Accelerators

Generated on: 2024-12-03 13:54:05 GMT+0000

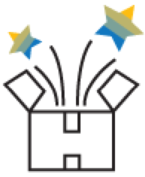
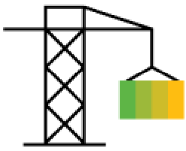
SAP Commerce | 2205

Public

Original content: https://help.sap.com/docs/SAP_COMMERCE/4c33bf189ab9409e84e589295c36d96e?locale=en-US&state=PRODUCTION&version=2205

B2B Accelerator Module

B2B Accelerator includes features that manage your inventory, security, AddOns, and user accounts.

Features	Architecture
	
B2B API AddOn for OCC	b2bacceleratoraddon AddOn
B2B Inventory Display	b2bacceleratorfacades Extension
B2B Powertools Store Extension	b2bacceleratorservices Extension
B2B Early Login	b2boccaddon AddOn
Commerce Organization	commerceorgaddon AddOn
Commerce Quotes	commerceorgsamplesaddon AddOn
	powertoolsstore Extension

B2B Accelerator Features

B2B Accelerator includes features that manage your inventory, security, AddOns, and user accounts.

B2B API AddOn for OCC

The B2B API AddOn for Omni Commerce Connect (OCC) provides API access to B2B-specific functionality, such as multi-dimensional product information. Functionality is provided by the `b2boccaddon`.

B2B Assisted Service

This document highlights important information to consider when using the Assisted Service Module (ASM) with Commerce B2B Accelerator.

B2B Future Stock Availability

The Future Stock Availability feature indicates when inventory is going to be replenished with new stock.

B2B Inventory Display

The B2B Inventory Display feature allows you to display a threshold value instead of the real amount of stock available for a product.

B2B Powertools Store Extension

The `powertoolsstore` extension is included to showcase the B2B functionality available in B2B Accelerator and AddOns by providing a sample, fully functional storefront.

B2B Early Login

The `b2bacceleratoraddon` AddOn requires users to authenticate before being able to browse the site. Users can also request an account.

Commerce Organization

The organization management features of SAP Commerce B2B Accelerator allows companies to self-service purchasing made through a merchant's B2B Accelerator web site.

Commerce Quotes

Commerce Quotes enables buyers to create quotes and negotiate the final price of an order using the storefront.

B2B API AddOn for OCC

The B2B API AddOn for Omni Commerce Connect (OCC) provides API access to B2B-specific functionality, such as multi-dimensional product information. Functionality is provided by the `b2boccaddon`.

When the `b2boccaddon` AddOn is enabled, standard OCC resources are replaced by B2B API AddOn for OCC resources wherever functionality is B2B-specific. Getting product details from a B2B site, for example, includes multi-dimensional product information, something that is only available through B2B. The B2B API AddOn for OCC also adds new resources to provide access to other B2B-specific features like organization management. For example, B2B sites allow customers to place account orders that require selection of a cost center.

Overview of B2B actions performed through the B2B API AddOn for OCC

- Authentication
- Get a list of categories and products
- Get product details

- Get the current cart
- Add products to the cart
- Update quantities in the cart
- Delete items from the cart
- Place orders using an account and specifying a cost center
- Get users, cost centers, and other organization management information

The B2B API AddOn for OCC was originally created to satisfy API requirements of B2B mobile client development. However the B2B API AddOn for OCC is not restricted to mobile usage.

Related Information

b2boccaddon AddOn
Omni Commerce Connect

B2B Assisted Service

This document highlights important information to consider when using the Assisted Service Module (ASM) with Commerce B2B Accelerator.

ASM enables customer service personnel to provide real-time customer sales and service support, using the same storefront across the omni-channel framework, both physically shoulder-to-shoulder, in-store, and virtually online. For more information, see Assisted Service Module.

Installation

Note

ASM is not fully compatible with the early login feature included in the `secureportaladdon` AddOn.

Refer to the installation section of assistedservicestorefront AddOn for instructions.

Disabling Customer Creation

ASM allows customer service personnel to create new users from the Customer ID field. For B2B, this feature should be disabled. The type of customer created by the functionality is the standard **Customer**, and B2B requires type **B2BCustomer**.

To disable this feature, add the following setting to `config/local.properties` and restart your system.

```
assistedservicefacades.createDisabled=false
```

Accessing Assisted Service Mode

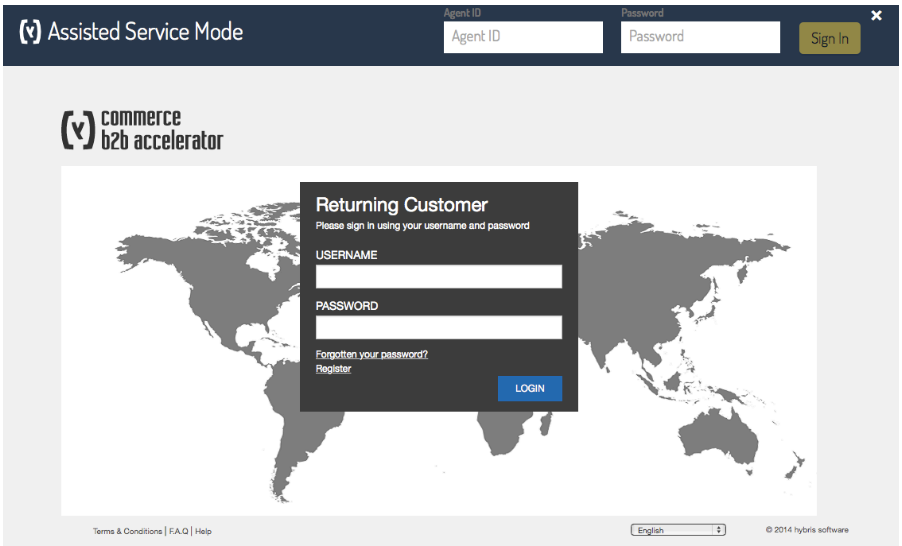
To access ASM, log in to the storefront using the parameter `?asm=true`. For example:

`https://powertools.local:9002/yacceleratorstorefront/?asm=true`

The Assisted Service Mode appears at the top of the page.

Sample login credentials:

- **Username**: asagent
- **Password**: use the password you defined for this account



Agent Privileges

ASM Users Require asagentgroup

To use ASM, agents must belong to the **asagentgroup** group.

Checkout Privileges Respected

An ASM agent cannot override checkout restrictions that apply to the customer. If an agent tries to check out with a user that is not allowed to do so (for example, the customer is an administrator and not a B2B customer), the message `Your account does not allow you to checkout here` is displayed.

My Company Pages

In addition to the standard functionality provided by ASM, such as being able to take control of a cart, B2B ASM also allows customer service personnel to access the My Company pages on behalf of the B2B Commerce Administrator.

The customer service personnel can only access My Company if they have the **b2badmingroup** privilege.

Advanced Configurations

You can configure ASM for more advanced scenarios, such as setting promotions that only an ASM agent can apply to a customer's cart, or create a special product category that is only viewable by ASM agents. Refer to these pages for more details:

- ASM Promotions
- ASM Product Categories

ASM Promotions

You can configure the Assisted Service Module (ASM) so that ASM agents have access to special promotions. For example, ASM agents can offer customers being supported by ASM a special 10% discount.

The procedure for setting up ASM promotions involves four main steps:

- Configure the AddOn files
- Update the system
- Set up the promotion in the Backoffice Administration Cockpit
- Test the promotion in the storefront

i Note

This procedure applies to the legacy Promotion Module only.

Configure AddOn Files

The first step is to make some changes to some `assistedservicesstorefront` files.

1. Update the `assistedservicestorefront-items.xml` file (located in the `hybris/bin/modules/assisted-services/assistedservicestorefront/resources` directory) by adding this code before the `typegroup` element:

```
<itemtype code="PromotionAssistedServiceRestriction"
              extends="AbstractPromotionRestriction"
              jaloclass="de.hybris.platform.assistedservicestorefront.jalo.PromotionAssistedServiceRestriction"
              autocreate="true"
              generate="true">

              <attributes>
                <attribute
                  qualifier="descriptionPattern"
                  redeclare="true"
                  type="localized:java.lang.String">
                  <description>The description of the restriction (supports message pattern).</description>
                  <modifiers read="true" write="true" search="false" optional="true"/>
                  <persistence type="property">
                    <columntype>
                      <value>HYBRIS.LONG_STRING</value>
                    </columntype>
                  </persistence>
                </attribute>

                <attribute
                  qualifier="positive"
                  type="java.lang.Boolean">
                  <defaultvalue>Boolean.TRUE</defaultvalue>
                  <description>Specifies if this restriction is a positive (true) or negative (false) one.</description>
                  <persistence type="property"/>
                  <modifiers search="false" optional="false"/>
                </attribute>

              </attributes>

 </itemtype>
```

2. Open the Terminal or Command Prompt window, navigate to the `hybris/bin/platform` directory, and uninstall and then reinstall the `assistedservicesstorefront` AddOn (refer to Uninstalling an AddOn for a Specific Storefront).

3. Run `ant clean all`. This creates the `GeneratedPromotionAssistedServiceRestriction` and `PromotionAssistedServiceRestriction` classes that are used in the next step. Note that a compilation error occurs that is fixed in the next step.

4. Update the `PromotionAssistedServiceRestriction` class (located in the `hybris/bin/modules/assisted-services/assistedservicestorefront/src/de/hybris/platform/assistedservicestorefront/jalo` directory) by replacing all contents of the file after the copyright with the following code:

```
package de.hybris.platform.assistedservicestorefront.jalo;

import de.hybris.platform.assistedservicefacades.AssistedServiceFacade;
import de.hybris.platform.core.Registry;
import de.hybris.platform.jalo.Item;
import de.hybris.platform.jalo.JaloBusinessException;
import de.hybris.platform.jalo.SessionContext;
import de.hybris.platform.jalo.order.AbstractOrder;
import de.hybris.platform.jalo.product.Product;
import de.hybris.platform.jalo.type.ComposedType;
import de.hybris.platform.promotions.jalo.AbstractPromotionRestriction;

import java.util.Collection;
import java.util.Date;

import org.apache.log4j.Logger;

public class PromotionAssistedServiceRestriction extends GeneratedPromotionAssistedServiceRestriction
{
        @SuppressWarnings("unused")
        private final static Logger LOG = Logger.getLogger(PromotionAssistedServiceRestriction.class.getName());

        private AssistedServiceFacade assistedServiceFacade;

        @Override
        protected Item createItem(final SessionContext ctx, final ComposedType type, final ItemAttributeMap allAttributes)
                        throws JaloBusinessException
        {
                // business code placed here will be executed before the item is created
                // then create the item
                final Item item = super.createItem(ctx, type, allAttributes);
                // business code placed here will be executed after the item was created
                // and return the item
                return item;
        }

        @Override
        public RestrictionResult evaluate(final SessionContext ctx, final Collection<Product> products, final Date date,
                        final AbstractOrder order)
        {
                final boolean positive = isPositiveAsPrimitive(ctx);
                if (getAssistedServiceFacade().isAssistedServiceAgentLoggedIn())
                {
                        return ((positive) ? AbstractPromotionRestriction.RestrictionResult.ALLOW
                                        : AbstractPromotionRestriction.RestrictionResult.DENY);
                }
                return ((positive) ? AbstractPromotionRestriction.RestrictionResult.DENY
                                : AbstractPromotionRestriction.RestrictionResult.ALLOW);
        }

        protected AssistedServiceFacade getAssistedServiceFacade()
        {
                if (assistedServiceFacade == null)
                {
                        setAssistedServiceFacade(assistedServiceFacade = Registry.getApplicationContext().getBean("assistedServ
                                        AssistedServiceFacade.class));
```

```
                }
                return assistedServiceFacade;
        }

        public void setAssistedServiceFacade(final AssistedServiceFacade assistedServiceFacade)
        {
                this.assistedServiceFacade = assistedServiceFacade;
        }

}
```

5. Run `ant clean all`.

The AddOn configuration part of the procedure is complete.

Update the System

The next step is to update the system with the changes.

1. In the Terminal or Command Prompt window, ensure you are in the `hybris/bin/platform` directory and start the SAP Commerce server using the command `hybrisserver.sh` or `hybrisserver.bat`.
2. In your web browser, go to `http://powertools.local:9001` and log in as admin (initialize the build if you have not done so yet).
3. Go to the **Platform** tab and select **Update**.
4. Clear all the check boxes except for the **Update running system** check box.
5. In the list of extensions, select the **assistedservicesstorefront** check box.
6. Click the **Update** button.

You are now ready to define a promotion in the Backoffice Administration Cockpit.

Define a Promotion

The next step is to create the promotion in the Backoffice Administration Cockpit. Follow the instructions provided in Creating Promotions (Legacy).

Testing the Promotion

The final step is to verify that the promotion works correctly for the ASM agent.

1. In your browser, navigate to the storefront using ASM (`http://powertools.local:9001/yacceleratorstorefront/powertools/en/?asm=true`).
2. Log in as an ASM agent (use the `asagent` account and password).
3. Add any product to the cart and then move to Checkout.

If the promotion was created correctly, it applies to all items in the cart. Note that the agent must complete the checkout flow for the promotion to apply; if the agent logs out before completing the order, any items added to the cart by the agent are still available in the cart, but the promotion is not applied on them.

ASM Product Categories

You can create a special product category that is available to ASM agents only. This category can be used to include special items that normal users would not have access to, enabling ASM agents to offer unique items to their customers.

The procedure for setting up ASM categories involves five main steps:

- Import a new category using Impex
- Restrict the ASM category link to ASM agents
- Add items to the category
- Restrict search results
- Test the setup

Getting Started

Before you begin, ensure that:

- B2B Accelerator is installed. Refer to Installing B2C and B2B Accelerator Locally.
- ASM AddOn is installed as well. Refer to assistedservicestorefront AddOn.

Create a file called `b2b_staged_asm_category.impex` and copy the following code into it.

```
# Macros / Replacement Parameter definitions
$productCatalog=powertoolsProductCatalog
$productCatalogName=Powertools Product Catalog
$catalogVersion=catalogversion(catalog(id[default=$productCatalog]),version[default='Staged'])[unique=true,default=$productCatalog:St
$supercategories=source(code, $catalogVersion)[unique=true]
```

```
$categories=target(code, $catalogVersion)[unique=true]

$contentCatalog=powertoolsContentCatalog
$contentCatalogName=Powertools Content Catalog
$contentCV=catalogVersion(catalog(id[default=$contentCatalog]),version[default='Staged'])

$productCV=catalogVersion(catalog(id[default=$productCatalog]),version[default='Staged'])[unique=true,default=$productCatalog:Staged
$siteResource=jar:de.hybris.platform.b2bacceleratorsampledata.constants.B2BAcceleratorSampleDataConstants&/b2bacceleratorsampledata/
$jarResourceCms=jar:de.hybris.platform.b2bacceleratorsampledata.constants.B2BAcceleratorSampleDataConstants&/b2bacceleratorsampledata

# Language
$lang=en

# Insert Categories
INSERT_UPDATE Category;code[unique=true];allowedPrincipals(uid)[default='customergroup'];$catalogVersion
                      ;1500;;

UPDATE Category;$catalogVersion;code[unique=true];name[lang=$lang];description[lang=$lang]
               ;;1500;ASM Category;

# Insert Category Structure
INSERT_UPDATE CategoryCategoryRelation;$categories;$supercategories
                                      ;1500;1

# CMS Link Components
INSERT_UPDATE CMSLinkComponent;$contentCV[unique=true];uid[unique=true];name;url;&linkRef;&componentRef;target(code)[default='sameWi
                              ;;ASMCategoryLink;ASM Category Link;/Open-Catalogue/c/1500;ASMCategoryLink;ASMCategoryLink

UPDATE CMSLinkComponent;$contentCV[unique=true];uid[unique=true];linkName[lang=$lang]
                       ;;ASMCategoryLink;"ASM"


# CMS Navigation Nodes
INSERT_UPDATE CMSNavigationNode;uid[unique=true];$contentCV[unique=true];name;parent(uid, $contentCV);links(&linkRef);&nodeRef
                               ;ASMNavNode;;ASM Category;PowertoolsNavNode;ASMCategoryLink;ASMNavNode

UPDATE CMSNavigationNode;$contentCV[unique=true];uid[unique=true];title[lang=$lang]
                        ;;ASMNavNode;"ASM"

# Navigation Bar Component

INSERT_UPDATE CMSNavigationNode; uid[unique = true]; $contentCV[unique = true]; name                ; parent(uid, $contentCV)   ; li
                               ; ASMNavNode        ;                          ; ASM Navigation Node ; PowertoolsCategoryNavNode ;

## entries of the above navigation nodes ##
INSERT_UPDATE CMSNavigationEntry; uid[unique = true]; $contentCV[unique = true]; name                      ; navigationNode(&nodeRef
                                ; ASMNavNodeEntry   ;                          ; ASM Navigation Node Entry ; ASMNavNode
```

The `b2b_staged_asm_category.impex` file is an Impex file that is used to add a new product category with these attributes:

- Category name: ASM Category
- Category ID: 1500
- Category super category: 1 (which is Open Catalog)
- Category storefront link name: ASM (The storefront link appears at the top-right section of the page, and displays all products included in the ASM Category.)

Download this file as it is used in the first step.

Create a file called `AsmFacetSearchListener.java` and copy the following code into it.

```
/*
 * Copyright (c) 2024 SAP SE or an SAP affiliate company. All rights reserved.
 */
package de.hybris.platform.assistedservicefacades.solrfacetsearch.search.context.listeners;

import de.hybris.platform.assistedservicefacades.AssistedServiceFacade;
import de.hybris.platform.solrfacetsearch.search.FacetSearchException;
import de.hybris.platform.solrfacetsearch.search.context.FacetSearchContext;
import de.hybris.platform.solrfacetsearch.search.context.FacetSearchListener;


public class AsmFacetSearchListener implements FacetSearchListener
{

    private AssistedServiceFacade assistedServiceFacade;

    @Override
    public void beforeSearch(FacetSearchContext facetSearchContext) throws FacetSearchException {
        // Check if AS agent is logged in
        if (!getAssistedServiceFacade().isAssistedServiceAgentLoggedIn()) {
            // Add filter to exclude ASM category products
            facetSearchContext.getSearchQuery().addFilterQuery("-allCategories_string_mv:1500");
        }
    }

    @Override
    public void afterSearch(FacetSearchContext facetSearchContext) {
    }

    @Override
    public void afterSearchError(FacetSearchContext facetSearchContext)  {
    }

    protected AssistedServiceFacade getAssistedServiceFacade()
    {
```

```
        return assistedServiceFacade;
    }

    public void setAssistedServiceFacade(final AssistedServiceFacade assistedServiceFacade)
    {
        this.assistedServiceFacade = assistedServiceFacade;
    }
}
```

Note that this Java class hardcodes the category ID (1500):

```
solrQuery.addFilterQuery("-allCategories_string_mv:1500");
```

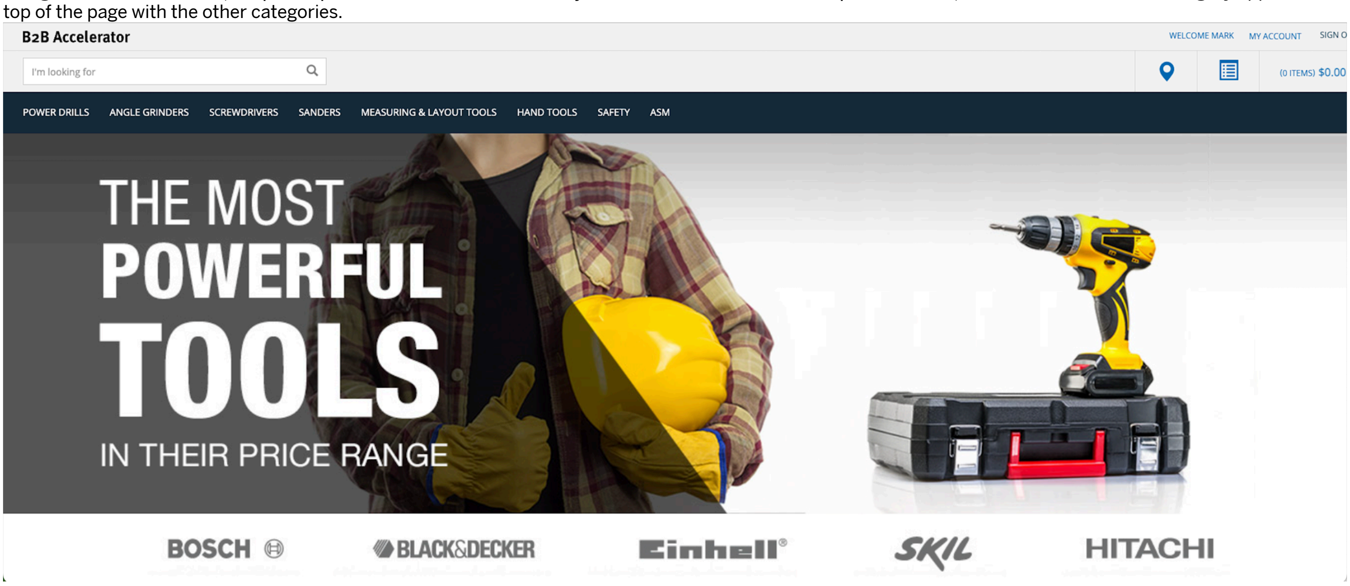
If you create an ASM category with a different ID, it must be reflected in this Java class.

Import a New Category Using Impex

The first step is to import the new category.

1. Navigate to the Import page of the SAP Commerce Administration Console (Administration Console): `https://localhost:9002/console/impex/import`
2. Click the Import script tab.
3. Click Choose File and navigate to where you saved the `b2b_staged_asm_category.impex` file, then click Import file.
4. Navigate to the Backoffice Administration Cockpit: `https://localhost:9002/backoffice`
5. Synchronize the staged Powertools Content Catalog:

   Click Catalog > Catalog Versions, select the staged Powertools Content Catalog, and then click the Catalog synchronization icon ( ).
6. Synchronize the staged Powertools Product Catalog.
7. Navigate to the storefront (`https://powertools.local:9002/yacceleratorstorefront/powertools`) to ensure that the ASM category appears at the top of the page with the other categories.



The next step is to restrict the link for ASM agents only.

Restrict the ASM Category Link

Now that the category is imported and its link appears in the storefront, the next step is to restrict that link to ASM agents only.

1. Navigate to the CMS cockpit: `https://localhost:9002/cmscockpit`
2. Log in and switch to the Navigation perspective.
3. In the navigation pane, expand Powertools Site and select Powertools Content Catalog/Staged.
4. Expand SiteRootNode > Powertools Site.
5. Select ASM Category and then click the edit icon ( ).
6. In the editor area under the Hierarchy section, click the edit icon next to ASM in the Links field. The Edit CMSLinkComponent window opens.
7. Expand Context Visibility and click the Add reference icon next to the Component Restrictions field. The Create/Add Item window opens.
8. Select Assisted Service Session Restriction and then click Create a new item.
9. Enter the restriction Name and ID (for example, `ASM Restriction`), and then click Done.
10. In the navigation pane, right-click Powertools Content Catalog/Staged and then click Synchronize content catalog.

The storefront ASM link is now restricted to ASM agents only. The next step is to add items to this new category.

Add Products to ASM Category

Next, add the required products to the ASM category.

1. Navigate to the Product Cockpit: `https://localhost:9002/productcockpit`
2. Log in as a product manager and then click Powertools Product Catalog Staged in the navigation pane.
3. Search for the item you want to add to the category and then click the edit icon for that item.
4. In the editor area, expand Category System.
5. Click the Add Reference icon next to the Supercategories field. The Create/Add Item window opens.
6. Click Category > Select an existing reference, then select Powertools Product Catalog/Staged from the Catalog version drop-down list and click the search icon. A list of all the categories for the catalog are displayed.
7. Select ASM Category and then click Done.
8. Synchronize the item to update it in the online catalog.
9. Repeat steps 3 - 8 to add any other items to the category.

Items are now included in the ASM category. The next step is to restrict the search results for these items.

Restrict Search Results

Restrict the search results for items in the ASM category so that they only appear for ASM agents.

1. Stop the SAP Commerce Server if it is running,
2. Copy the attached `AsmFacetSearchListener.java` file to the `hybris/bin/modules/assisted-services/assistedservicefacades/src/de/hybris/platform/assistedservicefacades/solrfacetsearch/search/context/listeners` folder. You may need to create the folders if they don't exist.
3. Modify the `assistedservicefacades-spring.xml` file, located in the `hybris/bin/modules/assisted-services/assistedservicefacades/resources` folder:

   Add these lines before the last `</beans>` tag:

```
<bean id="solrAsmListener" class="de.hybris.platform.assistedservicefacades.solrfacetsearch.search.context.listeners.AsmFacetSe
   <property name="assistedServiceFacade" ref="assistedServiceFacade"/>
</bean>

<bean id="solrASMListenerDefinition" parent="solrListenerDefinition">
   <property name="priority" value="1000" />
   <property name="listener" ref="solrAsmListener" />
</bean>
```

4. In the Terminal or Command Prompt window, navigate to the `hybris/bin/platform` folder and run `ant clean all`.
5. Start the SAP Commerce Server (`hybrisserver.bat` or `hybrisserver.sh`)

Items in the ASM category are now restricted to the ASM agent only and cannot be viewed or searched by a regular user.

Test the Setup

Finally, test your setup to ensure it works as expected.

1. Navigate to the storefront with ASM enabled: `https://powertools.local:9002/yb2bacceleratorstorefront/powertools/en/USD/login?asm=true`
2. Log in as an ASM agent (use the `asagent` username and its password). The ASM link should appear to the right of all the other categories.
3. Click the ASM link. Any items added to the ASM category should appear in the product list.
4. Sign out as the ASM agent. The ASM link should not appear in the list of categories, and any item that is exclusive to the ASM category should not appear in search results

B2B Future Stock Availability

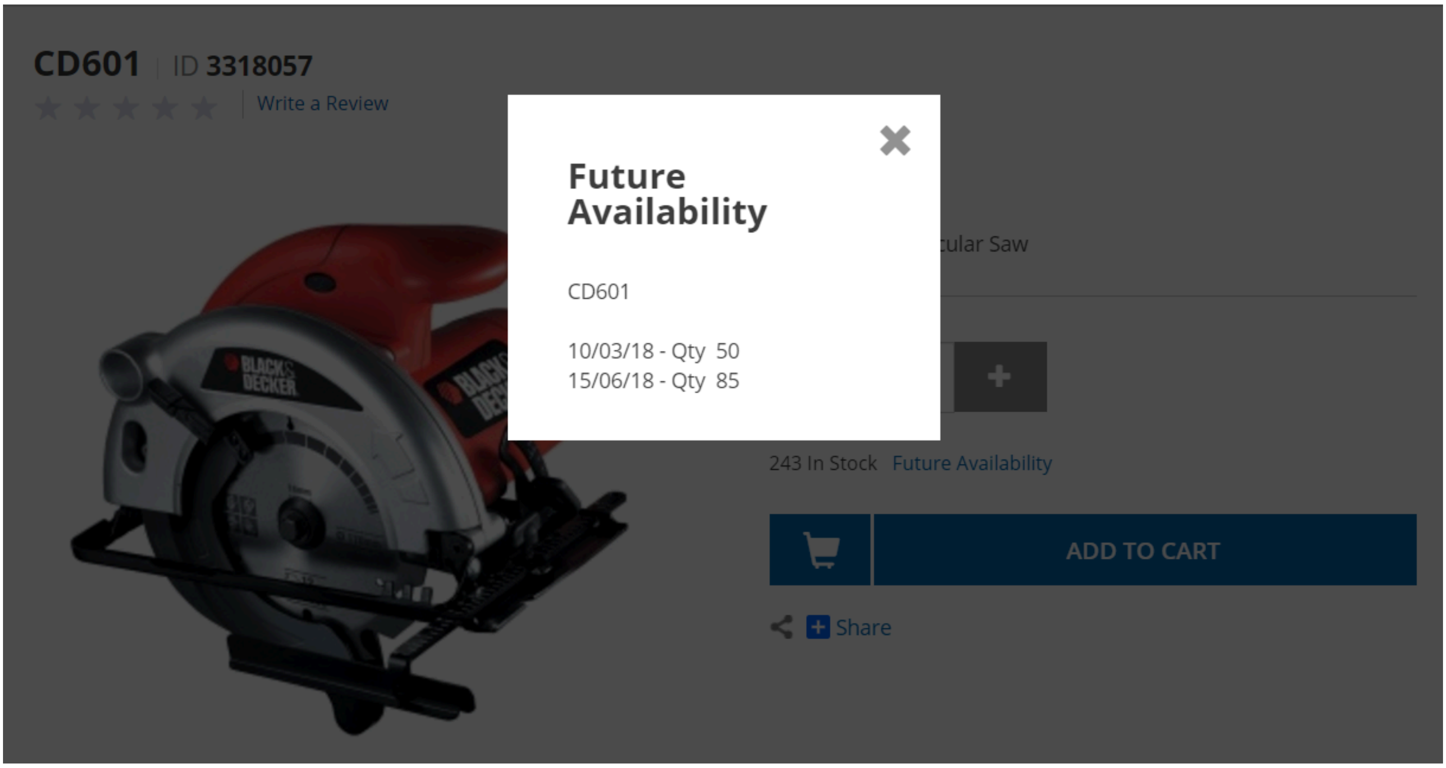
The Future Stock Availability feature indicates when inventory is going to be replenished with new stock.

Feature Overview

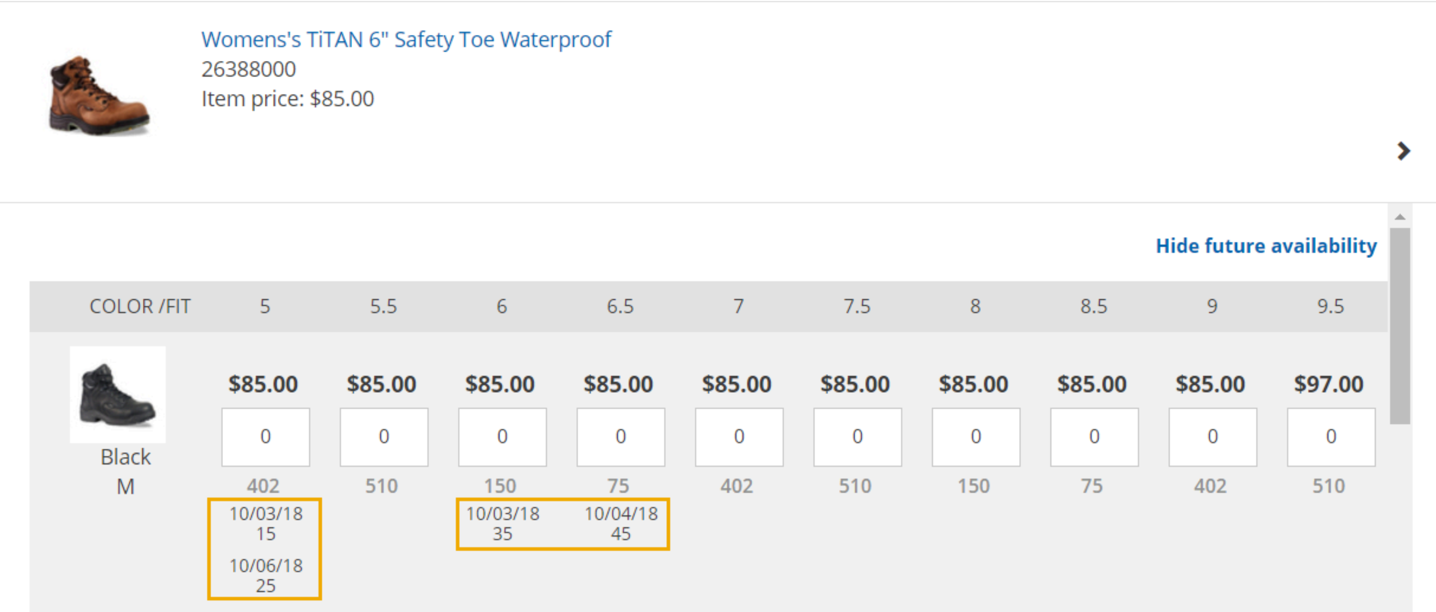
The Future Stock Availability feature, which is enabled by default, allows users to see future availability on a SKU (Stock Keeping Unit) by SKU basis or for a complete multi-dimensional product setup. Note that users must be logged into the storefront to view future availability.

Clicking Future Availability from a product page displays the dates when the stock will be replenshied, as well as the quantity for each date. Note that anonymous users do not see the Future Availability link.

This screenshot shows the future availabilty modal for a regular product:



For multi-dimensional products, future stock also appears in the Order Form grid:



To find examples, search for the following products:

- Normal product: 3318057
- Multi-dimensional product: 26388000 (black variant)

You can view products that contain future stock data in the Backoffice Administration Cockpit by navigating to Base Commerce > Futurestock.

Facade Layer

For detailed information, see the section of Future Stock Facade in commercefacades Extension.

MVC Layer

Error Handling

The MVC layer is expecting a certain behavior from the facade when reporting errors to the front end and the user.

Future Stock System not Available

If a future stock is not available for the system, the facade methods should return a null value. This is the same for the single or multiple SKUs.

No Future Stock Present for a SKU or List of SKUs

If there is no future stock available for a single SKU or for a list of SKUs, an empty list for this SKU is returned from the facade, which signals no future availability for the requested product. SKUs are processed as a list, not individually. See the Facade Layer above for more information.

Controllers

Controller changes were made to the `ProductPageController` to allow querying of single SKUs that are called from the web page.

Future Availability Pop-up Link

To add the link for the pop-up, the JSP file must have the tag like the following code snippet:

```
<c:if test="$ {futureStockEnabled}">
<ycommerce:testId code="productDetails_showAvailability_label">
<c:url value="${product.url}/futureStock" var="productfutureStockUrl"/>
<a class="futureStockLink" href="${productfutureStockUrl}" target="_blank" title="<spring:theme code="basket.page.viewFuture"/>">
<spring:theme code="basket.page.viewFuture"/>
</a>
</ycommerce:testId>
</c:if>
```

Where `${product.url}/futureStock` calls the controller for the current selected product and the controller returns the populated `futureStockPopup.jsp`.

Disabling Future Stock Availability

The Future Stock Availability feature can be enabled and disabled through a setting in the `local.properties` file. By default this feature is enabled.

Setting the following property in `local.properties` disables the Future Stock Availability feature:

```
# Defines whether Future Stock Availability is used in the Storefront.
storefront.products.futurestock.enabled=false
```

Related Information

[acceleratorservices Extension - Technical Guide]

B2B Inventory Display

The B2B Inventory Display feature allows you to display a threshold value instead of the real amount of stock available for a product.

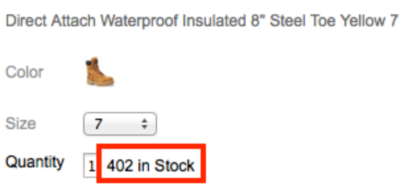
For example, if the inventory display value is set to 15, and there are 100 such products in stock, "15+" will be displayed in the product page. If 15 or less items are in stock, the actual stock number is displayed. The display value is configured per category, and a default value can be set for the entire site.

The purpose of this feature is to help merchandisers prevent a few customers from purchasing a product's entire stock. For example, a merchandiser is carrying a certain amount of inventory for a popular product. Some customers have this popular product on the top of their purchase orders when it becomes available, and the product is sold out very fast. The merchandiser wants to make sure that all customers have an equal opportunity to order this product by preventing a few orders from consuming the entire inventory. Allowing a few customers to order all product stock would lock out any other customers from the product, contributing to a monopoly and a bad customer experience. The Inventory Display feature allows the merchandiser to limit stock, providing better control over the distribution of in-demand products. Doing so helps prevent a monopoly situation and contributes to a better overall customer experience.

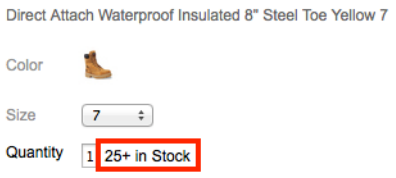
User Experience

This feature affects the display of inventory in the product details page as well as the order forms for multi-dimensional products. The following screenshots show how inventory values are displayed:

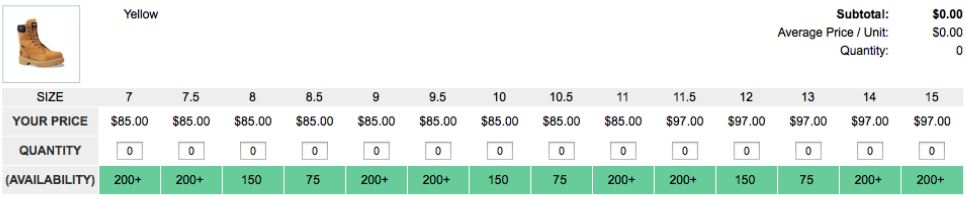
No inventory display:



Stock over inventory display (display=25):



Order form example for multi-dimensional product (display=200):



SIZE	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15
YOUR PRICE	$85.00	$85.00	$85.00	$85.00	$85.00	$85.00	$85.00	$85.00	$85.00	$97.00	$97.00	$97.00	$97.00	$97.00
QUANTITY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(AVAILABILITY)	200+	200+	150	75	200+	200+	150	75	200+	200+	150	75	200+	200+

Configuration

The inventory display can be configured through the Backoffice Administration Cockpit.

Inventory display values can be defined per category and for an entire storefront. The category display value takes precedence over the default display value.

Category Display Value

To change the inventory display value:

1. Open the Backoffice Administration Cockpit (`localhost/backoffice`).
2. In Catalog > Categories, search for the category you want to modify.
3. In the search results, select the entry for the category you want to modify.
4. Click the Administration tab.
5. In the Stock Level Threshold field, type the new display value.
6. Click Save.

To remove the category display value, delete the value from the Stock Level Threshold field, and then click Save.

Default Site Display Value

To change the default site display value:

1. Open the Backoffice Administration Cockpit (`localhost/backoffice`).
2. In WCMS > Websites, search for the site you want to modify. The default Accelerator storefront (`yacceleratorstorefront`) is named **powertools**.
3. In the search results, double-click the entry for the site you want to modify.
4. Click the Administration tab.
5. Type the new threshold value into the Default Inventory Threshold Value field.
6. Click Save.

To remove the default display value, delete the value from the Default Inventory Threshold Value field, and then click Save.

Technical Overview

This feature is provided by the `commercefacades` extension.

To show the display value, the new populator `stockPopulator` was created, and the `VariantOptionDataStockPopulator` class was updated to support multi-dimensional products.

B2B Powertools Store Extension

The `powertoolsstore` extension is included to showcase the B2B functionality available in B2B Accelerator and AddOns by providing a sample, fully functional storefront.

Overview

The `powertoolsstore` extension adds all the products and content necessary for the sample B2B site and also includes test promotions, users, Advanced Personalization rules, and B2B-specific sample data. It is provided as a sample only, and is not intended to be included in a live implementation. The sample data in this extension is separated to make it easy to exclude it from a project. To exclude the sample data, ensure this extension is not included in the `localextensions.xml` file. This extension does not require the SAP Commerce `sampledata` extension, but can run with this extension present.

Detailed Extension List and Dependencies

The following table lists the dependencies for `powertoolsstore`. This information can be found in each extension's `extensioninfo.xml` file.

Extension	Description	Dependencies
powertoolsstore	• Dataset for a reference B2B site • Power tools product catalog • CMS content to showcase products and functionality	b2bacceleratorservices

Related Information

http://lucene.apache.org/solr/

B2B Early Login

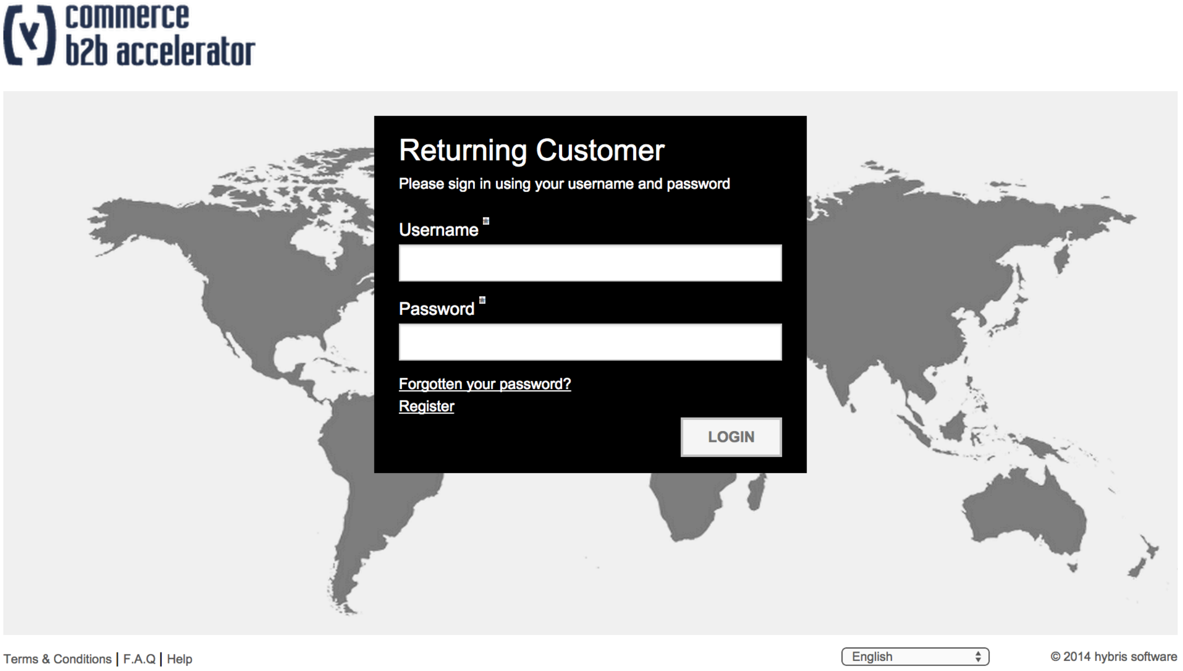
The `b2bacceleratoraddon` AddOn requires users to authenticate before being able to browse the site. Users can also request an account.

Note

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

For installation information, see b2bacceleratoraddon AddOn.

As shown in the following example, when the B2B Early Login AddOn is enabled, the early login page that is displayed is a bare page; there is no header or footer, or any links that could expose the rest of the site.



Related Information

B2B Early Login User Experience
b2bacceleratoraddon AddOn

B2B Early Login User Experience

The `b2bacceleratoraddon` AddOn requires users to authenticate before being able to browse the B2B Accelerator site. Users can also request an account.

When early login is activated, users cannot browse the B2B site unless they are logged in. The login page is bare and has no header or footer, nor does it have any links that could expose the rest of the site. Once registration is enabled, the user can request a new account.

If users forget their password, they can begin the password recovery process from the early login page. To reset their password, users must click the **Forgot your password?** link and enter their email address.

New Account Requests

Once registration is enabled, the user can request a new account usng the links in the early login page and in the header (if the user is not logged in). Once they click the link, the New Customer page appears where users can enter their information to create an account.

New registrations are approved or rejected through the Backoffice Administration Cockpit by a merchant user who belongs to the `b2bregistrationapprovergroup` group.

Emails are sent when the following stages are completed:

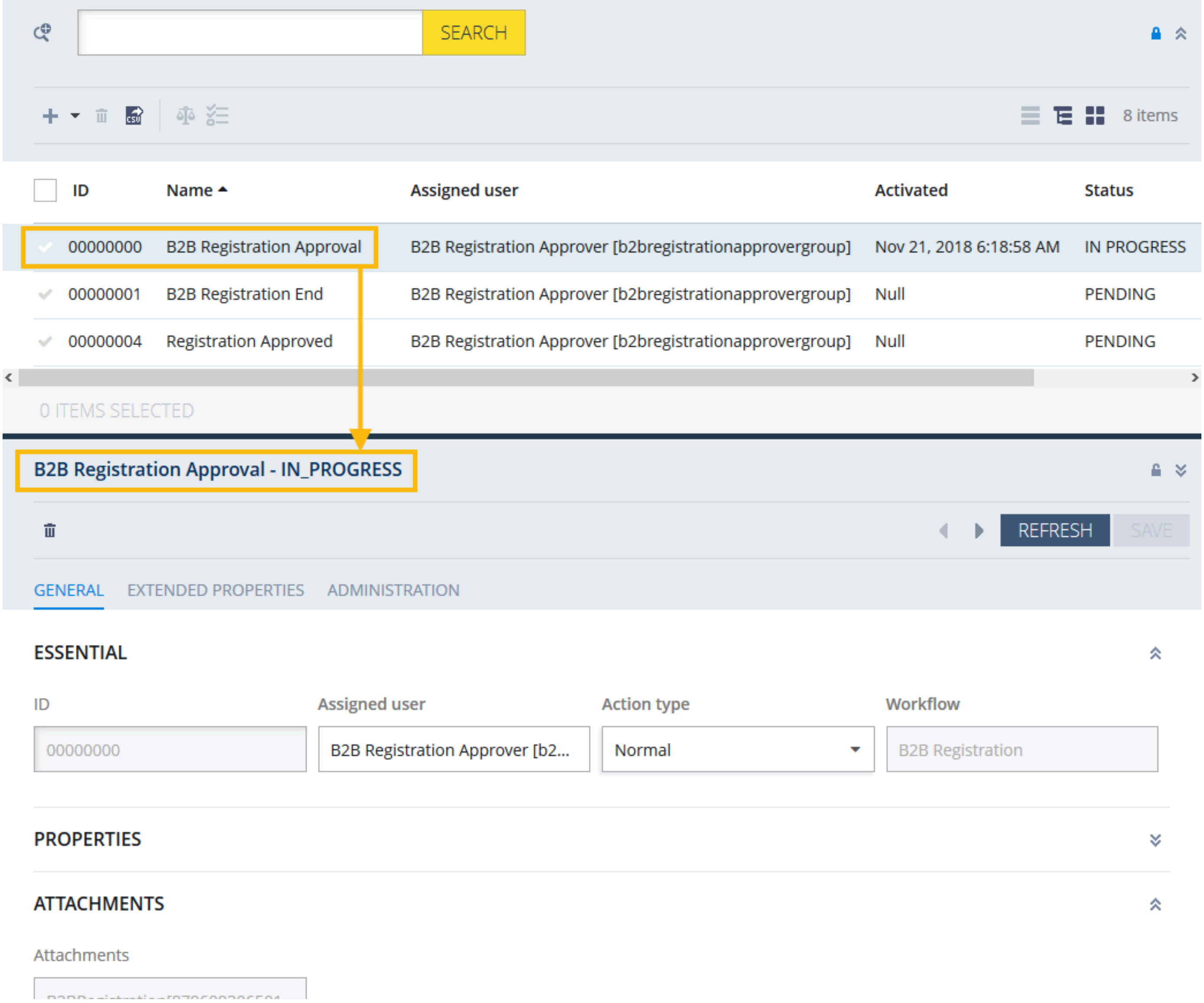
- The request is submitted
- The request is approved
- The request is rejected: the merchant approver must provide a reason

By default, new users are assigned to the role of B2B Customer. The approver must assign a unit for the new user and the company's B2B Administrator can then modify permission access.

Processing Registration Requests

To process registration requests, follow these steps:

1. Log into the Backoffice Administration Cockpit (`http://localhost:9001/backoffice`) with a user who belongs to the `b2bregistrationapprovergroup` group (use the default user of `RegApproverA` with its password).
2. In the navigation bar, click Inbox to view the tasks assigned to the approver. If any registrations are waiting approval, they appear in the list under the name B2B Registration Approval.
3. Click on a B2B Registration Approval task to view its details in the bottom portion of the screen.



Note

If the task you want to view is not in the list, you can search for all registration requests awaiting processing, use one of the following methods:

- Use the Search field to search for "B2B Registration Approval" with a Status of In progress.

- Next to the Search field, click the magnifying glass for advanced search.

4. For the selected task, look to the the bottom portion of the window, open General > Attachments, and double-click B2BRegistration Approval[#####].
5. In the Edit Item window, under the Unbound heading, select an appropriate unit from the Default B2B Unit. Alternatively, click ... to open an advanced search window.
6. Take note of the name and email address, so you can find the user easily later. You may want to copy/paste the name and email address in a text editor.
7. Click Save.
8. In Inbox, select the B2B registration Approval task.
9. In the General tab under the Options of Acting heading, select Approve or Reject.

Set a New Password

1. In the navigation bar, click Users > Customers.
2. Locate the user by name and email address, or click the magnifying glass for advanced search.
3. Click the Password tab and set a default password for the user.
4. Click Save.

Related Information

B2B Early Login

Commerce Organization

The organization management features of SAP Commerce B2B Accelerator allows companies to self-service purchasing made through a merchant's B2B Accelerator web site.

Companies can create multiple organizations (or units as they are called in B2B Accelerator), which are then associated with users, usergroups, order thresholds, budgets, and cost centers.

Organization management features are accessed through the My Company menu of B2B Accelerator, which is further separated into the following sections:

- Budgets
- Cost Centers
- Units
- Users
- User Groups
- Permissions
- Account Summary

Only users assigned the B2B Administrator role can access organization features.

For more details on each My Company page, refer to the links at the end of this topic.

Introduction

Units, Users, and Other Organization Entities

The following list outlines the purpose of each entity within the organization:

- **Unit**: The most basic building block of the organization is the unit. This represents a structure within the organization such as a department or a location. Units inherit from their parent units.
- **User**: Users are assigned to units and must have at least one of the following four roles:
  - **B2B Administrator**: To be able to administer the organization structure a user must have the B2B Administrator role. The B2B Administrator is only permitted to administrate the organization structure equal-to or below the B2B Administrator's position in the hierarchy.
  - **B2B Manager**: To view the reports of the organization's expenditure, a user must have the B2B Manager role. The B2B Manager is only permitted to view reports for the organization structure equal-to or below the B2B Manager's position in the hierarchy.
  - **B2B Approver**: To provide customer approval for an order, a user must have the B2B Approver role. In addition, the user must also have rights that define the monetary limits to which the user can approve. The position of the B2B Approver in the hierarchy is used by the customer approval process when finding the least senior B2B approver permitted to approve an order.
  - **B2B Customer**: Only users with the B2B Customer role are permitted to place orders. B2B Customers can create orders of any value. If the order value is within the user's order threshold, the order is placed immediately. If the order value exceeds the user's order threshold, the order is assigned to an approver for review

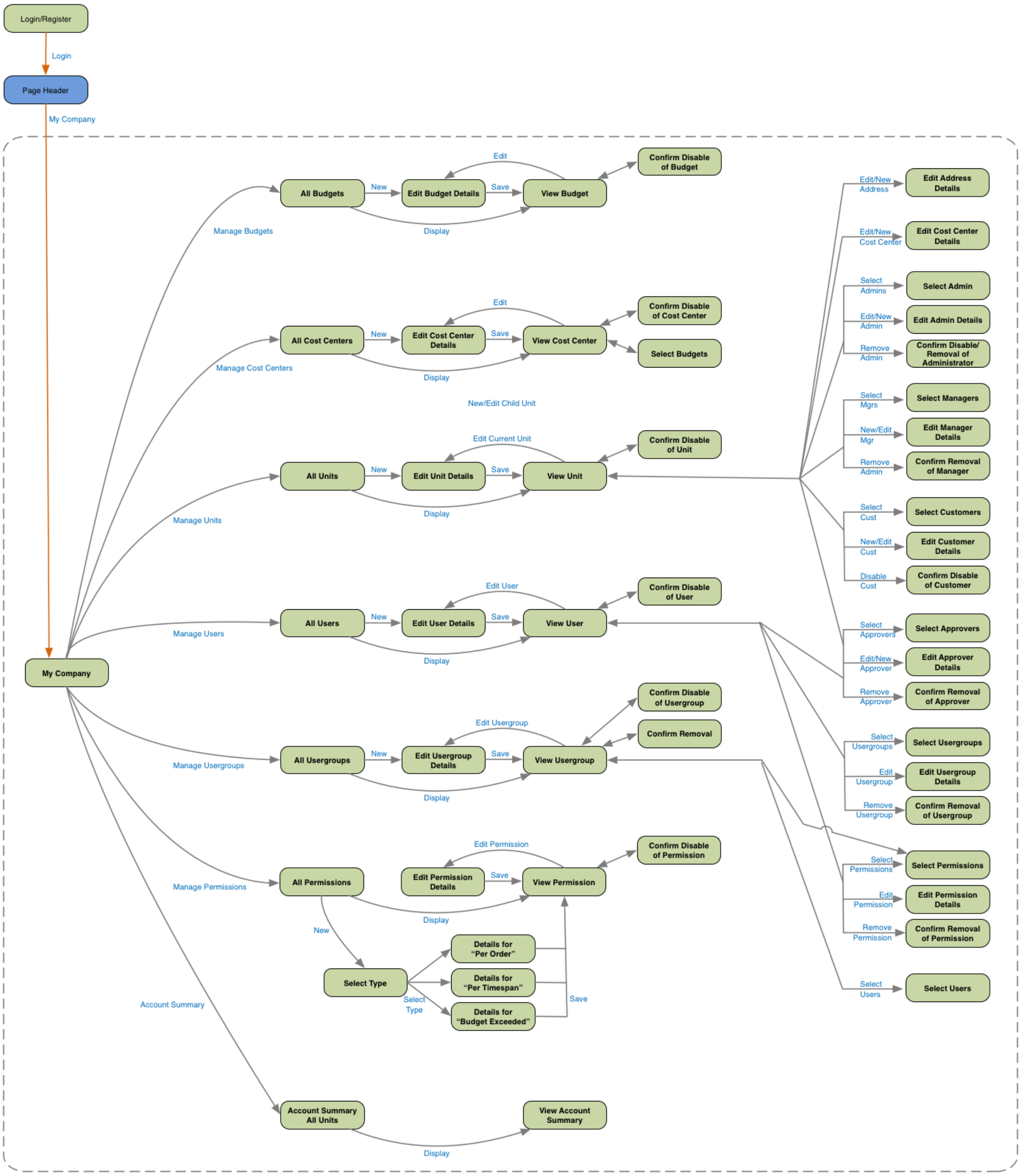
and approval. If approved, the order is placed. Note that the order may also require approval by the account manager.

- **Cost Center**: To simplify the organization's task of recharging of orders to departments, the B2B administrator assigns cost centers to units. Cost centers that are direct ancestors of the B2B customer are made available to the customer at checkout.
- **Budget**: The organization assigns budgets to units to limit their expenditure. Placed orders that exceed the budget are sent to the B2B approver for customer approval before being sent to the merchant.
- **Credit Limit**: Credit limits are managed by the merchant (and not the B2B administrator) to limit their credit exposure to the customer organization. Credit limits can be assigned to any unit.

For more information on B2B organizations, see B2B Commerce Module

Page Flow for Organization Management

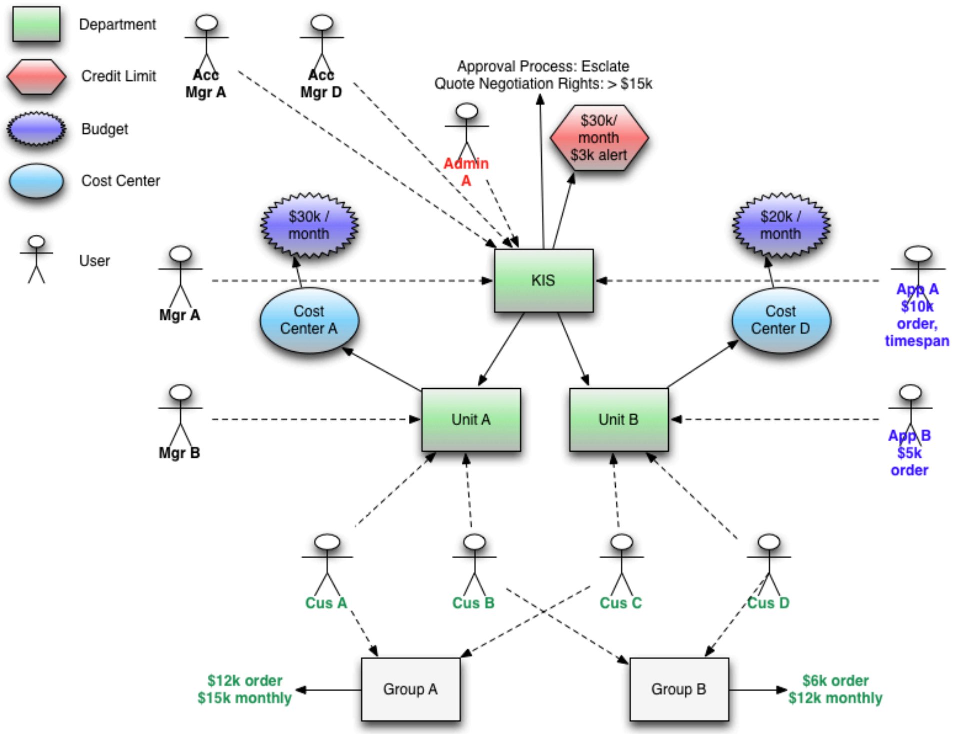
The possible interactions with the pages are structured as in the following diagram. (The diagram omits `view` actions. It is possible to traverse between any two related objects using `view` and this would make the diagram excessively complicated.)



Default Organization Provided with Sample Data

When adding a company to B2B Accelerator, the merchant often creates one unit (the root unit), one cost center, and one budget, along with an administrator who is assigned to the unit. The administrator is then responsible for creating the organization's structure in order to manage the purchasing rights of those permitted to purchase from the merchant.

The following diagram illustrates the KIS (Keep It Simple) structure used for the organization included in the B2B Accelerator sample data.



[Budget Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete budgets using the **Budgets** page in the **My Company** area.

[Cost Center Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete cost centers using the **Cost Centers** page in the **My Company** area.

[Business Unit Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete organizational units using the **Units** page in the **My Company** area.

[User Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete users via the **Users** page in the **My Company** area.

[User Group Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete user groups via the **User Groups** page in the **My Company** area.

[Order Permission Management]

B2B Accelerator allows B2B administrators to view, create, modify, and delete order permissions using the **Permissions** page in the **My Company** area.

[Account Summary]

B2B Accelerator allows B2B administrators to view the transaction history of their business units using the **Account Summary** page in the **My Company** area.

[B2C Accelerator Commerce Organization Trail]

This trail demonstrates how to install and use the `commerceorgaddon` AddOn with the B2C electronics storefront.

Budget Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete budgets using the **Budgets** page in the **My Company** area.

Budgets are assigned to cost centers so that customers can place orders against the cost center until the limit of the active budget is reached.

Different pages allow administrators to view all budgets, view specific budgets, and create or modify budgets.

Budgets Page

Administrators access the Budgets page by clicking **My Company** > **Budgets**. The page displays all budgets for the organization.

The Budgets page allows B2B administrators to:

- View a list of budgets defined for the organization
- View the details for a particular budget
- Create budgets

Budget Details Page

Administrators can view the budget details page by clicking on the budget ID in the Budgets page.

The Budget Details page allows B2B administrators to:

- View budget details, including which cost centers the budget is assigned to
- Make changes to budget details
- Disable and enable budgets

New Budget and Edit Budget Pages

This page is the same for both adding a new budget and editing an existing budget.

The New Budget and Edit Budget pages allow B2B administrators to specify budget details.

To display the New Budget page:

1. Click **My Company** > **Budgets**.
2. Click **Add New**.
3. Enter the required information in the form and then click **Save**.

To display the Edit Budget page:

1. Click **My Company** > **Budgets**.
2. Click the ID of the budget you want to update.
3. Click **Edit**.
4. Modify the required information in the form and then click **Save**.

Parent topic: Commerce Organization

Related Information

Cost Center Management
Business Unit Management
User Management
User Group Management
Order Permission Management
Account Summary
B2C Accelerator Commerce Organization Trail

Cost Center Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete cost centers using the **Cost Centers** page in the **My Company** area.

Budgets are assigned to cost centers so that customers can place orders against the cost center until the limit of the active budget is reached.

Note
All cost centers require budgets, so you must assign a budget to every new cost center.

All Cost Centers Page

Administrators access the Cost Centers page by clicking **My Company** > **Cost Centers**. The page displays all cost centers for the organization.

The Cost Centers page allows B2B administrators to:

- View a list of cost centers defined for the organization.
- View the details for a particular cost center
- Create new cost centers

Cost Center Details Page

Administrators can view the cost center details page by clicking on the cost center ID in the Cost Center page.

The Cost Center Details page allows B2B administrators to:

- View cost center details
- Make changes to cost centers

- Assign budgets to cost centers
- Disable and enable cost centers

New Cost Center and Edit Cost Center Pages

This page is the same for both adding a new cost center and editing an existing cost center.

The New Cost Center and Edit Cost Center pages allow B2B administrators to specify cost center details.

To display the New Cost Center page:

1. Click **My Company** > **Cost Centers**.
2. Click **Add New**.
3. Enter the required information in the form and then click **Save**.

To display the Edit Cost Center page:

1. Click **My Company** > **Cost Centers**.
2. Click the ID of the cost center you want to update.
3. Click **Edit**.
4. Modify the required information in the form and then click **Save**.

Select Budgets for Cost Center Page

The **Select Budgets for Cost Center** page allows B2B administrators to assign budgets to a cost center.

To display this page and assign budgets to a cost center:

1. Click **My Company** > **Cost Centers**.
2. Click the ID of the cost center you want to update.
3. In the Budgets area, click **Edit**.
4. Select the budgets you want to assign to the cost center.
5. Click **Done**.

Parent topic: Commerce Organization

Related Information

Budget Management
Business Unit Management
User Management
User Group Management
Order Permission Management
Account Summary
B2C Accelerator Commerce Organization Trail

Business Unit Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete organizational units using the **Units** page in the **My Company** area.

Units are assigned B2B account managers, cost centers, approvers, administrators, managers, and customers. There can only be one root unit but it can have many child units.

Units Page

Administrators access the Units page by clicking **My Company** > **Units**. The page displays all units for the organization.

The Units page allows B2B administrators to:

- View a list of units defined for the organization (child units can be expanded or collapsed)
- View the details for a particular unit
- Create units

Unit Details Page

Administrators can view the units details page by clicking on the unit ID in the units page.

The Unit Details page allows B2B administrators to:

- View details for a particular organizational unit.
- View and manage various entities associated with the unit, including:
  - Account managers
  - Addresses
  - Cost centers
  - Child units
  - Approvers
  - Administrators
  - Managers
  - Customers

New Unit and Edit Unit Pages

The New Unit and Edit Unit pages allow B2B administrators to specify unit details. This page is the same for both adding a new unit and editing an existing unit.

To display the Create Unit page:

1. Click **My Company** > **Units**.
2. Click **Add New**.
3. Enter the required information in the form and then click **Save**.

To display the Edit Unit page:

1. Click **My Company** > **Units**.
2. Click the ID of the unit you want to update.
3. Click **Edit**.
4. Modify the required information in the form and then click **Save**.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
User Management
User Group Management
Order Permission Management
Account Summary
B2C Accelerator Commerce Organization Trail

User Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete users via the **Users** page in the **My Company** area.

A B2B user is an individual who is able to log in to the B2B Accelerator store. Functionality available to the user depends on the roles assigned to them: B2B Administrator, B2B Manager, B2B Approver, or B2B Customer.

Users are assigned approvers, order permissions, and usergroups.

Users Page

Administrators access the Users page by clicking **My Company** > **Users**. The page displays all users for the organization.

The Users page allows B2B administrators to:

- View a list of users defined for the organization

- View user details
- Create new users

User Details Page

Administrators can view the user details page by clicking on the user name in the Users page.

The User Details page allows B2B administrators to:

- View user details
- Assign roles to users
- Make changes to user details
- Manage approvers, permissions, and user groups associated with the user
- Disable and enable users
- Reset a user's password

Manage Approvers

Administrators can assign approvers to a user; to do so:

1. Click My Company > Users.
2. Click the name of the user to display the User Details page.
3. In the Approvers area, click Add Existing.

   The Select Approver(s) page appears.
4. Select the checkmark for each approver you want to assign to the user.
5. Click Done.

Manage Permissions

The Select Permission(s) page allows administrators to assign order threshold permissions to a user.

To display this page and assign permissions to a user:

1. Click My Company > Users.
2. Click the name of the user to display the User Details page.
3. In the Permissions area, click Add Existing.

   The Select Permission(s) page appears.
4. Select the checkmark for each permission you want to assign to the user.
5. Click Done.

Manager User Groups

The Select User Group(s) page allows administrators to assign a user to usergroups.

To display this page and assign a user to a usergroup:

1. Click My Company > Users.
2. Click the name of the user to display the User Details page.
3. In the User Groups area, click Add Existing.

   The Select User Group(s) page appears.
4. Select the checkmark for each user group you want to assign to the user.
5. Click Done.

New User and Edit User Details Pages

This page is the same for both adding a new user and editing an existing user.

The New User and Edit User Details pages allow B2B administrators to specify user details.

To display the New User page:

1. Click My Company > Users.
2. Click Add New.
3. Enter the required information in the form and then click Save.

To display the Edit Users page:

1. Click My Company > Users.
2. Click the name of the user you want to update.
3. Click Edit.
4. Modify the required information in the form and then click Save.

Password Reset Form

The Password Reset form is displayed when an administrator wants to reset a password for a user.

To display this page and reset a user's password:

1. Click My Company > Users.
2. Click the name of the user whose password you want to change.
3. Click Reset Password.
4. Type the new password in the New Password and Confirm New Password fields.
5. Click Update Password.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
Business Unit Management
User Group Management
Order Permission Management
Account Summary
B2C Accelerator Commerce Organization Trail

User Group Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete user groups via the User Groups page in the My Company area.

User groups are used to assign permissions to multiple customers without adhering to the hierarchical structure of the organization's hierarchy.

User Groups Page

Administrators access the User Groups page by clicking My Company > User Groups. The page displays all user groups for the organization.

The User Groups page allows B2B administrators to:

- View a list of user groups defined for the organization
- View user group details
- Create new user groups

User Group Details Page

Administrators can view the user groups details page by clicking on the user group ID in the User Groups page.

The User Group Details page allows B2B administrators to:

- View user group details
- Make changes to user group details
- Manage permissions and users associated with the user group

- Disable and enable user groups
- Delete user groups

Manage Permissions for User Groups

The Permissions section of the User Group Details page allows administrators to assign permissions to user groups.

To assign a permission to a user group:

1. In the Permissions section of the User Group Details page, click Add Existing.
2. Select each permission you want to assign to the user group, or click an assigned permission to remove it from the user group.
3. Click Done.

Manage Users for User Groups

The Users section of the User Group Details page allows administrators to assign users to user groups.

To assign users to a usergroup:

1. In the Users section of the User Group Details page, click Add Existing.
2. Select each user you want to assign to the user group, or click an assigned user to remove the user from the user group.
3. Click Done.

New User Group and Edit User Group Pages

The New User Group and Edit User Group pages allow B2B administrators to specify user group details. This page is the same for both adding a new user group and editing an existing user group.

To display the New User Group page:

1. Click My Company > User Groups.
2. Click Add New.
3. Enter the required information in the form and then click Save.

To display the Edit User Group page:

1. Click My Company > User Groups.
2. Click the ID of the user group you want to update.
3. Click Edit.
4. Modify the required information in the form and then click Save.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
Business Unit Management
User Management
Order Permission Management
Account Summary
B2C Accelerator Commerce Organization Trail

Order Permission Management

B2B Accelerator allows B2B administrators to view, create, modify, and delete order permissions using the Permissions page in the My Company area.

Order permissions define financial limits. Permissions can be on a per-order or per-timespan basis.

The B2B user who approves orders is assigned the B2B Approver role. Approvers must also have permissions that define monetary approval limits. The position of B2B Approver in the hierarchy is used by the customer approval process when finding the least senior B2B Approver permitted to approve an order.

Permissions Page

Administrators access the Permissions page by clicking My Company > Permissions. The page displays all permissions defined for the organization.

The Permissions page allows B2B administrators to:

- View a list of order permissions defined for the organization
- View order permission details
- Create new order permissions

Permission Details Page

Administrators can view the Permissions Details page by clicking on the permission ID in the Permissions page.

The Permission Details page allows B2B administrators to:

- View order permission details
- Make changes to order permissions
- Disable and enable permissions

Edit Permission Page

The **Edit Permission** page allows B2B administrators to modify order permission details.

To display the Edit Permission page:

1. Click My Company > Permissions.
2. Click the ID of the permission you want to update.
3. Click **Edit**.
4. Modify the required information in the form and then click **Save**.

New Permission Page

The New Permission page allows B2B administrators to create order permissions of different types.

Creating order permissions is a two-step process: first you choose the type of order permission, and then you provided the details of the order permission.

To display the New Permission page and create a new permission:

1. Click My Company > Permissions.
2. Click **Add New**.
3. Select the permission type. The available options are:
   - Allow Order Threshold (per Order)
   - Allow Order Threshold (per Timespan)
   - Budget Exceeded Permission
4. Provide the permission details.
5. Click **Save**.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
Business Unit Management
User Management
User Group Management
Account Summary
B2C Accelerator Commerce Organization Trail

Account Summary

B2B Accelerator allows B2B administrators to view the transaction history of their business units using the **Account Summary** page in the **My Company** area.

ℹ Note

The accountsummaryaddon AddOn is required for this feature. For more information on the AddOn, see accountsummaryaddon AddOn.

Administrators access the Account Summary page by clicking **My Company** › **Account Summary**, and then clicking the business unit they want to view. The top portion of the Account Summary Details page shows an overview of the unit, including the current balance, total open balance, and aging summary of invoices.

The bottom portion of the Account Summary Details page displays a list of all transaction documents for the unit. These document types are displayed:

- purchase orders
- invoices
- credit notes
- debit notes
- statements

The list can be refined by using the filter and sorting controls, and then clicking **Search**. If available, the actual document can be accessed by clicking the **View** link.

Merchants can also view financial history of all their customers using Backoffice. For more information, see B2B Account Summary.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
Business Unit Management
User Management
User Group Management
Order Permission Management
B2C Accelerator Commerce Organization Trail

B2C Accelerator Commerce Organization Trail

This trail demonstrates how to install and use the `commerceorgaddon` AddOn with the B2C electronics storefront.

Introduction

Sample data for a fictional Photo Club Group is provided to give an idea of how to make use of the commerce organization features in a B2C scenario. In this trail, you will explore the sub-sections of the **My Groups** area and familiarize yourself with the different entities and their relations. Hands on lessons at the end of the trail are provided to give you an opportunity to create and edit different entities of the Photo Club.

ℹ Note

The scope of this trail is the **My Groups** area and its sub-sections. The trail does not cover any commerce organization features beyond this, such as account checkout with order approval, or user registration with a group. In fact, such features are either not present, or are not fully functional when the `commerceorgaddon` AddOn is installed on a B2C Accelerator. For now, these features still only work completely when the `commerceorgaddon` AddOn is installed on the B2B Accelerator.

Preparation

The following installation instructions assume you are using a newly unzipped installation of SAP Commerce.

Installing B2C Accelerator with the `commerceorgaddon` AddOn

1. Browse to the `installer/recipes/cx` folder of SAP Commerce and edit the `build.gradle` file, as follows:

   a. Add the `commerceorgaddon` extension to the recipe's `config`, as follows:

```
def config = {
        ...
        extensions {
                ...
                extName 'commerceorgaddon'
        }
}
...
```

   b. Adjust the `setup` task to install the `commerceorgaddon` AddOn. To do so, add `commerceorgaddon` to the comma separated `names` list in the `pl.project.addons` block, as follows:

```
task setup << {
        ...
        pl.project.addons {
                        names "liveeditaddon,commerceorgaddon"
                        template "yacceleratorstorefront"
                        storeFronts "yacceleratorstorefront"
                        platform pl
        }
        ...
}
```

2. Open the `installer` directory and execute the following commands:

   a. Install the B2C Accelerator recipe: `./install.sh -r cx`

   b. Initialize the system: `./install.sh -r cx initialize`

   c. Start the server: `./install.sh -r cx start`

   i Note

   On Windows, execute `install.bat` instead of `./install.sh`.

For more general information on recipes and on using the Installer tool, see Installing SAP Commerce Using Installer Recipes.

Importing Sample Data

Execute the following steps to import the sample data provided with this trail:

1. Create a `photoclub-usergroups.impex` file and copy the following code into it.

   i Note

   To ensure security, you should replace the `$defaultPassword` value with your own unique password.

```
$defaultPassword=[password]

INSERT_UPDATE B2BUnit;description;uid[unique=true];name;locName[lang=en];groups(uid);reportingOrganization(uid);&B2BUnitID;
;Hierarchical;Photo Club;Photo Club;Photo Club;;Photo Club;Photo Club;
;Unit A;Outdoor Photo Club;Outdoor Photo Club;Outdoor Photo Club;Photo Club;Photo Club;Outdoor Photo Club;
;Unit B;Community Club;Community Club;Community Club;Photo Club;Photo Club;Community Club;

INSERT_UPDATE B2BCustomer;description;uid[unique=true];originalUid;email;name;title(code);groups(uid);permissionGroups(uid);ses
;Admin A;anne.parsons@photoclub.com;anne.parsons@photoclub.com;anne.parsons@photoclub.com;Anne Parsons;ms;Photo Club,b2badmingr
;Customer A;christopher.parsons@photoclub.com;christopher.parsons@photoclub.com;christopher.parsons@photoclub.com;Christopher P
;Customer B;lilian.parsons@photoclub.com;lilian.parsons@photoclub.com;lilian.parsons@photoclub.com;Lilian Parsons;ms;Photo Club
;Admin B;andrea.berry@photoclub.com;andrea.berry@photoclub.com;andrea.berry@photoclub.com;Andrea Berry;ms;Outdoor Photo Club,b2
;Customer C;david.boweey@photoclub.com;david.boweey@photoclub.com;david.boweey@photoclub.com;David Boweey;mr;Outdoor Photo Club
;Customer D;gordon.scott@photoclub.com;gordon.scott@photoclub.com;gordon.scott@photoclub.com;Gordon Scott;mr;Outdoor Photo Club
;Customer E;sebastian.randall@photoclub.com;sebastian.randall@photoclub.com;sebastian.randall@photoclub.com;Sebastian Randall;m
;Customer F;samantha.martin@photoclub.com;samantha.martin@photoclub.com;samantha.martin@photoclub.com;Samantha Martin;ms;Commun
;Customer G;dylan.rampling@photoclub.com;dylan.rampling@photoclub.com;dylan.rampling@photoclub.com;Dylan Rampling;mr;Community
;Customer H;cameron.harris@photoclub.com;cameron.harris@photoclub.com;cameron.harris@photoclub.com;Cameron Harris;ms;Community
;Customer I;tracey.jones@photoclub.com;tracey.jones@photoclub.com;tracey.jones@photoclub.com;Tracey Jones;ms;Community Club,b2b

INSERT_UPDATE B2BBudget;code[unique=true];Unit(uid);budget;currency(isocode)[allownull=true];dateRange[dateformat=dd.MM.yyyy hh
;Annual Event Spending Limit 5K;Photo Club;5000;USD;01.01.2010 00:00:00,12.31.2032 12:59:59;Annual Event Spending Limit 5K;
;Annual Outdoor Spending Limit 10K;Outdoor Photo Club;10000;USD;01.01.2010 00:00:00,12.31.2032 12:59:59;Annual Outdoor Spending
;Annual Community Spending Limit 20K;Community Club;20000;USD;01.01.2010 00:00:00,12.31.2032 12:59:59;Annual Community Spending

INSERT_UPDATE B2BCostCenter;code[unique=true];name[lang=en];Unit(uid);budgets(code);currency(isocode)[default='USD']
;Spending Account Photo Club;Spending Account Photo Club;Photo Club;Annual Event Spending Limit 5K;
;Spending Account Outdoor Photo Club;Spending Account Outdoor Photo Club;Outdoor Photo Club;Annual Outdoor Spending Limit 10K;
;Spending Account Community Club;Spending Account Community Club;Community Club;Annual Community Spending Limit 20K;

INSERT_UPDATE B2BOrderThresholdPermission;code[unique=true];Unit(uid);threshold;currency(isocode)[default='USD'];
;Outdoor Photo Club Order Threshold;Outdoor Photo Club;150;

INSERT_UPDATE B2BOrderThresholdTimespanPermission;code[unique=true];Unit(uid);threshold;currency(isocode);range(code,itemtype(c
;Community Club Monthly Threshold;Community Club;800;USD;MONTH:B2BPeriodRange;

INSERT_UPDATE B2BBudgetExceededPermission;code[unique=true];Unit(uid);
;Photo Club Spending Limit Exceeded;Photo Club;

UPDATE B2BUnit;uid[unique=true];approvers(uid);
;Photo Club;anne.parsons@photoclub.com;
;Outdoor Photo Club;andrea.berry@photoclub.com;
```

2. Navigate to the SAP Commerce Administration Console in your web browser: `https://localhost:9002/`.

3. Log in as `admin`, using the admin user associated password.

4. Select **ImpEx Import** from the **Console** tab.

5. Select the **Import Script** tab.

6. Choose the `photoclub-usergroups.impex` file you have just downloaded.

7. Keep the default settings and click on **Import File**.

Exploring the My Groups Area

Now that the system is set up properly, you might want to take some time to explore the **My Groups** area.

Note

The following steps and screenshots are based on the responsive B2C Accelerator storefront viewed in desktop or laptop resolution. The navigation and overall experience are different in tablet and smartphone resolutions.

1. Open the electronics homepage: `https://electronics.local:9002/yacceleratorstorefront/electronics/en/`
2. Log in as the admin user of the Photo Club user group using the `anne.parsons@photoclub.com` username.
3. Make sure that the **My Groups** navigation element is present in the header and expands to display six sub-sections.

Groups

The **Groups** section provides functionality for setting up a hierarchical group structure, where sub-groups typically indicate a purpose, or a grouping based on location. In this section, you can create new groups or edit existing ones. The following groups are provided with the Photo Club sample data:

Group	Sub-Group
Photo Club	
	Outdoor Photo Club
	Community Club

Note

Groups are equivalent to business units in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Spending Accounts

All orders purchased oncredit must be ordered against a spending account.The spending account's place within the group structure defines who can place orders against it, while its spending limits define the limit of expenditure for that spending account at the store. In this section, you can create new spending accounts, edit existing ones, and assign spending limits. The following spending accounts are provided with the sample data:

Spending Account	Groups
Spending AccountOutdoor Photo Club	Outdoor Photo Club
Spending AccountCommunity Club	Community Club
Spending AccountPhoto Club	Photo Club

Note

Spending accounts are equivalent to cost centers in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Spending Limits

Spending limits define the maximum amount that can be spent on the associated spending account within a certain timespan (start date and end date). In this section, you can create spending limits or edit existing ones. The following spending limits are provided with the Photo Club sample data:

Spending Limits	Amount($)	Spending Account
Annual Outdoor Spending Limit 10k	10k	Spending Account Outdoor Photo Club
Annual Community Spending Limit 20K	20K	Spending Account Community Club
Annual Event Spending Limit 5k	5k	Spending Account Photo club

Note

Spending limits are equivalent to budgets in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Members

A member is an individual who is able to log in to the store. The functionality available to a member is dependent on the role or roles the member has. Administrators have access to the **My Groups** area, where they can modify the group hierarchy. Approvers can approve orders when a customer exceeds their spending threshold. Customers can place orders in the storefront.

In the **Members** section, you can create new members or edit existing ones. Spending thresholds, roles, and member permissions can be assigned, and members can be activated and deactivated. The following members are provided with the Photo Club sample data:

Email	Group	Role
`anne.parsons@photoclub.com`	Photo Club	Admin, Approver
`christopher.parsons@photoclub.com`	Photo Club	Customer
`lillian.parsons@photoclub.com`	Photo Club	Customer
`andrea.berry@photoclub.com`	Outdoor Photo Club	Admin, Approver
`david.boweey@photoclub.com`	Outdoor Photo Club	Customer
`gordon.scott@photoclub.com`	Outdoor Photo Club	Customer
`sebastian.randall@photoclub.com`	Community Club	Admin
`samantha.martin@photoclub.com`	Community Club	Customer
`dylan.rampling@photoclub.com`	Community Club	Customer
`cameron.harris@photoclub.com`	Community Club	Customer
`tracey.jones@photoclub.com`	Community Club	Customer

i Note

Members are equivalent to users in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Member Permissions

Member Permissions allow you to assign spending thresholds to multiple members without adhering to the hierarchical structure of the group. No member permissions are defined in the sample data. The creation and assignment of member permissions are part of the hands-on lessons in this trail.

i Note

Member permissions are equivalent to user groups in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Spending Thresholds

Spending thresholds define the financial limits of members. Spending thresholds can be created on a per-order or on a per-timespan basis, or they can be based on the spending limit of a spending account.

In this section, you can create and edit different types of spending thresholds for your group. The following spending thresholds are provided with the Photo Club sample data:

ID	NAME	VALUE	Group	TimeSpan
Outdoor Photo Club Limit Per User	Allowed Order Threshold (per order)	$150	Outdoor Photo Club	N/A
Community Club Spend	Allowed Order Threshold (per timespan)	$800	Community Club	Month
Spending Exceeded	Budget Exceeded Permission		Photo Club	N/A

i Note

Spending thresholds are equivalent to permissions in the B2B scenario, which the `commerceorgaddon` AddOn provides for the powertools storefront.

Configuring the Outdoor Photo Club

Now that you have familiarized yourself with the different sub-sections of the **My Groups** area, it is time for a hands-on lesson.

1. Open to the electronics homepage: `https://electronics.local:9002/yacceleratorstorefront/electronics/en/`
2. Log in with the admin user of the **Outdoor Photo Club** user group using the `andrea.berry@photoclub.com` username.

Allocating a Spending Limit

1. Navigate to the Spending Limits sub-section of the My Groups area and click Allocate Spending Limit.
2. Enter the following details:
    - Spending Limit ID: `Annual Miscellaneous Spending Limit 5k`
    - Spending Limit Name: `Annual Miscellaneous Spending Limit 5k`

- Allocated Amount: 5000$
- Parent Group: Outdoor Photo Club
- Currency: USD
- Start Date: 01/01/2016
- End Date: 12/31/2020

Creating and Assigning Spending Thresholds

Now let's set spending thresholds that put a cap on spending by the members of the group.

1. Navigate to the Spending Thresholds sub-section of the My Groups area and click Add New.
2. Select the Spending Threshold Type: `per order`, `per timespan`, or `budget exceeded permission`.

   This selection refreshes the screen with fields applicable for the selected threshold type. For this exercise, let's choose the `per order` threshold type.
3. Enter the following details:
   - Threshold Id: Miscellaneous outdoor threshold
   - Parent Group: Outdoor Photo Club
   - Threshold Currency: USD
   - Threshold ID: Per Order Threshold
   - Threshold Amount: $100
4. Click Save.

Adding Member Permissions

1. Navigate to the Member Permissions sub-section of the My Groups menu and click Add New.
2. Enter the following details:
   - Member Permission Id: photoclub special permissions
   - Member Permission Name: photoclub special permissions
   - Parent Group: The current group is selected by default.
3. Add Members to activate the Member Permissions by clicking the Add Existing link in the Members section of this page.
4. On the Select Member(s) page, check David Boweey and Gordon Scott.
5. Click Done.

   The added members appear on the Member Permissions Details page.
6. If there are No Members currently available, follow the steps in ***Adding New or Editing Existing Groups***, below.
7. Add a Spending Threshold by clicking Add Existing in the Spending Thresholds section of the page.
8. Select the Per Order Threshold of 100.00 (US Dollar) that was created in the previous step.

   A spending threshold on the Member Permission Details page appears.
9. If you want to experiment, you can try creating per timespan and budget exceeded threshold types as well.
10. You can also familiarize yourself with the Delete Member Permission and Disable Member Permission functions, which can manage member permissions within the photo club groups.

Adding a New Spending Account

In this procedure, you create a new spending account that the Photoclub group can use for expenses. The account can be tied to any source of funding for accounting purposes.

1. Navigate to the Spending Account sub-section of the My Groups menu and click Add New.
2. Enter the following information:
   - Spending Account ID: Spending Account Holiday Spend
   - Spending Account Name: Spending Account Holiday Spend
   - Currency: USD.
   - Parent Group: The current group is selected by default.

3. Click **Save**.

4. Refer to an existing spending limit that you created in the previous exercise, or else add a new spending limit.

Adding New or Editing Existing Groups

Now we can manage a group and add more details to our PhotoClub group.

Access the **Group** sub-section and click on the **Outdoor Photo Club** group to view more details.

Creating a Group Address

1. In the **Group Details** section, click **Add New**, which is located in the **Addresses** section.

   The page refreshes and allows you to enter a complete address.
2. Enter the new address details and click **Save**.

   The new address is displayed on the **Group Details** page.
3. The address can be further edited or deleted using the **Edit** and **Delete** icons.

Adding, Removing, and Editing Approvers

1. On the **Group Details** page, click **Add Existing** in the **Approvers** section.

   The **Select Approvers** page appears with a list of existing users.
2. Select a user and click **Done**.
3. You can also create a new member, and assign the member as a manager of the Photoclub group.
4. Verify that the selected or newly-added member is listed under the **Managers** section of the **Group Details** page.
5. Repeat steps 1 and 2 for adding customers to the Photoclub group.

Creating a Sub-Group

1. On the **Group Details** page, click **Add New** in the **Sub-Groups** section.
2. The **New Group** page appears.
3. Enter information for the **Group ID**, **Group Name**, **Parent Group**, and **Approval Process**.
4. Click **Save Changes**.

   The **Group Details** page for the sub-group appears. Here, you can manage the addresses, members, and spending accounts of the sub-group, similar to the Outdoor Photo Club.

   The newly created sub-group is also available to view within the Outdoor Photo Club **Details** page.

Parent topic: Commerce Organization

Related Information

Budget Management
Cost Center Management
Business Unit Management
User Management
User Group Management
Order Permission Management
Account Summary

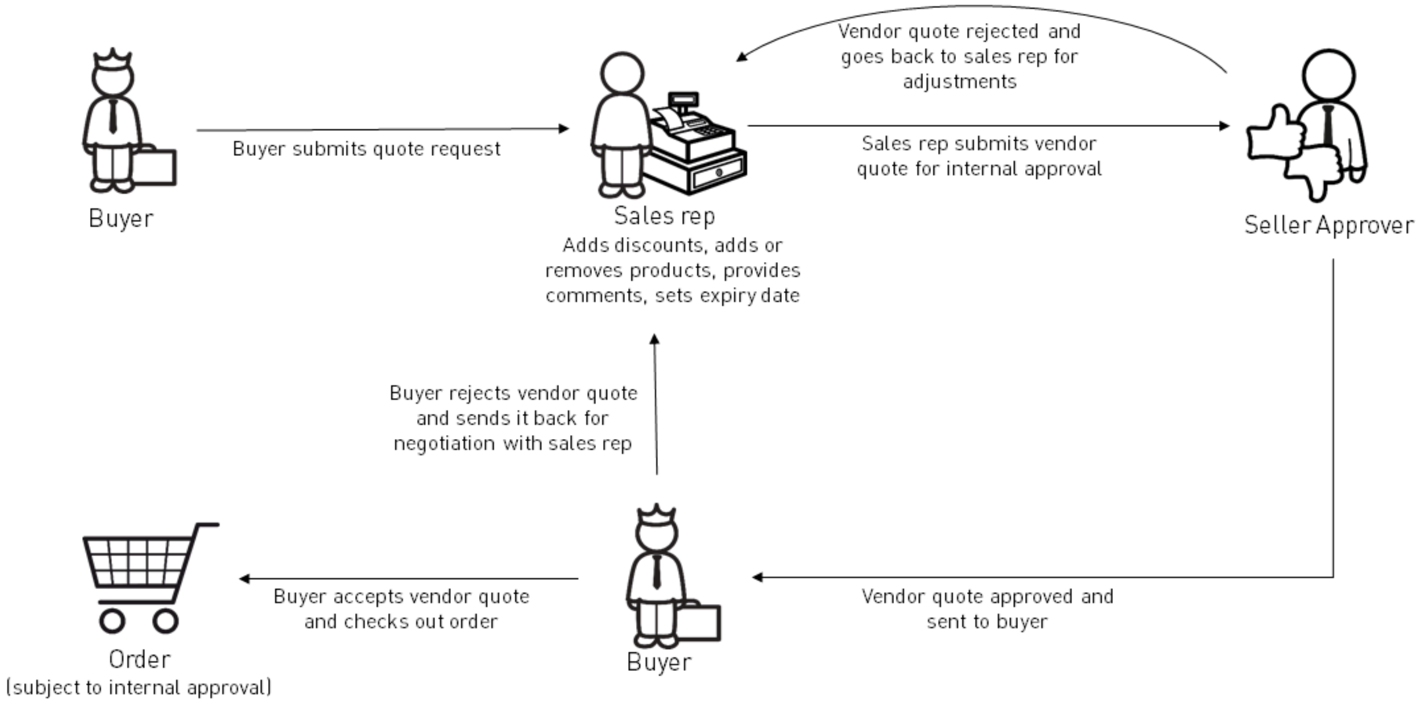
Commerce Quotes

Commerce Quotes enables buyers to create quotes and negotiate the final price of an order using the storefront.

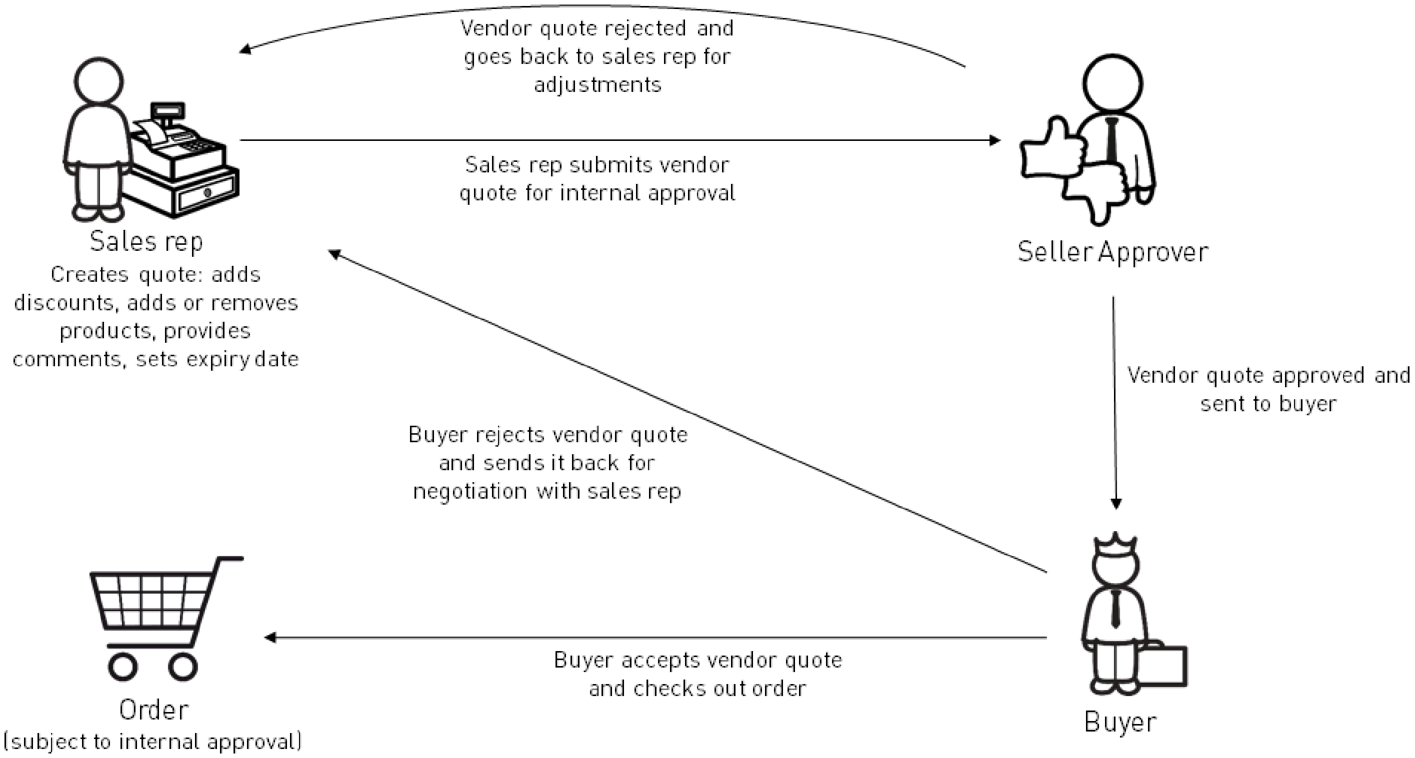
Buyers create quotes using their session cart, and then submit the quote requests to their sales rep. Buyers can only request quotes if the cart value is more than a defined amount ($25,000 by default). The sales rep then adjusts the quote and makes a vendor quote for negotiation. Both roles have flexibility to modify the quote during the negotiation process; they can add and remove items and comments. The quote is sent back and forth until both parties agree to the terms.

Sales reps can also create quotes for their buyers using the Assisted Service Module (ASM). A quote created or modified by the sales rep must be approved by the vendor if the amount is above a defined threshold ($75,000 by default), at which point it becomes a legally binding vendor quote. If the buyer agrees with the terms, the vendor quote is then converted to an order, which must be approved by the buying organization.

This diagram illustrates the quote process when a buyer initiates the quote:



This diagram shows the process when a sales rep initiates the quote:



Default Availability

The Commerce Quotes feature is included in Core Accelerator, and is implemented in the powertools storefront for B2B Accelerator by the sample data included in the `commerceorgsamplesaddon` AddOn. Commerce Quotes can be enabled in other storefronts as well; see Enabling Commerce Quotes in Other Storefronts for more details.

Prerequisites

These AddOns and extensions are required or recommended for Commerce Quotes:

- Assisted Service Module is required for the sales rep to modify quotes.
- commerceorgaddon AddOn is not required for Commerce Quotes, but is needed for the order approval process in the buying organization.
- commerceorgsamplesaddon AddOn includes sample data to implement Commerce Quotes in the powertools storefront.

Further Reading

To learn how buyers and sales reps use the storefront for the quote workflow, see User Experience.

For technical details on Commerce Quotes, see Technical Overview.

User Experience

Buyers use the storefront to create and modify quotes, while sales reps use the Assisted Service Module (ASM) during the negotiation process to offer a vendor quote to the buyer. If required, the seller approver also uses ASM to accept or reject vendor quotes that exceed the vendor's authorization threshold.

There are three user roles that are involved in the quote negotiation process:

- The **buyer** submits quote requests to the sales rep, and then decides to accept or reject the vendor quote submitted by the sales rep.
- The **sales rep** receives the buyer's quote request and modifies it to make an attractive vendor quote. The sales rep can also create a quote on the buyer's behalf.
- The **seller approver** must approve any vendor quotes submitted by the sales rep that exceed the vendor's authorization threshold. Any vendor quotes that are below the threshold are approved automatically.

Each user role can review the status of any quote to see where in the negotiation process it is. The quote status that appears in the storefront depends on the role that is viewing the quote. Any changes made to a quote by one role are not visible to any other role until the quote is submitted for the next step in the process.

When a quote is being modified by the buyer or sales rep, the quote becomes the active session cart. If another cart was the active cart before the quote is modified, then it is saved and the quote becomes the active session cart.

Buyer Journey Overview

The quote negotiation process typically begins by the buyer adding items to a cart and then submitting that cart as a quote request to the sales rep. When the sales rep submits the legally binding vendor quote, the buyer can reject it and continue negotiation or accept it and place an order.

During the negotiation process, these are the quote statuses visible to the buyer:

- **Draft**: Quote created by the buyer but not submitted to the sales rep. The buyer can edit, submit, or cancel the quote.
- **Submitted**: Quote sent to the sales rep. The buyer can't edit or cancel the quote, and must wait to get a vendor quote from the sales rep.
- **Ordered**: A vendor quote that was accepted and ordered.
- **Canceled**: Quote canceled by the buyer
- **Vendor Quote**: The legally binding vendor quote from the sales rep. The buyer can:
    - accept the vendor quote and check out the order
    - cancel the vendor quote
    - reject the quote and continue negotiation
    - modify the vendor quote, which also rejects the vendor quote and continues the negotiation

For more details on each part of the buyer's user journey, see Buyer Journey.

Seller Journey Overview

The sales rep reponds to the buyer's quote request or rejected vendor quote by modifying the quote to add incentives for the buyer. Once the sales rep has made the required modifications, he can submit a legally binding vendor quote that can't be modified by the sales rep. Sales reps modify quotes through ASM.

These are the quote statuses that are visible to the sales rep during the negotiation process:

- **Draft**: Quote that the sales rep created or modified, but has not submitted the vendor quote yet. Sales rep can either edit the draft quote or submit a vendor quote.
- **Requested**: Quote that has been submitted by the buyer or that has been rejected by the seller approver. Sales rep can either edit it or submit a vendor quote.
- **Submitted**: A legally binding vendor quote submitted by the sales rep. Sales rep can't make any modifications.
- **Canceled**: Quote canceled by the buyer. Sales rep can't make any modifications.

For more details on each part of the sales rep's user journey, see Seller Journey.

Seller Approver Journey Overview

If a vendor quote submitted by the sales rep exceeds the authorization threshold for the vendor, then it must be approved by the seller approver. Seller approvers use ASM to accept or reject vendor quotes. Note that they can't modify the contents of the quote.

The quote status indicates which vendor quote the approver must act on:

- **Pending**: A vendor quote submitted by the sales rep that exceeds the vendor's approval threshold. This is the only status that the seller approver can act on.
- **Rejected**: A vendor quote that was rejected by the seller approver.
- **Approved**: A vendor quote that was approved by the seller approver, or a vendor quote that was approved automatically because it did not exceed the vendor's threshold.
- **Canceled**: A vendor quote or quote that was canceled by the buyer.

For more details, see Approving or Rejecting a Vendor Quote.

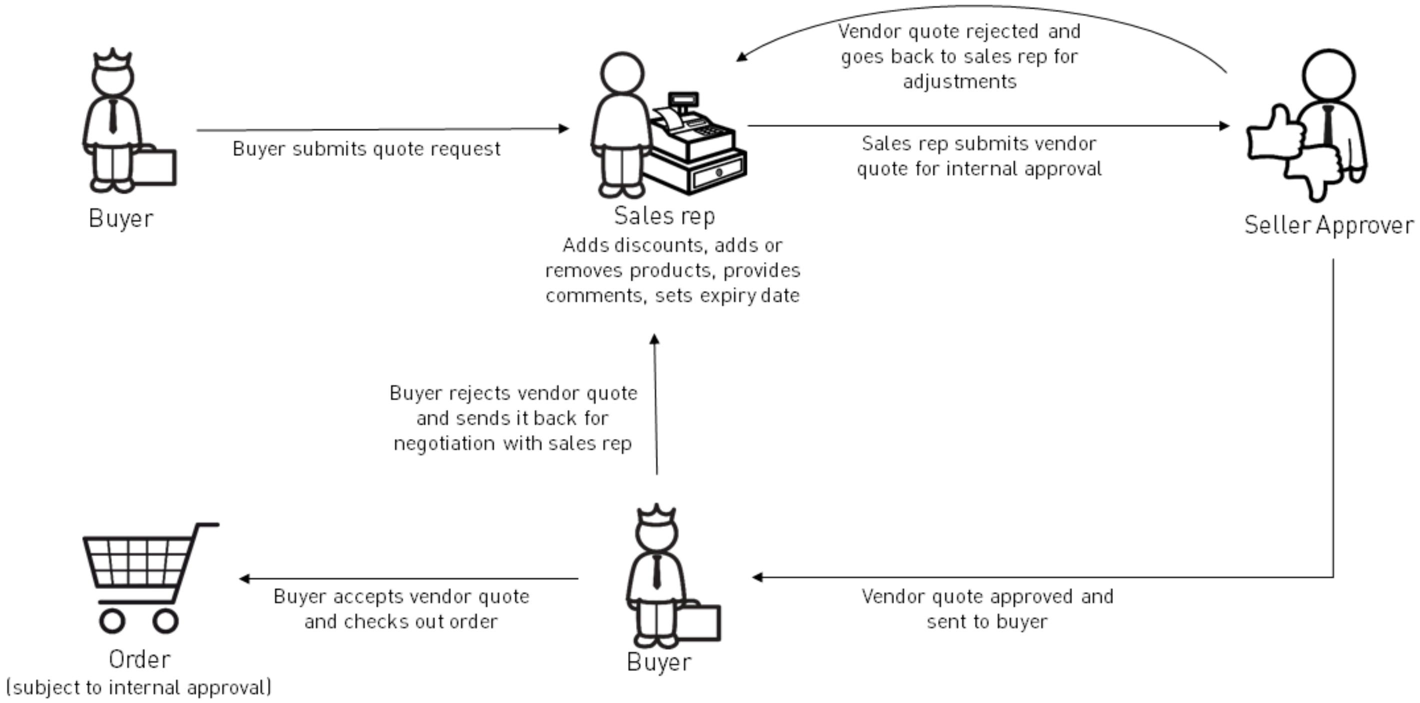
Buyer Journey

Buyers can initiate the negotiation process when they want a better price on an order.

In some cases, buyers will want special pricing for a particular order. For example, if they plan to purchase a greater quantity than usual, they might want additional discounts on the order. Using Commerce Quotes, buyers can convert their active session cart into a quote request, allowing them to negotiate with their sales rep.

Quotes can only be requested if the value of the cart exceeds $25,000. The buyer uses his session cart to add the items he wants quoted, and then submits the quote to the sales rep to begin the negotiation process. The quote may change hands multiple times before the terms are agreed upon.

This diagram illustrates the quote process when a buyer initiates the quote:



The following child pages go into further detail for the buyer's journey through the quote negotiation.

Creating and Submitting a Quote
Buyers begin the quote negotiation process by creating and submitting a quote from their active session cart.

Viewing Quotes
Buyers can view all the quotes they have created and see where in the negotiation process a specific quote is.

Accepting or Rejecting a Vendor Quote
Upon receiving the vendor quote from the sales rep, the buyer can accept the vendor quote and place an order, reject the vendor quote and resubmit it for negotiation, or cancel the vendor quote.

Requoting Inactive Quotes
At any time, buyers can use inactive quotes from their account history to request a new quote that includes all the items in the inactive quote. This feature offers buyers a quick way to requote items they purchase often.

Creating and Submitting a Quote

Buyers begin the quote negotiation process by creating and submitting a quote from their active session cart.

Quotes are created using the active session cart. Buyers have a few different ways to prepare their cart for a quote:

- Add items from the storefront

- Add items using the Quick Order feature
- Restore a saved cart
- Importing a cart from a CSV file

A quote can only be created if the cart has a minimum total value of $25,000. Note that this value includes any applied promotions.

Note

The minimum threshold can be changed in configuration files. For more details, see Changing the Quote Threshold

Creating the Quote

Once the desired items are in the cart, the quote can be created by clicking **Request a Quote** in the cart page. The buyer is then redirected to the quote draft page. The buyer must be logged in to create a quote, otherwise he is directed to the login screen before going to the quote draft page.

Note

Coupons are not supported for quotes; if the buyer applied a coupon to the cart before creating a quote, the coupon is removed when the quote is requested.

The session cart is still active and serves as the quote cart until a new cart is created, the quote is submitted, or the quote is canceled. In the quote draft page, the buyer can:

- Modify the quote name
- Add a quote description
- Add a comment for the entire quote
- Add a comment for an individual line item by clicking the ⋮ icon next to the item
- Change item quantities as in a regular cart
- Add more items by navigating to the storefront and adding items to the cart
- Click **Cancel Quote** to cancel the quote and empty the quote cart

A quote in **Draft** status can be modified at any time, but it can't be modified once it's submitted to the sales rep. So if the buyer wants to work on the quote at a later time before submitting it, he can save it by clicking **New Cart**; this creates a new empty cart and saves the draft quote. The saved quote can be accessed by clicking the **Quotes** link in the cart, or by navigating to **My Account** > **Quotes**.

Submitting the Quote

Once the buyer modifies the quote cart as needed, he can send the quote request to his sales rep by clicking **Submit Quote**. When the quote is submitted to the sales rep:

- The quote status changes from **Draft** to **Submitted**
- The session cart is cleared
- The buyer can't edit or cancel the quote

At this point, the quote is in the sales rep's hands, and the buyer waits until a vendor quote is made by the sale rep. In the meantime, the buyer can view his quotes by navigating to **My Account** > **Quotes**.

Parent topic: Buyer Journey

Related Information

Viewing Quotes
Accepting or Rejecting a Vendor Quote
Requoting Inactive Quotes

Viewing Quotes

Buyers can view all the quotes they have created and see where in the negotiation process a specific quote is.

Quote Listing

Users access the quote listing by clicking **My Account** > **Quotes** in the storefront. The listing displays all quotes that were created by the buyer, including those that were canceled or ordered. Buyers have several list sorting options:

- Date the quote was updated
- Quote code

- Quote name
- Quote status

The quote status indicates how far it is in the negotiation process:

- **Draft**: Quote created by the buyer but not submitted to the sales rep. The buyer can edit, submit, or cancel the quote.
- **Submitted**: Quote sent to the sales rep. The buyer can't edit or cancel the quote, and must wait to get a vendor quote from the sales rep.
- **Ordered**: A vendor quote that was accepted and ordered.
- **Canceled**: Quote canceled by the buyer.
- **Vendor Quote**: The legally binding vendor quote from the sales rep. The buyer can:
    - Accept the vendor quote and check out the order
    - Cancel the vendor quote
    - Modify the vendor quote, which causes the following:
        - Changes the quote status to **Draft**
        - Removes any quote discount applied by the sales rep
        - Clears the expiry date

  If a vendor quote is expired and the buyer tries to accept it, a notification appears stating that the vendor quote is expired. The buyer can then either cancel the vendor quote or edit it to create a new quote.

Quote Details

Clicking the quote name in the listing loads the details page for that quote. The details header displays the following information:

- Quote code and name
- Quote status
- Date created
- Expiry date: The expiry date is set by the sales rep, so it is blank when the buyer creates a new quote.
- Quote version: The version number increases whenever the quote changes hands, and not whenever it is modified. For example, when the buyer creates a new quote, its version is 1. The version number remains 1 even if the buyer saves it and modifies it later, or submits the quote. The version only changes to 2 when the sales rep views it and modifies it to make a vendor quote.
- Order number: If the vendor quote is accepted by the buyer, then the order number is displayed. The order number can be clicked to view the order details. Similarly, if an order was based on a quote, then the quote number is displayed in the order details.

Below the quote header, all items included in the quote are displayed.

The buyer can't make any changes to the quote when its status is **Submitted**, **Ordered**, or **Canceled**.

If the quote is in **Draft** status, the buyer can:

- Edit the quote
- Cancel the quote (changes the quote status to **Canceled**)
- Submit the quote to the sales rep (changes the quote status to **Submitted**)

If the quote is in **Vendor Quote** status, the buyer can:

- Edit the quote (changes the quote status to **Draft**)
- Cancel the quote (changes the status to **Canceled**)
- Accept the quote and check out (changes the status to **Ordered**)

Parent topic: Buyer Journey

Related Information

Creating and Submitting a Quote
Accepting or Rejecting a Vendor Quote
Requoting Inactive Quotes

Accepting or Rejecting a Vendor Quote

Upon receiving the vendor quote from the sales rep, the buyer can accept the vendor quote and place an order, reject the vendor quote and resubmit it for negotiation, or cancel the vendor quote.

Buyers can view all their quotes by navigating to **My Account** > **Quotes**. Any quote with the **Vendor Quote** status is the legally binding vendor quote from the sales rep and can be ordered if they meet the buyer's requirements. Clicking the quote name loads its details page, where buyers can review the vendor quote. If there is already an active session cart with items in it, the session cart is saved and the quote cart is loaded and becomes the active session cart.

Rejecting a Vendor Quote

If the buyer is not satisfied with the vendor quote, he can either:

- Reject the vendor quote and end the negotiation by clicking **Cancel Quote**. This changes the quote status to **Canceled**, and it can no longer be modified by either the buyer or sales rep. The canceled quote can still be viewed in the quote listing (**My Account** > **Quotes**)
- Continue the negotiation by clicking **Edit Quote**. This changes the quote status to **Draft** and the buyer can make the desired modifications to the quote (add/remove items, add/remove comments). Once the required changes are made, then the quote can be resubmitted to the sales rep. Note that any quote discounts applied by the sales rep are removed and the quote expiry date is cleared.

Accepting a Vendor Quote

If the buyer is satisfied with the terms of the vendor quote, he can convert the vendor quote to an order by clicking **Accept and Check Out**. The vendor quote then becomes the active session cart and the buyer checks out the order in the usual way. Note the following when a vendor quote is being checked out:

- If there were items in the active sessions cart before the buyer accepted the vendor quote, that cart is saved and the session cart is emptied; the vendor quote then becomes the active session cart. The cart that was saved can be viewed and restored by navigating to **My Account** > **Saved Carts**.
- If the buyer navigates to a product category and tries to add other items to the vendor quote, the additional items are not added to the cart; the vendor quote remains unchanged.
- If any promotion is triggered during the checkout that changes the cart total or subtotal, the buyer cannot check out the quote. The buyer also cannot check out a quote if any promotion applied during the quote negotiation becomes inactive (for example, expires or becomes disabled) when the buyer accepts and checks out the quote. In both these cases, the checkout fails because the total for the approved quote does not match the total of the cart that is being checked out. However, it is possible to implement your own `QuoteCartValidationStrategy` to customize the checkout validation strategy. For more information, see Commerce Quotes.

Once a vendor quote is accepted and ordered, the quote status changes to **Ordered** and it can be viewed in the quote listing (**My Account** > **Quotes**). The order associated with the quote appears in the order history page (**My Account** > **Order History**).

Note that if the order exceeds the buyer's budget, it must be approved by his manager.

Parent topic: Buyer Journey

Related Information

Creating and Submitting a Quote
Viewing Quotes
Requoting Inactive Quotes

Requoting Inactive Quotes

At any time, buyers can use inactive quotes from their account history to request a new quote that includes all the items in the inactive quote. This feature offers buyers a quick way to requote items they purchase often.

The **My Quotes** listing displays all the quotes the buyer has worked with, including inactive quotes. Quotes that have the following status are inactive:

- Canceled
- Ordered
- Expired

Buyers can use inactive quotes to create a new quote request with the same items using this procedure:

1. Click **My Account** > **Quotes**. A list of all quotes and their statuses is displayed.
2. Click an inactive quote to display its details.
3. Click **Requote**.

Note that when an inactive quote is requoted, the following elements are removed in the new draft quote:

- quote discounts (however, order discounts and promotions are retained)
- expiry date

- previous estimated total
- all quote comments, including line item comments and approval comments

When an inactive quote is requoted, a new draft quote is created and the buyer can edit it as a regular draft quote by adding more items or entering comments.

→ **Tip**

Buyers can use this feature to create template quotes for items they plan to purchase on a regular basis by creating a draft quote and then canceling it without submitting it to the sales rep. The canceled quote is displayed in the **My Quotes** listing and can be requoted at a later date as necessary.

Parent topic: Buyer Journey

Related Information

Creating and Submitting a Quote
Viewing Quotes
Accepting or Rejecting a Vendor Quote

Seller Journey

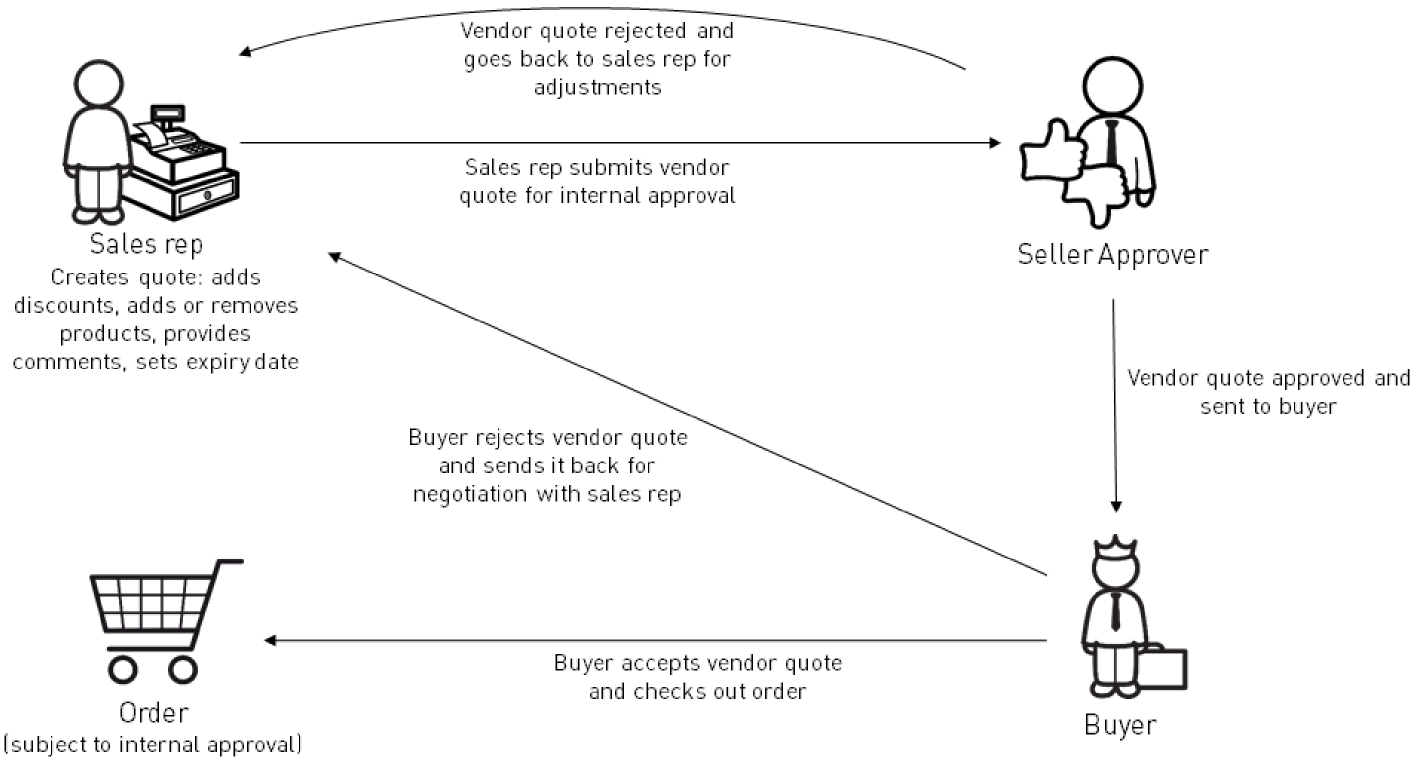
Sales reps respond to their customers' quote requests by adding incentives such as discounts or additional items to make an attractive offer. Sales reps can also initiate quote requests on their customers' behalf.

The first step in the seller journey (for both sales reps and seller approvers) begins by Logging into ASM.

Sales reps log into ASM and start a session for a customer to respond to that customer's quote requests. The sales rep can add incentives to the quote, including discounts and additional items. The quote is then submitted as a legally binding vendor quote that the buyer can accept and order, or reject to continue the negotiation. The quote can change hands between the buyer and sales rep multiple times before the terms are agreed upon.

Seller approvers also log into ASM and start a session for a customer to approve any vendor quotes that exceed the authorization threshold. If the vendor quote is rejected, then it goes back to the sales rep for modification.

This diagram illustrates the quote process when a sales rep initiates the quote:



The following child pages go into further detail for the seller's journey through the negotiation process.

Logging into ASM
Sales reps and seller approvers must log into the storefront using the Assisted Service Module (ASM) to work on their customers' quotes.
Viewing Quotes
Sales reps use the quote listing page to see if there are any quote requests that need their attention.

[Making a Vendor Quote](#)
Sales reps edit quote requests and add discounts or items to make an attractive vendor quote for their customers.
[Approving or Rejecting a Vendor Quote](#)
Vendor quotes that exceed the vendor's approval threshold must be authorized by the seller approver before the buyer can view and accept them.
[Creating a Quote for Buyers](#)
Sales reps can create quotes on their customers' behalf, or create a vendor quote that they think their customers will find attractive.

Logging into ASM

Sales reps and seller approvers must log into the storefront using the Assisted Service Module (ASM) to work on their customers' quotes.

To work on a quote for a customer, sales reps log into ASM and start a session for that customer. Similarly, seller approvers log into ASM and start a session for the customer to approve a vendor quote submitted by the sales rep.

Sales reps and seller approvers log into ASM and start a customer sessions as follows:

1. Navigate to ASM by adding `?asm=true` to the storefront URL. For example: `http://powertools.local:9001/yacceleratorstorefront/?asm=true`
2. Enter the user name in the **Agent ID** field, enter the password, and click **Sign In**. You are now logged into ASM.
3. Enter the **Customer Name** (or customer email address) and click **Start Session**. Alternatively, click **Customers** at the top of the page and select the customer from **My Recent Customer Sessions** or **Customer List**. The ASM session for that customer is started.

The next step is typically to view the quotes that need attention by navigating to **My Account** > **Quotes**. Note that the quote list differs slightly whether it's being viewed by the sales rep or seller approver.

- For more information on the sales rep's perspective, see [Viewing Quotes](#).
- For more information on the seller approver's perspective, see [Approving or Rejecting a Vendor Quote](#)

Parent topic: [Seller Journey](#)

Related Information

[Viewing Quotes](#)
[Making a Vendor Quote](#)
[Approving or Rejecting a Vendor Quote](#)
[Creating a Quote for Buyers](#)

Viewing Quotes

Sales reps use the quote listing page to see if there are any quote requests that need their attention.

Note
Sales reps must use the Assisted Service Module (ASM) and select the customer whose quote they'll be working on. For instructions, see [Logging into ASM](#).

The content on this page describes the storefront behavior after the sales rep is signed in through ASM.

Quote Listing

The quote listing is accessed by clicking **My Account** > **Quotes** in the storefront. The listing displays all quotes that have been submitted by the buyer. Note that any quote in **Buyer Draft** status (created by the buyer but not submitted to the sales rep) are not displayed in the quote listing for the sales rep. The listing has several sorting options:

- date the quote was updated
- quote code
- quote name
- quote status

The quote status indicates where it is in the negotiation process:

- **Draft**: Quote that the sales rep created or modified, but has not submitted the vendor quote yet. Sales rep can either edit the draft quote or submit a vendor quote.
- **Requested**: Quote that has been submitted by the buyer or that has been rejected by the seller approver. Sales rep can either edit it or submit a vendor quote.
- **Submitted**: A legally binding vendor quote submitted by the sales rep. Sales rep can't make any modifications.
- **Canceled**: Quote canceled by the buyer. Sales rep can't make any modifications.

Quote Details

Clicking the quote name in the listing loads the details page for that quote. The details header displays the following information:

- quote code and name
- quote status
- date created
- quote description
- expiry date
- quote version: The version number increases whenever the quote changes hands, and not whenever it is modified. For example, when the buyer creates a new quote, its version is 1. The version number remains 1 even if the buyer saves it and modifies it later, or submits the quote. The version only changes to 2 when the sales rep views it and modifies it to make a vendor quote.
- order number: If the vendor quote is accepted by the buyer, then the order number is displayed. The order number can be clicked to view the order details. Similarly, if an order was based on a quote, then the quote number is displayed in the order details.

Below the quote header, all items included in the quote are displayed.

The sales rep can't modify a quote when its status is either **Submitted** or **Canceled**.

If the quote is in **Draft** or **Requested** status, the sales rep can:

- Edit the quote
- Submit a vendor quote (changes the status to **Submitted**)

If a submitted vendor quote is more than the threshold set by the vendor, then it must be approved by the seller approver, otherwise it is approved automatically. The default seller organization threshold is $75,000. To change the default threshold, see Changing the Seller Approver Threshold

Parent topic: Seller Journey

Related Information

Logging into ASM
Making a Vendor Quote
Approving or Rejecting a Vendor Quote
Creating a Quote for Buyers

Making a Vendor Quote

Sales reps edit quote requests and add discounts or items to make an attractive vendor quote for their customers.

Note

Sales reps must use the Assisted Service Module (ASM) and select the customer whose quote they'll be working on. For instructions, see Logging into ASM.

The content on this page describes the storefront behavior after the sales rep is signed in through ASM.

Sales reps can view any pending quote requests by navigating to **My Accounts** > **Quotes**. There are two quote statuses that the sales rep can modify to make a vendor quote:

- **Requested**: A quote that has been requested by the buyer, or a quote that was rejected by the seller approver.
- **Draft**: A quote created by the sales rep on the buyer's behalf, or a quote that has been modified by the sales rep but not submitted as a vendor quote.

Clicking on the quote name loads its details page, where the sale rep can either edit the quote or submit a vendor quote.

Modifying the Quote

In most cases, sales reps modify the quote to add incentives and make a good vendor quote. When the sales rep clicks **Edit Quote**, the quote becomes the active session cart. If there is already an active session cart with items in it, the session cart is saved and the quote cart is loaded and becomes the active session cart. Any changes the sales rep makes to the quote are not visible to the buyer until the quote is submitted as a vendor quote by the sales rep.

The sales rep can make these changes to the quote:

- Set the expiry date: Clicking in the **Expiry Date** field and selecting a date sets the expiry date. Buyers can't accept the vendor quote after this date. If no date is selected, the expiry date is set to 30 days from the current date.
- Add a quote comment: Entering text in the **Comments** box and pressing enter creates a comment that is visible to the buyer and seller approver.

- Add a line item comment: Clicking ⋮ next to an item and entering text in the box that appears creates a line comment visible to the buyer and seller approver.
- Change the quantity of an item
- Add items: Clicking **Continue Shopping** or any product category shows the product catalog. Since the quote is the active session cart, any items added to the cart are added to the quote.
- Add discounts: Clicking the **Discount** link below the subtotal opens the Discount modal. The sales rep can add a percentage discount, a fixed discount, or adjust the order total.

At any time the sales rep can view the quote listing by clicking the **Quotes** link in the cart.

If the sales rep needs to save the quote and return to it later, clicking the **New Cart** link saves the quote in **Draft** status and clears the session cart.

Submitting a Vendor Quote

Once the sales rep has made all the necessary modifications, clicking **Submit Quote** creates a legally binding vendor quote that the buyer can accept. The quote status changes to **Submitted** and the sales rep cannot make any further changes to it. If the quote is more than the vendor's approval threshold ($75,000 by default), then the seller approver must authorize the vendor quote before the buyer can view and accept it. If the vendor quote is below the threshold, then it is automatically approved and the buyer can view and accept it.

Note

The default threshold can be changed. For details, see Changing the Seller Approver Threshold

Parent topic: Seller Journey

Related Information

Logging into ASM
Viewing Quotes
Approving or Rejecting a Vendor Quote
Creating a Quote for Buyers

Approving or Rejecting a Vendor Quote

Vendor quotes that exceed the vendor's approval threshold must be authorized by the seller approver before the buyer can view and accept them.

Note

Seller approvers must use the Assisted Service Module (ASM) and select the customer whose quote they'll be working on. For instructions, see Logging into ASM.

The content on this page describes the storefront behavior after the seller approver is signed in through ASM.

By default, any vendor quote submitted by the sales rep that exceeds $75,000 must be approved by the seller approver.

Note

The default threshold can be changed. For details, see Changing the Seller Approver Threshold

Viewing Pending Vendor Quotes

Seller approvers can review all pending vendor quotes for a customer by navigating to the quote listing (**My Accounts** > **Quotes**). The listing displays all vendor quotes that were submitted by the sales rep for that customer, and it has several sorting options:

- date the quote was updated
- quote code
- quote name
- quote status

The quote status indicates which vendor quote the approver needs to act on:

- **Pending**: A vendor quote submitted by the sales rep that exceeds the vendor's approval threshold. This is the only status that the seller approver can act on.
- **Rejected**: A vendor quote that was rejected by the seller approver.
- **Approved**: A vendor quote that was approved by the seller approver, or a vendor quote that was approved automatically because it did not exceed the vendor's threshold.
- **Canceled**: A vendor quote or quote that was canceled by the buyer.

The seller approver can view the details of any vendor quote by clicking the quote name, but can only accept or reject vendor quotes in **Pending** status.

Approving a Vendor Quote

If the seller approver reviews a **Pending** vendor quote and there are no issues with it, clicking **Approve Quote** releases the vendor quote to the buyer, who can then either reject it or accept it and check out.

Rejecting a Vendor Quote

If the **Pending** vendor quote has issues with it, the seller approver clicks **Reject Quote**. This changes the quote status to **Rejected** and it goes back to the sales rep so that the necessary changes can be made.

Parent topic: Seller Journey

Related Information

Logging into ASM
Viewing Quotes
Making a Vendor Quote
Creating a Quote for Buyers

Creating a Quote for Buyers

Sales reps can create quotes on their customers' behalf, or create a vendor quote that they think their customers will find attractive.

Note

Sales reps must use the Assisted Service Module (ASM) and select the customer whose quote they'll be working on. For instructions, see Logging into ASM.

The content on this page describes the storefront behavior after the sales rep is signed in through ASM.

The process for creating quotes by the sales rep is very similar to when a buyer creates a quote. The main difference is that the buyer can't see the quote the sales rep is working while it is in **Draft** status; it only becomes visible to the buyer once the sales rep submits the quote (and, if necessary, approved by the seller approver).

Preparing the Quote

Quotes are created using the active session cart. Sales reps have a few different ways to prepare their cart for a quote:

- Add items from the storefront
- Add items using the Quick Order feature
- Restore a saved cart
- Importing a cart from a CSV file

A quote can only be created if the cart has a minimum total value of $25,000. Note that this value includes any applied promotions.

Note

The minimum threshold can be changed in configuration files. For more details, see Changing the Quote Threshold

Creating the Quote

Once the desired items are in the cart, the quote can be created by clicking **Request a Quote** in the cart page. The sales rep is then redirected to the quote draft page. The session cart is still active and serves as the quote cart until a new cart is created or the quote is submitted. In the quote draft page, the sales rep can:

- Define an expiry date by clicking and selecting the date. If no expiry date is specified, it is set to 30 days from the current date.
- Add a comment for the entire quote
- Add a comment for an individual line item by clicking the icon next to the item
- Change item quantities as in a regular cart
- Add more items by navigating to the storefront and adding items to the cart
- Add discounts by clicking the **Discount** link below the cart subtotal. In the modal that appears, the sales rep can add a discount amount, percentage, or modify the total of the quote.

A quote in **Draft** status can be modified at any time, but it can't be modified once it's submitted as a vendor quote. So if the sales rep wants to work on the quote at a later time before submitting it, he can save it by clicking **New Cart**; this creates a new empty cart and saves the draft quote. The saved quote can be accessed by clicking the **Quotes** link in the cart, or by navigating to ▶My Account ▶ Quotes ▶.

Submitting the Quote

Once the sales rep modifies the quote cart as needed, he can submit the quote as a vendor quote to the buyer by clicking **Submit Quote**. When the quote is submitted as a vendor quote:

- The quote status changes from **Draft** to **Submitted**.
- The session cart is cleared.
- The sales rep can't edit the quote.
- If the vendor quote exceeds the authorization threshold of the vendor, it must be approved by the seller approver. Otherwise, it is approved automatically.
- The buyer can view the approved vendor quote.

Parent topic: Seller Journey

Related Information

Logging into ASM
Viewing Quotes
Making a Vendor Quote
Approving or Rejecting a Vendor Quote

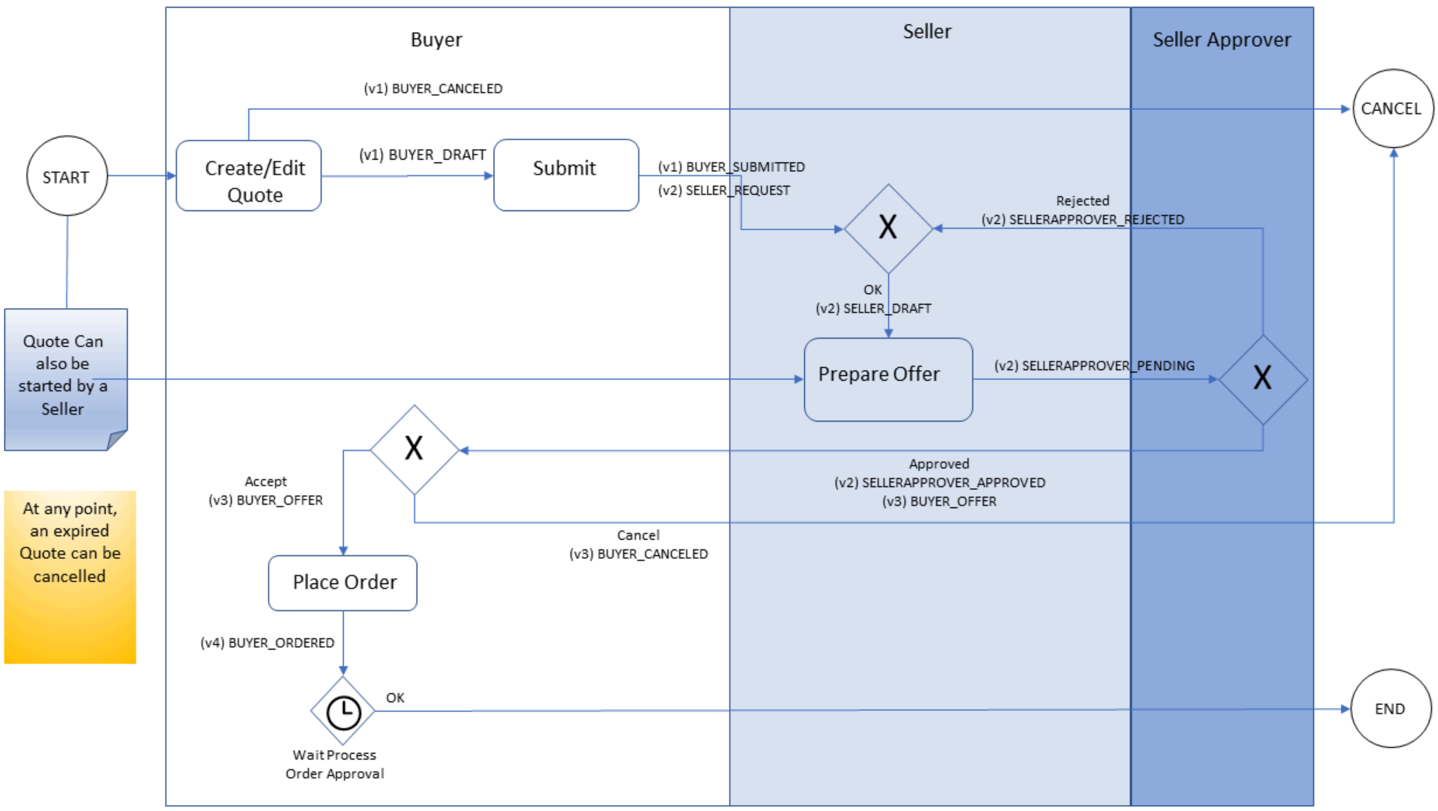
Technical Overview

Learn the general technical workflow for commerce quotes, and gain understanding of the items in the facade layer.

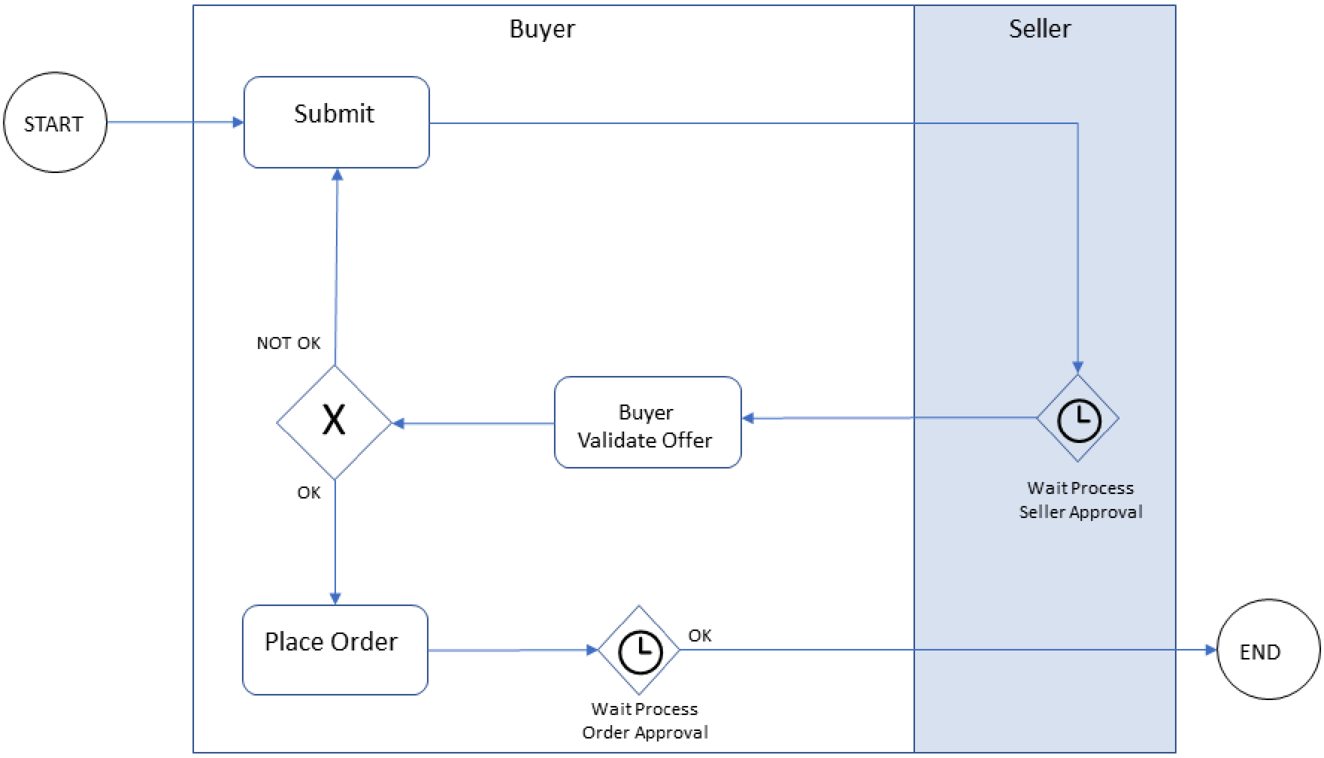
Buyers use their session cart to add items they want quoted. The cart is then converted to a quote cart when the buyer clicks **Request Quote**. Similarly, when sales reps initiate a quote, they add items to a cart, which is then converted to a quote when they click **Submit Quote**. A quote is a separate object from a cart.

Workflow

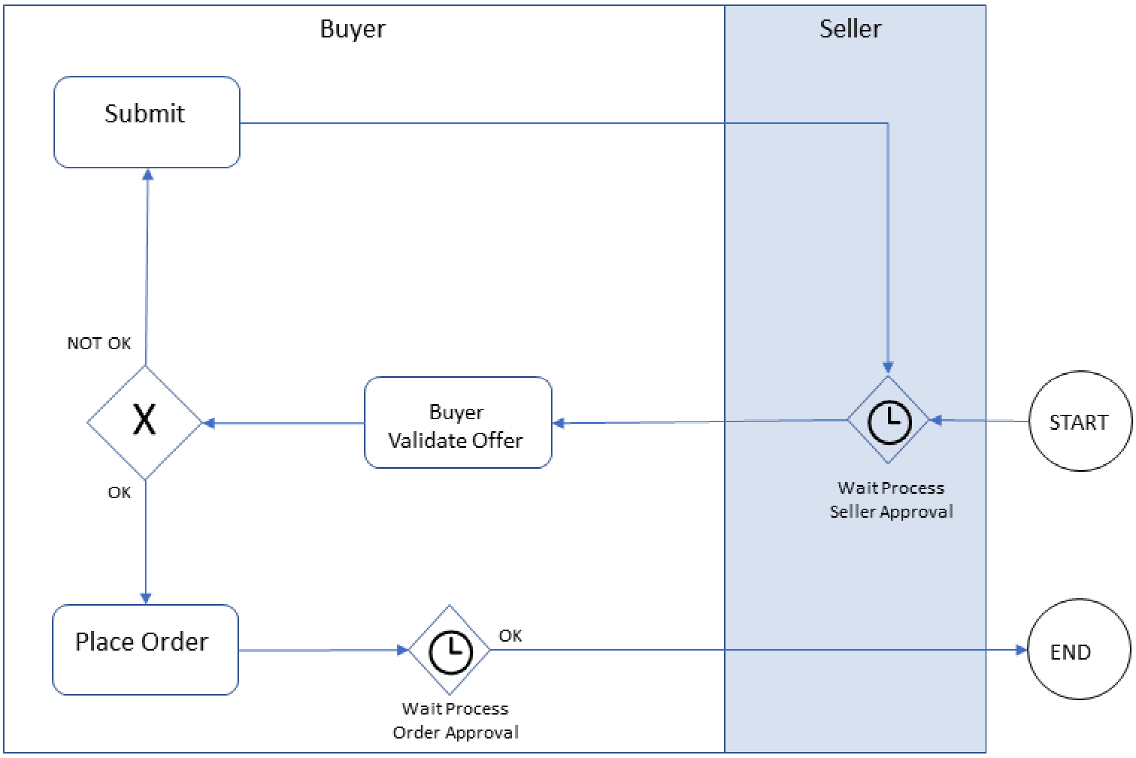
This diagram represents the general quote workflow, and shows the quote status at each point in the workflow. Note that the quote process ends when the quote is canceled, expired, or is converted to an order. If the order is above the buyer organization authorization threshold, it needs approval on the buyer side, but is not part of the quote process.



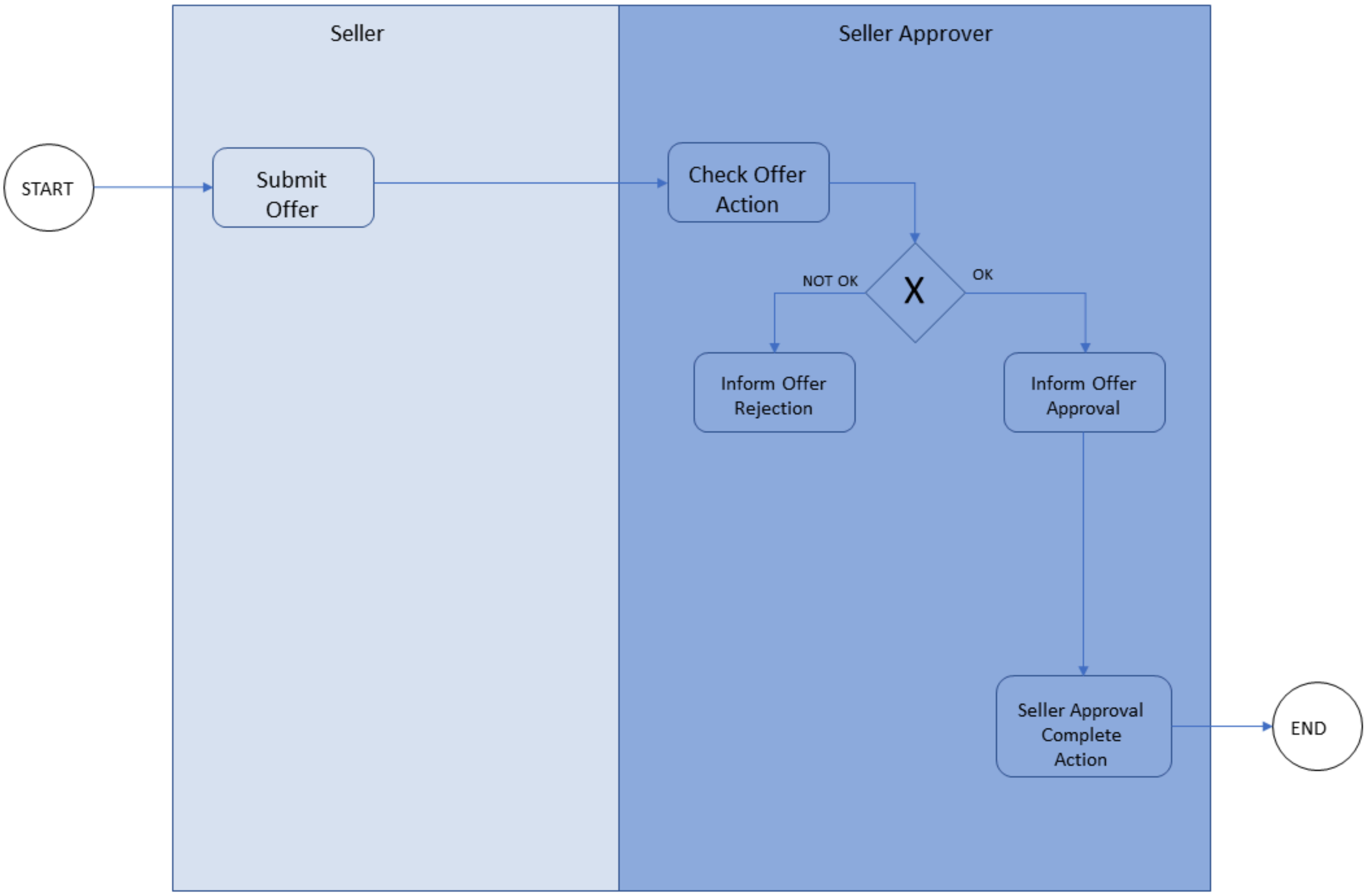
This diagram represents the workflow when the quote is initiated by the buyer.



This diagram represents the workflow when the quote is initiated by the sales rep.



This diagram represents the workflow for the seller approver. This process is triggered when the vendor quote submitted by the sales rep and the value is more than the vendor authorization threshold.



Facade Layer

This section illustrates the DTOs, facades, populators, and controllers in the facade layer. The following colors are used in the diagrams to identify the modules for each item:

Legend

platform-module

- core
- platformservices

commerceservices-module

- commerceservices
- commercefacades

coreaccelerator-module

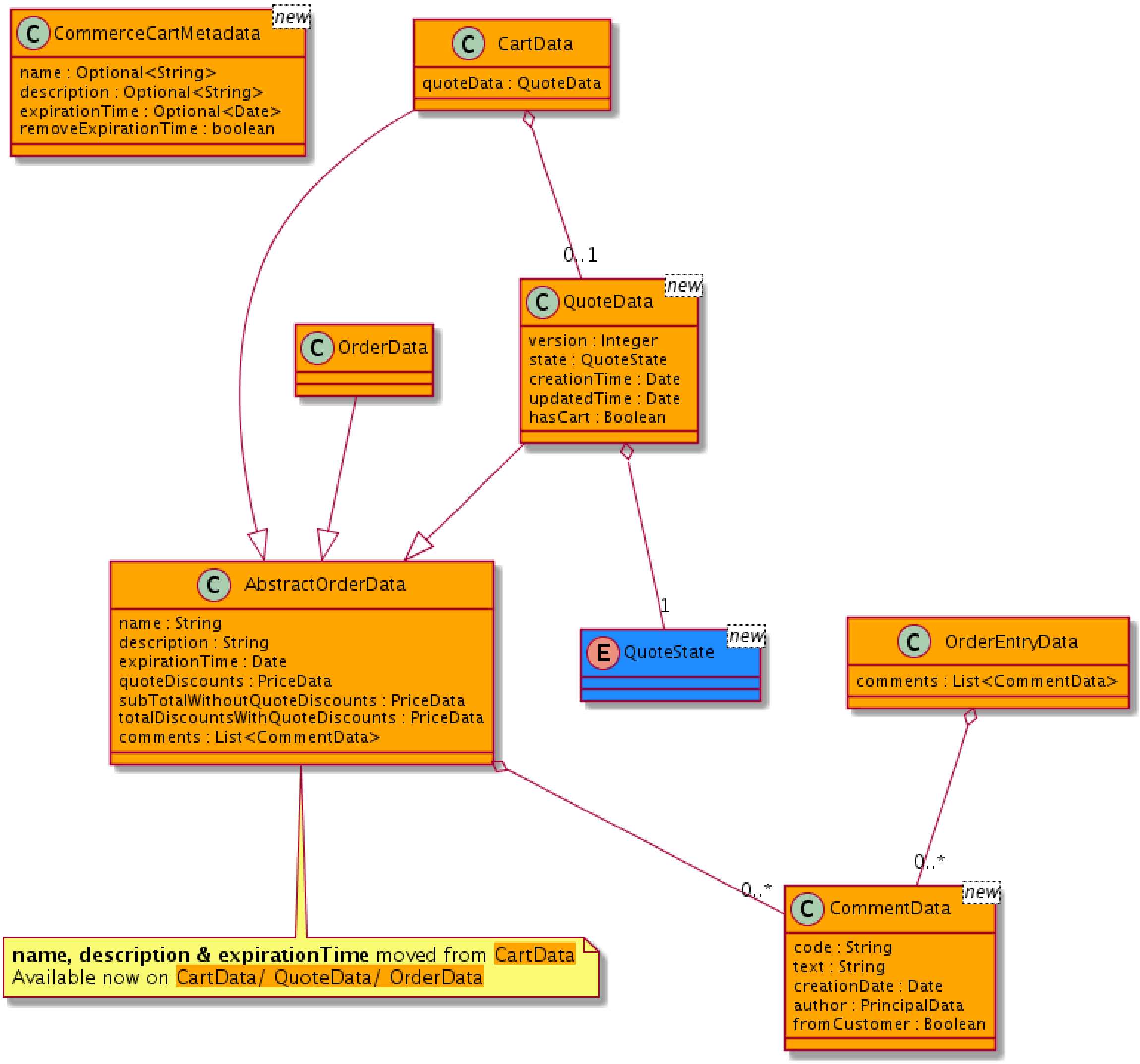
- `acceleratorstorefrontcommons`
- `acceleratorfacades`
- `acceleratorservices`
- `yacceleratorfulfilmentprocess`

b2caccelerator-module

- yacceleratorcore
- yacceleratorfacades
- yacceleratorstorefront

For more information on quote-related items in Platform and `commercerservices`, see the Related Information section at the end of this topic.

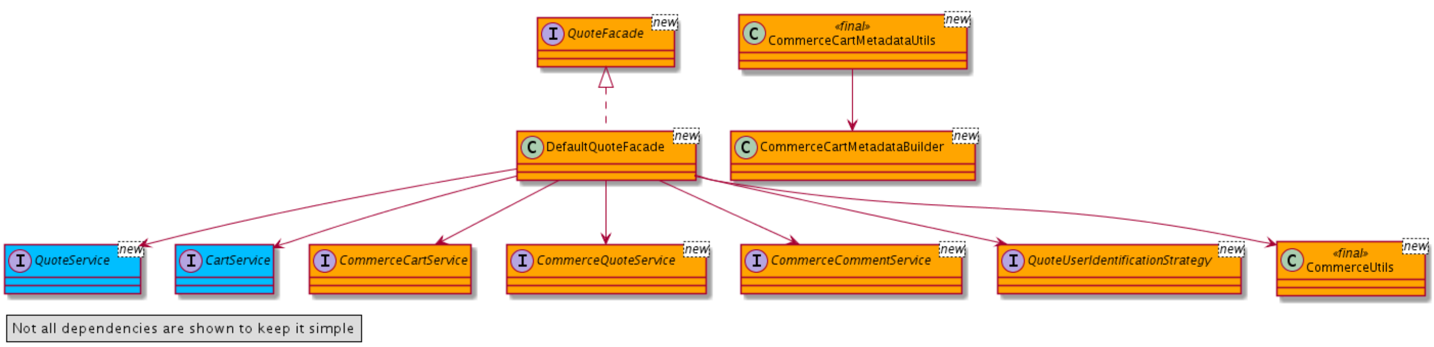
DTOs



Here are some details about the new items:

- `QuoteData`: Extends `AbstractOrderData` and is a DTO used in the view layer to represent `QuoteModel`.
- `CommerceCartMetadata`: DTO used to transfer cart-related metadata to the facade layer.
- `CommerceCartMetadataBuilder`: Builder class to build `CommerceCartMetadata`.

Facades



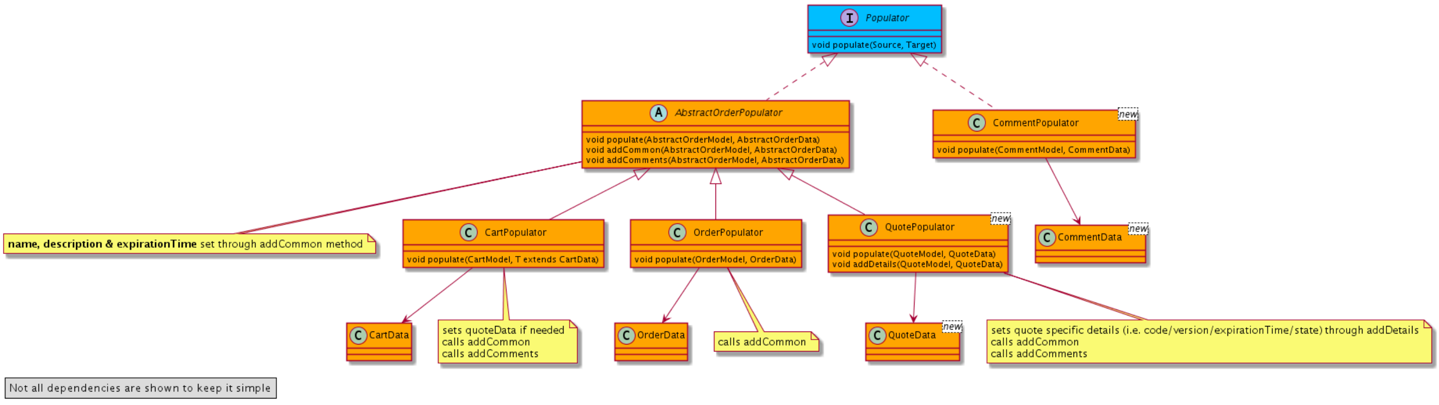
Here are some details about the new items:

- `QuoteFacade`: Facade interface that provides several methods to manage a quote through its life cycle, such as creating, edit, submitting, approving, and rejecting a quote.
- `DefaultQuoteFacade`: Default implementation of `QuoteFacade` that makes use of the following services, strategies, and converters:
  - `CartService`
  - `CommerceCartService`
  - `CommerceQuoteService`
  - `QuoteService`
  - `ModelService`

- UserService
- BaseStoreService
- EnumerationService
- TypeService
- CommerceCommentService
- QuoteUserIdentificationStrategy
- quoteConverter
- cartConverter

- `CommerceUtils`: Utility class for commerce facades. Currently provides a single method of abstraction for the commerce facade layer to `convertPageData` given the source and converter.

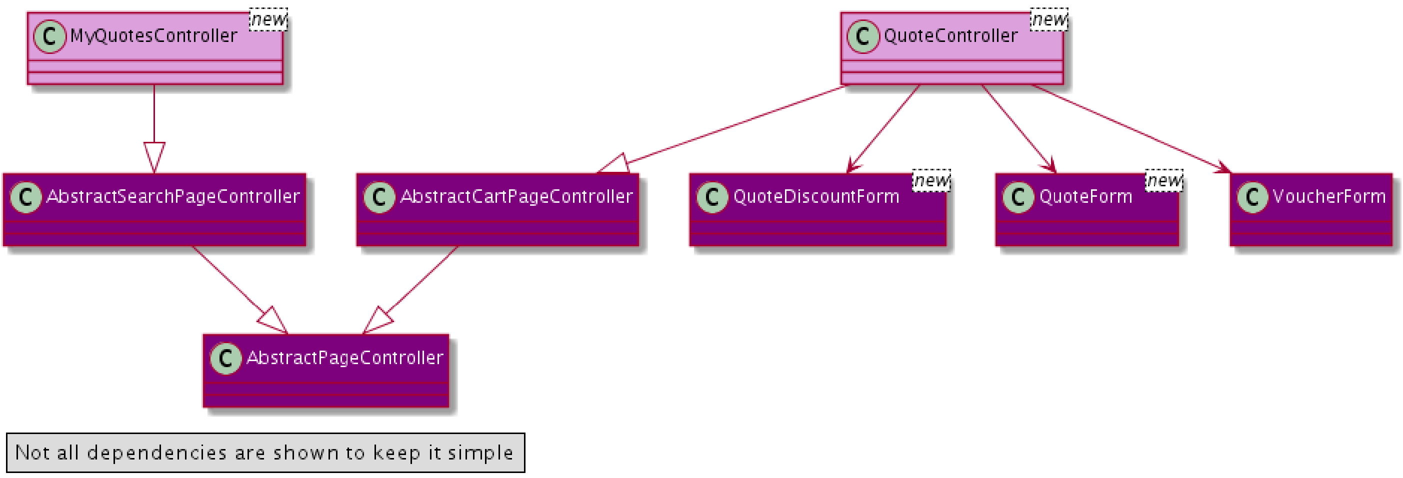
Populators



Here are some details about the new items:

- `CommentData`: DTO used in the view layer to represent `CommentModel`.
- `QuotePopulator`: Extends `AbstractOrderPopulator<QuoteModel, QuoteData>` and populates `QuoteData` from `QuoteModel`.
- `CommentPopulator`: Populates `CommentData` from `CommentModel`.

Controllers



Here are some details about the new items:

- `QuoteDiscountForm`: Used in `QuoteController` to capture quote discount information from the incoming HTTP request.
- `QuoteForm`: Used in `QuoteController` to capture quote metadata information from the incoming HTTP request.
- `MyQuotesController`: Extends `AbstractSearchPageController`. A controller that provides request mappings for accessing quotes from the My Account section. It uses several facades, such as `QuoteFacade`, `VoucherFacade`, `OrderGridFormFacade`, and `CartFacade`.
- `QuoteController`: Extends `AbstractCartPageController`. A controller that provides request mappings for managing quotes. It uses several facades, such as `QuoteFacade`, `VoucherFacade`, and `SaveCartFacade`.

Related Information

For more information on Platform classes and methods that are used for commerce quotes, see Commerce Quotes Items.

For more information on the `commerceservices` classes and methods that are used for commerce quotes, see Commerce Quotes.

Enabling Commerce Quotes in Other Storefronts

Commerce Quotes is implemented in the powertools storefront by default. You can implement the feature in other storefronts by enabling a switch and setting up required CMS content.

Commerce Quotes Switch

Commerce Quotes is enabled by a switch set to `true` in the `project.properties` file of the powertools storefront (located in `hybris/bin/modules/b2b-accelerator/powertoolsstore`):

```
# Specifies whether powertools site is enabled for quote functionality or not.
site.quotes.enabled.powertools=true
```

To enable Commerce Quotes in other storefronts, change the value of the switch to `true` in the `project.properties` file for that storefront. For example, this is the `project.properties` entry for the apparel storefront (located in `hybris/bin/modules/b2c-accelerator/apparelstore`):

```
# Disables the quote feature for these apparel stores.
site.quotes.enabled.apparel-uk=false
site.quotes.enabled.apparel-de=false
```

CMS Content

The next step is to map specific CMS pages and then include content for those pages in the impex files for the storefront you wish to enable Commerce Quotes. This section describes the impex file for the powertools storefront. To enable Commerce Quotes in another storefront, modify the impex for that storefront accordingly.

There are three ContentPages defined in the `cms-content.impex` file that are mapped from controllers and are mandatory CMS components:

CMS Page	URL Mapping	Source Code File
my-quotes	/my-account/my-quotes	MyQuotesController.java
quote-detail	/my-account/my-quotes/{quoteCode}	MyQuotesController.java
quoteEditPage	/quote/{quoteCode}/edit	QuoteController.java

For the powertools storefront, the page definitions are found in the `hybris/bin/modules/b2b-accelerator/powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/cms-content.impex`:

```
 # Functional Content Pages
INSERT_UPDATE ContentPage;$contentCV[unique=true];uid[unique=true];name;masterTemplate(uid,$contentCV);label;defaultPage[default='tru
...
;;quote-detail;My Quote Details;AccountPageTemplate;quote-detail
;;my-quotes;My Quotes Page;AccountPageTemplate;my-quotes
;;quoteEditPage;Quote Edit Page;AccountPageTemplate;quoteEditPage
```

The `hybris/bin/modules/b2b-accelerator/powertoolsstore/resources/powertoolsstore/import/sampledata/contentCatalogs/powertoolsContentCatalog/cms-content.impex` impex file is used to set up the actual content defined in the `cms-content.impex` file located in the `coredata` folder:

```
 ##---- level 4. children of My Account Nav ----##
INSERT_UPDATE CMSNavigationNode;uid[unique=true];$contentCV[unique=true];name;parent(uid, $contentCV);links(&linkRef);&nodeRef
...
;MyQuotesNavNode;;My Quotes;MyAccountNavNode;;MyQuotesNavNode
;MyQuotesNavNodeEntry;;MyQuotesNavNodeEntry;MyQuotesNavNode;MyQuotesLink;
INSERT_UPDATE CMSLinkComponent;$contentCV[unique=true];uid[unique=true];name;url;&linkRef;target(code)[default='sameWindow']
...
;;MyQuotesLink;MyQuotesLink;/my-account/my-quotes;MyQuotesLink;
###### Quote Edit Page Start ######
INSERT_UPDATE ContentSlotForPage;$contentCV[unique=true];uid[unique=true];position[unique=true];page(uid,$contentCV)[unique=true][de
;;SideContent-quoteEditPage;SideContent;;SideContentSlot-quoteEditPage;;;
;;TopContent-quoteEditPage;TopContent;;TopContentSlot-quoteEditPage;;;
;;BodyContent-quoteEditPage;BodyContent;;BodyContentSlot-quoteEditPage;;;
;;BottomContent-quoteEditPage;BottomContent;;BottomContentSlot-quoteEditPage;;;
INSERT_UPDATE ContentSlot;$contentCV[unique=true];uid[unique=true];name;active;cmsComponents(&componentRef);;;
;;SideContentSlot-quoteEditPage;Side Content Slot for Quote Edit Page;true;;;;
;;TopContentSlot-quoteEditPage;Top Content Slot for Quote Edit Page;true;QuoteHeadlineComponent;;;
;;BodyContentSlot-quoteEditPage;Body Content Slot for Quote Edit Page;true;QuoteEditDetailsComponent,QuoteCartEntriesComponent;;;
;;BottomContentSlot-quoteEditPage;Bottom Content Slot for Quote Edit Page;true;CartTotalsComponent;;;
INSERT_UPDATE JspIncludeComponent;$contentCV[unique=true];uid[unique=true];name;page;actions(uid,$contentCV);&componentRef
;;QuoteHeadlineComponent;Quote Headline Component;/WEB-INF/views/responsive/pages/quote/quoteHeadline.jsp;;QuoteHeadlineComponent
;;QuoteEditDetailsComponent;Quote Edit Details Component;/WEB-INF/views/responsive/pages/quote/quoteEditDetails.jsp;;QuoteEditDetail
;;QuoteCartEntriesComponent;Quote Cart Entries Component;/WEB-INF/views/responsive/pages/quote/quoteCartEntries.jsp;;QuoteCartEntrie
###### Quote Edit Page End ######
###### Account My Quotes Start ######
INSERT_UPDATE ContentSlotForPage;$contentCV[unique=true];uid[unique=true];position[unique=true];page(uid,$contentCV)[unique=true][de
;;SideContent-my-quotes;SideContent;;SideContent-my-quotes;;;
;;BodyContent-my-quotes;BodyContent;;BodyContent-my-quotes;;;
INSERT_UPDATE ContentSlot;$contentCV[unique=true];uid[unique=true];name;active;cmsComponents(&componentRef);;;
;;SideContent-my-quotes;Side Content Slot for My Account My Quotes;true;;;;
;;BodyContent-my-quotes;Body Content Slot for My Account My Quotes;true;AccountMyQuotesComponent;;;
INSERT_UPDATE JspIncludeComponent;$contentCV[unique=true];uid[unique=true];name;page;actions(uid,$contentCV);&componentRef
;;AccountMyQuotesComponent;Account My Quotes Component;accountMyQuotesPage.jsp;;AccountMyQuotesComponent
###### Account My Quotes End ######
###### Account Quote Details Start ######
INSERT_UPDATE ContentSlotForPage;$contentCV[unique=true];uid[unique=true];position[unique=true];page(uid,$contentCV)[unique=true][de
;;SideContent-quote-detail;SideContent;;SideContent-quote-detail;;;
;;BodyContent-quote-detail;BodyContent;;BodyContent-quote-detail;;;
INSERT_UPDATE ContentSlot;$contentCV[unique=true];uid[unique=true];name;active;cmsComponents(&componentRef);;;
;;SideContent-quote-detail;Side Content Slot for My Account Quote Details;true;;;;
;;BodyContent-quote-detail;Body Content Slot for My Account Quote Details;true;AccountQuoteDetailsOverviewComponent,QuoteDetailsEntr
INSERT_UPDATE JspIncludeComponent;$contentCV[unique=true];uid[unique=true];name;page;actions(uid,$contentCV);&componentRef
;;AccountQuoteDetailsOverviewComponent;Account Quote Details Overview Component;accountQuoteDetailOverview.jsp;;AccountQuoteDetailsO
;;QuoteDetailsEntriesComponent;Quote Cart Entries Component;/WEB-INF/views/responsive/pages/quote/quoteDetailsEntries.jsp;;QuoteDeta
;;QuoteTotalsComponent;Quote Totals Display Component;/WEB-INF/views/responsive/pages/quote/quoteTotalsDisplay.jsp;;QuoteTotalsCompo
###### Account Quote Details End ######
###### Restriction Start ######
INSERT_UPDATE CMSUserGroupRestriction;$contentCV[unique=true];uid[unique=true];name;userGroups(uid);includeSubgroups;components(&lin
;;MyAccountLinkCustomerGroupRestriction;My Account Link Customer Group Restriction;b2bcustomergroup;true;AddressBookLink,PaymentDeta
;;MyAccountLinkApproverGroupRestriction;My Account Link Approver Group Restriction;b2bapprovergroup;true;ApprovalDashboardLink
###### Restriction End ######
###### Media Start ######
INSERT_UPDATE Media;$contentCV[unique=true];code[unique=true];mime;realfilename;@media[translator=de.hybris.platform.impex.jalo.medi
...
;;myQuotesPagePreview;text/png;MyQuotesPage.png;$jarResourceCms/preview-images/powertools/MyQuotesPage.png
;;quoteDetailPreview;text/png;UpdatePasswordPage.png;$jarResourceCms/preview-images/powertools/QuoteDetailPage.png
###### Media End ######
###### update contentPage to set previewImage Start ######
## set previewImage and linkComponent ##
UPDATE ContentPage;$contentCV[unique=true];uid[unique=true];previewImage(code, $contentCV)
...
;;my-quotes;myQuotesPagePreview
;;my-replenishment-orders;myReplenishmentOrdersPagePreview
;;quote-detail;quoteDetailPreview
###### update contentPage to set previewImage End ######
```

Parent topic: Technical Overview

Related Information

Quote Statuses

Email Notifications

User Types

User Type Identification and State Selection Strategies

Changing the Quote Threshold

Changing the Seller Approver Threshold

Commerce Quotes Items

Quote Statuses

The quote status indicates where a quote is in the negotiation process. The status displayed in the storefront for a given quote depends on which role is viewing the quote.

Any role can view all quotes that are visible to that role by navigating to **My Account** › **Quotes** in the storefront. The list displays all the quotes and their statuses. As a quote moves through the negotiation process, a copy of the quote is created for the next step in the workflow. The quote copy displayed in the list depends on the role that is viewing the list. For example, a quote submitted by the buyer to the sales rep displays the following:

- The buyer sees the `Buyer Submitted` copy of the quote, which displays `Submitted` in the storefront for the buyer.

- The sales rep sees the `Seller Request` copy of the quote, which displays `Requested` in the storefront.
- The seller approver does not see the quote; it is only visible once the sales rep submits the vendor quote.

The quote statuses (`Buyer Submitted` and `Seller Request`) refer to the status displayed in Backoffice Administration Cockpit. To view quotes in Backoffice, log into Backoffice and navigate to Order > Quotes.

This table shows all the available quote statuses, and what is displayed for the different roles for each status:

Status Code (as seen in Backoffice)	Description	Buyer View	Sales Rep View	Sales Approver View
`Buyer Draft`	A quote that the buyer is working on and hasn't submitted to the sales rep. This can occur either when the buyer is creating a new quote, or modifying a vendor quote.	`Draft`	Not visible	Not visible
`Buyer Submitted`	A draft quote that has been submitted to the sales rep. A copy of the quote with `Seller Request` status is created.	`Submitted`	n/a - sees the `Seller Request` copy of the quote	Not visible
`Seller Request`	A new quote request submitted by the buyer, or a vendor quote that was modified by the buyer. This is a copy of the `Buyer Submitted` quote.	n/a - sees the `Buyer Submitted` copy of the quote	`Requested`	Not visible
`Seller Draft`	A quote that the sales rep is currently working on and hasn't submitted as a vendor quote. The `Seller Draft` is either a copy of a `Buyer Submitted` quote or a new quote created by the sales rep on the buyer's behalf.	n/a - sees the `Buyer Submitted` copy of the quote	`Draft`	Not visible
`SELLER_SUBMITTED`	A quote that has been submitted by the sales rep as a legally binding vendor quote. If the quote amount exceeds the vendor's authorization threshold, it must be approved by the seller approver (a copy of the quote with `Seller Approver Pending` status is created). Otherwise, it is approved automatically (`Seller Approver Approved` status copy is created).	n/a - sees the `Buyer Submitted` copy of the quote	n/a: • Sees the `Seller Approver Approved` copy if the vendor quote does not need approval • Sees the `Seller Approver Pending` copy if the vendor quote requires approval **i Note** When the sales rep first submits the vendor quote, the quote listing displays `Submitted` status, but when the listing is refreshed or the vendor quote details are viewed, then the status is updated as indicated above.	n/a: • Sees the `Seller Approver Approved` copy if the vendor quote does not need approval • Sees the `Seller Approver Pending`
`Seller Approver Pending`	A vendor quote submitted by the sales rep that exceeds the vendor's authorization threshold and has not yet been approved by the seller approver. copy if the vendor quote requires approval	n/a - sees the `Buyer Submitted` copy of the quote	`Pending Approval`	`Pending Approval`
`Seller Approver Rejected`	A vendor quote that was rejected by the seller approver. The quote goes back to sales rep for editing.	n/a - sees the `Buyer Submitted` copy of the quote	n/a - sees the `Seller Request` copy of the quote	`Rejected`

Status Code (as seen in Backoffice)	Description	Buyer View	Sales Rep View	Sales Approver View
`Seller Approver Approved`	A vendor quote that has been approved by the seller approver. Control of the vendor quote is passed to the buyer (`Buyer Offer` status copy created).	n/a - sees the `Buyer Offer` copy of the quote	`Approved`	`Approved`
`Buyer Offer`	An approved vendor quote that the buyer can accept and convert to an order, or reject and continue negotiation.	`Vendor Quote`	n/a - sees the `Seller Approver Approved` copy of the quote	n/a - sees the `Seller Approver Approved` copy of the quote
`Buyer Ordered`	A vendor quote that has been accepted by the buyer and converted to an order.	`Ordered`	`Ordered`	`Ordered`
`Canceled`	A quote or vendor quote that was canceled by the buyer.	`Canceled`	`Canceled`	`Canceled`
`Expired`	A vendor quote that has passed the expiry date.	`Expired`	`Expired`	`Expired`

Parent topic: Technical Overview

Related Information

Enabling Commerce Quotes in Other Storefronts
Email Notifications
User Types
User Type Identification and State Selection Strategies
Changing the Quote Threshold
Changing the Seller Approver Threshold
Commerce Quotes Items

Email Notifications

During the quote negotiation process, the buyer receives email notifications at specific points in the process. The notifications include the **Quote Discount** field to reflect any discount the sales rep applied to the vendor quote.

Email notifications are sent when:

- The buyer submits a quote
- The buyer accepts the vendor quote and places an order
- The buyer cancels the quote
- The vendor submits a quote
- The vendor quote will expire soon
- The vendor quote has expired

All email notifications display an itemized list of all the products in the quote. Details about each notification are provided in the following sections.

Buyer Submits Quote

Buyers receive an email notification when they submit a quote to their sales rep by clicking **Submit Quote** on the draft quote page. The notification confirms that the quote has been submitted.

When the buyer submits the quote, these steps are performed:

1. The `DefaultCommerceQuoteService` service is invoked.
2. The `QuoteBuyerSubmitEvent` event is published for the submitted quote.
3. The `QuoteBuyerSubmitEventListener` listener catches the `QuoteBuyerSubmitEvent` event and triggers the `QuoteProcess` business process that handles the email notification.
4. The `QuoteProcess` (defined in `yacceleratorcore/resources/yacceleratorcore/processes/quote/quote-buyer-process.xml`) performs these steps:
    a. Creates a copy of the quote that the sales rep can work on (the copy is in Seller Request status).

b. Generates a `BuyerQuoteSubmission` email.

c. Sends the email.

d. Removes the sent `BuyerQuoteSubmission` email.

The `quoteBuyerSubmission` template is used for these notifications, and is located in `yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteBuyerSubmissionBody.vm`.

Buyer Places an Order

Buyers receive an order confirmation notification when they accept and check out a vendor quote. If the order is above the buyer organization's approval threshold, it must be approved before the order is placed.

There are three notifications that can be sent; each one has its own event, listener, and business process:

- Order pending approval
  - Sent if the order needs to be approved by the buyer's manager.
  - Event: `OrderPendingApprovalEvent`
  - Listener: `OrderPendingApprovalEventListener`
  - Process: `orderPendingApprovalEmailProcess`
  - Email template: `orderPendingApproval`, located in `powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-orderPendingApprovalBody.vm`.
- Order approval rejection
  - Sent if the order was not approved by the buyer's manager.
  - Event: `OrderApprovalRejectionEvent`
  - Listener: `OrderApprovalRejectionEventListener`
  - Process: `orderApprovalRejectionEmailProcess`
  - Email template: `orderApprovalRejection`, located in `powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-orderApprovalRejectionBody.vm`.
- Order confirmation
  - Sent if the order was approved by the buyer's manager, or if the placed order does not require approval.
  - Event: `OrderPlacedEvent`
  - Listener: `OrderConfirmationEventListener`
  - Process: `orderConfirmationEmailProcess`
  - Email template: `orderConfirmation`, located in `yacceleratorcore/resources/yacceleratorcore/import/emails/email-orderConfirmationBody.vm`.

The `Quote Savings` field has been added to the three templates to reflect any quote discounts applied by the sales rep. Note that this field was not added to replenishment order notifications (`replenishmentOrderConfirmation` and `replenishmentOrderPlaced`) as replenishment is not supported for quoted orders.

The field is not displayed when quote savings is null or a zero value.

Buyer Cancels Quote

Buyers can cancel quotes when:

- The quote has been created but not submitted to the sales rep for negotiation (quote is in draft status).
- The vendor quote submitted by the sales rep does not meet the buyer's needs.

In either case, buyers can cancel the quote or vendor quote by clicking **Cancel Quote** in the quote cart.

When the buyer cancels a quote, these steps are performed:

1. The `DefaultCommerceQuoteService` service is invoked.
2. A `QuoteCancelEvent` event is published for the canceled quote.
3. The `QuoteCancelEventListener` listener catches the `QuoteCancelEvent` and triggers the `QuoteProcessModel` business process.

4. The `QuoteProcessModel` (defined in `yacceleratorcore/resources/yacceleratorcore/processes/quote/quote-post-cancellation-process.xml`) performs these steps:
    a. Generates a `BuyerQuoteCancellation` email.
    b. Sends the email.
    c. Removes the sent `BuyerQuoteCancellation` email.

The `quoteBuyerCancellation` is used for this notification, and is located in `yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteBuyerCancellationBody.vm`.

Vendor Quote Expires Soon

Buyers receive a notification when a vendor quote will expire soon. The `QuoteToExpireSoonJob` cron job finds quotes that qualify for the notification. A quote qualifies for the notification if:

- It is in Buyer Offer status
- It will expire in the number of days specified in the `quotetoexpiresoonjob.daystoexpire` configuration property

You can specify when to send the notification by defining the number of days left to quote expiry. By default, this value is set to 3. Note that this value represents calendar days; weekend days are included in this value. The cron job triggers twice a day (6 a.m. and 6 p.m.).

When `QuoteToExpireSoonJob` is triggered, these steps are performed:

1. A `QuoteToExpireSoonEvent` event is published for every quote that will expire in the number of days specified in the cron job.
2. The `QuoteToExpireSoonEventListener` listener catches the `QuoteToExpireSoonEvent` event and triggers the `QuoteProcess` business process.
3. The `QuoteProcess` (defined in `yacceleratorcore/resources/yacceleratorcore/processes/quote/quote-to-expire-soon-email-process.xml`) performs these steps:
    a. Generates a `QuoteToExpireSoon` email.
    b. Sends the email.
    c. Removes the sent `QuoteToExpireSoon` email.
    d. Marks the email as sent.

The last step is accomplished by setting `QuoteNotificationType.EXPIRING_SOON` in the `Generated Notifications` attribute of the quote. This is used by `QuoteToExpireSoonJob` to filter out any quotes for which this notification has been sent already.

The `quoteToExpireSoon` template is used for this notification, and is located in `yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteToExpireSoonBody.vm`.

Vendor Quote has Expired

Buyers receive a notification when a vendor quote has expired. The `QuoteExpiredJob` cron job finds quotes that qualify for the `QuoteExpired` notification. A quote qualifies for this notification if:

- It is in Buyer Offer status
- It has expired (`QuoteModel.expirationTime` attribute)

By default, the trigger configuration is once a day at midnight.

When `QuoteExpiredJob` is triggered, these steps are performed:

1. A `QuoteExpiredEvent` is published for each expired vendor quote.
2. The `QuoteExpiredEventListener` listener catches the `QuoteExpiredEvent` event and triggers the `QuoteProcess` business process.
3. The `QuoteProcess` (defined in `yacceleratorcore/resources/yacceleratorcore/processes/quote/quote-expired-email-process.xml`) performs these steps:
    a. Generates the `QuoteExpired` email.
    b. Sends the email.
    c. Removes the sent `QuoteExpired` email.
    d. Marks the email as sent.

The last step is accomplished by setting `QuoteNotificationType.EXPIRED` in the `Generated Notifications` attribute of the quote. This is used by `QuoteExpiredJob` to filter out any quotes for which this notification has been sent already.

The `quoteExpired` template is used for this notification, and is located in `yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteExpiredBody.vm`.

Email Template Features

The email templates include the following features:

- make the quote summary section consistent across all emails and storefront pages that contain it.
- remove unused templates or irrelevant parts of the emails.
- Ensuring consistent positioning of the **Order Discounts** field before **Quote Discount**.
- Displaying both **Order Discounts** and **Quote Discount** fields with a minus sign (-) before the amount.
- Removing unused quote email templates (`QuoteOrderRejectEmailTemplate` and `QuoteOrderApproveEmailTemplate`)
- Removing **Quote Discount** from replenishment emails as replenishment is not supported for quoted orders.

These email templates are found in the following extensions:

- powertoolsstore
  - `orderApprovalRejection` (`powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-orderApprovalRejectionBody.vm`)
  - `orderPendingApproval` (`powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-orderPendingApprovalBody.vm`)
  - `replenishmentOrderConfirmation` (`powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-replenishmentOrderConfirmationBody.vm`)
  - `replenishmentOrderPlaced` (`powertoolsstore/resources/powertoolsstore/import/coredata/contentCatalogs/powertoolsContentCatalog/emails/email-replenishmentOrderPlacedBody.vm`)
- yacceleratorcore
  - `orderConfirmation` (`yacceleratorcore/resources/yacceleratorcore/import/emails/email-orderConfirmationBody.vm`)
  - `quoteBuyerCancellation` (`yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteBuyerCancellationBody.vm`)
  - `quoteBuyerSubmission` (`yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteBuyerSubmissionBody.vm`)
  - `quoteToExpireSoon` (`yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteToExpireSoonBody.vm`)
  - `quoteExpired` (`yacceleratorcore/resources/yacceleratorcore/import/emails/email-quoteExpiredBody.vm`)

Parent topic: Technical Overview

Related Information

Enabling Commerce Quotes in Other Storefronts
Quote Statuses
User Types
User Type Identification and State Selection Strategies
Changing the Quote Threshold
Changing the Seller Approver Threshold

User Types

The `commerceorgsamplesaddon` AddOn overrides some of the user group definitions in `commerceservices` so that they can be used for in the Commerce Quotes workflow.

There are three user types that are involved in the Commerce Quotes workflow:

- **buyer**: A customer who requests a quote.
- **seller**: A sales rep of the vendor organization who modifies a requested quote. If the quote amount is more than the vendor's authorization threshold, then the quote needs to be approved by the seller approver.
- **seller approver**: A role in the vendor organization that approves any quotes submitted by the sales rep that are more than the authorization threshold.

`commerceservices` defines the following properties for the quote user types:

```
# Quote User Type Groups
commerceservices.quote.buyer.usergroup.uid=customergroup
commerceservices.quote.seller.usergroup.uid=orgemployeegroup
commerceservices.quote.seller.approver.usergroup.uid=orgemployeegroup
```

The `commerceorgsamplesaddon` AddOn overrides the definitions for the sales rep and seller approver:

```
# Quote User Type Groups
commerceservices.quote.seller.usergroup.uid=salesemployeegroup
commerceservices.quote.seller.approver.usergroup.uid=salesapprovergroup
```

When the Assisted Service Module (ASM) is installed, members of the `salesemployeegroup` are also members of the `asagentsalesgroup`, and can log into ASM to work on quotes for their buyers. This relation is defined in `/commerceorgsamplesaddon/resources/commerceorgsamplesaddon/import/addons/assistedservicestorefront/common/user-groups.impex`:

```
INSERT_UPDATE PrincipalGroupRelation;source(uid)[unique=true];target(uid)[unique=true]
;salesemployeegroup;asagentsalesgroup
```

The buyer definition is not changed by `commerceorgsamplesaddon`. For the powertools storefront, the sample B2B customers can be used. B2B customers are members of the `b2bcustomergroup`, which is part of `customergroup`.

Parent topic: Technical Overview

Related Information

Enabling Commerce Quotes in Other Storefronts
Quote Statuses
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User Type Identification and State Selection Strategies
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Changing the Seller Approver Threshold
Commerce Quotes Items

User Type Identification and State Selection Strategies

Several strategies are used to identify user types so that the correct quotes are visible to specific user types.

There are three user types that are involved in the Commerce Quote workflow: buyer, seller (sales rep), and seller approver. During the negotiation process, a quote is visible to specific users. This is determined by the user type and quote status. For example, when a buyer creating a quote, it is in **Draft** status and cannot be viewed by the sales rep or seller approver.

State Selection Strategies

To determine which quotes are visible to which user type, the following strategies are used:

- `AssistedServiceQuoteUserIdentificationStrategy`: Used when the Assisted Service Module (ASM) is installed and checks whether there is an ASM session for the user and that the agent is set within the ASM session. If those conditions are true, it then attempts to determine the quote user type for the agent. If the quote user type could be determined, it returns the agent instance. Otherwise it falls back on a call to `getCurrentQuoteUser` from `DefaultQuoteUserIdentificationStrategy`. The same fallback call (`getCurrentQuoteUser` from `DefaultQuoteUserIdentificationStrategy`) is also used in the case when there is no ASM session for the user.
- `DefaultQuoteUserIdentificationStrategy`: Used when ASM is not installed or for the fallback call from `AssistedServiceQuoteUserIdentificationStrategy` when there is no ASM session. The implementation of the `getCurrentQuoteUser` method exposed by this strategy returns the current user as provided by the `UserService`.
- `DefaultQuoteUserTypeIdentificationStrategy`: Used to determine the quote user type based on the input user model parameter of the `getCurrentQuoteUserType` method. The quote user type is determined by checking the membership of the user to the following groups in the order indicated below:
    - **seller approver group**, defined through the `commerceservices.quote.seller.approver.usergroup.uid` property.
    - **seller group**, defined through the `commerceservices.quote.seller.usergroup.uid` configuration property.
    - **buyer group**, defined through the `commerceservices.quote.buyer.usergroup.uid` configuration property.

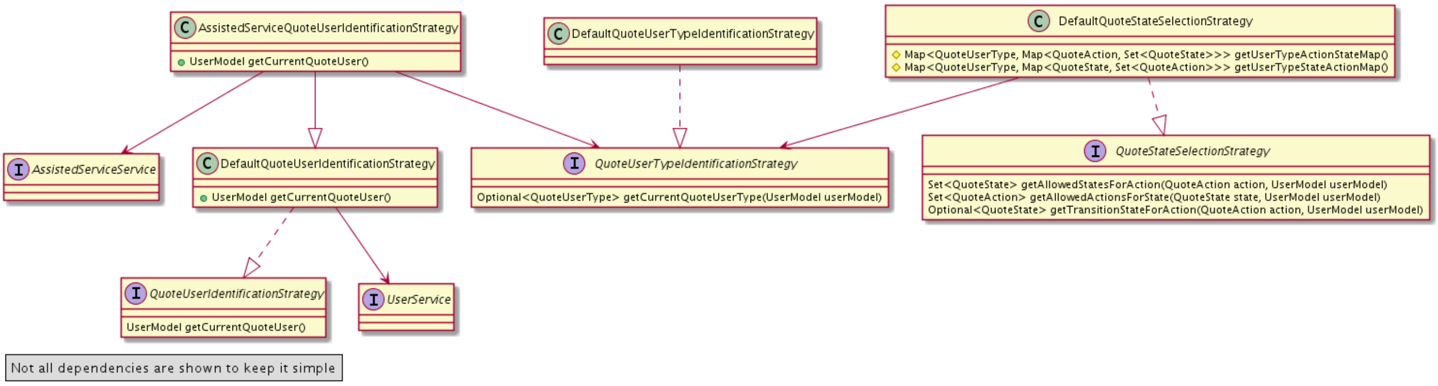
  If the user is not a member of any of the above groups, then `Optional.empty()` is returned. The groups indicated above are set as properties of the `DefaultQuoteUserTypeIdentificationStrategy` strategy through the bean definition in the `commerceservices-spring.xml` file.

- `DefaultQuoteStateSelectionStrategy`: Used to determined the list of accessible quotes states based on the user model, and the quote action performed by the user is provided as input parameters to the `getAllowedStatesForAction` method. This method relies on the `QuoteUserTypeIdentificationStrategy` implementation (`DefaultQuoteUserTypeIdentificationStrategy`) to determine the user type for the user model input parameter. If the user type could not be determined, then an empty set of quote states is returned. Otherwise, the configured set of the quotes states for the determined user type and the quote action being performed is returned. The quote states accessible to the different quote user types and quote actions are configured in `commerceservices-spring.xml` and made available to `defaultQuoteStateSelectionStrategy` and `quoteStateSelectionStrategy`.

ℹ Note

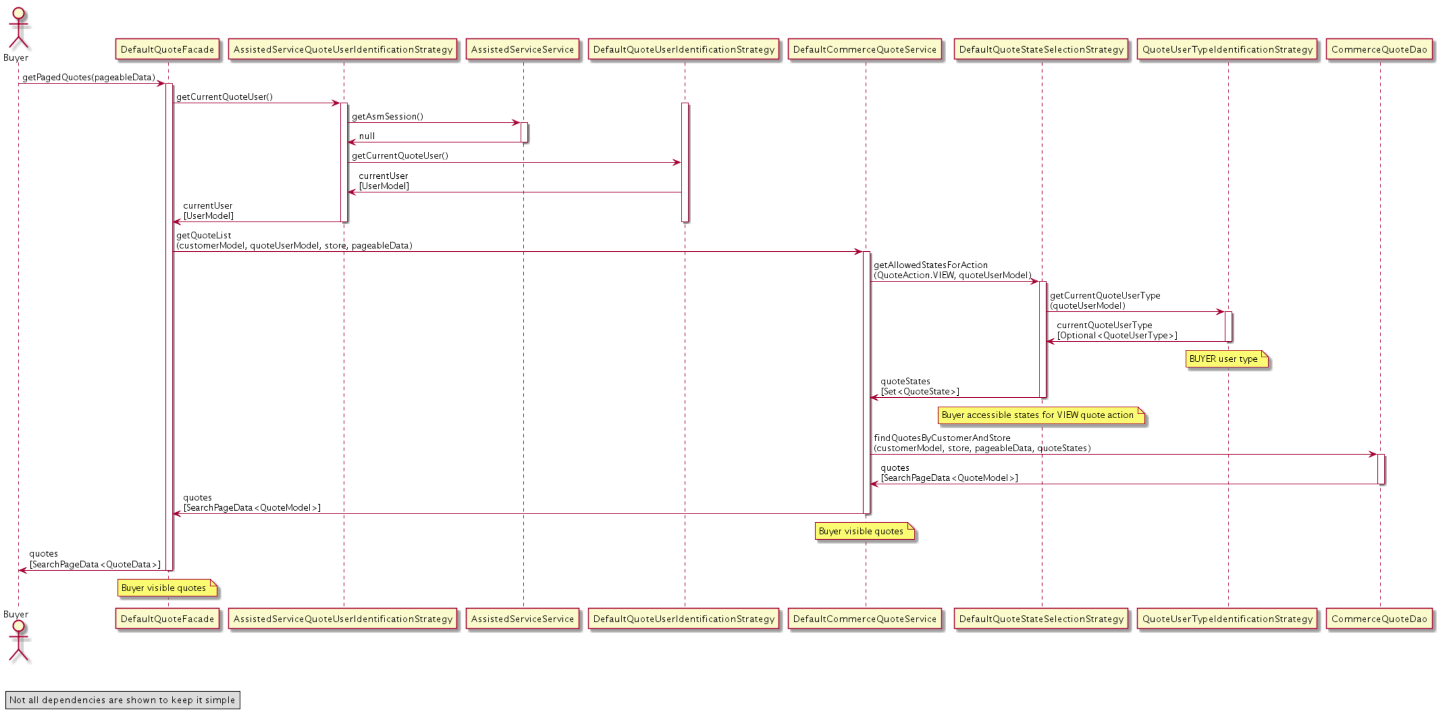
To view the diagrams in this topic, right-click the image and view it in a new tab.

This diagram illustrates the dependencies between the different strategies:



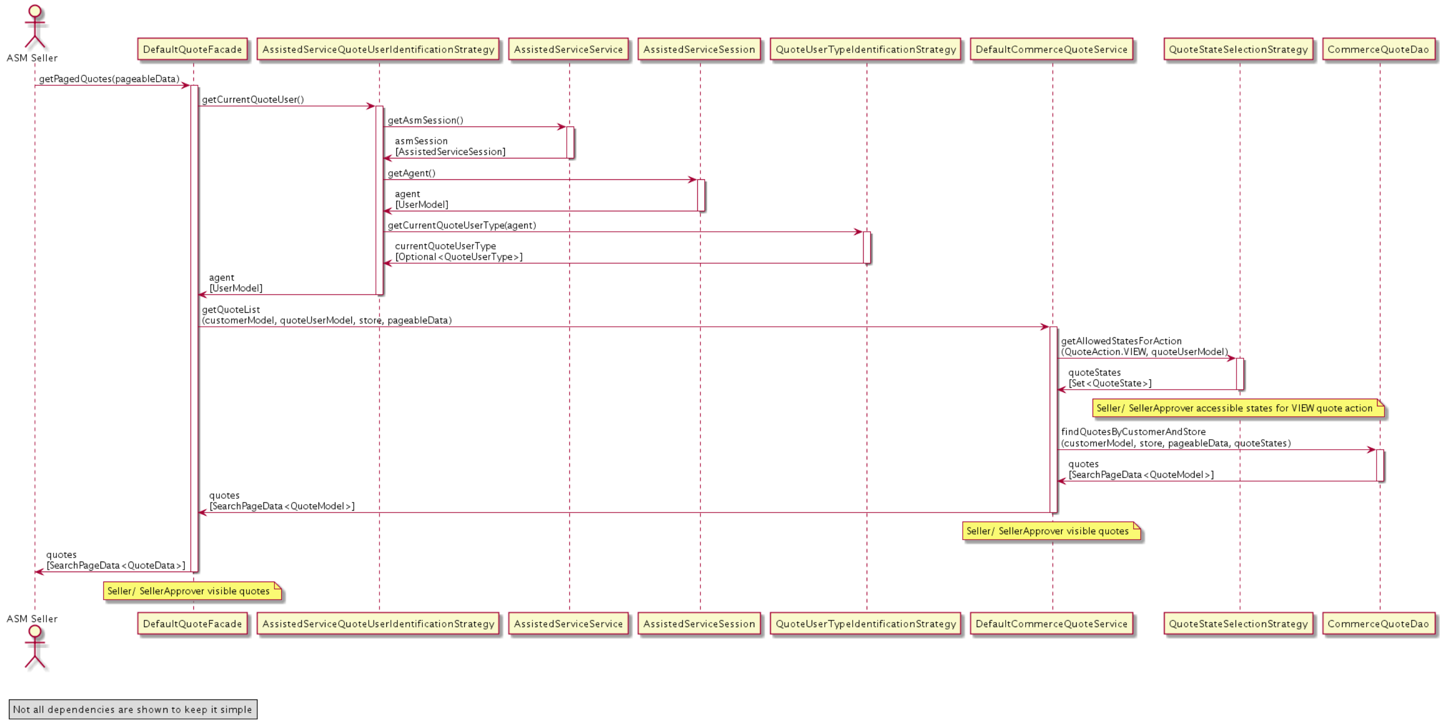
ASM Buyer

This sequence diagram illustrates the main set of calls made to determine which quotes are visible to a buyer when the `getPagedQuotes` method of `DefaultQuoteFacade` is invoked. Note that the diagram focuses on determining the quote states accessible to the buyer when the `VIEW` quote action is performed.



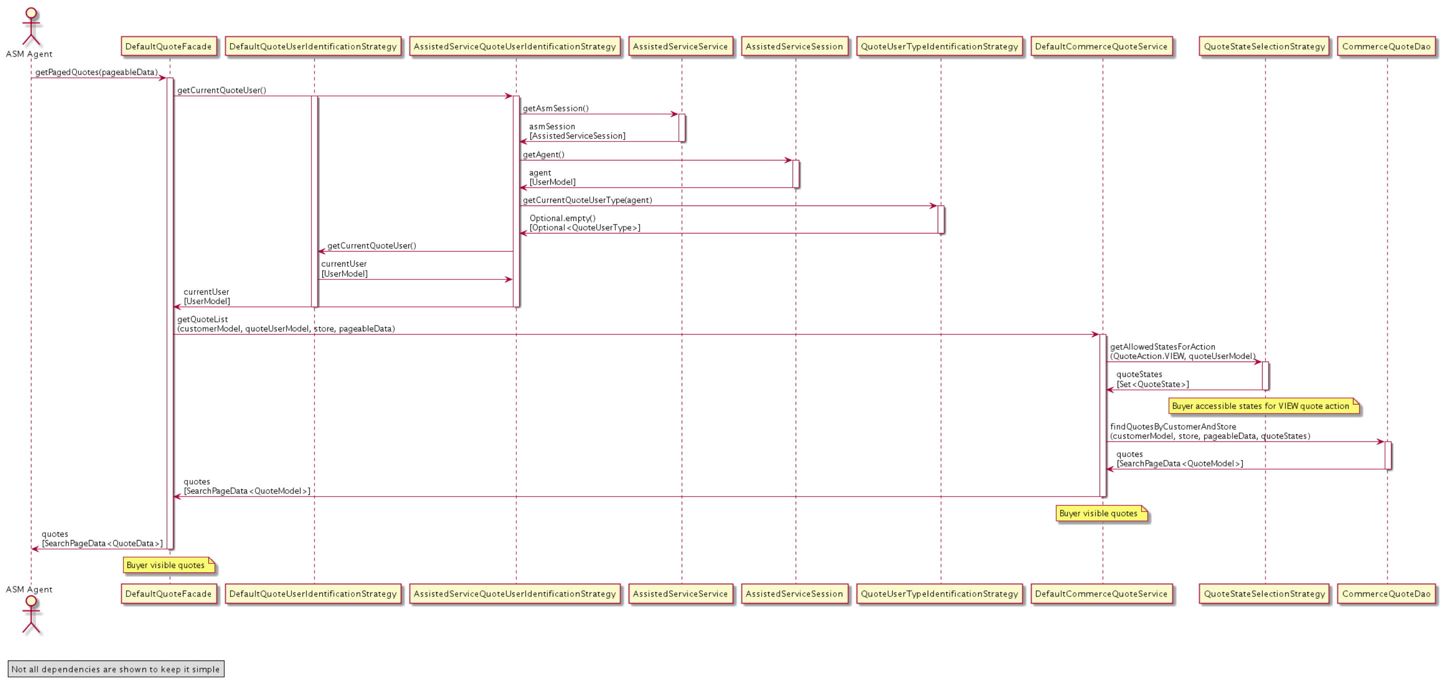
ASM Seller and Seller Approver

This sequence diagram illustrates the main set of calls made to determine which quotes are visible to a sales rep or seller approver working on quotes submitted by a buyer when the `getPagedQuotes` method of `DefaultQuoteFacade` is invoked. Note that the diagram focuses on determining the quote states accessible to the sales rep and seller approver when the `VIEW` quote action is performed.



ASM Agent

This sequence diagram illustrates the main set of calls made to determine the quotes visible to a regular ASM agent acting on behalf of the buyer when the `getPagedQuotes` method of `DefaultQuoteFacade` is invoked. Note that the diagram focuses on determining the quote states accessible to the ASM agent when the `VIEW` quote action is performed.



Parent topic: [Technical Overview]

Related Information

[Enabling Commerce Quotes in Other Storefronts]

[Quote Statuses]

[Email Notifications]

[User Types]

[Changing the Quote Threshold]

[Changing the Seller Approver Threshold]

[Commerce Quotes Items]

Changing the Quote Threshold

Buyers can only request quotes if the value of their cart is more than a certain value. You can change the default value of 25,000 by modifying the `local.properties` file.

If the cart is below the quote threshold amount, a message appears stating that a quote can only be requested if it is more than the threshold amount. You may wish to modify the default amount according to your business needs.

There are two ways to change the default minimum quote amount threshold:

- Use the SAP Commerce Administration Console (Administration Console). This method does not require a restart of the SAP Commerce server.
- Modify the `project.properties` file for `commerceservices`. This method requires a restart of the SAP Commerce server.

Using the SAP Commerce Administration Console

To change the minimum quote amount threshold using Administration Console:

1. Log into Administration Console (`http://powertools.local:9001/hac`).
2. Navigate to **Platform** > **Configuration**.
3. In the **Search** field, enter `quote.request.initiation.threshold`.

   → Tip

   You can set a different threshold value for each currency and storefront. To do so, search for `quote.request.initiation.threshold.<storefront>.<currency>`

4. Enter the required threshold amount in the **Value** field.
5. Click **Apply all**.

The new threshold amount is updated.

Modifying `project.properties`

To change the authorization threshold by modifying `project.properties`:

1. Navigate to `hybris/bin/modules/b2b-accelerator/b2bacceleratorservices`.
2. Open the `project.properties` file.
3. Change the value in this line to the required amount:

   ```
   quote.request.initiation.threshold=<your new amount>
   ```

   Alternatively, add the above code in the `local.properties` file with the required threshold value. You will find this file in one of the following paths:

   - **Development**: `hybris/bin/platform/resources/development/`
   - **Production**: `hybris/bin/platform/resources/production/`

   → Tip

   You can set a different threshold value for each currency and storefront. To do so, change the value for `quote.request.initiation.threshold.<storefront>.<currency>`

4. Restart the SAP Commerce server.

The new threshold amount is updated.

Parent topic: Technical Overview

Related Information

Enabling Commerce Quotes in Other Storefronts
Quote Statuses
Email Notifications
User Types
User Type Identification and State Selection Strategies
Changing the Seller Approver Threshold
Commerce Quotes Items

Changing the Seller Approver Threshold

Vendor quotes that exceed a vendor's authorization threshold must be approved, otherwise, they are automatically approved. You can change the default threshold amount of 75,000 if required.

There are two ways to change the default vendor authorization threshold:

- Use the SAP Commerce Administration Console (Administration Console). This method does not require a restart of the SAP Commerce server.
- Override the default configuration values by modifying the `local.properties` file for `commerceservices`. This method requires a restart of the SAP Commerce server.

Using the SAP Commerce Administration Console

To change the authorization threshold using Administration Console:

1. Log into Administration Console (`http://powertools.local:9001/hac`).
2. Navigate to **Platform** > **Configuration**.
3. In the **Search** field, enter `commerceservices.quote.seller.auto.approval.threshold`.

   → Tip

   You can set a different threshold value for each currency and storefront. To do so, search for `commerceservices.quote.seller.auto.approval.threshold.<storefront>.<currency>`

4. Enter the required threshold amount in the **Value** field.
5. Click **Apply all**.

The new threshold amount is updated.

Overriding the default properties values

The `project.properties` file defines the default configuration values for `commerceservices`. If you have values that are unique for a customer project, you can modify the `local.properties` file, which overrides the default configuration values.

To override the authorization threshold value by modifying `local.properties` file:

1. Navigate to your `hybris/config` folder.
2. Open the `local.properties` file.
3. Add or change the `commerceservices.quote.seller.auto.approval.threshold` property to the desired value.

   ```
   commerceservices.quote.seller.auto.approval.threshold=75000
   ```

   → Tip

   You can set a different threshold value for each currency and storefront. To do so, change the value for `commerceservices.quote.seller.auto.approval.threshold.<storefront>.<currency>`

4. Restart the SAP Commerce server.

The new threshold amount is updated.

Parent topic: Technical Overview

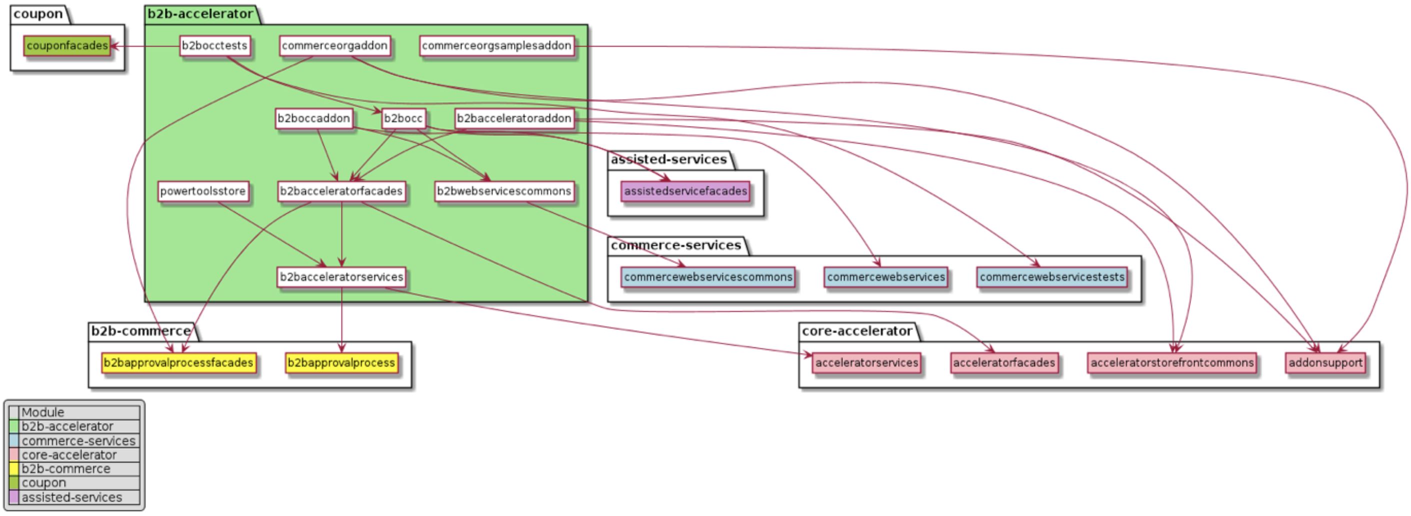
Related Information

Enabling Commerce Quotes in Other Storefronts
Quote Statuses
Email Notifications
User Types
User Type Identification and State Selection Strategies
Changing the Quote Threshold
Commerce Quotes Items

B2B Accelerator Architecture

This section explains how to use B2B Accelerator extensions to enable the commerce features, servces, and other AddOns.

Dependencies



Recipes

For a complete list of SAP Commerce recipes that may include this module, see Installer Recipes.

For a complete list of the SAP Commerce Cloud, integration extension pack recipes that may include this module, see Installer Recipe Reference.

Extensions

The <module name> consists of the following extensions:

b2bacceleratoraddon AddOn

The `b2bacceleratoraddon` AddOn extends a target Core Accelerator storefront with B2B-specific functionality.

b2bacceleratorfacades Extension

The `b2bacceleratorfacades` extension provides a number of facades that are backed by the services in the `b2bcommerce` extension. Also, some current SAP Commerce Accelerator functionality is replaced with B2B-specific functionality via this extension.

b2bacceleratorservices Extension

The `b2bacceleratorservices` extension organizes functionality from one or more B2B commerce services related to the company and user management, orders and carts, and workflow-related actions and events.

b2boccaddon AddOn

The B2B API AddOn for OCC (`b2boccaddon`) provides API access to B2B-specific functionality, such as multi-dimensional products and organization information. When this AddOn is enabled, standard OCC resources are replaced by B2B REST API resources wherever functionality is B2B-specific.

b2bocc Extension

The `b2bocc` extension exposes saved functionality of the B2B Accelerator Module in the form of the standardized OCC (Omnichannel Commerce) API.

b2bocctests Extension

The `b2bocctests` extension provides tests for the b2bocc extension.

b2bwebservicescommons Extension

The `b2bwebservicescommons` extension provides common resources that can be used by multiple OCC (Omnichannel Commerce) API extensions or addons. Common resources are mostly Data Transfer Objects.

commerceorgaddon AddOn

The `commerceorgaddon` extends the target Core Accelerator Storefront to provide organization management functionality through a merchant's B2B Accelerator web site.

commerceorgsamplesaddon AddOn

The purpose of the `commerceorgsamplesaddon` AddOn is to load commerceorg sample data, including sales organization data. In particular, it makes use of the AddOn's capabilities to load data, such as loading impex data only for stores that are currently installed.

powertoolsstore Extension

The `powertoolsstore` extension adds the necessary dataset for a reference B2B Accelerator site and a power tools product catalog.

b2bacceleratoraddon AddOn

The `b2bacceleratoraddon` AddOn extends a target Core Accelerator storefront with B2B-specific functionality.

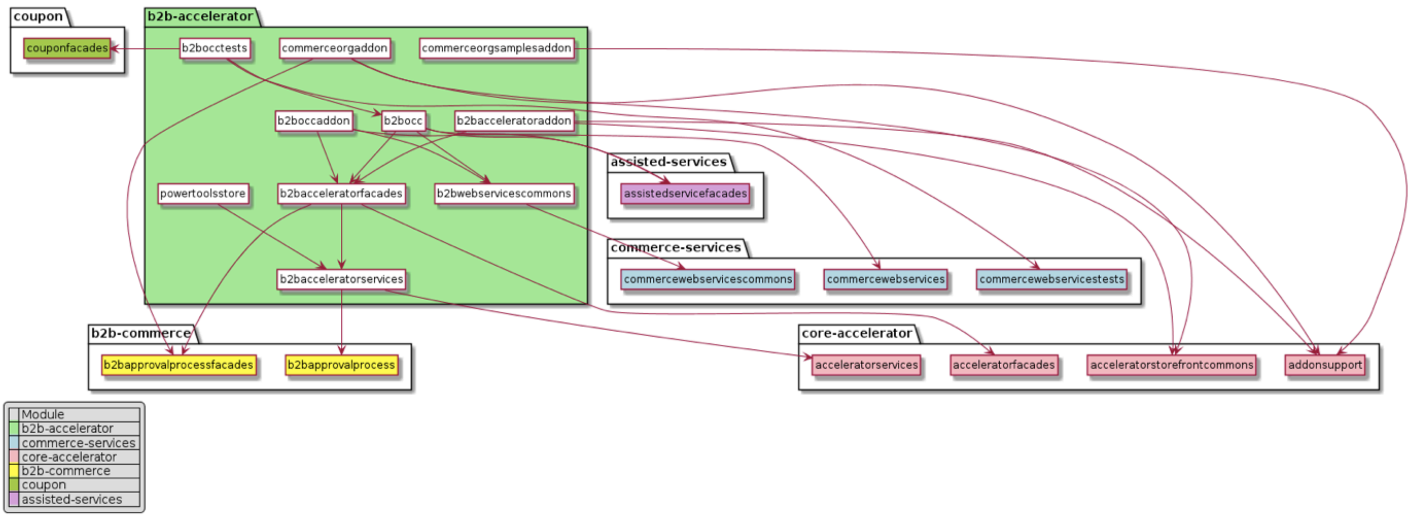
⚠ **Caution**

This page refers to software that has been deprecated as part of the Accelerator UI and older OCC template extensions deprecation. For more information, see Deprecation of Accelerator UIs and Older OCC Template Extensions.

i Note

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



AddOn Definition

Name	`b2bacceleratoraddon`
Description	The `b2bacceleratoraddon` extends a target storefront with B2B-specific functionality.
Requires	• addonsupport Extension • acceleratorstorefrontcommons AddOn • b2bacceleratorfacades Extension
Author	SAP Commerce

Supported Markets and Channels

The `b2bacceleratoraddon` supports the B2B market. It can only be used for the desktop channel.

Supported	B2C Commerce	B2B Commerce	Telco Commerce
Market	–	✔	–
Channel	Desktop: – Mobile: –	Desktop: ✔ Mobile: –	Desktop: – Mobile: –

Extensions and Adjustments to the Target Storefront

The `b2bacceleratoraddon` AddOn adjusts the following aspects of the target storefront:

- The Spring security configuration
- The My Account area
- The checkout process

The `b2bacceleratoraddon` AddOn also adds B2B-specific business processes, such as approval or email processes, that are related to orders or replenishments.

Finally, the AddOn customizes the appearance of the target storefront using stylesheets.

Spring Security

The AddOn extends the spring security configuration by restricting storefront access to users in one of the following user groups:

- b2bcustomergroup
- b2bmanagergroup
- b2bapprovergroup
- b2badmingroup

Furthermore the checkout is restricted to users in b2bcustomergroup. The B2B-specific spring security configuration can be found in `b2bacceleratoraddon/resources/b2bacceleratoraddon/web/spring/b2bacceleratoraddon-spring-security-config.xml`.

My Account Area

The `b2bacceleratoraddon` AddOn adds new subsections to the My Account area and adjusts existing ones to enable B2B-specific functionality.

The following sections are added to the My Account area by the `b2bacceleratoraddon` AddOn:

- Order Approval Dashboard
- My Replenishment Orders

Furthermore, in the Order History section, reorder functionality and approval process information is also added by the `b2bacceleratoraddon` AddOn.

For more information on the My Account area, see B2B Account Management.

B2B Commerce Checkout

The `b2bacceleratoraddon` AddOn provides a B2B-specific multistep checkout configuration that defines the checkout steps and their associated validators, as well as a B2B checkout group that defines the transitions between the steps. The configuration introduces a B2B-specific step for payment type and cost center selection, and also adjusts the other steps to use B2B-specific step validators. On the final review page, in addition to placing a regular order, the B2B checkout configuration allows you to schedule a replenishment.

The checkout configuration is defined in `modules/b2b-accelerator/b2bacceleratoraddon/resources/b2bacceleratoraddon/web/spring/multi-step-checkout-config.xml`.

For more information on the B2B checkout, see B2B Checkout and Order Process.

B2B Commerce Business Processes

The business processes definitions are found in the `b2bacceleratoraddon/resources/b2bacceleratoraddon/processes` directory. These are highly customizable: you are free to overwrite existing actions of the processes, add your own actions, or change the workflow of the process to fit your business needs.

The following business processes are provide for order approval and for email generation:

Process Definition File	Process Name	Description
`b2bAccOrderApproval.xml`	`accApproval`	A process for order approval.
`orderApprovalRejectionEmailProcess.xml`	`orderApprovalRejectionEmailProcess`	Generates and sends emails when an order is approved/rejected.
`orderPendingApprovalEmailProcess.xml`	`orderPendingApprovalEmailProcess`	Generates and sends an email when an order has been assigned to an approver.
`replenishmentOrderProcess.xml`	`replenishmentOrderProcess`	Handles creation of scheduled orders.
`replenishmentOrderConfirmationEmailProcess.xml`	`replenishmentOrderConfirmationEmailProcess`	Generates and sends an email when a scheduled order is placed.
`replenishmentOrderPlacedEmailProcess.xml`	`replenishmentOrderPlacedEmailProcess`	Generates an email when an order has been scheduled for replenishment.

Order Approval Process

The SAP Commerce Accelerator order approval process is based on the order approval business process of the core B2B Commerce Module. The process is customized to fit the SAP Commerce Accelerator requirements.

The process definition is contained in the `modules/b2b-accelerator/b2bacceleratoraddon/resources/b2bacceleratoraddon/processes/b2bAccOrderApproval.xml` file.

For more information, see b2bapprovalprocess Extension.

Replenishment Order Process

The replenishment order process takes care of placing orders scheduled by the customer through the Powertools store.

The process definition is contained in the `modules/b2b-accelerator/b2bacceleratoraddon/resources/b2bacceleratoraddon/processes/replenishmentOrderProcess.xml` file.

The following is a description of the replenishment process flow:

Action	Description
`cloneCartAction`	In the replenishment flow, since the order is placed by a cron job at a future date, the `CartMode` object is preserved at all times to place an order at a later time. For this reason, the process starts cloning the `CartModel` object rather than placing the order from the original `CartModel` object. Cloning is done in order to preserve the `CartModel` object, because the `CartModel` is converted to an `OrderModel` object after placing the order, and the original `CartModel` object is lost.
`recalculateCartAction`	Every time the cron job runs to place an order at a scheduled time, it has to recalculate the entire order cost by recalculating the order entries. This recalculation includes finding prices, taxes, discounts, as well as payment and delivery costs from Pricing systems.
`authorizePaymentAction`	The system supports payment through credit card, and there are scenarios where a replenishment order can be placed with credit cards. As a result, the payment information has to be authorized and verified before placing the actual order from the `Cart`. This prevents issues like placing the order with expired card details, since replenishment always happens at a future date.
`placeOrderAction`	An order is placed from the cloned cart and the `OrderModel` object, which is created out of the cloned `CartModel`, is attached to the `CronJob` model that actually places the order. This helps in finding out cron job information for a particular order, or vice-versa.
`confirmationAction`	The `confirmationAction` sends a notification email to the customer regarding the replenishment order that has been placed by the cron job.

Early Login and Registration

Early login: Users are required to authenticate before browsing the site. Password recovery is provided from the early login page that is displayed when a user tries to access the site and this feature is enabled.

Registration: Users can request an account. The link to do so appears in two places: in the early login page, and in the header, if the user is not logged in. The new account is approved by a merchant user who is part of the `b2bregistrationapprovergroup` group.

Enabling Early Login and Registration Features

You can enable or disable early login and registration in the Backoffice Administration Cockpit. The early login and registration features can be enabled separately.

To enable early login and registration in Backoffice:

1. Log into the Backoffice (`localhost:9002/backoffice`).
2. Navigate to WCMS > Website, and then click the site you want to modify. The default Accelerator storefront (`yacceleratorstorefront`) is named powertools.
3. In the Administration tab, change the following settings as required:
    - Requires Authentication: When set to true, users are required to log in before the site can be viewed.

      Note

      The value does not influence the existing OCC API to disable or enable anonymous access.

    - Enable Registration: When set to true, users can register for an account.

      Note

      The two features can be enabled separately from each other.

4. Click Save.

Securing OCC APIs

The following are done to the backend (OCC endpoints) to further enhance the ability:

- The property `requiresAuthentication` is moved from its original location to itemtype `BaseSite` defined in `commerce-services/commerceservices/resources/commerceservices-items.xml`.

  The default value is false. When set to true, OCC endpoints are password-protected. To enable this feature, navigate to WCMS > Website in the backoffice, click the site you want to modify, and in the administration tab, select True under Requires Authentication.

  Note that your previous configuration of the `requiresAuthentication` switch for your storefront will not be overwritten by this release patch. So, for B2C storefronts, you need to make sure that this feature is turned off.

- An interceptor called `SecurePortalAuthenticationInteceptor` is introduced so any unauthenticated users will see the 404-exception error when trying to visit secured OCC endpoints after the requires authentication feature is enabled.

- An annotation called `SecurePortalUnauthenticatedAccess` is introduced to keep a list of OCC endpoints public. You can also add the annotation to endpoints that you consider should be publicly accessed.

Public OCC Endpoints

`GET /{baseSiteId}/cms/components`
`GET /{baseSiteId}/cms/components/{componentId}`
`GET /{baseSiteId}/cms/pages`

GET /{baseSiteId}/cms/pages/{pageId}
GET /{baseSiteId}/cms/sitepages
GET /{baseSiteId}/cardtypes
GET /{baseSiteId}/currencies
GET /{baseSiteId}/languages
GET /{baseSiteId}/titles
GET /{baseSiteId}/countries
GET /{baseSiteId}/countries/{countyIsoCode}/regions
POST /{baseSiteId}/forgottenpasswordtokens
POST /{baseSiteId}/resetpassword
GET /{baseSiteId}/users/{userId}/consenttemplates
GET /{baseSiteId}/users/{userId}/consenttemplates/{consentTemplateId}
POST /{baseSiteId}/users
POST /{baseSiteId}/orgUsers
GET /basesites

Procedure

1. Open the SAP Commerce Administration Console.
2. Go to the **Platform** tab and select the **Update** option.
3. Under the **General settings**, unselect **Create essential data**.
4. Click **Update**.

ℹ Note

This enhancement is applied to OCC v2 and all future versions. OCC v1 is not within the scope of this enhancement.

CAPTCHA Recommended

For security reasons, we recommend that you display a CAPTCHA on all registration pages and on login pages after too many failed login attempts.

To use B2B Early Login with the CAPTCHA AddOn, you need to:

- Configure the CAPTCHA AddOn in the storefront
- Set the recaptcha aspect with the correct pointcuts

Configuring the CAPTCHA AddOn in the Storefront

To configure the CAPTCHA AddOn in the storefront, follow the instructions in the [captchaaddon AddOn] document.

Setting the recaptcha Aspect with the Correct Pointcuts

To set the `recaptcha` aspect with the correct pointcuts, point them to those already defined in `b2bacceleratoraddon` (`showRegistrationPagePointcut` and `submitRegistrationPointcut`). Add the following snippet of code to the `/ext-addon/b2bacceleratoraddon/resources/b2bacceleratoraddon/web/spring/b2bacceleratoraddon-web-spring.xml` file (or any `*web-spring.xml` file that already exists in the system) to load the aspect configuration; or you can create the configuration using a class instead of XML:

```
<aop:config proxy-target-class="true" expose-proxy="true">
        <aop:pointcut expression="execution(* de.hybris.platform.b2bacceleratoraddon..controllers..*.showRegistrationPage(..))" id="s
        <aop:pointcut expression="execution(* de.hybris.platform.b2bacceleratoraddon..controllers..*.submitRegistration(..))" id="su
        <aop:aspect id="prepB2bRegistrationReCaptchaAspect" ref="reCaptchaAspect">
                <aop:around method="prepare" pointcut-ref="showRegistrationPagePointcut"/>
        </aop:aspect>
        <aop:aspect id="b2bRegistrationReCaptchaAspect" ref="reCaptchaAspect">
                <aop:around method="advise" pointcut-ref="submitRegistrationPointcut"/>
        </aop:aspect>
</aop:config>
```

Run `ant clean all` to update the system.

Bypassing B2B Early Login for PunchOut and Other Site Features

If Early Login is enabled but needs to be bypassed for a particular feature (PunchOut for example), you must add a list of control and unsecured mappings to the B2B Early Login Spring configuration file:

`/b2bacceleratoraddon/resources/b2bacceleratoraddon/web/spring/b2bacceleratoraddon-web-spring.xml`

The following example configuration illustrates how to skip early login for PunchOut sessions:

```
<!-- List of unsecured mappings, i.e. those that the SecurePortalBeforeControllerHandler instance will let through regardless of auth
<util:set id="unsecuredUris" value-type="java.lang.String">
        <value>/login/**</value>
        <value>/_s/**</value>
        <value>/punchout/**</value>
</util:set>

<!-- List of control mappings, i.e. those that do not launch a new page but would only change a value on the server side such as lang
<util:set id="controlUris" value-type="java.lang.String">
        <value>/_s/**</value>
        <value>/punchout/**</value>
</util:set>
```

Configuring an Employee User as a B2B Registration Approver

Registration approvers are employee users who belong to the `b2bregistrationapprovergroup` group. When a user registers for a new account, the task is assigned to all B2B registration approvers. For information on approving registration requests, see B2B Early Login User Experience.

To assign registration approval rights to a user in the Backoffice Administration Cockpit:

1. Open the Backoffice Administration Cockpit (`localhost/backoffice`).
2. In User > Employees, search for and select the user who is to become the registration approver.
3. In the **General** tab, in the **Groups** field, click inside the search field at the bottom of the table.
4. Start typing the first few letters of **b2bregistrationapprovergroup**.
5. When **b2bregistrationapprovergroup** appears in the list of results, click **b2bregistrationapprovergroup**. The group appears in the table.
6. Click **Save**.

Technical Notes

The B2B Early Login AddOn is pre-configured to run on the `yacceleratorstorefront` with the `powertools` catalog as defined in the `project.properties` file. To prevent this behavior, comment the following line to use your own storefronts instead:

```
yacceleratorstorefront.additionalWebSpringConfigs.b2bacceleratoraddon
```

When testing your site, access your storefront using a domain name and not an IP address or `localhost`. Failure to do so results in erratic behavior as the security cookies are not set on the proper domain. Using the `site` query parameter also results in erratic behavior. To work around this problem, modify your hosts files (`/windows/system32/drivers/etc/hosts` or `/etc/hosts`) to use a domain (`127.0.0.1 powertools.local` for example).

For example, the following URL will cause the erratic behavior: `http://localhost:9001/yacceleratorstorefront?site=powertools`.

The proper URL should be: `http://powertools.local:9001/yacceleratorstorefront`.

The `listRedirectUrlsForceDefaultTarget` attribute in the `yacceleratorstorefront/web/src/de/hybris/platform/yacceleratorstorefront/security/StorefrontAuthenticationSuccessHandler.java` file defines the URL targets to intercept so that users are prevented from logging in through other methods. Instead, users are redirected to the secure portal login.

This list is defined in the `spring-security-config.xml` file. By default, the list is empty.

The `SecurePortalLoginAuthenticationSuccessHandler` now extends from the `loginAuthenticationSuccessHandler` base bean. By default, this is the `StorefrontAuthenticationSuccessHandler` in the `yacceleratorstorefront`.

Installing the b2bacceleratoraddon AddOn

1. Add the `b2bacceleratoraddon` AddOn to your `localextensions.xml` file, ensuring the listed required extensions are also included:

   ```
   <extension dir="${HYBRIS_BIN_DIR}/modules/b2b-accelerator/b2bacceleratoraddon"/>
   <extension dir="${HYBRIS_BIN_DIR}/modules/b2b-accelerator/b2bacceleratorfacades"/>
   <extension dir="${HYBRIS_BIN_DIR}/modules/core-accelerator/acceleratorstorefrontcommons"/>
   <extension dir="${HYBRIS_BIN_DIR}/modules/core-accelerator/addonsupport"/>
   ```

2. Install the `b2bacceleratoraddon` AddOn to your storefront extensions based on the `yacceleratorstorefront` template with the following ant command:

   ```
   ant addoninstall -Daddonnames="b2bacceleratoraddon" -DaddonStorefront.yacceleratorstorefront="<mystorefrontextensionname>"
   ```

Modifications Checklist

The modifications that this AddOn makes to SAP Commerce Accelerator are listed below:

Impex Configuration Scripts	✓
Core Data Listeners	−
Model Layer	−
Model Interceptors	−
Cockpit Configuration	−
Cockpit Beans	−
Validation Rules	−

Service Layer	−
Facade DTO	−
Facade Layer	−
CMS Components	✓
Page Templates	✓
JavaScript	✓
CSS	✓

Page Controllers	✓
Tags	✓
TLD	−
Filters	−
MVC Interceptors	✓
Spring Security	✓
Message Resources	✓

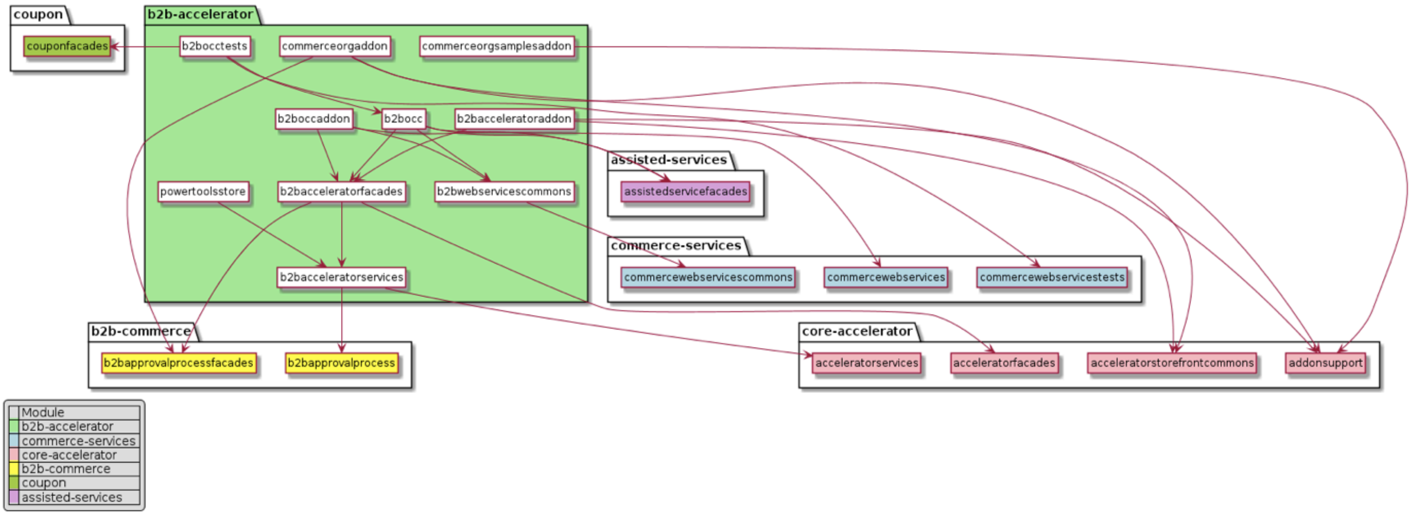
b2bacceleratorfacades Extension

The `b2bacceleratorfacades` extension provides a number of facades that are backed by the services in the `b2bcommerce` extension. Also, some current SAP Commerce Accelerator functionality is replaced with B2B-specific functionality via this extension.

> **i Note**
> The commerce organization facades described on this page have been deprecated (that is, all facades with "commerce" in their name). Instead, use the migrated facades in b2bcommercefacades Extension and b2bapprovalprocessfacades Extension.

> **i Note**
> An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



B2B Facades

The following facades expose B2B services from the `b2bcommerce` extension:

- `B2BFutureStockFacade`

  Note

  `DefaultB2BFutureStockFacade` to be deprecated. Since 2205 release, use `de.hybris.platform.commercefacades.futurestock.impl.DefaultFutureStockFacade` instead.

- `B2BOrderFacade`
- `/api`
  - `/cart`
    - `CartFacade`
    - `CheckoutFacade`
    - `CheckoutFlowFacade`
  - `/company`
    - `BudgetFacade`
    - `CostCenterFacade`

For more information, see: [b2bcommerce Extension]

The following facades extend existing facades from the `commercefacades` extension to add B2B functionality:

- `B2BCheckoutFacade`
- `B2BOrderFacade`
- `B2BRegistrationFacade`
- `B2BRegistrationWorkflowFacade`

For more information, see: [commercefacades Extension]

b2bacceleratorservices Extension

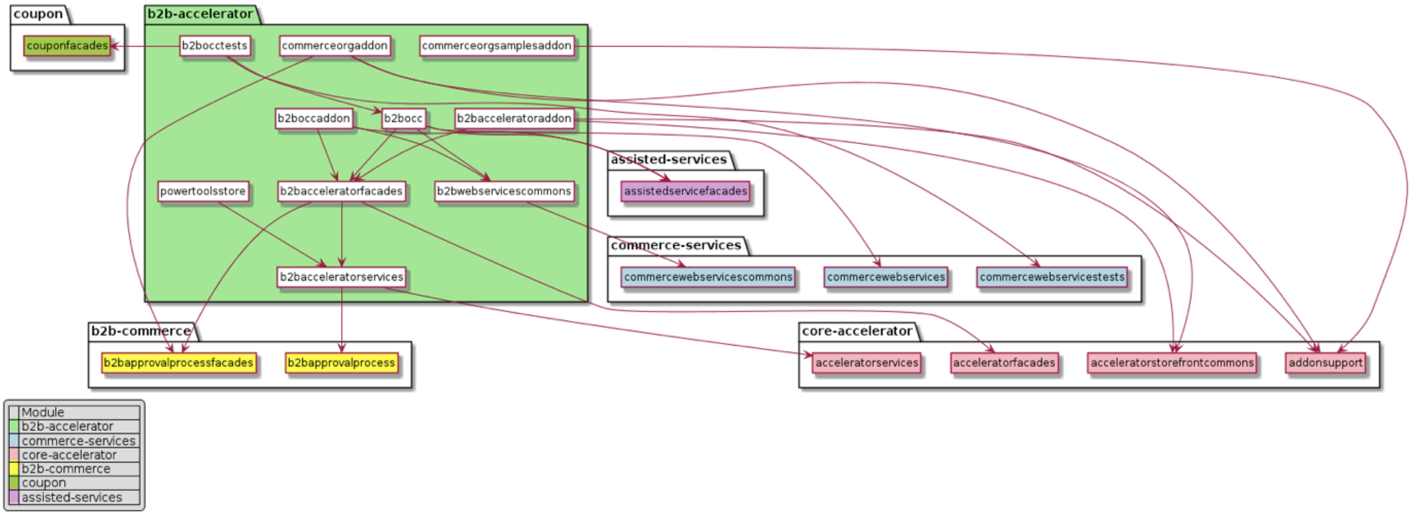
The `b2bacceleratorservices` extension organizes functionality from one or more B2B commerce services related to the company and user management, orders and carts, and workflow-related actions and events.

The services included in the `b2bacceleratorservices` extension fulfill certain tasks on their own but often need to be combined to provide a complete B2B commerce use case. This often involves combining functionality from separate extensions that are licensed separately. The extension also extends more generic functionality from certain hybris extensions to add more B2B commerce features.

Note

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



Overview of Services

B2B Organization Services

i Note

The services described in this section have been deprecated. The migrated services in the [b2bcommerce Extension] and the [b2bapprovalprocess Extension] should be used instead.

Services provided with the `b2bacceleratorservices` extension replace lookups originally available within the `b2bcommerce` extension and implement paginated lookups using the `commerceservice` extension search infrastructure.

Service Name	Lookup Item	Description
`B2BCommerceUnitService`	`B2BUnit`	`B2BCommerceUnitService` replaces the `b2bcommerce` extension `B2BUnitService`. This service provides some common unit manipulations methods such as disabling units, assigning approvers to units, and editing unit delivery addresses.
`B2BCommerceBudgetService`	`B2BBudget`	It replaces the `B2BBudgetService` enhancing it with paginated lookups.
`B2BCommerceCostCenterService`	`B2BCostCenter`	It replaces the `B2BCostCenterService` enhancing it with paginated lookups.
`B2BCommercePermissionService`	`B2BPermission`	This service provides methods to get paginated lists of `B2BPermissionModels`.
`B2BCommerceUserService`	`B2BCustomer`	This service provides some common methods for the `B2BCustomer` items. In addition to searching for `B2BCustomers` by UID and performing paginated searches, this service provides methods for disabling customers, assigning approvers to `B2BCustomers`, adding user roles and adding user permissions.
`B2BCommerceB2BUserGroupService`	`B2BUserGroup`	This service provides methods to manage and look up the `B2BUserGroupModel`, like assigning members and permissions to a usergroup, getting a paginated list of usergroups and more.

All the above services extend the `CompanyB2BCommerceService`, thereby sharing common resources from the `b2bcommerce` extension services, platform ServiceLayer services, and the `commerceservices` extension.`CompanyB2BCommerceService` contains some general methods such as `getAllCurrencies`, `getUnitForUid`, `getCurrentUser` and `saveModel`.

Order Services

Service Name	Description
`B2BCommerceCartService`	Extends validate functionality on the cart from `CommerceCartService`.
`B2BCustomerAccountService`	Extends `CustomerAccountService` with methods to look up everything around order scheduling.

Order Strategies

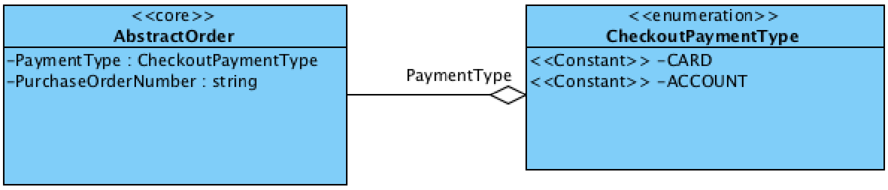
Service Name	Description
`B2BApprovalProcessLookUpStrategy`	Knows how to get a list of `BusinessProcesses` for a given store that a unit can be assigned to, currently this list is wired via Spring configuration.
`B2BUserGroupsLookUpStrategy`	Knows how to look up a list of usergroups that a customer can be a member of, currently the list is wired via Spring configuration and contains the following roles `b2badmin`, `b2bcustomer`, `b2bmanager` and `b2bapprover`.

B2B Registration Services

Service Name	Description
`DefaultB2BRegistrationService`	Service methods that are used by the B2B registration process.

Data Model

AbstractOrder

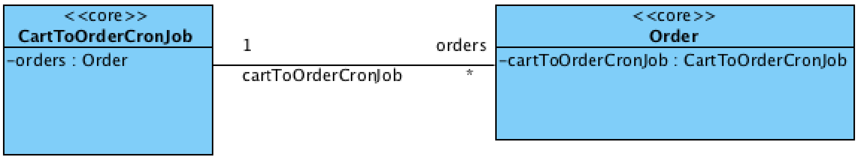


The core `AbstractOrder` item is augmented with two additional attributes by the `B2BAcceleratorService`:

- `Payment Type`: an enumeration of type `CheckoutPaymentType`. B2B Accelerator supports payments made to an invoiced account and payments made by credit cards, this attribute indicates which method was used.
- `Purchase Order Number`: a string attribute. B2B Accelerator allows shoppers to tag their orders with a Purchase Order Number used solely for their own records.

Order to CartToOrderCronJob Relation

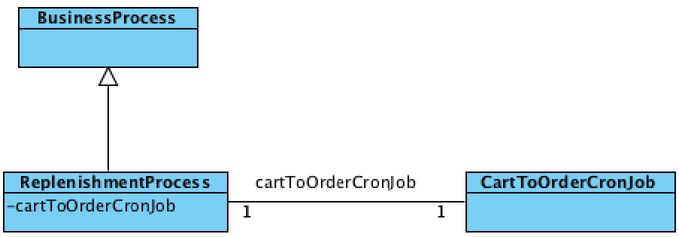
Replenishment orders are supported and enhanced by B2B Accelerator. This relation has been added to provide a link between replenishment carts and the orders generated by them. Consequently, orders get the `cronToOderCronJob` attribute that, if not `null`, indicates it was produced by a replenishment and `CartToOrderCronJobs` get an attribute orders, which is a collection of orders produced by the replenishment.



The underlying technology for replenishment uses the platform order scheduling packages, `B2BAcceleratorServices` provides additional support for replenishment such as providing this link, providing replenishment process and service to meet B2B Accelerator needs.

ReplenishmentProcess

`ReplenishmentProcess` has an association to `CartToOrderCronJobModel`, which is a type from the `basecommerce` extension an holds a reference to the `Cart` to be used for order replenishment.



`B2BAcceleratorCartToOrderJob` is the default implementation of a cron job that creates `ReplenishmentProcessModel`, a business process that knows how to create a replenishment order.

Other Items

Enums

Enum	Description
`B2BPermissionTypeEnum`	Used to select the permission type. For example, permission granted for a specific order amount or a specific time period.
`CheckoutFlowEnum`	Used to define the type of checkout flow (single or multi step)

Item Types

Item Type	Description
`OrderThresholdDiscountPercentagePromotion`	Extends `OrderPromotion`. Defines a discount percentage to be applied to an order after a threshold is achieved.
`ProductPriceDiscountPromotionByPaymentType`	Extends `ProductPromotion`. Defines a discount to be applied to a product for a given payment type.
`ProductThresholdPriceDiscountPromotion`	Extends `ProductPromotion`. Defines a discount to be applied to a product after a threshold is achieved.

Pagination

List of DAOs that Support Pagination

DAO Name	Model
`B2BAcceleratorCartToOrderCronJobModelDao`	`CartToOrderCronJobModel`
`PagedB2BBudgetDao`	`B2BBudgetModel`
`PagedB2BCostCenterDao`	`B2BCostCenterModel`
`PagedB2BCustomerDao`	`B2BCustomerModel`
`PagedB2BPermissionDao`	`B2BPermissionModel`
`PagedB2BUserGroupDao`	`B2BUserGroupModel`
`PagedB2BWorkflowActionDao`	`WorkflowActionModel`

DefaultPagedGenericDao

`DefaultPagedGenericDao` provides generic pagination support for any SAP Commerce model where you can paginate things like `select * from B2BUnit;`

The following methods are available:

```
package de.hybris.platform.commerceservices.search.dao;

import...

/**
 * Paged version of the {@link de.hybris.platform.servicelayer.internal.dao.GenericDao}.
 *
 * @param <M> The type of item returned from the search
 */
public interface PagedGenericDao<M>
{
        /**
         * Searches for all instances of model given as a generic type.
         *
         * @param pageableData
         *            the page of results to return
         * @return The matching page of search results
         */
        SearchPageData<M> find(PageableData pageableData);

        /**
         * Searches for all instances of model given as a generic type matching given parameters.
         *
         * @param params
         *            parameters to add to search query as {@link java.util.Map} with parameter name as a key and parameter
         *            value as a value.
         * @param pageableData
         *            the page of results to return
         * @return The matching page of search results
         */
        SearchPageData<M> find(Map<String, ?> params, PageableData pageableData);

        /**
         * Searches for all instances of model given as a generic type using given
         * {@link de.hybris.platform.servicelayer.internal.dao.SortParameters} to sort results.
         *
         * @param sortParameters
         *            {@link de.hybris.platform.servicelayer.internal.dao.SortParameters} object used to sort results.
         * @param pageableData
         *            the page of results to return
         * @return The matching page of search results
         */
        SearchPageData<M> find(SortParameters sortParameters, PageableData pageableData);
```

```
	/**
	 * Searches for all instances of model given as a generic type matching given parameters using given
	 * {@link SortParameters} to sort results.
	 *
	 * @param params
	 *           parameters to add to search query as {@link Map} with parameter name as a key and parameter value as a
	 *           value.
	 * @param sortParameters
	 *           {@link SortParameters} object used to sort results.
	 * @param pageableData
	 *           the page of results to return
	 * @return The matching page of search results
	 */
	SearchPageData<M> find(Map<String, ?> params, SortParameters sortParameters, PageableData pageableData);
}
```

Example Page DAO Implemenation for B2BUnitModel

The code snippet bellow shows how to extend `DefaultPagedGenericDao` to paginate on `B2BUnitModel`. This example shows a method that pages units and returns results with option to sort by the unit name or creation time.

```
package de.hybris.platform.b2bacceleratorservices.dao.impl;

import ...

public class DefaultPagedB2BUnitDao extends DefaultPagedGenericDao<B2BUnitModel> implements PagedB2BUnitDao<B2BUnitModel>
{
	public DefaultPagedB2BUnitDao(final String typeCode)
	{
		super(typeCode);
	}

	@Override
	public SearchPageData<B2BUnitModel> findPagedUnits(final String sortCode, final PageableData pageableData)
	{
		final List<SortQueryData> sortQueries = Arrays.asList(
				createSortQueryData("byDate", new HashMap<String, Object>(),
						SortParameters.singletonDescending(B2BUnitModel.CREATIONTIME), pageableData),
				createSortQueryData("byName", new HashMap<String, Object>(),
						SortParameters.singletonAscending(B2BUnitModel.NAME), pageableData));

		return getPagedFlexibleSearchService().search(sortQueries, sortCode, new HashMap<String, Object>(), pageableData);
	}
}
```

Related Information

[b2bcommerce Extension](#)

[basecommerce Extension](#)

[commerceservices Extension](#)

b2boccaddon AddOn

The B2B API AddOn for OCC (`b2boccaddon`) provides API access to B2B-specific functionality, such as multi-dimensional products and organization information. When this AddOn is enabled, standard OCC resources are replaced by B2B REST API resources wherever functionality is B2B-specific.

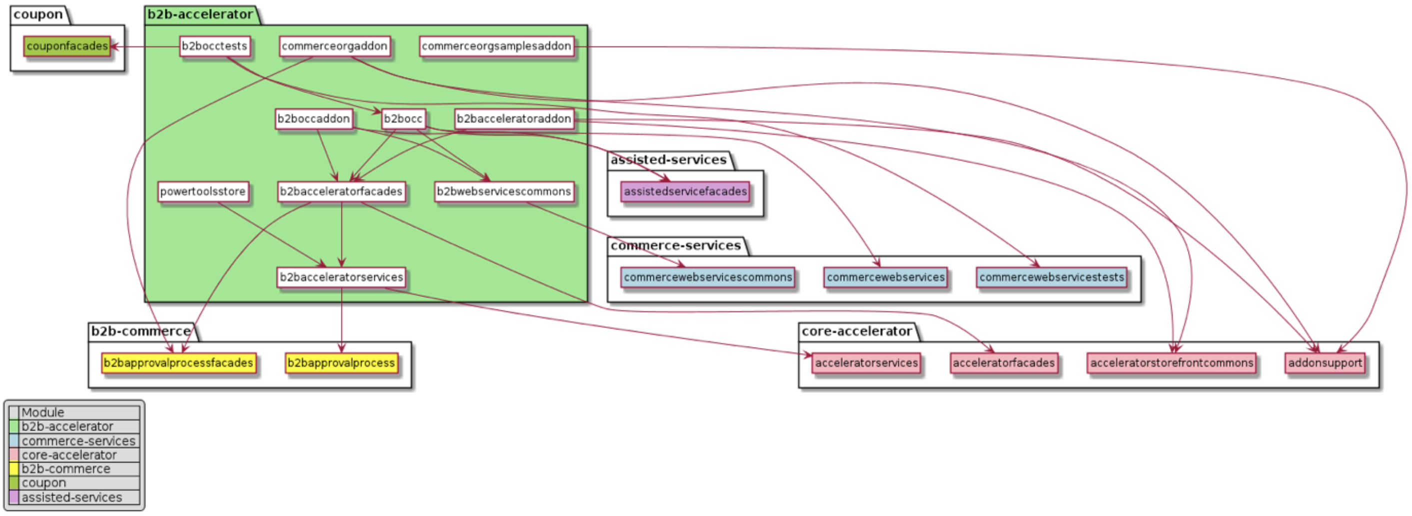
⚠ Caution

This page refers to software that has been deprecated as part of the Accelerator UI and older OCC template extensions deprecation. For more information, see Deprecation of Accelerator UIs and Older OCC Template Extensions.

i Note

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



AddOn Definition

Name	b2boccaddon
Description	This AddOn is responsible for providing B2B-specific API resources.
Requires	• [commercewebservicescommons Extension] • [b2bacceleratorfacades Extension]
Author	SAP

Supported Markets and Channels

Supported	**B2C Commerce**	**B2B Commerce**	**Telco Commerce**
Market	–	✔	–
Channel	Desktop: Mobile:	Desktop: Mobile:	Desktop: Mobile:

Installing the B2B API AddOn for OCC

To install the addon using `addoninstall`:

1. Ensure that `b2boccaddon` and `ycommercewebservices` are listed in `config/localextensions.xml` and that the entries are not commented out, as shown in the following example.

```
...
<extension name="b2boccaddon" />
<extension name="ycommercewebservices" />
...
```

2. Run the following `ant` task:

```
ant addoninstall -Daddonnames="b2boccaddon" -DaddonStorefront.ycommercewebservices="ycommercewebservices"
```

3. Rebuild (that is, run `ant all`), then update or initialize the system.

i Note

For further information on installing OCC AddOns, see:

- [Creating an AddOn for OCC Web Services]
- [Installing an AddOn for a Specific Storefront]

Important Note about version 5.5.1 and higher

The `cmsoccaddon` addon supports only basic B2B extensions. If you need to display addons, the mappings need to be added.

For example, to support `accountsummaryaddon`, add the following to `cmsoccaddon-beans.xml`:

```
<!-- AccountSummaryAccountStatusComponent -->
        <bean class="de.hybris.platform.cms.occ.data.AccountSummaryAccountStatusComponentData"
```

```
                extends="de.hybris.platform.cms.occ.data.ComponentData">
                <property name="gridViewPageSize" type="Integer"/>
                <property name="listViewPageSize" type="Integer"/>
        </bean>
<!-- AccountSummaryUnitTreeComponent : use ComponentData -->


<!-- AccountSummaryAccountStatusComponent -->
        <bean parent="fieldSetLevelMapping">
                <property name="dtoClass"
                        value="de.hybris.platform.cms.occ.data.AccountSummaryAccountStatusComponentData" />
                <property name="levelMapping">
                        <map>
                                <entry key="BASIC" value="uid" />
                                <entry key="DEFAULT" value="BASIC,name,type,actions,gridViewPageSize,listViewPageSize" />
                                <entry key="FULL" value="DEFAULT,catalogVersion,onlyOneRestrictionMustApply" />
                        </map>
                </property>
        </bean>

        <!-- AccountSummaryUnitTreeComponent -->
        <!-- AccountSummaryAccountStatusComponent -->
        <bean parent="fieldMapper">
                <property name="sourceClass"
                        value="de.hybris.platform.accountsummaryaddon.model.AccountSummaryAccountStatusComponentModel" />
                <property name="destClass"
                        value="de.hybris.platform.cms.occ.data.AccountSummaryAccountStatusComponentData" />
                <property name="fieldMapping">
                        <map />
                </property>
        </bean>

        <!-- AccountSummaryUnitTreeComponent -->
        <bean parent="fieldMapper">
                <property name="sourceClass"
                        value="de.hybris.platform.accountsummaryaddon.model.AccountSummaryUnitTreeComponentModel" />
                <property name="destClass"
                        value="de.hybris.platform.cms.occ.data.ComponentData" />
                <property name="fieldMapping">
                        <map />
                </property>
        </bean>
```

Related Information

[Omni Commerce Connect]

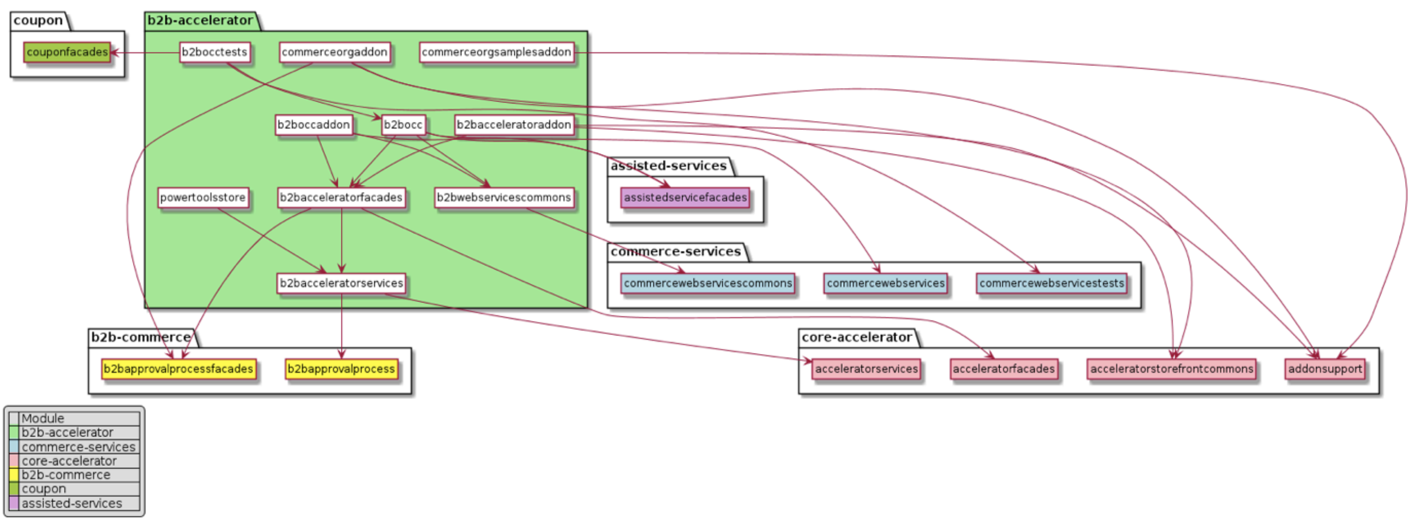
b2bocc Extension

The `b2bocc` extension exposes saved functionality of the [B2B Accelerator Module] in the form of the standardized OCC (Omnichannel Commerce) API.

About the Extension

Name	Directory	Related Module
`b2bocc`	`bin/modules/b2b-accelerator`	[B2B Accelerator Module]

Dependencies



Related Information

Quotes OCC API

The following sections describe the REST API calls you can make using the Quotes OCC APIs.

Get all quotes for a user

The following table describes the GET method to retrieve all quotes for a given user.

HTTP method	GET
URI	`/{baseSiteId}/users/{userId}/quotes`
Request notes	• *<userId>* can also be "current" to identify the current user. • When authenticated as a sales representative, "current" will refer to the sales representative and should not be used.

Request a quote

The following table describes the POST method to create a quote from a given cart or a previously cancelled quote.

HTTP method	POST
URI	`/{baseSiteId}/users/{userId}/quotes`
Request notes	• *<userId>* can also be "current" to identify the current user. • The request should contain one of the following: ◦ *<cartId>*: reference to the cart from which a quote should be created. ◦ *<quoteCode>*:reference to a previously cancelled quote. A copy of the cancelled quote will then be created.

Get a specific quote

The following table describes the GET method to retrieve a single quote.

HTTP method	GET
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}`
Request notes	• *<userId>* can also be "current" to identify the current user.

Edit a quote

The following table describes the PUT and PATCH methods to edit the quote metadata.

HTTP method	PUT and PATCH
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}`
Request notes	• When using PUT, fields not specified in the request payload will be cleared. • *<userId>* can also be "current" to identify the current user. • As a buyer, it is possible to change the name and description of the quote. • As a sales representative, it is possible to change the expiration date.

Perform workflow actions with the quote

The following table describes the POST method to perform a quote workflow action.

HTTP method	POST
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}/action`
Request notes	• *<userId>* can also be "current" to identify the current user. • The request payload must contain an action. • An action can be one of CANCEL, SUBMIT, ACCEPT, APPROVE, or REJECT. Supported actions can be found in the field "allowedActions" when retrieving a quote.

HTTP method	POST
	• Different users will have different allowed actions.

Add a comment to a quote

The following table describes the POST method to add a comment to a quote.

HTTP method	POST
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}/comments`
Request notes	• *<userId>* can also be "current" to identify the current user. • The request payload must contain the field "text".

Apply a discount to an existing quote

The following table describes the POST method to add a discount to a quote.

HTTP method	POST
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}/discounts`

Request notes	• *<userId>* can also be "current" to identify the current user.
	• The request payload must contain the fields "discountRate" and "discountType".
	• *<discountType>* can be either of the following:
	  ◦ PERCENT: a percentage discount of "discountRate" percent on the total amount
	  ◦ ABSOLUTE: an absolute discount of "discountRate"
	  ◦ TARGET: will overwrite the total. The new total amount will be "discountRate".

Add a comment to a line item of a quote

The following table describes the POST method to add a discount to a quote.

HTTP method	POST
URI	`/{baseSiteId}/users/{userId}/quotes/{quoteCode}/entries/{entryNumber}/comments`
Request notes	• *<userId>* can also be "current" to identify the current user. • *<entryNumber>* is the entry under which the comment should be created.

Related Information

[Commerce Quotes]

Using the Quotes OCC API

See examples of using the various OCC Quotes REST API calls. In all examples, the host is `localhost:9002` and the storefront is `Powertools`.

Buyer flow

The following scenario covers a basic end-to-end from the buyer's perspective. The first step is to make sure the following endpoints are called with a customer token. (see [OAuth2])

Create a quote from an existing cart

The following is an example of POST request that will create a quote from the cart with id "00003007". Note that the quote contains a cartId. In order to edit the content of the quote, the associated cart should be edited directly.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes
```

Request body:

```
{
    "cartId":"00003007"
```

```
}
```

The following is the response:


```
{
    "allowedActions": [
        "CANCEL",
        "SUBMIT",
        "EDIT"
    ],
    "cartId": "00003009",
    "code": "00003008",
    "comments": [],
    "entries": [
        {
            "cancellableQuantity": 0,
            "comments": [],
            "configurationInfos": [],
            "entryNumber": 0,
            "product": {
                "availableForPickup": false,
                "baseOptions": [],
                "categories": [
                    {
                        "code": "1360",
                        "name": "Power Drills"
                    },
                    {
                        "code": "brand_753",
                        "name": "Bosch"
                    }
                ],
                "code": "4567167",
                "configurable": false,
                "manufacturer": "Bosch",
                "name": "GSR 14,4 VE-2",
                "purchasable": true,
                "stock": {
                    "isValueRounded": false,
                    "stockLevel": 409,
                    "stockLevelStatus": "inStock"
                },
                "url": "/Open-Catalogue/Tools/Power-Drills/GSR-14%2C4-VE-2/p/4567167"
            },
            "quantity": 100,
            "returnableQuantity": 0,
            "statusSummaryList": [],
            "totalPrice": {
                "currencyIso": "USD",
                "value": 28800.0
            }
        }
    ],
    "name": "Quote 00003008",
    "orderDiscounts": {
        "currencyIso": "USD",
        "value": 0.0
    },
    "previousEstimatedTotal": {
        "currencyIso": "USD",
        "value": 0.0
    },
    "productDiscounts": {
        "currencyIso": "USD",
        "value": 0.0
    },
    "quoteDiscounts": {
        "currencyIso": "USD",
        "value": 0.0
    },
    "state": "BUYER_DRAFT",
    "threshold": 25000.0,
    "totalItems": 1,
    "totalPrice": {
        "currencyIso": "USD",
        "value": 28800.0
    },
    "totalPriceWithTax": {
        "currencyIso": "USD",
        "value": 28800.0
    },
    "updatedTime": "2021-05-17T14:42:37+0000",
    "version": 1
}
```


Submit previously created quote

The following is an example of POST request that will submit a quote to the sales representative. Note that "SUBMIT" is included in the "allowedActions" in the previous quote.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes/00003008/action
```

Request body:

```
{
  "action": "SUBMIT"
}
```

Accept quote and go through checkout

The following is an example of POST request that will accept a quote and will allow a buyer to go through checkout.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes/00003008/action
```

Request body:

```
{
  "action": "CHECKOUT"
}
```

Sales representative flow

The following scenario covers a basic end-to-end from the sales representative's perspective. The first step is to make sure the following endpoints are called as an employee from the group **customermanagergroup**.

Add discount to an existing quote

The following is an example of POST request that will add a discount to a quote. This example will give a $50 discount.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes/00003008/discounts
```

Request body:

```
{
  "discountRate": 50,
  "discountType": "ABSOLUTE"
}
```

Accept quote

The following is an example of POST request that will submit a quote back to the buyer. If the quote amount is too large, an approver will need to approve the quote first. For details, see the section **Approver flow** below.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes/00003008/action
```

Request body:

```
{
  "action": "SUBMIT"
}
```

Approver flow

The following scenario covers a basic end-to-end from the approver's perspective. The first step is to make sure the following endpoints are called as an employee from the group **salesapprover**.

An approver is involved only when the quote amount is above a given threshold.

Approve quote

The following is an example of POST request that will approve a quote and send it back to the buyer. Note that "APPROVE" will be included in the allowedActions when an approver retrieves a quote that he should review.

```
https://api.localhost:9002/occ/v2/powertools/users/127bf550-3092-4faa-af6d-f168f8ee85fc/quotes/00003008/action
```

Request body:

```
{
  "action": "APPROVE"
}
```

Related Information

[Commerce Quotes]

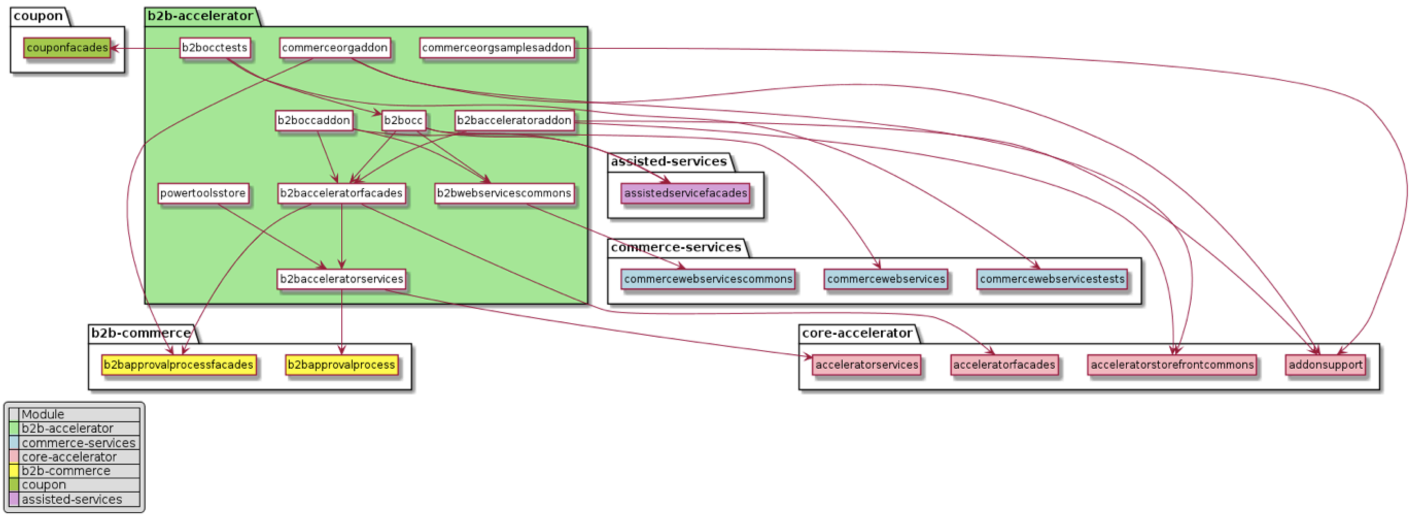
b2bocctests Extension

The `b2bocctests` extension provides tests for the b2bocc extension.

About the Extension

Name	Directory	Related Module
`b2bocctests`	`bin/modules/b2b-accelerator`	B2B Accelerator Module

Dependencies



Related Information

Extensions and AddOns

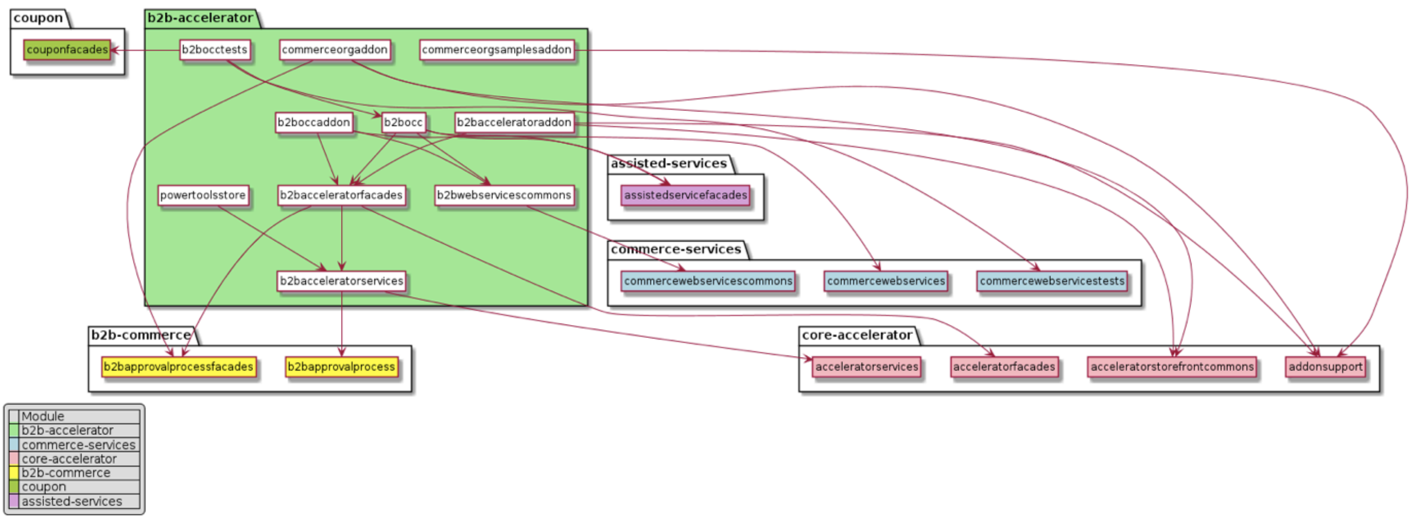
b2bwebservicescommons Extension

The `b2bwebservicescommons` extension provides common resources that can be used by multiple OCC (Omnichannel Commerce) API extensions or addons. Common resources are mostly Data Transfer Objects.

About the Extension

Name	Directory	Related Module
`b2bwebservicescommons`	`bin/modules/b2b-accelerator`	B2B Accelerator Module

Dependencies



Related Information

Extensions and AddOns

commerceorgaddon AddOn

The `commerceorgaddon` extends the target Core Accelerator Storefront to provide organization management functionality through a merchant's B2B Accelerator web site.

⚠ Caution

This page refers to software that has been deprecated as part of the Accelerator UI and older OCC template extensions deprecation. For more information, see Deprecation of Accelerator UIs and Older OCC Template Extensions.

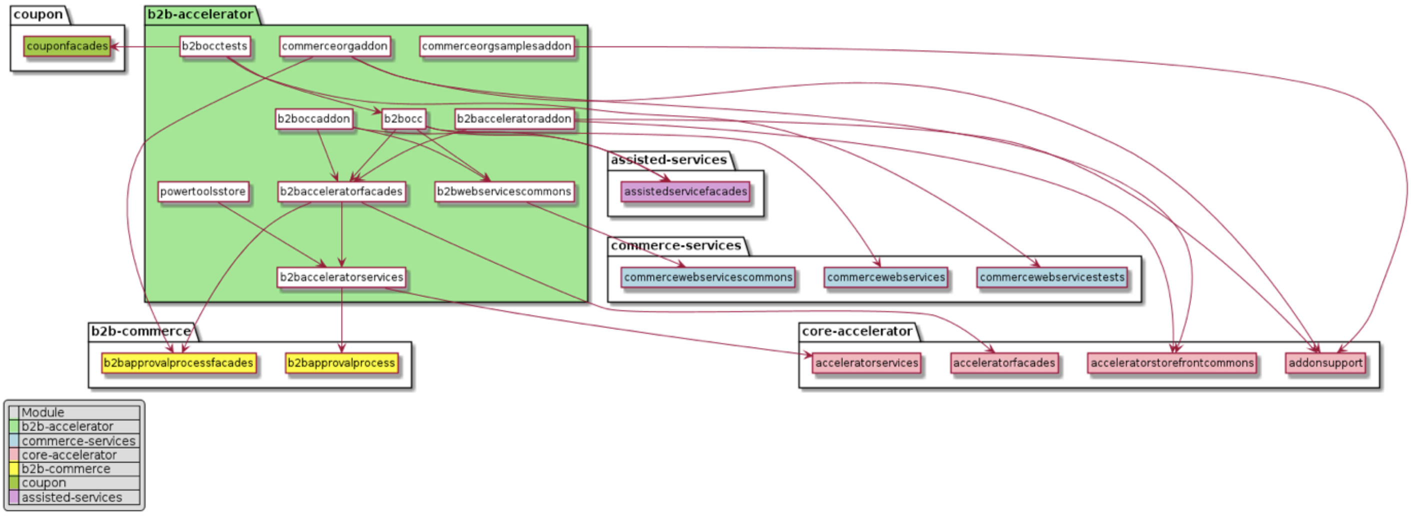
Companies can create multiple organizations (or units as they are called in B2B Accelerator), which are then associated with users, usergroups, order thresholds, budgets, and cost centers.

Organization management features are accessed through the Commerce Organization page of B2B Accelerator.

i Note

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



AddOn Definition

Name	commerceorgaddon
Description	The `commerceorgaddon` AddOn extends a target storefront with Organization Management B2B-specific functionality.
Requires	• addonsupport Extension • acceleratorstorefrontcommons AddOn • b2bacceleratorfacades Extension • Should also be installed with the b2bacceleratoraddon AddOn
Author	SAP

Getting Started

The Storefront Web Application Deconstructed document provides a deeper understanding of how the storefront fits together.

Prior to starting development, you should first start your project by making a copy of the `yacceleratorstorefront` extension together with counterpart extensions from the SAP Commerce Accelerator package using the `extgen` and `modulegen` functionality. For more information about `extgen` and `modulegen` tools, see Customizing the B2C Accelerator.

Commerce Organization Functionality

The `commerceorgaddon` AddOn unlocks the Commerce Organization functionality from the B2B Accelerator. The Contollers, Spring Security, JSP, tag, JavaScript, and CSS files related to the **My Company** section were taken out of the B2B Accelerator and added to the `commerceorgaddon` AddOn.

The `commerceorgaddon` AddOn adds the **My Company** area to the target storefront. The `commerceorgaddon` AddOn also adjusts the Spring security configuration of the target storefront.

For more information on the **My Company** area, see Commerce Organization.

Spring Security

The `commerceorgaddon` AddOn restricts visibility of the **My Company** section to users in the **b2badmingroup**. The following snippet shows the Spring security configuration.

```
........
<security:intercept-url pattern="/my-company*" access="ROLE_B2BADMINGROUP" requires-channel="https"/>
<security:intercept-url pattern="/my-company/**" access="ROLE_B2BADMINGROUP" requires-channel="https"/>
........
```

The commerceorg-specific Spring security configuration can be found in `ext-addon/commerceorgaddon/resources/commerceorgaddon/web/spring/commerceorgaddon-spring-security-config.xml`.

Installing the commerceorgaddon AddOn

Procedure

1. Add the `commerceorgaddon` AddOn to your `localextensions.xml` file, ensuring the listed required extensions are also included.

   ```
   <extension dir="${HYBRIS_BIN_DIR}/ext-addon/b2bacceleratoraddon"/>
                                           <extension dir="${HYBRIS_BIN_DIR}/ext-addon/commerceorgaddon"/>
                                           <extension dir="${HYBRIS_BIN_DIR}/ext-accelerator/b2bacceleratorfacades"/>
                                           <extension dir="${HYBRIS_BIN_DIR}/ext-accelerator/acceleratorstorefrontcommons"/>
                                           <extension dir="${HYBRIS_BIN_DIR}/ext-addon/addonsupport"/>
   ```

2. Open a command prompt and navigate to the `hybris/bin/platform` directory.
   - On Microsoft Windows systems, open the `setantenv.bat` file.
   - On Unix-related systems (such as Linux or Mac OS), run `setantenv.sh` by entering `. ./setantenv.sh`.
3. Do not close the command window.
4. Install the `b2bacceleratoraddon` AddOn to your storefront extensions based on the `yacceleratorstorefront` template with the following `ant` command.

   ```
   ant addoninstall -Daddonnames="commerceorgaddon" -DaddonStorefront.yacceleratorstorefront="<mystorefrontextensionname>"
   ```

   When the installation is successful, the BUILD SUCCESSFUL notification is displayed in the command prompt.

Modifications Checklist

The modifications that this AddOn makes to the Accelerator are listed below:

Impex Configuration Scripts	✔
Core Data Listeners	−
Model Layer	−
Model Interceptors	−
Cockpit Configuration	−
Cockpit Beans	−
Validation Rules	−

Service Layer	−
Facade DTO	−
Facade Layer	−
CMS Components	✔
Page Templates	−
JavaScript	✔

CSS	✓

Page Controllers	✓
Tags	✓
TLD	−
Filters	−
MVC Interceptors	−
Spring Security	✓
Message Resources	✓

commerceorgsamplesaddon AddOn

The purpose of the `commerceorgsamplesaddon` AddOn is to load commerceorg sample data, including sales organization data. In particular, it makes use of the AddOn's capabilities to load data, such as loading impex data only for stores that are currently installed.

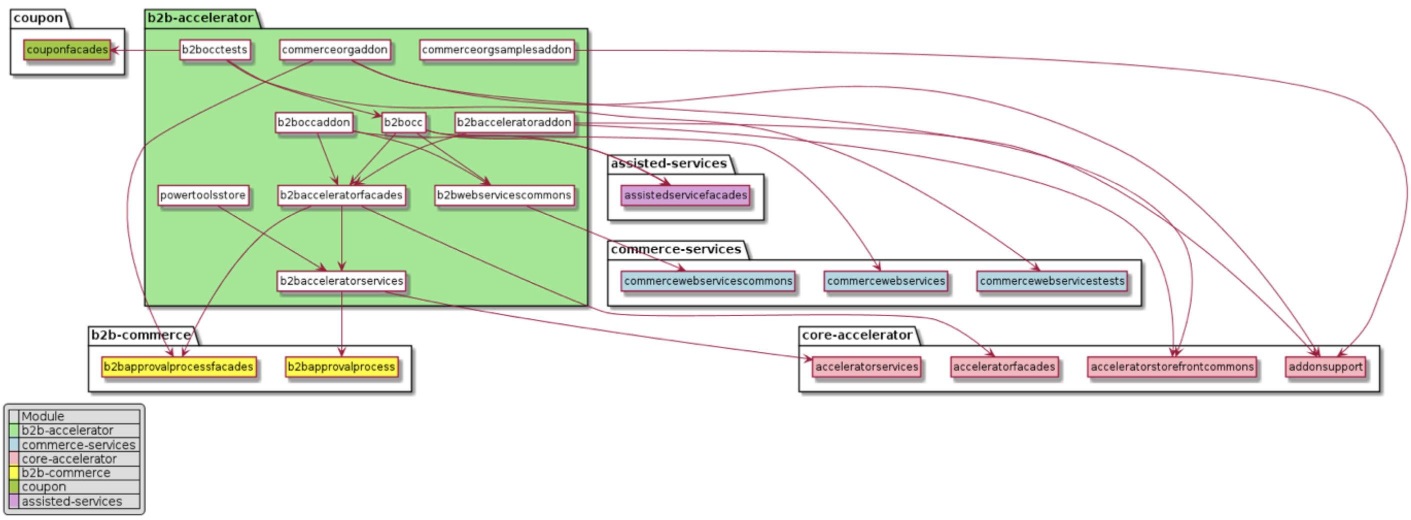
⚠ **Caution**

This page refers to software that has been deprecated as part of the Accelerator UI and older OCC template extensions deprecation. For more information, see Deprecation of Accelerator UIs and Older OCC Template Extensions.

i **Note**

An SAP Commerce extension may provide functionality that is licensed through different SAP Commerce modules. Make sure to limit your implementation to the features defined in your contract license. In case of doubt, please contact your sales representative.

Dependencies



AddOn Definition

Name	commerceorgsamplesaddon
Description	The purpose of the `commerceorgsamplesaddon` AddOn is to load commerceorg sample data, including sales organization data. In particular, it makes use of the AddOn's capabilities to load data, such as loading impex data only for stores that are currently installed.
Requires	addonsupport Extension
Author	hybris

Supported Markets and Channels

The `commerceorgsamplesaddon` AddOn supports all Accelerator.

Overview

The `commerceorgsamplesaddon` AddOn makes use of the AddOn'ss ability to load sample data for specific stores. For instance, sample data that defines global sales organizations is located in `/commerceorgsamplesaddon/resources/commerceorgsamplesaddon/import/common/user-groups.impex`, but the mapping of those organizations to the specific powertools user groups can be found in `/commerceorgsamplesaddon/resources/commerceorgsamplesaddon/import/stores/powertools/user-groups.impex`.

Installing the commerceorgsamplesaddon AddOn

The following procedure describes how to install the `commerceorgsamplesaddon` AddOn.

1. Add the `commerceorgsamplesaddon` AddOn to your `localextensions.xml` file, along with any required extensions, as follows:

```
<extension dir="${HYBRIS_BIN_DIR}/modules/b2b-accelerator/commerceorgsamplesaddon"/>
<extension dir="${HYBRIS_BIN_DIR}/modules/core-accelerator/addonsupport/addonsupport"/>
```

2. Install the AddOn by executing the `addoninstall` ant command, as follows:

```
ant addoninstall -Daddonnames="commerceorgsamplesaddon" -DaddonStorefront.yacceleratorstorefront="yacceleratorstorefront"
```

   This generates the correct properties in the `project.properties` file of the `commerceorgsamplesaddon` AddOn, and adds a dependency from your storefront to the `commerceorgsamplesaddon` AddOn.

3. After the `commerceorgsamplesaddon` AddOn is installed, you can initialize or update the system normally.

Modifications Checklist

The modifications that this AddOn makes to the Accelerator are listed below:

Impex Configuration Scripts	−
Core Data Listeners	−
Model Layer	−
Model Interceptors	−
Cockpit Configuration	−
Cockpit Beans	−
Validation Rules	−

Service Layer	−
Facade DTO	−
Facade Layer	−
CMS Components	−
Page Templates	−
JavaScript	−
CSS	−

Page Controllers	−
Tags	−
TLD	−
Filters	−
MVC Interceptors	−
Spring Security	−
Message Resources	−

powertoolsstore Extension

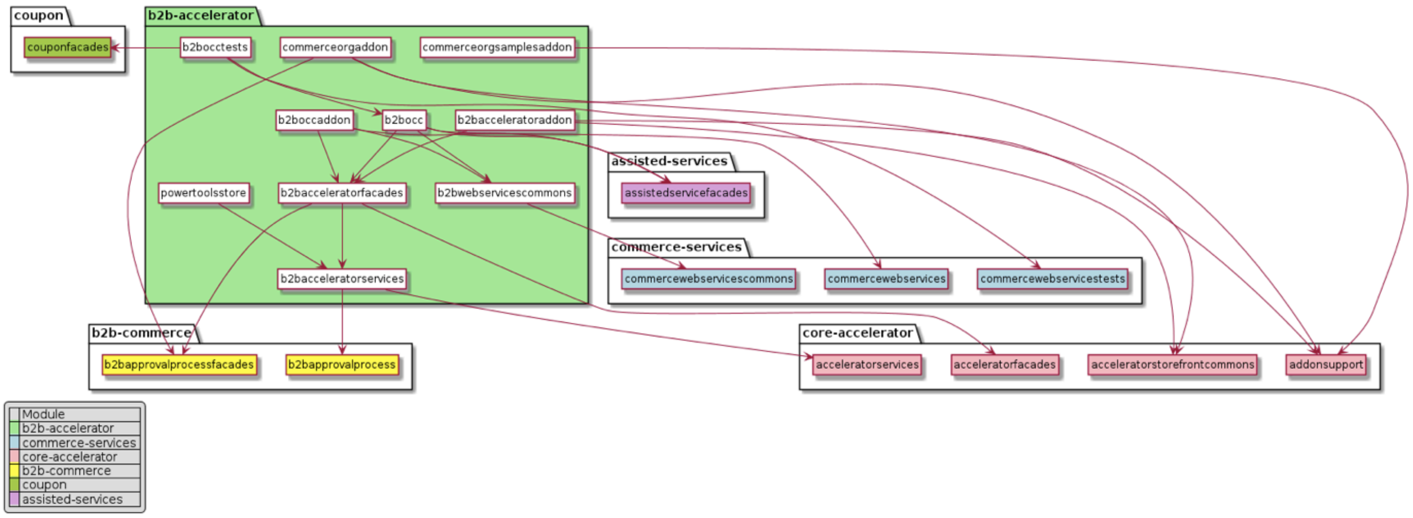
The `powertoolsstore` extension adds the necessary dataset for a reference B2B Accelerator site and a power tools product catalog.

The sample store has multilingual options, as well as shipping to multiple countries, tax rules set at the store point of sale country and support for multi-dimensional products.

→ **Tip**

This extension contains sample data for a B2B site. The description for B2C sample data is provided in the apparelstore Extension and electronicsstore Extension documents.

Dependencies



Impex Data Configuration

`PowertoolsSampleDataImportService.java` has been created for the `powertoolsstore` extension. This class extends the default `SampleDataImportService`, so that, in addition to the default sample data, commerce organization data (that is, commerceorg data) is specifically imported as well. Also note, when importing the product catalog data, the data for multi-dimensional products is imported as well.

Impex data in the `powertoolsstore` extension are separated into two groups: core data and sample data.

The core data is configured as follows:

- Essential data (includes the following)
  - Languages
  - Currency
  - Vendor
  - Warehouse
  - Titles
- Store data
  - Site configuration
  - Solr configuration
  - Base store configuration
- Content Catalogs
  - CMS page template
  - Email template

The sample data is configured as follows:

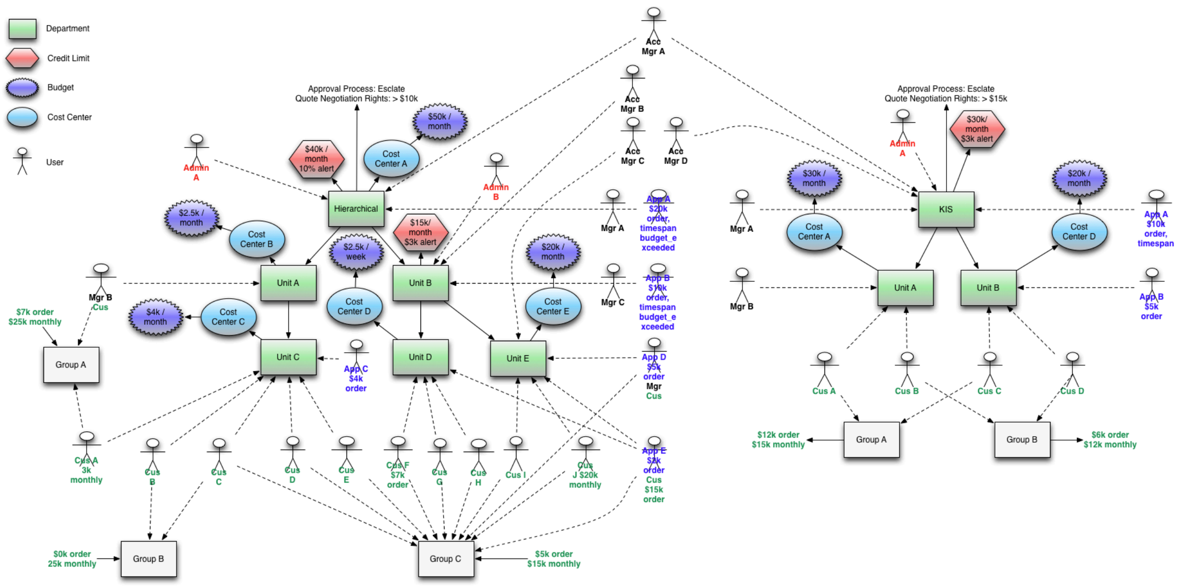
- Cockpits
  - CMS Cockpit
  - CS Cockpit
  - Product Cockpit
  - Report Cockpit
- Commerceorg
  - Users

- User groups
- Permissions
- Cost center
- Budget
- Unit

- Content Catalog
  - CMS content data
  - Email content data
- Product Catalog
  - Catalog Data
  - Category Classification Data
  - Product Data (for example, name, code, description, etc).
  - Media Data
  - Future-stock and Stock-level
  - Supplier Data
  - Multi-Dimensional Product Data
- Stores
  - Promotions
  - Solr Search
  - Store Locations
  - Btg
  - Warehouses

Organization Structure

B2B Accelerator provides a reference organization delivered with the SAP `powertoolsstore` extension. The organization is as follows (right-click the image to view it full-sized in a new tab):



Rustic Organization

B2B Units

Top-level unit: **Rustic**

Description	Name	Groups (UID)
Unit A	Rustic Retail	Rustic

Description	Name	Groups (UID)
Unit B	Rustic Services	Rustic
Unit C	Custom Retail	Rustic Retail
Unit D	Services East	Rustic Services
Unit E	Services West	Rustic Services

B2B Customers

Description	Email (Login)	Unit	Group
Admin A	linda.wolf@rustic-hw.com	Rustic	`b2badmingroup`
Admin B	lars.bauer@rustic-hw.com	Rustic Services	`b2badmingroup`
Approver A	hanna.schmidt@rustic-hw.com	Rustic	`b2bapprovergroup`
Approver B	james.bell@rustic-hw.com	Rustic Services	`b2bapprovergroup`
Approver C	carla.torres@rustic-hw.com	Custom Retail	`b2bapprovergroup`
Approver D	matheu.silva@rustic-hw.com	Services West	`b2bapprovergroup`, `b2bcustomergroup`, `b2bmanagergroup`
Approver E	mingmei.wang@rustic-hw.com	Services East	`b2bapprovergroup`, `b2bcustomergroup`
Customer A	mark.rivers@rustic-hw.com	Custom Retail	`b2bcustomergroup`
Customer B	anthony.lombardi@rustic-hw.com	Custom Retail	`b2bcustomergroup`
Customer C	william.hunter@rustic-hw.com	Custom Retail	`b2bcustomergroup`
Customer D	marie.dubois@rustic-hw.com	Custom Retail	`b2bcustomergroup`
Customer E	axel.krause@rustic-hw.com	Custom Retail	`b2bcustomergroup`
Customer F	ulf.becker@rustic-hw.com	Services East	`b2bcustomergroup`
Customer G	alejandro.navarro@rustic-hw.com	Services East	`b2bcustomergroup`
Customer H	lucas.kowalski@rustic-hw.com	Services East	`b2bcustomergroup`
Customer I	byung-soon.lee@rustic-hw.com	Services West	`b2bcustomergroup`
Customer J	gi.sun@rustic-hw.com	Services West	`b2bcustomergroup`
Manager A	akiro.nakamura@rustic-hw.com	Rustic	`b2bmanagergroup`
Manager B	anil.gupta@rustic-hw.com	Rustic Retail	`b2bmanagergroup`, `b2bcustomergroup`
Manager C	salome.levi@rustic-hw.com	Rustic Services	`b2bmanagergroup`

Account Managers

Stick Figure Name	UID (Login)	Name
Acc Mgr A	acctmgra	Alistair Thompson
Acc Mgr B	acctmgrb	Elke Vogel
Acc Mgr C	acctmgrc	Sergio Vega
Acc Mgr D	acctmgrd	Bruce Rivers

KIS Organization (Pronto)

B2B Units

Top-level unit: **Pronto**

Description	Name	Groups (UID)
Unit A	Pronto Goods	Pronto
Unit B	Pronto Services	Pronto

B2B Customers

Description	Email (Login)	Unit	Group
Admin A	linda.wolf@pronto-hw.com	Pronto	`b2badmingroup`
Approver A	hanna.schmidt@pronto-hw.com	Pronto	`b2bapprovergroup`
Approver B	james.bell@pronto-hw.com	Pronto Services	`b2bapprovergroup`
Customer A	mark.rivers@pronto-hw.com	Pronto Goods	`b2bcustomergroup`
Customer B	mingmei.wang@pronto-hw.com	Pronto Goods	`b2bcustomergroup`
Customer C	william.hunter@pronto-hw.com	Pronto Services	`b2bcustomergroup`
Customer D	gi.sun@pronto-hw.com	Pronto Services	`b2bcustomergroup`
Manager A	akiro.nakamura@pronto-hw.com	Pronto	`b2bmanagergroup`
Manager B	anil.gupta@pronto-hw.com	Pronto Goods	`b2bmanagergroup`

Other Units and Employees

Other Employees

UID (Login)	Name
B2BRegistrationApprover	B2B Registration Approver
cmsmanager	CMS Manager
csagent	Customer Service Agent
customermanager	Customer manager

PunchOut Organization and Customers

The PunchOut Organization exists as the unit for customer accounts used by the PunchOut AddOn.

Description	UID	Group
PunchOut Customer 1	punchout.customer@punchoutorg.com	`b2bcustomergroup`
PunchOut Customer 2	punchout.customer2@punchoutorg.com	`b2bcustomergroup`

Related Information

[SAP Commerce Accelerator Documentation](#)
[apparelstore Extension](#)
[electronicsstore Extension](#)

B2B Accelerator Implementation

This section explains how to implement the Omni Commerce Connect (OCC) API AddOn with B2B Accelerator.

[Customizing B2B Accelerator](#)
This procedure describes how to create a customized B2B Accelerator.
[Changing the Default Remember Me Timeout](#)
Learn how to update the default remained logged in time.

Customizing B2B Accelerator

This procedure describes how to create a customized B2B Accelerator.

Prerequisites

Before running the `modulegen` tool, download the latest version of the SAP Commerce solution. For more details, see [Download](#).

Once you have downloaded SAP Commerce, extract the SAP Commerce ZIP file in *<BASE_DIR>*.

→ **Tip**

If you are in a training class, the SAP Commerce ZIP file will be provided by your trainer.

Procedure

1. Open a command line and go to the installer directory of your SAP Commerce instance.
   - Windows: `cd <HYBRIS_HOME_DIR>\installer`
   - Unix/MacOS: `cd <HYBRIS_HOME_DIR>/installer`
2. Build SAP Commerce using the `cx` recipe.
   - Windows: `install.bat -r cx -A initAdminPassword=<your_password>`
   - Unix/MacOS: `./install.sh -r cx -A initAdminPassword=<your_password>`
3. Navigate to the `<HYBRIS_BIN_DIR>/platform` directory and set your `ant` environment by entering the following command.
   - Windows: `setantenv.bat`
   - Unix/MacOS: `. ./setantenv.sh`
4. Remove the `yb2bacceleratorstorefront` extension from the `<HYBRIS_CONFIG_DIR>/localextensions.xml` file.
5. Delete the `yb2bacceleratorstorefront` extension directory under `<HYBRIS_CONFIG_DIR>`.

   Windows:

   ```
   rm <HYBRIS_HOME_DIR>\hybris\bin\custom\yb2bacceleratorstorefront -rf
   ```

   Unix/MacOS:

   ```
   rm -r <HYBRIS_HOME_DIR>/hybris/bin/custom/yb2bacceleratorstorefront
   ```

6. Run the `ant modulegen` command and modify the `input.name` and `input.package` parameters as required.

   ```
   ant modulegen -Dinput.module=accelerator -Dinput.name=training -Dinput.package=de.hybris.training -Dinput.template=develop
   ```

   Where:

   - `input.module` parameter: Configures the **modulegen** task to use the `accelerator` module.
   - `input.name` value: Indicates the prefix that is added to the new extensions generated by **modulegen**.
   - `input.package` value: Defines the default Java package prefix.
   - `input.template` parameter: Defines how to use the default SAP Commerce configuration.

   i **Note**

   The `training` variable can be substituted for any string value.

7. Remove all the `yaccelerator*` extensions from the `<HYBRIS_CONFIG_DIR>/localextensions.xml` file.
8. Add the new extensions to the `<HYBRIS_CONFIG_DIR>/localextensions.xml` file.

   ```
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingbackoffice"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingcore"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingfacades"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingfulfilmentprocess"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/traininginitialdata"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingstorefront"/>
   <extension dir="${HYBRIS_BIN_DIR}/custom/training/trainingtest"/>
   ```

   i **Note**

   If you include the `trainingtest` extension, it imports test data which can be inaccurate in a real-world scenario. Only include the `trainingtest` extension if you intend to perform tests with this Accelerator.

9. Add the following extension to the `<HYBRIS_CONFIG_DIR>/localextensions.xml` file.

   ```
   <extension name='ycommercewebservices' />
   ```

10. Uninstall the following B2B Accelerator AddOns by running the following `ant` commands from the `<HYBRIS_BIN_DIR>/platform` directory.

    ```
    ant addonuninstall -Daddonnames="customerinterestsaddon" -DaddonStorefront.yacceleratorstorefront="trainingstorefront"
    ant addonuninstall -Daddonnames="stocknotificationaddon" -DaddonStorefront.yacceleratorstorefront="trainingstorefront"
    ant addonuninstall -Daddonnames="notificationaddon" -DaddonStorefront.yacceleratorstorefront="trainingstorefront"
    ant addonuninstall -Daddonnames="assistedservicecustomerinterestsaddon" -DaddonStorefront.yacceleratorstorefront="trainingstore
    ant addonuninstall -Daddonnames="customerinterestsocc" -DaddonStorefront.yacceleratorstorefront="ycommercewebservices"
    ant addonuninstall -Daddonnames="notificationocc" -DaddonStorefront.yacceleratorstorefront="ycommercewebservices"
    ```

11. Install the B2B Accelerator AddOns on the training storefront by running the following `ant` commands from the `<HYBRIS_BIN_DIR>/platform` folder.

    ```
    ant addoninstall -Daddonnames="b2bacceleratoraddon" -DaddonStorefront.yacceleratorstorefront="trainingstorefront"
    ant addoninstall -Daddonnames="commerceorgaddon" -DaddonStorefront.yacceleratorstorefront="trainingstorefront"
    ```

12. Provide access to the powertools B2B storefront website.

    a. Navigate to *<HYBRIS_BIN_DIR>*`/custom/training/trainingstorefront`.

    b. Open the `trainingstorefront` extension's `project.properties` file and remove all existing properties starting with `website.*` and replace them with the following properties.

    ```
    website.powertools.http=http://powertools.local:9001/trainingstorefront
    website.powertools.https=https://powertools.local:9002/trainingstorefront
    media.powertools.http=http://powertools.local:9001
    media.powertools.https=https://powertools.local:9002
    ```

    c. Change the site channel filters so that the extension uses the B2B filters by modifying the `trainingstorefront/web/webroot/WEB-INF/config/spring-filter-config.xml` file and replacing this code snippet with the following one.

    Original code:

    ```
    <alias name="b2cAcceleratorSiteChannels" alias="acceleratorSiteChannels"/>
    <util:set id="b2cAcceleratorSiteChannels" value-type="de.hybris.platform.commerceservices.enums.SiteChannel">
        <ref bean="SiteChannel.B2C"/>
    </util:set>
    ```

    New code:

    ```
    <alias name="b2bAcceleratorSiteChannels" alias="acceleratorSiteChannels"/>
    <util:set id="b2bAcceleratorSiteChannels" value-type="de.hybris.platform.commerceservices.enums.SiteChannel">
        <ref bean="SiteChannel.B2B"/>
    </util:set>
    ```

13. Run `ant clean all` and `ant initialize` from the *<HYBRIS_BIN_DIR>*`/platform` directory.

    Windows:

    ```
    cd %HYBRIS_HOME_DIR%\hybris\bin\platform & ant clean all
    ant initialize
    ```

    Unix/MacOS

    ```
    cd $HYBRIS_HOME_DIR/hybris/bin/platform; ant clean all
    ant initialize
    ```

14. Start the SAP Commerce server by running the following command from the *<HYBRIS_BIN_DIR>*`/platform` folder.

    - Windows: `hybrisserver.bat`
    - Unix/MacOS: `./hybrisserver.sh`

15. If necessary, allow blocked libraries to run in MacOS Catalina. For further information, see Allowing Apps on MacOS.

16. Add the following to your hosts file.

    ```
    127.0.0.1    powertools.local
    ```

    You can access the B2B powertools storefront with the following URL:

    - `https://powertools.local:9002/trainingstorefront/powertools/en/USD/login`

Related Information

Modulegen
Environment Variables
Customizing the B2C Accelerator to Have B2B and B2C Storefronts

Changing the Default Remember Me Timeout

Learn how to update the default remained logged in time.

Context

The SAP Commerce Accelerator Remember Me functionality is enabled by default, and has a default validity of two weeks.

Procedure

1. Navigate to `spring-security-config.xml` under `{root path of customer storefront}\web\webroot\WEB-INF\config`.
2. Locate the bean `defaultRememberMeServices` in this XML.
3. Add property `tokenValiditySeconds`, and override the default two weeks with the desired time.
4. Restart the server to make the modification take effect.

Related Information

Remember Me Feature