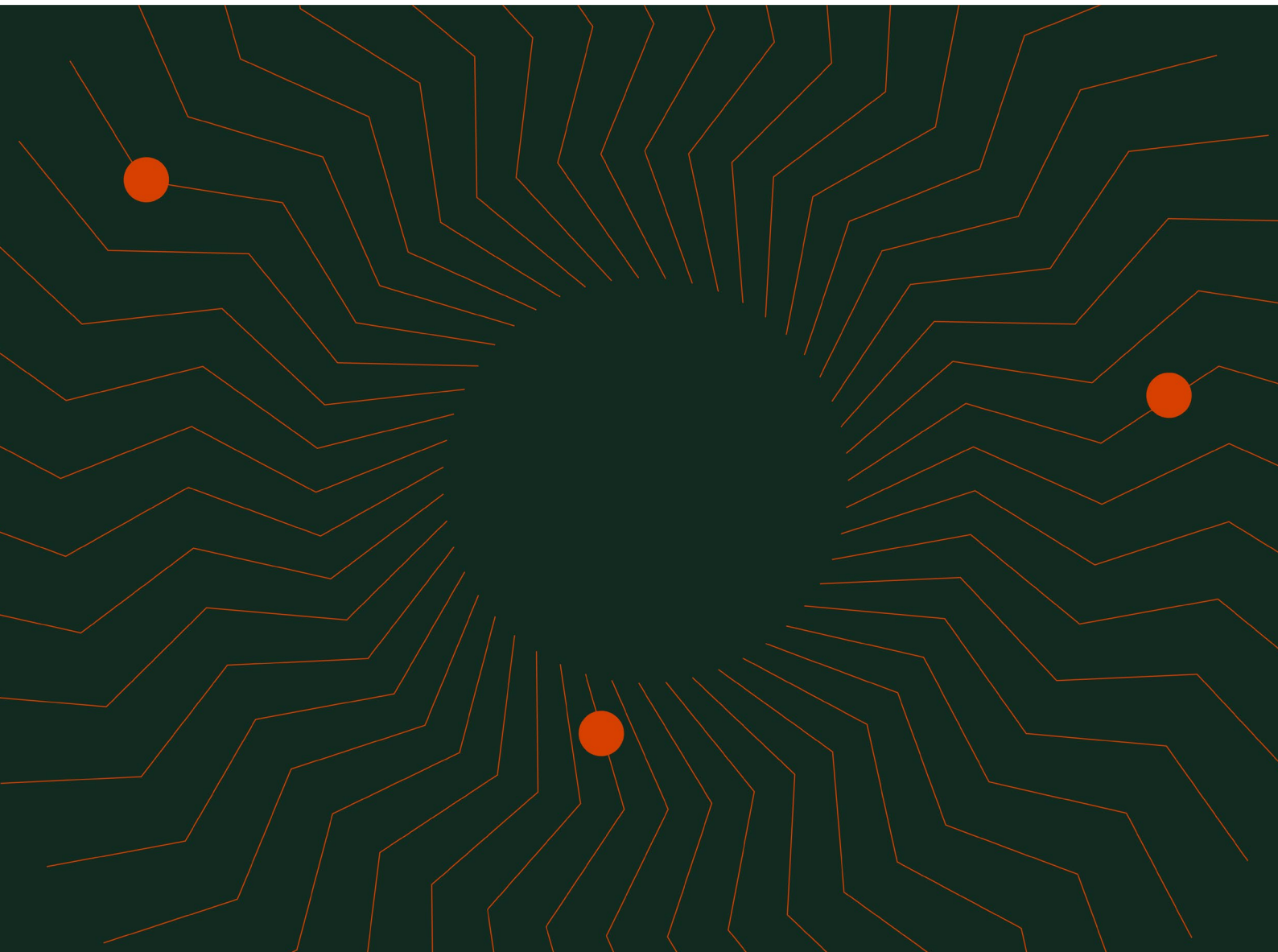


ONESOURCE Indirect Tax Compliance SAP S4/HANA Integration

July/2025



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INTEGRATION OVERVIEW

ONESOURCE Indirect Tax Compliance (OIC) integration for SAP is designed to integrate the SAP ERP with OIC with an extensible framework for customers to easily execute the Extraction and Transformation processes and transfer the transactional tax information to the OneSource compliance tool with a user-friendly selection screen.

Key functionalities of this tool include the ability to schedule jobs both in foreground and background.

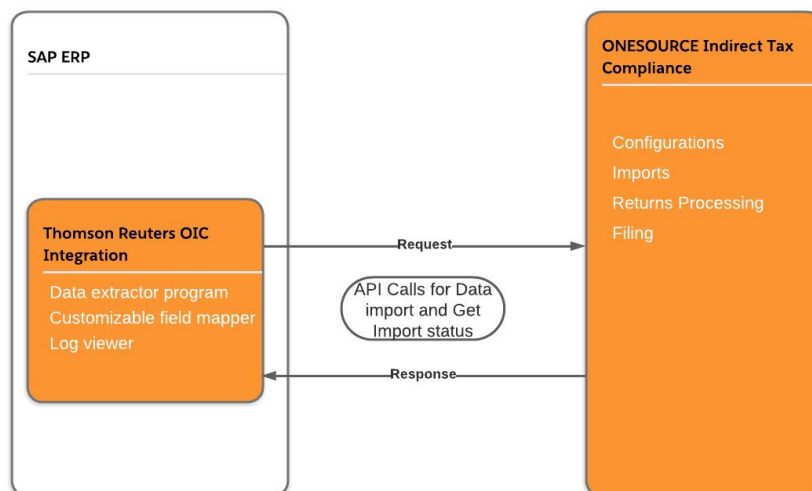
Additionally, users can download data for verification and reconciliation purposes, ensuring the accuracy of information sent to OIC. The tool is equipped with an integrated log viewer, enabling users to track uploads directly from SAP screens without the need to log into the OneSource compliance tool separately.

Accessible through a User menu after the installation of the provided transport package, this tool enhances user convenience and efficiency in managing tax compliance processes.

This release version supports G/L Transactions and INTRASTAT reports in EU countries in addition to Value Added Tax (VAT) and European Sales List (ESL), and can reconcile INTRASTAT and G/L Transactions reports against VAT-ESL (European Sales List) transactions on ONESOURCE Indirect Tax Compliance platform.

Supported SAP S/4HANA versions are 2021 & support pack stack(SPS) 6 and onwards.

Architectural diagram



Quick view of Features

FUNCTION	DESCRIPTION
Pre-defined field mapping	This integration offers pre-defined field mapping
Data selection screen	User can use the selection screen to select the required data
Foreground and background scheduling options	User can run this program both in foreground and background
Downloading options to Presentation and Application layer	User can either download to Presentation server or application server
Import status log	User can view the status of the import using import id
Extensible framework with BADIs	BADIs are provided for any customizations
Customizable field mapping with overriding and appending options	Users can add a new field or override an existing mapping.
Log viewer	Users can view the logs and filter the logs

INSTALLING INTEGRATION

IMPORTING TRANSPORT OBJECTS

Thomson Reuters provided transports will need to be imported into the clients Development system to setup ONESOURCE Indirect Tax Compliance Integration for SAP. All our objects are in the Thomson Reuters Indirect Tax namespace '/TROIC/'. We don't change any customer owned objects. The sequence of transport will be same for upgrades and new installations.

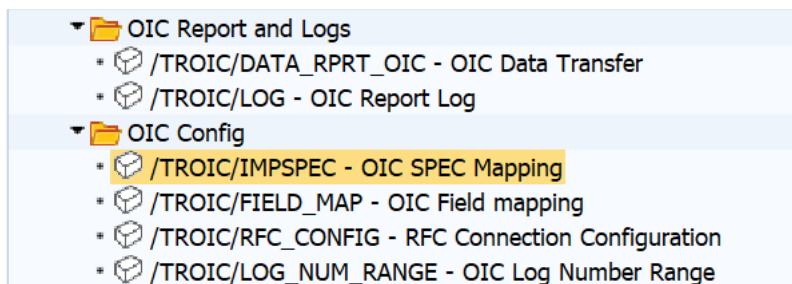
Transport Package Information

TRANSPORT	DESCRIPTION
FS4K900472	ONESOURCE Indirect Tax Compliance Integration-1.1.0.0-Code
FS4K900473	ONESOURCE Indirect Tax Compliance Integration-1.1.0.0-Config
FS4K900502	ONESOURCE Indirect Tax Compliance Integration-1.1.0.0-Roles
FS4K900599	Hotfix: OIC Thousand Separator

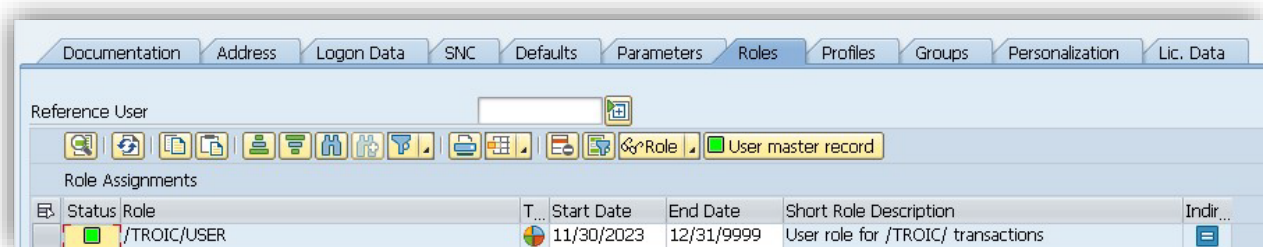
ADDING USER MENU TO A ROLE

For users to be able to access the new ONESOURCE Indirect Tax for SAP setup, configurations, and reports we delivered an SAP User Menu. To access this User Menu, provide your users with the role: /TROIC/USER.

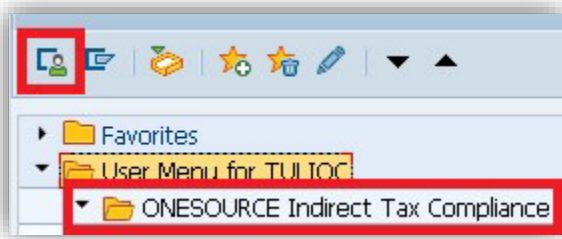
/TROIC/USER contains all the TROIC transactions codes and the full ONESOURCE User Menu. This would normally be given to users that oversee management of the system, configuration, and mapping.



To assign the role to a user, go to Transaction Code SU01. On the Roles Tab, insert the new role name, with start and end dates.



Once the role has been assigned a user can access the User Menu from the main SAP start screen as follows by selecting the **User Menu** icon or **Ctrl+F10**.

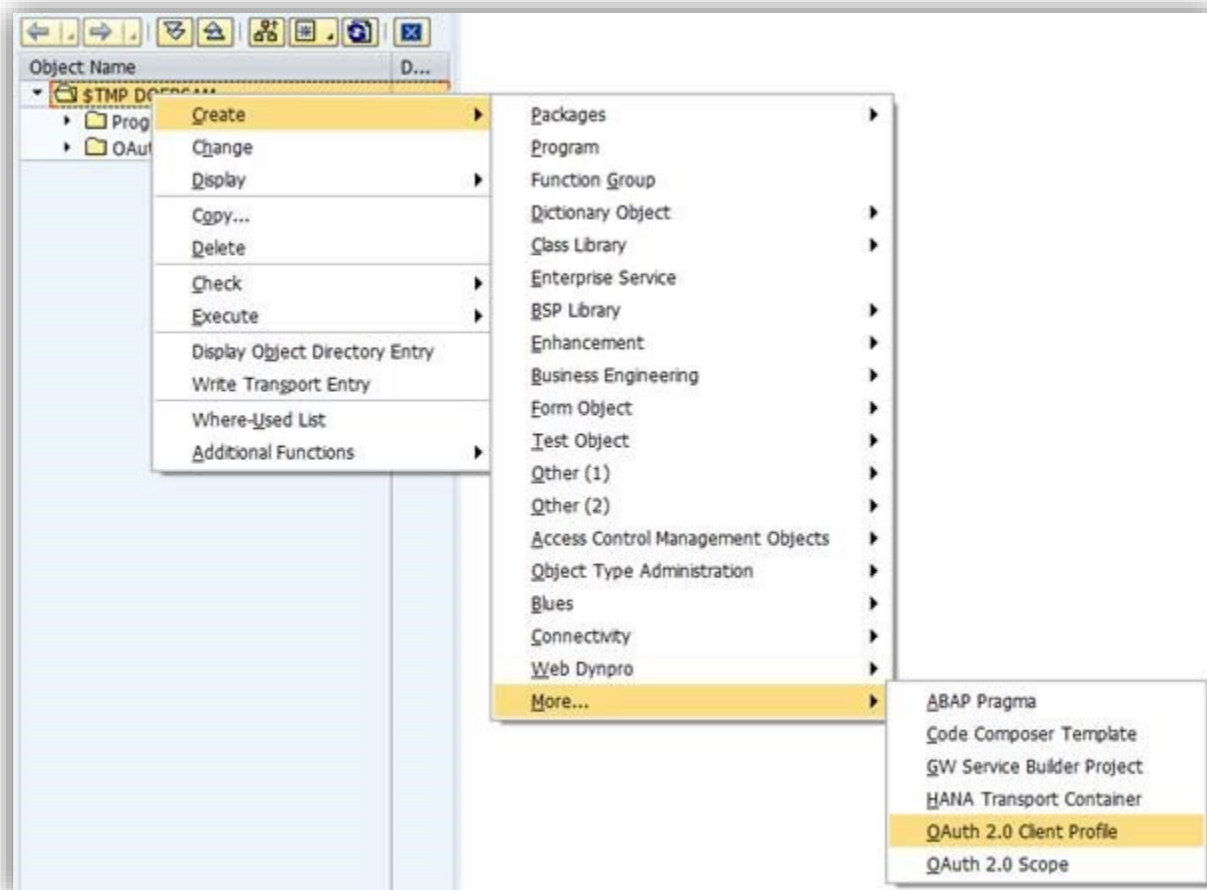


OAUTH 2.0 Profile Creation

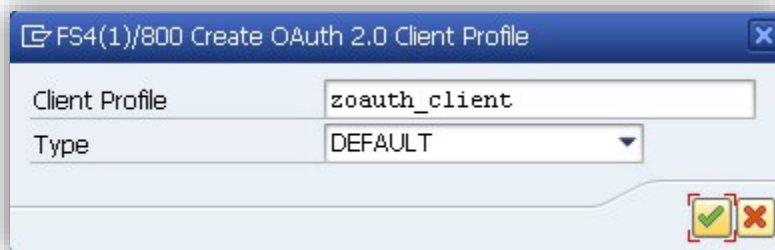
Users must set up OAuth2.0 profile and RFC configuration to connect SAP to OIC.

Creating OAuth2.0 client profile:

1. Start the object navigator (transaction SE80).
2. Choose Development Object in the dropdown list.
3. To create a development object in the SAP namespace, choose Create -> OAuth 2.0 Client Profile in the context menu of the object name.



1. Enter the object name in the Client Profile field of the popup as 'ZOAUTH_CLIENT' (or any of your preference).
2. Choose the type of service provider as 'DEFAULT'



3. Also, provide the scope as urn:tr:onesource:auth:api:indirecttaxcompliance and activate the client profile.

NOTE: If you have multiple clients in OIC, reach out to Professional services team.

Display OAuth 2.0 Client Profile

Profile: ZOAUTH_CLIENT Saved

Type: DEFAULT

Administration Scopes

SCOPE
urn:tr:onesource:auth:api:indirecttaxcompliance

OAUTH 2.0 Profile Configuration

1. Go to transaction OA2C_CONFIG to configure the OAuth2.0
2. Click on 'Create'.
3. Select the OAuth2.0 Client Profile as 'ZOAUTH_CLIENT'.
4. Provide the Configuration Name (can be any of your preference) and Client ID given by OIC team.

Create a new OAuth 2.0 client.

OAuth 2.0 Client Profile: ZOAUTH_CLIENT

Configuration Name: ZOAUTH_CLIENT

OAuth 2.0 Client ID:

OK

5. Maintain the Client Secret.
6. Also provide the Token Endpoint given by Professional services team.

Details

Administration

Scopes

Enhancement Settings

Created By

 TULIOC

Created On

 10/26/2023

Created At

 07:20:46 PM

Changed By

General Settings

Service Provider Type:

 DEFAULT

Profile:

 ZOAUTH_OIC

Configuration Name:

 ZOAUTH_OIC

OAuth 2.0 Client ID:

OAuth 2.0 Client ID (Internal):

Client Secret:

Authorization Server Settings

Authorization Endpoint:

 https://api/oauth2/v1/token

Token Endpoint:

 https://api/oauth2/v1/token

Revocation Endpoint:

 https://

7. Enter the Client Authentication as 'Basic', Resource Access Authentication as 'Header Field' and select grant type as 'Client Credentials'.
8. Click on save. The OAuth2.0 configuration name is 'ZOAUTH_CLIENT'.

Access Settings

Client Authentication: ☒ Basic
☐ Form Fields
☐ Client Certificate

Resource Access Authentication: ☒ Header Field
☐ Form Field

Selected Grant Type: ☐ Current user related
☐ Resource Owner Password Credentials
☒ Client Credentials

Grant Type (Current User related): ☐ Authorization Code
☐ SAML 2.0 Bearer Assertion

RFC Destination Configuration

Create RFC Destination

1. Go to transaction SM59 to configure the OAuth2.0 2.
2. Click on 'Create'.
3. Enter OIC_API_CALL_QA (or any of your preference) as Destination.
4. In Connection Type select "HTTP connection to external server".

FS4(1)/800 Create Destination	
Destination	OIC_API_CALL_QA
Connection Type	G HTTP connection to external server ▼
✓ ✗	

5. Enter the host provided by OIC team.
6. Also provide the path prefix /indirect-tax-compliance/v1/imports.

RFC Destination OIC_API_CALL_QA

Connection Test

RFC Destination

Connection Type HTTP Connection to External Server Description

Description

Description 1

Description 2

Description 3

Administration Technical Settings Logon & Security Special Options

Target System Settings

Host Port

Path Prefix

HTTP Proxy Options

Proxy Host

Proxy Service

Proxy User

Proxy PW Status

7. In the 'Logon & Security' tab:

Click in 'OAuth Settings' button and enter the values accordingly with Configured in OAuth 2.0 Client.

The Profile should be the same as created before in OAUTH 2.0 Profile Creation and the Configuration should be the same from OAUTH 2.0 Profile Configuration.

The screenshot shows the 'Logon & Security' tab in the SAP configuration interface. Under the 'Logon Procedure' section, the 'Logon with User' sub-section is active. The 'Do not use a user' radio button is selected. A yellow box with a red border highlights the 'OAuth Settings' button. Below this, the 'User' field is empty and the 'PW Status' is 'is initial'. The 'Logon with Ticket' section below it has 'Do not send logon ticket' selected, with 'Send ticket without reference to target system' and 'Send assertion ticket for dedicated target system' as options. 'System ID' and 'Client' fields are also present.

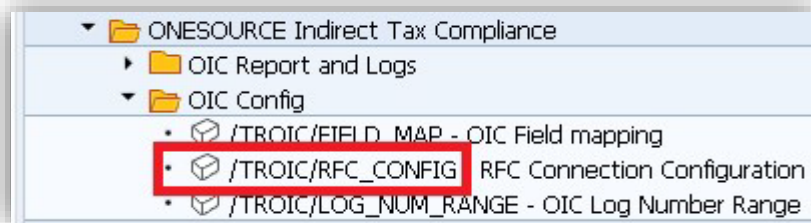
The screenshot shows a dialog box titled 'FS4(1)/800 OAUTH Settings'. It has two input fields: 'Profiles' and 'Configuration', both containing the text 'ZOAUTH_CLIENT'. The 'Configuration' field is highlighted with a yellow background. At the bottom right, there is a 'Reject Settings' button with a red 'X' icon.

Select SSL as 'Active' and SSL Certificate select ANONYM SSL (Anonymous).

The screenshot shows the 'Logon & Security' tab, specifically the 'Logon with MQTT/AMQP' section. The 'User' field is empty, 'PW Status' is 'is initial', and the 'Password' field is filled with asterisks. Below this is the 'Security Options' section. Under 'Status of Secure Protocol', the 'Active' radio button is selected, highlighted with a red box. The 'SSL Certificate' dropdown menu is set to 'ANONYM SSL Client (Anonymous)'. There is also a 'Do not use certificate for logon' checkbox which is unchecked. At the bottom, there is an 'Authorization for Destination' field.

RFC configuration set up in OIC Integration

To have one or, in case of more than one RFC config point to other/contingencies OIC API systems, you need to configure that in /TROIC/RFC_CONFIG transaction, as below. Remember to enter the same RFC Destination as created in [Create RFC Destination](#).



Activate the respective RFC destination created in the prior sections. If both lines are active, highest sort order takes precedence for the same username.

Change View "Configuration for RFC API Call": Overview

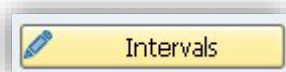
68 New Entries

Configuration for RFC API Call				
	Sort Order	Active	User Name	RFC Destination
	100001	☒	*	OIC_API_CALL_QA
	100002	☐	*	OIC_API_CALL_UAT

CREATING A LOG NUMBER RANGE

The request and response can be logged in SAP in JSON format. Logging can be configured within the Integration setup, and logs can be searched and viewed in SAP using a provided transaction. Review the User Guide section for more details on logging. For logs to be stored with SAP a log number range for Object /TROIC/LOG needs to be setup:

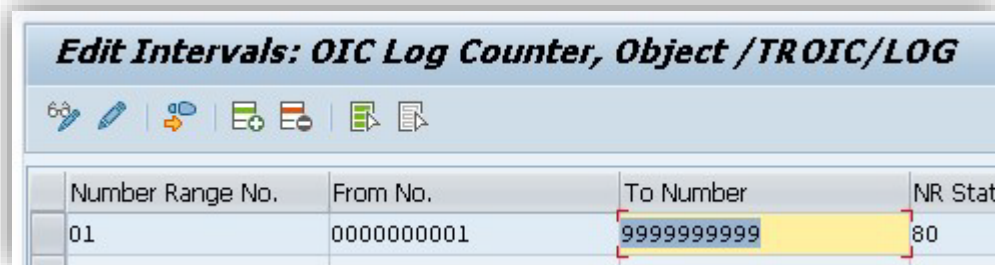
1. Transaction Code /N/TROIC/LOG_NUM_RANGE
2. Press **Change Intervals** to create a new number range interval.



3. Press **Insert Line (F6)** to insert a new line.



4. Make sure that you use a value of 01 for the Number range number. Currently we only support one number range of value 01.
5. Fill out the "From Number and To Number". We recommend opening the number range as wide as possible.



Edit Intervals: OIC Log Counter, Object /TROIC/LOG			
Number Range No.	From No.	To Number	NR Stat
01	0000000001	9999999999	80

6. SAVE the log number range.

Extensible Framework

Field Mapping

To determine the required OIC target fields, the transaction ‘/TROIC/FIELD_MAP’ is utilized. This transaction facilitates the mapping of the SAP S/4HANA source data tables and to the corresponding target OIC tool fields.

Menu path

Below screenshots represent the S/4HANA to OIC standard field mapping for VAT-ESL, G/L Transactions, and INTRASTAT reports.

Below screenshots represent standard mappings for the respective report types.



Display View "Field Mapping for OIC": Overview

Field Mapping for OIC

Standard	Product	Report Type	Sort Order	Active	Entry Grp	CoCd	Source Base	Source Field	Target Field	Comments
☒	OIC	VAT-ESL V...	000010	☒	*	*	BKPF	BUKRS	EntityCode	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000020	☒	*	*	BKPF	BUDAT	ReportingDate	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000030	☒	*	*	BKPF	BUDAT	TransactionDate	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000040	☒	*	*	BKPF	BELNR	TransactionID	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000050	☒	*	*	BKPF	BELNR	InvoiceID	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000060	☒	*	*	BKPF	BKTX	Description	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000070	☒	*	*	CALC_BSEG	INV_TYPE	InvoiceType	LOGICAL VALUE DERIVED FROM BSEG USING KOART AND SHKZG
☒	OIC	VAT-ESL V...	000080	☒	*	*	BKPF	BLDAT	InvoiceDate	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000090	☒	*	*	BKPF	HWAER	Currency	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000100	☒	*	*	BKPF	KUFSF	TransactionExRate	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000110	☒	*	*	BKPF	WAERS	TransactionCurrency	CASCADED VALUE FROM BKPF
☒	OIC	VAT-ESL V...	000120	☒	*	*	CALC_BSEG	KOART_APAR	TransactionTypeCode	LOGICAL VALUE DERIVED FROM BSEG USING KOART
☒	OIC	VAT-ESL V...	000130	☒	*	*	CALC_BSEG	KUNNR_NAME	CustomerName	LOGICAL VALUE DERIVED FROM BSEG
☒	OIC	VAT-ESL V...	000140	☒	*	*	CALC_BSET	SUP_JURID	SupplierJurisdictionID	FIRST 2 CHARACTERS OF SUPPLIER VAT NUMBER
☒	OIC	VAT-ESL V...	000150	☒	*	*	CALC_BSEG	LIFNR_NAME	SupplierName	LOGICAL VALUE DERIVED FROM BSEG
☒	OIC	VAT-ESL V...	000160	☒	*	*	CALC_BSET	GROSS_AMT	TransactionAmountGross	CALCULATED VALUE FROM BSET-FWBAS AND BSET-FWSTE
☒	OIC	VAT-ESL V...	000170	☒	*	*	CALC_BSET	FWBAS	TransactionAmountNet	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	VAT-ESL V...	000180	☒	*	*	CALC_BSET	FWSTE	GeneralLedgerAmount	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	VAT-ESL V...	000190	☒	*	*	CALC_BSET	FWSTE	TransactionAmountTax	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	VAT-ESL V...	000200	☒	*	*	BSET	HKONT	GeneralLedgerAccount	DIRECT FIELD
☒	OIC	VAT-ESL V...	000210	☒	*	*	CALC_BSET	KBETR	TaxClassificationRate	DIRECT FIELD (ABSOLUTE VALUE)
☒	OIC	VAT-ESL V...	000220	☒	*	*	BSET	MWSKZ	TaxClassificationCode	DIRECT FIELD
☒	OIC	VAT-ESL V...	000230	☒	*	*	CALC_BSET	SUP_VAT	SupplierVATNumber	FOR AP TRANSACTION, MAPPED TO COMPANY CODE VAT NUMBER ELSE BSET-STCEG
☒	OIC	VAT-ESL V...	000240	☒	*	*	CALC_BSET	CUST_VAT	CustomerVATNumber	FOR AP TRANSACTION, MAPPED TO COMPANY CODE VAT NUMBER ELSE BSET-STCEG
☒	OIC	VAT-ESL V...	000250	☒	*	*	BSET	STCEG	TaxNumber	DIRECT FIELD
☒	OIC	VAT-ESL V...	000260	☒	*	*	CALC_BSET	CUST_JURID	CustomerJurisdictionID	FIRST 2 CHARACTERS OF CUSTOMER VAT NUMBER
☒	OIC	VAT-ESL V...	000270	☒	*	*	BSET	KTOSL	TransactionKey	TRANSACTION KEY

Field Mapping for OIC

Standard	Product	Report Type	Sort Order	CoCd	Source Base	Source Field	Target Field	Comments
☒	OIC	GL-T GL-TR	000010	*	BKPF	BUKRS	EntityCode	CASCADED VALUE FROM BKPF
☒	OIC	GL-T GL-TR	000020	*	BSET	HKONT	GeneralLedgerAccount	DIRECT FIELD
☒	OIC	GL-T GL-TR	000030	*	CALC_BSET	FWSTE	GeneralLedgerAmount	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	GL-T GL-TR	000040	*	BKPF	BLDAT	InvoiceDate	CASCADED VALUE FROM BKPF
☒	OIC	GL-T GL-TR	000050	*	BKPF	BELNR	InvoiceID	CASCADED VALUE FROM BKPF
☒	OIC	GL-T GL-TR	000060	*	BSEG	HBUDAT	PostingDate	CASCADED VALUE FROM BKPF
☒	OIC	GL-T GL-TR	000070	*	BSET	MLDDT	ReportingDate	CASCADED VALUE FROM BKPF
☒	OIC	GL-T GL-TR	000080	*	BSET	MWSKZ	TaxClassificationCode	DIRECT FIELD
☒	OIC	GL-T GL-TR	000090	*	CALC_BSET	FWBAS	TransactionAmountNet	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	GL-T GL-TR	000100	*	CALC_BSET	FWSTE	TransactionAmountTax	DIRECT FIELD WITH DEBIT CREDIT SIGNS
☒	OIC	GL-T GL-TR	000110	*	CALC_BSEG	KOART_APAR	TransactionTypeCode	LOGICAL VALUE DERIVED FROM BSEG USING KOART

Field Mapping for OIC								
Standard	Product	Report Type	Sort Order	CoCd	Source Base	Source Field	Target Field	Comments
☒	OIC	INTRASTAT	▼ 000010	*	/ECRS/RPIT	PTVAT	CustomerVATNumber	
☒	OIC	INTRASTAT	▼ 000020	*	/ECRS/RPIT	PTCTI	DestinationJurisdictionID	
☒	OIC	INTRASTAT	▼ 000030	*	/ECRS/RPIT	INCZO	DestinationRegionArrival	
☒	OIC	INTRASTAT	▼ 000040	*	/ECRS/POIA	BUKRS	Entitycode	
☒	OIC	INTRASTAT	▼ 000050	*	/ECRS/CALC_R.DIREC		Flow	
☒	OIC	INTRASTAT	▼ 000060	*	/ECRS/RPIT	MAKTX	GoodsDescription	
☒	OIC	INTRASTAT	▼ 000070	*	/ECRS/RPIT	MOTAB	ModeTransport	
☒	OIC	INTRASTAT	▼ 000080	*	/ECRS/RPIT	BTTYP	NatureTransaction	DIRECT
☒	OIC	INTRASTAT	▼ 000090	*	/ECRS/RPIT	CTOOI	OriginArrivalJurisdictionID	
☒	OIC	INTRASTAT	▼ 000100	*	/ECRS/RPHD	RPCTY	OriginJurisdictionID	
☒	OIC	INTRASTAT	▼ 000110	*	/ECRS/RPIT	REGIN	OriginRegionDispatch	
☒	OIC	INTRASTAT	▼ 000120	*	/ECRS/CALC_R.PORTI_LO		PortLoading	
☒	OIC	INTRASTAT	▼ 000130	*	/ECRS/CALC_R.PORTI_UN		PortUnloading	
☒	OIC	INTRASTAT	▼ 000140	*	/ECRS/CALC_R.LCHTS		ReportingDate	
☒	OIC	INTRASTAT	▼ 000150	*	/ECRS/RPIT	SPQUA	SupplementaryQuantity	
☒	OIC	INTRASTAT	▼ 000160	*	/ECRS/RPIT	COMCD	CommodityCode	
☒	OIC	INTRASTAT	▼ 000170	*	/ECRS/RPIT	INCOI	DeliveryTermsFirstSub	
☒	OIC	INTRASTAT	▼ 000180	*	/ECRS/RPIT	ITQUA	Quantity	
☒	OIC	INTRASTAT	▼ 000190	*	/ECRS/CALC_R.INVAL		TransactionAmountNet	
☒	OIC	INTRASTAT	▼ 000200	*	/ECRS/RPIT	STVAL	TransactionStatisticalValue	
☒	OIC	INTRASTAT	▼ 000210	*	/ECRS/CALC_R.DIREC		TransactionTypeCode	
☒	OIC	INTRASTAT	▼ 000220	*	/ECRS/CALC_R.INVAL		ValueSupplyLocalCurrency	DIRECT FIELD WITH DEBIT CREDIT SIGNS

Features of Extensibility framework

1. Users can use this framework to view the field mapping delivered as well as customize the field mapping based on the customer specific requirements by creating a custom entry with a highest sort order either to override pre-defined mapping or to add a new mapping.
2. Users have the capability to either activate or deactivate using 'Active' Check box and to restrict the mapping for a specific company code using 'CoCd'.
3. Data extraction for VAT-ESL and G/L Transactions report is performed by leveraging BSET entries and incorporating other relevant values from either BKPFI, BSEG using CDS views /TROIC/BKPFI_DDF, /TROIC/BSEG, /TROIC/BSET and for INTRASTAT report it is performed using /ECRS/POIA - Provider of Information (Countries), /ECRS/RPHD - INTRASTAT Declaration Header Data, /ECRS/RPIT - INTRASTAT Declaration Item Data tables using CDS views /TROIC/RPHD_CDS, /TROIC/ECRS_ITEM, /TROIC/ECRS_POIA for the corresponding report.
4. Except for mappings labeled 'DIRECT FIELD' in the comments section, all others incorporate a defined logic for transferring values to the target. The label 'DIRECT FIELD' indicates that the value has been directly mapped from the standard SAP S/4HANA source table to the OIC application target field without any manipulation.
5. The label 'CASCADED VALUE' signifies that the entry from the source table is manipulated across multiple lines of BSET, BSEG, /ECRS/RPHD, /ECRS/RPIT.
6. The column 'Standard' is utilized to indicate that a mapping line is part of the pre-delivered standard mappings provided by Thomson Reuters.

Refer the [section](#) for customizing instructions.

Use of structures CALC_BSET and CALC_BSEG

We created structures, CALC_BSEG and CALC_BSET for VAT-ESL and G/L Transactions, /TROIC/RPHD_CALC_S and /TROIC/RPIT_CALC_S for INTRSTAT reports specifically designed for field mapping. These structures are filled up in standard Thomson Reuters code, intended to accommodate any necessary calculations and data manipulations during the field mapping process.

Structure	/TROIC/CALC_BSEG	Active					
Short Description	Calculative BSEG						
Attributes	Components	Input Help/Check	Currency/quantity fields				
 Built-In Type 1 / 5							
Component	Typing Method	Component Type	Data Type	Length	Deci...	Coordinate	Short Description
BELNR	1 Types	BELNR_D	CHAR	10	0	0	Accounting Document Number
KOART APAR	1 Types	CHAR2	CHAR	2	0	0	Component of the Version Number
LIFNR_NAME	1 Types	NAME1_GP	CHAR	35	0	0	Name 1
KUNNR_NAME	1 Types	NAME1_GP	CHAR	35	0	0	Name 1
INV_TYPE	1 Types	CHAR12	CHAR	12	0	0	Character Field of Length 12

Structure

/TROIC/CALC_BSET

Active

Short Description

Calculative BSET

Attributes

Components

Input Help/Check

Currency/quantity fields



Built-In Type

1 / 12

Component	Typing Method	Component Type	Data Type	Length	Deci...	Coordinate	Short Description
BUKRS	1 Types	BUKRS	CHAR	4	0		0Company Code
BELNR	1 Types	BELNR_D	CHAR	10	0		0Accounting Document Number
GJAHR	1 Types	GJAHR	NUMC	4	0		0Fiscal Year
BUZEI	1 Types	BUZEI	NUMC	3	0		0Number of Line Item Within Accounting Document
SUP_VAT	1 Types	STCEG	CHAR	20	0		0VAT Registration Number
SUP_JURID	1 Types	CHAR2	CHAR	2	0		0Component of the Version Number
CUST_VAT	1 Types	STCEG	CHAR	20	0		0VAT Registration Number
CUST_JURID	1 Types	CHAR2	CHAR	2	0		0Component of the Version Number
FWSTE	1 Types	FWSTE	CURR	23	2		0Tax Amount in Document Currency
FWBAS	1 Types	FWBAS_BSES	CURR	23	2		0Tax base amount in document currency
KBETR	1 Types	KBETR_TAX	CURR	23	2		0Tax Rate
GROSS_AMT	1 Types	WRBTR	CURR	23	2		0Amount in document currency

[illegible][illegible]

Enhancement Spots – Badls

Two BADls are available to accommodate adjustments tailored to customer requirements. The first occurs before finalizing the output line, while the second takes place after the field mapping. These BADls are presented as enhancement spots, allowing customers to implement changes as needed.

1. /TROIC/ENH_OIC_MOD_LINE:

This BADl offers a dynamic enhancement spot during the creation of the output table line, providing flexibility through its importing and changing parameters. Customers can customize it to align with their specific requirements.

2. /TROIC/ENH_OIC_MOD_AFTER_MAP:

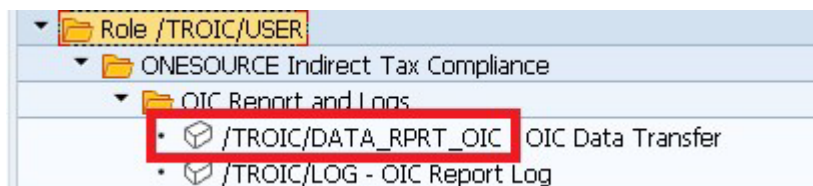
This BADl presents a dynamic enhancement spot after the creation of the output table, triggered post-field mapping and before sending the data to OIC. Customers can tailor it to their needs by leveraging the importing and changing parameters.

USER GUIDE

Users are presented with a selection screen within this integration, allowing them to filter the necessary data that needs to be transmitted to OIC.

This selection screen can be accessed through the integration user menu or the tcode:

/TROIC/DATA_RPRT_OIC



After configuring all the necessary settings, users can execute this program by entering mandatory fields in the selection screen after choosing the 'Report' option. Within this menu, users have the flexibility to either download the data exclusively or send data to OIC without downloading. Both options can be utilized independently or in combination as needed.

NOTE As of this release, VAT & ESL, G/L transactions and INTRASTAT reports are tested end-to-end with standard field mappings.

OIC Data Transfer

Execution Type

☒ Report
☐ Import status

Report Type

☐ VAT and ESL
☐ GL Transactions
☒ Intrastat
☐ SAF-T (future)

Selection Parameters

Provider of Info. GERMANY
Declaration Year 2024 to 2024
Declaration Month 10 to 11
Direction to

Download or Send to OIC

☒ Download
☒ Application Server
Server Path D:\usr\sap\FS4\D00\data
Server File Name TES17_OIC_INTRASTAT.CSV
☐ Presentation Server
Local Path
Local File Name

Select the report type as per requirement. Selection parameters may change based on the report type selected. Once all the required data has been entered, the program can be run either in Foreground or Background.

Download

Users have two options to download the data or send the data to OIC.

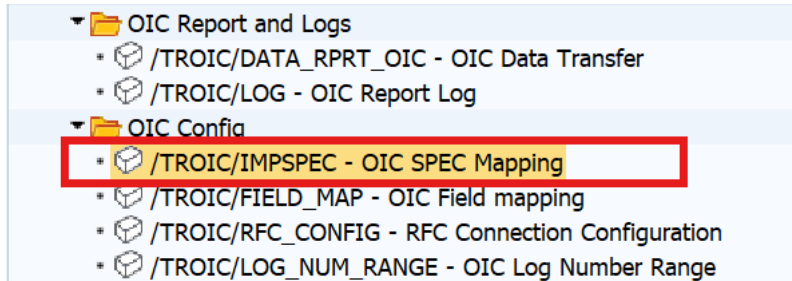
For downloading, follow below steps.

- Application Server- Choose this option to save the file in the directory (AL11 Transaction code) while executing in the background or foreground.
- Presentation Server- Choose this option to download the file to your local folder while executing in the foreground only.

NOTE: Specify the file name extension with .csv

Send data to OIC

For sending the data to OIC, the specification details are required. User can maintain these details in 'OIC Import Specification' configuration table by clicking '/TROIC/IMPSPEC - OIC SPEC Mapping'



Display View "OIC Import Specification": Overview

OIC Import Specification							
Report Type	Sort Order	Active	Import Name	Import Specification Name	Specification Name	Import Type Name	
GL-T GL-TRANSACTION	000001	✓	VN_GLImport_Test_01	Alloc_GLTransactions	Alloc_GLTransactions	GeneralLedger	
INTRASTAT	000001	✓	Intrastat source file	Alloc_Intrastat	Alloc_Intrastat	Intrastat	
VAT-ESL VAT ESL	000001	✓	Test SAP_OIC1	SAP-OIC_Import Spec	SAP_OIC11	Transactions	

Select this option to Send the data to OIC.

Download or Send to OIC

☐ Download
☒ Send data to OIC

Import name

Test SAP_OIC1

Import specification name

SAP-OIC_Import Spec

Specification name

SAP_OIC11

Import type name

Transactions

OIC File Name

☒

Based on the OIC Import Specification config table, the specification details are fetched automatically when user clicks 'Send data to OIC'.

Below are the example screenshots.

When report type is selected as 'VAT-ESL'

Download or Send to OIC	
☒ Download	
☒ Application Server	
Server Path	
Server File Name	
☐ Presentation Server	
Local Path	
Local File Name	
☒ Send data to OIC	
Import name	SAP Integration Test 01
Import specification name	Auto_Upload Test Spec
Specification name	Auto_5C upload
Import type name	Transactions

When report type is selected as 'INTRASTAT'

Download or Send to OIC	
☒ Download	
☒ Application Server	
Server Path	D:\usr\sap\FS4\D00\data
Server File Name	TES17_OIC_INTRASTAT.CSV
☐ Presentation Server	
Local Path	
Local File Name	
☒ Send data to OIC	
Import name	Intrastat source file
Import specification name	Alloc_Intrastat
Specification name	Alloc_Intrastat
Import type name	Intrastat

When report type is selected as 'G/L Transactions'

Download or Send to OIC	
☒ Download	
☒ Application Server	
Server Path	
Server File Name	
☐ Presentation Server	
Local Path	
Local File Name	
☒ Send data to OIC	
Import name	VN_GLImport_Test_01
Import specification name	Alloc_GLTransactions
Specification name	Alloc_GLTransactions
Import type name	GeneralLedger

Once executed per the above selection screen, the file will be downloaded to the specified File Path, data is sent to OIC and the status of each call will be displayed at the end with a unique 'import id'.

Based on OIC import specification configuration table, the specification details are fetched automatically when user clicks 'Send data to OIC'.

Log Report							
Log Count	Imp ID	Date	Time	User Name	Program name	Call Type	Imp Status
677	10747	12/06/2024	14:06:22	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Placeholder	202-Successful
678	10747	12/06/2024	14:06:22	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Upload	200-Successful
679	10747	12/06/2024	14:06:28	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Ingest	200-Successful

NOTE

The format for currency fields is sent as per below in the export file/CSV:

- Thousand Separator as Comma (,)
- Decimal Separator as Dot (.)

Import status

Import status can be obtained by selecting the 'Import status' radio button on the selection screen and entering the corresponding import ID.

OIC Data Transfer

OIC Data Transfer

Status

☐ Report

☒ Import status

 Import ID

NOTE: The same 'Status' Call Type is updated with the latest status for that specific import ID each time the import status is executed.

Log viewer

You can also view the logs of each call made to OIC, using tcode: /N/TROIC/LOG or directly from the OIC user menu.

Users can filter specific logs using selection parameters within the log report.

Log Report

Selection Parameters

Log Counter		to		
Current Date	11/27/2024	to		
Import ID		to		
User Name	KAMALAKAR.R	to		
Import Status				
Program Name		to		

On execution, the below screen is displayed where users can access the JSON response for each call made to OIC.

Log Report

Log Count	Imp ID	Date	Time	User Name	Program name	Call Type	Import Status	OIC Comm
641	10734	11/27/2024	12:48:31	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Placeholder		202-Successful
642	10734	11/27/2024	12:48:31	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Upload		200-Successful
643	10734	11/27/2024	12:49:39	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Ingest		200-Successful
644	10734	11/27/2024	13:11:41	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Status	No Returns found	200-Successful

Log Report

Log Count	Imp ID	Date	Time	User Name	Program name	Call Type	Import Status	OIC Comm
641	10734	11/27/2024	12:48:31	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Placeholder		202-Successful
642	10734	11/27/2024	12:48:31	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Upload		200-Successful
643	10734	11/27/2024	12:49:39	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Ingest		200-Successful
644	10734	11/27/2024	13:11:41	KAMALAKAR.R	/TROIC/DATA_RPRT_OIC	Status	No Returns found	200-Successful

Output

```
{
  "id":10734,
  "status-id":20,
  "status":"No Returns found",
  "error-count":1,
  "rule-error-count":0,
  "active-count":12,
  "edit-count":0,
  "warning-count":10
}
```

‘OIC Communication status’ indicates the response code for each call made from SAP to OIC. On the other hand, ‘Import Status’ reflects the status of the import file sent to OIC.

Customize using field mapping

Users have the flexibility to utilize the field mapping framework, in case any customizations are needed. You can either override an existing field mapping or add a new field in the communication structure.

Highest sort order takes precedence in case of multiple entries with the same target field and company code.

In the example below, a new field mapping is added to the communication structure.

Change View "Field Mapping for OIC": Overview

New Entries

Field Mapping for OIC										
Standard	Product	Report Type	Sort Order	Active	Entry Grp	CoCd	Source Base	Source Field	Target Field	Comments
☐	OIC	VAT ESL	000300	☒	*		GB01 BSET	LSXML	Country/Region for Tax Report	ADDITIONAL FIELD

Along with this, a new target field has to be appended to the back-end communication structure (/TROIC/TARGET_OIC) when using VAT-ESL.

Dictionary: Display Structure

Structure: /TROIC/TARGET_OIC Active

Short Description: Target structure for OIC

Attributes Components Input Help/Check Currency/quantity fields

Built-In Type 8 / 27

Component	Typing Method	Component Type	Data Type	Length	Decim...	Coordinate	Short Description
REPORTINGDATE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
INVOICEID	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
INVOICEDATE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
GENERALLEDGERAMOU...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
GENERALLEDGERACCO...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
ENTITYCODE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
CUSTOMERVATNUMBER	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
CUSTOMERNAME	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
CUSTOMERJURISDICT...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
CURRENCY	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
DESCRIPTION	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
INVOICETYPE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TAXCLASSIFICATION...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TAXNUMBER	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONAMOUNT...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONCURREN...	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONDATE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONID	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONEXRATE	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects
TRANSACTIONKEY	Types	/TROIC/STRING	STRING	0	0		0 String Data Element used for OIC objects

Additionally, if you are using CALC_BSEG OR CALC_BSET to customize the field mapping, make sure these structures have the desired source fields. If you cannot make use of existing fields in these structures, you can append your own fields to these structures.

A new target field has to be appended to the back-end communication structure (/TROIC/TARGET_OIC_GLT) when using G/L Transactions.

Dictionary: Display Structure

Structure: /TROIC/TARGET_OIC_GLT Active

Short Description: Target structure for OIC GL Transaction

Attributes Components Input Help/Check Currency/quantity fields

Built-In Type 1 / 12

Component	Typing Method	Component Type	Data Type	Length	Decimal...	Coordinate	Short
ENTITYCODE	Types	/TROIC/STRING	STRING	0	0		0 String
GENERALLEDGERACC	Types	/TROIC/STRING	STRING	0	0		0 String
GENERALLEDGERAMO	Types	/TROIC/STRING	STRING	0	0		0 String
INVOICEDATE	Types	/TROIC/STRING	STRING	0	0		0 String
INVOICEID	Types	/TROIC/STRING	STRING	0	0		0 String
POSTINGDATE	Types	/TROIC/STRING	STRING	0	0		0 String
REPORTINGDATE	Types	/TROIC/STRING	STRING	0	0		0 String
TAXCLASSIFICATIO	Types	/TROIC/STRING	STRING	0	0		0 String
TRANSACTIONAMOUN	Types	/TROIC/STRING	STRING	0	0		0 String
TRANSACTIONAMOUN	Types	/TROIC/STRING	STRING	0	0		0 String
TRANSACTIONTYPEC	Types	/TROIC/STRING	STRING	0	0		0 String
GLVATMATCHFIELD	Types	/TROIC/STRING	STRING	0	0		0 String

If you are using CALC_BSEG OR CALC_BSET to customize the field mapping, make sure these structures have the desired source fields. If you cannot make use of existing fields in these structures, you can append your own fields to these structures.

NOTE

Implement BADIs if the customization is made to the CALC_BSEG OR CALC_BSET fields.

A new target field has to be appended to the back-end communication structure (/TROIC/TARGET_OIC_INTRASTAT)

when using INTRASTAT.

Dictionary: Display Structure

Structure: /TROIC/TARGET_OIC_INTRASTAT Active

Short Description: Target structure for OIC Intrastat

Attributes Components Input Help/Check Currency/quantity fields

Built-In Type 1 / 22

Component	Typing Method	Component Type	Data Type	Length	Decimal...	Coordinate	S
CUSTOMERVATNUMBE	Types	/TROIC/STRING	STRING	0	0		0 Si
DESTINATIONJURIS	Types	/TROIC/STRING	STRING	0	0		0 Si
DESTINATIONREGIO	Types	/TROIC/STRING	STRING	0	0		0 Si
ENTITYCODE	Types	/TROIC/STRING	STRING	0	0		0 Si
FLOW	Types	/TROIC/STRING	STRING	0	0		0 Si
GOODSDESCRIPTION	Types	/TROIC/STRING	STRING	0	0		0 Si
MODETRANSPORT	Types	/TROIC/STRING	STRING	0	0		0 Si
NATURETRANSACTION	Types	/TROIC/STRING	STRING	0	0		0 Si
ORIGINARRIVALJUR	Types	/TROIC/STRING	STRING	0	0		0 Si
ORIGINJURISDICTION	Types	/TROIC/STRING	STRING	0	0		0 Si
ORIGINREGIONDISP	Types	/TROIC/STRING	STRING	0	0		0 Si
PORTLOADING	Types	/TROIC/STRING	STRING	0	0		0 Si
PORTUNLOADING	Types	/TROIC/STRING	STRING	0	0		0 Si

If you are using CALC_RPHD OR CALC_RPIT to customize the field mapping, make sure these structures have the desired source fields. If you cannot make use of existing fields in these structures, you can append your own fields to these structures.

OIC General Configuration for Field Separator

This manual provides step-by-step instructions for configuring and maintaining the OIC (OneSource Indirect Tax Compliance) integration with General Setup, with the respective values, field separators, and amount field handling in SAP so as to generate the output csv correctly with the required field separators, and the conversion of the amount fields format are recognized and converted by the integration with required formats so as to match the setup in OIC.

If both lines are active, highest sort order takes precedence for the same username.

Note: Amount field values for few currency/countries have different SAP internal format than SAP display format. Hence conversion of the amount fields is implemented as part of General configuration.

1. Accessing the OIC General Configuration

Transaction Code: /TROIC/GENERAL

1. Log in to SAP.
2. Enter transaction code /TROIC/GENERAL in the command field.
3. Press Enter to open the OIC General Configuration screen.

Display View "OIC General Configuration": Overview			
OIC General Configuration			
Sort Order	General Option	Value	Active
000001	01 CSV SEPARATOR	;	☒
000002	02 AMOUNT FIELD	FWSTE	☒
000003	02 AMOUNT FIELD	FWBAS	☒
000004	02 AMOUNT FIELD	INVAL	☒
000005	02 AMOUNT FIELD	GROSS_AMT	☒

2. Setting up Sort Orders and Field Separators

Purpose: Sort Orders shown above define the primary interpretation for the precedence and execution order of tax rules and settings, which directly impacts the accuracy of tax calculations and also formatting of fields in the OIC file output. The field separator determines how columns are separated in the CSV output file.

Steps:

1. On the OIC General Configuration screen, locate the Sort Orders section.
2. As in above screen, Column General option with value "CSV Separator" is maintained with value; (semicolon) is used to define the field separator for the CSV file output.
 - a. By default, the separator is set to a semicolon (;)
 - b. Users can maintain separator according to their necessity, to change the separator:
 - i. Edit the separator value to your preferred character (e.g., **(comma)** or \t **(tab)**, etc.) and make sure the "Active" checkbox is checked.
 - ii. Inform the OIC team of the new separator so it can be updated in the OIC import specification configuration.
 - iii. If multiple separators are maintained, the system will consider whichever is maintained in the OIC general configuration, it will select the first active one.
3. Save your changes.

NOTE: The chosen separator will be used as a column in the generated CSV file output and at OIC.

3. Configuring Amount Fields for SAP Display

Purpose: Rows with Amount field have values with Amount field names maintained referring to the amount fields from SAP tables which we use in the OIC. These ensure that amounts are displayed in SAP's specific standard format, converting internal SAP values to SAP display values.

Example:

- In the SAP document display (e.g., FB03), a tax value might show as 250 for CLP currency.
- In the SAP table BSET for e.g. currency CLP, it is stored as 2.5 (SAP internal format).
- The configuration ensures 2.5 is converted to 250 for SAP display format.

Steps:

1. Users can add new amount-specific fields in the field mapping:
 - a. Ensure to add the same field in the OIC General table, refer to screen shot above.
 - b. This maintains consistency and correct conversion for SAP display.

4. Maintenance & Best Practices

- The same set up above needs to be maintained in OIC to recognize the field separator in the file.
- When adding new amount fields, update both the field mapping (T.Code: /TROIC/FIELD_MAP) and the OIC General table (T.Code: /TROIC/GENERAL)

5. Troubleshooting

- CSV Output Issues: If columns are not separated as expected, verify the field separator in Colum General option with value “CSV Separator” from the above screen.
- Amount Display Issues: If amounts appear in incorrect format, check that all relevant amount fields are correctly mapped in field mapping and maintained in the OIC General table.

FREQUENTLY ASKED QUESTIONS

Is the Integration compatible with SAP S/4HANA?

Yes.

Which S/4HANA versions are the Integration supported on?

This integration has been tested to be compatible with S/4HANA 2021 & support pack stack (SPS) 6 and onwards.

Is integration compatible with ECC?

For this integration to work with SAP ECC, a review of the field mapping and core object customization is required.

How many transactions can be processed on one csv file?

This solely depends on the customer's infrastructure and the resources allotted in that particular SAP landscape.

What are the report types supported for this integration?

Though standard field mappings are provided for VAT-ESL, G/L Transactions, INTRASTAT reports.

Users have the flexibility to customize the standard mappings and can be extended to other reports

by generating new TR transports that may require ABAP coding, field mapping for required data,

use of BADIs, and enhancement of current selection screens.

Are Multiple Field separators supported?

Only a single delimiter character can be specified per CSV file configuration, Multiple delimiter characters cannot be used together in the same file processing operation, hence multiple field separators are not Supported.