



# Avalara AvaTax for Salesforce B2C Commerce QuickStart

## Storefront Reference Architecture

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## System Integration Document for Avalara AvaTax

Revision Date: 03/06/2020

Product Release: v20.1.0

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## 1.0. Acronyms and Abbreviations

B2C	Business to Consumer
SFRA	Storefront Reference Architecture
UUID	Universally Unique Identifiers

## 2.0. Connector Overview

The AvaTax Salesforce B2C Commerce cartridge provides rapid integration for Salesforce B2C Commerce implementations, helping to accelerate and simplify integration projects. This cartridge can be configured in the Business Manager and contains all the elements necessary to perform a successful integration of AvaTax **Tax calculation** and **Address Validation** services.

## 3.0. Configuration

The following table displays the list of AvaTax Configuration Settings:

Sr. No.	AvaTax Settings	Descriptions
<b>Account Settings</b>		
1.	Tax Calculation	<ul style="list-style-type: none"> <li>• Enable AvaTax Tax Calculation on the transactions.</li> </ul>
2.	Address Validation	<ul style="list-style-type: none"> <li>• Enable Address Validation using AvaTax.</li> </ul>
3.	Save Transaction to AvaTax	<ul style="list-style-type: none"> <li>• Enable this to save the transactions to AvaTax.</li> </ul>
4.	Commit Transaction to AvaTax	<ul style="list-style-type: none"> <li>• Enable this to commit the transactions to AvaTax.</li> </ul>
5.	Company Code	<ul style="list-style-type: none"> <li>• The entered Company Code will be used to save the transactions in the company configured in the AvaTax.</li> </ul>
6.	Customer Code	<ul style="list-style-type: none"> <li>• Customer Code sent to Avalara services can be customized in the AvaTax Settings section.</li> <li>• For Guest users, Email ID provided during the checkout process is sent over. If the customer is authenticated, and the custom attribute preference value is available, then the attribute value from 'Profile' object is used.</li> <li>• The order of preference used for Customer Code is:               <ul style="list-style-type: none"> <li>○ Custom field attribute provided in AvaTax Settings section for the Authenticated users and subject to the availability.</li> <li>○ Email ID provided during checkout for both Authenticated and Guest Users.</li> <li>○ Email ID from the User Account (authenticated users only).</li> </ul> </li> </ul>
7.	Shipping Tax Code	<ul style="list-style-type: none"> <li>• The default Tax Code is used when no tax code is assigned to the shipping method.</li> </ul>
<b>Cross Border Calculation</b>		
8.	Taxation Policy	<ul style="list-style-type: none"> <li>• It shows the taxation policy set by the merchant.</li> </ul>

Sr. No.	AvaTax Settings	Descriptions
<b>Address Details</b>		
1.	Location Code	<ul style="list-style-type: none"> <li>If a value is available, then the entered origin address details are not used for the tax calculation.</li> </ul>
2.	ShipFrom Address fields (Address Line 1, Address Line 2, Address Line 3, City, State, Zip/Postal Code, Country Code)	<ul style="list-style-type: none"> <li>Enter the ShipFrom address details.</li> </ul>

#### 4.0. Reconcile Orders

The Reconcile Orders utility allows you to reconcile/ update orders in the AvaTax where the Amount or Tax is mismatched, or the orders which are missing in the AvaTax.

**Note:** The orders which are missing in Salesforce B2C Commerce cannot be reconciled.

## 5.0. Object Mapping

The following tables shows the mapping of Salesforce B2C Commerce Fields with the AvaTax Fields:

### 5.1. Address Validation

Sr. No.	Type of Salesforce B2C Commerce Object	Salesforce B2C Commerce Fields	AvaTax Fields
1.	String	address1	line1
2.	String	address2	line2
3.	String	address3	line3
4.	String	city	city
5.	String	stateCode	region
6.	String	countryCode / country	country
7.	String	postalCode	postalCode
8.	String	latitude	latitude
9.	String	longitude	longitude

### 5.2. Tax Calculation

Sr. No.	Type of Salesforce B2C Commerce Object	Salesforce B2C Commerce Fields	AvaTax Fields	Descriptions
1.	String	Basket > UUID	code	<ul style="list-style-type: none"> <li>After you place an order, the variable code gets assigned with the Order Number, and the docType gets assigned with the SalesInvoice.</li> </ul>
2.	String	Settings > Company Code	companyCode	<ul style="list-style-type: none"> <li>Specify the code of the company.</li> </ul>
3.	String	Current date	date	<ul style="list-style-type: none"> <li>Retrieved using JavaScript.</li> </ul>
4.	String	Basket > Shipment > Email	customerCode	<ul style="list-style-type: none"> <li>It sends the Account Id or Name as a Customer Code.</li> </ul>
5.	dw.order.orderAddress	Basket > Shipment > shippingAddress	addresses.shipTo	<ul style="list-style-type: none"> <li>Retrieved from the Storefront shipping page.</li> </ul>
6.	dw.order.orderAddress	Settings > shipFrom values	addresses.shipFrom	<ul style="list-style-type: none"> <li>AvaTax for Salesforce B2C Commerce provides an AvaTax Configuration page where a user can enter the Origin Address.</li> </ul>
7.	String	Shipment > Line Item > UUID	line.number	<ul style="list-style-type: none"> <li>Represents line item in a transaction.</li> </ul>
8.	Number	Line Item > Quantity	line.quantity	<ul style="list-style-type: none"> <li>Quantity of items in this line.</li> </ul>
9.	dw.value.Money	Line Item > Price	line.amount	<ul style="list-style-type: none"> <li>AvaTax retrieves the value from the Basket object.</li> </ul>

Sr. No.	Type of Salesforce B2C Commerce Object	Salesforce B2C Commerce Fields	AvaTax Fields	Descriptions
10.	dw.order.orderAddress	Settings > shipFrom values	line.addresses.shipFrom	<ul style="list-style-type: none"> <li>The shipFrom address picked from the AvaTax Configuration page.</li> </ul>
11.	dw.order.orderAddress	Basket > Shipment > shippingAddress	line.addresses.shipTo	<ul style="list-style-type: none"> <li>The shipTo address is filled by the end user on the Storefront.</li> </ul>
12.	String	Line Item > Tax class ID OR Setting > defaultShippingMethodTaxCode	line.taxCode	<ul style="list-style-type: none"> <li>Tax Code - System or Custom Tax Code.</li> </ul>
13.	dw.order.TaxMgr.taxationPolicy	Site settings > Taxation policy	line.taxIncluded	<ul style="list-style-type: none"> <li>It is a taxation policy of the current site. i.e. net/ gross</li> </ul>
14.	String	Line Item > ID	line.itemCode	<ul style="list-style-type: none"> <li>The Line Item ID is used as ItemCode.</li> </ul>
15.	String	Line Item > Product > Description	line.description	<ul style="list-style-type: none"> <li>AvaTax for Salesforce B2C Commerce passes the Product Description as a line description to the AvaTax for Tax Calculation.</li> </ul>
17.	String	customer.profile.custom.taxID	businessIdentificationNo	<ul style="list-style-type: none"> <li>Enter the VAT Business Identification Number of the customer.</li> </ul>
18.	String	basket.currencyCode	currencyCode	<ul style="list-style-type: none"> <li>It displays the currency information.</li> <li>For example: Currency Code: USD</li> </ul>
19.	String	basket.custom.ATInvoiceMessage	response.messages.details[]	<ul style="list-style-type: none"> <li>It displays the invoice messages received in the Avalara response when the order is in the checkout stage.</li> </ul>
20.	String	order.custom.ATInvoiceMessage	response.messages.details[]	<ul style="list-style-type: none"> <li>It displays the invoice messages received in the Avalara response when the order is placed.</li> </ul>
21.	Text	basket.custom.ATTaxDetail	response.line.details[]	<ul style="list-style-type: none"> <li>It is used to store Tax Detail/ type in the Basket object when the order is in the checkout stage</li> </ul>
22.	Text	order.custom.ATTaxDetail	response.line.details[]	<ul style="list-style-type: none"> <li>It is used to store Tax Detail/ type in the Order object when the order is placed.</li> </ul>

Sr. No.	Type of Salesforce B2C Commerce Object	Salesforce B2C Commerce Fields	AvaTax Fields	Descriptions
23.	String	basket.custom.ATCustomDuty	response.summary[i].tax	<ul style="list-style-type: none"> <li>It is used to store import duty/ fees if applicable in the basket object.</li> </ul>
24.	String	order.custom.ATCustomDuty	response.summary[i].tax	<ul style="list-style-type: none"> <li>It is used to store import duty/ fees if applicable in the order object.</li> </ul>
25.	Text	basket.custom.ATGenericMessage	response.messages[i].summary	<ul style="list-style-type: none"> <li>It is used to store the transaction summary messages in the basket object.</li> </ul>
26.	Text	order.custom.ATGenericMessage	response.messages[i].summary	<ul style="list-style-type: none"> <li>It is used to store the transaction summary messages in the order object.</li> </ul>
27.	Text	basket.custom.ATLandedCost	response.messages[i].summary	<ul style="list-style-type: none"> <li>It is used to store Cross Border messages in the basket object.</li> </ul>
28.	Text	order.custom.ATLandedCost	response.messages[i].summary	<ul style="list-style-type: none"> <li>It is used to store Cross Border messages in the order object.</li> </ul>
29.	String	basket.custom.ATTax	response.summary[i].tax	<ul style="list-style-type: none"> <li>It is used to store tax.</li> </ul>
30.	String	order.custom.ATTax	response.summary[i].tax	<ul style="list-style-type: none"> <li>It is used to store tax.</li> </ul>



## 6.0. Integration Points

The following table shows the AvaTax Integration Points:

Sr. No.	Integration Page	Address Validation	Tax Calculation
1.	My Account	Yes	No
2.	Shipping Page	Yes	Yes
3.	Billing Page	No	Yes

## 7.0. Services

Navigate to **Merchant Tools > AvaTax > AvaTax settings > Services**

- Test Connection – It is used to validate the AvaTax Account credentials.
- Void Transaction – It is used to void/cancel the orders posted in the AvaTax. The AvaTax service response is returned and displayed in the Service Response box.
- Commit Transaction It is used to commit the orders posted in the AvaTax. The AvaTax service response is returned and displayed in the Service Response box.
- Validate Address – It is used to validate shipping address of an order and receive a validated address as response.

**Note:** All the above features are for the testing purpose and can be scaled to process multiple Orders on the storefront.

## 8.0. Workflow Diagrams

### Address Validation

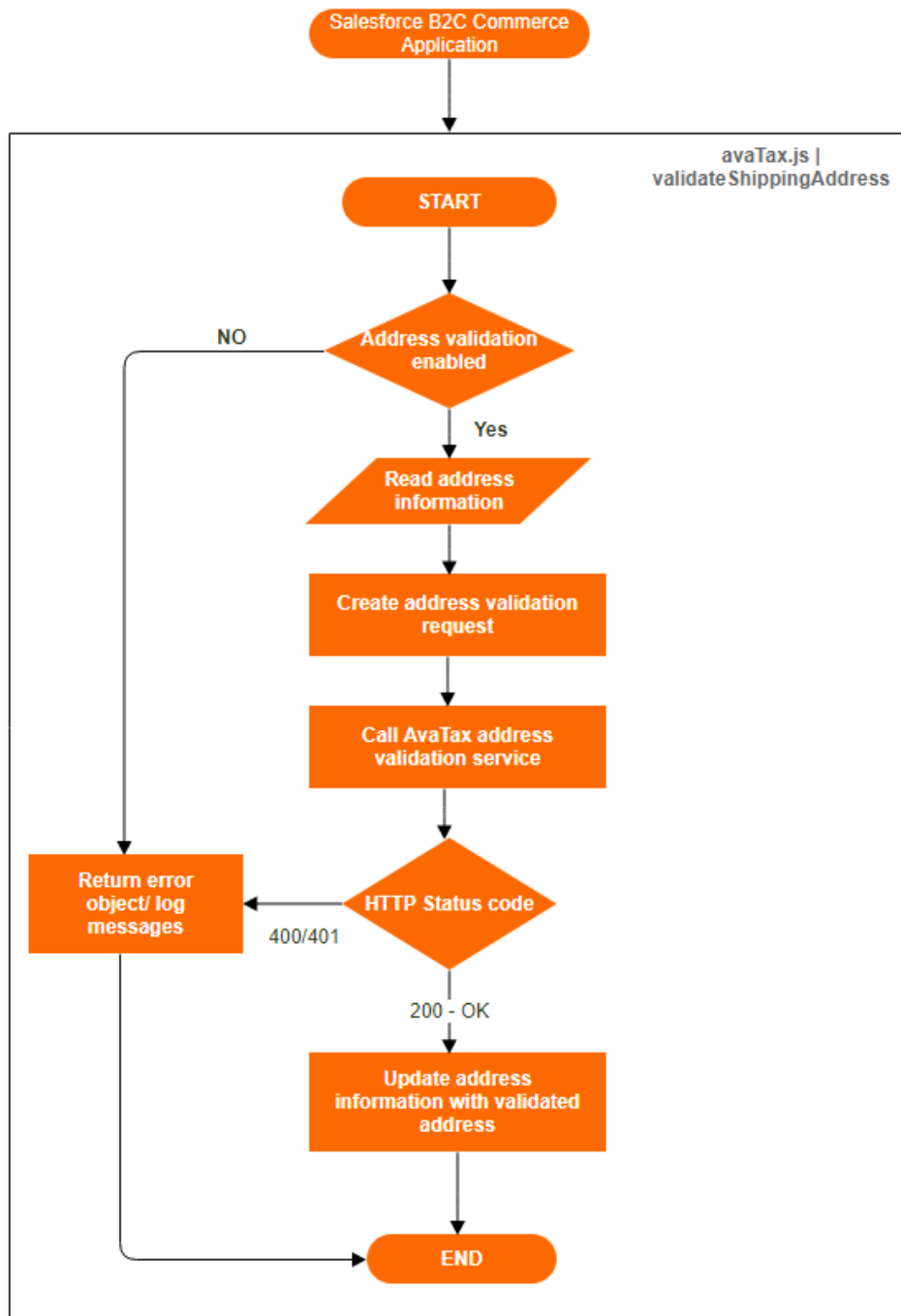


Figure 1: Address Validation

## Tax Calculation

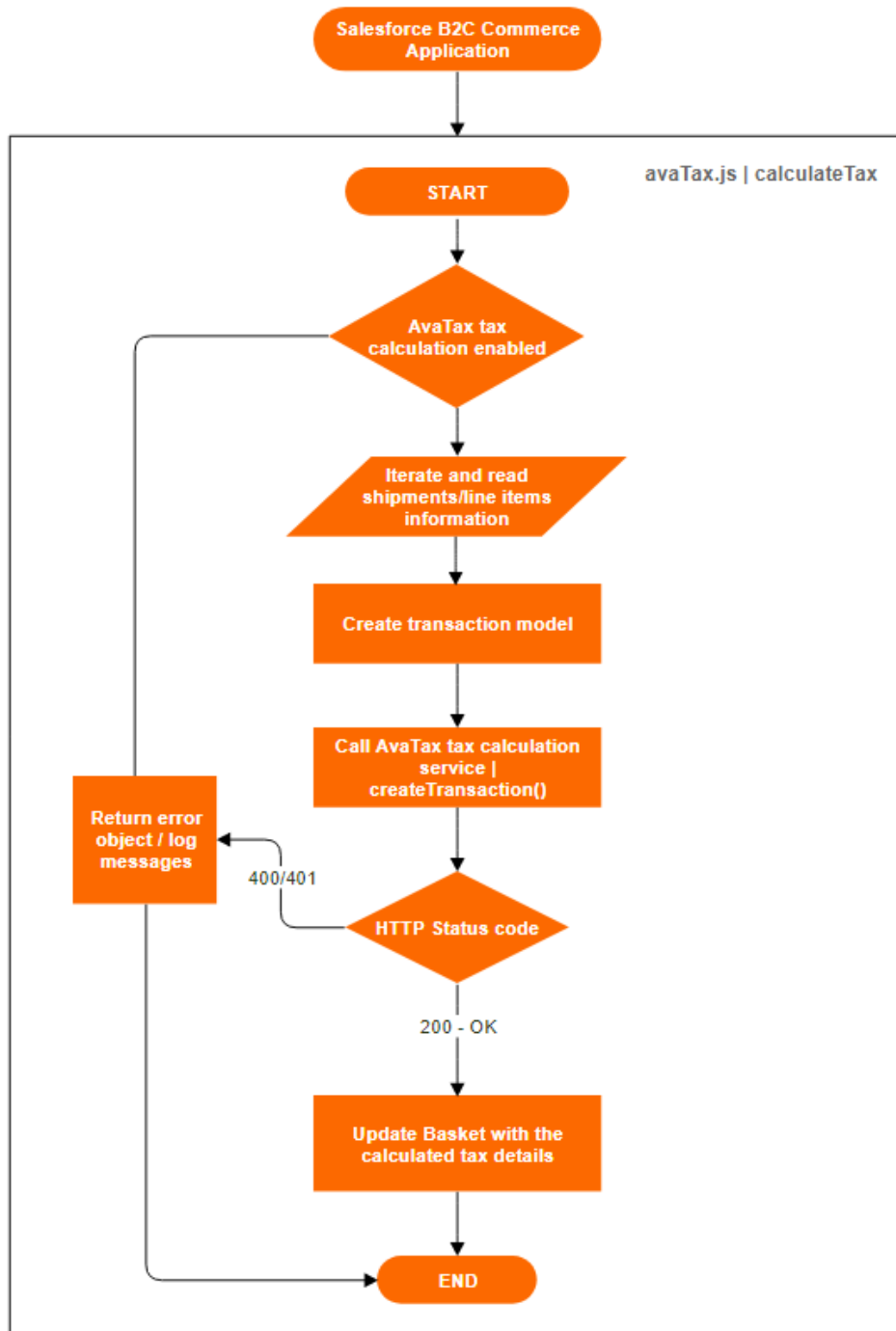


Figure 2: Tax Calculation