



Avalara AvaTax for Salesforce Order Management System

System Integration Document for Avalara AvaTax

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1.0. Connector Overview

The AvaTax for Salesforce Lightning Order Management app provides rapid integration with AvaTax features, helping to accelerate and simplify Tax Calculation. This app can be configured from Installed package by clicking on configure link beside installed package name. The features include – **Origin Address Validation, Tax Calculation, Returns, and Cancellations.**

Note: The person account dependency has been removed with this release.

Note: Customers upgrading to the latest AvaTax For Salesforce Lightning Order Management (OMS) v4.0 from any older version must deactivate the following existing AvaTax Process Builders:

- AvaTax Approve Order Summary Process (Process Builder)
- AvaTax FulFillment Order (Process Builder)
- AvaTax Order Summary Calc Return Cancel (Process Builder)

2.0. Configuration

The following table displays the list of AvaTax Configuration Settings:

Sr. No.	AvaTax Settings	Descriptions
AvaTax Options		
1.	Tax Calculation	<ul style="list-style-type: none"> It Enables/disables the AvaTax Tax Calculation features on the Orders summary.
2.	Sales Channel (read-only)	<ul style="list-style-type: none"> It displays the selected Sales Channel.
3.	Tax Inclusive	<ul style="list-style-type: none"> If enabled, then it indicates that the product prices are inclusive of the taxes.
4.	AvaTax Company	<ul style="list-style-type: none"> It is a company configured in the AvaTax used to save the transaction.
5.	Default Shipping Method Tax Code	<ul style="list-style-type: none"> The user needs to apply the Freight (FR) as a Default Shipping Method Tax Code. If no Tax Code is applied, then the default Tax Code (P0000000) is considered.
6.	Customer Code	<ul style="list-style-type: none"> It is a unique code to identify the customer. It is a Customer Code which is sent to the AvaTax along with the orders. The Customer Code values are as follows: <ul style="list-style-type: none"> Customer Email ID Customer ID
Address Details		
7.	Origin Address fields	<ul style="list-style-type: none"> It indicates the location from where the orders are shipped. The Origin Address fields are as follows: <ul style="list-style-type: none"> Address line 1 line 2 line 3 City State Postal Code Country
AvaTax Service Credentials		
8.	Account Number	<ul style="list-style-type: none"> Avalara AvaTax Account Number (Provided by Avalara).
9.	License Key	<ul style="list-style-type: none"> Avalara AvaTax License Key (Provided by Avalara).
10.	Environment	<ul style="list-style-type: none"> AvaTax Environment type such as Sandbox and Production.

3.0. Integrations

3.1. Test Connection

After configuring the AvaTax credentials, perform the test connection to verify the AvaTax credentials.

3.2. Address Validation

Address Validation is currently available on the origin address in the configuration section, and it is limited to US and Canada addresses.

3.3. Tax Calculation

Tax calculation is available on the following objects:

- **OrderSummary:** The tax calculated and updated on the custom fields created for the Avalara reference.
- **FulfillmentOrder (in case of 1 FO on Order Summary):** It updates the order DocStatus from uncommitted to the committed status in the AvaTax based on the status value as “Fulfilled”.
- **FulfillmentOrder (in case of multiple FO’s on Order Summary):** In case of multiple FO’s, when the one/first FO gets fulfilled a transaction gets posted on AvaTax with FO number in committed status and parallelly the original transaction on Order Summary gets adjusted with the Line items of the FO which are yet in ‘Allocated’ status only. The status of original transaction (on Order Summary) on AvaTax would still be ‘Uncommitted’. Similarly, the same would happen for the next all FO’s being fulfilled except for the last FO. When the last FO is fulfilled then no new transaction is created, instead the original transaction (on Order Summary) gets committed on AvaTax.

3.4. Returns

Returns are available on the OrderSummary object. In case of a return, a Return Invoice is created on AvaTax.

3.5. Cancellation

- The Cancellation is available on the OrderSummary object.
- If the user updates the order summary with the status as Cancelled, then the transaction record gets Voided. The transaction gets void in both Salesforce and AvaTax.
- If the quantity of the transaction line items is decreased, then the existing transaction on the AvaTax gets updated.

4.0. Object Mapping

The following tables shows the field mapping of AvaTax request and response for the Tax Calculation:

Sr. No.	AvaTax Fields	Salesforce Fields	Type	Descriptions
Request Fields				
1.	code	OrderSummary.OrderNumber	String	<ul style="list-style-type: none"> A unique identifier for orders posted to AvaTax.
2.	companyCode	Avatax_Site_Setting__c.Company_Code__c	String	<ul style="list-style-type: none"> Specifies the code of the company.
3.	date	OrderSummary.OrderedDate	Date/Time	<ul style="list-style-type: none"> The Date/Time when the order is created.
4.	<ul style="list-style-type: none"> CustomerCode <ul style="list-style-type: none"> Customer ID Customer Email 	<ul style="list-style-type: none"> Account.Account number for Customer ID Account.PersonEmail for Customer email 	String	<ul style="list-style-type: none"> Allows the user to select Customer ID or Customer Email. The value selected will be considered as a Customer Code. Customer ID: If the 'AccountNumber' field is blank then the 'AccountName' will be sent as Customercode. Customer Email: If the 'PersonAccount' is enabled, it looks for Person Email and if Person email is blank then the 'AccountName' will be sent as Customercode.
5.	addresses.shipTo	<ul style="list-style-type: none"> OrderSummary.ShippingAddress OrderDeliveryGroupSummary.DeliverToAddress 	String	<ul style="list-style-type: none"> It retrieves Ship To address from the OrderSummary page.
6.	addresses.shipFrom	<ul style="list-style-type: none"> Avatax_Site_Setting__c.Line_1__c Avatax_Site_Setting__c.Line_2__c Avatax_Site_Setting__c.Line_3__c Avatax_Site_Setting__c.City__c Avatax_Site_Setting__c.State__c Avatax_Site_Setting__c.Postal_Code__c Avatax_Site_Setting__c.Country__c 	String	<ul style="list-style-type: none"> All the address fields are grouped under the addresses.shipFrom node of AvaTax request.
7.	line.number	OrderItemSummary.LineNumber	Number	<ul style="list-style-type: none"> It represents the line items in a transaction.
8.	line.quantity	OrderItemSummary.Quantity	Number	<ul style="list-style-type: none"> It represents the quantity of items in a transaction.
9.	line.amount	OrderItemSummary.TotalLineAmount	Currency	<ul style="list-style-type: none"> It displays the total amount of the line items added in the transaction.
10.	line.taxIncluded	Avatax_Site_Setting__c.Tax_Included__c	Boolean	<ul style="list-style-type: none"> The tax is included in the item amount.

Sr. No.	AvaTax Fields	Salesforce Fields	Type	Descriptions
11.	line.itemCode	OrderItemSummary.ItemCode	String	<ul style="list-style-type: none"> It is a unique identifier of the item.
12.	line.description	OrderItemSummary.Description	String	<ul style="list-style-type: none"> It is a product description.
13.	currencyCode	UserInfo.getDefaultCurrency()	String	<ul style="list-style-type: none"> It is a default currency for the current user.
Response Fields				
14.	summary[i].tax	OrderSummary.Avatax_Message__c	String	<ul style="list-style-type: none"> Stores AvaTax message.
15.	summary[i].taxDate	OrderSummary.Tax_Date__c	Date/Time	<ul style="list-style-type: none"> Stores tax calculation date.
16.	Messages[i].summary	OrderSummary.avaoms__Cross_Border_Summary__c	String (Long)	<ul style="list-style-type: none"> Stores Custom duty details.
17.	lines[i].totalTax	OrderItemSummary.Sales_Tax_Amount_Line__c	String	<ul style="list-style-type: none"> Stores tax amount at line level.
18.	lines[i].taxRate	OrderItemSummary.Sales_Tax_Rate__c	String	<ul style="list-style-type: none"> Stores tax rate at line level.
19.	Lines[i].taxDetails	OrderItemSummary.Sales_Tax_Details__c	String	<ul style="list-style-type: none"> Stores tax break up at line level.
20.	Lines[i].Details[i].tax	OrderSummaryItem.LandedCost__c	String	<ul style="list-style-type: none"> Stores custom duty.
21.	Lines[i].Details[i].ItemCode	Product2.UPC__c	String	<ul style="list-style-type: none"> To pass UPC as ItemCode to AvaTax.

5.0. Flow Definition

5.1. AvaTax Approve Order Summary Process

Flow Label: AvaTax Approve Order Summary Process

Flow API Name: AvaTax_Approve_Order_Summary_Process_Final

Type: Autolaunched Flow

Trigger: Platform Event

Release Version: 4.0

- This flow is to approve Order summary record status.
- This decision is to check the criteria for the correct Order Summary Id which the flow triggered.

Calculate Tax (Calculate_Tax)

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER +

- Order Summary Tax calc
- Default Outcome

OUTCOME DETAILS

* Label: Order Summary Tax calc

* Outcome API Name: Order_Summary_Tax_calc

Condition Requirements to Execute Outcome: All Conditions Are Met (AND)

Resource: \$Record > Order Summary ID > Order Summary ...

Operator: Equals

Value: \$Record > Order Summary ID > Order Summary ...

+ Add Condition

- Apex Action

This Action invokes the Apex class `AvaTaxOrderSummaryTaxCalculator` for Tax Calculation

Edit "avaoms__AvaTaxOrderSummaryTaxCalculator" Apex action

Use values from earlier in the flow to set the inputs for the "avaoms__AvaTaxOrderSummaryTaxCalculator" Apex action. To use its outputs later in the flow, store them in variables.

Calculate Tax for Approved status (Calculate_Tax_for_Approved_status)

Set Input Values

* recordId: {!\$Record.OrderSummary.Id}


* salesChannelId: {!\$Record.OrderSummary.SalesChannel.Id}

isMultiCommit: [Include] (Toggle checked) | {!\$GlobalConstant.True}

- Status Field Update
- Order Summary record Status is getting approved in the below field update:

Edit Update Records

Update Salesforce records using values from the flow.

Status Update (Status_Update) 

*** How to Find Records to Update and Set Their Values**

Use the IDs and all field values from a record or record collection

Specify conditions to identify records, and set fields individually

Update Records of This Object Type

*Object

Order Summary

Filter Order Summary Records

Condition Requirements to Update Records

All Conditions Are Met (AND) ▼

Field	Operator	Value	
Id	Equals ▼	Aa \$Record > Order Summary ID > Or... X 🗑️	

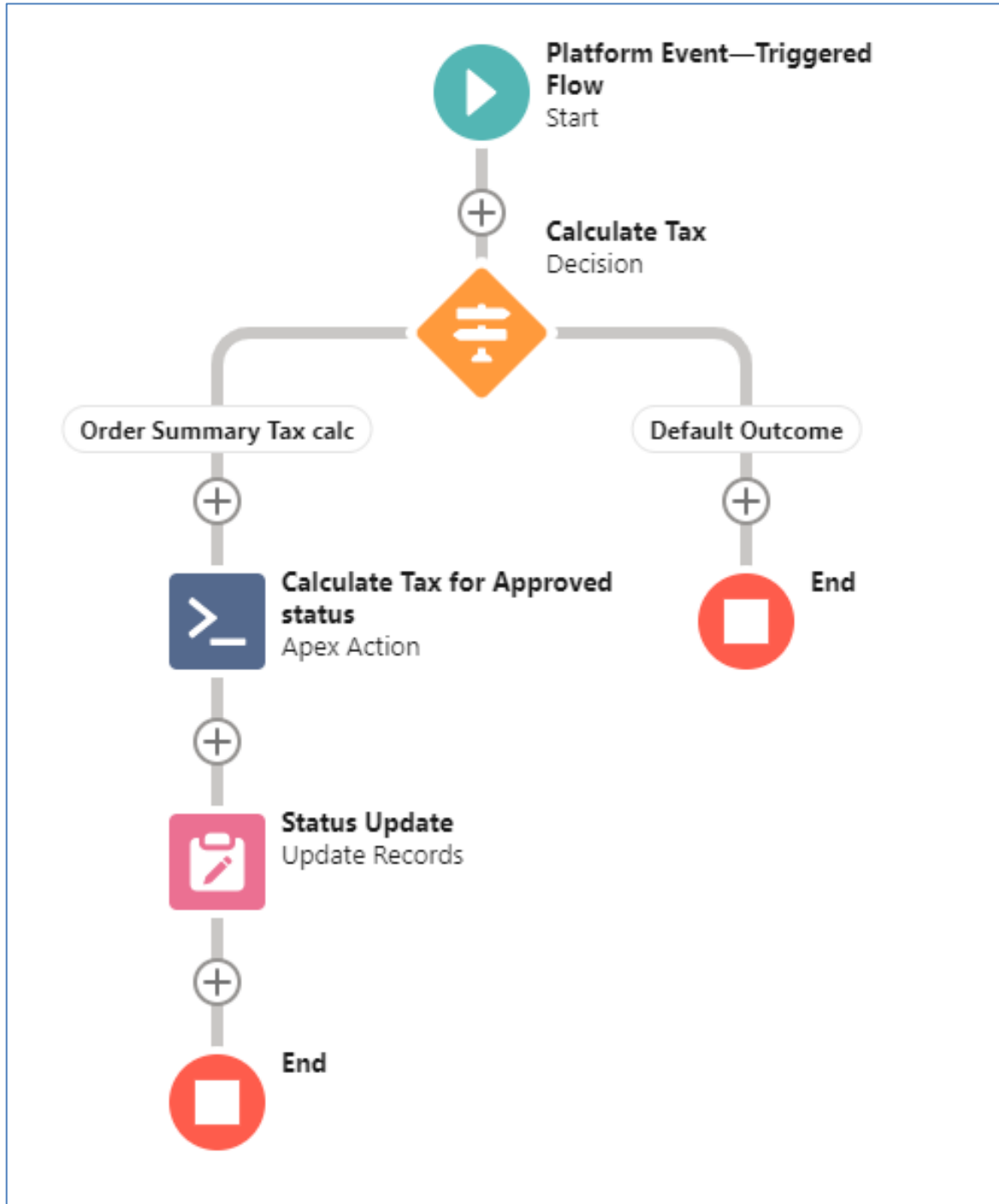
+ Add Condition

Set Field Values for the Order Summary Records

Field		Value	
Status	←	Approved	🗑️

+ Add Field

- Flow



5.2. AvaTax Order Summary Calc Return Cancel

Flow Label: AvaTax Order Summary Calc Return Cancel

Flow API Name: AvaTax_Order_Summary_Calc_Return_Cancel_Test

Type: Autolaunched Flow

Trigger: Record-Run After Save

Release Version: 4.0

- Start Action

Configure Start

Select Object
Select the object whose records trigger the flow when they're created, updated, or deleted.

* Object

Configure Trigger

* Trigger the Flow When:

A record is created
 A record is updated
 A record is created or updated
 A record is deleted

Set Entry Conditions
Specify entry conditions to reduce the number of records that trigger the flow and the number of times the flow is executed. Minimizing unnecessary flow executions helps to conserve your org's resources.

If you create a flow that's triggered when a record is updated, we recommend first defining entry conditions. Then select the **Only when a record is updated to meet the condition requirements** option for When to Run the Flow for Updated Records.

Condition Requirements

* Condition Logic ⓘ

	Field	Operator	Value	
1	<input type="text" value="Status"/>	<input type="text" value="Equals"/>	<input type="text" value="Approved"/>	<input type="button" value="🗑"/>
2	<input type="text" value="Status"/>	<input type="text" value="Equals"/>	<input type="text" value="Cancelled"/>	<input type="button" value="🗑"/>
3	<input type="text" value="Status"/>	<input type="text" value="Equals"/>	<input type="text" value="Waiting to Fulfill"/>	<input type="button" value="🗑"/>
4	<input type="text" value="avaoms_QuantityChanged_c"/>	<input type="text" value="Is Changed"/>	<input type="text" value="False X"/>	<input type="button" value="🗑"/>
5	<input type="text" value="avaoms_QuantityChanged_c"/>	<input type="text" value="Is Changed"/>	<input type="text" value="True X"/>	<input type="button" value="🗑"/>

When to Run the Flow for Updated Records ⓘ

Every time a record is updated and meets the condition requirements
 Only when a record is updated to meet the condition requirements

ⓘ Because you selected the Is Changed operator in a condition, you can't change when to run the flow for updated records. To select an option for when to run the flow, remove all Is Changed operators from the conditions.

* Optimize the Flow for:

Fast Field Updates
Update fields on the record that triggers the flow to run. This high-performance flow runs before the record is saved to the database.

Actions and Related Records
Update any record and perform actions, like send an email. This more flexible flow runs after the record is saved to the database.

Include a Run Asynchronously path to access an external system after the original transaction for the triggering record is successfully committed

The above criteria are to check if the Order summary status is approved, cancelled, or waiting to fulfill.

- Decision
- Based on the respective status check, the Order Summary transaction is created, cancelled, and returned.

Edit Decision

Status Update (Status_Update)

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER	OUTCOME DETAILS												
<ul style="list-style-type: none"> + Status Approved and Quantity Changed Status cancelled Status Waiting to Fulfill Default Outcome 	<div style="text-align: right;">Delete Outcome</div> <p>* Label: Status Approved and Quantity Changed</p> <p>* Outcome API Name: Status_Approved_and_Quantity_Changed</p> <p>Condition Requirements to Execute Outcome: All Conditions Are Met (AND)</p> <table border="0"> <tr> <td>Resource: \$Record > Status</td> <td>Operator: Equals</td> <td>Value: Approved</td> <td></td> </tr> <tr> <td colspan="4">AND</td> </tr> <tr> <td>Resource: \$Record > Quantity Changed</td> <td>Operator: Is Changed</td> <td>Value: True</td> <td></td> </tr> </table> <p>+ Add Condition</p> <p>When to Execute Outcome</p> <p><input checked="" type="radio"/> If the condition requirements are met</p> <p><input type="radio"/> Only if the record that triggered the flow to run is updated to meet the condition requirements</p> <p> Because you selected the Is Changed operator in a condition, you can't change when to execute the outcome.</p>	Resource: \$Record > Status	Operator: Equals	Value: Approved		AND				Resource: \$Record > Quantity Changed	Operator: Is Changed	Value: True	
Resource: \$Record > Status	Operator: Equals	Value: Approved											
AND													
Resource: \$Record > Quantity Changed	Operator: Is Changed	Value: True											


Edit Decision

Status Update (Status_Update)


Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.





OUTCOME ORDER	OUTCOME DETAILS												
<ul style="list-style-type: none"> + Status Approved and Quantity Changed Status cancelled Status Waiting to Fulfill Default Outcome 	<div style="text-align: right;">Delete Outcome</div> <p>* Label: Status cancelled</p> <p>* Outcome API Name: Status_cancelled</p> <p>Condition Requirements to Execute Outcome: All Conditions Are Met (AND)</p> <table border="0"> <tr> <td>Resource: \$Record > Status</td> <td>Operator: Equals</td> <td>Value: Cancelled</td> <td></td> </tr> <tr> <td colspan="4">AND</td> </tr> <tr> <td>Resource: \$Record > Quantity Changed</td> <td>Operator: Is Changed</td> <td>Value: False</td> <td></td> </tr> </table> <p>+ Add Condition</p> <p>When to Execute Outcome</p> <p><input checked="" type="radio"/> If the condition requirements are met</p> <p><input type="radio"/> Only if the record that triggered the flow to run is updated to meet the condition requirements</p> <p> Because you selected the Is Changed operator in a condition, you can't change when to execute the outcome.</p>	Resource: \$Record > Status	Operator: Equals	Value: Cancelled		AND				Resource: \$Record > Quantity Changed	Operator: Is Changed	Value: False	
Resource: \$Record > Status	Operator: Equals	Value: Cancelled											
AND													
Resource: \$Record > Quantity Changed	Operator: Is Changed	Value: False											

Edit Decision

Status Update (Status_Update) 

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER  +

-  Status Approved and Quantity Changed
-  Status cancelled
-  Status Waiting to Fulfill
-  Default Outcome


OUTCOME DETAILS [Delete Outcome](#)

* Label * Outcome API Name


Condition Requirements to Execute Outcome

Resource	Operator	Value
<input type="text" value="\$Record > Status"/>	<input type="text" value="Equals"/>	<input type="text" value="Waiting to Fulfill"/>
AND <input type="text" value="# \$Record > Quantity Changed"/>	<input type="text" value="Is Changed"/>	<input type="text" value="True"/>

[+ Add Condition](#)

When to Execute Outcome 

If the condition requirements are met
 Only if the record that triggered the flow to run is updated to meet the condition requirements


 Because you selected the Is Changed operator in a condition, you can't change when to execute the outcome.

- Apex Action

Order Summary Status is Approved and Queued

Edit "avaoms__AvaTaxOrderSummaryTaxCalculator" Apex action

Use values from earlier in the flow to set the inputs for the "avaoms__AvaTaxOrderSummaryTaxCalculator" Apex action. To use its outputs later in the flow, store them in variables.

Create or Adjust Transaction (Create_or_Adjust_Transaction) 

Set Input Values

A_a * recordId


A_a * salesChannelId

isMultiCommit Include

Order Summary Status is cancelled

Edit "avaoms__AvaTaxOrderSummaryCancelTaxCalculator" Apex action

Use values from earlier in the flow to set the inputs for the "avaoms__AvaTaxOrderSummaryCancelTaxCalculator" Apex action. To use its outputs later in the flow, store them in variables.

Cancel Transaction (Cancel_Transaction) 

Set Input Values


A_a *recordId

A_a *salesChannelId

Order Summary Status is Waiting to Fulfill

Edit "avaoms__AvaTaxOrderSummaryReturnTaxCalculator" Apex action

Use values from earlier in the flow to set the inputs for the "avaoms__AvaTaxOrderSummaryReturnTaxCalculator" Apex action. To use its outputs later in the flow, store them in variables.

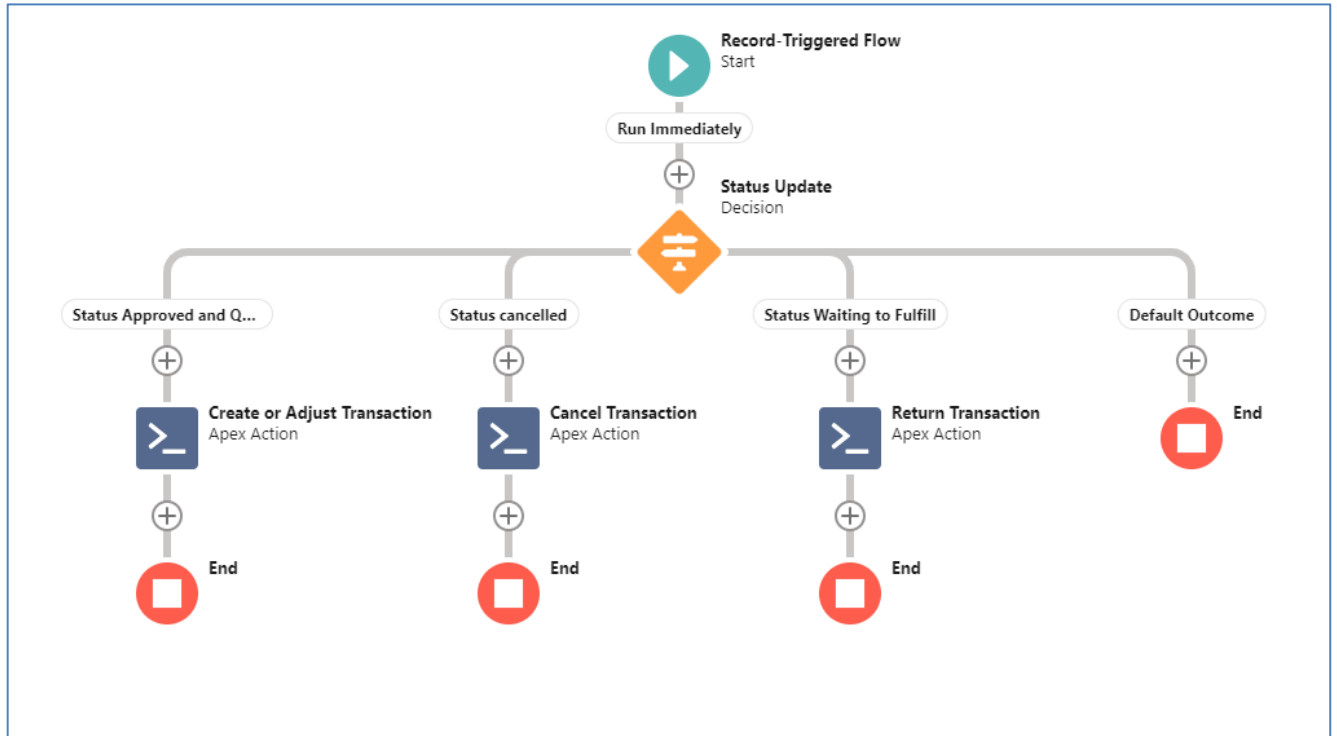
Return Transaction (Return_Transaction) 

Set Input Values

A_a *recordId

A_a *salesChannelId

- Flow



5.3. AvaTax Fulfillment Order

Flow Label: AvaTax Fulfillment Order

Flow API Name: Fulfillment_Order_5_08

Type: Autolaunched Flow

Trigger: Platform Event

Release Version: 4.0

- Decision
- The flow is to check for the Fulfillment Order record Id which is triggered by the flow and if the status is fulfilled.

Edit Decision

Fulfillment Order Update (Fulfillment_Order_Update)

Outcomes For each path the flow can take, create an outcome. For each outcome, specify the conditions that must be met for the flow to take that path.

OUTCOME ORDER

OUTCOME DETAILS

*Label: Fulfillment status Update

*Outcome API Name: Fulfillment_status_Update

Condition Requirements to Execute Outcome: All Conditions Are Met (AND)

Resource	Operator	Value
\$Record > Fulfillment Order ID > Fulfillment Ord...	Equals	\$Record > Fulfillment Order ID > Fulfillment Ord...
AND: \$Record > New Status	Equals	Fulfilled


Add Condition

- Apex Action

The Apex class is invoked when the Fulfillment Order's Status is fulfilled.

Edit "avaoms__AvaTaxFulfillmentOrderTaxCalculator" Apex action

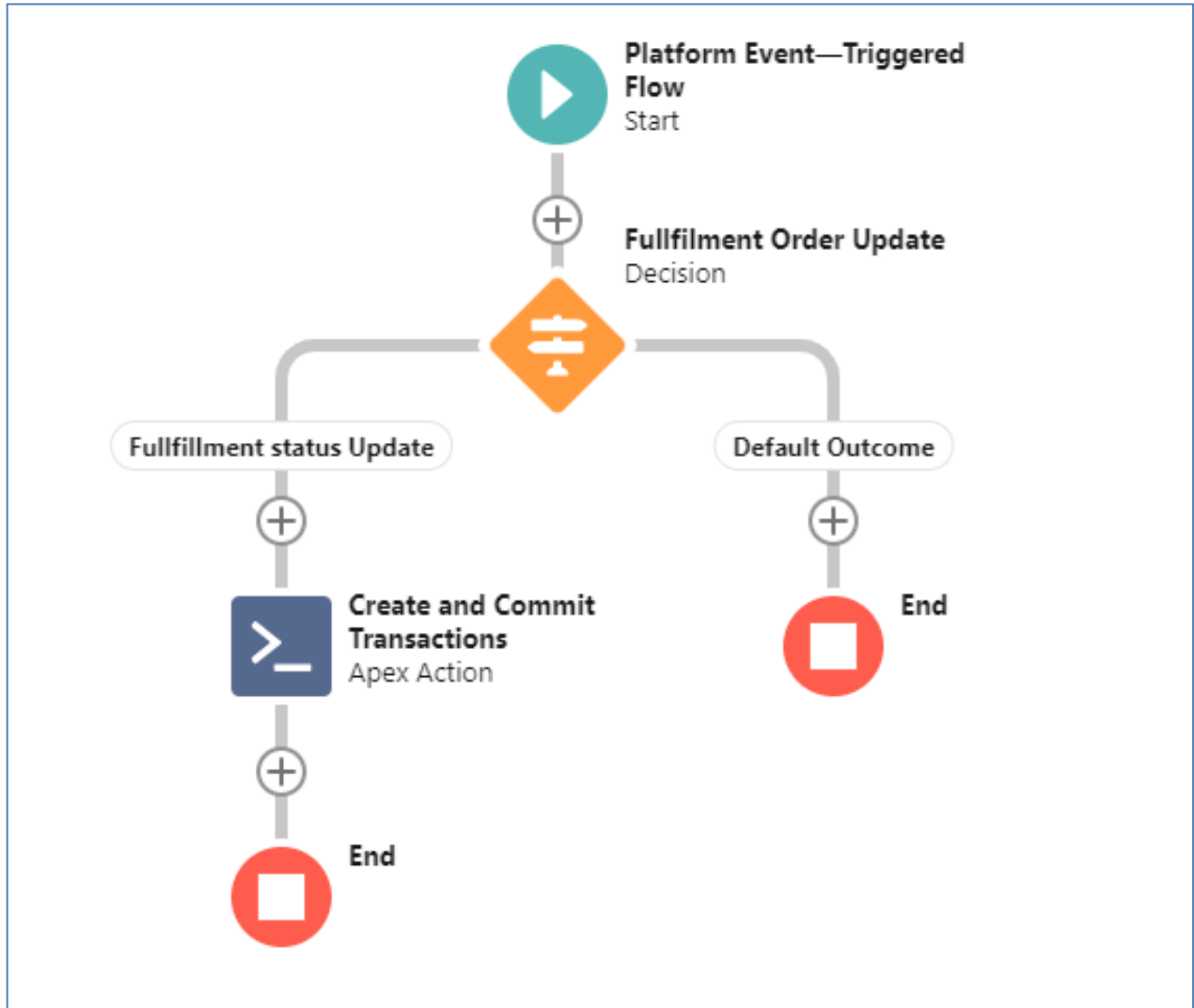
Use values from earlier in the flow to set the inputs for the "avaoms__AvaTaxFulfillmentOrderTaxCalculator" Apex action. To use its outputs later in the flow, store them in variables.

Create and Commit Transactions (Create_and_Commit_Transactions) 

Set Input Values

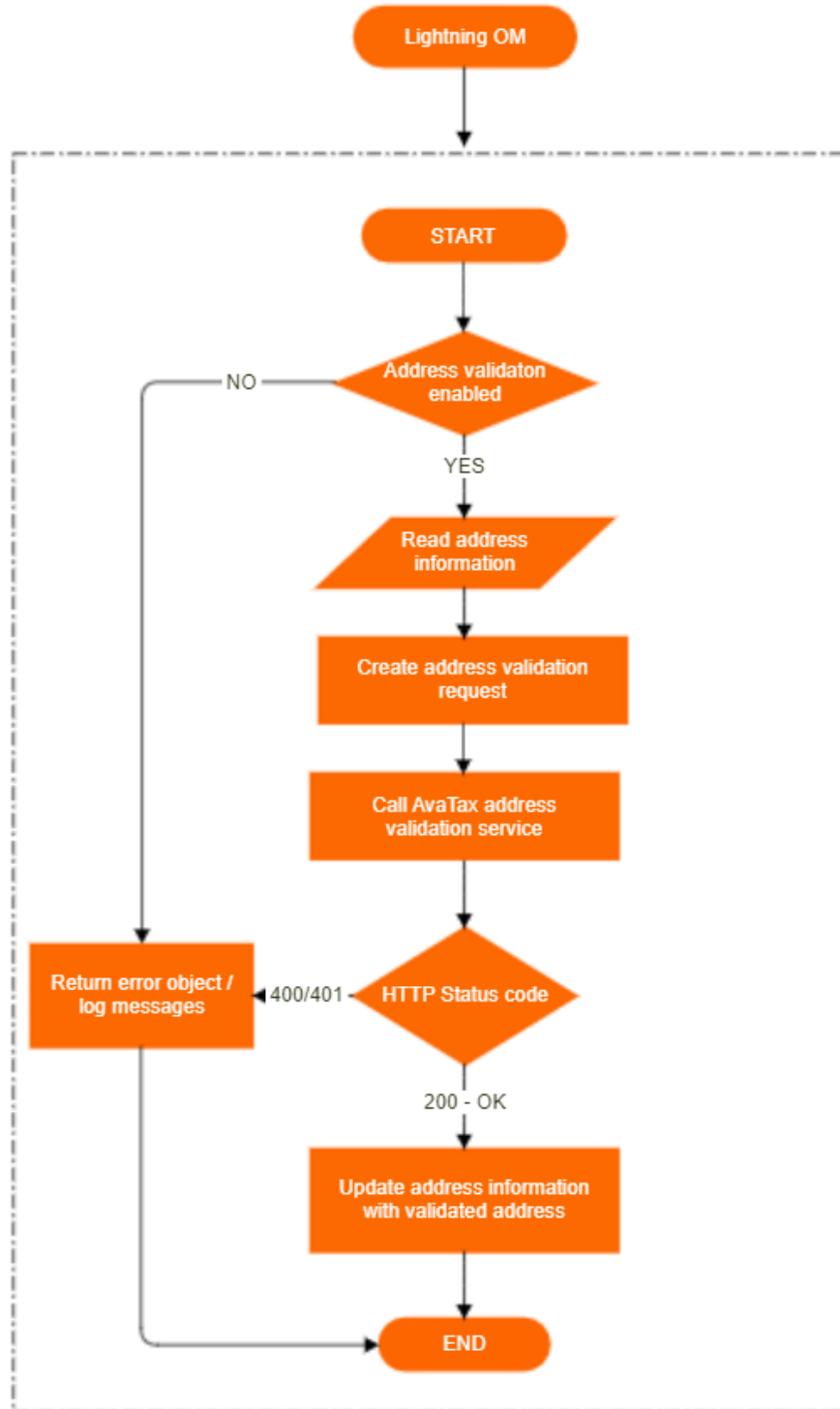
A _a * foDocId	<input type="text" value="{!\$Record.FulfillmentOrder.Id}"/>
A _a * recordId	<input type="text" value="{!\$Record.OrderSummary.Id}"/>
A _a * salesChannelId	<input type="text" value="{!\$Record.FulfillmentOrder.OrderSummary.Sales}"/>
A _a * statusToCommit	<input type="text" value="Fulfilled"/>
<input checked="" type="checkbox"/> isMultiCommit	<input type="text" value="{!\$GlobalConstant.True}"/> <input checked="" type="checkbox"/> Include
A _a transactionCode	<input type="text"/> <input type="checkbox"/> Don't Include

- Flow



6.0. Workflow Diagram

Address Validation



Tax Calculation

