

Sabrix® Solution

Installing and Configuring the Sabrix Tax for SAP Goods Movement Application

Version 1.0.1.0

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About This Guide

Integrating the Sabrix Solution with SAP

Corporations using SAP R/3 can improve their tax accuracy by integrating with the Sabrix Solution for SAP Goods Movement transactions. Doing so enables fast, accurate use tax results and a complete audit trail from which you can generate both standard and custom reports, as well as information to assist in returns preparations. This integration is enabled by the SabrixConnection for SAP and **Sabrix Tax for SAP Goods Movement**, which is described in this guide.

SAP provides a standard tax interface to communicate with external third-party tax software. The SabrixConnection for SAP makes use of this tax interface and has been certified by SAP. The Sabrix Tax for SAP Goods Movement solution enhances the existing SAP tax process to also calculate tax on certain goods movements within SAP that the current SAP standard tax interface does not consider to be tax-relevant. Once you install and configure the Sabrix Tax for SAP Goods Movement solution, this major gap is closed.

This solution applies to the US tax process only.

How this Guide is Organized

This guide contains the following chapters:

- *Application Overview, (page 5)* shows the benefits of integrating the Sabrix Solution with SAP using Sabrix Tax for SAP Goods Movement, and describes both an architectural and configuration overview of the integration process.
- *Installing Sabrix Tax for SAP Goods Movement, (page 9)* explains how to physically install and initially configure the application.
- *Running Sabrix Tax for SAP Goods Movement, (page 13)* provides information on executing the application.
- *Functional and Technical Details, (page 23)* provides background information for your SAP Technical Staff about the application and its components.
- *Mapping SAP Fields to Sabrix Solution Input XML Elements, (page 27)* lists the input and output maps used to associate SAP data fields to Sabrix Solution XML elements.

Skill and Access Prerequisites

This guide is intended for use by the SAP System Administrator, Configurator, or Superuser when installing and configuring Sabrix Tax for SAP Goods Movement. The following table lists required knowledge, permissions, and other information that will help the installation proceed quickly.

TABLE 1: SKILL AND ACCESS PREREQUISITES

REQUIREMENT	DESCRIPTION
Technical Skills	<ul style="list-style-type: none"> SAP Basis / Administrator skills Using SAP MM and FI Using the Sabrix Solution
SAP Authorizations	<ul style="list-style-type: none"> Configurator System Administrator All MM and FI transactions Ability to run and schedule an ABAP program
System Access	<ul style="list-style-type: none"> Ability to import and manage transports

Scope of This Solution

Sabrix Tax for SAP Goods Movement is meant to enhance SAP by providing missing tax integration functionality. The solution has been developed within the following parameters:

- Only goods movement transactions related to processes using the **MB1A** transaction are covered.
- This solution applies to the US tax process only.
- Implementation of Sabrix Tax for SAP Goods Movement might require the company to re-evaluate the current taxability of Purchases. Consider making purchases under a direct pay permit so that tax on goods movement will not lead to over-taxation.
- Sabrix Tax for SAP Goods Movement considers the goods movement location when calculating tax. The Ship From is used as the source location of the movement and the Ship To destination is the location to which the goods are moved.
- Reciprocal tax is not addressed with this solution.

System Prerequisites

The installation of Sabrix Tax for SAP Goods Movement places no new software or hardware requirements on either the system hosting SAP or that hosting the Sabrix Solution.

TABLE 2: SYSTEM PREREQUISITES

SYSTEM	REQUIREMENTS
SAP System	SAP R/3 4.6 or higher.
Sabrix Solution	Sabrix Solution version 4.3.3 or higher.
SabrixConnection for SAP	<ul style="list-style-type: none">SabrixConnection for SAP 1.1.2.x / 2.0.2.x / 5.0.x B / 5.0.x E.SAP Java Connector (JCo) version 2.1.8. Please review SAP OSS note 549268 when choosing your version of JCo.

References to Relevant Documentation

SabrixConnection for SAP Installation Guide

This guide provides a more in-depth view of how the Sabrix Solution is integrated with SAP. This guide was provided as part of the SabrixConnection for SAP download.

SAP R/3 Tax Interface Configuration Guide

In many cases, complete information about performing a task specific to preparing SAP R/3 for the SabrixConnection can be found in the *R/3 Tax Interface Configuration Guide Release 4.6x* released by SAP Labs. You can download this document from SAP's web page according to instructions in OSS note 392696, or you can request it from Sabrix.

Application Overview

This chapter describes:

- The purpose and benefits of the Sabrix Tax for SAP Goods Movement application ([this page](#)).
- A high-level overview of the business process flow ([page 6](#)).
- A description of the program flow by which the process works ([page 6](#)).

Purpose and Benefits

The Sabrix Tax for SAP Goods Movement application enables an organization using SAP to accurately and efficiently calculate, accrue, and record tax for SAP internal goods movements within the Material Management (MM) module.

This process provides features unavailable in SAP and allows SAP users to accurately manage their tax liability for selected post-purchase goods movements that affect the taxability of the products which are moved.

Once this solution is integrated with your SAP system, you can avoid the problem of underestimating tax liabilities on internal goods movements.

Business Process

When a Purchase transaction is processed by SAP, it is possible to call Sabrix using the SAP-certified SabrixConnection for SAP. Sabrix takes into account all relevant transaction data elements to make a tax determination and calculation, and then returns the results to SAP. Sabrix Tax for SAP Goods Movement extends accurate tax determination capability to post-purchase transactions for previously purchased goods.

Post-purchase goods movements may result in transaction tax liability based on a change in intended usage or location of a product. This may be signified by certain data elements, including cost center, project or location. For example, a company may purchase inventory that is intended for use in production and eventual resale, which does not trigger a use tax liability at the time of purchase. When the company later decides to move some of this inventory for its own internal consumption, this may trigger the need to calculate a use tax for the product.

This movement may be identified by one of the following:

- Transfer to a cost center.
- Transfer to a project.
- Transfer of stock to fixed asset.
- Stock scrapping.
- Transfer to order.

Such goods movement transactions would have tax consequences based on the final purpose and location of usage.

Process Flow

Sabrix Tax for SAP Goods Movement provides a user interface and a process for properly identifying, and then posting, the correct tax. The tax is based on the characteristics of the goods movement activity. Sabrix Tax for SAP Goods Movement is an ABAP object-oriented program that can:

- Identify specific goods movements transactions.
- Determine and calculate tax with the Sabrix Solution.
- Post journal entries in SAP to accrue the estimated tax.
- Update the Sabrix Audit and Compliance Database and the SAP external tax tables.
- Display the results in a custom SAP report.

The following diagram describes the goods movement process:

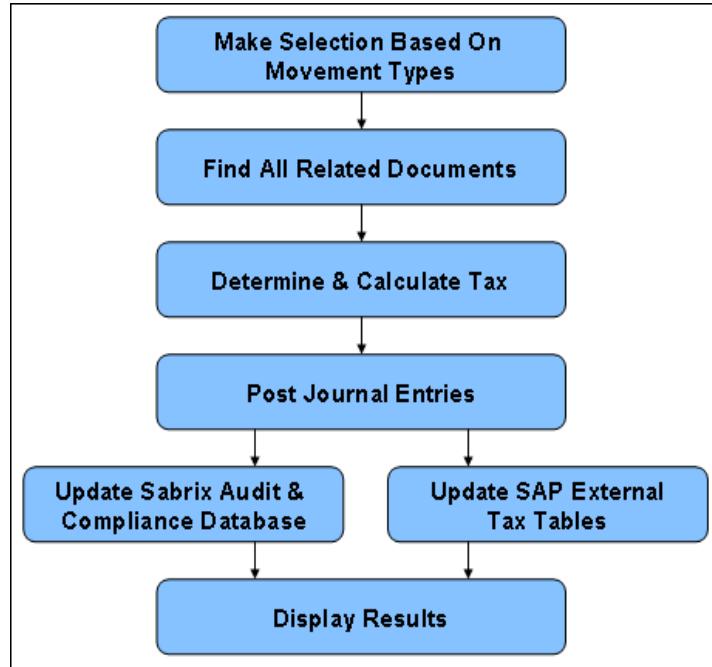


FIGURE 1: GOODS MOVEMENT PROCESS FLOW

Installing Sabrix Tax for SAP Goods Movement

This chapter describes the process for physically installing the application.



You must correctly install and configure the SabrixConnection for SAP and the Sabrix Solution before you install and configure Sabrix Tax for SAP Goods Movement.

Architecture Overview

Sabrix Tax for SAP Goods Movement uses the SAP-certified SabrixConnection for SAP to communicate with the Sabrix Solution. Goods Movement uses standard RFCs (Remote Function Calls) and BAPI to perform the communication and all of the application functions. This use of certified connections and SAP-prescribed RFCs ensures the robustness and supportability of the solution. The following diagram describes the integration between SAP and the Sabrix Solution as implemented with the Sabrix Tax for SAP Goods Movement:

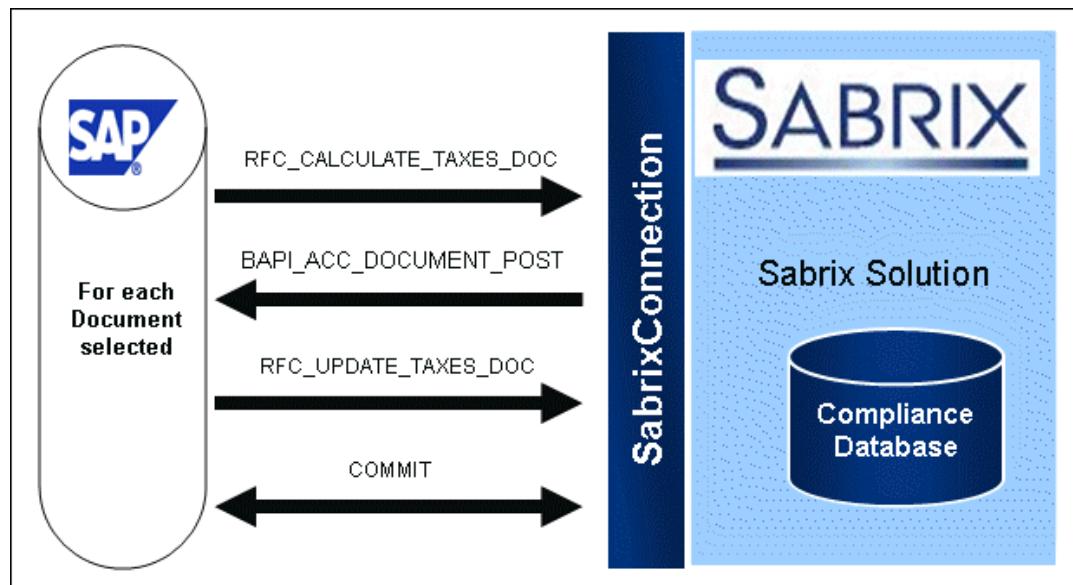


FIGURE 2: ARCHITECTURAL OVERVIEW

Installing the SAP Transport Object

Goods Movement has been designed with an ABAP object-oriented approach, as opposed to traditional procedural coding. This object-oriented approach offers better:

- Code readability
- Code maintenance
- Change management

The application has several components, listed below, which are included in a single SAP transport.

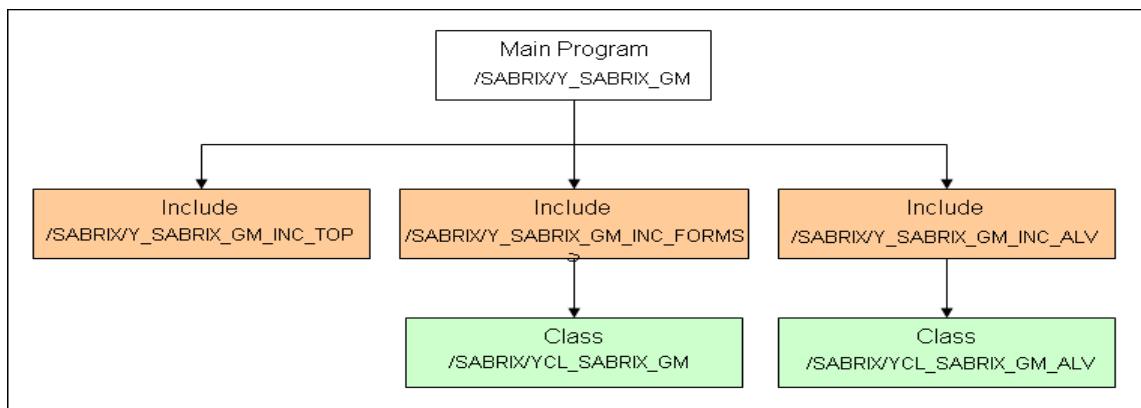


FIGURE 3: APPLICATION COMPONENTS

The inclusion of the Sabrix provided components in a single transport enables installation of the Sabrix Tax for SAP Goods Movement application in a single step at your location.



Sabrix strongly suggests that the initial installation of Sabrix-provided transport object containing all development objects for the Sabrix Tax for SAP Goods Movement be located in your development or "sandbox" environment. Subsequent installations of Sabrix Tax for SAP Goods Movement can then follow the standard migration process as set up in your SAP environment.

Post-Installation Configuration

Following the installation of the SAP transport, you must complete two SAP configuration steps to fully enable the Sabrix Tax for SAP Goods Movement application.

- Creating a new tax code.
- Assigning tax accounts to the new tax code.

Creating a New Tax Code

You should create a new tax code (for example, **ZZ**) that will be associated with a set of specific tax payable accounts. The use of this unique new tax code will allow you to more easily identify and reconcile postings of tax accruals performed by the Sabrix Tax for SAP Goods Movement program.

To create the new tax code:

1. Copy an existing Purchasing A/P tax code. (For example: Tax code "I1 - A/P Sales Tax" can be copied to tax code "ZZ - A/P Self-Assessed/Use Tax - Taxable").
2. Using transaction **FTXP**: Enter **US** as the country and copy the existing tax code for procedure **TAXUSX** and tax type **V**.

The screen below shows an example of the **Maintain Tax Code: Tax Rates** page that is accessed by the **FTXP** transaction:

Maintain Tax Code: Tax Rates						
Properties		Tax accounts		Deactivate line		
Country Key	US	United States				
Tax Code	ZZ	A/P self-assessed/ Use tax - taxable				
Procedure	TAXUSX					
Tax type	V	Inputtax				
Percentage rates						
Tax Type	Acct	Key	Tax Percent	Rate	Level	From Lvl
Base Amount			100	0	100	0
Calculated Call			100	0	105	0
Shared with G/L			100	0	200	0
A/P Sales Tax 1 Inv.	NVV		100.000		210	100
A/P Sales Tax 2 Inv.	NVV		100.000		220	100
A/P Sales Tax 3 Inv.	NVV		100.000		230	100
A/P Sales Tax 4 Inv.	NVV		100.000		240	100
A/P Sales Tax 5 Inv.	NVV		100.000		250	100
A/P Sales Tax 6 Inv.	NVV		100.000		260	100
Expensed			100.000		300	0
A/P Sales Tax 1 Exp.	VS1				310	100
A/P Sales Tax 2 Exp.	VS2				320	100
A/P Sales Tax 3 Exp.	VS3				330	100
A/P Sales Tax 4 Exp.	VS4				340	100
A/P Sales Tax 5 Exp	VS4				350	100
A/P Sales Tax 6 Exp	VS4				360	100
Self-assessment					400	0
A/P Sales Tax 1 Use	MW1		100.000-		410	210

FIGURE 4: TAX CODE SETUP

Assigning Tax Accounts to the New Tax Code

1. Using transaction **FTXP**, click on **Tax Accounts**.
2. Since Sabrix has up to six jurisdiction levels, use a minimum of four different GL tax accounts.

Enter these four to six accounts on the **Tax Accounts** page as shown below, using your own desired tax account numbers.

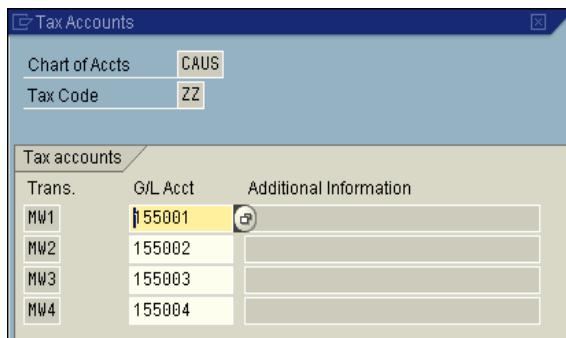


FIGURE 5: TAX CODE EXAMPLE

Sabrix Tax for SAP Goods Movement uses the assigned tax accounts to post the tax accruals resulting from the goods movements transactions as calculated by Sabrix.

Running Sabrix Tax for SAP Goods Movement

This chapter provides a step-by-step guide on how to calculate the tax on goods movement using the Sabrix provided solution.

Executing Sabrix Tax for SAP Goods Movement

Once the Sabrix Tax for SAP Goods Movement application has been installed:

1. Start the application using transaction **SA38**.
2. When prompted to enter a program name, enter `/SABRIX/Y_SABRIX_GM` as shown here:

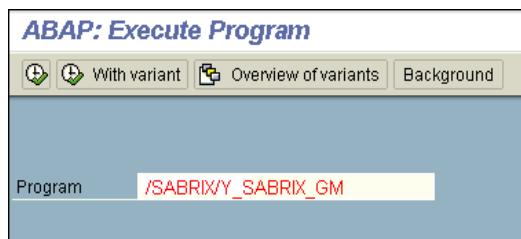


FIGURE 6: PROGRAM EXECUTION

Selecting Parameters

Once you start the program, the **Parameter Selection** page appears.

The Parameter Selection page has five main sections for parameter entry:

- Data selection.
- Tax structure selection.
- Posting parameters for JE and Sabrix update.
- ALV selection (for entering optional report layout variants).
- Additional order movement types.

/SABRIX/Y_SABRIX_GM

Data selection

Source Company Code	3000	to	<input type="button" value=""/>	<input type="button" value=""/>
Financial doc number	<input type="text"/>	to	<input type="button" value=""/>	<input type="button" value=""/>
Fiscal Year	2008			
Posting date	08/27/2008	to	<input type="button" value=""/>	<input type="button" value=""/>
Document type	WA	to	<input type="button" value=""/>	<input type="button" value=""/>
Movement type	201	to	<input type="button" value=""/>	<input type="button" value=""/>
Special Stock Indicator	<input type="checkbox"/>	to	<input type="button" value=""/>	<input type="button" value=""/>
Accounting indicator	<input type="checkbox"/>	to	<input type="button" value=""/>	<input type="button" value=""/>
G/L Account	<input type="text"/>	to	<input type="button" value=""/>	<input type="button" value=""/>
Order Type	<input type="checkbox"/>	to	<input type="button" value=""/>	<input type="button" value=""/>

Tax structure selection

Tax code	U1
----------	----

Posting parameters for JE and Sabrix update

Posting date	08/27/2008
Chart of account	CAUS
Default tab payable - BS acct	12000 <input type="button" value=""/>
<input type="checkbox"/> Post tax transactions?	

ALV selection

ALV layout variant	<input type="text"/>
--------------------	----------------------

Additional Order Movement Types

Movement types with Orders	261	to	<input type="button" value=""/>	<input type="button" value=""/>
----------------------------	-----	----	---------------------------------	---------------------------------

FIGURE 7: PARAMETER SELECTION

See the following section for descriptions of screen sections and entry fields.

Entering Data Selection Parameters

TABLE 3: DATA SELECTION PARAMETERS

FIELD NAME	REQUIRED / OPTIONAL	DESCRIPTION
Source company code	Required	One or several company codes.
Financial document number	Optional	Select a specific number or a range of numbers related to SAP financial goods movements created with transaction MB1A .
Fiscal year	Required	For example: 2008
Posting date	Required	Select the date range of the goods movements transactions on which tax needs to be computed and accrued.
Document type	Required	Default is WA (the standard SAP document type for Goods Issue documents).
Movement type	Required	Select the movement types to consider. For example: 201 for Goods Issue to a cost center.
Special Stock Indicator	Optional	Specifies the special stock type. If you need to separately manage certain stock (for example, consignment stock) of a material, the stock type in question is defined using this indicator.
Accounting indicator	Optional	Used to filter movements based on the accounting indicator (field BEMOT in table MSEG).
G/L Account	Optional	The G/L account number identifies the G/L account in a chart of accounts.
Order Type	Optional	<p>Key that differentiates orders according to their purpose.</p> <p>The order type contains a range of parameters which affect the way the order is processed.</p> <p>For example, using the order type, you can specify:</p> <ul style="list-style-type: none"> • The number ranges to be used for the orders • Which criteria are used when selecting a routing • How the order is to be costed.

Entering the Tax Structure Selection Parameter

TABLE 4: TAX STRUCTURE SELECTION PARAMETER

FIELD NAME	REQUIRED / OPTIONAL	DESCRIPTION
Tax code	Required	This tax code determines the SAP tax configuration that users want to use. Users should implement a tax code specifically created for internal goods movements as described in <i>Post-Installation Configuration</i> (page 11).

Entering the Posting Parameters for JE and Sabrix Update Parameters

TABLE 5: POSTING PARAMETERS FOR JE AND SABRIX UPDATE

FIELD NAME	REQUIRED / OPTIONAL	DESCRIPTION
Posting Date	Required	The posting date for the tax accruals. It will also determine the posting date of the tax document in the Sabrix system.
Chart of Accounts	Required	The chart of accounts used to post the tax accruals in SAP.
Default Tax Payable - Balance Sheet Account	Required	<p>This field value is used if the SAP system was not configured to allocate GL accounts to the tax code used. See Post-Installation Configuration (page 11).</p> <p>If this is the case, the program uses the default tax payable account indicated here for all tax jurisdiction lines.</p> <p> The debit account of the tax accruals is the account of the original SAP goods movement document.</p> <p>For example, if an SAP document is created with transaction MB1A as below:</p> <ul style="list-style-type: none"> • Debit = acct1 • Credit = acct2 <p>Then the tax accrual will be booked as following:</p> <ul style="list-style-type: none"> • Debit = acct1 • Credit = accounts for tax code or the default account
Post Tax Transactions (Check Button)	Optional (Default is unchecked)	<p>Unchecked: If unchecked, you can run the program in test mode and view the results. The program calls Sabrix, and displays the results and entries that would be posted. However, it does not post any entries in SAP nor does it update the Sabrix audit database.</p> <p>Checked: If checked, all entries that are ready will run and post to the SAP GL accounts and to the Sabrix audit database.</p>

TABLE 6: ADDITIONAL ORDER MOVEMENT TYPES

FIELD NAME	REQUIRED / OPTIONAL	DESCRIPTION
Movement types with Orders	Optional	<p>Values are dependent on the Movement Type data selection parameter. Order-based movement types must also be stated in this field because these movement types require a different jurisdiction source: order ship-to instead of value from BESEG.</p> <p>Default values are 261 and 262.</p>

Entering the ALV Selection Parameter

TABLE 7: ALV SELECTION PARAMETER

FIELD NAME	REQUIRED / OPTIONAL	DESCRIPTION
ALV Layout Variant	Optional	<p>Sabrix Tax for SAP Goods Movement uses ALV reporting. It allows users to customize their report by saving the layout with a variant.</p> <p>Enter a report variant to run the program, and this variant will be used in the report display feature of the program.</p>

Report Display

After all of the required parameters have been entered and Sabrix Tax for SAP Goods Movement is executed, you will see the results in a custom report, an example of which is below. This report offers drilldown and analysis opportunities that are described in the following sections.

Sabrix Tax for SAP Goods Movement											
SABRIX											
											
Sabrix Tax for SAP Goods Movement											
Orig. fin.	Mat.Doc.	Header txt	CoCd	Year	Doc..Date	Doc. Type	Movmt Type	Comment	Tax accrual doc	Σ Count..	
49000000046	4900032279		3000	2005	07/26/2005	WA	201	Tax already booked	100000033		1
49000000047	4900032286		3000	2005	07/28/2005	WA	201	Ready to post			1
49000000048	4900032287		3000	2005	07/28/2005	WA	201	Ready to post			1
49000000049	4900032288		3000	2005	07/28/2005	WA	201	InterCo/No txjcd in...			1
49000000017	4900032288		4000	2005	07/28/2005	WA	201	Ready to post			1
											5

FIGURE 8: SAMPLE REPORT OUTPUT

TABLE 8: REPORT COLUMNS

FIELD NAME	DRILLDOWN AVAILABLE	PURPOSE
Original Financial Document	Yes	The SAP financial goods movement document.
Material Document	Yes	The SAP material movement document.
Document header text	No	The header text of the SAP financial goods movement.
Company code	No	The company code for the goods movement.
Fiscal year	No	The fiscal year of the goods movement.
Document date	No	The document date of the goods movement.
Document type	No	The document type of the goods movement.
Movement type	No	The movement type of the goods movement.
Comment	No	The status of the goods movement. (See the following table for a detailed description of the possible values.)
Tax accrual document number	Yes	The tax accrual document number posted by the program.
Counter	No	Used to provide a count of report lines.

The **Comment** field of the report provides information about the posting status of the goods movement transaction on that row of the report. The following table describes the possible values found in this column.

TABLE 9: COMMENT FIELD VALUES

VALUE	DESCRIPTION
Ready to post	Tax on goods movement can be computed and is ready for posting.
Posting successful	Tax was computed, posted in SAP, and the Sabrix audit database was updated.
Tax already booked	Means that tax was computed and a tax accrual was already booked for this goods movement document. Each tax accrual document posted by Sabrix Tax for SAP Goods Movement references the original goods movement document number, and the header text shows 'Sabrix tax'. (This unique key provides the information needed to determine if tax has already been posted.)
Tax calculate/update failed	The calculation or the update could not be performed.  The tax document will be posted in SAP only if the Sabrix update was successful.
InterCo/No txjcd in table BSEG	The program could not find any tax jurisdiction or the goods movement document is an inter-company transaction.
No tax	The tax calculated is zero.

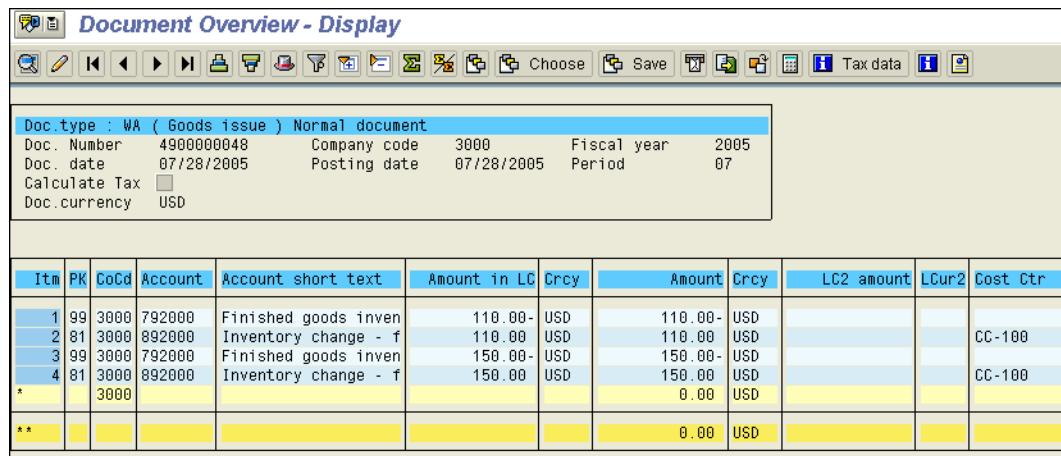
Report Drilldowns

The report output provides drilldown opportunities on three columns:

- Original Financial Document
- Material Document
- Tax Accrual Document Number

You can click on the desired value in the report to view drilldowns.

Original Financial Document Drilldown

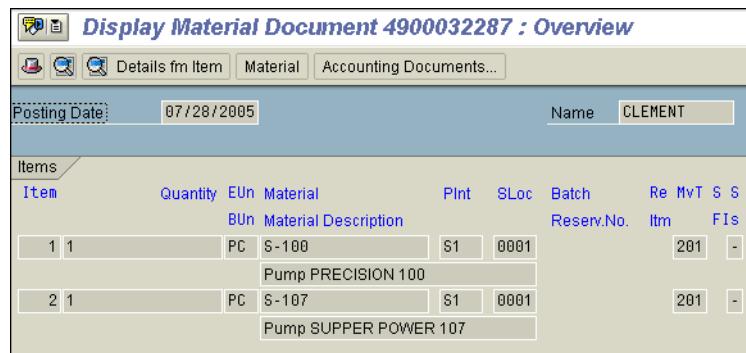


The screenshot shows the SAP Document Overview - Display screen. At the top, it displays document details: Doc.type : WA (Goods issue) Normal document, Doc. Number 4900000048, Company code 3000, Fiscal year 2005, Doc. date 07/28/2005, Posting date 07/28/2005, Period 07, Calculate Tax (unchecked), and Doc.currency USD. Below this is a table of accounting entries:

Item	PK	CoCd	Account	Account short text	Amount in LC	Crcy	Amount	Crcy	LC2 amount	LCur2	Cost Ctr
1	99	3000	792000	Finished goods invent	110.00-	USD	110.00-	USD			
2	81	3000	892000	Inventory change - f	110.00	USD	110.00	USD			CC-100
3	99	3000	792000	Finished goods invent	150.00-	USD	150.00-	USD			
4	81	3000	892000	Inventory change - f	150.00	USD	150.00	USD			CC-100
*			3000				0.00	USD			
**							0.00	USD			

FIGURE 9: ORIGINAL FINANCIAL DOCUMENT DRILLDOWN

Material Document Drilldown

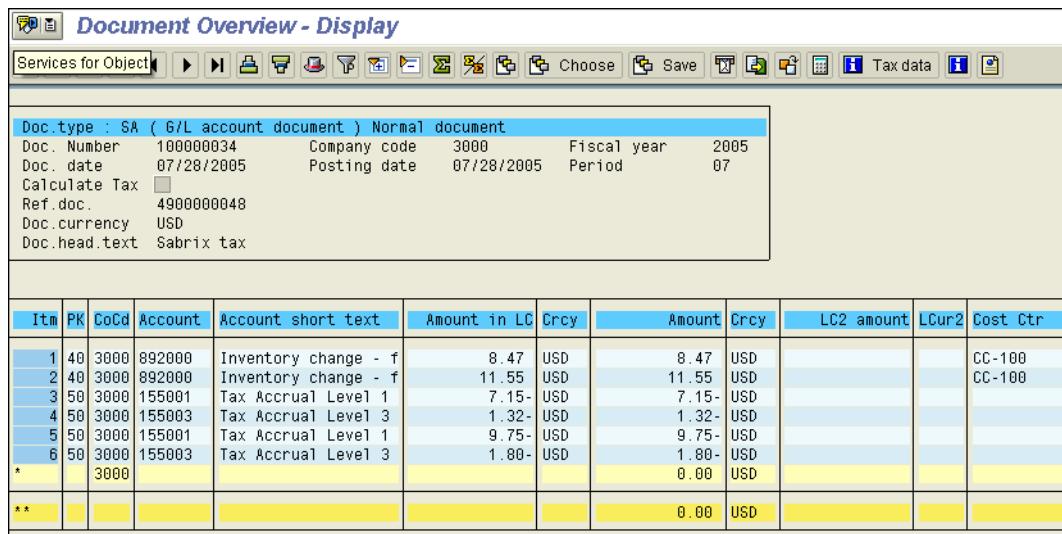


The screenshot shows the SAP Display Material Document 4900032287 : Overview screen. It displays a material document with a posting date of 07/28/2005 and a name of CLEMENT. The table below shows the items:

Item	Quantity	EU	Material	Plnt	SLoc	Batch	Re	Mvt	S	S
			BU	Material Description			Reserv.No.	Itm		FIs
1	1	PC	S-100		S1	0001		201	-	
				Pump PRECISION 100						
2	1	PC	S-107		S1	0001		201	-	
				Pump SUPPER POWER 107						

FIGURE 10: MATERIAL DOCUMENT DRILLDOWN

Tax Accrual Document Drilldown



The screenshot shows the SAP GUI interface for a tax accrual document. The title bar reads 'Document Overview - Display'. The toolbar includes standard SAP icons for file operations, search, and data entry. The main area displays document details in a table:

Doc.type : SA (G/L account document)	Normal document				
Doc. Number	100000034	Company code	3000	Fiscal year	2005
Doc. date	07/28/2005	Posting date	07/28/2005	Period	07
Calculate Tax	<input type="checkbox"/>				
Ref.doc.	4900000048				
Doc.currency	USD				
Doc.head.text	Sabrix tax				

Below this is a detailed journal entry table:

Item	PK	CoCd	Account	Account short text	Amount in LC	Crcy	Amount	Crcy	LC2 amount	LCur2	Cost Ctr
1	40	3000	892000	Inventory change - f	8.47	USD	8.47	USD			CC-100
2	40	3000	892000	Inventory change - f	11.55	USD	11.55	USD			CC-100
3	50	3000	155001	Tax Accrual Level 1	7.15-	USD	7.15-	USD			
4	50	3000	155003	Tax Accrual Level 3	1.32-	USD	1.32-	USD			
5	50	3000	155001	Tax Accrual Level 1	9.75-	USD	9.75-	USD			
6	50	3000	155003	Tax Accrual Level 3	1.80-	USD	1.80-	USD			
*		3000					0.00	USD			
**							0.00	USD			

FIGURE 11: TAX ACCRUAL DOCUMENT DRILLDOWN

The tax journal entries are detailed by goods movement line and tax jurisdiction. Each tax jurisdiction accrued amount can be booked under a specific tax accrual General Ledger account, as shown above.

As described in [Post-Installation Configuration, \(page 11\)](#), you should use a specific tax code and associate GL accounts to it. This way, each tax jurisdiction accrual is booked to those associated accounts. This enables straightforward accounting reconciliation as well as separation between standard SAP tax and tax booked by the Sabrix application.

Sabrix Audit

Sabrix Tax for SAP Goods Movement writes tax accruals to SAP as well as to the Sabrix Solution audit database. Tax accruals are posted by authority to support returns filling. For information on running the Invoice Detail Report, see the *Sabrix Solution Users Guide*.

Invoice Detail Report									
Thu Jul 28 15:17:03 PDT 2005									
Company:	SAP America								
Invoice Number:	0100000034								
Date:	7/28/2005 0:0:0								
Customer:									
Currency:	USD								
Line	AuthType	Authority	Product	TxType	Exempt Reason	Certificate	Rate	Tax Amount	Gross Amount
1	State Sales/Use	WA - STATE SALES/USE TAX		CU			6.5	7.15	110.00
1	City Sales/Use	WA - VANCOUVER, CITY SALES/USE TAX		CU			1.2	1.32	110.00
2	State Sales/Use	WA - STATE SALES/USE TAX		CU			6.5	9.75	150.00
2	City Sales/Use	WA - VANCOUVER, CITY SALES/USE TAX		CU			1.2	1.80	150.00
-2	State Sales/Use	WA - STATE SALES/USE TAX	FREIGHT	CU			6.5	0.00	0.00
-2	City Sales/Use	WA - VANCOUVER, CITY SALES/USE TAX	FREIGHT	CU			1.2	0.00	0.00
-1	State Sales/Use	WA - STATE SALES/USE TAX	FREIGHT	CU			6.5	0.00	0.00
-1	City Sales/Use	WA - VANCOUVER, CITY SALES/USE TAX	FREIGHT	CU			1.2	0.00	0.00
							20.02	260.00	
Company Total:							20.02	260.00	
Report Total:							20.02	260.00	

FIGURE 12: INVOICE DETAIL REPORT

Functional and Technical Details

This chapter provides background information about how Sabrix Tax for SAP Goods Movement leverages standard SAP and Sabrix functionality.

General Functional Information

- Sabrix Tax for SAP Goods Movement was built to accrue tax on goods movements entered with SAP transaction **MB1A**.
- It should be run at each closing-period to accrue tax on internal goods movements.
- The **Parameter Selection** screen ([page 15](#)) enables users to specify which movement types they want to consider.
- Always run the program in test mode first to analyze the proposed tax accruals.
- You can schedule the program as a batch job and therefore have it execute automatically in the background.

Integration with Standard SAP Functionality

Sabrix Tax for SAP Goods Movement updates the following SAP external tax tables with the newly created tax documents in addition to the GL posting tables:

- ETXDCH
- ETXDCI
- ETXDCJ

As with standard SAP tax functionality, you can display internal tax documents with the SAP report **RFYTXDISPLAY**, select the **Tax sent** button for the document in question, and then review the values of the ETXDC* tables.

Program for displaying a list of documents for the external tax system

Tax	Tx	Jurisdict. code	Ju	Ta	CoCd	In	Tax date	Jur. Shipto	Jur. Shipfr	Material	LC base amnt	LC tax	Amount	G/L
ZZ	USWA98668XXXX0	1	1	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-100	11,000.00	7.15	6,500	155001	
ZZ	USWA98668XXXX0	3	1	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-100	11,000.00	1.32	1,200	155002	
ZZ	USWA98668XXXX0	4	1	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-100	11,000.00	0.00	0,000	155004	
ZZ	USWA98668XXXX0	5	1	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-100	11,000.00	0.00	0,000	155004	
ZZ	USWA98668XXXX0	6	1	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-100	11,000.00	0.00	0,000	155004	
ZZ	USWA98668XXXX0	1	2	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-107	15,000.00	9.75	6,500	155001	
ZZ	USWA98668XXXX0	3	2	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-107	15,000.00	1.80	1,200	155002	
ZZ	USWA98668XXXX0	4	2	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-107	15,000.00	0.00	0,000	155004	
ZZ	USWA98668XXXX0	5	2	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-107	15,000.00	0.00	0,000	155004	
ZZ	USWA98668XXXX0	6	2	3000	V	07/28/2005	USWA98668XXXX0	USWA98668XXXX1	S-107	15,000.00	0.00	0,000	155004	

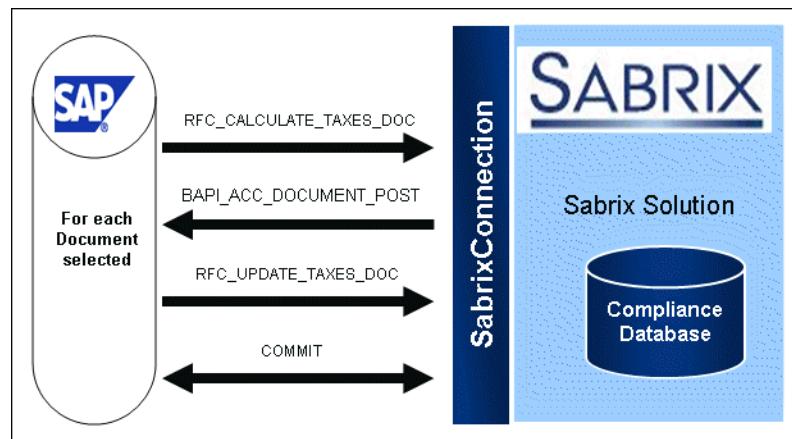
FIGURE 13: RFYTXDISPLAY SAMPLE OUTPUT

Flow Logic and Technical Components

Sabrix Tax for SAP Goods Movement was built to maximize the synchronization of SAP with the Sabrix Solution. When a tax accrual is booked in SAP, the Sabrix Solution is also updated. Conversely, if the Sabrix Solution cannot be updated, the SAP accrual will not be booked.

Sabrix Tax for SAP Goods Movement uses the traditional RFC functions **RFC_CALCULATE_TAXES_DOC** and **RFC_UPDATE_TAXES_DOC** to calculate tax and update the Sabrix system.

A standard SAP BAPI function, **BAPI_ACC_DOCUMENT_POST**, is used to post the tax accruals to SAP. A “double” **COMMIT** function ensures that the SAP GL and Tax Tables as well as the Sabrix audit tables are updated.



Support of SAP Standard Tax User-Exit

Sabrix Tax for SAP Goods Movement supports the SAP-provided Tax User-Exit to enable customers to enhance the tax data content sent from SAP to Sabrix with additional information. To do so follow the instructions provided in the *SAP R/3 Tax Interface Configuration Guide Appendix C* (see [References to Relevant Documentation, \(page 3\)](#) for information on how to obtain this document).

Program Component Descriptions

The Sabrix Tax for SAP Goods Movement application consists of the components shown in the following table.

TABLE 10: PROGRAM COMPONENTS

COMPONENT TYPE	COMPONENT
Devpt class	/SABRIX/Y_SABRIX
Main program	/SABRIX/Y_SABRIX_GM
Includes	/SABRIX/Y_SABRIX_GM_INC_TOP
	/SABRIX/Y_SABRIX_GM_INC_FORMS
	/SABRIX/Y_SABRIX_GM_INC_ALV
Custom classes	/SABRIX/YCL_SABRIX_GM
	/SABRIX/YCL_SABRIX_GM_ALV
Custom structures	/SABRIX/YST_SABRIX_GM_ALV
	/SABRIX/YST_SABRIX_GM_BKPF
	/SABRIX/YST_SABRIX_GM_BSEG
	/SABRIX/YST_SABRIX_GM_MSEG
Custom msg class	/SABRIX/YMS_SABRIX_GM
Custom table types	/SABRIX/YTT_SABRIX_GM_ALV
	/SABRIX/YTT_SABRIX_GM_BKPF
	/SABRIX/YTT_SABRIX_GM_BSEG
	/SABRIX/YTT_SABRIX_GM_MSEG
Custom table	YTB_SABRIX_GM_MT
Screen	0100
GUI	PF_100
MIME binary	Y_SABRIX_LOGO
Main tables used	BKPF Accounting Document Header
	BSEG Accounting Document Segment
	MSEG Document Segment: Material
	SKA1 G/L Account Master (Chart of Accounts)
	T001 Company Codes
	T004 Directory of Charts of Accounts
	T005 Countries
	T007A Tax Keys
	TTXD Description of Tax Jurisdiction Code Structure

Mapping SAP Fields to Sabrix Solution Input XML Elements

This chapter describes the mapping between SAP goods movement fields and Sabrix Solution Input XML.

The Output XML mapping is the same as that used by the `SabrixConnection` for SAP. See the *SabrixConnection for SAP Installation Guide* for a list of these Output XML mappings.

TABLE 11: INPUT XML MAPPING

GOODS MOVEMENT	SAP RFCs	SABRIX XML	COMMENTS
SAP_CONTROL_DATA			
SY-HOST	APP_SERVER	N/A	
SY-SAPRL	SAP_VERSION	N/A	
TTXD-INTVERSION	INTERF_VERSION	N/A	
TAX_*_HEAD_IN00			
SY-SYSID	SYST_NAME	N/A	
SY-MANDT	CLIENT	USER_ELEMENT.ATTRIBUTE50	
BKPF-BUKRS	COMP_CODE	EXTERNAL_COMPANY_ID	
BKPF-BELNR	DOC_NUMBER	INVOICE_NUMBER	
BKPF-WAERS	CURRENCY	CURRENCY_CODE	
TCURX-CURRDEC or '002'	CURR_DEC	N/A	Used to support decimal points on values
TTXD-LENG1	TXJCD_L1	N/A	
TTXD-LENG2	TXJCD_L2	N/A	
TTXD-LENG3	TXJCD_L3	N/A	
TTXD-LENG4	TXJCD_L4	N/A	
TAX_PER_ITEM	TAX_PER_ITEM	IS_AUDIT_UPDATE	
NR_LINE_ITEMS	NR_LINE_ITEMS	N/A	Internally used
TAX_*_ITEM_IN00			
T007A-MWART	APAR_IND	COMPANY_ROLE	From first item line
N/A	N/A	TRANSACTION_TYPE	GS (Goods) by default, can be overwritten at line level via TE in Sabrix
BKPF-BUDA	TAX_DATE	INVOICE_DATE	

TABLE 11: INPUT XML MAPPING

GOODS MOVEMENT	SAP RFCs	SABRIX XML	COMMENTS
N/A	N/A	IS_AUDITED	Only in UPDATE, set to Y
BKPF-BUDAT (User parameter)	REP_DATE	FISCAL_DATE	Only in UPDATE
N/A	N/A	CALCULATION_DIRECTION	Only in FORCE, for FORCE set to R
SY-TABIX	ITEM_NO	LINE.REGIME	
SY-TABIX	POS_NO	LINE_NUMBER	
N/A	GROUP_ID	USER_ELEMENT.ATTRIBUTE49	User-Exit.
T001-LAND1	COUNTRY	COUNTRY_OF_ORIGIN	
N/A	DIVISION	USER_ELEMENT.ATTRIBUTE50	User-Exit.
BSEG-MATNR	MATNR	PART_NUMBER	Leading zeros removed
TTXP-XPRCD	PROD_CODE	PRODUCT_CODE	
N/A	GROUP_PROD_CO DE	USER_ELEMENT.ATTRIBUTE41	User-Exit. Leading zeros removed
N/A	QUANTITY	QUANTITY	User-Exit.
N/A	UNIT	SUPPLEMENTARY_UNIT	User-Exit.
T007A-TXIND	TAX_TYPE	TRANSACTION_TYPE	SAP TAX_TYPE 0 or 1 = TRANSACTION_TYPE GS, 2 = DS, all others error
N/A	EXEMP_IND	IS_EXEMPT.ALL	"If SAP EXEMP_IND is 'null' or 0, IS_EXEMPT.ALL is not set.
T001W-TXJCD	TXJCD_SF	SHIP_FROM	User-Exit.
KNA1-TXJCD MSEG-TXJCD T001W-TXJCD	TXJCD_ST	SHIP_TO	The system checks for the TXJCD in this order: 1. Ship-to on order, if not on order 2. Check MSEG, if not MSEG 3. Check Cost Center, if not in Cost Center 4. Check Plant, if not in Plant 5. Error
N/A	TXJCD_POA	ORDER_ACCEPTANCE	User exit.
N/A	TXJCD_POO	ORDER_ORIGIN	User exit.
BSEG-WRBTR	AMOUNT	GROSS_AMOUNT	
N/A	GROSS_AMOUNT	USER_ELEMENT.ATTRIBUTE48	

TABLE 11: INPUT XML MAPPING

GOODS MOVEMENT	SAP RFCs	SABRIX XML	COMMENTS
N/A	FREIGHT_AM	FREIGHT_AMOUNT	MB1A does not allow freight
N/A	EXEMPT_AMT	EXEMPT_AMOUNT.<level>	MB1A does not allow exemptions
BKPF-BUDAT	REP_DATE	N/A	Only in UPDATE, mapped to Invoice Input level
T156-SHKZG	CREDIT_IND	IS_CREDIT	Only in UPDATE, internally used for calculation (pos./neg. sign)
N/A	ACCNT_NO	USER_ELEMENT.ATTRIBUTE47	User-Exit.
N/A	ACCNT_CLS	USER_ELEMENT.ATTRIBUTE42	User-Exit.
N/A	COST_OBJECT	USER_ELEMENT.ATTRIBUTE43	User-Exit.
N/A	PTP_IND	POINT_OF_TITLE_TRANSFER	User-Exit.
N/A	EXCERTIF	EXEMPT_CERTIFICATE.STATE or COUNTRY	MB1A does not allow exemptions
N/A	EXREASON	EXEMPT_REASON.STATE or COUNTRY	MB1A does not allow exemptions
"GM"	USER_DATA	USER_ELEMENT.ATTRIBUTE44	User-Exit. Only in UPDATE.
N/A	STORE_CODE	USER_ELEMENT.ATTRIBUTE45	User-Exit. Only in UPDATE.
N/A	USER_REPT_DATA	USER_ELEMENT.ATTRIBUTE46	User-Exit. Only in UPDATE.



In the table, * denotes either CALCULATE for RFC_CALCULATE_TAXES_DOC or UPDATE for RFC_UPDATE_TAXES_DOC.

