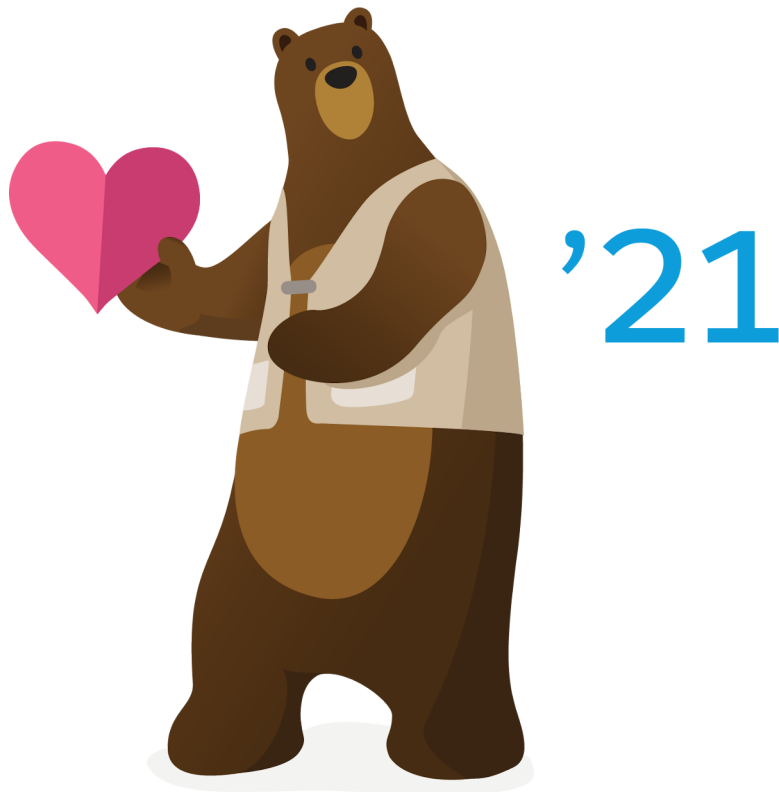




Synchronize Product and Pricing Data

Salesforce, Spring '21



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SYNCHRONIZE PRODUCT AND PRICING DATA

Establish a single source of truth for products and pricing data in CPQ and B2B Commerce.



Get Started



Take Trailhead modules related to this solution.

- [Salesforce Solution Kits: Quick Look](#)

This solution kit helps you:

- Establish a connected, single source of truth for products and price data.
- Store all product data in CPQ and B2B Commerce.
- Maintain a separate product catalog between channels to sync any or all products needed.

Required Products

- B2B Commerce Cloud
- Salesforce CPQ
- Sales Cloud or Service Cloud
- B2B Commerce and CPQ Connector

Implement This Solution

[Workflow](#)

Learn how data flows through the configurations to synchronize product and pricing data.

[Design Considerations](#)

For the best outcomes, keep these design considerations in mind. Use the connector and other required products to synchronize product and pricing data

[Connector](#)

Connectors are developer enablement frameworks that accelerate cross-cloud integration by providing code, configuration, and implementation patterns. Use the CPQ B2B Commerce Cloud Connector to synchronize product and pricing data.

Configurations

Use these configurations to synchronize product and pricing data.

Workflow

Learn how data flows through the configurations to synchronize product and pricing data.

Workflow



Note: We assume that the Pricing Manager is the CPQ Admin. This Admin is responsible for creating all product and pricing data. The B2B Admin enriches the data to meet the needs of the Commerce tool using Discounts, Promotions, and other features.

Related Content



Take the next steps in this implementation.

- [Design Considerations](#)
- [Connector](#)
- [Configurations](#)

Design Considerations

For the best outcomes, keep these design considerations in mind. Use the connector and other required products to synchronize product and pricing data

Avoid Duplicating All Data Between the B2B Commerce and CPQ Clouds

We recommend that you enrich B2B Commerce-specific metadata in B2B only. Do not replicate on the core Product2 object. Examples are B2B Product Categories, Product Images, and SEO-related information.

Test Data Strategy and Use a Partial or Full Sandbox

Test connector and data synchronization from a sandbox environment. Do not start by completing the process from a Production Instance.

Create Reports with a Custom Report Type for the CPQB2B Log Object

- Monitor performance and effectively swarm issues that affect the customer shopping experience.
- Monitor and manage the Error Logs and LastSync_Date__c field.

Database of Record (DBOR)

Make updates to the core metadata only in CPQ. The connector doesn't use a bi-directional sync between B2B Commerce and CPQ.

Follow the following sequence to update:

1. Update to CPQ standard objects.
2. Sync to CC objects.
3. Run product index in B2B. Ensure that all integrations, scheduled loads, and related actions follow the data flow sequence. Align data between CPQ and B2B, and share with external community users.

Product Index Monitoring

Manually refresh your index at any time. Schedule the Batch Apex Jobs to automatically run from the [Apex Jobs Queue](#).

Key Considerations

Localization

The connector doesn't currently handle localization. To localize, customize the unmanaged package for the connector. It uses a storefront localization [Product i18n object](#).

Multi-Currency Pricebooks

For pricing, publish Currency ISO Code on the Commerce Price List data model, "CC Price Lists". It uses a Commerce [Price List data model](#).

- Commerce uses one currency in the CC Price Lists mappings to support pricebooks as multi-currency.
- This links CC Price List currency as items to accommodate a multi-currency path. For example, if a Pricebook has USD and CAD prices and links to a USD currency CC Price List, it syncs only USD prices. To sync the two prices, the user must create a second CC Price List with CAD currency.

Limitations and Guardrails

Business requirements rely on modifications to the code in the package.

Customize package and object configurations to support more CPQ functionality and CPQ Product Types:

- Contract Pricing Sync.

- Managing Kits, Dynamic Kits, and Product Bundles for CC Commerce.
- Managing Tier Pricing for CC Commerce Products.
- Supporting Percent of Total Products in CC Commerce.
- A payment integration or implementation is necessary and not included in the connector.
- B2B Commerce assumes that a certain level of information exists for order details. Customize the B2B order page or sync other shipping and payment information. The Connector doesn't sync them.

B2B Commerce to CPQ Connector currently syncs core product and pricing objects between CPQ and B2B. It doesn't support Contract Pricing sync, but you can extend them with customizations.

Contract Pricing

SBQQ__ContractedPrice	CC Price Group Account	CC Price Group
CC_LastSyncDate__c	SBQQ__Contracted_Price_Id__c	SBQQ__Contracted_Price_Id__c

SBQQ__ContractedPrice	CC Price Group Item	CC Price Group Pricelist
CC_LastSyncDate__c	SBQQ__Contracted_Price_Id__c	SBQQ__Contracted_Price_Id__c



[Related Solution Kits](#) cover key mapping fields for objects.

Performance and Scalability Considerations

- When the Product and Pricing sync completes, it enriches B2B Commerce-specific metadata like SEO and Product Categories in B2B Commerce.
- Data Syncing processes run regardless of CPQ and B2B permissions. It includes permissions added to users who modify metadata in Salesforce CPQ after the connector setup.
- Refer to the [Implementation Guide Technical](#) section for instructions on code modifications required to support the desired automation requirements.

Data Sync	Approach
Products and Pricing	<ul style="list-style-type: none"> • Platform Events • Scheduled Batch Classes • Queue-able Framework

Related Content

 <p>Review earlier steps in this solution.</p> <ul style="list-style-type: none"> • Workflow
 <p>Take the next steps in this implementation.</p> <ul style="list-style-type: none"> • Connector

- [Configurations](#)

Connector

Connectors are developer enablement frameworks that accelerate cross-cloud integration by providing code, configuration, and implementation patterns. Use the CPQ B2B Commerce Cloud Connector to synchronize product and pricing data.

The CPQ B2B Commerce Cloud Connector is an unmanaged package from Salesforce Labs. It allows B2B Commerce and CPQ customers to configure or customize functionality. Sync products, pricing, quote requests, and orders in both clouds.

Use one data model, pricing engine, and a unified process built around customer engagement from CPQ. Create omnichannel customer-driven experiences.

The connector supports the following use cases:

1. Synchronize Product and Price Data
2. Convert Cart to Order
3. Request for a Quote
4. Buy Again with Synchronized Order History


General Connector Information

- Connectors are a developer enablement framework that accelerates cross-cloud integration. Connectors are not a standalone product.
- Connectors support a core set of use cases and can be extended to support more customer-driven use cases.
- Connectors require customization and configuration in B2B Commerce and Salesforce CPQ.
- Plan your connector implementation with a data strategy and governance policy.

What Your Company Can Do with This Connector

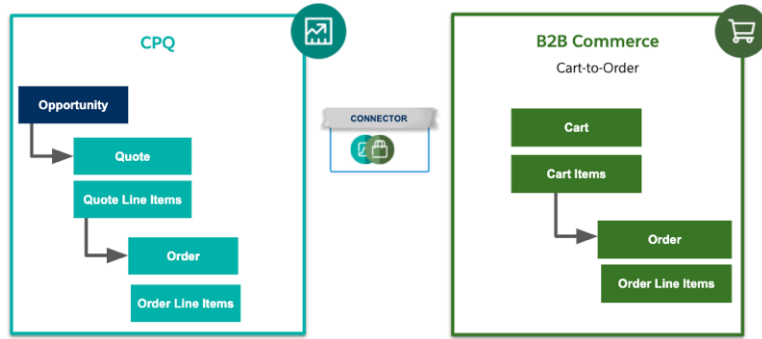
Each connection point supports a core set of use cases enabled individually through custom metadata configurations. These connections meet your specific business requirements. You can disable them as needed, such as for scheduled maintenance or data ETL activities.

- Product and Pricebook
- Cart and Quoting
- Orders and CC Order

 **Note:** See the following visualized data flows. You reduce system complexity with a unified master data, shared data model, and single source of truth.

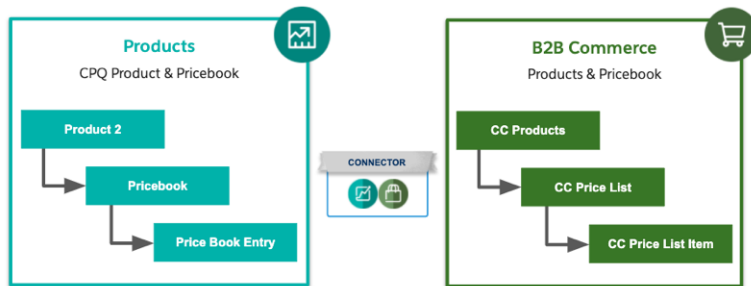
Connected Selling and Buying

Synchronize Quoting and Order History.



Connected Products and Pricing

Create CPQ Product and Price Data and Sync to B2B Commerce.



Note: The CPQ + B2B Connector supports a one-way sync for Product and Pricing logic.

Table 1: Data Synchronization

Data Sync	Approach
Products and Pricing	<ul style="list-style-type: none"> • Platform Events • Scheduled Batch Classes • Queue-able Framework
Transactional Carts, Quotes, and Orders	<ul style="list-style-type: none"> • Triggers • Future Methods

Factors to Consider

- Volume of data (product catalog and price lists)
- Frequency of changes in business process impacting Pricing or Product Data
- Integrated systems and other data flows.
- Scalability and performance

Considerations

Product and Pricing Assumptions

The Connector lets you sync Simple Products with a flat price.

Connector Guardrails

Unsupported Product Types

To support the following B2B products, make other customizations in the Connector sync:

- Aggregate Products
- Assembly Products

Unsupported Complex CPQ Product Bundles

Without other customizations, we don't recommend using complex CPQ Product Bundles with many Options and Constraints. They're not ideal for using with self-service or the Connector.

B2B Product Entitlements

The Product and Pricing Sync process does not automate the B2B Product Entitlements. Associate The "Account Groups" to the "Price Lists" after completing the Product and Pricing Sync in B2B Commerce.

Discounts and Promotions

We recommend that you manage [discounts and promotions for B2B Commerce](#) in B2B. Do not sync the information from CPQ.

Data Strategy

Connector Data Flow Strategy and Governance

Advanced product and pricing capabilities within CPQ aren't available in B2B. For example, Bundles and Rules.

ERP as the Product and Pricing Master

Don't directly integrate B2B Commerce with the ERP. The functionality supported in the Connector and the approaches listed here assume that CPQ is the publishing data source for B2B Commerce.

Product Index Synchronization

Synced Products in B2B appear only in a Storefront after refreshing the [Product Index](#).

Related Content



Review earlier steps in this solution.

- [Workflow](#)
- [Design Considerations](#)



Take the next steps in this implementation.

- [Configurations](#)

Configurations

Use these configurations to synchronize product and pricing data.

Prerequisites: These configurations require a Permission Set assignment to CPQ B2B Connector Admin and the CPQ and B2B Commerce Administration areas.

1. Install and Perform Initial Setup

After installation of the connector package, enable CPQ B2B Commerce Connector Settings for SKU (Product) and Pricing Sync records.

- Navigate to Setup > Custom Metadata Types > Connector Sync Config > Manage

Update Page Layouts using the Product and Pricing Sync Instructions of the installation guide.

2. Create Custom Fields on Pricing and Product Objects

The following tables show the recommended core metadata CPQ and B2B Commerce fields. They represent a 1-to-1 mapping with the SKU and Pricing Sync Process. Include other custom fields for more business requirements.

Table 2: Product Fields

Product2	CC Product
CC_Quantity_Per_Unit__c	Product_Id__c
CC_Start_Date__c	Product_Type__c
CC_End_Date__c	
CC_Long_Description__c	
CC_Storefront__c	
CC_ProductType__c	
CC_LastSyncDate__c	

Table 3: Pricing Book Fields

Pricebook	CC Price List
CC_Start_Date__c	PriceBook_Id__c
CC_End_Date__c	
CC_Storefront__c	
CC_LastSyncDate__c	

Table 4: Pricing Book Entry Fields

PriceBookEntry	CC Price List Item
CC_Price_List_Id__c (*Formula)	PriceBook_Entry_Id__c
CC_Product__c (*Formula)	Price_Book_Id__c (*Formula)
CC_Start_Date__c	
CC_End_Date__c	
CC_Item_Type__c	
CC_Min_Qty__c	
CC_Max_Qty__c	

PriceBookEntry	CC Price List Item
CC_Reoccurring_Price__c	
CC_LastSyncDate__c	

Custom Field Notes:**CC_LastSyncDate__c;**

Use this field for managing Data Events that link data from one cloud to the other. Add this field on all source CPQ Objects mapped to a sync process with the Connector for reporting and monitoring.

Product2

CC_ProductType__c

- *Picklist for Commerce Products, Simple Product, Tier Priced Product, Product Bundle, Kit, Dynamic Kit, Percent of Total Product.

CC Product

Use an extra custom attribute "Product_Type__c" to capture the value passed. Track product types that aren't supported B2B Commerce out-of-box, such as Percent of Total.

PriceBookEntry

CC_Price_List_Id__c

- *Formula field links to CC Price List based on Price Book Id.

CC_Item_Type__c

- *Field type of pricing (tiered, simple). If this value is "tiered,"publish the Discount Schedule associated with this Product as tier pricing on the Price List Entry.

CC_Recurring_Price__c

- *Subscription field attribute captures support for recurring billing (typically used for subscriptions).

Managing Tier Pricing for B2B Commerce Products

Publish the product and pricing details for B2B Tier Priced Products. Set up the product in CPQ with a Discount Schedule matching the Tier Pricing structure.

Stamp the value "CC_Item_Type__c" on the object "Price Book Entry" as Tiered.

Use a sync job to look at the Price Book Entry for this value. If it's set up as "Tiered", publish the Discount Schedule associated with this Product. Publish as JSON value on the attribute "ccrz__PricingTiers__c" related to "CC Price List Entry" object.

3. Supplement the Installed Package CPQ B2B Mapping Custom Metadata

Follow this path: Setup > Custom Metadata > CPQ B2B Mapping > Manage Records.

Create a metadata record to manage the field sync for the SKU Process. For example, the Connector process that uses the mapping record logic.

Select the source object from the picklist options. Lead with CPQ objects first for SKU and Pricing process types with destination objects of CC Commerce.

Source Field picklist maps the from field to the Destination Field picklist, including the custom fields created in step one.

Choose the Field Mapping Service Class. Select the option that matches your technical implementation setup and process.

4. Review Data Between CPQ and B2B Commerce

Determine the need for data load insert or update to CC Commerce Product and Pricing Objects.

Test Batch and Sync to ensure that the setup carried over expected synchronized field sets.

Review the CC Commerce Product Index. Manually run and schedule future Product Index.

Related Content



Review earlier steps in this solution.

- [Workflow](#)
- [Design Considerations](#)
- [Connector](#)