



## Tax Data Swap (TDS) Information

### 1. Background

Standard SAP is adequate when all sales and/or purchases can be taxed solely using a tax jurisdiction code at the document header or line item level. However, this is seldom the case...particularly when it comes to use tax. Complex tax laws require the use of many other data elements to properly determine tax attributes which are usually unobtainable within standard SAP parameters.

### 2. The SAP-Tax Software Data Gap

- Processes and computations performed by bolt-on Tax Software (e.g. Vertex's Tax Software for Sales & Use Tax and Taxware's Sales/Use Tax System) are heavily dependent on data passed from SAP
- In many cases, standard SAP does not provide access to all data elements that Tax Software requires for its calculations which are driven by a myriad of complex tax regulations
- Data element attributes within areas such as materials, ship-tos and various account assignments are needed to properly determine specific tax attributes
- These are generally unobtainable from standard SAP processes and/or programs.

### 3. Typical Outcome

- Results generated by Tax Software and returned to SAP are often inconsistent, inaccurate or accurate for the wrong reasons
- Companies grope for answers:
  - Call Tax Software provider - the software doesn't work right
  - Call Tax Software Implementation Partner - the Tax Software set up is wrong
  - Call SAP Implementation Partner - the configuration is no good
  - Call SAP - R/3 functionality is too limited for business needs
- Countless hours and dollars spent analyzing tax errors only to conclude that core SAP processes and/or programs need to be modified



- In the meantime, companies overpay or underpay taxes and absorb any related interest costs and penalties.

#### 4. TDS Bridges the Data Gap

- Accesses SAP data element attributes which are needed to properly determine specific tax attributes
- Leverages SAP pricing procedures and standard user exits. TDS uses pre-built custom tables and unique, advanced programming techniques to overcome the limited data manipulation capabilities of standard SAP pricing routines
- Custom tables allow TDS to be configured such that client-specific data elements are applied to determine the tax attributes that are passed from SAP to Tax Software
- The TDS solution is portable and generic. It can be used by any size company, in any industry
- **No modification** of SAP core code.

#### 5. Problems Solved

- Incorrect Purchase Order Display  
When displaying a purchase order, there are two locations to view the tax information - invoice tab and conditions tab. If you press the conditions tab, the purchase order taxes are correctly displayed. However, if you then go to the invoice tab and press the taxes button, an incorrect tax amount is displayed after Tax Software is called. When you again return to the conditions tab, the tax values are incorrect.
- Incorrect Taxation For Multiple Cost Objects on Purchase Orders/Service Entry Sheets  
SAP taxes based on the Purchase Order and Service Entry line items. Therefore, if you assign multiple cost objects to a single line item and need to tax based on the cost objects, SAP returns tax data based only on the first Account Assignment line item.
- Incorrect / Incomplete Data Sent to Tax Software in Service Entry, After Changes Made to Account Assignment Information



Since standard SAP taxes are based on the tax jurisdiction code, Tax Software is not called if a change is made to the cost object which does not affect the tax jurisdiction code.

- Improper Tax Decision in Service Entry if a Document is Copied, Changes are Made, or Changes are Not Made  
During service entry processing, standard SAP does not populate all fields required to make a proper tax decision prior to the tax calculation.
- Incomplete Account Assignment Data Passed from Logistics Invoice Verification (LIV) to Tax Software  
Within the processing of LIV documents, G/L accounts are not passed to standard SAP user exits or field exits.
- Improper Tax Decision on LIV Without Manual Intervention  
When processing Logistics Invoice Verification documents, there are no user exits prior to the call to tax. Therefore, tax communication structures are not populated with the data necessary to make a proper tax decision.
- Restricted Structure Fields That Cannot be Modified in the Standard SAP Tax User Exit  
Standard SAP user exit processing restricts the fields that can be modified, for example the Ship-To-Tax Jurisdiction Code.

## 6. Fields Provided by Standard SAP

Other than the basic requirements such as amounts, quantities and dates, standard SAP parameters typically provide these tax determination data for the Tax Software interface:

ACCNT_NO	Vendor or ship-to customer account number
AMOUNT	Tax base amount
COMP_CODE	Company code using tax interface
QUANTITY	Material quantity (internal representation - KOMP-MENGE)
TAX_DATE	Tax date (internal representation)
TXJCD_POA	Jurisdiction code "Point of order acceptance"
TXJCD_POO	Jurisdiction code "Point of order origin"



TXJCD_SF	Jurisdiction code "Ship-from"
TXJCD_ST	Jurisdiction code "Ship-to"

## 7. Additional Fields Provided by TDS

TDS opens access to an abundance of fields outside of standard SAP boundaries without modifying programs. Here are some of the key fields that TDS clients are now using to calculate consistently accurate taxes:

GL ACCOUNT	General Ledger Account
COST CENTER	Cost Center where goods are consumed
CATEGORY	Cost Center Category (Client-defined cost center groupings)
PROJECT	WBS Element
INTERNAL ORDER	Internal Order Number
DEPARTMENT	Cost Object Department
XPRCD	External product code (external interface)
STORE_CODE	Store Code

## 8. Benefits to SAP-Tax Software Customers

- Enhances SAP core functionality. Many transaction codes are more robust and perform better than those in standard SAP
- Tax decision making is removed from the transaction processor's role
- Produces consistently accurate SAP tax attributes
- Avoids costs associated with analyzing transaction processing errors and identifying potential solutions
- Avoids costs and risks related to implementing and supporting core code modifications
- Quick, simple configuration and installation based on company-specific requirements (usually about 6 days)
- Minimal impact applying SAP SPs, CRTs and release upgrades.