this Journey passes data to link specific header and item SAP fields to corresponding line level XML elements of Determination.
/IDT/JOURNEY_ITEM_REQ_BR_GM	This Journey manages the item data going from SAP to Determination for the Brazil material transaction MBOA for receiving inbound transaction on Intra Co STO process.
/IDT/JOURNEY_ITEM_REQUEST_GM	This Journey manages header and item data going from SAP to Determination for the Goods Movement product transactions. In field mappings this Journey passes data to link specific header and item SAP fields to corresponding line level XML elements of Determination for materials movement transactions in MM.
/IDT/JOURNEY_NG_ITEM_REQUEST	This Journey manages header and item data going from non-group transactions of SAP to Determination. In field mappings this Journey passes data to link specific

Journey	Description
	header and item SAP fields to corresponding line level XML elements of Determination.
/IDT/JOURNEY_NG_ITEM_SERV_ENTR	This Journey manages item level data going from SAP to Determination for the specific data in Service Entry Sheets within MM PO process. In field mappings this Journey passes data to line specific line item SAP fields to corresponding line level XML elements of Determination for Service Entry Sheet charges.
/IDT/JOURNEY_MULTI_ACC_SERVICE	This journey manages the multi account assignment as it is used on a service entry sheet line item.
/IDT/JOURNEY_TAX_TAB_RESPONSE	This Journey manages data coming from Determination to SAP. It collects the tax calculation results from the XML and will use the configurable field mappings to link specific Determination fields to corresponding fields in table /IDT/D_TAX_DATA for later use in downstream processes such as invoice printing and reporting.
/IDT/JOURNEY_STANDARD_RESPONSE	This Journey manages data coming from Determination to SAP. It collects the tax calculation results from the XML and distributes them in condition value formulas where needed. It will use the configurable field mappings to link specific Determination fields to corresponding SAP fields in table KONV. NOTE: This mapping is provided for backwards compatibility and should not be used.
/IDT/JOURNEY_AUDIT_UPD_DB_BILL	This Journey manages the update to the Determination audit database for Billing documents. At time of SAP finishing posting to the General Ledger account a call will be made to Determination for persisting the tax liability in audit. The process will use the latest calculation done and sets the IS_AUDITED flag to TRUE, the FISCAL_DATE to the posting date of the Billing document, the INVOICE_NUMBER and UNIQUE_INVOICE_NUMBER and the GROSS_AMOUNT in company code currency. It also may set the IS_CREDIT flag to TRUE/FALSE to negate amounts and make the audit reports add up correctly. NOTE: In some cases a certain value isn't known till the document has been posted to the G/L, i.e. the legal document number required in some countries. This Journey can be used to write the value to audit, but it would not be recommended to use such a value for taxability rules as the value would not be available during calculations.
/IDT/JOURNEY_AUDIT_UPD_DB_GL	This Journey manages the update to the Determination audit update database for G/L documents when there is no billing document. It is using the route /IDT/ROUTE_UPDATE_AUDIT_DB and is used to add information to the update to audit table and report for noting that status of an entry that may not have been posted yet to the audit database.
/IDT/JOURNEY_AUDIT_SAVE_FRM_GL	This Journey manages the update to the Determination

Journey	Description
	audit database for G/L (LIV/FI) documents. At time of SAP finishing posting to the General Ledger account a call will be made to Determination for persisting the tax liability in audit. The process will use the latest calculation done and sets the IS_AUDITED flag to TRUE, the FISCAL_DATE to the posting date of the G/L document, the INVOICE_NUMBER and UNIQUE_INVOICE_NUMBER and the GROSS_AMOUNT in company code currency. It also may set the IS_CREDIT flag to TRUE/FALSE to negate amounts and make the audit reports add up correctly. NOTE: In some cases a certain value isn't known till the document has been posted to the G/L, i.e. the legal document number required in some countries. This Journey can be used to write the value to audit, but it would not be recommended to use such a value for taxability rules as the value would not be available during calculations.
/IDT/JOURNEY_AUDIT_SAVE_TAX_UP	This journey manages the update to the audit database and will be used for all manual tax scenarios (calculate tax = " ") and down payments. To update the audit database, this will use the last tax calculation make changes to a few fields like override amount and then send that to audit.
/IDT/JOURNEY_AUDIT_RESPONSE	This Journey manages the response of the update to the Audit Database. It determines if an update to the Audit Database is successful from the response message and passes a flag with that information to be stored in table /IDT/D_AUDIT_STA.
/IDT/JOURNEY_AUDIT_SAVE	This Journey saves the data of the last tax calculation call at the time of saving the invoice document in table /IDT/D_AUDIT_REC for later use in the audit update call, cancellations, and other processes. This journey assumes calculate tax = X
/IDT/JOURNEY_BRAZIL_SD_ADJUST	This Journey adjusts the Brazil SD document and process when use to set the application area from TX to V. This was done to allow the system to utilize the standard Nota Fiscal mapping logic in SD for Brazil
/IDT/JOURNEY_CHECK_AUDIT_MESS	This Journey checks the audit message and adjusts the call to audit. It does a double check to make sure the call is for a final invoice.
/IDT/JOURNEY_GM_RESPONSE	This Journey manages the response of the update to the Audit Database for Goods Movement transactions in the Goods Movement product.
/IDT/JOURNEY_US_SPECIAL_LOGIC2	This Journey manages the AP logic for countries like US, and PR by switching the company role for the Vendor Charged Tax and offsetting the tax lines for Self-Accrual taxes. NOTE: Customers most likely will not use this in the field mappings; the default is delivered by Thomson Reuters.

Journey	Description
/IDT/JOURNEY_FREIGHT	This Journey manages the Freight logic based on the configurable Freight condition sub-total. It will create a shadow line as a related line to the product line. See the *Configuration Guide* for more details. NOTE: This journey is not used in the field mappings.
/IDT/JOURNEY_FREIGHT_LIV	This Journey manages the Freight logic based on the configurable Freight condition sub-total specifically for functions that are different within the MIRO transaction. It will create a shadow line as a related line to the product line.
/IDT/JOURNEY_PLANTS_ABROAD	This Journey manages the logic for Plants Abroad based on the billing types maintained in table /IDT/D_PLNTS_ABD. For these billing types a Seller and Buyer call is made for the one SD Invoice. Billing type WIA has been added as a default. NOTE: This journey is not used in the field mappings.
/IDT/JOURNEY_FB05_RESPONSE	This Journey is to handle the complexity of the transactions that can have cash discounts.
/IDT/JOURNEY_NG_ITEM_FB05	This Journey manages header and item data going from non-group cash discount transactions of SAP to Determination. In field mappings this Journey passes data to link specific header and item SAP fields to corresponding line level XML elements of Determination.
/IDT/JOURNEY_FB05_COMPANY_ROLE	This Journey manages the company role for the FB05 transaction logic.
/IDT/JOURNEY_NG_ITEM_DOWN_PAYM	This Journey is to handle the complexity of the down payment transactions.
/IDT/JOURNEY_NG_ITEM_SERV_ENTR	This Journey is to handle the complexity of the transactions with service entry sheets.
/IDT/JOURNEY_MULTI_ACC_ASSIGN	This journey is used to handle the complexity of the logic needed for multiple account assignment within a single PO line item.

LIST OF ROUTES

Routes can be basically split into two categories; Group and Non-Group. Group Routes are based on transactions which use pricing procedures (SD) or calculation schemas (PO), where Non-Group Routes are based on transactions which use tax procedures (LIV/FI). Routes can be used in the field mapping if desired.

Route	Description
/IDT/ROUTE_GROUP_SALES	This Route handles the complexity of calculating tax unique to SD sales transactions.
/IDT/ROUTE_GROUP_BILLING_GEN	This Route handles the complexity of calculating tax unique to SD billing transactions.
/IDT/ROUTE_GROUP_DELIVERY	This Route handles the complexity of calculating tax unique to delivery transactions. This was added to support Brazil STO process for Nota Fiscal based on the delivery document.
/IDT/ROUTE_GROUP_BILLING_PA	This Route handles the complexity of calculating tax unique to SD Plants Abroad billing transactions. Table /IDT/D_PLNTS_ABD needs to be maintained with the relevant Billing Types for Plants Abroad, billing type WIA has been added as a default.
/IDT/ROUTE_GROUP_PURCHASING	This Route handles the complexity of calculating tax unique to purchasing transactions using a calculation schema.
/IDT/ROUTE_NON_GROUP_DOC_DNF	This Route handles the complexity of calculating tax unique to the delivery documents for Brazil Nota Fiscal.
/IDT/ROUTE_NON_GROUP_DOC_LIV	This Route handles the complexity of calculating tax unique to LIV transactions.
/IDT/ROUTE_NON_GROUP_DOC_PUR	This Route is in support of the TAXES button and copies the taxes from the conditions tab and replicates the data in the taxes button so that both conditions tab and taxes button are in agreement.
/IDT/ROUTE_NON_GROUP_DOC_AP	This Route handles the complexity of calculating tax unique to FI AP transactions.
/IDT/ROUTE_NON_GROUP_DOC_AR	This Route handles the complexity of calculating tax unique to FI AR transactions.
/IDT/ROUTE_NON_GROUP_DOC_FI	This Route handles the complexity of calculating tax unique to FI processes where there is no Vendor or Customer in the transaction.
/IDT/ROUTE_NON_GROUP_DOC_GM_BR	This Route handles the complexity of calculation tax unique to Brazil STO material receiving transaction using MBOA transaction for inbound process Nota Fiscal data
/IDT/ROUTE_UPDATE_AUDIT_DB	This Route handles the complexity of updating the Audit Database. It initiates asynchronous update process (V2) after a G/L document posting has been successfully done in SAP and will trigger the audit call.

Route	Description
/IDT/ROUTE_NON_GROUP_DOC_DT	This Route is to handle the complexity of transactions with deferred tax.
/IDT/ROUTE_NON_GROUP_DOC_FB5	This Route is to handle the complexity of the transactions that can have cash discounts.
/IDT/ROUTE_NON_GROUP_DOC_A_GL	This Route is to handle the logic for audit updated based on the amounts in the G/L document in SAP.
/IDT/ROUTE_NON_GROUP_DOC_DP	This Route is to handle the complexity of transaction with Down payments.
/IDT/ROUTE_NON_GROUP_DOC_SES	This Route is to handle the complexity of transactions with service entry sheets.

LIST OF BASES

Bases represent a source or target in the field mapping of a tax request and response. They either represent an entity in SAP or a Determination XML structure such as Batch, Invoice, Line, or Tax. Some complex XML structures like User Attributes, Quantities, Registrations, Currency Conversions, etc. require special processing described at the end of this section. Not all of the sources are available for all Journeys.

Source Bases

Base	Description	Journey supported
SAP_HEADER	Fields from the following SAP document **header** tables: BKPF, EKKO,ESSR, KNA1, LFA1, T001, T001Z, T180, TVAK, TVAP, TVFK, TVKO, TVTA, VBAK, VBKD, VBUK, VBRK, KOMK, CALC_HDR*,J_1BBRANCH, J_1IMOVEND, J_1IMOCUST, J_1IMOCOMP, MKPF, MSEG, T156, DM07M, VM07M	/IDT/JOURNEY_HEADER_REQUEST /IDT/JOURNEY_HEADER_REQ_BR_GM
	BKPF (FI/LIV) VBRK (SD) T001 for both processes	/IDT/JOURNEY_AUDIT_UPD_DB_GL /IDT/JOURNEY_AUDIT_UPD_DB_BILL
	MKPF, BKPF, KOMK, KOMP, MSEG, EKKO, LFA1, CALC_HDR	/IDT/JOURNEY_HEADER_REQ_BR_GM
SAP_ITEM	Fields from the following SAP document **item** tables: BSEG, CSKS, DRSEG, EINA, EINE, EKKNU, EKPO, KOMP, KOMV_INDEX, MAKT, MARA, MARC, MARD, MBEW, MT06E, MVKE, PRICE_COND, T001W, T001Z ,TVAP, VBAP, VBAPF, VBRP, VBUP, CALC_ITEM*,J_1BBRANCH, J_1IMOVEND, J_1IMOCUST, J_1IMOCOMP, MKPF, MSEG, T156, DM07M, VM07M **Header fields:** Any field listed in the SAP_HEADER section above, use prefix HDR-> when mapping a header table at line level	/IDT/JOURNEY_ITEM_REQUEST /IDT/JOURNEY_NG_ITEM_REQUEST
	BKPF (FI/LIV) VBRK (SD)	/IDT/JOURNEY_AUDIT_UPD_DB_GL /IDT/JOURNEY_AUDIT_UPD_DB_BILL
	MKPF, MSEG, EKPO, KOMP, LFA1, MBEW, J_1BBRANCH, LIKP	/IDT/JOURNEY_ITEM_REQ_BR_GM
SAP_FIELD	SYST GC_XS_FALSE – translates an SAP check box value to a XSD true/false value GC_VERSION – represents the XSD	All

Source Bases		
	version supported, set to “G” as a constant	
DET_TAX	All fields in the Tax level of the Determination response (OUTDATA) message	/IDT/JOURNEY_STANDARD_RESPONSE /IDT/JOURNEY_TAX_TAB_RESPONSE
CONSTANT	Any constant value	All

Target Bases		
Base	**Description**	**Journey supported**
DET_BATCH	All fields in Batch level of Determination request (INDATA) message	/IDT/JOURNEY_HEADER_REQUEST
DET_INVOICE	All fields in Invoice level of Determination request (INDATA) message	/IDT/JOURNEY_HEADER_REQUEST
DET_LINE	All fields in the Item level of the Determination request (INDATA) message	/IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST,
SAP_TAX_LINE	All fields in table /IDT/D_TAX_DATA, including custom appended fields	/IDT/JOURNEY_TAX_TAB_RESPONSE /IDT/JOURNEY_FB05_RESPONSE
	All fields of the SAP pricing lines as defined in structure KOMV_INDEX NOTE: used for backwards compatibility only	/IDT/JOURNEY_STANDARD_RESPONSE

Special Purpose Operands

Operand	Description	Journey supported
CALC_HDR	ROLE, EXTERNAL_COMPANY_ID, UNIQUE_INVOICE_NUMBER, TAX_CATEGORY	/IDT/JOURNEY_HEADER_REQUEST
CALC_ITEM	DET_TAX_CODE, IS_EXEMPT, AMOUNT, QUANTITY, IS_CREDIT	/IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST,
PARTNER_TAB	Used to reference a partner address in field mappings. Can be used in combination with partner function type.	/IDT/JOURNEY_HEADER_REQUEST, /IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST
HDR->	Pointer use in Item level request mapping to indicate that the field used is at header level, i.e. HDR->T001W-WERKS would indicate the plant from the header table to be mapped at the item level.	/IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST, /IDT/JOURNEY_FB05_RESPONSE
ANCESTOR->	Pointer used in response mapping to indicate that the field used is at a higher level in the structure, i.e. ANCESTOR->ANCESTOR->CALLING_SYSTEM_NUMBER would be used to map from Invoice level field in the tax data level. NOTE: At this time we don't support mapping from the BATCH level of the Determination XML, all fields are available on the INVOICE level too.	/IDT/JOURNEY_TAX_TAB_RESPONSE /IDT/JOURNEY_STANDARD_RESPONSE /IDT/JOURNEY_FB05_RESPONSE
ITEMS->	Pointer used to determine at the header level a field that is stored at the line item level in order to pass that to the request.	/IDT/JOURNEY_HEADER_REQUEST

XSD Tables

Table	Description	Journey supported
USER_ELEMENT	A custom field in the XSD comprised of the XML element USER_ELEMENT and field ATTRIBUTE#, where # is any number between 1-40 at Invoice or Item level. NOTE: Attributes 41-50 are reserved by Thomson Reuters.	IDT/JOURNEY_HEADER_REQUEST, IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST, /IDT/JOURNEY_STANDARD_RESPONSE, /IDT/JOURNEY_TAX_TAB_RESPONSE
REGISTRATIONS	A structure of registration numbers for different roles; SELLER_ROLE, BUYER_ROLE, MIDDLEMAN_ROLE.	DT/JOURNEY_HEADER_REQUEST, IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST,
QUANTITIES	A complex structure to represent a list of quantities and unit of measures.	/IDT/JOURNEY_ITEM_REQUEST, /IDT/JOURNEY_NG_ITEM_REQUEST,

XSD Tables		
CURRENCY_CONVERSION	Represents a result set of one or two currency conversion steps in the TAX block of the tax response.	/IDT/JOURNEY_STANDARD_RESPONSE, /IDT/JOURNEY_TAX_TAB_RESPONSE

Special Purpose Operands in Tables	
Operand	**Description**
NAME	A field value within a table like NAME=ATTRIBUTE1
ROW	A field value to point to a specific place in a table i.e. ROW=3 would point to the third row
ADD	An action, i.e. to add a row to the table
CREATE_IF_NOT_EXIST	A control flag to only add the mapping if none already exists

LIST OF DELIVERED TABLES

For reference below table lists all Thomson Reuters delivered SAP tables.

CONFIGURATION TABLES

Most of the configuration tables are accessible via the User Menu provided with a few exceptions which are noted.

Table	Description
/IDT/C_DET_TAX_T	Determination Tax Code
/IDT/C_FI_CONTRL	FI Control Process: Custom
/IDT/C_LOG_CONFI	Log Configuration: Custom
/IDT/C_PROXIES	Configuration for Proxy Call
/IDT/C_ROLE_OVER	AP Company Role Override and Special Logic
/IDT/C_TAX_REL	Tax Code Relevancy
/IDT/C_TAX_TYPE	Determine condition types for taxes
/IDT/D_ADDR_SURC	Non partner function address sources
/IDT/D_ADDR_TYPE	Logical address types for ONESOURCE Tax Determination
/IDT/D_ADDRESSES	Match address sources to logical addresses types
/IDT/D_AUTO_JRNY	Automatically processed Journeys for each Route
/IDT/D_BASE_MAP	Base Maps
/IDT/D_CASH_DISC	Match SAP tax code to Determination Tax Code for Cash Discounts at time of payment calculations. Note this table is not in standard menu yet. Use sm30 transaction to maintain at this point.
/IDT/D_CG_ASSIGN	Country group assignment
/IDT/D_COUNTRY_G	Country groups
/IDT/D_DET_TAX_T	Determination Tax Type
/IDT/D_FI_CONTRL	FI process control configuration
/IDT/D_FIELD_MAP	Configurable field mappings
/IDT/D_GENERAL	General configuration option values table
/IDT/D_GRP_BUKRS	List company codes that should use non-grouped tax calc
/IDT/D_IS_EXEMPT	Configure exempt transactions
/IDT/D_LOG_CONFI	Log configuration
/IDT/D_NEG_TTYP	Tax scenarios to negate the tax values
/IDT/D_PART_SA	Partial Self-Assessment table

Table	Description
/IDT/D_PLNTS_ABD	Billing documents types that signify a plants abroad process
/IDT/D_PROXIES	Configuration for Proxy Call
/IDT/D_ROLE_OVER	AP company role override
/IDT/D_ROUTE_GRP	Route - Route Group index
/IDT/D_ROUTES	Configuration to switch on Routes
/IDT/D_SEL_ROUTE	Select route for SD and purchasing
/IDT/D_TAX_FILTERS	Tax Filters
/IDT/D_TAX_REL	Tax Code Relevancy
/IDT/D_TAX_TYPE	Determine condition types for taxes
/IDT/D_TXJCD_DEF	Tax Jurisdiction Code Definitions for Country
/IDT/D_VERSION	IDT Integration Version
/IDT/D_WSDL	WSDL Data of the Proxy Structure
/IDT/GM_MVMTTYPE	Maintain Internal Goods Movement Types
/IDT/S_FI_CONTRL	FI Control Process: Standard
/IDT/S_LOG_CONFI	Log Configuration: Standard
/IDT/TAX_SUM_GRP	IDT Tax Summarization Table
/IDT/V_ADDR_SURC	SAP Non-Partner Function Address Sources: Custom
/IDT/V_ADDR_TYPE	Determination Address Types: Standard
/IDT/V_ADDRESSES	Address Mappings: Custom
/IDT/V_ADR_PRIVA	Address Mappings: Standard
/IDT/V_AJ_PRIVAT	Auto Processed Journeys for Route: Standard
/IDT/V_AS_PRIVAT	SAP Non-Partner Function Address Sources: Standard
/IDT/V_AUTO_JRNY	Auto Processed Journeys for Route: Custom
/IDT/V_BASE_MAP	Base Mappings: Standard
/IDT/V_CG_ASSIGN	Country Group Assign Standard
/IDT/V_COUNTRY_G	Country Group Standard
/IDT/V_FM_PRIVAT	Field Mappings: Standard
/IDT/V_GENERAL	General Configuration Values
/IDT/V_GM_MVTYPE	Goods Movement types
/IDT/V_NEG_TTYP	Negate Tax Types: Standard
/IDT/V_NEG_TTYPE	Negate Tax Types: Custom
/IDT/V_PLNTS_ABD	Plants Abroad Billing Type

Table	Description
/IDT/V_RG_PRIVAT	Route Groups: Standard
/IDT/V_ROUTE_GRP	Route Groups: Custom
/IDT/V_ROUTES	Configuration to Switch on Routes
/IDT/V_SEL_ROUTE	Select Route for SD and Purchasing Configuration
/IDT/V_TAX_SUM_C	IDT Tax Summarization Configuration View
/IDT/D_VERSION	IDT Integration Version
/IDT/D_WS	WS Security Configuration for Proxy

TRANSACTION TABLES

Transaction tables can hold a considerable amount of data depending on your business processes and system configurations. You should monitor growth of these tables and manage them as part of your archiving and/or purging process.

Route	Description
/IDT/D_AUDIT_REC	Record of last Determination calculation request messages for document for later use in the audit update call, cancellations, and other processes. Archiving should be tied to your document retention process.
/IDT/D_AUDIT_STA	Status of messages for audit DB. Archiving can be managed as part of month end close process.
/IDT/D_LOG	Log for tax calculations based on log configuration settings. Archiving can be managed as part of month end close process.
/IDT/D_TAX_DATA	Table that holds additional Tax Data information for a given document in support of invoice printing and downstream processes. This table is tied to the transaction document and should be managed for archiving based on the leading documents archiving.

RESERVED ATTRIBUTES

Thomson Reuters reserved attributes 41-50 of the **Invoice** and **Line** fields for internal use. The following table is a list of the standard attributes that are already mapped. Customers can't make use of Attributes 41-50.

Attribute	Used for
INVOICE.USER_ELEMENT.ATTRIBUTE41	TAX CATEGORY OF 0 OR 1
INVOICE.USER_ELEMENT.ATTRIBUTE50	PLANTS ABROAD - CONSTANT "PA"
LINE.USER_ELEMENT.ATTRIBUTE42	G/L ACCOUNT NUMBER
LINE.USER_ELEMENT.ATTRIBUTE43	COST CENTER
LINE.USER_ELEMENT.ATTRIBUTE44	CREDIT/DEBIT FLAG (S,H)/ GM - Used in Goods Movement Program
LINE.USER_ELEMENT.ATTRIBUTE45	ROUTE NAME
LINE.USER_ELEMENT.ATTRIBUTE46	SAP TAX CODE for Item and NG_Item Journey/ TAX CODE OF ORIGINAL DOCUMENT FOR CASH DISCOUNTS AT TIME OF PAYMENT CALCULATION
LINE.USER_ELEMENT.ATTRIBUTE47	US-specific configuration that applies to the line.
LINE.USER_ELEMENT.ATTRIBUTE49	Used for (Sequential Number of Account Assignment) for item request journey for SES - /IDT/JOURNEY_NG_ITEM_SERV_ENTR.
LINE.USER_ELEMENT.ATTRIBUTE50	DIVISION/ BUSINESS AREA (depending on module)

LIST OF TRANSACTION CODES

Below is a list of the transaction codes added to the system for the IDT integration tables and processes. This list can be used by security personnel in order to assign transactions to roles for security authorizations.

Transaction code	Used for
/IDT/SELECT_ROUTE_V	Select Route for SD and Purchasing View Only
/IDT/AUTO_JOURNEYS_V	Automatically Processed Journeys View Only
/IDT/ROUTE_GROUP_V	Route Groups View Only
/IDT/ADDRESS_TYPES_V	Address Types View Only
/IDT/ADDRESS_SOURC_V	Address Sources View Only
/IDT/LOG_CONFIG_V	Log Configuration View Only
/IDT/NEG_TAX_TYPE_V	Negate Direction of Tax Types View Only
/IDT/FI_CONTROL_V	FI Process Control Configuration View Only
/IDT/COUNTRY_G_V	Country Groups View

Transaction code	Used for
/IDT/CG_ASSIGN_V	Country Group Assignment View
/IDT/BASE_MAPPING_V	Base Mappings View Only
/IDT/FIELD_MAPPING_V	Field Mappings View Only
/IDT/ADDRESS_MAP_V	Address Mapping View Only
/IDT/PROXY_CONFIG	ONESOURCE Proxy Configuration
/IDT/LOG_NUMBR_RANGE	Log Number Range
/IDT/WS	Web Service Security Configuration
/IDT/LOG_CONFIG	Configure Logs
/IDT/ROUTE_CONFIG	Route Configuration
/IDT/DETER_COND_TYPE	Determine Condition Type for Taxes
/IDT/ROUTE_GROUP	Route Groups
/IDT/NEG_TAX_TYPE	Negate Direction of Tax Types
/IDT/FI_CONTROL	FI Process Control Configuration
/IDT/FIELD_MAPPINGS	Field Mappings
/IDT/ADDRESS_MAPPING	Address Mapping
/IDT/COUNTRY_GROUPS	Country Groups
/IDT/CNTRY_GRP_ASSIG	Country Group Assignment
/IDT/TAX_SUM_CONFIG	Configuration for Tax Summarization
/IDT/EXEMPT_SETTINGS	Tax Exemption Settings
/IDT/GEN_CONFIG_VALS	General Configuration Values
/IDT/DET_TAX_CODE	SAP Tax Code/Det Tax Code Index
/IDT/CASH_DISCOUNT	Cash Discount/Det Tax Code Index
/IDT/US_LOGIC	US Specific Logic
/IDT/OFFSET_CONFIG	Offset tax line configuration
/IDT/PLANTS_ABROAD	Plants Abroad Billing Types
/IDT/TAX_CODE_REL	Tax Code Relevancy
/IDT/AUTO_JOURNEYS	Automatically Processed Journeys
/IDT/ADDRESS_SOURCES	Address Sources
/IDT/LOG	Log Reader
/IDT/LOG_ARCHIVE	Log Archival – Delete/Export to ZIP File (used for both foreground and background processing)
/IDT/AUDIT_DATABASE	Audit Database Transactions Update used for foreground processing
/IDT/RECON_EXTRACT	ERP Reconciliation Extract Report
/IDT/US_TAX_REPORT	Copy of US Tax Report

Transaction code	Used for
/IDT/TAX_FILTERS	Tax Filters Configuration
/IDT/VERSION	Global Next Product Version
/IDT/WS	Web Service Security Configuration

RECONCILIATION EXTRACT PROGRAM REFERENCES

RECONCILIATION EXTRACT MAPPED FROM SAP

Below table shows the mapping from SAP to ONESOURCE Indirect Tax Reconciliation Extract Output.

Output field name	SAP field name	Table-fieldname
External Company ID	SAP company code	BKPF-BUKRS
Host System	SAP system name (e.g. CO3)	SY-SYSID
Calling System	SAP client number	SY-MANDT
Company Role	Buyer (B) / Seller (S)	
ERP Transaction ID	Reference key of SAP Accounting document	BKPF-AWKEY
Document Number	Accounting document number	FI: BKPF-BELNR LIV: RBKP-BELNR SD: VBRK-VBELN
Document Type	Accounting document type	BKPF-BLART
Document Description	Accounting document header text	BKPF-BKTXT
Document partner number	Customer number (AR transactions) /	BSEG-KUNNR / BSEG-LIFNR
Vendor number (AP transactions)	BSEG-KUNNR /	KNA1-NAME1 / LFA1- NAME1
ERP Period	Fiscal Period	BKPF-MONAT
Document Date	Document date in format : DD-MON-YYYY, E.g. 12-Aug-2012	ETXDCI-ZZINVDATE if not NULL, else ETXDCI-TAX_DATE
Fiscal Date	Posting Date Date Format : DD-MON-YYYY	BKPF-BUDAT
Gross Amount	Tax Base Amount in Local (Company code) Currency	BSET-HWBAS
Tax Amount	Tax Amount in Local (Company code) Currency	BSET-HWSTE

Output field name	SAP field name	Table-fieldname
Document currency	Document currency key	BKPF-WAERS
Optional UDF 1	Custom field based on custom BAPI implementation	
Optional UDF 2	Custom field based on custom BAPI implementation	
Optional UDF 3	Custom field based on custom BAPI implementation	
Optional UDF 4	Custom field based on custom BAPI implementation	
Optional UDF 5	Custom field based on custom BAPI implementation	

EXTRACT SELECTION SCREEN FIELD DEFINITION

The table below shows in detail each of the selection screens available at runtime of the Reconciliation Extract:

Description	Field Name	Type	Optional / Required	Default value
Company Code	BKPF-BUKRS	Parameter	R	
Fiscal Year	BKPF-GJAHR	Parameter	R	
Posting Date	BKPF-BUDAT	Select options	O	
Posting Period	BKPF-MONAT	Select options	O	
Tax Code	BSEG-MWSKZ	Select options	O	
Select Zero/Exempt tax records		Check Box	O	X
Application / Local server path		Radio Buttons	O	Application server
Application Server	RLGRAP-FILENAME	Parameter	O	TVARV variable value

Description	Field Name	Type	Optional / Required	Default value
Presentation Server	RLGRAP-FILENAME	Parameter	O	User parameter value
Company Code Prepend		Parameter	O	
Package Size		Parameter	R	10000

ONESOURCE INDIRECT TAX TRANSPORT OBJECTS

This section lists the technical objects delivered with the Reconciliation Extract Report transport provided:

Object Name	Object Type	Description of Object
/IDT/	Name space	Container for all objects delivered by Thomson Reuters
/IDT/RECON_EXTRACT	Package	Package containing all report development objects
/IDT/RECEXT	Transaction code	Transaction code to run the Reconciliation extract report
/IDT/RECON_EXTRACT	Report program	Main program
/IDT/RECON_EXTRACT_TOP	Include	Include contains global types and data declaration
/IDT/RECON_EXTRACT_SEL	Include	Selection screen is defined under this include
/IDT/RECON_EXTRACT_FORM	Include	Include contains form routines
/IDT/BADIRECON_EXTRACT	BAdI definition	BAdI definition to add logic for 5 user defined fields
/IDT/EXTRACT_OUTPUT	Structure	Output file structure
/IDT/INT_RECON_EXTRACT	Interface	BAdI Interface
/IDT/CL_RECON_EXTRACT	Class	Class implementing the BAdI interface
/ IDT/EXTRACT_UDF	Structure	BAdI return data structure

Object Name	Object Type	Description of Object
/ IDT/APP_SERVER_PATH	TVARV global variable	Variable in TVARV table to maintain Application server path
/IDT/LCLFILEPATH	Parameter ID	User parameter to maintain default Presentation server path

ENABLING CUSTOM FIELDS

The file format of the Reconciliation Report allows for five (5) user defined fields (UDF) as pass through elements. Companies wishing to use these fields can use custom code to set a value from SAP and extract it into one of the UDF's. These values then will be imported into the Reporting reconciliation tables and show in the Reconciliation Report process.

A BAdI **/IDT/BADIRECON_EXTRACT** has been provided as part of the SAP Reconciliation Report which can be implemented by the customers. The BAdI method returns the 5 UDF's in the structure /IST/EXTRACT_UDF.