LEVEL III DATA PROCESSING

FOR DEVELOPERS

SLIM CD offers LEVEL III EXPRESS, where a default product is created on slimcd.com and that default product is added to all transactions. In addition, SLIM CD allows developers to post LEVEL III data to get LEVEL III rates. Up to 25 items can be posted, and the totals of all details in an item must add correctly to the total for the item. In addition, the total for all items must match the total for the transaction.

Please note that LEVEL III depends on qualifying for LEVEL II. To qualify for LEVEL II, the data required is:

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| **FIELDNAME** | **DESCRIPTION** |
| po | A purchase order number (non-blank value) |
| salestax | Amount of the sale which represents sales tax |
| salestaxtype | 0=Not provided, 1=Sales Tax, 2=Tax Exempt. |

Note that for tax exempt items, send salestaxtype=2 and salestax=0

To qualify for LEVEL III, the developer also needs to include the street/zip so that address verification (AVS) can be performed. This requires the street and zip fields to be sent to SLIM CD.

The developer also needs to include line item details for up to 25 items. SLIM CD accepts this information in field names where the suffix of the field name is the number of the item. For example, itemdescription1, unitofmeasure1, itemdescription2, unitofmeasure2, etc.

Fields for LEVEL III items (where X below is a sequential number from 1-25)

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| **FIELDNAME** | **DESCRIPTION** |
| itemdescriptionX | Description of the item that may appear on the cardholder’s statement |
| unitofmeasureX | Unit of measure from standard unit of measure abbreviations |
| unitpriceX | Price for a “unit” of the above measurement |
| itemquantityX | Quantity of the items purchased |
| productcodeX | Product Code identifying the item |
| icommoditycodeX | Commodity Code identifying the item |
| itemdiscountamountX | Discount amount applied to the item’s unit price |
| itemdiscountrateX | Discount rate applied to the item unit price |
| itemtaxamountX | Tax amount applied for this total |
| itemtaxrateX | Tax rate applied to the item |
| totalX | Total for the line item |

All items must be provided, and the totals “across” an individual line item must match. For example, the (unit cost minus, the discount, plus the tax amount) times the item quantity must equal the total for that line item

IMPORTANT: When generating line item amounts, quantities, rates, etc., text strings formatting the amounts to 4 digits of decimal precision should be used in line items when sending data to SLIM CD.

Below are some resources that may be useful in locating product codes, commodity codes and units of measure:

Product Code Search: <https://www.unspsc.org/search-code>

Commodity Code List: <http://www-bfs.ucsd.edu/pur/services/pursvcs/comcodes.htm>

Units of Measure: <https://stats.slimcd.com/soft/interface/units.htm>

PLEASE NOTE that these are not guaranteed to be accurate or all-inclusive and you may require values not found in these resources!

Calculating your own “LEVEL III DEFAUL ITEM”. Slim CD offers LEVEL III EXPRESS, where a default LEVEL III item is added to each transaction. This is done by:

1. Using the PO, SALES, TAX and SALES TAX TYPE as provided.
2. If the PO is not provided, we fill the PO field with the CLIENT\_TRANSREF (invoice #). If that is also not provided, SLIM CD generates a PO based on the current date.
3. Using the SALES TAX as provided. If the sales tax is NOT provided, SLIM CD looks at the default item to determine if it’s marked as “taxable”. If it IS NOT taxable, SLIM CD uses 0.00 as the sales tax. If it is taxable and no salestax was provided to the gateway, SLIM CD uses the “INVOICE SETTINGS” value for the tax rate to determine how to reverse-calculate the amount of the sales tax. (See the pseudo-code below for an example of this)
4. Use the SALES TAX TYPE provided. If the salestaxtype is not provided, SLIM CD generates it as follows: If the sales tax is non-zero, SLIM CD will force the salestaxtype to be 1. If the sales tax is provided and is zero, SLIM CD will force the salestaxtype to be 2 (tax exempt)

IMPORTANT: Sales tax and total for the transaction are formatted with two digits of decimal precision. However, when generating line item amounts, quantities, rates, etc., text strings formatting the amounts to 4 digits of decimal precision should be used in line items when sending data to SLIM CD.

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| **PSEUDO-CODE in VBS-LIKE format for generating the line item** |
| // Pseudo-code to reverse-calculate the default item's tax rate, etc  //where:  // total is the total amount of the charge, including tax  // salestax is the amount of sales tax specified  // taxrate is from some other source, and is used in reverse-calculating tax when salestax not provided  // if you know the sales tax (already calculated) ... or if salestaxtype is tax exempt then  if salestax <> "" and ((salestaxamt > 0 and salestaxtype <>"2") or  (salestaxamt=0 and salestaxtype="2")) then  // Use what is provided!  netamount = total – salestaxamt  itemtaxrate = formatnumber((salestaxamt/total)\*100,4,-1,0,0)  else  'to calculate the salestax amount "in reverse" from a taxrate:  netamount = cDbl(formatnumber(cCur(total / (1.0 + taxrate)),2,-1,0,0))  if default\_item\_is\_taxable then  salestaxamt = total - netamount  salestax = formatnumber(salestaxamt,2,-1,0,0)  salestaxtype = "1"  itemtaxrate = formatnumber(taxrate\*100,4,-1,0,0)  else  salestax = "0.00"  salestaxamt = 0.0  netamount = total  salestaxtype = "2"  itemtaxrate = “0.0000”  end if  end if  itemdescription1 = DefaultItemDescription  unitofmeasure = DefaultUnitOfMeasire  unitprice1 = formatnumber(netamount,4,-1,0,0)  itemquantity1 = 1  productcode1 = DefaultProductCodeValue  itemdiscountamount1 = 0  itemdiscountrate1 = 0  itemcommoditycode1 = DefaultCommodityCode  itemtaxamount1 = formatnumber(salestaxamt,4,-1,0,0)  itemtaxrate1 = itemtaxrate //calculated above, from salestax amount, etc |

# Additional fields for LEVEL III on TSYS.

The TSYS processor has additional data fields that can be specified. These are often used for international sales, and most do not apply.

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| FIELDNAME | DESCRIPTION |
| summarycommoditycode | The overall commodity code or MCC/SIC code for the merchant |
| customer\_VATregistrationnumber | VAT registration number |
| dutyamount | Duty amount for this transaction |
| discountamount | Total discount amount for the transaction |
| shipamount | Amount of shipping for this transaction |
| shipfromzip | Zip code from where the product is shipped |
| shiptozip | Destination zip code |
| shiptocountry | Destination country |
| vat\_invoice\_number | VAT Invoice number |

In our experience, the primary value used has been the summarycommoditycode, but I cannot say if it is required to achieve LEVEL III rates on TSYS. Consult your merchant services specialist for this information.