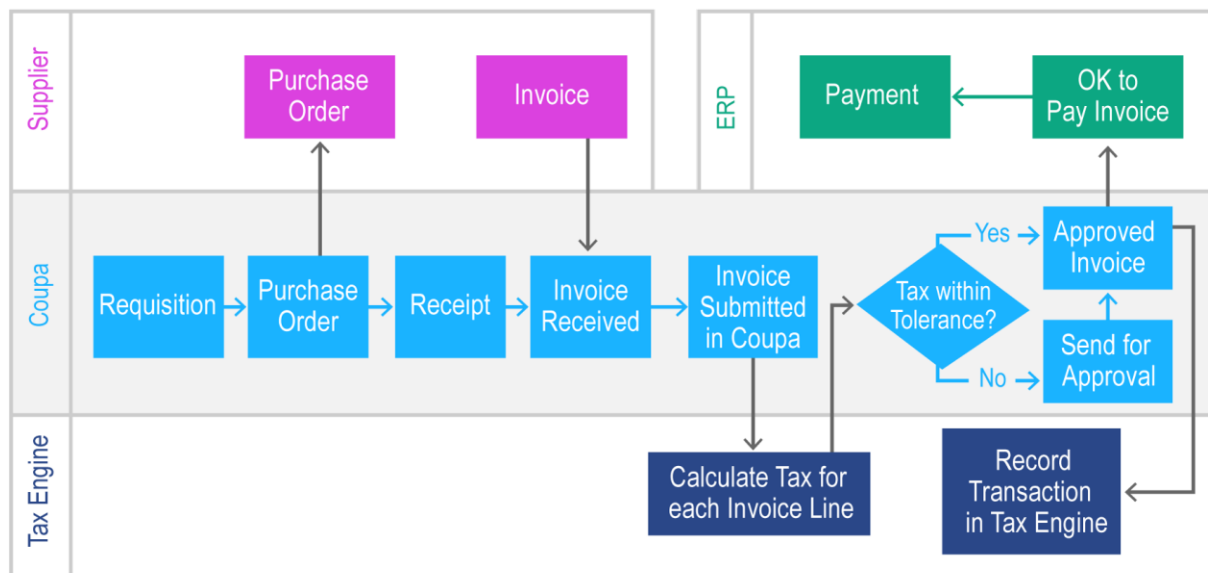


Tax Engine

Your tax engine helps your customers charge taxes consistently and accurately across all their transactions. This function is closely related to spend management—and your customers who use Coupa will appreciate having a tight integration between Coupa and your system. You can easily integrate your tax engine with Coupa using REST API. When you integrate your system with Coupa, your customers will be able to trigger tax callouts to your tax engine automatically when they receive invoices in Coupa. They'll be able to validate the tax amount by comparing supplier-entered tax on an invoice with the tax calculated by your tax engine. They'll also be able to take approved invoices in Coupa and record them in your tax engine's database, allowing for further reporting and analysis

Business Process Overview

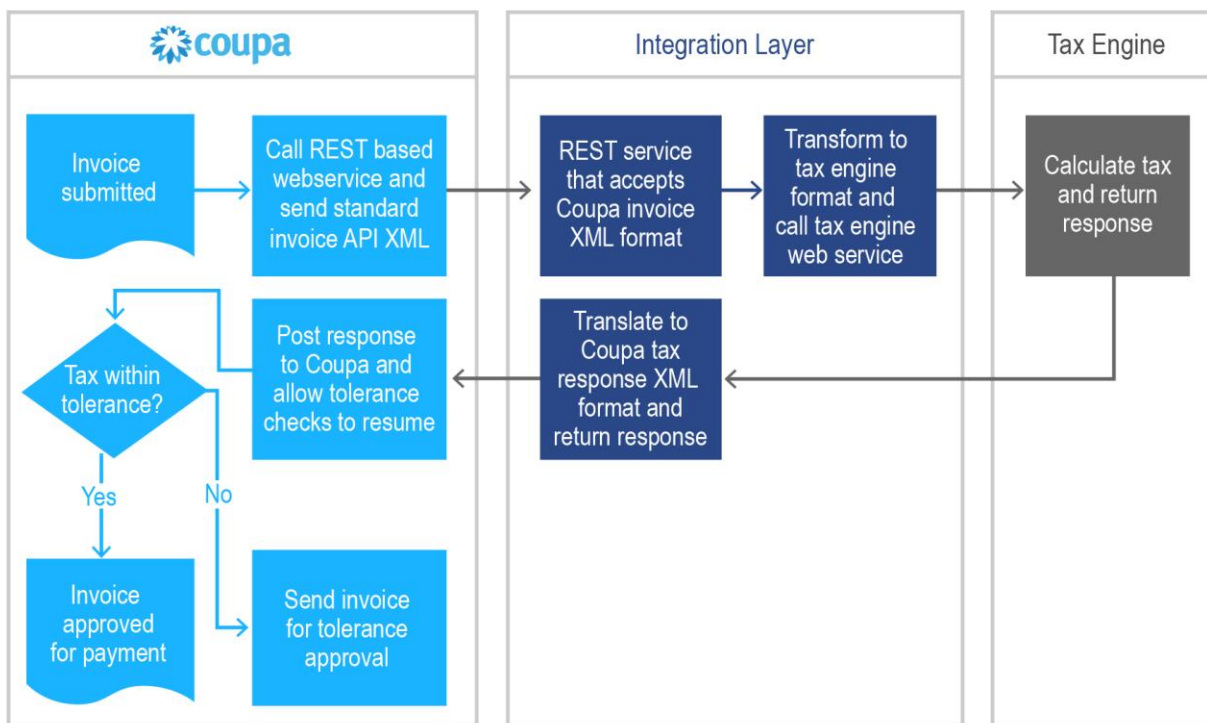
The procurement function happens in Coupa. When the invoice is received in Coupa from the supplier and submitted for approval, it triggers a tax callout which is used by the tax engine to calculate the tax. Tolerance checks can be configured in Coupa to compare the supplier entered tax on the invoice v/s the tax engine calculated tax. Once the invoice is fully approved and OK to Pay invoice is sent to the client's ERP system which the client uses to pay the invoice. The approved invoice from Coupa can also be recorded in the tax engine for reporting purposes.



Designing the Solution

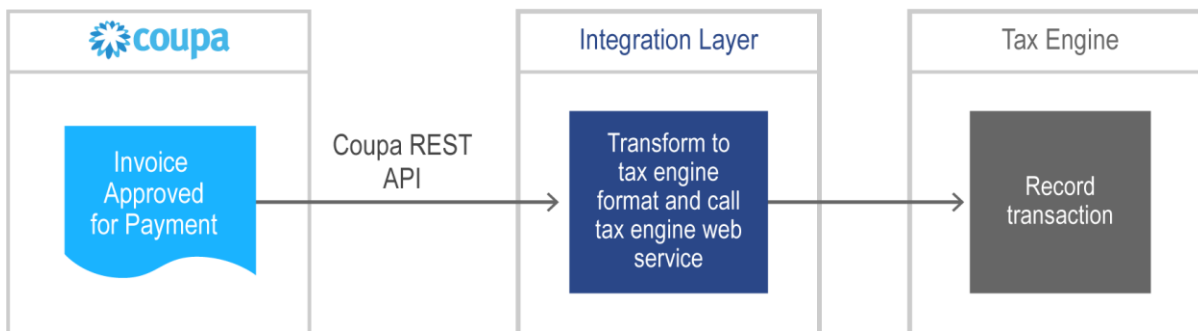
Tax Calculation and Validation

Coupa supports a native tax callout to a REST web service which is triggered on submission (for approval) of an invoice. The configured web service will receive Coupa invoice data in a Coupa defined XML format. The integration layer can transform the Coupa Invoice XML data to the appropriate tax engine format and then call the tax engine web service. The Coupa tax callout also expects the response back in a Coupa defined format. Once the tax engine validates the tax and returns a calculated tax, the integration layer can transform the tax engine response to a Coupa tax callout response format and return the response back to Coupa.



Recording the transaction in the tax engine

Once the invoice is fully approved in Coupa, you can make a subsequent call to the tax engine to record this invoice in the tax engine database. This can be accomplished by calling the Coupa REST API to GET the invoice data, transforming it to the tax engine format and then calling the tax engine web service.



Configuring the tax callout in Coupa

You can configure the callout to an external tax engine by going to the “Company Information” page. Enter the URL of the tax engine callback as follows:

☒ Enable Tax Validation

You must also select 'Use tax engine to validate taxes' for each invoice presentation template that should perform this calculation

☐ Native Tax Engine

☒ Tax Engine Callback Url

Addresses must begin with http:// or https://

☐ Only display tax validation values on invoice edit pages

You must configure each invoice presentation that should callout to the tax engine. To do this, go to the desired invoice presentation and select the “Use tax engine to validate taxes” checkbox:

Summary Charges ☐
Considered Taxable

Use tax engine to validate taxes ☒

Force invoice date to be the date that Coupa processed the invoice ☐

Hold invoices without standard tax rates ☐

Allow editing of supplier-entered data ☐



Build your integration

Coupa Tax Callout Request Invoice XML specification

https://success.coupa.com/Integrate/Technical_Documentation/API/Methods/Transaction_Data_API/Invoices_API#Elements

Coupa Tax Callout Response XML specification

This section will provide sample response formats when using Coupa's external tax engine capability. It is important to note that these formats are very simple by design as we are simply comparing the amount of tax provided by the supplier to the amount calculated by the tax engine. So all we need in return from the tax engine is the header or line level tax amount. This value will be used to drive tolerance checks against what the supplier provided.

Header Level Tax Response

```
<invoice-header>
  <tax-engine-header>10.00</tax-engine-header>
</invoice-header>
```

Line Level Tax Response

```
<invoice-header>
  <tax-engine-header />
<invoice-lines>
  <invoice-line>
    <line-num>1</line-num>
    <tax-lines>
      <tax-line>
        <line-num>1</line-num>
        <tax-engine-line>5.00</tax-engine-line>
      </tax-line>
    </tax-lines>
  </invoice-line>
  <invoice-line>
    <line-num>2</line-num>
    <tax-lines>
      <tax-line>
        <line-num>1</line-num>
        <tax-engine-line>10.00</tax-engine-line>
      </tax-line>
    </tax-lines>
  </invoice-line>
</invoice-lines>
</invoice-header>
```



Coupa Invoice REST API

https://success.coupa.com/Integrate/Technical_Documentation/API/Methods/Transaction_Data_API/Invoices_API

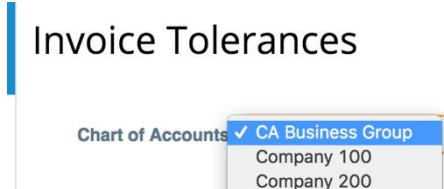
Test Scenarios

- Callout to tax engine against a PO backed invoice
 - Update Coupa Invoice (Header Level) to include tax amount from Tax Engine
 - Update Coupa Invoice (Line Level) to include tax amount from Tax Engine
- Callout to tax engine against a non PO backed invoice
 - Update Coupa Invoice (Header Level) to include tax amount from Tax Engine
 - Update Coupa Invoice (Line Level) to include tax amount from Tax Engine
- Callout to tax engine against invoice with multiple invoice lines
 - Update Coupa Invoice (Header Level) to include tax amount from Tax Engine
 - Update Coupa Invoice (Line Level) to include tax amount from Tax Engine
- Record Invoice in Tax Engine database. Verify that the invoice is recorded successfully.

Configuring tax tolerances in Coupa

Option 1: This is per COA and applicable on Header and Line level

1. Goto: <https://<customer-instance>/invoices/tolerances>
2. Select the COA for which the tolerance needs to be configured



3. Section: Internally created Invoices, enter the percentage for tolerance in below lines

Line tax compared to tax engine calculation	<input type="text"/> %	<input checked="" type="radio"/> Ignore
Total tax compared to tax engine calculation	<input type="text"/> %	<input checked="" type="radio"/> Ignore

4. Section: Supplier Created Invoices, enter the percentage for tolerance in below lines

Line tax compared to tax engine calculation	<input type="text"/> %	<input checked="" type="radio"/> Ignore
Total tax compared to tax engine calculation	<input type="text"/> %	<input checked="" type="radio"/> Ignore

Option 2: This is per commodity and only applicable on Line level

1. Goto: https://<customer-instance>/commodities/<:id>/invoice_tolerances
2. Select the Commodity for which the Tolerance needs to be configured



3. Section: Internally created Invoices, enter the percentage for tolerance in below line

Internally Created Invoices

Condition		Tolerance
Invoice line quantity compared to PO line quantity	<input type="radio"/> <input type="text"/> %	<input checked="" type="radio"/> Ignore
Invoice line unit price compared to PO line unit price	<input type="radio"/> <input type="text"/> %	<input checked="" type="radio"/> Ignore
Invoice line amount compared to PO line amount	<input type="radio"/> <input type="text"/> %	<input checked="" type="radio"/> Ignore
Line tax compared to tax engine calculation	<input type="radio"/> <input type="text"/> %	<input checked="" type="radio"/> Ignore

4. Section: Supplier Created Invoices, enter the percentage for tolerance in below line

Supplier Created Invoices

Condition		Tolerance
Invoice line quantity compared to PO line quantity	<input checked="" type="radio"/> 0.000 %	<input type="radio"/> Ignore
Invoice line unit price compared to PO line unit price	<input checked="" type="radio"/> 0.000 %	<input type="radio"/> Ignore
Invoice line amount compared to PO line amount	<input checked="" type="radio"/> 0.000 %	<input type="radio"/> Ignore
Line tax compared to tax engine calculation	<input type="radio"/> <input type="text"/> %	<input checked="" type="radio"/> Ignore

Note:

- Line tax compared to tax engine calculation: This is valid only for Line level taxes
- Total tax compared to tax engine calculation: This is valid only for Header level taxes

Sample Error Message if above Tolerance Fails:

- Header level tax tolerance


- Line Level Tax Tolerance:


Invoice Checks Failed


Whoops! The invoice could not be approved as...

- Line 1: Exceeds tax compared to tax engine calculation by more than 1.0%
- Line 2: Exceeds tax compared to tax engine calculation by more than 1.0%

This invoice will be sent through the following approval chain:

 Shruti Brockway

 Sally (SVP) Jones



Name

After Current Approver

With Hierarchy?

Add


Continue


Invoice Checks Failed


Whoops! The invoice could not be approved as...

- Line 2: Exceeds tax compared to tax engine calculation by more than 1.0%

This invoice will be sent through the following approval chain:

 Shruti Brockway

 Sally (SVP) Jones



Name

After Current Approver

With Hierarchy?

Add

Continue