


CNV-9019 GL Line Items (BS - Input / Output (VAT))

Status	
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Purpose

The purpose of this document is to define the conversion approach to migrate GL line items relating to VAT (input / output) in S/4 HANA.

Conversion Scope

The scope of this document covers the approach for converting tax items with AP/AR open items from Legacy Source Systems into S/4HANA.

The data from legacy system includes:

1. deferred tax items related to AP/AR open items as per object # 9006/9007/9008/9009

The data from legacy system excludes:

1. non deferred tax items

Relevancy rule :

- Initial extract all documents from BSET for deferred tax codes mapped in [link](#) with fiscal year =< 2 years from migration cutoff date
- refer to relevant data extracted from object # 9006/9007/9008/9009 (document number, fiscal year, company code)
- filter for same document number + fiscal year + company code from BSET table initial extracts

List of source systems and approximate number of records

Source	Scope	Source Approx No. of Records	Target System	Target Approx No. of Records <small>(estimate based on open items volume with deferred tax combinations)</small>
PF2	Deferred tax items of AP/AR open items	1000	S4	1000
WP2	Deferred tax items of AP/AR open items	5000	S4	1000
PI2	Deferred tax items of AP/AR open items	1000	S4	1000

Scope of the migration is based on deferred tax linked to migrated AP OPEN ITEMS (9006), AP SPECIAL GL OPEN ITEMS (9007), AR OPEN ITEMS (9008), AR SPECIAL GL OPEN ITEMS (9009). The deferred tax codes will be mapped in a table by country / company (refer [link](#)). If such tax codes are part of the 4 objects (AP/AR) scope ie same document number/year/company code combination, the respective BSET data will be extracted for migration together with each object. The extracted and transformed data will be used in load files of respective objects ie not loaded on its own. Example for AP open items, it will be used in the DEFERRED TAX tab sheet of the load file, the postings will auto generate tax line items.

BSET	FWBAS	Tax base amount in document currency	CURR	15 (2)	Mandatory
BSET	FWSTE	Tax Amount in Document Currency	CURR	13 (2)	Mandatory
BSET	HWBAS	Tax Base Amount in Local Currency	CURR	15 (2)	Mandatory
BSET	HWSTE	Tax Amount in Local Currency	CURR	13 (2)	Mandatory
BSET	H3BAS	Tax Base Amount in Local Currency 3	CURR	15 (2)	Optional
BSET	H3STE	Tax Amount in Local Currency 3	CURR	13 (2)	Optional
BSET	H2BAS	Tax Base Amount in Local Currency 2	CURR	15 (2)	Optional
BSET	H2STE	Tax Amount in Local Currency 2	CURR	13 (2)	Optional
BSET	BUPLA	Business Place	CHAR	4	Optional or mandatory depending on tax configurations by country
BSET	TXJCD	Tax jurisdiction	CHAR	15	Optional

Data Cleansing

ID	Criticality	Error Message/Report Description	Rule	Output	Source System
N/A					

Conversion Process

The high-level process is as follows :

1. Extract from legacy systems
2. Transformation : Based on dependent objects (Open AP / AR) , check if tax codes are marked as deferred tax in mapping tables. If matched, the respective load data will be generated to respective load file outputs to be combined into respective OPEN AP / AR load files
3. Load process will be performed in respective OPEN AP / AR objects via respective tool eg. LTMC
4. There is no loading for this object on its own

Data Privacy and Sensitivity

Extraction

Extract data from a source into Syniti. There are 2 possibilities:

1. The data exists in legacy system. Syniti connects to the source and loads the data into Syniti.
2. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in DCT. This is to be conducted using DCT (Data Collection Template) in Syniti.

The agreed Relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target loads

Extraction Run Sheet

Req #	Requirement description	Team responsible
1.	Ensure source table BSET is extracted in migration tools, according to the agreed cut-off date in the project plan	Data team
2.	For entities with tax items maintained in DCT, ensure the DCTs are error free and endorsed for conversion	Data team
3.	Perform preliminary completeness check	Data team
4.	Raise issues as defects if Req # 1 to 3 are not met	Data team
5.	Repeat Req # 1 to 4 if required	Data team

6.	Report extraction result to person in charge of conversion	Data team
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Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
N/A				

Data Collection Template (DCT)

Data Collection Template will be prepared by business for VAT data for companies not in scope of Syniti as well as data correction scenarios. This is not automatically extracted from legacy and require transformation and direct load to target system.

Field name	Field Description	Rule
BSET-BUKRS	Company Code	
BSIK/BSID-BELNR	Document Number	
BSIK/BSID-GJAHR	Fiscal year	
BSET-BUZEI	Line item	
BSIK-LIFNR/BSID-KUNNR	Vendor/Customer	
BSET-MWSKZ	Tax on Sales/Purchases Code	
BSET-SHKZG	Debit/Credit Indicator	
BSET-HWBAS	Tax Base Amount in Local Currency	
BSET-FWBAS	Tax base amount in document currency	
BSET-HWSTE	Tax Amount in Local Currency	
BSET-FWSTE	Tax Amount in Document Currency	
BSET-H2STE	Tax Amount in Local Currency 2	
BSET-H3STE	Tax Amount in Local Currency 3	
BSET-H2BAS	Tax Base Amount in Local Currency 2	
BSET-H3BAS	Tax Base Amount in Local Currency 3	
BSET-BUPLA	Business Place	
BSET-TXJCD	Tax jurisdiction	

Extraction Dependencies

Item #	Step description	Team responsible
1.	Any period / year end close activities have been fully completed	Business
2.	Finance closing is completed and reconciled	Business

Transformation

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow Syniti to make the data Target ready:

1. Perform value mapping and data transformation rules.
 - a. Legacy values are mapped to the to-be values (this could include a default value)
 - b. Values are transformed according to the rules defined in Syniti
2. Prepare target-ready data in the structure (refer TARGET DESIGN table above) and format that is required for loading via prescribed Load Tool (refer to LOAD section below). This step also produces the load data ready for business to perform Pre-load Data Validation

Transformation Run Sheet

Item #	Step description	Team responsible
1.	Ensure all the fields that require value mapping, as stipulated (Mapping tables), have the latest signed-off mapping files imported into toolMigrate.	Data team
2.	In tool, select the AP/AR / GL Open Items object.	Data team
3.	Go to Process Area Launch and Process the Object - AP/AR Open Items - R3 AP/AR Open Items.	Data team
4.	Launch the Objects to execute transformation.	Data team
5.	Monitor the transformation progress and ensure performance and completion is within allowed timeframe	Data team
6.	Generate Pre-Load reports .	Data team
7.	Generate data load count.	Data team
8.	Log errors as defects, if any and address resolutions. Close defects.	Data team
9.	Re-transform and re-validate the Pre-load reports if necessary.	Data team
10.	Validate the transformed file as part of pre-load validation, raise data defects or provide the pre-load sign-off.	Business
11.	Analyse and resolve any pre-load defects logged by business.	Data team
12.	Repeat steps 6 to 11 if necessary	Data team
13.	Proceed to pre-load validations	Data team

Transformation Rules

R u l e #	Sou rce s y s t e m	S o u r c e T a b l e	S o u r c e F i e l d	S o u r c e D e s c r i p t i o n	T a r g e t s y s t e m	T a r g e t T a b l e	T a r g e t F i e l d	T a r g e t D e s c r i p t i o n	T r a n s f o r m a t i o n l o g i c
1	Leg acy	BS ET	BUKRS	Company Code	S /4H ANA	BS ET	BU KRS	Company Code	Map from source to target using Company code mapping table.
2	Leg acy	BS ET	BELNR	Accounting Document Number	S /4H ANA	BS ET	BEL NR	Accounting Document Number	If tax code is in mapping table and these fields match with AP / AR / GL OI extraction according to Doc + Year + company code, this record will be combined to become 1 field (REFERENCE DOCUMENT NUMBER) for matching with AP / AR / GL OI record
3	Leg acy	BS ET	GJAHR	Fiscal Year	S /4H ANA	BS ET	GJ AHR	Fiscal Year	
4			DOCLN	Line item number			DO CLN	Line item number	Start from 001 onwards
5	Leg acy	BS EG	LIFNR /KUNNR /SAKNR	Vendor /Customer /GL	S /4H ANA	BS EG	LIF NR /KU NNR	Vendor /Customer	Based on matching document number/year/company, derive the value from BSEG table based on posting key range 01 to 39 (AP / AR). Map from source to target using respective BP mapping table.
6	Leg acy	BS ET	BUZEI	Tax line item number	S /4H ANA	BS ET	BU ZEI	Tax line item number	Copy source value

7	Leg acy	BS ET	HKONT	Tax account	S /4H ANA	BS ET	GJ AHR	Tax account	Map from source to target using GL mapping table.
8	Leg acy	BS EG	GKONT	Offsetting GL account	S /4H ANA	BS EG	GK ONT	Offsetting GL account	This GL is the default offsetting migration GL account used by each object (AP/AR). Map in GL mapping table by object.
9	Leg acy	BS ET	MWSKZ	Tax on Sales /Purchases Code	S /4H ANA	BS ET	MW SKZ	Tax on Sales /Purchases Code	Map from source to target using Tax mapping table.
10	Leg acy	BS ET	FWBAS	Tax base amount in document currency	S /4H ANA	BS ET	FW BAS	Tax base amount in document currency	Copy source value
11	Leg acy	BS ET	FWSTE	Tax Amount in Document Currency	S /4H ANA	BS ET	FW STE	Tax Amount in Document Currency	Copy source value
12	Leg acy	BS ET	HWBAS	Tax Base Amount in Local Currency	S /4H ANA	BS ET	HW BAS	Tax Base Amount in Local Currency	Copy source value
13	Leg acy	BS ET	HWSTE	Tax Amount in Local Currency	S /4H ANA	BS ET	HW STE	Tax Amount in Local Currency	Copy source value
14	Leg acy	BS ET	H3BAS	Tax Base Amount in Local Currency 3	S /4H ANA	BS ET	H3 BAS	Tax Base Amount in Local Currency 3	<p>Copy source value if any. If LC3 is in scope for S4 and if blank or 0 when HWSTE = 0, this is to be auto-calculated during migration posting, based on Local currency base amount (HWBAS) converted to group currency (T000 MWAER) with exchange rate of migration posting date</p> <p>This is for currency type 31 (Global currency / Group currency)</p> <p>Note: Currently, legacy does not have group currency amount, the plan is let exchange rate to populate this.</p> <p>Very Important point to be noted here - take the relevant exchange rate from the exchange rate table (refer to CNV-9013 TB CY (0L - IFRS = 31 GC Val Ledger) Monthly Movement exchange rate DCT section) based on the cut-over date (Period + Year) for this object (9010 - GL Open items)</p>
15	Leg acy	BS ET	H3STE	Tax Amount in Local Currency 3	S /4H ANA	BS ET	H3 STE	Tax Amount in Local Currency 3	<p>Copy source value. If LC3 is in scope for S4 and if blank or 0 when HWSTE = 0, this is to be auto-calculated during migration posting, based on Local currency amount (HWSTE) converted to group currency (T000 MWAER) with exchange rate of migration posting date</p> <p>This is for currency type 31 (Global currency / Group currency)</p> <p>Note: Currently, legacy does not have group currency amount, the plan is let exchange rate to populate this.</p> <p>Very Important point to be noted here - take the relevant exchange rate from the exchange rate table (refer to CNV-9013 TB CY (0L - IFRS = 31 GC Val Ledger) Monthly Movement exchange rate DCT section) based on the cut-over date (Period + Year) for this object (9010 - GL Open items)</p>
16	Leg acy	BS ET	H2BAS	Tax Base Amount in Local Currency 2	S /4H ANA	BS ET	H2 BAS	Tax Base Amount in Local Currency 2	<p>Copy source value</p> <p>This is for currency type 30 (Global currency / Group currency)</p> <p>Note: Currently, legacy does not have group currency amount, the plan is let exchange rate to populate this.</p> <p>Very Important point to be noted here - take the relevant exchange rate from the exchange rate table (refer to CNV-9013 TB CY (0L - IFRS = 31 GC Val Ledger) Monthly Movement exchange rate DCT section) based on the cut-over date (Period + Year) for this object (9010 - GL Open items)</p>
17	Leg acy	BS ET	H2STE	Tax Amount in Local Currency 2	S /4H ANA	BS ET	H2 STE	Tax Amount in Local Currency 2	<p>Copy source value</p> <p>This is for currency type 30 (Global currency / Group currency)</p> <p>Note: Currently, legacy does not have group currency amount, the plan is let exchange rate to populate this.</p> <p>Very Important point to be noted here - take the relevant exchange rate from the exchange rate table (refer to CNV-9013 TB CY (0L - IFRS = 31 GC Val Ledger) Monthly Movement exchange rate DCT section) based on the cut-over date (Period + Year) for this object (9010 - GL Open items)</p>
18	Leg acy	BS ET	BUPLA	Business Place	S /4H ANA	BS ET	BU PLA	Business Place	Map from source to target using business place mapping table.
19	Leg acy	BS ET	TXJCD	Tax jurisdiction	S /4H ANA	BS ET	TXJ CD	Tax jurisdiction	Map from source to target using Tax jurisdiction mapping table.

List of Custom Target Reports for this object is maintained here: [Conversion Specification - Custom Reports Register](#).

Note on currencies :

Group Currency Calculation (reference from CS # 9013)

In legacy ECC, it was identified that group currency balances are missing. To address this, the plan is to derive group currency amounts by reading the relevant exchange rates from the BFC consolidation system for each period within the migration scope.

For each period:

- The local currency amounts will be extracted from ECC.
- The corresponding period's exchange rate will be retrieved from BFC.
- The group currency balance will be calculated by converting the local currency amounts using the BFC exchange rates.
- The calculated group currency balances will then be loaded into S/4HANA as part of the migration process.

This approach ensures consistency between the group currency balances in S/4HANA and the consolidation system.

Exchange Rate Table: Local Currency to Group Currency (DCT page to be maintained to store this information for each cycle and to be used across Finance transactional objects)

Target company code	Period (YYYYMM)	Local currency	Target group currency (currency type 30)	Group currency exchange rate (currency type 30)	Target group currency (currency type 31)	Group currency exchange rate (currency type 31)	Source system
1000	202401	EUR	EUR	1.10	EUR	1.10	BFC
2000	202401	GBP	EUR	1.30	EUR	1.30	BFC
3000	202401	CNY	EUR	0.14	EUR	0.14	BFC
1000	202402	EUR	EUR	1.12	EUR	1.12	BFC
2000	202402	GBP	EUR	1.28	EUR	1.28	BFC
3000	202402	CNY	EUR	0.15	EUR	0.15	BFC
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Currency Adjustment During Migration (TCURX Consideration)

In SAP, the **TCURX** table defines the **number of decimal places** used for each currency.

This impacts how amounts are **stored internally** in database tables versus how they are **displayed externally** in user interfaces or reports.

Currencies such as **JPY (Japanese Yen)**, **KRW (Korean Won)**, or **VND (Vietnamese Dong)** are typically configured with **no decimal places** (TCURX -CURRDEC = 0).

Understanding and correctly applying the **TCURX rules** is essential during **data migration** to ensure financial consistency between **ECC** and **S/4HANA**.

Internal vs External Currency Representation example:

External Amount

The amount value as displayed to users in SAP screens and reports.
96015 JPY

Internal Amount

The amount value stored in database tables for computation.
960.15

Multiplied by factor = 10² if target has 2 decimals

During **data migration**, these internal (technical) amounts must be **converted to external** amounts to ensure accuracy and consistency in the **target S/4HANA system**.

Conversion Formula:

External Amount = Internal Amount * 10 to the power (2 - Number of decimal for the currency in TCURX table)

Transformation Mapping

Mapping Table Name	Mapping Table Description
Company Code	Mapping of legacy company codes to target system value

Tax code	Mapping of legacy sales/purchasing tax codes to target system value by country (deferred tax in scope only)
Business place	Mapping of legacy to target system value according to company code. There is mapping of blanks to values in each company code

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Ensure all the fields that require value mapping, as stipulated. Mapping tables, have the correct values mapped and imported into tool.	Data team

Pre-Load Validation

Project Team

Completeness

Task	Action
Generation of Pre-load reports	<p><u>Mandatory field check.</u> Based on S/4HANA target design fields, account field status groups and tax settings</p> <p>Check if records have all mandatory fields filled and mapped, otherwise they should be flagged as error.</p> <p><u>Check signage of amount.</u></p> <p>Check whether source data (including DCT) has debit and credit entries in the same line. If sign is the same in all the three currency fields, then no action needed.</p> <p>If the sign in the document currency and company code currency field are different, then the document needs to be corrected in the source system or DCT.</p> <p>Ensure all transactions have values in Document Currency and Local Currency (i.e. no 0.00 allowed)</p>
Reconciliation of total	<p><u>Record Count</u></p> <p>Check the sum of record count of the AP/AR tax items in the load file is the same as source. The record count for AP/AR tax items will be done on the group basis. The fields in the group are consist of: Company Code, tax code</p> <p><u>Check Amount in Document Currency and Local Currency</u></p> <p>Check the sum of the amount in Document Currency and Local Currency in load file is the same as source. If any of the sum is different, flag the record as error.</p>

Accuracy

Task	Action
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Mandatory field mapping and transformation	Obtain a list of the fields to be populated with values from mapping files and ensure all these fields contain S/4HANA values. Review the data report to ensure mapping value is not missing in tool. Capture errors in the Data Error report.
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Business

Completeness

Task	Action
Verify record count in Pre-load reports by region	<p>In legacy system, execute report AP/AR Line Item Display (t/code: FBL1N and FBL5N) with selection parameters. Execute VAT reports for deferred tax codes and AP/AR document numbers by company.</p> <p>Group the output of the report by Company Code and compare the count in this VAT report against the AP/AR deferred tax items count in the pre-load file.</p> <p>If any of the count is different, raise defect and flag the relevant record as error.</p>

Accuracy

Task	Action
Conversion accuracy	<p>Verify AP/AR tax items are transformed accurately as per endorsed transformation/mapping rules.</p> <p>Review error reports in tool for any mismatch or missing transformed values.</p> <p>In legacy system, execute report AP/AR Line Item Display (t/code: FBL1N and FBL5N) with selection parameters.</p> <p>If any of the sum is different, raise defect and flag the relevant record as error.</p>
Business partner balance on Company code and profit center level	Check the total tax amount on at Company Code level, against the total in legacy by Document, Local and Group currency. Apply currency rules where applicable

Load

Loading will be done through migration cockpit at respective objects (AP OPEN ITEMS (9006), AP SPECIAL GL OPEN ITEMS (9007), AR OPEN ITEMS (9008), AR SPECIAL GL OPEN ITEMS (9009) and therefore, data from the transformation export view to be exported into the load file format.

3 export views to be prepared based on the field list from the XML load templates attached.

1. Create export view for the DEFERRED TAX ITEMS of AP OPEN ITEMS (9006), AP SPECIAL GL OPEN ITEMS (9007)
2. Create export view for the DEFERRED TAX ITEMS of AR OPEN ITEMS (9008), AR SPECIAL GL OPEN ITEMS (9009)

Load Phase and Dependencies

Configuration

Item #	Configuration item
1.	Company code-related configuration (posting period variant).
2.	Finance posting (document types, document number ranges, special gl indicator)
3.	Currencies (currency keys, decimal places in currencies)
4.	Tax (tax codes, business place)

Conversion Objects

Object #	Preceding Object Conversion Approach
1067	GL Account Operational CoA (incl. secondary CE)
3018	Business Partners - FI Vendor (FLVN00)
9006	AP Open Items
9007	AP Special GL Open Items
9008	AR Open Items
9009	AR Special GL Open Items

Error Handling

Error type	Error description	Action taken
Tax code does not exist	Tax code does not exist in country	Ensure the tax code mapping is correct

Post-Load Validation

Project Team

Completeness

Task	Action
Reconciliation of Record Count	<p>Total number of records loaded for AP/AR tax items will be generated in the Post-load reports in tool based on the target table and fields mentioned</p> <p>The reconciliation needs to be executed on the total number of 'valid' records and currency amount per company code in the source compared to total number of records and currency amount in S/4HANA</p> <p><u>Record Count</u></p> <p>Check the sum of record count of the tax items in the load file is the same as S/4HANA. The record count for AP/AR tax items will be done on the group basis. The fields in the group are consist of: Company Code, deferred tax code</p> <p><u>Check Amount in Document Currency and Local Currency</u></p> <p>Check on line item level that the sum of the amount in Document Currency and Local Currency in the load file is the same as posted in S/4HANA. If any of the sum is different, flag the record as error.</p>

Accuracy

Task	Action
Check values in key fields for accuracy	<p>Post-load reports will have the same structure as the load file and some additional columns as required to facilitate the post load validation.</p> <p>Leverage on tool to create a Post Load report that reports S/4HANA loaded records along with the legacy values side-by-side to allow for 100% check of all these fields in the shortest possible time.</p> <p><u>Any</u> mismatch will be reported under the Post Load - Error report.</p>

Business

Completeness

Task	Action
Record Count Check	<p>Review the record count report from the Data Team and ensure it is correct by cross-checking with the record count confirmed during Pre-load Business Validations</p> <p>Business may also run VAT reports or equivalent report in Fiori App to display loaded AP/AR tax items in S/4HANA and compare results against the pre-load reports generated from tool.</p>

Accuracy

Task	Action
tax items totals	Check deferred VAT totals by Company code. Totals should be checked in Document, Local and Group currency.
Spot check	Business should choose some tax codes and perform comprehensive check of tax items etc. Such companies should have huge number of tax items or have certain complexity in conversion.

Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.
- is in scope based on data design and any exception requested by business.

Change log

Version	Published	Changed By	Comment
CURRENT (v. 43)	Apr 02, 2026 09:05	NG-ext, Bernard	
v. 42	Mar 27, 2026 08:52	NG-ext, Bernard	
v. 41	Mar 26, 2026 15:50	NG-ext, Bernard	
v. 40	Mar 26, 2026 15:38	NG-ext, Bernard	
v. 39	Nov 24, 2025 16:59	NG-ext, Bernard	
v. 38	Nov 19, 2025 06:01	NG-ext, Bernard	
v. 37	Nov 17, 2025 12:41	NG-ext, Bernard	

v. 36	Oct 28, 2025 04:01	NG-ext, Bernard
v. 35	Oct 27, 2025 19:25	PILLAY-ext, Lawrence
v. 34	Oct 17, 2025 12:18	NG-ext, Bernard

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Workflow history

Title	Last Updated By	Updated	Status
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There are no pages at the moment.
