CPQ B2B Commerce Cloud Lightning Connector

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Lightning Connector Introduction

The CPQ B2B Commerce Cloud Lightning Connector is a managed package from Salesforce Labs and allows customers of both B2B Commerce Lightning Experience and CPQ to configure or customize functionality that will request quotes and orders in both clouds. This connector package will also be available as open source via GitHub. Please look into the installation instructions listed below

The goal of the connector is to leverage one data model, pricing engine and a unified process that is built around customer engagement from B2B Commerce and CPQ to create omnichannel customer driven experiences.

The connector supports the following use cases.

1. Request for a Quote
2. Generate Order Summary
3. Reorder with Synchronized Order Summary

General Connector Information

- Connectors are a developer enablement framework designed to accelerate cross-cloud integration vs. a productized solution.
- Connectors support a core set of use cases and can be extended to support additional customer-driven use cases.
- Connectors will require customization and configuration in B2B Commerce and Salesforce CPQ.
- Plan your connector implementation with a data strategy and governance policy.

Available in: Enterprise, Performance, Unlimited, and Developer Editions

WORKFLOW

Commerce

Customer Self Service

Request Quote

Reorder Process

Considerations - Lightning Connector

There are important considerations to understand before implementing the Lightning Connector capabilities. Below are the list of considerations.

- Any buyers (external users) creating quotes in CPQ will require a Salesforce CPQ license and the Salesforce CPQ Customer User permission set must be applied (for full details on permissions required for different users, see the User Setup section of this document).
- The Lightning connector does not support Contract Management.
- **Cart to Quote Pricing strategy** - The B2B Lightning Connector does not try to mimic the same pricing strategy that Commerce offers its users: Sequence or Best Price. That decision has already been made by the time the Price has been captured on the CartItem. We cannot stamp the price on the Quote Line as CPQ requires a Quote Line to be created by indicating both the Product and the Pricebook that the Cart item came from.
- It is recommended that every product that is entitled to be displayed on the Storefront is added to the Standard Pricebook. Products that are not a part of the store's pricebook will cause the Cart to Quote flow to fail.
- The B2B Lightning Experience pricing type "tiered pricing" is not supported by the connector.
- Complex CPQ Product bundles are not supported by the lightning connector. Additionally customizations on top of the connector would be required to achieve self-service use cases with CPQ bundles.
- Modifications to the code in the package may be required to suit all business requirements
- **"Enhanced Request to Quote"** adds Shipping charges as a Quote line item when creating the Quote. The CPQ user will then have to manually assign the web store pricebook to the Shipping Charges line item and then proceed with generating an Order.
- The "**Request to Quote**" button that is available in the package (configuration details here) is used to generate Standard quotes and cannot be used to generate order summary as required data will be missing. Once the quote has been created, the CPQ user will need a mechanism to create the necessary required data. Documentation on what data is required can be found here.
- CPQ Calculation Service must have an authorized user. Documentation on authorizing your desired user can be found here.
- The Lightning Connector was last tested against the Spring '21 Salesforce release.

CONFIGURATIONS

Prerequisites: **User Permissions** requires a Permission Set assignment to CPQ B2B Connector Admin and the CPQ and B2B Commerce Administration areas of setup.

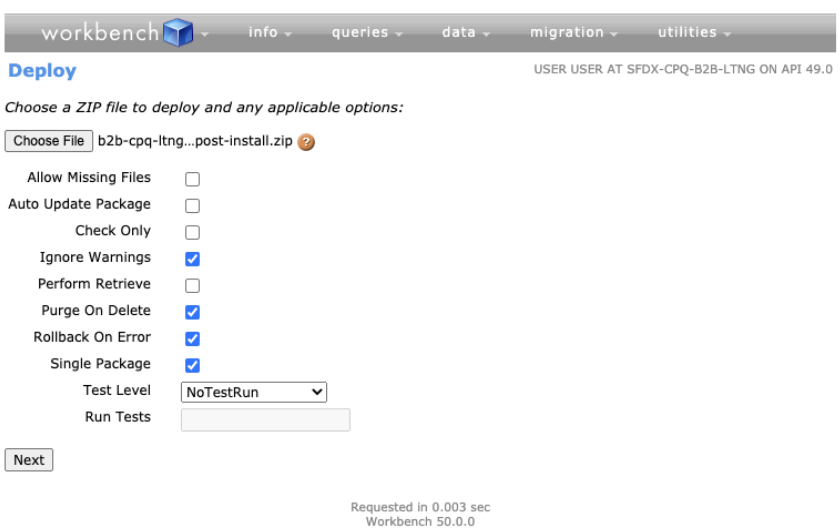
Install Managed Package

Assumptions:

1. CPQ Winter '21 v 228.7 is installed
2. B2B Commerce Lightning Experience is installed

Option 1: A Salesforce Administrator can install the Lightning Connector package

1. Log into the Salesforce instance where you want to install the package
2. In a new browser tab, paste the link to the version of the Connector package you want to install
3. Alternatively, you can download the package from AppExchange
4. Choose **Install for Admins Only** radio button
5. Click **Install**
6. The installation of the package takes a few minutes; Salesforce sends a confirmation email when the installation is complete, informing the success (or failure) of the installation
7. Verify that the package is installed successfully by navigating to **Setup | Installed Packages**
8. Navigate to **Setup | Administration | Users | Users**
9. Click on the user with "**System Administrator**" Profile
10. Add **B2B2CPQ User** Permission set to the user
11. Click **Save**
12. Login to Workbench
13. Deploy the following metadata (.zip files) with following options (**note:** B2B Setup Files must be deployed first)



Zip File:
B2B Setup files (Unmanaged Winter 2021 B2B Checkout Flows)
Available in the github repo with the unmanaged code.

B2ble_cpq_cnctr Unmanaged package of Quote to Cart Checkout Flow Templates
Available in the github repo with the unmanaged code.

Option 2: Deploy the project through GITHUB

Note: The public github repo is not available yet. These instructions assume you have access to the unmanaged code, and are deploying from your own repo. Please reach out to aschubert@salesforce.com to get access to the unmanaged code.

Log into the CLI with the credentials of the org where you want to deploy the codebase

1. Convert and Deploy the unmanaged b2b-template flows from source:
   ```
   sfdx force:source:convert -r /b2b-setup/ -d predeploy
   sfdx force:mdapi:deploy -d predeploy
   ```
2. Convert and Deploy project source:
   ```
   sfdx force:source:convert -d deploy
   sfdx force:mdapi:deploy -d deploy
   ```
3. Convert and Deploy unmanaged project folders:
   ```
   sfdx force:source:convert -r /b2b-cpq-unmanaged -d postdeploy
   sfdx force:mdapi:deploy -d postdeploy
   ```

“Request to Quote” Functionality

“Request to Quote” can be configured in one of the following two ways

1. **Request to Quote Enhanced Flow** - Configure this if the **Order Summary** should be created **automatically** once order is created. This flow will require the customer to navigate through a portion of the B2B checkout flow to collect information such as shipping address and method prior to the quote being submitted.
2. **Request to Quote Basic Flow** - Configure this if the required information to create an **Order Summary** will be **manually** created by the CPQ user. In this flow the customer can request a quote directly from the cart page. Any information traditionally collected in the B2B checkout flow that is required to create an order summary must be created **via custom code** as a part of the customer’s implementation. Documentation on what data is required to create both a B2B Order and an Order Summary can be found here.

Configure “Request to Quote” Enhanced Flow

User Permissions Needed	
To enable communities and create or change custom fields:	Customize Application
To create, customize, or publish a community AND to create stores and administer store settings:	• Create and Set Up Communities • View Setup and Configuration

“Request to Quote” Enhanced flow can be used to request additional information related to the shipping address from the user while requesting a Quote.

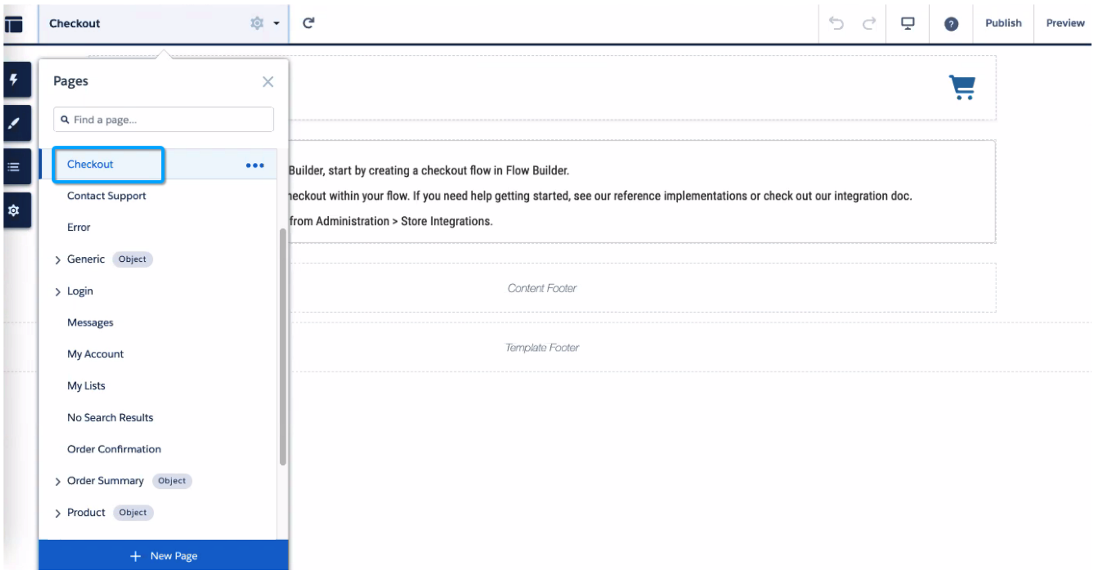
In general, orders can be created through Storefront or at the backend by the CPQ Sales user who processes the Quote request thus received from a B2B buyer.

The earlier mentioned “Request to Quote” component does not support creation of Order summaries.

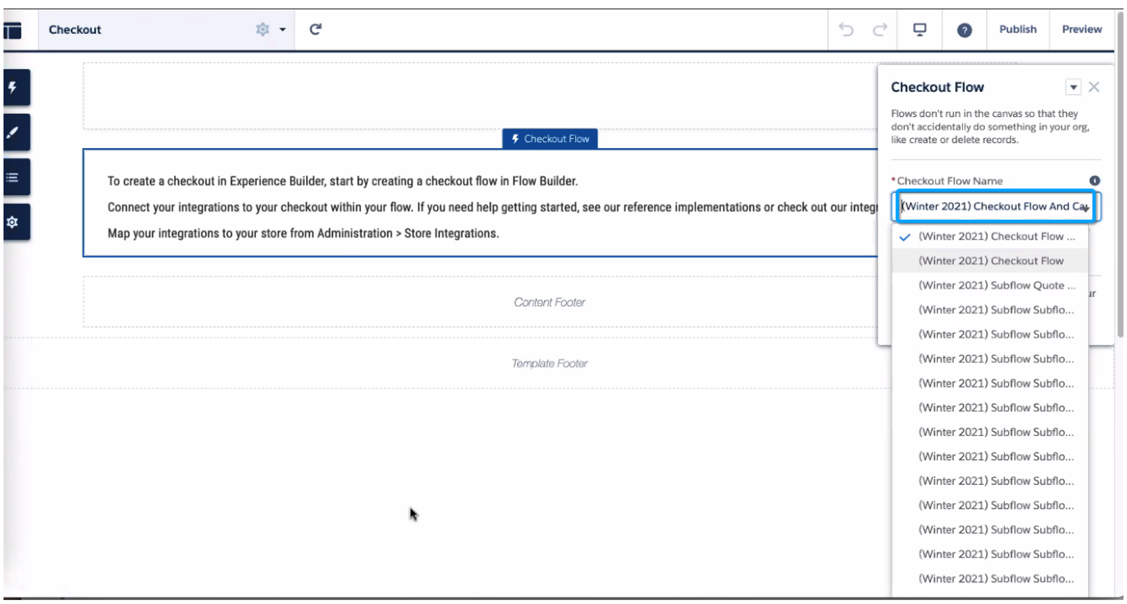
The enhanced flow will help in building an order summary when the Quote is converted to an order by the CPQ Sales user at the backend. Thus created order summary can be viewable on the Storefront.

Customize the Community page to include Enhanced Checkout flow

1. Access the Communities Settings of your B2B Store:
    - Click the Setup in the Salesforce instance
    - Navigate to **All Communities**
    - Choose the desired Active community from the list & click **Builder**
    - The Community Experience Builder will be opened in a new window
    - Navigate to the Checkout page as shown below:



- Click the Checkout Flow component on the screen and that will bring the Checkout Flow template list. Choose the ***(Winter 2021) Checkout Flow And Cart to Quote*** as shown below



- Click **Publish**

Note: The next steps for configuration of the “enhanced” request to quote flow continue in the [Add fields to the Page Layouts section](#).

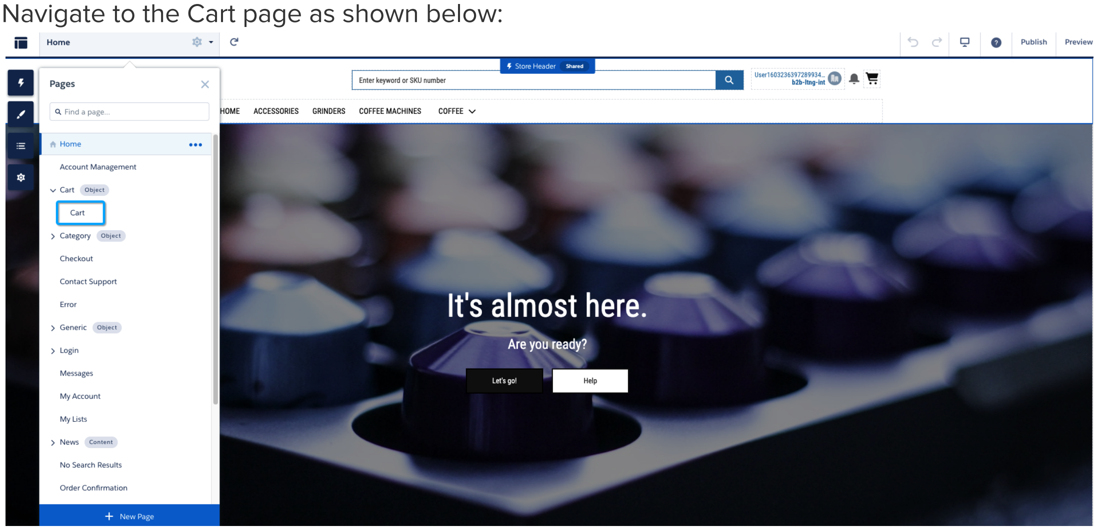
Configure “Basic” Request to Quote Flow

After installation of the connector package is complete, add the “**Request to Quote**” component onto the Storefront Community Website.

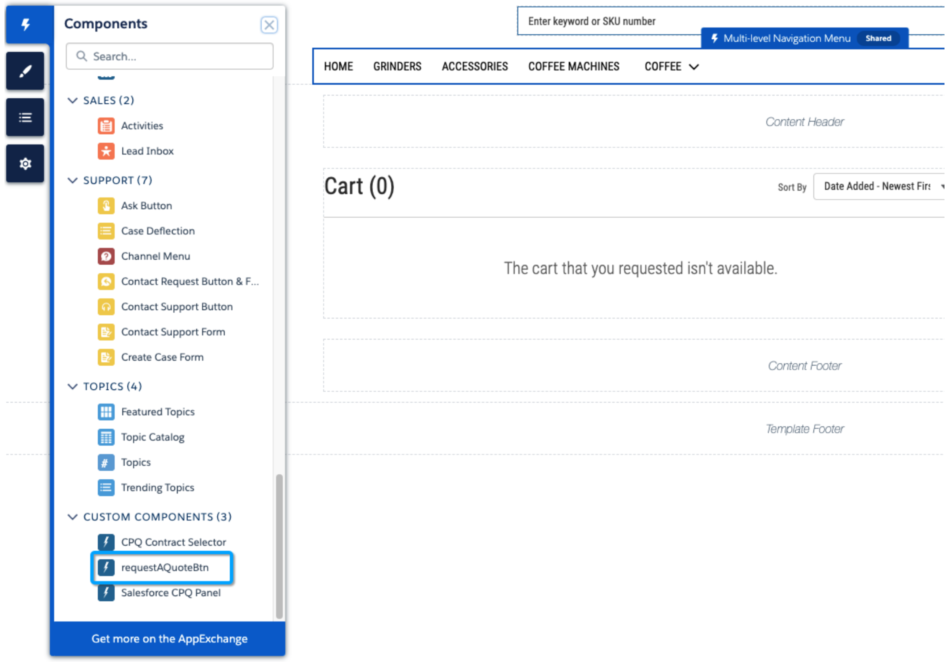
Note: The “**Request to Quote**” button that is available in the package is used to generate Standard quotes and cannot be used to generate order summary as required data will be missing. Once the quote has been created, the CPQ user will need a mechanism to create the necessary required data. Documentation on what data is required can be found here.

User Permissions Needed	
To enable communities and create or change custom fields:	Customize Application
To create, customize, or publish a community AND to create stores and administer store settings:	• Create and Set Up Communities • View Setup and Configuration

1. Access the Communities Settings of your B2B Store:

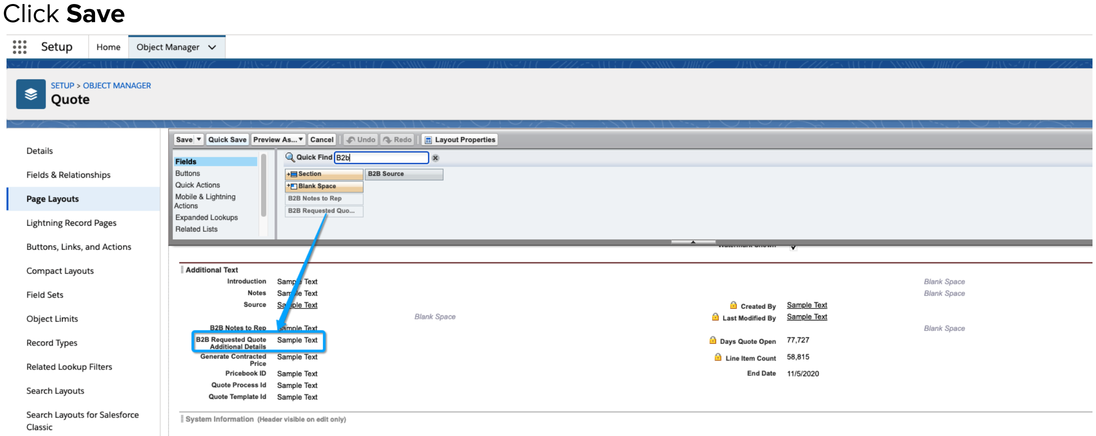
    - Click the Setup in the Salesforce instance
    - Navigate to **All Communities**
    - Choose the desired Active community from the list & click **Builder**
    - The Community Experience Builder will be opened in a new window
    - Navigate to the Cart page as shown below:
    - 

    - Navigate to the **Components** and drag the ***requestAQuoteBtn*** onto the Page below the Proceed to Checkout component

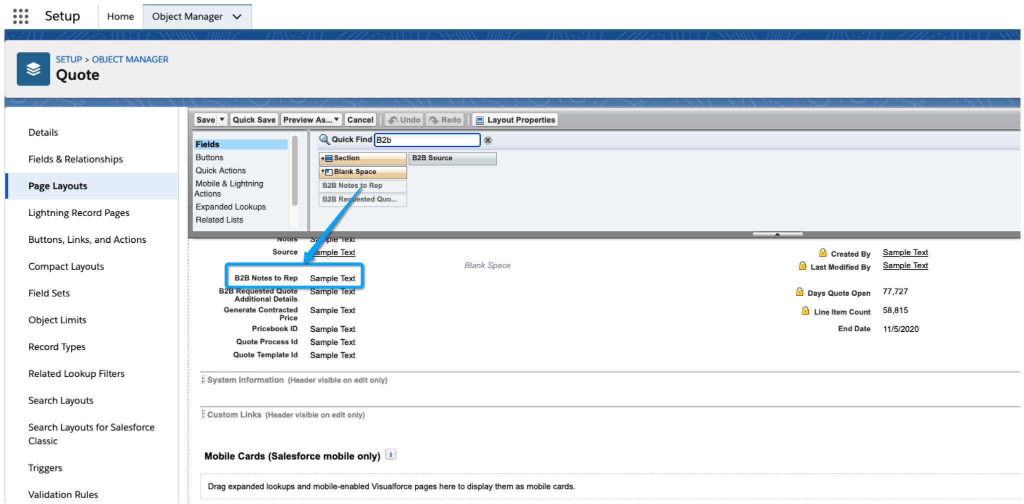


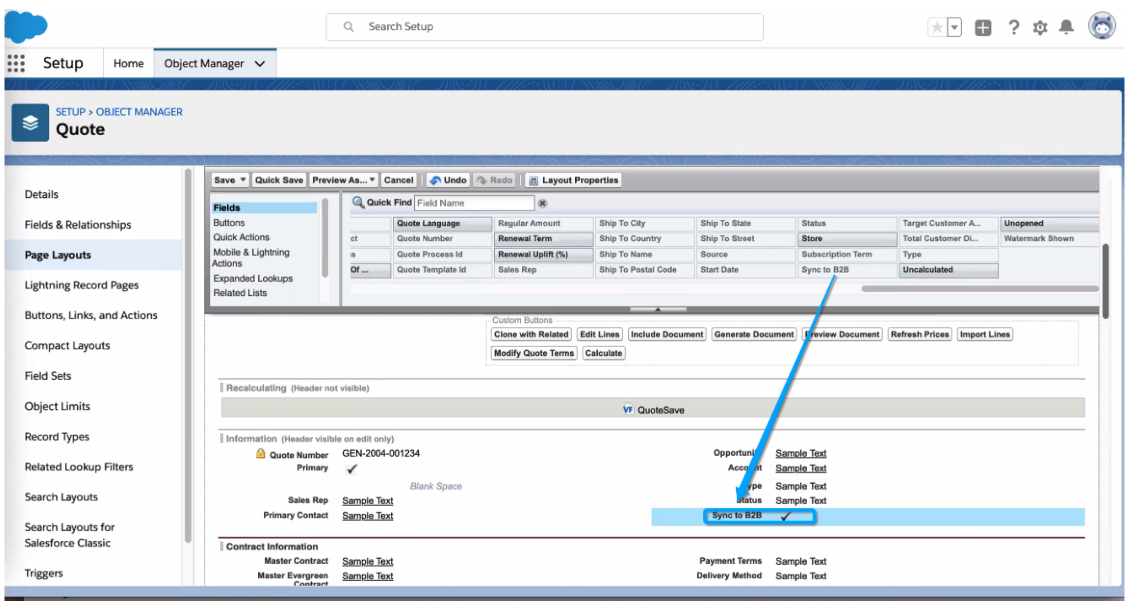
-
- Click **Publish**

Add fields to the Page Layouts

2. Add "*B2B Requested Quote Additional Details*" field onto the Quote Page Layout
    a. Navigate to **Setup | Object Manager | Quote**
    b. Click **Page Layouts**
    c. Click intended Page Layout
    d. Drag the field to the Page layout
    e. Click **Save**
    f. 

3. Add "*B2B Notes to Rep*" field onto the Quote Page Layout
    a. Navigate to **Setup | Object Manager | Quote**
    b. Click **Page Layouts**

c. Click intended Page Layout
d. Drag the field to the Page layout
e. Click **Save**
f. 

4. Add "*Sync to B2B*" field onto the Quote Page Layout
   a. Navigate to **Setup | Object Manager | Quote**
   b. Click **Page Layouts**
   c. Click intended Page Layout
   d. Drag the field to the Page layout
   e. Click **Save**
   f. 

Configure Custom Labels

Following custom labels are defined for the following messages you see on the Storefront Website. These can be configured according to the business requirements

Custom Label Name	Description	Value
RequestQuoteButton	Request a Quote Button text on the Storefront website.	Request a Quote
RequestQuoteCancel	Cancel Button label	Cancel
RequestQuoteErrorToastMsg	Error toast message text that show after quote was created	Oops. Something went wrong when requesting a quote. Please try again later.
RequestQuoteModalWarningText	Warning text for the modal that shows up after B2B user clicks 'Request a Quote'	Once a quote has been requested, your cart will no longer be available to place an order. Are you sure you want to request a quote? Click Submit to proceed, otherwise, click Cancel to go back to your cart.
RequestQuoteQuoteModalText1	Line 1 text for the modal that shows up after B2B user clicks 'Request a Quote'	Please add any additional details you may want us to know.
RequestQuoteSubmit	Submit Button label	Submit
RequestQuoteSuccessToastMsg	Success toast message text that shows after the quote was created.	Thank you for requesting a quote, someone will be contacting you shortly.

Custom labels that are part of a Managed package cannot be edited. Hence, to override any of the custom labels, Translations have to be enabled in the given Salesforce instance

Configure Custom Metadata Types

Note: Prior to creating custom metadata type records you will need to setup the page layout. It is recommended to add the following fields to the page layout: Label, B2B to CPQ Settings Name, Order Lifecycle Type, Store Name, Use Multiple Price Books.

1. When a store utilizes more than one Pricebook, the following Custom Metadata Type needs to be configured with the information. Once this information is saved, whenever the prices come from multiple price books, Notes to Rep field on the Quote will be populated with the following text - *"The Quote may be generated from multiple price books. Please double-check before clicking the Calculate button"*

Store	<Enter Store Name>
Use Multiple Price Books	TRUE

2. Need to configure the Custom Metadata Type called "B2B to CPQ Settings". This metadata type has two fields as listed in the below table: Store and Order Lifecycle Type. These values need to be configured.

Store	<Enter Store Name>
Order Lifecycle Type	MANAGED|UNMANAGED

Order Lifecycle Type is used when we call the Connect Api to generate Order Summaries. It is a parameter that the Order Summary Generation logic uses to determine if the Order Summary will be generated in Salesforce (UNMANAGED) or an external system (MANAGED). By default, the system assumes UNMANAGED

User Setup

Following users must be set up/updated after the above said configuration is complete

User Type	License	Profile	Permission Set
Internal CPQ User	Salesforce; CPQ	System Administrator (Standard) with B2B Commerce user system permission turned on	B2B2CPQ User Salesforce CPQ Admin Salesforce CPQ User
Developer	Salesforce; CPQ	System Administrator (Standard) with B2B Commerce user system permission turned on	B2B2CPQ User Salesforce CPQ Admin Salesforce CPQ User
B2B Buyer	Partner Community or Customer Community Plus Salesforce; CPQ	CC Plus (Custom) with B2B Commerce user system permission turned on Basically, any User who has a profile and perm set configured to the Customer user baseline defined here	B2B2CPQ User Salesforce CPQ Customer User

The setup is complete!

Troubleshooting

In order to ease in any troubleshooting and monitor the functionalities provided by the connector, any errors that occur as a result of the connector code are captured in a custom object called “Log” (b2ble_cpq_cnctr__Log__c).

For any issues during setup, it is recommended to view any records created into the Log object, which will capture any errors related to the connector code.

For monitoring, Salesforce reports and alerts can be configured off of the Log object. Each new record indicates that an error has occurred.

1. Create a tab for the custom object “Log”
    a. Navigate to **Setup | User Interface | Tabs**
    b. Click **New** in the Custom Object Tabs list
    c. Select the object “Log” and tab style
    d. Determine the tab visibility for each profile
    e. Select the custom apps for which the new tab will be available
    f. Click **Save**

2. Add fields to the Log Page Layout
    a. Navigate to **Setup | Object Manager | Log**
    b. Click **Page Layouts**
    c. Click intended Page Layout
    d. Drag the following fields on to the Page layout
        i. Log Name
        ii. Stack Trace
        iii. Triggering Event
        iv. Error Message
        v. Record Id (Id of the record that is being created. For example in the Request for Quote process this would be the record Id of the Quote that is created)
        vi. Source Record Id (Id of the record the action is taking place on. For example in the Request for Quote process this would be the record Id fo the Cart)
    e. Click **Save**