APTTUS®

Partner Commerce on Salesforce Winter 2019 Implementation and Deployment Guide

Doc Rev A

01/29/2020

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About This Guide

With the Partner Commerce on Salesforce Implementation and Deployment Guide, you can find out how Apttus Partner Commerce works and how to install, implement and deploy Partner Commerce for your customers.

Topic	Description
What's Covered	This guide is designed to provide administrators with information on setting up data to be consumed within Apttus Partner Commerce. This guide covers the most common use cases for administration and assumes a level of familiarity with basic Salesforce.
Primary Audience	Admin users responsible for installing, implementing and deploying the Apttus Partner Commerce solution.
IT Environment	Refer to the latest Apttus Partner Commerce on Salesforce Release Notes for information on System Requirements and Supported Platforms.
Updates	For a comprehensive list of updates to this guide for each release, see the release notes.
Other Resources	• Partner Commerce User Guide: Refer to this guide for basic admin tasks and end user experience. • Partner Commerce SDK: Refer to this guide for technical instructions on the installation and setup of an Apttus E-Commerce storefront.

This guide describes the following tasks:

- Setting up Communities
- Adding a Storefront record
- Cloning and installing the reference template
- Local Development Setup
- Server Deployment
- Post Deployment Community Setup

Before using Partner Commerce, you must be familiar with the following:

- Basic Salesforce administration
- Salesforce and Apttus terms and definitions

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What's New

The following table lists changes in the documentation to support each release.

Release	Topic	Description
Winter 2019 Rev A	About Apttus Partner Commerce	Updated topic to conform with Apttus Documentation standards.
Winter 2019	All topics	Complete new guide.

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About Apttus Partner Commerce

Partner Commerce is the activity of electronically managing and improving channel sales online or over the Internet. Partner commerce has three main components: Web Commerce, Mobile Commerce, and Social Commerce, thus connecting channels and devices.

As an administrator, you can use Apttus CPQ to perform configuration and pricing tasks to build the catalog page for your Partner Commerce web site. Configuration involves creating products, options, attributes, categories and associating them appropriately with each other for visibility on the Catalog page. A product can be created as a standalone product or as a bundle product with options and attributes. You can control the selection of a product on the catalog page by configuring constraint rules. You can also control the selection of attributes on the configuration page of a product by setting up attribute-based configuration for that product. Pricing enables you to set up pricing structures for the products so that the price for all products is calculated accurately. Pricing has two components: Price Lists and Price List Items. A price list controls the visibility of products to the user. A price list contains several price list items, each linked to a product. Apttus CPQ calculates the price for each product based on the applied price list, price list items, and various pricing and discounting rules.

After you have used Apttus CPQ to configure products and pricing, you can associate the price list to the storefront object within the Apttus E-Commerce package. After your catalog has been set up, the next step is to create a Storefront record.

You can define the asset management functions with different data objects to track quote details until an order is fulfilled. You can set up multi-language web sites. You can apply promotions, make secure payments, and calculate tax on your cart page.

Apttus Partner Commerce allows an administrator to perform the following administrative tasks:

- Set up and activate communities
- Install Apttus E-Commerce Package and dependent packages
- Post deployment community setup
- Assign Apttus E-Commerce permission set
- Create custom field on account for the price list
- Set up single and multiple store
- Payment integration using Cybersource Payment
- Tax integration with Avalara tax engine
- Set up multi-language storefront using translations
- Set email notification template for checkout
- Enable state and country picklists
- Add a storefront record
- Add storefront promotional banners and associate it with the storefront record
- Clone and install the reference template
- Configure templates
- Set up the local development environment
- Server Deployment
- Customize your application
    - Customize HTML content and standard components

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- Add custom fields on object models
- Add custom attributes to a product
- Customize logic in the services
- Customize the template page with custom field
- Optimize Search Engine

Key Terminologies

It is important to understand how terms are used when working with Apttus Partner Commerce.

Term	Description
Configure Price Quote (CPQ)	Apttus solution for configuring products, setting up pricing, and generating quotes.
Partner Commerce	Partner Commerce enables your partner company to create quotes, configure products, and manage orders for the end customer to ensure faster selling and up-time without your support.
Product Catalog	A view that allows hierarchical categorization of products for users to search through and add to their configuration.
Promotions	A promotion is a marketing technique that you apply to reduce the list price of a product or a service. You can create a promotion and restrict the scope, limit, and benefits so your sales representatives apply this promotion to specific products, for specific customers, and for a limited period.
Options	A product that can be sold along with another product.
Attributes	Features of a product, such as color, size, weight, and more.
Communities	Apttus leverages Salesforce Communities to host your Partner Commerce site providing authentication and hosting features for your storefront. You can create multiple communities within your organization for multiple storefronts.
Storefront	Custom object that is part of the E-Commerce package. The storefront object maps a storefront to a price list and other basic information such as logo, banners and more.
Reference template/application	Base template provided by Apttus for further development and customization as per your requirement.

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Term	Description
Payment integration	E-Commerce payment integration using Cybersource.
Tax integration	Tax integration using Avalara tax engine with the help of a Tax Callback class.
Translations	If your org has multiple languages enabled, use Translation Workbench to maintain your translated labels in your org. You can manage translated values for any Salesforce supported language.

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Installing Apttus Partner Commerce Package

Multiple packages must be installed to implement a complete E-Commerce solution. Packages for Partner Commerce must be installed in the order indicated in the table in this section. You begin with the Apttus base packages and then install the integration packages that enable the various products to function together.

Caution
Apttus recommends downloading and installing Apttus packages in a Salesforce sandbox org before installing them in your production environment. For information on installing and upgrading in a sandbox, please contact Apttus Support before you install any packages.

Install the packages in the following order.

Order	Package	Install Center tab to access the package	Required?
1	Apttus Contract Management	Contract Management	Y
2	Apttus Partner Commerce	CPQ	Y
3	Apttus E-Commerce	CPQ	Y
4	Apttus Proposal Management	CPQ	Y
5	Apttus Configuration & Pricing	CPQ	Y
6	Apttus Quote/Proposal-Configuration Integration	Integrations	Y
7	Apttus CPQ Admin	CPQ	Y
8	Apttus CPQ API	CPQ	Y
9	Apttus Order Management	CPQ	Y

You must have Apttus-provided login credentials to the Apttus Community Portal to be able to download packages.

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Logging in to Apttus Partner Commerce

Log in to your Salesforce.com org.

> **Note**
> Do not use the Back button on your browser.

Before you log in, make sure you meet the following criteria.

- All Apttus Partner Commerce packages are installed.
- You have administrative privileges.
- You have login credentials provided by Apttus.

To log into the application

1. Go to http://www.salesforce.com.
   Or
   If your organization is using a sandbox or test environment (for example, if you are doing user acceptance testing), go to http://test.salesforce.com instead.
2. In the toolbar at the top of the page, click **Login**. The login page opens.
3. Enter your **User Name** and **Password**, and click **Log in to Salesforce**.

You have successfully logged into the application.

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Setting Up Communities

In order to deploy the Partner Commerce code, you must set up and enable a Community.

The Apttus E-Commerce platform leverages a Salesforce Community to provide authentication and hosting features for partners. After the E-Commerce package is deployed, the next step is to create a Salesforce Community. For the basic setup, you only need the community URL. However, if you intend to support guest users, you must enable that within the community settings. After deployment, the angular library provides a Visualforce page that must set as the default page for all page settings within the community (that is, home, login, forgot password, change password etc.).

To set up a community

1. Go to **Setup > Customize > Communities > Communities Settings** and select **Enable communities**.
2. Under select a domain name section, type a domain name for your community and click **Check Availability** to see if the domain name is available.
3. If you see a success message, click **Save**.
4. The Communities page is refreshed and displays All Communities section. Click **New Community**.
5. Select from one of the Partner Community templates.
6. Click **Get Started**.
7. In **Name**, type a name for your community. **URL** displays the domain name of your community, in **Optional**, type a suffix for your community. Click **Create**. For example, Name = Partner Commerce, Optional = pcomm.

Your community is created.

Activating the Community

After setting up a community, you must activate it to use the community.

To activate a community

1. Go to **Setup > Customize > Communities** and click **All Communities**.
2. Click **Workspaces** and under My Workspaces click **Administration**.
3. From the Settings page, click **Activate**.

Your community space is now activated.

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Creating Custom Field on Account for the Price List

PriceListId gets added to CPQ on the Account object. Create a custom field on the Account for the Price List with API name PriceListId__c. You can use this Price List in the Storefront record, to set up your Storefront with Categories, Products and more.

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Enabling State and Country Picklists

Your Partner Commerce site may require State and Country picklists. You must configure these picklists on the org level which enables the State and Country fields to display the picklists on the Contact object.

To enable state and country picklists

1. Go to **Setup**, in the Quick Find box, search for *State and Country/Territory Picklists* and click **State and Country/Territory Picklists**. The State and Country/Territory Picklists setup page appears.
2. On the State and Country/Territory Picklists setup page, follow the step-by-step instructions to enable the State and Country picklists.

For complete information, refer to Enable and Disable State and Country Picklists in Salesforce documentation.

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Setting Up Multi-Language Using Translations

You can set up multi-language support for your Partner Commerce site. Apttus provides you three ways to achieve this:

- Translations from the SDK
- Translations from Salesforce
- Translations using Translation Workbench

Translation can be set up for the following:

- Static Labels or text (Page Titles, Header, Footer, Tabs, Descriptions)
- Field Label translations
- Data translations (product, category, product attribute group)

The default language is English. You can set a different language from the User Profile.

To set a default language for a user

1. Go to **Setup > Administration** Setup - Managed Users and click Users.
2. Click **Edit** next to the User.
3. In **Locale**, select a locale. For example Spanish (Mexico).
4. In **Language**, select your preferred language for the user. For example Spanish.
5. Click **Save**.

Setting Up Translations using SDK

The Apttus E-Commerce package consists of a Translator Loader. This Translator loader contains a folder named assets > i18n that consists of json files used to define translations. Be default, only English language (en_US.json) is packaged with the base template. In order to add more languages, you can clone the English language json file and modify it to accommodate your preferred language. In the translator-loader.service.ts file, the translation get method checks for the translation URL from the Storefront record. Priority is set to check if the Translation URL is defined on the Storefront object. If not, the system checks for the files in the SDK. The system selects the URL from the local json files. If both, the Storefront and the SDK, do not have the URL, the system sets the default language as English. Refer to the get method code snippet. If the translation URL is not present on the Storefront object, the system uses SDK to translate labels, fields, and data.

Setting Up Translations Using Salesforce

The translation URL must be present on the Storefront record. Go to the **Storefront record > Translation URL = /apex/APTS_EcommerceTranslation**. This URL points to a static page that contains all the translations. See example code snippet.

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Example Code Snippet for E-Commerce Translation

```
<apex:page contentType="application/json; charset=utf-8" language="{!
$CurrentPage.parameters.language}">

{
  "ERROR": {
    "MIN-OPTIONS": "{!$Label.eCom_MIN_OPTIONS}",
    "CART": {
      "TOO_MANY_ATTEMPTS": "{!$Label.ecom_TOO_MANY_ATTEMPTS}",
      "PRICE_CHANGE": "{!$Label.eCom_PRICE_CHANGE}",
      "PRICE_CHANGE_TOASTR_TITLE": "{!$Label.eCom_PRICE_CHANGE_TOASTR_TITLE}"
    },
    "APPLICATION_ERROR_TOASTR_TITLE": "{!$Label.eCom_APPLICATION_ERROR_TOASTR_TITLE}"
  },
  "SUCCESS": {
    "CART": {
      "ITEM_ADDED_TOASTR_MESSAGE": "{!$Label.eCom_ITEM_ADDED_TOASTR_MESSAGE}",
      "ITEM_ADDED_TOASTR_TITLE": "{!$Label.eCom_ITEM_ADDED_TOASTR_TITLE}"
    }
  },
  "ASSETS": {
    "CHANGECONFIGURATION_SUCCESS": "{!$Label.eCom_Assets_ChangeConfigurationSuccess}",
    "CHANGECONFIGURATION_START_DATE": "{!
$Label.eCom_Assets_ChangeConfigurationStartDate}",
    "CHANGECONFIGURATION_END_DATE": "{!$Label.eCom_Assets_ChangeConfigurationEndDate}"
  },
  "MY_ACCOUNT": {
    "LAST_LOGIN_DATE": "{!$Label.eCom_LAST_LOGIN_DATE}"
  },
  "BUTTON": {
    "Change Configuration": "{!$Label.eCom_Button_ChangeConfiguration}"
  },
  "PRODUCT_CARD": {
    "INSTALLED_PRODUCT": "{!$Label.eCom_PRODUCT_CARD_INSTALLED_PRODUCT}",
    "STANDARD_PRICE": "{!$Label.eCom_PRODUCT_CARD_STANDARD_PRICE}"
  },
  "PAGINATION": {
    "FIRST": "{!$Label.eCom_PAGINATION_FIRST}"
  },
  "COMMON": {
    "ORDERS": "{!$Label.eCom_COMMON_ORDERS}",
    "USERNAME": "{!$Label.eCom_COMMON_USERNAME}",
    "QUANTITY": "{!$Label.eCom_COMMON_QUANTITY}",
    "CHANGE_CONFIGURATION": "{!$Label.eCom_Common_ChangeConfiguration}",
    "ADD_TO_CART": "{!$Label.eCom_Add_to_Cart}"
  },
  "CONSTRAINT_POPOVER": {
```


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```
    "PRODUCTS_INCLUDED_EXCLUDED_HEADING": "{!
$Label.eCom_PRODUCTS_INCLUDED_EXCLUDED_HEADING}"
  },
  "CART": {
    "PAYMENT": {
      "PAYMENT_TITLE": "{!$Label.eCom_CART_PAYMENT_TITLE}"
    },
    "CART_SUMMARY": {
      "QUANTITY": "{!$Label.eCom_CART_SUMMARY_QUANTITY}"
    },
    "CHECKOUT": "{!$Label.eCom_CHECKOUT}",
    "BILLING_AND_SHIPPING_INFORMATION": "{!
$Label.eCom_BILLING_AND_SHIPPING_INFORMATION}"
  },
  "MANAGE_CART": {
    "CART_SUMMARY": {
      "CART_SUMMARY_TITLE": "{!$Label.eCom_Cart_Summary_Title}",
      "SUB_TOTAL": "{!$Label.eCom_Sub_Total}"
    },
    "CART_TABLE": {
      "ITEMS_IN_YOURCART": "{!$Label.eCom_ITEMS_IN_YOUR_CART}"
    }
  },
  "FOOTER": {
    "PRODUCTS": "{!$Label.eCom_FOOTER_PRODUCTS}"
  },
  "HEADER": {
    "SUBMIT": "{!$Label.eCom_HEADER_SUBMIT}",
    "ENTER_YOUR_SEARCH_TERM": "{!$Label.eCom_ENTER_YOUR_SEARCH_TERM}",
    "LAST_LOGIN": "{!$Label.eCom_HEADER_LAST_LOGIN}",
    "HOME": "{!$Label.eCom_HEADER_HOME}",
    "LOG_OUT": "{!$Label.eCom_HEADER_LOG_OUT}",
    "LOG_IN": "{!$Label.eCom_HEADER_LOG_IN}"
  },
  "PROMOTION": {
    "PROMO_CODE": "{!$Label.eCom_PROMOTION_PROMO_CODE}",
    "PROMOTION_APPLIED": "{!$Label.eCom_PROMOTION_APPLIED}",
    "APPLIED_PROMOTION": "{!$Label.eCom_APPLIED_PROMOTION}"
  },
  "LOGIN": {
    "USERNAME": "{!$Label.eCom_LOGIN_USERNAME}",
    "SIGN_IN": "{!$Label.eCom_LOGIN_SIGN_IN}",
    "INCORRECT_CREDENTIALS_TOASTR_MESSAGE": "{!
$Label.eCom_INCORRECT_CREDENTIALS_TOASTR_MESSAGE}"
  },
  "PRODUCT_DETAILS": {
    "PRODUCT_DETAIL": "{!$Label.eCom_PRODUCT_DETAIL}",
    "PRODUCT_CODE": "{!$Label.eCom_PRODUCT_CODE}",
    "STANDARD_PRICE": "{!$Label.eCom_PRODUCT_DETAILS_STANDARD_PRICE}",
```


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```
    "UPDATE_CONFIGURATION": "{!$Label.eCom_PRODUCT_DETAILS_UPDATE_CONFIGURATION}"
  },
  "INSTALLED_PRODUCTS": {
    "PRODUCT_FAMILY": "{!$Label.eCom_INSTALLED_PRODUCTS_PRODUCT_FAMILY}"
  },
  "MINI_CART": {
    "YOUR_CART_IS_EMPTY": "{!$Label.eCom_MINI_CART_YOUR_CART_IS_EMPTY}"
  }
}
</apex:page>
```

Wherever you are displaying a label on the UI, a translation pipe is used.

This translation pipe calls the translation loader service, which uses the translation get method to look for the translation URL whether it is in the code base or defined on the storefront object. The translation get method looks at the URL, reads the file, gets all the key values and displays the response on the template.

Defining translations on Salesforce using Custom Labels

For the translation URL defined on the Storefront record, you must define custom labels.

To define custom labels

1. Go to Setup > App Setup > Create and click Custom Labels.
2. Click New Custom Label.
3. Enter a Short Description for the custom label you are creating.
4. Enter a Name for the custom label.
5. The default language is English.
6. In Categories, enter text to categorize the label.
7. In the Value text box, enter text. This value can be translated into any language that Salesforce supports.
8. Click Save.

Translations for custom labels determine what text to display for the label's value when a user's default language is the translation language.

1. Go to Setup > App Setup > Create and click Custom Labels.
2. Select the name of the custom label to open.
3. In the Translations related list, click New to enter a new translation or Edit next to the language to change a translation.
4. Select the Language you are translating into.
5. Enter the Translation Text. This text overrides the value specified in the label's Value field when a user's default language is the translation language.

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6. Click Save.

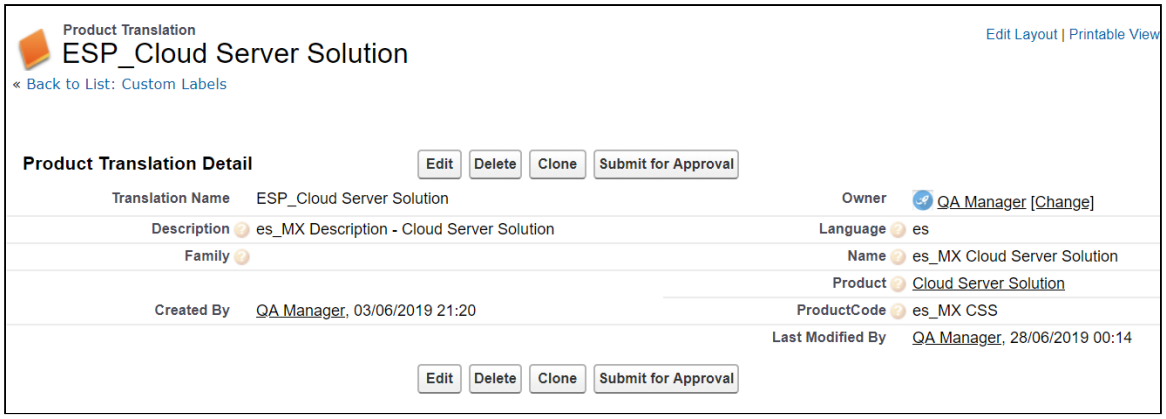
Defining translations for custom objects

Salesforce supports Product Translations, Category Translations, and Attribute Group Translations.

To define translations for Products

1. Go to the Product Translations tab and click New. - OR - Go to the Product tab, select a product for which you want to define translation, and from the Product Translations related list, click New Product Translations.
2. Enter a Translation Name.
3. Enter translated text for the following fields:
    - Description
    - Language
    - Name
    - Product
    - ProductCode

> ⚠ Currently, Family is not supported.



Now when you browse a product on the cart for which you have defined translations in Salesforce, the translated text is displayed.

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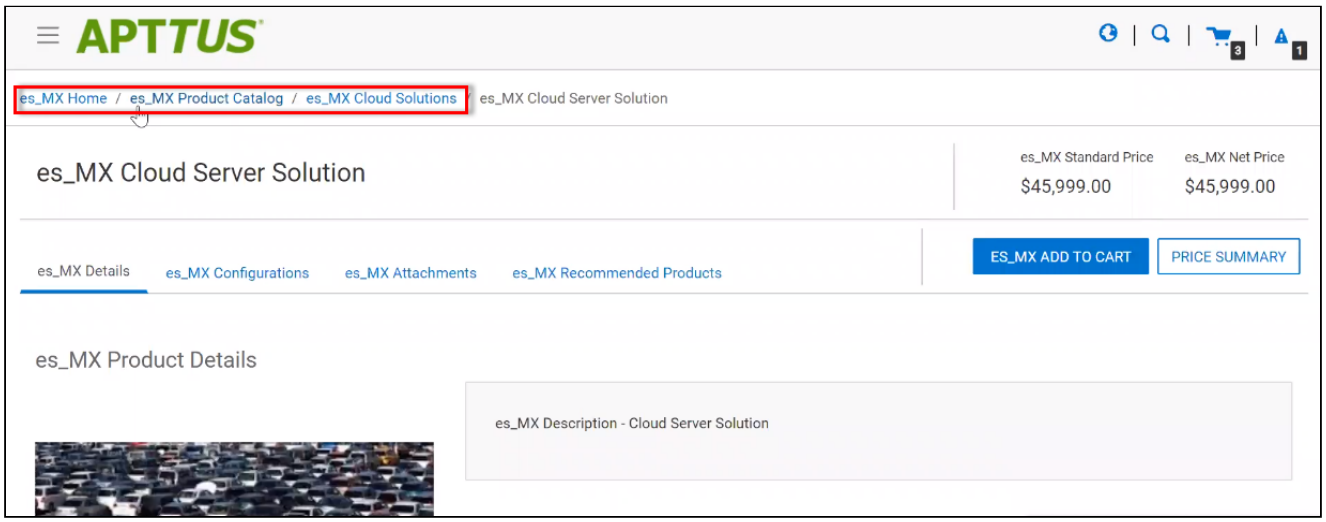

⚠ For illustration purpose, the translated categories are prefixed with es_ in the above image. In actual scenario, the correct language is displayed.

Similarly, you can define category translations.

To define translations for Categories

1. Go to the Product tab, select a product for which you want to define the category translation.
2. Go to the Categories related list and click the category classification Id.
3. From the Product Classification page, click the Category.
   - OR -
4. Go to the Categories tab and select the Category for which you want to define translations.
5. From the Category Translations related list, click New Category Translation.
6. Enter a Category Translation Name.
7. Search and select the Category Hierarchy.
8. Enter a Language and a Label.
9. Select a currency.
10. Click Save.

To define translations for Product Attribute Group

1. Go to the Product Attribute Groups tab and select a product attribute group for which you want to define the attribute group translation.
2. Go to the Attribute Group Translations related list and click New Attribute Group Translation.
3. Enter a Translation Name.
4. The Product Attribute Group field is already populated.
5. In Name, enter the translated attribute group name.

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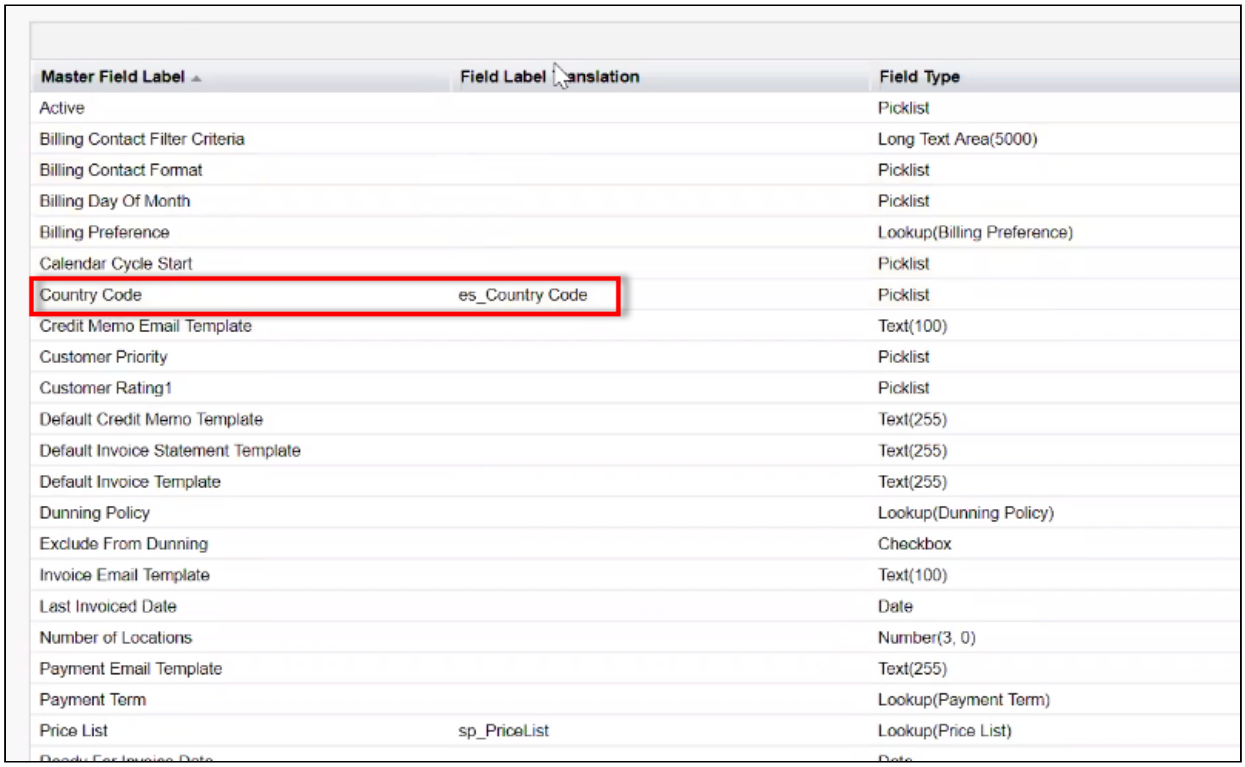
6. Enter a Language.
7. Select a currency.
8. Click Save.

Setting up Translations using Translation Workbench

You can also translate fields and objects using Translation Workbench. You can set up languages for your translations in the Translation Workbench.

To set up translation using Translation Workbench

1. Go to Setup > Administration Setup > Translation Workbench and click Translation Settings
2. Add a Language you want to support for your site.
3. To make the translations available to the users in that language, click Active.
4. Click Save.
5. Now go to Setup > Administration Setup > Translation Workbench and click Translate.
6. Select the Language.
7. Select Custom Field as the Setup Component. This way you can translate the fields on an object.
8. Select an Object. A list of all the available fields in the selected object is displayed.
9. For the fields that you want to set the translations, double-click the Field Label Translation.



Master Field Label	Field Label anslation	Field Type
Active		Picklist
Billing Contact Filter Criteria		Long Text Area(5000)
Billing Contact Format		Picklist
Billing Day Of Month		Picklist
Billing Preference		Lookup(Billing Preference)
Calendar Cycle Start		Picklist
Country Code	es_Country Code	Picklist
Credit Memo Email Template		Text(100)
Customer Priority		Picklist
Customer Rating1		Picklist
Default Credit Memo Template		Text(255)
Default Invoice Statement Template		Text(255)
Default Invoice Template		Text(255)
Dunning Policy		Lookup(Dunning Policy)
Exclude From Dunning		Checkbox
Invoice Email Template		Text(100)
Last Invoiced Date		Date
Number of Locations		Number(3, 0)
Payment Email Template		Text(255)
Payment Term		Lookup(Payment Term)
Price List	sp_PriceList	Lookup(Price List)

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10. Click Save.

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Adding a Storefront Record

The Store object is created during the deployment process. The Store object is the only supplementary object to the CPQ code. You must create a store record. After installing the managed package, there is no way for you to access the Storefront object. You must add a Storefront tab to access the Storefront object.

Apart from the underlying catalog, the Partner Commerce package comes with a store object and tab to map a storefront to a catalog. If you are using an Apttus MDO org, there may already be a 'store' object installed. This object is deprecated in favor of the 'Storefront' object that comes with the Partner Commerce package.

After your catalog has been setup within Apttus, the next step is to create a 'Storefront' record. The storefront object is very basic and contains only a couple fields to map a storefront to a price list and logo for the guest user. The price list should look up to the price list you want the guest user to access and the logo should be an id or a url of the logo attachment for the store. The storefront record also has a 'banner' related list that can be used to setup banners for the jumbotron component in the reference template. Remember the name of the storefront you created. This will be used in a later step to associate with a storefront codebase.

To add a storefront tab

1. Go to **Setup > Create > Tabs** and click **New**.
2. From **Object**, select Storefront.
3. From **Tab Style**, select a style and click **Next**.
4. Click **Next** and click **Save**.

The Storefronts tab is created. You can now create a Storefront record.

To add a storefront record

1. Click **All tabs** and click **Storefronts**.
2. Click **New**.
3. For **Storefront Name**, type a mandatory name for your storefront.
4. For **Default Price List**, select a price list. This is the default price list used for guest users in the storefront.
5. For **Logo**, use Notes and Attachments to attach an image file. Copy and paste the image ID in the Logo field to reference the image. You can also type a URL to reference an externally hosted logo image.

   > ⓘ If you do not see the fields above, add them by editing the layout.

6. From **Currency**, select a mandatory currency for your storefront.
7. To enable Asset Based Ordering capabilities for your storefront, select **Enable ABO**.

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8. If you enabled Asset Based Ordering, use the **Asset Actions** field to enable them for your storefront.
9. To enable Promotion capabilities for your storefront, select **Enable Promotions**.
10. Click **Save**.

Adding Storefront Promotional Banners

Storefront Banners are custom objects that are deployed with the managed package. You can add as many banners as you want.

To create storefront banners

1. In the Storefront record, from the Storefront Banners related list, click **New Storefront Banner**.
2. Enter the following information:

Field	Description
Link	Specify the page that opens, when clicked.
Image	This field references a custom id or a URL.
Title	Title for the banner.
Subtitle	Subtitle or sub heading for the banner.

3. Click **Save**. The Storefront Banner details page appears.
4. Using **Note and Attachments**, attach a banner image to the Storefront Banner record.

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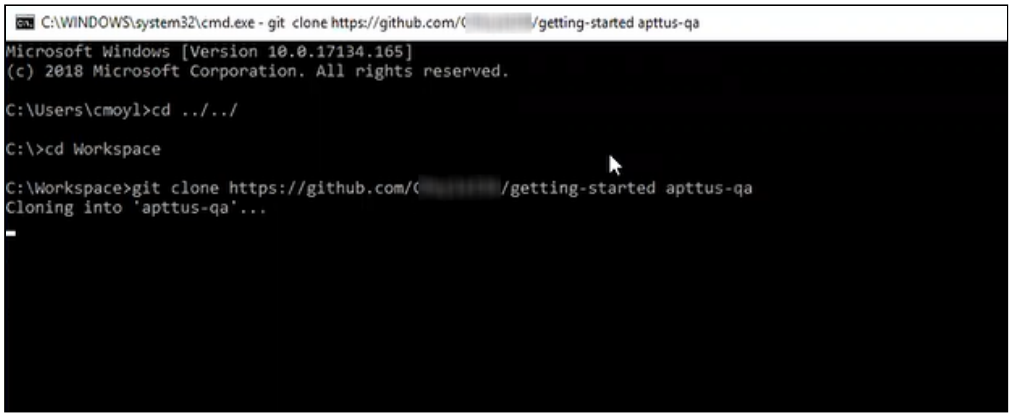
Cloning the Reference Templates

You can clone a template from Apttus standard repository and customize per your specific requirement.

To clone a template from Apttus repository

1. Open command prompt and type *git clone,* the *URL* of the template and a new name for your cloned template. See the following example:



2. Press **Enter** on your keyboard.

Your template is cloned. You can now open the code for the cloned template.

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Installing the Reference Template

After cloning a template, the first task is to run the npm install command. The npm install command installs all the dependencies under the package.json folder. One of the dependencies under the package.json folder is the apttus/ecommerce library that bundles all the components library and the data access layers. The npm install process sets up the Partner Commerce SDK with your Salesforce instance.

Pre-requisite: You must ensure that the following tasks are completed before you run the npm install command:

- Install required packages on your Salesforce org
- Set up a community, if not already done
- Create a custom field on Accounts for Price List
- Create a Store object and a store record within it
- Ensure you have angular-cli installed on your local machine in order to use the templates

To install the cloned template

1. Open the code of the template.
2. Type **npm install** and press **Enter** on your keyboard. The system prompts with series of questions for your templates to get connected with a Salesforce org. Type your answers as described in the table below:

Question	Answer
Would you like to connect with a Salesforce instance?	Yes
Which angular project are you using?	Type the name of your project. For example, getting-started
What is your salesforce administrator name?	Type the username of your Salesforce org
What is your salesforce password with the security token?	Type the password of your Salesforce org
What is your salesforce endpoint?	By default, it is https://login.salesforce.com. You can change it to your sandbox or leave it as is.
Would you like to add a CORS entry to your org to allow localhost development?	Yes. This adds a white list for local host so you can run development in your local machine instead of just the Salesforce instance.
Which domain will be used for api calls?	Type the domain URL.
Which community are you using?	Type the name of the community.

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Question	Answer
Would you like to deploy the standard ecommerce permission set? (Y/n)	Yes. This deploys the permission set that is installed with your managed package.

Your reference template along with all dependencies is now installed on your Salesforce org.

Configuring Templates

You can open the repository folder on your local machine to check the setup.

A new folder named node_modules is created. You should never modify anything in the node_modules folder. This folder is not part of the repository. All the third party dependencies get installed in this folder. Whenever you run an npm command the dependencies are overridden in this folder.

Salesforce Credentials

As part of the setup, sf.json file is created that contains the credentials for deploying the application. If you want to deploy your Storefront in a different org, you can update the credentials in this sf.json file.

Configuration Parameters

During the npm install phase, a configuration file named config.ts is automatically created. This is a runtime configuration for the application. This file is different from the sf.json file. The config.ts file contains runtime specific variables that helps the application to operate. You must set it up with the following parameters:

Name	Type	Required	Default Value	Description
production	True/false	Yes	-	Specify the environment where you want the application to run.
organizationId	True/false	Yes	-	Specify the org Id of the application. For details, see What is your Salesforce.com Organization Id? section.

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Name	Type	Required	Default Value	Description
defaultImageSrc	String	No	-	Specify the URL of the default image to use when no image is found.
defaultCountry	String	No	‘US’	The default country code is "US".
defaultLanguage	String	No	‘en-US’	The default locale is "en-US".
enableErrorLogging	True/false	No	True	Set this to True, in non-production mode, to send error logs to Apttus.
enableErrorReporting	True/false	No	True	When set to True, in non-production mode, it shows a model window to provide user feedback to Apttus.
enableMultiCurrency	True/false	No	False	If using a multi-currency enabled org, set to true to enable currency fields on models.
enableQueryLogs	True/false	No	True	Set to true to print query requests and results in the browser console.
enablePerformanceLogs	True/false	No	True	Set to true to print performance metrics of requests in the browser console.
defaultCurrency	String	No	‘USD’	The default currency to use for guest users. Defaults to USD.
bufferTime	Number (milliseconds)	No	200	The number in milliseconds to wait before sending requests. A larger number will batch requests into a single network callout, but may decrease performance.

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Name	Type	Required	Default Value	Description
maxBufferSize	Number	No	10	The maximum number of requests to batch into a single callout.
disableBuffer	True/False	No	False	When set to true, will disable buffered requests entirely. 1 request = 1 network callout.
disableCache	True/false	No	False	When set to true, data returned from requests will not be cached.
encryptResponse	True/false	No	True	When set to true, responses from the server will be encrypted. ⚠ Encryption payload is limited to 1 MB.
productIdentifier (Deprecated)	String	No	'Id'	The API name of the field on the product to use as the unique identifier in the application.
cartRetryLimit	Number	No	10	Maximum number of times the Apttus CPQ reprice operation should be attempted when the state of the cart changes.
debounceTime	Number (milliseconds)	No	200	Amount of time the application should wait for user input before batching DML operations.
storageAccount (Deprecated)	String	No	-	
tenantId (Deprecated)	String	No	-	
tenant (Deprecated)	String	No	-	

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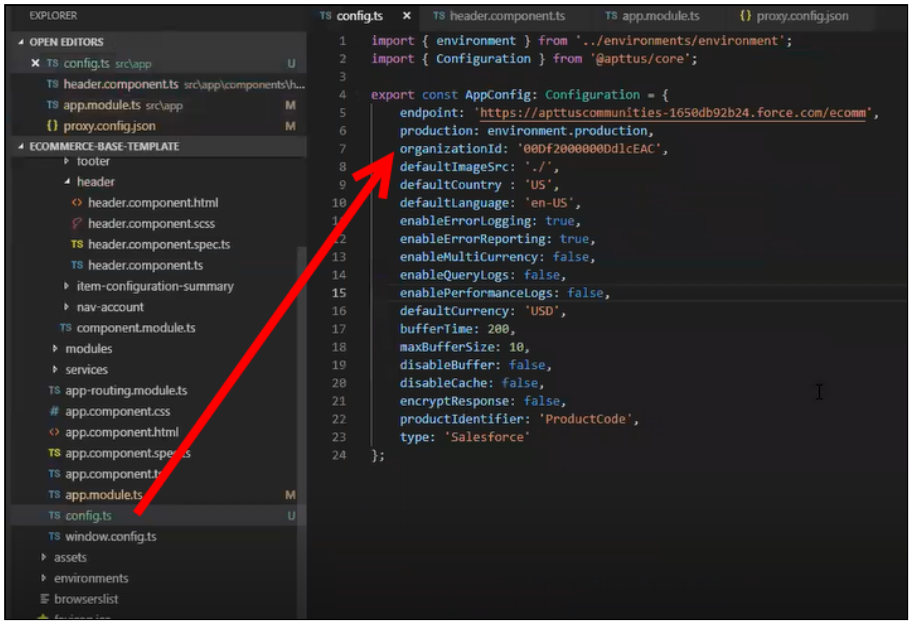
Name	Type	Required	Default Value	Description
proxy	String	No	-	The login proxy to use to bypass CORS restrictions on login
useIndexedDB	True/false	No	False	When set to true, data cache will be persisted in browser IndexedDB
storefront	String	Yes	-	
expandDepth	Number	No	10	The maximum number of queries that should be executed to populate subquery data.



Setting Up Proxy for Local Development

There is also a proxy.config.json file that gets installed in the root directory as part of the deployment. To configure the proxy.config.json file, you must provide the Community URL in both the target locations. This allows you to make SOAP API calls from your local development server (for functionality like login and reprice cart). Populate the 'target' attributes in that file with the instance URL of your community.

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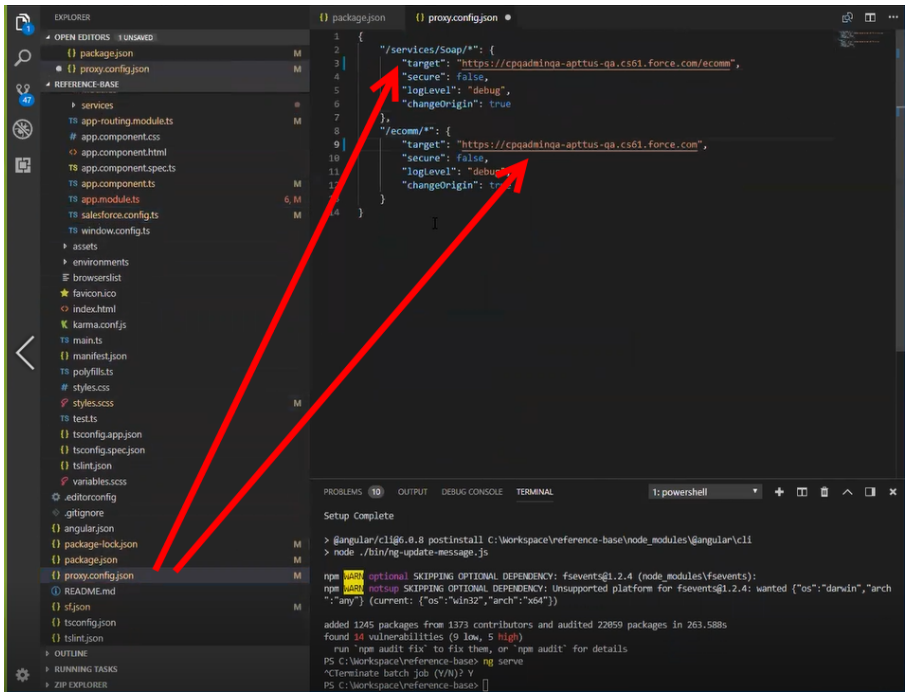

All the code for the templates is open sourced into the library we just cloned and installed. It consists of all the modules such as cart page, home page, account page and more. We can go into any template, for example, Home page layout where you can see some of the components of the Apttus underlying component library. For example, apt-jumbotron. This is a component library that gets installed as part of the apttus/ecommerce. You dont need to essentially build a code for this component. This is a component with the npm package. You just need to modify a single line of HTML code to reference and use it.

You can reference your configuration and import them into your main application module from the app.module.ts file. This app.module.ts file contains an ApttusModule and a CommerceModule. These two modules are getting referenced from the underlying libraries. You must import them into the root module or application to use them.

Importing the app modules in the root module

Add two lines for the following:

- ApttusModule.forRoot - Apttus module runs all the underlying state management, caching, communication with the Salesforce org. You must import the configuration from the config.ts file.

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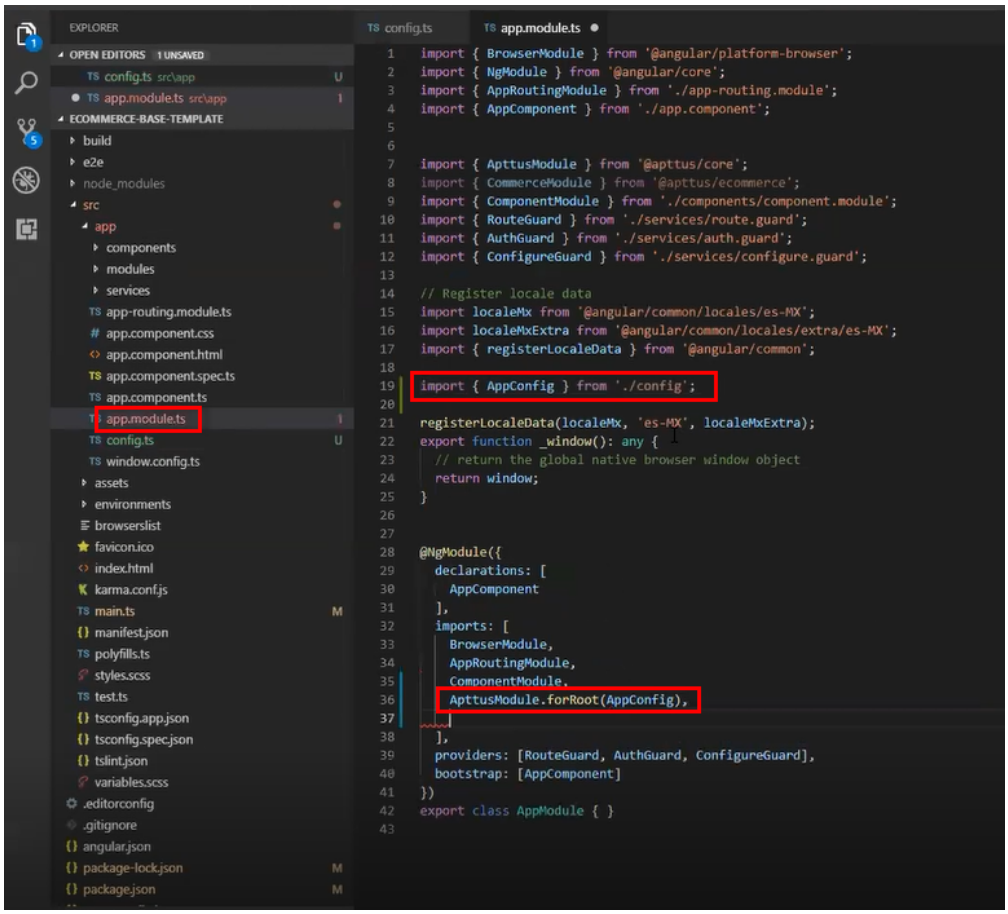
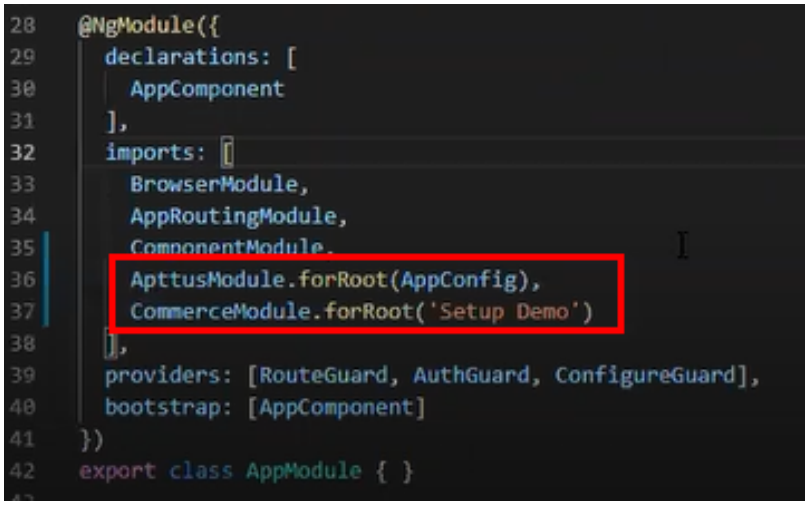


- CommerceModule.forRoot - In the forRoot method of the CommerceModule declare the storefront that you want to use. For example, CommerceModule.forRoot('Tier 1')

This defines the Storefront for your application.



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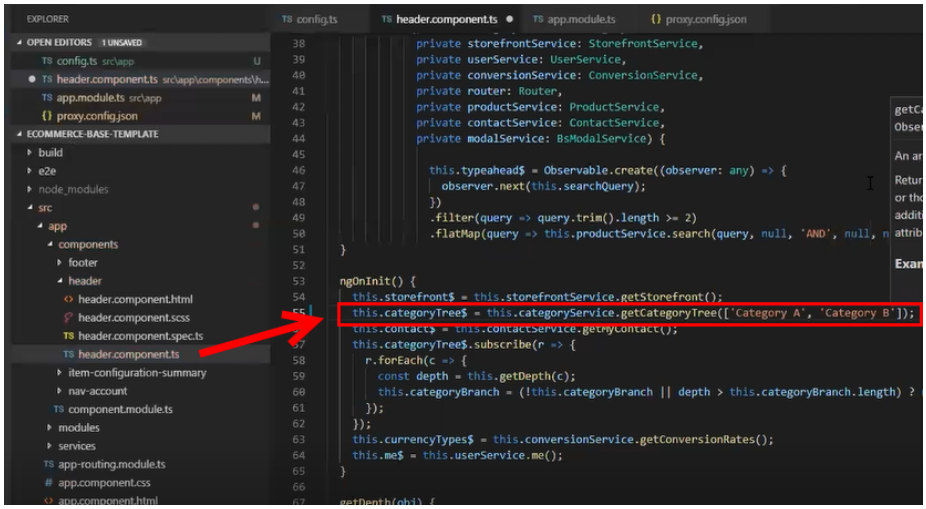
Setting Up Subset of Categories

You can set up specific categories or subset of categories from the header.component.ts file.



Turning Off Sentry for a Customer

Our angular application is wired into Sentry, any errors that occur for customers are sent to sentry. You can view those in sentry, along with stacktrace and debug them. If customers dont want such information to be sent to us, you may consider turning it off for customers.

Go to config.ts and do the following:

- enableErrorLogging - Set this to False.
- enableErrorReporting - Set this to False.

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Local Development Setup

Now you can run your application locally on your local machine by running the ***ng serve*** command. This runs the E-Commerce site locally in your local machine against the configuration that you set up during the npm install phase.

Navigate to http://localhost:4200/ to see how your application looks like. The application displays categories, products, pricing and more based on the Price List selected in the Storefront record. The app is automatically reloaded if you change any of the source files.

Bootstrap Theme Changes

Bootstrap and ngx Bootstrap (angular wrapper to Bootstrap) is installed during the npm install phase. The templates are built around the Bootstrap as a UI framework. You can change to any other mechanism if you dont want to use Bootstrap.

A variables.scss file is installed in the template. If you want to do some quick and easy theme change to your template, you can modify this file as per your requirement. All this follows standard Bootstrap framework construct to modify cards, dropdowns, forms, buttons and more.

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Server Deployment

After everything looks correct in your local machine, you are now ready to deploy your Partner Commerce application on your Salesforce Org.

In order to deploy on your Salesforce org, go to your code and run the npm run deploy command. This command retrieves everything you built and run it through a web pack and compress it down, get it production ready and then deploy it to a Visualforce and static resource page in your org.

To deploy your application on salesforce org

1. Go to your code, type **npm run deploy** and press **Enter**.
2. For **Which angular project are you using?**, type the name of your project. For example, reference-base.
3. For **What is the name of the visualforce page you would like to deploy to?**, type the name of your visualforce page. For example, gettingstarted.
4. For **What is the name of the static resource you would like to deploy to?**, type the name of your visualforce page. For example, gettingstarted.

After successful completion, the system displays a message that your application is ready and provides a link. Click the link to see how your application looks in your Salesforce org.

The application deployment has a 4 minute time limit after which it times out. You can go to your Salesforce org and see your deployment in progress from **Setup > Deployment Status**. You can also verify your deployment from the package and dist folder.

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Payment Integration with Cybersource Payment

You can use Cybersource Payment Gateway with Partner Commerce to perform payments for Orders. This section describes how you can integrate Cybersource Payment with Partner Commerce.

Prerequisite
You must have already installed the Apttus CPQ and Apttus Billing Management packages.

There are following four Billing object store record entries that are used by the Cybersource unmanaged package for every transaction.

Object Name	Purpose
Payment	When a transaction is successfully completed with a success message, a new entry is made in the Payment object with regards to the order.
Payment Method	This object stores the data for saving payment detail for future use.
Gateway Transaction	This object creates a new record every time a payment request to Cybersource is sent and updates the status when a response is received.
Gateway Communication	This is a child object of Gateway Transaction. This object creates a new entry for each request and response payload.

The following diagram illustrates the relationship of Salesforce objects:

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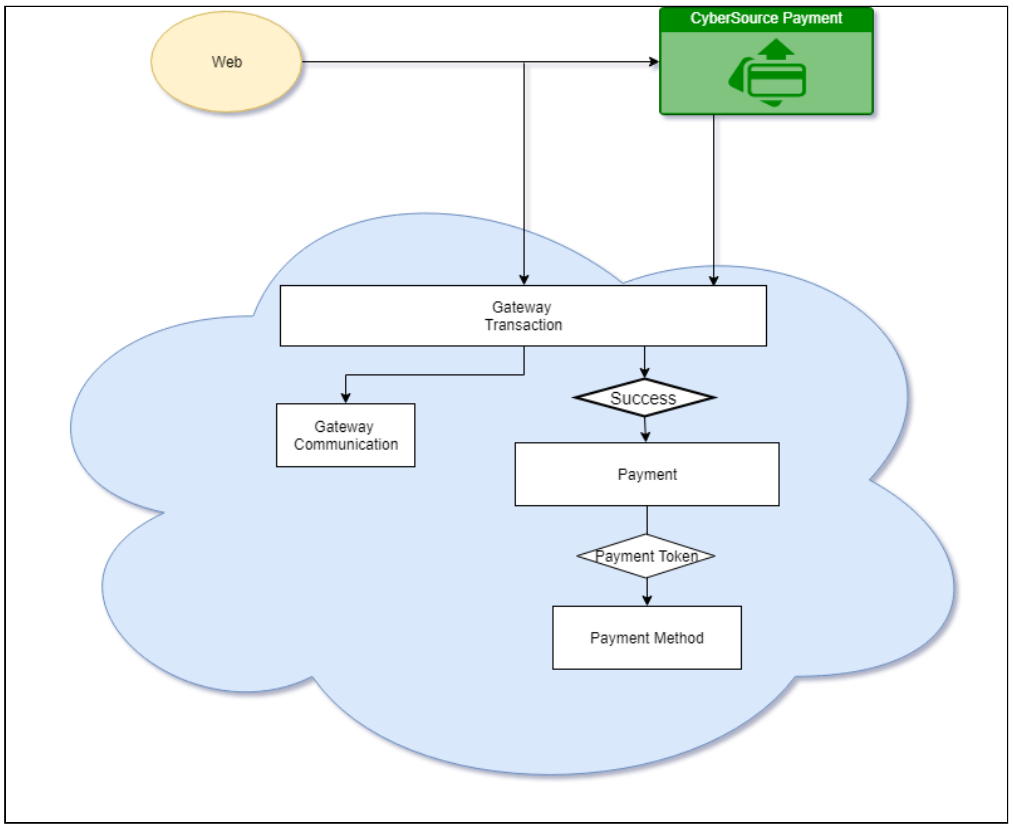

To implement payment integration using Cybersource

1. Download and install the Cybersource unmanaged package from the repository. This package includes all the related objects, labels, classes, and permissions with some rest API resources. Based on these resources the payment integration is executed through classes.
2. You must create a Cybersource account with the following two Secure Acceptance profiles.
    a. Hosted API - This is used to display IFrame in your Digital commerce site.
    b. Checkout API - This is used to perform transactions by using the payment method in a silent way.
    c. Set up Payment Integration using Cybersource.
3. Create profiles in the APTS Cybersource Profile Details custom setting. This custom setting is part of the unmanaged package.
4. Define custom labels for the Hosted profile and Checkout/Silent Order Post profile.

Creating a Cybersource Account with the Secure Acceptance Method

To integrate the Cybersource payment gateway with Apttus, you must create a Cybersource account and create your own profile under a secure acceptance setting.

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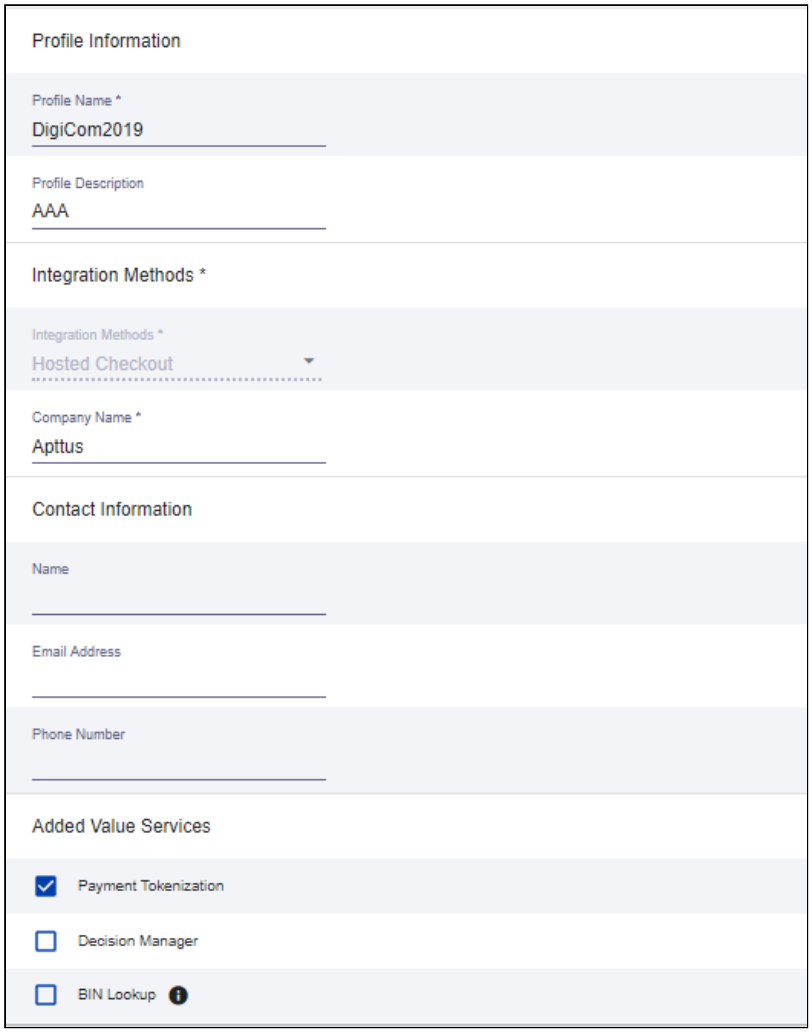
Prerequisite

You must subscribe to a Cybersource subscription account.

To create profiles under secure acceptance setting

1. Log in to your Cybersource account.
2. From the **Dashboard**, under **Payment Configuration**, select **Secure Acceptance Setting**.
3. From the **Secure Acceptance Setting** page, click **New Profile**. The Create Profile panel appears.
4. Enter the profile name and description, the company name, the integration method used to process notifications and the contact to whom they will be sent, and any additional services. This information is available in the General Information tab after you create the profile.

   ⚠ The integration method cannot be changed later.



5. Click **Submit**. The Create Profile panel closes and the Edit Profile page appears.

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The profile is created as “Inactive.” You can complete profile values to promote it using the steps in Editing Secure Acceptance Profiles at any time.

To edit a secure acceptance profile

You must make changes to an inactive profile, then promote the changes to the active profile.

1. On the left navigation pane, click the **Payment Configuration** icon.
2. Click **Secure Acceptance** Settings. The Secure Acceptance Settings page appears.
3. Click the **Inactive Profiles** tab.
4. In the Profile Name column, click the name of the profile you want to edit. The Edit Profile page appears. You can also select an Active profile, and click the Edit icon. Business Center automatically takes you to the Inactive version of the profile.
5. Click the tab containing the information you want to update and make changes as necessary.

Tab Name	Description
General Information	Enter basic information about the name and format of the profile.
Payment Settings	Select accepted card types, checkout methods, and reversal preferences.
Security	Generate access key and security key that you need to pass for the transaction.
Payment Form	Set up checkout steps, and which fields to include in billing and order review forms.
Notifications	Designate where to send transaction data.
Customer Response	Customize response and error messages.
Branding (Optional)	Add your branding logos, fonts, and colors.

6. When you are done, click **Save**.
7. Click the **Promote Profile** icon to add changes to the Active profile.

Defining Payment Methods

After creating a profile, configure payment methods.

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1. From the **Edit Profile** page, go to the **Payment Settings** tab.
2. Click **Add Card Types** to add cards of your choice.

   ⚠ If you want to use Electronic Check (eCheck) or Pay Pal method, you must raise a support ticket first with Cybersource. Cybersource implements your requirement, post which eCheck and Pay Pal options are displayed. You can also select account types as per your requirement.

3. Click the setting icon next to the card type to add supported currencies and required fields. The card setting page appears.

   ⚠ The default currency is US Dollars (USD). To add more currencies, you must raise a support ticket with Cybersource.

4. Select the options of your choice and click **Submit**.

Creating Access and Security Key

You must create your access key and security key that is needed for transactions.

1. From the **Edit Profile** page, go to the **Security** tab.
2. Click the **Create** icon.
3. Enter a **Key Name** and click **Create**.

An access key and security key is generated. You must enter the keys in the APTS_CyberSource_Profile_Details__c Cybersource custom Setting.

Configuring Transaction Responses

You can configure transaction responses from the Notification tab. You can define whether to receive responses through email or a post on API. Currently, Email notifications are supported.

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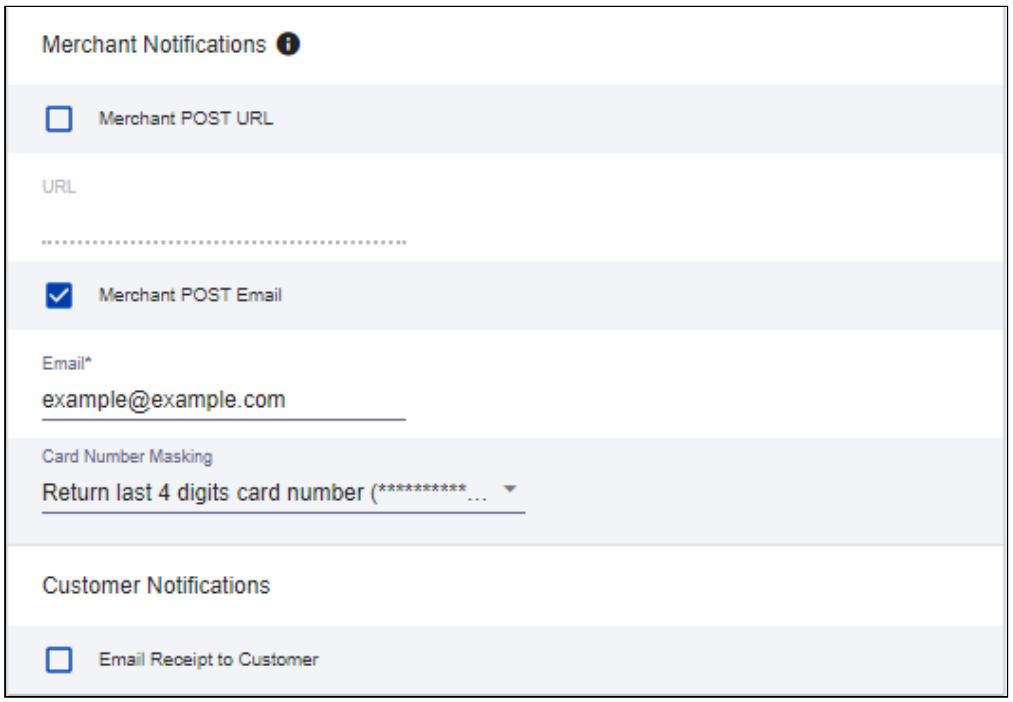

Configuring Customer Responses

The customer response setting allows you to configure the redirect page after the transaction is completed/canceled.

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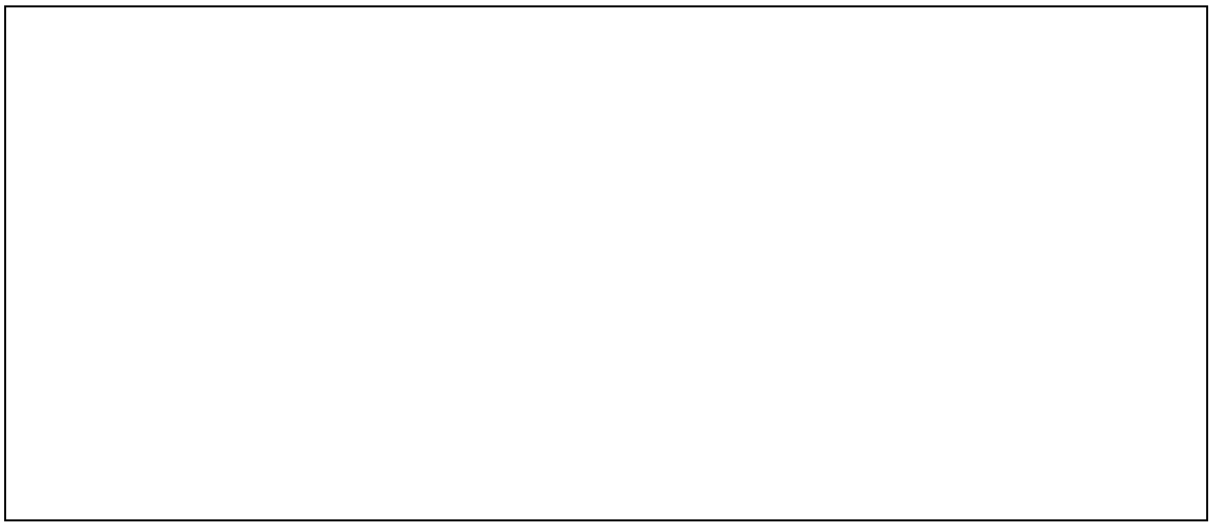
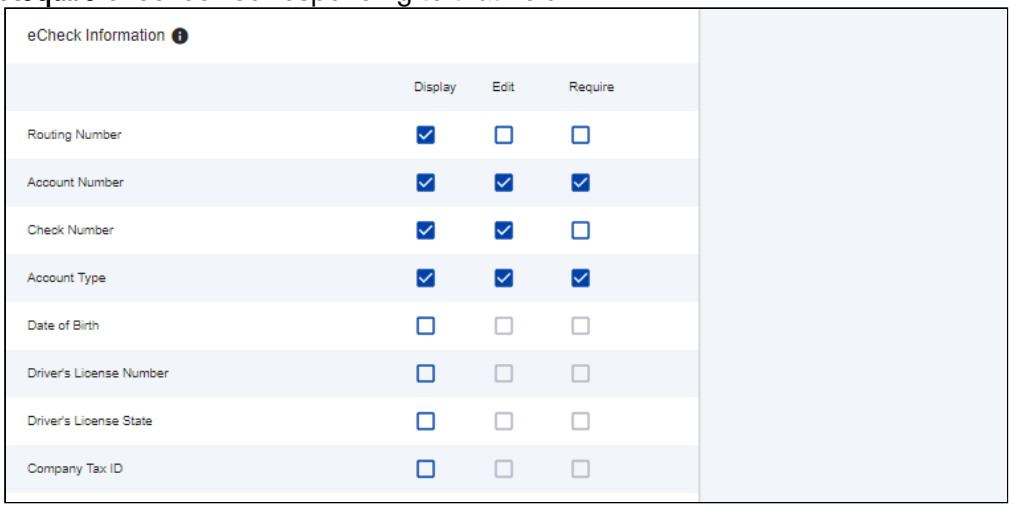
3. Configure payment and checkout page information.



4. Select the fields to display on the billing page. Select the **Display** checkbox corresponding to each field to display it on the billing page. You can also mark some fields as required by selecting the **Require** checkbox corresponding to that field.

5. Select the fields to display on the eCheck page. Select the **Display** checkbox corresponding to each field to display it on the billing page. You can also mark some fields as required by selecting the **Require** checkbox corresponding to that field.



6. Select the settings to show on the order review page. You can show the Billing Information, Shipping Information, and Payment Information.

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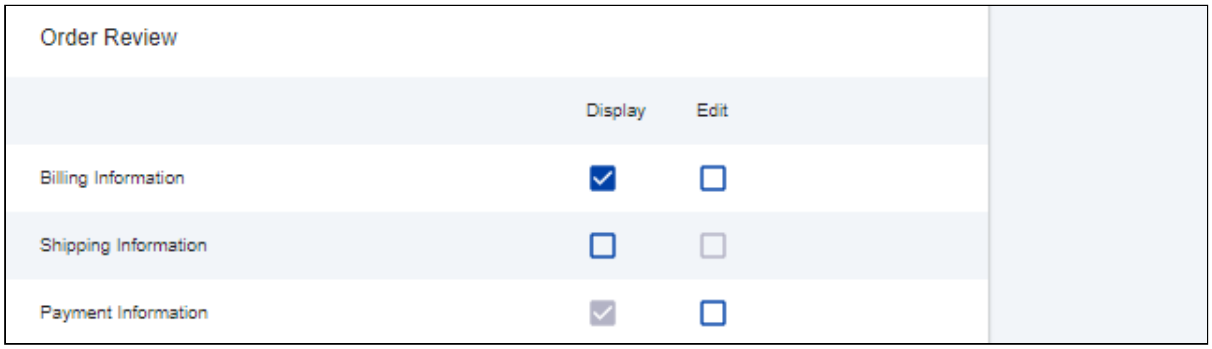

7. Click **Save**.

Creating Profiles in Custom Settings

After you configure the Cybersource settings, you must create profiles in the APTS CyberSource Profile Details custom settings. The Cybersource unmanaged package includes Cybersource custom setting named APTS_CyberSource_Profile_Details__c. This custom setting stores the access_Key, Secret_Key, and Profile ID from Payments. You must create two records in the custom settings, one for the hosted profile and another for the checkout profile.

To create a hosted profile in custom settings

1. Go to **Setup > Develop > Custom Settings** and click **Manage** for APTS CyberSource Profile Details.
2. Click **New**.
3. Enter the **Name** for the profile. For example System Properties.
4. Enter the **Access Key** that you generated in the Security tab in Cybersource.
5. Enter the **Ifram URL** provided by Cybersource during the subscription.
    - For Test Transactions, you must use https://testsecureacceptance.cybersource.com/embedded/pay
    - For Live Transactions, you must use https://secureacceptance.cybersource.com/embedded/pay or the URL provided by Cybersource.
6. Enter the **Merchant ID**. The merchant ID is the same as the Organization ID that you used to create the Cybersource account.
7. Enter the **Profile ID**. You will receive the Profile ID when you create a secure acceptance profile.
8. In Secret Key1 and Secret Key2, enter the secret keys that you generated in the Security tab in Cybersource.

    ⚠ Due to the Salesforce limitation of 250 characters, the secret key is divided into two fields. You must manually break the key into two and enter in these fields. You must ensure that there are no extra spaces at the beginning or, the end of the secret key.

9. If you are using a test environment, select **Is TestEnvironment**.

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> ⚠ Checking this flag sets the default order amount to $100 as Cybersource may display an error for amounts exceeding $100 in test environments.

10. Click **Save**.

To create a checkout profile in custom settings

1. Go to **Setup > Develop > Custom Settings** and click **Manage** for APTS CyberSource Profile Details.
2. Click **New**.
3. Enter the **Name** for the profile. For example Silent Checkout Profile.
4. Enter the **Access Key** that you generated in the Security tab in Cybersource.
5. Enter the **Ifram URL** provided by Cybersource during the subscription.
    - For Test Transactions, you must use https://testsecureacceptance.cybersource.com/silent/embedded/pay
    - For Live Transactions, you must use https://secureacceptance.cybersource.com/silent/embedded/pay or the URL provided by Cybersource.
    a. Enter the **Merchant ID**. The merchant ID is the same as the Organization ID that you used to create the Cybersource account.
6. Enter the **Profile ID**. You will receive the Profile ID when you create a secure acceptance profile.
7. In Secret Key1 and Secret Key2, enter the secret key that you generated in the Security tab in Cybersource.

> ⚠ Due to the Salesforce limitation of 250 characters, the secret key is divided into two fields. You must manually break the key into two and enter in these fields. You must ensure that there are no extra spaces at the beginning or, the end of the secret key.

8. If you are using a test environment, select **Is TestEnvironment**.

> ⚠ Checking this flag sets the default order amount to $100 as Cybersource may display an error for amounts exceeding $100 in test environments.

9. Click **Save**.

To configure the callback URL for Payment Iframe in the custom settings

1. Go to **Setup > Develop > Custom Settings** and click **Manage** for APTS CyberSource Profile Details.
2. Click **System Properties**.
3. Enter the **Payment Callback URL**, to redirect the customer in the Digital Commerce application after payment is done.
4. Click **Save**.

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Defining Custom Labels

The Cybersource unmanaged package comes with two labels where you must enter the custom setting profile you created. These labels use relevant values while performing payment transactions.

To define custom labels

1. Go to **Setup > Create > Custom Labels** and click **Edit** for cyberSource_Active_CustomSetting.
2. Enter a short description.
3. In **Value**, enter the name for the hosted profile you created in the APTS CyberSource Profile Details custom setting. For example System Properties.
4. Click **Save**.
5. Now to go to **Setup > Create > Custom Labels** and click **Edit** for cyberSource_Active_Silent_CustomSetting.
6. In **Value**, enter the name for the checkout profile you created in the APTS CyberSource Profile Details custom setting. For example Silent Checkout Profile.
7. Click **Save**.

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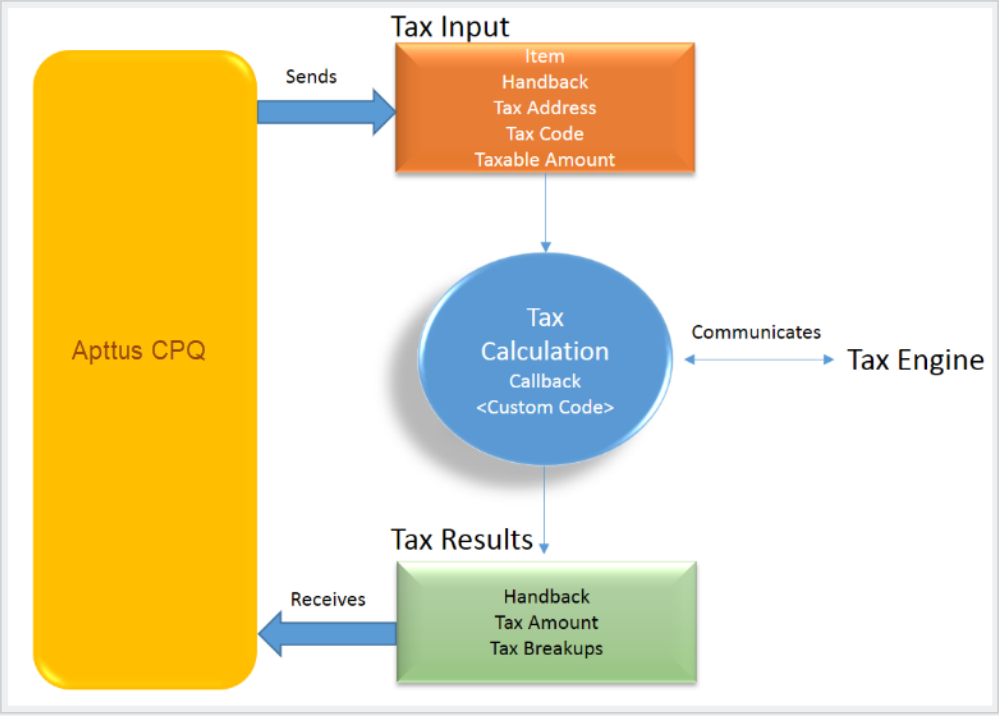
Tax Integration with Avalara Tax Engine

You can communicate with a Tax Engine of your choice with the help of a Tax Callback class. For this, you must use the Request Fields to send to the Callback and further to the Tax Engine. Following diagram gives an overview of how information is sent from Product to the Tax Engine and received back after processing.

Apttus Tax Engine



Tax input is a container which holds the following fields:

- **Item:** Contains an Invoice Line Item or a Credit Memo Line Item.
- **Handback**: A generic wrapper class that can be used to pass an additional field value. Set the value for this field to *TaxInputRelatedObjects*. This class contains the parent Invoice or Credit Memo based on whether the item contains an Invoice Line Item or a Credit Memo Line Item.
- **Tax Address**: The address specified as the Shipping Address of the Ship To account. If there is no Shipping Address mentioned in the Ship To account, then the Billing Address of the Ship To account is used.
- **Tax Code:** This value is taken from the product Price Line Item (PLI).
- **Taxable Amount**: This is the amount to apply the tax to.

When communicating with a Tax Engine, you must note that:

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- The implementation of the Tax Callback must return a *TaxResultHandback* object in the *Handback* field of a Tax Result.
- The implementation of the Tax Callback must determine a *commit mode* by checking if the status of the Invoice is *Approved Pending.*

You must register a **Tax Callback class** which is called for tax calculation on invoice generation.

Setting Up Tax Integration

You can integrate a tax engine with the Partner Commerce Application. To set up tax integration, you must complete the following tasks:

- Install the tax integration package and define the class in custom settings
- Enable tax calculations
- Create Tax Code and Tax Certificate
- Set up Tax Calculations
- Set up Tax Breakups

Prerequisites

You must have already installed Apttus CPQ packages.

To set up tax integration with Avalara tax engine

1. Download and install Avalara Tax Integration with Ecommerce unmanaged package from the repository.
2. Go to **Custom Settings** and click **Manage** for Config Custom Classes.
3. Click **New**.
4. Enter the **Name** as *System Properties*.
5. In Tax Callback Class, enter APTS_APTSTaxCallBack. This class is part of the Avalara Tax Integration with the Ecommerce unmanaged package.
6. Click **Save**.

To enable tax calculations

1. Go to the **Storefronts** tab. Choose and click your storefront name to open your storefront record.
2. Click **Edit** and set the **Enable Tax Calculations** flag to True.
3. Click **Save**.

In Apttus Partner Commerce at the time of order generation tax needs to be calculated for taxable line items or order line items. You must create a Tax Code and a Tax Certificate record.

To create tax code and tax certificate record

1. Go to the **Tax Code** tab and click **New**.

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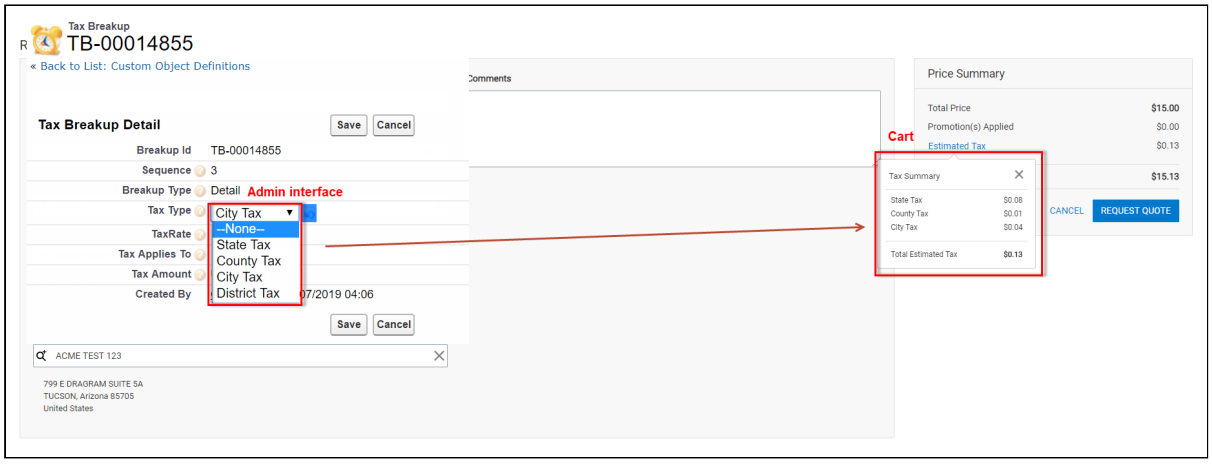
2. Enter a **Name** for the tax code.
3. In **Code,** enter the tax code provided by Avalara.
4. Enter a meaningful **Description** for the tax code.
5. Click **Save**. You can define this code in your price list item.
6. Go to the **Tax Certificate** tab and click **New**.
7. Enter a **Number** for the tax certificate.
8. Enter a meaningful **Description** for the tax certificate.
9. Select the **Effective Date** and **Expiration Date** for the tax certificate.
10. Click **Save**. You can define the newly created tax certificate in your Account object.

By default, not all products are taxable. To make a product taxable, you must set the **Taxable** flag to *True* and enter the tax code on the Price List Item.

To set up tax calculation

1. Go to the **Price List Item** for the line item you want to calculate the tax for.
2. Set the **Taxable** flag to *True* and enter the **Tax Code.**
3. Click **Save**.

In Apttus Partner Commerce, when you select a product that is taxable and you generate an order, the system calculates the tax and displays it into the cart. The breakup of the tax is defined in Salesforce from the line item level. The percentage of the tax break up is passed on from Avalara. The tax API retrieves the account address and passes it to Avalara. Based on the region/address, Avalara passes tax percentage information which is then computed in Salesforce and displayed in the Tax Breakup object. Refer to the image below for the type for tax breakups available on the Partner Commerce site.



When you generate the order, you receive its order tax breakup. These tax breakups are attached to the respective line items.

You must ensure that the Account object has a valid Billing and Shipping Address and the Tax certificate is defined.

Use Case:

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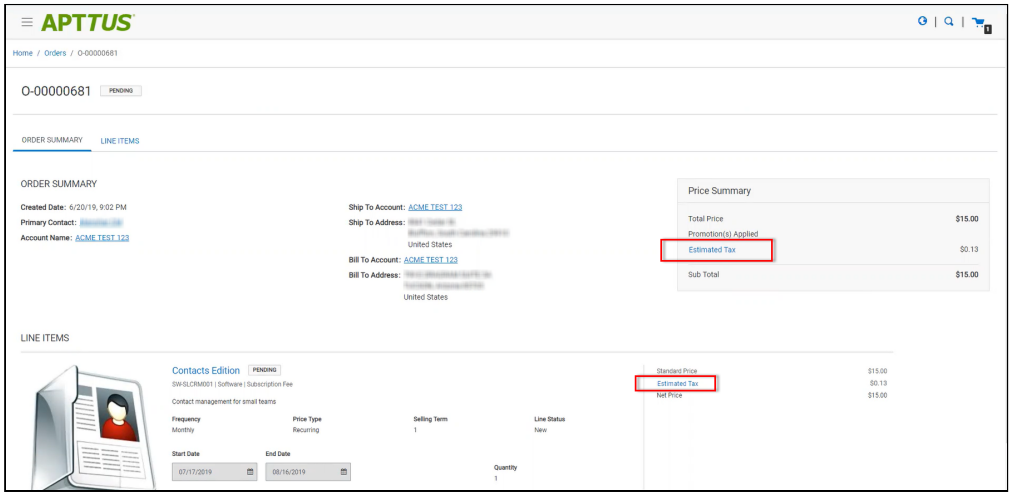
1. From the Product Catalog, select a **Product** and add it to the cart.
2. Click Place Order. The order confirmation page appears. Tax for the selected product is calculated and displayed.
3. To view the tax break up, click **Estimated Tax**.
4. You can view the tax summary from **My Accounts > Orders**.



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Customizing Your Application

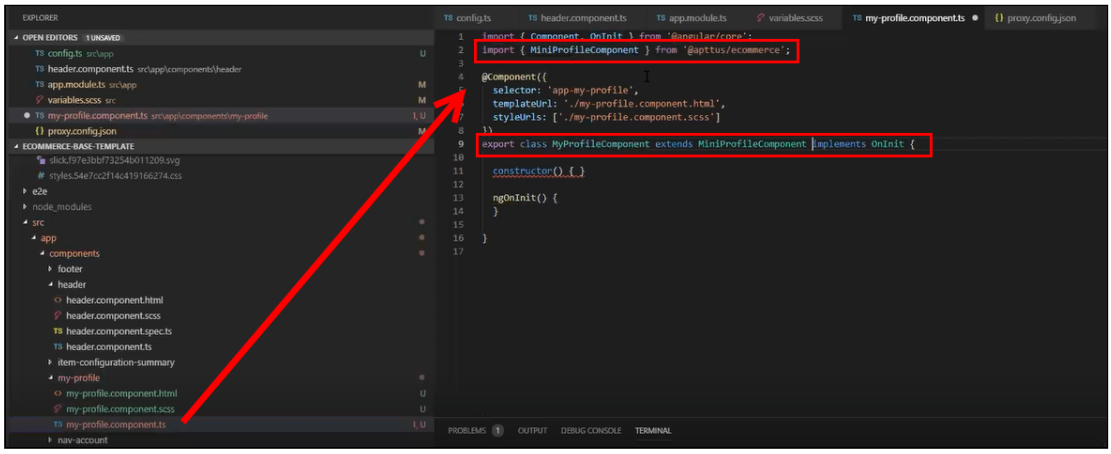
In This Section

Customizing HTML Content and Standard Components

You can override the HTML for any component that comes with your angular application. You can do so by writing an extension component. Similarly, you can override the methods within it as well. For example, there is a registration method and you want to retain it but want to change the look and feel of the template, you must write an extension component. You can override extension classes, extension services or extension components that are present within the angular library.

To customize the HTML content

1. Go to header.component.html file and browse for apt-mini-profile component. The HTML content are all bundled in this component.
2. Go to your application and use basic angular syntax to generate a component. For example: ng g c components/my-profile --module-components/component.module.ts --spec-false
3. A new my-profile.component.ts is created.
4. Import the miniprofile component from @apttus/ecommerce and extend the miniprofile component. By doing this, all the controller code is inherited from the miniprofile component.



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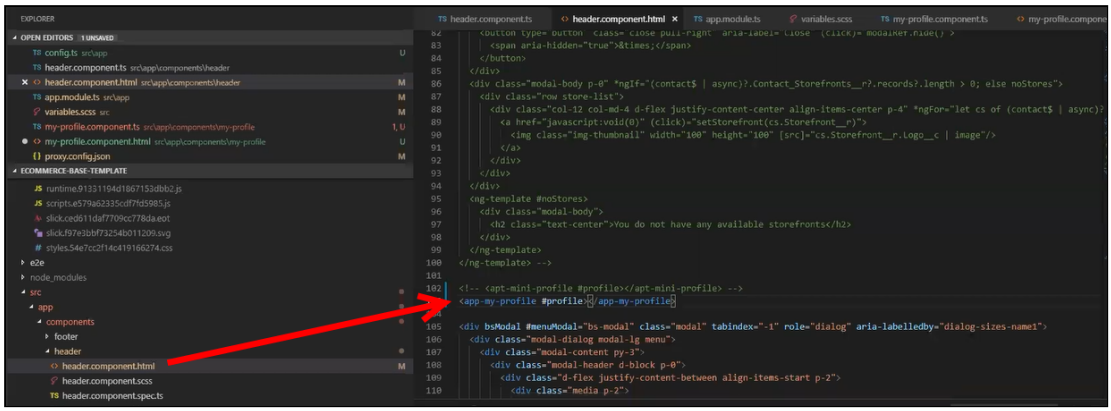
5. Refer the Partner Commerce on Salesforce SDK and search for miniprofilecomponent. Click on the Template tab for HTML template for all of the components in it.
6. Copy all the HTML content and paste it in the my-profile.component.html you just created and save it.
7. From the new component you just created, copy the selector and go to the header where it is referenced and paste the selector.



8. Run ng serve command.

The profile component is overridden.

Go to my-profile.component.html and within the HTML content add a custom field and save.

Refresh your application on the local machine and you will see the newly added custom field. If you want to assign the custom field to a user that is associated with the component, you can do so by modifying the ngModel. For example: [(ngModel)]="user.My_Custom_field__c"

```
<div class="form-group">
  <label for="Ramesh">Ramesh</label>
  <input type="text" class="form-control" id="Ramesh" name="Ramesh" placeholder="Ramesh" [(ngModel)]="user.My_Custom_field__c">
</div>
```

Adding Custom Fields on Object Models

You can add custom fields to a model by using the extended model in components. The strategy to add customization to the application is to use the object-oriented nature of typescript to extend and override the out of the box content. Let us see how to add a custom field to the Product object.

To create a custom model

1. Right-click on the App folder and click **Create Folder** to create a new folder for models and name it. For example, models.
2. Right-click on the models folder and click **Create File** to create a product model and name it. For example, s-product.model.ts

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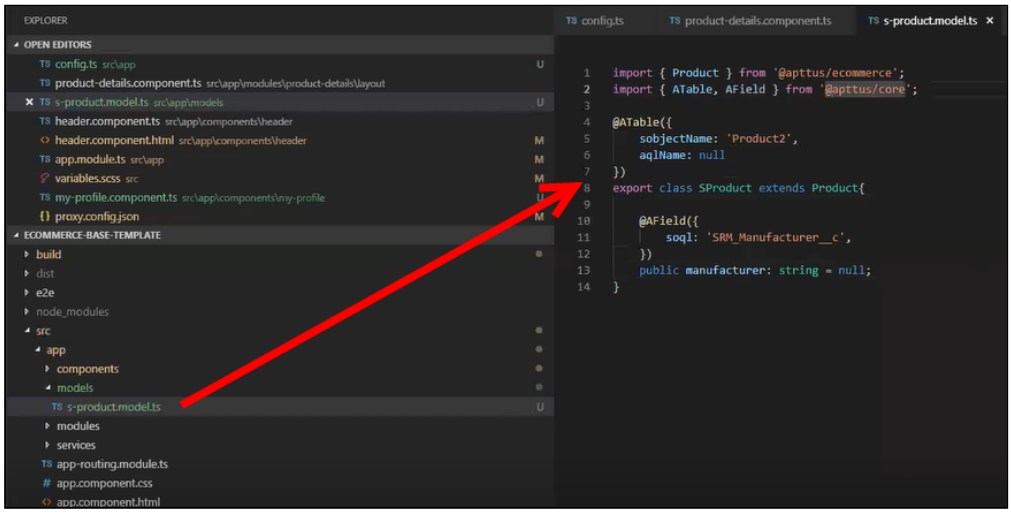
3. In the s-product.model.ts, import Product from @apttus/ecommerce. For example: import { Product } from @apttus/ecommerce
4. Create the extension of the product for your custom model. For example, export class SProduct extends Product {} The SProduct class has all the properties of the original product.



5. When adding custom properties to your model, you must associate the following decorators from the @apttus/core library. These are used to map your classes to the underlying Salesforce objects. Basically, this mechanism is to map typescript classes with Salesforce objects using decorators.
    - ATable - This is used to map product class to any object on the backend by specifying what object you want to map it up to. For Salesforce, the object name can be added to field sobjectName.
    - AField - This is used to specify the Salesforce name of the custom field. For example: SRM_Manufacturer__c. It is not necessary to use the Salesforce syntax for the field name. You can provide a generic name. For example manufacturer. You must specify a default value for any field created. Do not leave a blank value.

Now that you have created your custom product model, mapped typescript class to the Salesforce object Product2, and provided custom fields, you must map it back to the service. The product service looks up at the product class. You can override that using a setType method that is available on every single service. This method should be created in the constructor of the component. This changes the mapping of that service to the model that you want to use. Once this is done within your application or within your module, the method gets applied to every other component within your module. Now pass it in the class reference of the class you just created. For details, refer to the image below.

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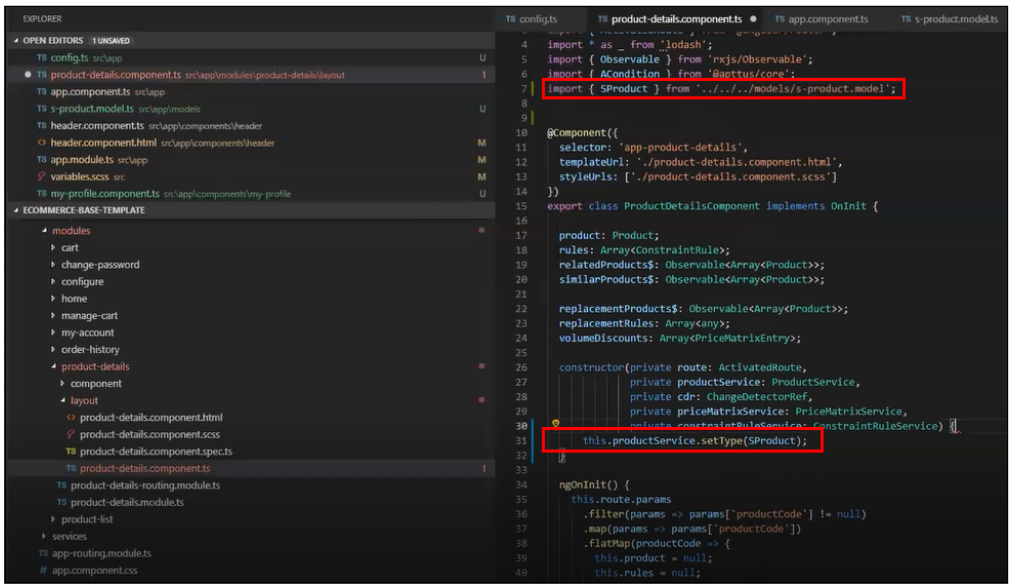

Adding Custom Attributes to a Product

You can add a custom attribute on any product in the product details page through the product attribute model that contains all the product attributes.

To add a custom attribute to a product

1. You must import the product attribute model from the Apttus E-Commerce library into the product attribute value service.

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```
@ATable({
    sobjectName: 'Apttus_Config2__ProductAttributeValue__c',
    aqlName: 'cpq_ProductAttributeValue'
})
export class ProductAttributeValue extends AObject {
    @AField({
        soql: 'Apttus_Config2__BillingOffsetDays__c',
        aql:'BillingOffsetDays'
    })
    BillingOffsetDays: number = null;
    @AField({
        soql: 'Apttus_Config2__Color__c',
        aql:'Color'
    })
    Color: string = null;
    @AField({
        soql: 'Apttus_Config2__LineItemId__c',
        aql:'LineItemId'
    })
    LineItemId: string = null;
    @AField({
        soql: 'Apttus_Config2__Vendor__c',
```

2. In the @Table decorator, you must set the Dynamic flag to *True*.

```
1   import { AObject, ATable, AField } from '@apttus/core';
2
    You, 5 months ago | 2 authors (Vishal Bhan and others)
3   @ATable({
4       sobjectName: 'Apttus_Config2__ProductAttributeValue__c',
5       aqlName: 'cpq_ProductAttributeValue',
6       dynamic: true
7   })
8   export class ProductAttributeValue extends AObject {
9       @AField({
10          soql: 'Apttus_Config2__LineItemId__c',
11          aql:'LineItemId'
12      })
13      LineItemId: string = null;
14  }
```

The following objects have the dynamic flag set to true, by default.

a. ProductAttributeValue
b. OrderAttributeValue
c. QuoteAttributeValue
d. AssetAttributeValue

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Customizing Logic in the Services

Your application is built around the concept of Models and Services and pairing the two to work together. You can do one or more of the following:

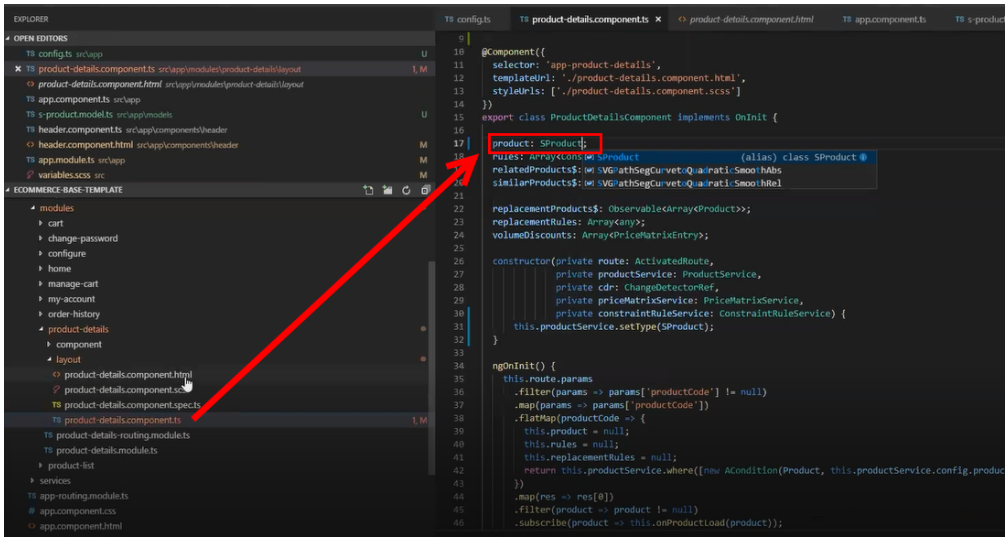
- Change the model that goes with some business logic and service
- Change the business logic or service for a particular modal
- Create completely new models and new services

Customizing the Template Page with Custom Field

You can use the custom field you just created in your template.

To customize the template page

1. Go to product-details.component.ts and modify the product name with your custom field name.



2. Go to the product-details.component.html and add an entry for your custom field to be displayed on the template.

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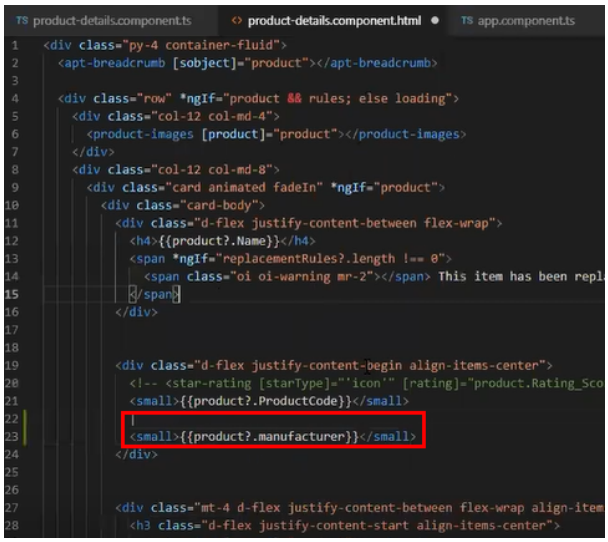

3. Your template displays the new custom field.

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Setting Email Notification Template for Order Lifecycle

Partner Commerce sends an email notification whenever the order changes its status. To use these email notifications you must configure email notification template settings in Salesforce.

Prerequisites

- You must have configured the URL for the portal.

To configure email notification template

1. Go to **Setup > Administration Setup** and click **Customer Order Email Notification Templates**.
2. Click **Edit**.
3. From **Edit Template**, replace {!recipient.name} with {recipient.Contact_Full_Name__c}.
4. Click **Save**.

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Setting Up Single and Multiple Store

You can set up a single store within a community as well as multiple stores within the same community. Communities are used to segment the users. For example, if you want users to view all your storefronts, you can create one community with multiple storefronts. In case, you want to restrict set of users to different stores, you must create separate communities to restrict access.

You can achieve this by creating different visualforce pages and control access through profiles and permissions sets.

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Post Deployment Community Setup

After deploying Partner Commerce you have to follow the steps described in this section to give access to the community to your customers and partners.

Setting Up the Default Page

You can set up the default page for your community. This eliminates the need to suffix your community URL with the storefront you created.

To set up a default page

1. Go to **Setup > Customize > Communities** and click **All Communities**.
2. Click **Workspaces** and under My Workspaces, click **Administration**.
3. Select **Pages** and from **Community Home**, select the Visualforce page.
4. Search and select the Visualforce page you deployed.
5. Click **Save**.

Now when you go to your community URL, your storefront is displayed.

Granting User Access to Community via Profiles

You can enable users to access the community through profiles based on the level of access you want to grant.

To enable users to access a community

1. Go to **Setup > Customize > Communities** and click **All Communities**.
2. Click **Workspaces** and under My Workspaces, click **Administration** and select **Members.**
3. Under Select Profiles section, select a profile from the **Available Profiles** column and add it to the **Selected Profiles** column.
4. Under the Select Permission Sets section, select a permission set from the **Available Permission Sets** column, select a permission set and add it to **Selected Permission Sets** column.rch and select the Visualforce page you deployed.
5. Click **Save**.

Enabling Self Registration

You can enable self-registration and other user management tasks from the community administration page.

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To enable self-registration

1. Go to **Setup > Customize > Communities** and click **All Communities**.
2. Click **Workspaces** and under My Workspaces, click **Administration** and select **Login & Registration.**
3. For **Login**, select the Visualforce page, and search and select the Visualforce home page you deployed. For example store
4. From the **Password** section, do the following:
    - For **Forgot Password**, select the Visualforce page, and search and select the Visualforce home page you deployed. For example store
    - For **Change Password**, select the Visualforce page, and search and select the Visualforce page you deployed for a password change request. For example 'storepassword'.

    > ⚠ This is based on the Salesforce behavior of handling sessions. You cannot use the same Visualforce page for both the Home page and Change Password page.
5. From the Registration section, do the following:
    a. To enable self-registration, select Allow external users to self-register.
    b. From Page, select the Visualforce page, and search and select the Visualforce home page you deployed. For example store
    c. From Assign Registering Users To, set up the default Profile and Account for the self-registration.
6. Click **Save**.

Setting Up Guest Users

You can set up guest users for your community. The concept of guest users is simply hiding access to certain pages.

To set up a guest user

1. Go to **Setup > Customize > Communities** and click **All Communities**.
2. Click **Workspaces** and under My Workspaces, click **Administration**.
3. Select **Pages,** select the Force.com section. This section takes you to the underlying site record for your Salesforce community.
4. Under the Site Visualforce Pages section, ensure the pages are listed for the guest user to access. The pages that are not listed cannot be accessed by a guest user.
5. Once done, click **Public Access Settings** where you can see the guest user profile for our storefront. This displays what a guest user can access and manage object and field-level permissions.
6. Click **Save**.

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Apttus E-Commerce Permission Set

The E-Commerce package comes with a basic permission set for providing the necessary access to users. The permission set is named 'Apttus Ecommerce' and should be assigned to users access the e-commerce storefront. If you would like to make any changes to the permissions, you may clone the permission set and make any changes necessary.

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Contact Apttus Support

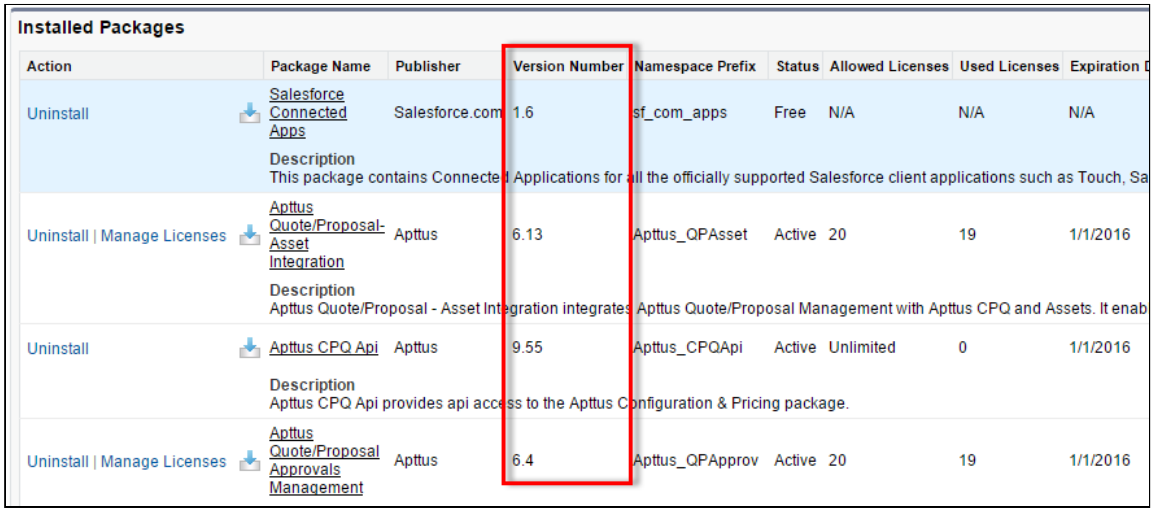
If you experience an issue with an Apttus product and need help, you can contact Apttus Support. Before you contact Apttus support, prepare a brief description of the problem you are experiencing. Additionally, to enable us to resolve your problem at the earliest, provide the following important information:

- What is the environment in which you are experiencing the problem: Sandbox or Production?
- How many users are affected?

Which product versions are installed?

To determine version numbers:

1. Go to **Setup > App Setup > Installed Packages**.
2. In the Installed Packages section, all the installed packages are displayed. You can find the version numbers in the Version Number column.



What is your Salesforce.com Organization ID?

To determine the Salesforce.com organization ID:

1. Go to **Setup > Administration Setup > Company Profile > Company Information**.

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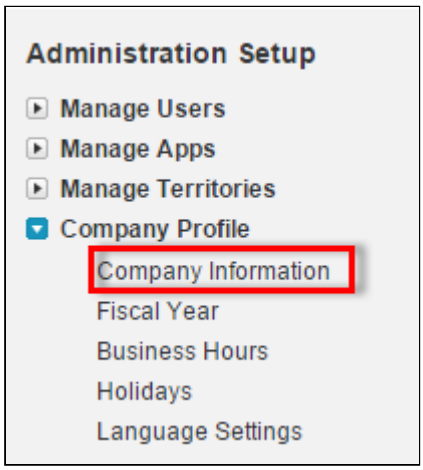
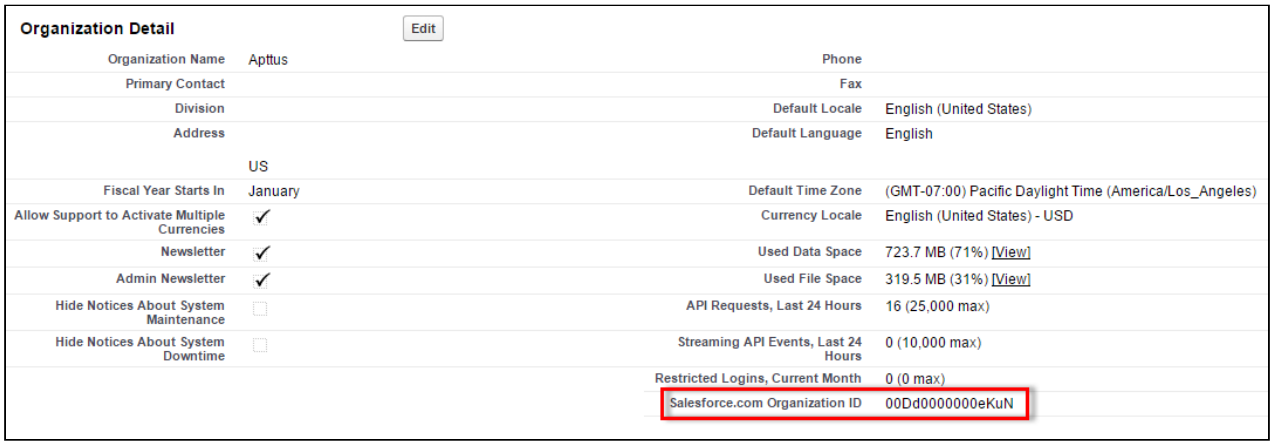


2. From the Organization Detail pane, provide the Salesforce.com Organization ID.



If you are having issues generating documents, what is your merge server end point?

To find the merge server end point:

1. Go to **Setup > App Setup > Develop > Custom Settings**.
2. Click **Manage** for Comply System Properties.
3. Click **System Properties**.
4. The Merge Webservice Endpoint field displays the setting. The https://mergeserver.apttus.net:9876 portion of the setting is what will be helpful to customer support.

Grant Login Access of the affected user and an administrator.

To grant login access:

1. Go to **Setup > Personal Setup > My Personal Information > Grant Login Access.**

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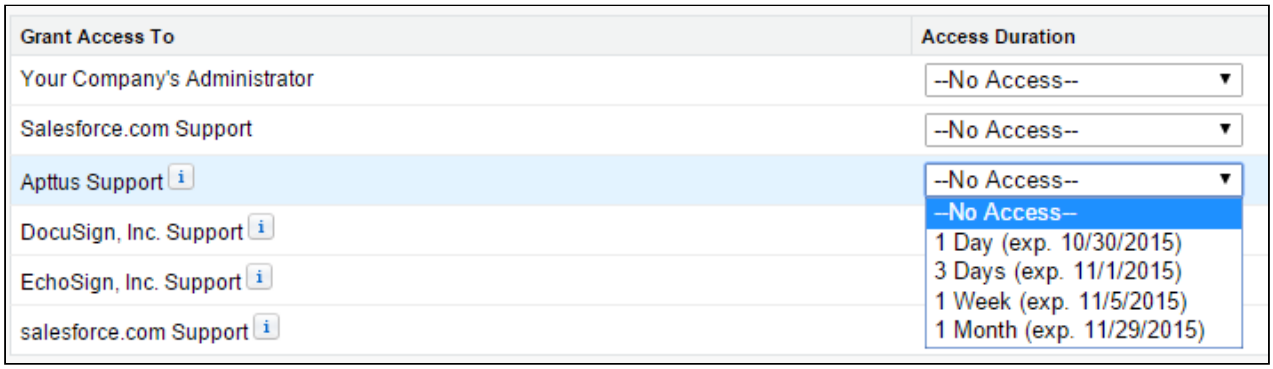
2. From the Apttus Support picklist, select an option for access duration.



3. Click **Save**.

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For additional resources and support, please visit https://community.apttus.com.

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