Unit of Measure & SalesTax Customization

- Multi-select UOM configuration
 - Unit of Measure Set, Base Unit, Related Unit
 - Base Unit
 - Related Unit
 - Unit of Measure Set
- · Field Mappings for Invoice integration with Sales Tax

Multi-select UOM configuration

This section illustrates a typical QuickBooks Unit Of Measurement configuration for all the ITEM List. And, it shows how the same can be replicated in Salesforce under Products which is an equivalent of QuickBooks ITEMS List. The following section illustrates Unit Of Measure, Base Unit and Related Unit

Unit of Measure Set, Base Unit, Related Unit

Base Unit

The first unit defined in a unit of measure set is usually the smallest unit of measure. It is used for an item when purchasing it, tracking it in inventory, and selling it. In QuickBooks, the base units of items are used to count inventory, generate most inventory reports, and perform quantity-related calculations.

Important: When you create an inventory item, the cost, sales price, and on-hand quantity you enter are all for the base unit.

Related Unit

A unit is defined by the number of base units it contains. For example, if the base unit is foot, a related unit might be yard, which is defined as containing three feet.

Related units make it possible to show quantities of the same item in different measurements in different places in QuickBooks. For example, you might purchase an item called Cable in spools. And, you may count that item in inventory by the foot, and then sell it by the yard. By creating a unit of measure set with a base unit of foot and related units of spool (containing 500 feet) and yard, you can enter a quantity of spools on a purchase order, show the item in feet on inventory reports, and enter a quantity of yards on an invoice.

Unit of Measure Set

Consists of a base unit and any number of related units.

When you create a unit of measure set, you can also specify which unit of measure should appear by default when adding an item to a purchase form, a sales form, and a shipping pick list. You also give the set a name, such as "Length by the foot."

Once you've created a unit of measure set, and assigned it to an item, you can easily convert to other units of measure within the set when you add the item to a transaction. Continuing with the previous example, if you add the Cable item to an invoice with a quantity of 10 yards, you could then convert that quantity to 30 feet or 0.06 spools.

Note: Unit of measure sets are available only when Multiple U/M Per Item is selected as the unit of measure mode.

Set Up – Multiple Units of Measure Per Item

QuickBooks company file has multi-select UOM option per ITEM. A single item can have multiple UOM selected. And, one of the UOM values has to be assigned as default. However, while generating a transaction, you can use different sets based on the requirement or conversion required for a given transaction.

In the example shown below - for the ITEM **z0b1-739** - the default UOM set I**b739** has the base unit as POUND (lb) but has several related units Square Feet, Linear Feet and sheet with default values as shown. The above can be read as:

1 pound = 1.03 Sq Feet

1 pound = 3.3818 Linear Feet

1 pound = 33.8183 sheets

The same ITEM, when selected within a transaction in QuickBooks, can use the following conversions based on the quantity and UOM set used:

Field Mappings for Invoice Item Line with UOM

Below is a table lists mappings / data required from Salesforce for successful integration of a QuickBooksInvoice transaction with a Unit of Measure.

Salesforce	R	QuickBooks	R	Comments
Rate	Υ	Rate	Υ	The rate has to be calculated precisely based on the quantity and based on the conversion for a particular UOM.
Quantity	Υ	Quantity	Υ	Quantity should be calculated from Salesforce based on the Unit and Conversion used for a particular Product.
UOM	Ν	UnitOfMeasure	Ν	The correct UOM should be referred with the names matching the U/M list in QuickBooks.

Rate:

The rate or amount of the LineItem should be precise based on the UNIT used and the quantity used. The calculation of this needs to happen on the Salesforce side at the Opportunity Line Item level. It will be based on the PRODUCT selected and UNIT used before, DBSync can parse/push this data into QuickBooks without the transaction erring out.

Quantity:

Quantity values should change either as 1 Ft, 1Sheet etc as shown above based on the UNIT selected for a given PRODUCT on the OpportunityLineItem. Care should be taken to make sure we are always sending in the correct Quantity along with the right UNIT.

UnitOfMeasure:

MaxLength - 31

This is the QuickBooks xml name for selecting a UOM for a given transaction line item. For a given UNIT, there are several RELATED UNITS based on the Quantity and Rate changes. For a given ITEM LINE, if the right BASE UNIT name, corresponding QUANTITY, and RATE should be provided at all times for successful integration of an Invoice transaction. A corresponding field on the OpportunityProducts object can either be a *P icklist* or *Text* field. Finally, the data needs to be populated at all times.

Field Mappings for Invoice integration with Sales Tax

This section illustrates the field mappings required for QuickBooksInvoice integration based on SalesTaxCode configuration in QuickBooks. In order to ensure seamless integration of a transaction with SalesTaxCode, DBSync will require the following information from Salesforce to integrating the same into QuickBooks:

Salesforce	R	QuickBooks	R	Comments
ItemTaxCode	Y	ItemSalesTaxRef		This field should be on the Opportunity object and the NAME should match with the QuickBooksSalesTaxCode list at all times.
Customer Tax Code	Ν	CustomerSalesTaxCodeRef	Ν	This field should be on the Opportunity object and the NAME should match with the QuickBooksCustomerTaxCode list at all times.
SalesTaxCode	Y	SalesTaxCodeRef	Y	This field should be on the Opportunity Products object and should match with QuickBooks available list.
TaxAmount	Ν	TaxAmount	Ν	Should be on the Opportunity Products Object.
CheckBox	Ν	IsTaxable	Ν	Should be on the LineItem level.

ItemSalesTaxRef:MaxLength = 31

The ItemSalesTaxRef field is the one that calculates the tax based on whether a LineItem is taxable or not. The ItemSalesTax is setup on each Item in quickbooks at the time of configuration. A corresponding field in Salesforce should always be on the Opportunity object as it is on the Invoice header on QuickBooks. Secondly, the SFDC field name should always match with the ItemSalesTax code list available in QuickBooks and preferable data-type in Salesforce is *Text Field or Picklist*.

CustomerSalesTaxCodeRef:MaxLength = 3

The customer Tax Code in QuickBooks holds the values **Taxable Sales** &**Non-Taxable Sales**. It could also hold custom values based on how QuickBooksCustomerTaxCode is configured. The corresponding field in SFDC needs to be at the Opportunity level and preferably has to be **Text** field with the data values matching with the QuickBooksCustomerSalesTaxCodeRef list.

SalesTaxCodeRef: MaxLength = 3

SalesTaxCode, by default, have *Tax* and *Non* as default values which translate into *Taxable* &*Non Taxables* into QuickBooks. QuickBooks can also hold custom values but, can be only 3 characters in length. The corresponding SFDC field preferably needs to be a *Text* field and hold same vales as that of QuickBooks "SalesTaxCodeRef" list.