



Propel

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HPE Propel Admin Help

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About this PDF Version of Online Help

This document is a PDF version of the online help. This PDF file is provided so you can easily print multiple topics from the help information or read the online help in PDF format. Because this content was originally created to be viewed as online help in a web browser, some topics may not be formatted properly. Some interactive topics may not be present in this PDF version. Those topics can be successfully printed from within the online help.

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Launchpad

Welcome to the HPE Propel Launchpad. From here, consumers can order, track, and manage their IT services, access knowledge articles, and more. Administrators can manage catalogs, organizations, catalog items, and perform other administrative tasks.

Launchpad Sections

The Launchpad content is divided into several areas or sections.

Banner - This administrator customizable area of Launchpad typically contains a background image, the *banner*, or a group of images that are displayed one at a time for a specified time interval before rotating to the next image.

You will also find:

- The HPE Propel product logo or your organizations logo
- Possibly one or more buttons to launch applications
- Your user avatar that when clicked displays a drop-down list of additional navigation options. See "[Avatar and Action Drop-Down List](#)" on page 12 for more information.

Tip: Click the arrow in the lower corner of the banner to expand or minimize this content.

My Information (available to consumers and organization administrators)

This section includes:

- HPE Propel Website Link
- Current date and time

My Applications

Launchpad has a **My Applications** section that includes tiles that when clicked on launch an application available to the user. More information on the tasks offered in this section can be found in [Tasks](#).

Tasks

The user's role determines what tasks they will be able to perform. More information on each of the following can be found in either the HPE Propel Consumer or Administrator help.

The following tiles are typically associated with consumer tasks:

- **Knowledge** - Access knowledge articles
- **Request Support** - Request support assistance
- **Services** - Manage service subscriptions
- **Shop** - Shop for catalog items

The following tiles are typically associated with organization administrative tasks:

- **Business Processes** - Create, customize and manage HPE Propel policies and processes
- **Catalogs** - Create and manage catalogs
- **Catalog Items** - Create and manage catalog items
- **Categories** - Create and manage categories used to group items within a catalog
- **Catalog Connect** - Create and manage catalog aggregations, which contain catalog items imported from end-point systems
- **Policies** - Create and manage approval policies
- **Suppliers** - Create and manage end-point fulfillment systems, also known as suppliers

The following tiles are typically associated with administrative tasks:

- **Content Management** - Manage Service Exchange content packs
- **Diagnostics** - View basic monitoring and health check data
- **Identity** - Create and manage organizations and manage licensing

Detailed help is available when you navigate to any of these applications.

Additional Actions

Additional actions are available by clicking on the avatar at the top of HPE Propel views. See "[Avatar and Action Drop-Down List](#)" on page 12 for more information.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, or [here](#) for the latest English version of the HPE Propel Consumer Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

Get Started

Get started here!

- ["Prerequisites" on page 8](#)
- ["User Interface Customization" on page 9](#)
- ["Adaptive Content" on page 9](#)
- ["Language Display" on page 9](#)
- ["Log In" on page 11](#)
- ["Log Out" on page 11](#)
- ["Online Help " on page 12](#)

Prerequisites

Review the following requirements:

- HPE Propel uses https and by default runs on port 9000. If the Launchpad is customized for your organization, contact your Propel administrator to determine whether the port or protocol has changed.
- You must use a supported browser. A minimum screen resolution of 1024x768 is supported. As a best practice, HPE recommends a screen resolution of 1280x1024. For information about supported browsers, refer to the *HPE Propel Support Matrix*.
- The default URL format is: `https://<HOST>:9000/org/<ORG_ID>`

Password Security

A master password is used to encrypt passwords for user accounts, such as `admin`, `consumer`, and `idmTransportUser`. As a best practice for security within your organization, HPE recommends that you change the default master password during the installation process. For password details, refer to the *HPE Propel Administration Guide*.

User Interface Customization

As an end user, you might want to use your organization's branding in the HPE Propel user interface.

To support your organization's branding styles and standards, you can customize certain user interface elements, such as the Launchpad icon, title, welcome message, footer message, widgets, and security classifications. For instructions on how to customize these user interface elements, refer to the *HPE Propel Customizing Launchpad* document or contact your Propel administrator.

Adaptive Content

The user interface layout is designed to adapt to various screen sizes, where the content adjusts to the size, and where all functionality persists. View it on your desktop, tablet, or other mobile devices. Across these device screens, an intuitive user interface displays and includes all functionality. For screen resolution requirements and best practices, see "[Prerequisites](#)" on page 8.


Language Display

By default, the user interface displays in a left-to-right direction. For certain languages, such as Arabic and Hebrew, you can configure supported browsers for a right-to-left user interface display.

- Several navigation components in the Portal, such as the organization logo and user avatar display on the right or left side, depending on the language you configure in your browser.
- In the input fields, you can also enter text in a right-to-left direction.


Setting the Language Display in Google Chrome

To configure the language setting in your Chrome browser:

1. From the Chrome drop-down menu , select **Settings**.
2. In the Settings window, select **Show advanced settings**.
3. In the Languages section, click **Language and input settings**.
4. In the Languages pane, click **Add**.
5. In the Add Language window, select a supported language from the drop-down list.
6. Click **OK**.
7. For the language that you want the views displayed in, select it and then drag to the top of the Languages list.
8. In the Languages window, click **Done**.
9. Log out and then log back in for the selected language to display. This language setting persists in your browser until you change it.

Setting the Language Display in Mozilla Firefox

To configure the language setting in your Firefox browser:

1. From the Firefox drop-down menu , select **Options**.
2. In the Options window, select the **Content** tab.
3. In the Languages section, click **Choose** to select your preferred language for displaying views.
4. In the Languages window, in the **Select a language to add** drop-down list, select a supported language, and then click **Add**.
5. For the language that you want the views displayed in, select it and then click **Move Up** to move that selection to the top of the list.
6. Click **OK** to save your changes.
7. Log out and then log back in for the selected language to display. This language setting persists in your browser until you change it.

Note: Navigation components display on either the right or left side of the user interface, depending on the language configured in your browser.

Log In

To log in:

1. Open a browser window.
2. Enter the URL provided by your Propel administrator. The landing page displays.
3. Click **Login**. The login page displays.
4. Enter your **Username** and **Password**, then click **Log In**.
 - If the login request token is invalid or has expired, you will see a warning, and will be allowed to enter valid credentials.
 - HPE Propel Launchpad supports single sign-on, which might change the login experience that is based on your organization's settings. Contact your Propel administrator for additional information.

Log Out


To log out:

- Click on the user avatar at the top of the view, and select **Logout** from the drop-down list.
Your HPE Propel session will be ended.

Back Navigation

In any view in the Portal, click the application icon in the heading under the banner to return to the top of the current application. Click the Propel or organization icon in the heading to navigate to Launchpad.

Search

In most views, you can use the search tool  to locate an object by a text search. See ["Searches" on page 13](#) for more information.

Online Help

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, or [here](#) for the latest English version of the HPE Propel Consumer Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

You can access the online Help from any view in HPE Propel. Review the context-sensitive online Help for instructions on how to perform tasks.

To access the online Help:

1. From any view, in the user avatar drop-down list, select **Help** to open the online Help.
2. Context-sensitive help will be displayed. You can also view other topics by selecting sub-folders in the left navigation pane to expand the table of contents.
3. Use the search box to look for topics by keyword.
4. (Optional) Use your browser to save Favorites or Bookmarks for topics.
5. (Optional) At the bottom of a topic, click the **Send Help Center feedback** link to help us improve the information you need!

Avatar and Action Drop-Down List

The HPE Propel views include an avatar, or graphical representation of the user. It is typically a circle around the first initial of the user name.

The avatar is located at the top of the user interface. Click on the avatar to display a drop-down list of additional navigation options. The options presented in all views include:

- **About** - Displays the product name and version number
- **Help** - Displays context-sensitive online help

- **Logout** - Logs you out, ending your user session
- **My Workstream** - View a list of the five most recent unread workstream feeds, or navigate to the **My Workstream** view where you can view all your feeds.

Consumer focused views might include options such as:

- **Approvals** - Navigates to the **Approval List** view where you can see and manage requests that require approval.
- **Cart** - Navigates to the **Shopping Cart** view where you can modify your cart contents and place your order
- **Orders** - Navigates to the **Orders** view where you can view orders and order details.
- **Support Requests** - Navigates to the **Support Catalog** view where you can browse and manage support requests, and more

Administrative focused views might include options such as:

- **License** - View and manage product license information

Searches

When logged in with a **consumer** or **orgadmin** role, you can search each application's information using its search feature. Additionally you can search HPE Propel more broadly using the **Search Propel** feature available in HPE Propel **Launchpad** and in the **Request Support** application.

Search Shop, Request Support, and Knowledge applications use HPE IDOL (Intelligent Data Operating Layer) for searches. For detailed information on Propel searches with IDOL, see the *HPE Propel Searches with IDOL* white paper.


IDOL Search Quick Tips

Following are several basic IDOL search tips. For detailed information on Propel searches with IDOL, see the *HPE Propel Searches with IDOL* white paper.

- **Wildcard search** - Use wildcards in the search string. A question mark (?) represents a single character; an asterisk (*) represents any number of characters.

- **Exact phrase search** - Enclose the search string in double quotation marks (""). This forces IDOL to search only on the exact string, and not for results that appear relevant even though the exact search string was not found.
- **Boolean Search** - Search on a Boolean expression using operators AND, NOT, OR, and others.

Search Propel

Enter text in the **Search Propel** text box to locate relevant content based on the specified keyword or string, then click on the search icon . Content searched includes that found in the **Shop**, **Knowledge**, and **Request Support** applications. The search results view lists relevant content, as well as a list of what applications the content was found in. Click on a search result to navigate to that specific content, or click on an application to view more detailed search results for that application only.

Sort Search Results

By default, search results are displayed with most relevant first. Use the drop-down list to sort by newest, oldest, price, alphabetical, reverse alphabetical, and so on.

Filter Search Results

Refine the results of the content displayed by selecting a specific application whose content is to be searched. Use the application drop-down list to select all available applications or one specific application. Content searched includes data found in the **Shop**, **Knowledge**, and **Request Support** applications.

Catalogs Management

The Organization Administrator can use the following applications to manage catalogs, the suppliers that provide catalog items, and the order fulfillment approval policies:

- "Catalogs" on page 16 - create and manage HPE Propel catalogs, which contain published catalog items for consumer fulfillment.
- "Catalog Items" on page 25 - create and manage HPE Propel catalog items.
- "Categories" on page 72 - create and manage HPE Propel categories, which are used to group catalog items in catalogs.
- "Catalog Connect" on page 78 - aggregate (import) catalog items from end-point systems (HPE Propel suppliers), such as HPE Service Manager (SM) and HPE Cloud Service Automation (CSA).
- "Suppliers" on page 92 - manage integration of HPE Propel with suppliers, from which catalog items are imported (aggregated).
- "Policies" on page 101 - create and manage the policies that control the approval requirements for orders placed by consumers in the HPE Propel Portal.
- "Business Processes" on page 109 - create and manage the business processes that tailor the HPE Propel approval policies to business needs.

Expand the help table of contents to see all topics included in this help.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

For more information about Hewlett Packard Enterprise products, visit the HPE website at www.hpe.com.

Catalogs

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

Catalogs can contain categories, which are used to group catalog items within the catalog.

Tasks

- "[Manage Catalogs](#)" on page 17 - View, sort, add and remove catalogs.
- "[View Catalog Details](#)" on page 19 – View details of the catalog, including name and description.
- "[Edit Catalog](#)" on page 19 - Edit details of the catalog, including name, description, and image used for visual representation.
- "[Manage Items in Catalog](#)" on page 20 – View and manage the catalog items in the catalog.
- "[Grant Catalog Access Control](#)" on page 21 – View and control who has access to the catalog.
- "[Manage Catalog Approval Policy](#)" on page 22 – View and control the approval policy for the catalog.
- "[View Catalogs in Localized Languages](#)" on page 23 - Set the language in which to view the catalog and translate the catalog into that language.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

Manage Catalogs

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator uses the **Catalogs** application to view, create and manage catalogs. These catalogs enable the Organization Administrator to publish catalog items to the HPE Propel Portal for consumer fulfillment.

Tasks

The following tasks are available from the **Catalogs** view:

- ["View List of Catalogs" on page 17](#)
- ["Sort List of Catalogs" on page 17](#)
- ["Add Catalog" on page 18](#)
- ["Remove Catalog" on page 18](#)

View List of Catalogs

To view the list of catalogs:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view displays all catalogs.

Tip: To filter the list of catalogs that are displayed, type the search criteria. Only the catalogs that meet the search criteria are displayed.

Sort List of Catalogs

Note: This task assumes you are in the **Catalogs** view. (See ["View List of Catalogs" on page 17](#) for instructions.)

To change the sort order of the catalogs:

1. Open the drop-down list.
2. Select the desired sort order: **Newest**, **Oldest**, **Reverse Alphabetical** or **Alphabetical**.

Add Catalog

Note: This task assumes you are in the **Catalogs** view. (See "[View List of Catalogs](#)" on [page 17](#) for instructions.)

To create a new catalog:

1. In the **Catalogs** view, click the **Add Catalog** button.
2. In the **New Catalog** dialog, type the **Name** of the new catalog, and then click the **Add Catalog** button to finish and save your changes.

After the new catalog is created, you can view and edit the catalog's properties in the **Catalog Details** view. (See "[Edit Catalog](#)" on [page 19](#) for instructions.)


Additionally, you can configure the catalog by providing information in the following areas:

- "[Manage Items in Catalog](#)" on [page 20](#) - View and manage the catalog items in the catalog.
- "[Grant Catalog Access Control](#)" on [page 21](#) – Specify what group has access to the catalog.
- "[Manage Catalog Approval Policy](#)" on [page 22](#) – Specify the approval policy for the catalog.

Remove Catalog

To remove a catalog:

Note: This task assumes you are in the **Catalogs** view. (See "[View List of Catalogs](#)" on [page 17](#) for instructions.)

1. In the **Catalogs** view, for the catalog you want to remove, click  and select **Remove**.
2. Confirm the catalog removal.

The former catalog is removed and not listed in the **Catalogs** view.

Tip: A catalog can also be removed in the catalog **Catalog Details** view.

View Catalog Details

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator can use the **Overview** tab of the **Catalogs** application to view the properties of a catalog. This view provides the **Catalog Name** and **Description** of the catalog.

Tasks

To view the properties of a catalog:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view is displayed.
2. In the **Catalogs** view, click the catalog that you want to view.

The **Overview** tab opens and the **Catalog Name** and **Description** are displayed.

Edit Catalog

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator can view and edit an existing catalog, including the **Catalog Name**, **Description**, and **Main Image** (visual representation).

Tasks

To edit an existing catalog:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view is displayed.
2. In the **Catalogs** view, click the catalog that you want to edit.
3. In the **Catalog Details** view, click **Edit**.
4. In the **Catalog Details** dialog, make the desired changes to the catalog:
 - Catalog Name
 - Description: Maximum of 4000 characters. Editor tools are available to improve the presentation.
 - Main Image: A single image file for the catalog, maximum of 500 KB. Drag and drop the image file into the box or click the box to navigate to and select the file.
5. Click **Save** to finish and save your changes.

The properties of the revised catalog are displayed in the **Catalog Details** view.

Manage Items in Catalog

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator can use the **Items** tab of the **Catalogs** application to view the list of all catalog items that are published in a catalog and to access the **Catalog Items** application to manage catalog items.

Tasks

To list all catalog items in a catalog:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view is displayed.
2. Click the catalog for which you want view the catalog items.
3. In the **Catalog Details** view, click the **Items** tab.

The **Items** view is displayed and all catalog items in the catalog are listed.

You can click a catalog item to manage it in the **Catalog Items** application. (See "[Catalog Items](#)" on [page 25](#) for details.)

Tip: To add a catalog item to a catalog, go to the **Catalog Items** application to create the item and to publish the item to the catalog. (See "[Catalog Items](#)" on [page 25](#) for details.)

Grant Catalog Access Control

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator uses the **Access Control** tab of the **Catalogs** application to grant group access to published catalog items in a catalog. When the Organization Administrator specifies group access to a catalog, all members of the group have access to all catalog items in the catalog.

Tip: The Organization Administrator can control access to individual catalog items in a catalog. Refer to "[Catalog Item Access Control](#)" on [page 51](#) for details.

To have all catalog items in a catalog visible to all authenticated users of a consumer organization, make sure all the organization's groups appear in the **Access Control** view for the catalog.

Tasks

To allow an LDAP group to access a catalog:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view is displayed.
2. In the **Catalogs** view, click the catalog for which you want to change LDAP group access.
3. In the **Catalog Details** view, click the **Access Control** tab.
4. In the **Access Control** view, click the drop-down menu in the **Who has access** area to view the available groups that can be granted access to the catalog. Alternatively, you can type the beginning of the group name to display it
5. In the drop-down menu, select the group you want to allow access to the catalog.

Tip: You can add or remove multiple groups in the drop-down menu field.

6. Click **Add** to save your changes and grant all specified groups access to the catalog.

The selected LDAP groups now have access to the HPE Propel catalog.

Note: To remove access for an LDAP group, click . Confirm the removal.

Manage Catalog Approval Policy

Concepts

A catalog contains published catalog items in the HPE Propel Portal for consumer fulfillment.

The Organization Administrator uses the **Approval Policy** tab of the **Catalogs** application to manage approval policies for a catalog.

By default, a catalog does not require approval and is assigned the **No Approval** policy.

An approval policy can be applied to a catalog or a catalog item. When applying an approval policy to a catalog, all catalog items in the catalog have the approval policy; however, the administrator can assign different approval policies to various catalog items in a catalog.

Policies can be **Named**, **User Context**, or **Business Approval**. Refer to "[Policies](#)" on page 101 for information about HPE Propel approval policies.

A Business Approval policy is a business process along with its parameters. Refer to "[Business Processes](#)" on page 109 for information about HPE Propel business processes.

Tasks

To add an approval policy to a catalog:

1. From the Launchpad, click the **Catalogs** application. The **Catalogs** view is displayed.
2. In the **Catalogs** view, click the catalog for which you want to change the approval policy.
3. In the **Catalog Details** view, click the **Approval Policy** tab.
4. In the **Approval Policy** view, click **Edit**.
5. Select the approval policy that you want to apply to the catalog from the drop-down list, and then click **Save** to finish and save your changes.

The newly added approval policy for the catalog is displayed in the **Approval Policy** view.

Note: To remove an approval policy from the catalog, select **No Approval**.

View Catalogs in Localized Languages

Concepts

Multiple HPE Propel applications enable you to translate the properties of items into a foreign language and then view the items in the localized language. The properties of catalogs, categories, and catalog items can be translated and viewed in localized languages.

Multiple foreign languages can be associated with an HPE Propel organization. The default language is initially specified by the Administrator.

The Organization Administrator manages the localized languages for an organization and enables HPE Propel catalogs, categories, and catalog items to be viewed in localized languages.

The HPE Propel Administrator manages foreign languages in all Consumer organizations. See ["Manage Languages" on page 151](#) for information on how the Administrator can add, delete, and set default languages.

Tasks

- ["Add Language" on page 24](#)
- ["Translate to Localized Language" on page 24](#)

Add Language

If the localized language has not been assigned to the organization, click the languages list under the HPE Propel avatar and select **Settings**. This takes you to the **Identity** application.

Note: See ["Manage Languages" on page 151](#) for information on how to add, delete, and set default languages in the **Identity** application.

Translate to Localized Language

In the **Catalogs** application, to translate a catalog's properties and view them in a localized language:

1. Click the languages list under the HPE Propel avatar and select the localized language.

Tip: When viewing the catalog in a localized language and it has not been translated into the localized language, the description of the catalog appears in a non-black colored font. The non-black colored font is a convenient visual indicator that the catalog is not translated in the localized language.

2. Edit the HPE Propel catalog and translate its properties into the localized language:
 - a. Click the catalog.
 - b. In the **Catalog Details** view, click **Edit**.
 - c. In the **Catalog Details** dialog, translate the catalog's properties—**Catalog Name**, **Description**, and **Main Image**—into the localized language.
 - d. To finish and save the translated changes, click **Save**.

The translated HPE Propel catalog can now be viewed in the localized language.

Catalog Items

Concepts

The Organization Administrator uses the **Catalog Items** application to configure and manage catalog items. Aggregated service offerings and catalog items from end-point systems, such as HPE Service Anywhere, HPE Cloud Service Automation, and HPE Service Manager, are published as catalog items in HPE Propel catalogs and available to consumers for fulfillment in the HPE Propel Portal.

There are two unique HPE Propel catalog items: *template items* and *published items*. A published item is a variation of a template item, and a published item usually (but not always) has a different name or description than the template item it was created from.

- **Template item:**

- A template item either originates from an end-point system and is imported into an HPE Propel aggregation or is manually created by the Organization Administrator.
- A template item is used as the source catalog item when creating a published item.
- Modifying a template item causes the change to occur in all published items that were created from the template item. For example, changing the description of a template item not only changes the template item's description, but also changes all descriptions of published items that were created from the template item.

- **Published item:**

- A published item is uniquely created and is not in an end-point system.
- A published item is created as a target catalog item from a template item.
- Modifying a published item causes the change to occur only to the published item. That is, changing the description of a published item only changes the description of the published item.

Modifications to aggregated catalog items do not affect the items in the originating system (such as HPE Cloud Service Automation or HPE Service Manager). But if you make changes in the originating system and re-aggregate the item, the catalog item in HPE Propel will be updated. Any changes made to the HPE Propel catalog item are visible in the HPE Propel Portal.

Catalog items can be grouped into categories within a catalog. Refer to ["Categories" on page 72](#) for information about categories.

Tasks

To view catalog items, from the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed and all catalog items that have been aggregated from end-point systems are listed. (Refer to ["Catalog Connect" on page 78](#) for information about HPE Propel aggregations.)

You can filter which catalog items are displayed by any of the following:

- Select either **Template Items** or **Published Items** from the **Filter** area (the left area).
- With **Templates Only** selected, click a category in the **Categories** list to view only catalog items in a specific category.
- With **Published Only** selected, click a catalog in the **Catalogs** list and additionally select a category in the **Categories** list to filter the set of catalog items.

Tip: To search for specific catalog items, type the search criteria in the **Search Items** field. Only the catalog items that meet the search criteria are displayed. You can also change the catalog items list to be sorted by the newest or oldest creation dates or alphabetically.

The Organization Administrator can do the following catalog item tasks in the **Catalog Items** view:

- ["Add Catalog Item to Category" on page 28](#) – Add the catalog item to a category in a catalog.
- ["Add Catalog Item" on page 27](#) – Create a new HPE Propel catalog item that is either an E-mail catalog item or a bundle catalog item.
- ["Create Custom Published Item" on page 30](#) – Create a new HPE Propel catalog item that is a variation of an aggregated catalog item. For example, create a catalog item that is identical to an existing catalog item, except for one or more options.
- ["Hide Catalog Item Price" on page 32](#) – Hide the price of the catalog item from consumers in the HPE Propel Portal.
- ["Edit Catalog Item" on page 33](#) – Revise the properties of a catalog item, such as the name, description, category, and image (visual representation).
- ["Manage Catalog Items Using Tabs" on page 35](#) - Manage catalog items for properties such as form, pricing, gallery, and attachments by using the available tabs.

- "[Publish Catalog Item](#)" on page 64 – Publish the catalog item into a catalog, which makes it available for consumer fulfillment in the HPE Propel Portal.
- "[Remove Catalog Item from Categories](#)" on page 67 – Remove the catalog item from a category in a catalog.
- "[Remove Catalog Item](#)" on page 65 – Remove the HPE Propel catalog item .
- "[Unpublish Catalog Item](#)" on page 68 – Unpublish the catalog item and make it unavailable for consumer fulfillment in the HPE Propel Portal.
- "[View Catalog Items in Localized Languages](#)" on page 70 - Change the language used and view translated catalog items.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

Add Catalog Item

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The Organization Administrator can add the following types of HPE Propel catalog items:

- E-mail catalog item
- Bundle catalog item

Tasks

Adding an E-mail Catalog Item or Bundle Catalog Item

To add a new catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the **Add Item** button.
3. In the **New Catalog Item** dialog:
 - a. Select the appropriate type of catalog item - either **E-mail** (a single item) or **Bundle** (a bundle of several items).
 - b. Type a descriptive name in the **Name** field.
 - c. Select the category for the new catalog item.
 - d. Click the **Create Item** button to finish and save your entries.

The new HPE Propel catalog item is created.

The newly added catalog item has been added as a template item. To publish the catalog item, see ["Publish Catalog Item" on page 64](#).

Tip: For a bundle catalog item, you use the ["Catalog Item Bundle Items" on page 60](#) view to manage the catalog items in the bundle.

Add Catalog Item to Category

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.


Catalog items can be grouped into categories within a catalog. A catalog item can be in multiple categories.

The Organization Administrator can add a catalog item to a category in a catalog.

Tasks

Adding a Single Catalog Item to Categories

To add a catalog item to categories:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, for the catalog item you want to add to a category, click  and select **Add Categories**.
3. In the **Add categories** dialog, select the new categories for the catalog item, and then click the **Add Categories** button.

The HPE Propel catalog item is added to the categories.

Adding Multiple Catalog Items to Categories

The Organization Administrator can also add multiple catalog items to categories at one time in a batch operation.

To add multiple catalog items to categories in a batch:

1. In the **Catalog Items** view, select the catalog items for the batch by clicking the radio buttons next to each catalog item. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items.)
2. Click the **More v** button and select **Add Categories**.
3. In the **Add Categories** dialog, select the new categories for the catalog items, and then click the **Add Categories** button.

All of the selected HPE Propel catalog items are added to the specified categories.

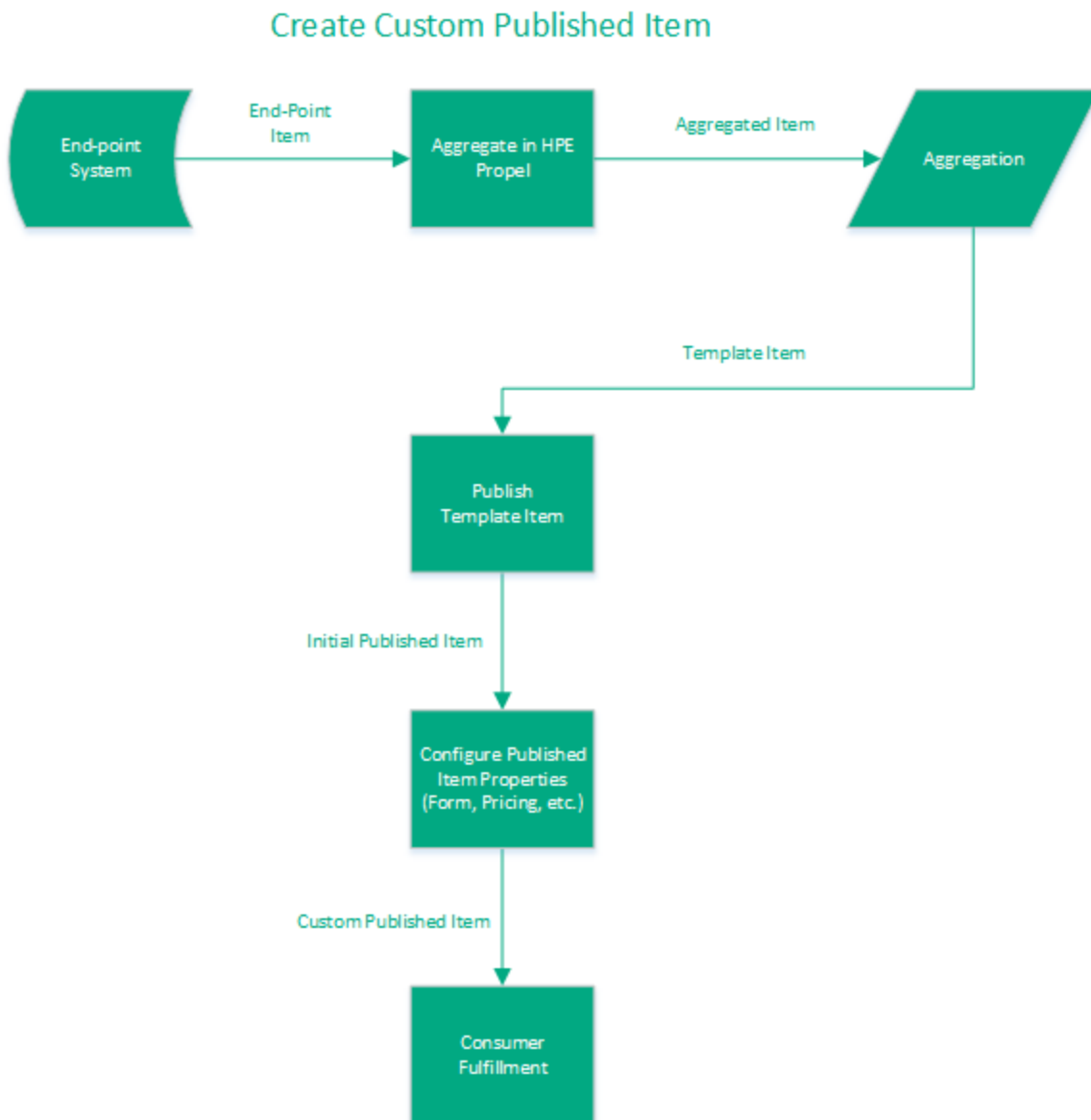
Create Custom Published Item

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.


The Organization Administrator can create additional catalog items that are variations of aggregated items by creating *custom published items* from *template items*.

The following figure shows the process to create a *custom published item*.



Tasks

To create a new *custom published item* from a *template item* (shown in the bottom of the figure):

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** from the **Items** (left) area. The list of *template items* is displayed.
3. Click the *template item* that is the source of the *custom published item*. The **Details** view for the *template item* is displayed.
4. Click the **Publish** button. The **Publish item to catalog** dialog is displayed.
5. In the **Publish item to catalog** dialog, select the catalog that will contain the *initial published item*. (Only catalogs where the catalog item is not currently published are listed.)
6. Click the **Publish** button. The *initial published item* is published to the specified catalog and displayed in the **Details** view.
7. To create a *custom published item* that is a variation of the *initial published item*, in the **Details** view, click **Edit**.
8. In the **Details** dialog, specify the unique properties for the *custom published item*, such as **Display Name**, **Description** and **Details**. You can also specify the **Categories** and **Main Image**.
Note that a modified icon  appears after each field that you modified in the **Details** dialog.
9. Click **Save** to finish and save the new *custom published item*.

The new *custom published item* is published and available as a catalog item in the catalog you specified for consumer fulfillment in HPE Propel.

After creating the new *customized published item*, you can specify the following properties:

- ["Catalog Item Form" on page 38](#) – View and specify the fields and selections used to order the catalog item.
- ["Catalog Item Parameter Aliases" on page 40](#) – View and manage the parameter aliases for a catalog item.
- ["Catalog Item Pricing" on page 44](#) – View and set the pricing for the catalog item, including the initial price and the recurring price.
- ["Catalog Item Gallery" on page 46](#) – View and specify an image for the catalog item that provides the user with a visual representation.

- ["Catalog Item Attachments" on page 49](#) – View and specify attachments for the catalog item, such as service level agreements, terms, and conditions.
- ["Catalog Item Access Control" on page 51](#) – View and control who has access to the catalog item.
- ["Catalog Item Approval Policy" on page 54](#) – View and control who must approve order requests for the catalog item.
- ["Catalog Item Service" on page 57](#) – View and manage the related support and service catalog items.

Hide Catalog Item Price

Concepts


A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The Organization Administrator can hide the price of a catalog item so that the price is not visible to consumers in the HPE Propel Portal.

Tasks

Hiding the Price of a Single Catalog Item

To hide the price of a catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, for the catalog item you want to hide the price, click  and select **Hide price from end user**. A confirmation dialog is displayed.
3. Confirm hiding the price of the catalog item.

The price of the catalog item is now hidden from consumers in the HPE Propel Portal.

Hiding the Price of Multiple Catalog Items

The Organization Administrator can also hide the prices of multiple catalog items at one time in a batch operation.

To hide the prices of multiple catalog items in a batch:

1. In the **Catalog Items** view, select the catalog items for the batch by clicking the radio buttons next to each catalog item. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items.)
2. Click the **More v** button, and then select **Hide price from end user**.
3. Confirm hiding the prices in the confirmation dialog.

The prices are hidden for all of the selected catalog items in the HPE Propel Portal.

Edit Catalog Item

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The properties of a catalog item, including **Display Name**, **Categories**, **Description**, **Details**, and **Main Image** (visual representation of a catalog item) can be changed by the Organization Administrator.

Tasks

To edit a catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to edit.
3. In the **Details** view, click **Edit**.

4. In the **Details** dialog, the following properties of the catalog item can be changed:
 - Type a new **Display Name**.
 - Add new **Categories**.
 - Type a new **Description**.
 - Type new **Details**.
 - Specify a new **Main Image**.
5. After making the changes, click **Save** to finish and save the edits.

The new details of the catalog item are displayed in the **Details** view.

The Organization Administrator can also manage catalog items in the following HPE Propel views:

- ["Catalog Item Form" on page 38](#) – View and specify the fields and selections used to order the catalog item.
- ["Catalog Item Parameter Aliases" on page 40](#) – View and manage the parameter aliases for a catalog item.
- ["Catalog Item Pricing" on page 44](#) – View and set the pricing for the catalog item, including the initial price and the recurring price.
- ["Catalog Item Gallery" on page 46](#) – View and specify an image for the catalog item that provides the user with a visual representation.
- ["Catalog Item Attachments" on page 49](#) – View and specify attachments for the catalog item, such as service level agreements, terms, and conditions.
- ["Catalog Item Access Control" on page 51](#) – View and control who has access to the catalog item.
- ["Catalog Item Approval Policy" on page 54](#) – View and control who must approve order requests for the catalog item.
- ["Catalog Item Service" on page 57](#) – View and manage the related service actions and support catalog items.

Manage Catalog Items Using Tabs

Concepts

The Organization Administrator uses the **Catalog Items** application to configure and manage catalog items.

The Organization Administrator uses the tabs in the **Details** view to manage the catalog item properties—such as form, pricing, gallery, and attachments.

Tasks

To view catalog items, from the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed and all catalog items are listed. Click a catalog item to open its **Details** view.

The Organization Administrator can do the following catalog item tasks using the tabs in the Catalog Items **Details** view:

- ["Catalog Item Overview" on page 36](#) – View and specify the properties for a catalog item.
- ["Catalog Item Form" on page 38](#) – View and specify the fields and selections used to order the catalog item.
- ["Catalog Item Parameter Aliases" on page 40](#) – View and manage the parameter aliases for a catalog item.
- ["Catalog Item Pricing" on page 44](#) – View and set the pricing for the catalog item, including the initial price and the recurring price.
- ["Catalog Item Gallery" on page 46](#) – View and specify an image for the catalog item that provides the user with a visual representation.
- ["Catalog Item Attachments" on page 49](#) – View and specify attachments for the catalog item, such as service level agreements, terms, and conditions.
- ["Catalog Item Access Control" on page 51](#) – View and control who has access to the catalog item.
- ["Catalog Item Approval Policy" on page 54](#) – View and control who must approve order requests for the catalog item.
- ["Catalog Item Service" on page 57](#) – View and manage the related support and service catalog items.
- ["Catalog Item Bundle Items" on page 60](#) – View and manage bundled catalog items.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

Catalog Item Overview

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The **Overview** view can be used by the Organization Administrator to manage the properties of a catalog item.

Tasks

The following tasks are available from the **Overview** details view:

- "[View Catalog Item Properties](#)" on page 36
- "[Edit Catalog Item Properties](#)" on page 37
- "[Publish Catalog Item](#)" on page 37 - Template items or published items to new catalogs
- "[Remove Catalog Item](#)" on page 37 - Template items only
- "[Unpublish Catalog Item](#)" on page 38 - Published items only

View Catalog Item Properties

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view.

The properties of the catalog item are displayed in the Details view.

Edit Catalog Item Properties

This task assumes you are in the **Overview** view. (See "[View Catalog Item Properties](#)" on page 36 for instructions.) To edit the properties of a catalog item:

1. In the **Overview** view, click **Edit**. The **Details** dialog is displayed.
2. Revise the properties of the catalog item, and then click **Save** to finish and save your changes.

The new properties of the catalog item are displayed.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Overview** view. (See "[View Catalog Item Properties](#)" on page 36 for instructions.) To publish a catalog item in the **Overview** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Overview** view. (See "[View Catalog Item Properties](#)" on page 36 for instructions.) To remove a catalog item in the **Overview** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Overview** view. (See "[View Catalog Item Properties](#)" on page 36 for instructions.) To unpublish a catalog item in the **Overview** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Form

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The **Form** view can be used by the Organization Administrator to manage the fields and selections that are required when ordering the catalog item in the HPE Propel Portal.

Tasks

The following tasks can be performed in the **Form** view:

- "[View Catalog Item Form](#)" on page 39
- "[Edit Catalog Item Form](#)" on page 39
- "[Publish Catalog Item](#)" on page 39 - Template items or published items to new catalogs
- "[Remove Catalog Item](#)" on page 40 - Template items only
- "[Unpublish Catalog Item](#)" on page 40 - Published items only

View Catalog Item Form

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Form**.

The required fields and selections for ordering the catalog item are displayed.

Edit Catalog Item Form

This task assumes you are in the **Form** view. (See "[View Catalog Item Form](#)" on page 39 for instructions.) To edit the form for a catalog item:

1. In the **Form** view, click **Edit**. All fields and selections that can be specified for ordering the catalog item are displayed.
2. Specify all fields and selections that are required when ordering the catalog item, and then click **Save** to finish and save your changes.

The new required fields and selections for ordering the catalog item are displayed.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Form** view. (See "[View Catalog Item Form](#)" on page 39 for instructions.) To publish a catalog item in the **Form** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Form** view. (See "[View Catalog Item Form](#)" on page 39 for instructions.) To remove a catalog item in the **Form** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Form** view. (See "[View Catalog Item Form](#)" on page 39 for instructions.) To unpublish a catalog item in the **Form** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Parameter Aliases

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

Bundled catalog items can contain items that depend on each other. HPE Propel facilitates this with inputs and outputs—referred to as *parameter aliases*—that pass information between the different items in the bundle.

Examples:

- The *Create New Employee* catalog item creates an employee number. The *Create Directory Listing* catalog item uses the employee number as an input. Both catalog items are bundled in the *Set Up New Employee* bundled catalog item.
- The fulfillment of the *Create Virtual Machine* catalog item creates an IP address output. As a part of the bundle, the subsequent *Install Operating System* catalog item requires the IP address as input.

The Organization Administrator uses the **Parameter Aliases** view to manage parameter aliases for a catalog item. After the parameter aliases are set up, the Organization Administrator uses the **Bundle Items** view to add items to a bundled catalog item and then define any item dependencies (see ["Catalog Item Bundle Items" on page 60](#)).

Tasks

The following tasks can be performed in the **Parameter Aliases** view:

- ["View Catalog Item Parameter Aliases" on page 41](#)
- ["Add Catalog Item Parameter Aliases" on page 42](#)
- ["Edit Catalog Item Parameter Alias" on page 42](#)
- ["Delete Catalog Item Parameter Alias" on page 42](#)
- ["Publish Catalog Item" on page 42](#) - Template items or published items to new catalogs
- ["Remove Catalog Item" on page 43](#) - Template items only
- ["Unpublish Catalog Item" on page 43](#) - Published items only

View Catalog Item Parameter Aliases

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Parameter Aliases**.

The parameter aliases for the catalog item are displayed.

Add Catalog Item Parameter Aliases


This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To add a parameter alias for a catalog item:

1. In the **Parameter Aliases** view, click **Add** to add a new parameter alias for a catalog item.
2. In the **Add Parameter Alias** dialog, specify values for **Alias Name** and **Location** (used as an output parameter).
3. Click the **Add** button to finish and save your changes.

The parameter aliases for the catalog item are displayed.

Edit Catalog Item Parameter Alias


This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To edit a parameter alias for a catalog item:

1. In the **Parameter Aliases** view, click the edit  icon for the parameter alias you want to revise.
2. Make your changes, and then click the **Save** button to finish and save your changes.

The revised parameter alias is displayed in the list of Parameter Aliases.

Delete Catalog Item Parameter Alias

This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To delete a parameter alias:

1. In the **Parameter Aliases** view, click the delete  icon for the parameter alias you want to delete. A confirmation dialog is displayed.
2. Confirm deleting the parameter alias.

The parameter alias is deleted and no longer visible in the list of Parameter Aliases.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To publish a catalog item in the **Parameter Aliases** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To publish a catalog item in the **Parameter Aliases** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Parameter Aliases** view. (See "[View Catalog Item Parameter Aliases](#)" on page 41 for instructions.) To publish a catalog item in the **Parameter Aliases** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Pricing

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The **Pricing** view provides the current catalog item pricing, including the initial price and the recurring price. The Organization Administrator can change the pricing.

Tasks

The following tasks can be performed in the **Pricing** view:

- ["View Catalog Item Pricing" on page 44](#)
- ["Edit Catalog Item Pricing" on page 44](#)
- ["Publish Catalog Item" on page 45](#) - Template items or published items to new catalogs
- ["Remove Catalog Item" on page 45](#) - Template items only
- ["Unpublish Catalog Item" on page 46](#) - Published items only

View Catalog Item Pricing

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Pricing**. The following information is displayed:
 - a. Whether the price is visible to end users.
 - b. The initial price.
 - c. The recurring price.

Edit Catalog Item Pricing

This task assumes you are in the **Pricing** view. (See ["View Catalog Item Pricing" on page 44](#) for instructions.) To edit the pricing for a catalog item:

1. In the **Pricing** view, click **Edit**. The **Base Price** dialog is displayed.
2. In the **Base Price** dialog, specify whether the price is visible to end user, the price currency, the initial price, whether to enable recurrence, and the recurring pricing.
3. To finish and save your changes, click **Save**.

The new pricing for the catalog item is displayed.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Pricing** view. (See "[View Catalog Item Pricing](#)" on page 44 for instructions.) To publish a catalog item in the **Pricing** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Pricing** view. (See "[View Catalog Item Pricing](#)" on page 44 for instructions.) To remove a catalog item in the **Pricing** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Pricing** view. (See "[View Catalog Item Pricing](#)" on page 44 for instructions.) To unpublish a catalog item in the **Pricing** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Gallery

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

An image is specified as a visual representation of a catalog item. The Organization Administrator can change the image used to represent the HPE Propel catalog item.

Tasks

The following tasks can be performed in the **Gallery** view:

- "[View Catalog Item Gallery](#)" on page 47
- "[Change Catalog Item Gallery](#)" on page 47
- "[Publish Catalog Item](#)" on page 47 - Template items or published items to new catalogs
- "[Remove Catalog Item](#)" on page 48 - Template items only
- "[Unpublish Catalog Item](#)" on page 48 - Published items only



View Catalog Item Gallery

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Gallery**.

The current images for the catalog item are displayed.

Change Catalog Item Gallery

This task assumes you are in the **Gallery** view. (See "[View Catalog Item Gallery](#)" on page 47 for instructions.) To change the image used for a catalog item:

- To add image files, either:
 - Drag and drop image file(s) into the **Gallery** image file area.
 - Click in the image file area, navigate to the image file(s), select and confirm.
- To delete an image file, move your cursor to the image to be removed, click  and confirm the deletion.
- To download an image file to your computer, move your cursor to the image to be downloaded and click . The image file is downloaded according to your browser settings.

The new images for the catalog item are displayed.

Tip: Image recommendations are:

- Multiple image files can be used
- File type: PNG
- Image size: 256x256
- Total file size: Maximum 20 MB

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Gallery** view. (See ["View Catalog Item Gallery" on page 47](#) for instructions.) To publish a catalog item in the **Gallery** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Gallery** view. (See ["View Catalog Item Gallery" on page 47](#) for instructions.) To remove a catalog item in the **Gallery** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Gallery** view. (See ["View Catalog Item Gallery" on page 47](#) for instructions.) To unpublish a catalog item in the **Gallery** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Attachments

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The **Attachments** view provides the attachments, such as service level agreements, terms, and conditions, that are specified for a catalog item. The Organization Administrator can change what attachments are associated with a catalog item.

Tasks

The following tasks can be performed in the **Attachments** view:

- ["View Catalog Item Attachments" on page 49](#)
- ["Change Catalog Item Attachments" on page 49](#)
- ["Publish Catalog Item" on page 50](#) - Template items or published items to new catalogs
- ["Remove Catalog Item" on page 50](#) - Template items only
- ["Unpublish Catalog Item" on page 51](#) - Published items only



View Catalog Item Attachments

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Attachments**.

The current attachments for the catalog item are displayed.

Change Catalog Item Attachments

This task assumes you are in the **Attachment** view. (See ["View Catalog Item Attachments" on page 49](#) for instructions.) To change the attachments for a catalog item:

- To add attachment files, either:
 - Drag and drop attachment file(s) into the **Attachments** file area.
 - Click in the attachment file area, navigate to the attachment file(s), select and confirm.
- To delete an attachment file, move your cursor to the attachment to be removed, click  and confirm the deletion.
- To download an attachment file to your computer, move your cursor to the attachment to be downloaded and click . The attachment file is downloaded according to your browser settings.

The updated attachment(s) for the catalog item are displayed.

Tip: The total file size for attachment files: Maximum 20 MB

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Attachments** view. (See "[View Catalog Item Attachments](#)" on page 49 for instructions.) To publish a catalog item in the **Attachments** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Attachments** view. (See ["View Catalog Item Attachments"](#) on page 49 for instructions.) To remove a catalog item in the **Attachments** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Attachments** view. (See ["View Catalog Item Attachments"](#) on page 49 for instructions.) To unpublish a catalog item in the **Attachments** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Access Control

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The Organization Administrator uses the **Access Control** view for a catalog item to limit group access to a catalog item for consumer fulfillment.

For example, access control is granted to groups A and B at the catalog level so that all members of these groups can access all of the catalog's catalog items. To limit access to a specific catalog item by members of only group C, the Organization Administrator designates group C access at the catalog item level.

Tasks

The following tasks can be performed in the **Access Control** view:

- ["View Catalog Item Access Control" on page 52](#)
- ["Change Catalog Item Access Control" on page 52](#)
- ["Remove Catalog Item Access Control" on page 53](#)
- ["Publish Catalog Item" on page 53](#) - Template items or published items to new catalogs
- ["Remove Catalog Item" on page 53](#) - Template items only
- ["Unpublish Catalog Item" on page 54](#) - Published items only

View Catalog Item Access Control

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Access Control**.

The list of groups that have access to the catalog item is displayed.

Change Catalog Item Access Control

This task assumes you are in the **Access Control** view. (See ["View Catalog Item Access Control" on page 52](#) for instructions.) To change who has access to a catalog item:

1. In the **Access Control** view, click the drop-down menu in the **Who has access** area to view the available groups that can be granted access to the catalog item. Alternatively, you can type the beginning of the group name to display it.
2. In the drop-down menu, select the group you want to allow access to the catalog item.

Tip: You can add or remove multiple groups in the drop-down menu field.

3. Click **Add** to save your changes and grant all specified groups access to the catalog item.

The groups you granted access are displayed in the **Who has access** area. Only users in this group can now order the catalog item for fulfillment in the HPE Propel Portal.

Remove Catalog Item Access Control

This task assumes you are in the **Access Control** view. (See "[View Catalog Item Access Control](#)" on [page 52](#) for instructions.) To remove access from a group for a catalog item:

1. In the **Access Control** view, click **X** for the group from which you want to remove access. A confirmation dialog is displayed.
2. Confirm removing the access.

The list of groups that have access to the catalog item is displayed.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Access Control** view. (See "[View Catalog Item Access Control](#)" on [page 52](#) for instructions.) To publish a catalog item in the **Access Control** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Access Control** view. (See "[View Catalog Item Access Control](#)" on [page 52](#) for instructions.) To remove a catalog item in the **Access Control** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.

3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Access Control** view. (See "[View Catalog Item Access Control](#)" on [page 52](#) for instructions.) To unpublish a catalog item from a specific catalog in the **Access Control** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Approval Policy

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

The **Approval Policy** view provides the current approval policy for ordering a catalog item. The Organization Administrator can change the approval policy.

An approval policy can be applied to a catalog or a catalog item. When applying an approval policy to a catalog, all catalog items in the catalog have the approval policy; however, the administrator can assign different approval policies to various catalog items in a catalog.


Refer to "[Policies](#)" on [page 101](#) for details of HPE Propel approval policies.

Tasks

The following tasks can be performed in the **Approval Policy** view:

- ["View Catalog Item Approval Policy" on page 55](#)
- ["Change Catalog Item Approval Policy" on page 55](#) - Published items only
- ["Publish Catalog Item" on page 56](#) - Template items or published items to new catalog
- ["Remove Catalog Item" on page 56](#) - Template items only
- ["Unpublish Catalog Item" on page 56](#) - Published items only

View Catalog Item Approval Policy

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click the **Approval Policy** tab.
4. Click **Template** to see that the template's approval policy.
5. Click the tabs for the catalogs where the catalog item is published to see the published approval policies. By default, approval policies are inherited from catalogs. If the approval policy has been changed, a modified icon  is shown.

Note: Clicking on the policy takes you to the **Policies** application (see ["Policies" on page 101](#)) where the policy itself can be redefined.

Change Catalog Item Approval Policy

Note: This task is for only published catalog items.

This task assumes you are in the **Approval Policy** view. (See ["View Catalog Item Approval Policy" on page 55](#) for instructions.) To change the approval policy for a catalog item:

1. In the **Approval Policy** view, click **Edit**. The **Approval Policy** dialog is displayed.
2. In the **Approval Policy** dialog, select the approval policy for the catalog item. To finish and save your changes, click **Save**.

The new approval policy for the catalog item is displayed.

Publish Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Approval Policy** view. (See ["View Catalog Item Approval Policy" on page 55](#) for instructions.) To publish a catalog item in the **Approval Policy** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Approval Policy** view. (See ["View Catalog Item Approval Policy" on page 55](#) for instructions.) To remove a catalog item in the **Approval Policy** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Approval Policy** view. (See ["View Catalog Item Approval Policy" on page 55](#) for instructions.) To unpublish a catalog item in the **Approval Policy** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Service

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

Some supplier fulfillment engines provide services. The services can have logical relationships between them. For example, the support catalog item *Fix VM* may be associated with *Create VM*. Services can also have actions associated with them. For example, the action *Restart VM* may be represented by another catalog item. Such associated support and service items can be offered along with the catalog item when a consumer shops.

The **Service** view can be used by the Organization Administrator to view and manage service actions and related support catalog items for a catalog item.

Tasks

The following tasks are available from the **Service** view:

- ["View Service Actions and Related Support Catalog Items" on page 58](#)
- ["Add Service Action or Related Support Catalog Item" on page 58](#)
- ["Edit Service Action or Related Support Catalog Item Properties" on page 59](#)
- ["Delete Service Action or Related Support Catalog Item" on page 59](#)
- ["Publish Catalog Item" on page 59](#) - Template items or published items to new catalog
- ["Remove Catalog Item" on page 60](#) - Template items only
- ["Unpublish Catalog Item" on page 60](#) - Published items only

View Service Actions and Related Support Catalog Items

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the catalog item for which you want to view the service actions and related support catalog items.
3. Click the **Service** tab.

The service actions and related support catalog items are displayed.

Add Service Action or Related Support Catalog Item

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To add a service action or related support catalog item to a catalog item:

1. In the **Service** view, in either the service action or related support catalog item area, click **Add**.
2. To add a service action, in the corresponding dialog, make your selections:

Service Action: Select a service catalog item from the drop-down list.

Action Name: Keep the default name or enter a new name.

Approval Policy: Select an approval policy from the drop-down list.

3. To add a related support catalog item, in the corresponding dialog, make your selections:

Support Catalog Item: Select a support catalog item from the drop-down list

Action Name: Keep the default name or enter a new name


To add a mapping:

- a. Click the **Add Mapping** button.
 - b. **Field:** Select **Requested For**, **Contact Name**, **Notify By**, **Urgency**, or **email**.
 - c. **Mapping Expression:** Enter an expression according to the mapping structure. For example, `serviceInstance.component[0].propertyMap.hostName`. An Angular Expression or JSONPath Expression can be used by starting the expression with "\$.".
 - d. Click the **Add** button.
4. Click the **Add** button to finish and save your changes.

The newly added service action or related support catalog item is displayed.


Edit Service Action or Related Support Catalog Item Properties

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To edit the properties of either a service action or related support catalog item:

1. In the **Service** view, click the edit  icon for the service action or related support catalog item you want to edit.
2. In the corresponding edit dialog, revise the properties of the service action or support catalog item, and then click the **Save** button to finish and save your changes.

Delete Service Action or Related Support Catalog Item

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To delete a related service action or support catalog item:

1. In the **Service** view, click the delete  icon for the service action or related support catalog item you want to delete. A confirmation dialog is displayed.
2. Confirm deletion of the service action or related support catalog item.

The service action or related support catalog item is deleted.

Publish Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To publish a catalog item in the **Service** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.
3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Remove Catalog Item

Note: This task is for template items only.

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To remove a catalog item in the **Service** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Service** view. (See "[View Service Actions and Related Support Catalog Items](#)" on page 58 for instructions.) To unpublish a catalog item in the **Service** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Catalog Item Bundle Items

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

A bundled catalog item can contain multiple catalog items and dependent service catalog items. The Organization Administrator manages the bundled catalog items and dependent service catalog items.

Note: The **Bundle Items** view is only available for bundled catalog items.

Tasks

The following tasks can be performed in the **Bundle Items** view:

- ["View Bundled Catalog Item" on page 61](#)
- ["Add Items to Bundled Catalog Item" on page 61](#)
- ["Add Item Dependencies" on page 62](#)
- ["Publish Bundled Catalog Item" on page 62](#) - Template items or published items to new catalogs
- ["Remove Bundled Catalog Item" on page 63](#) - Template items only
- ["Unpublish Bundled Catalog Item" on page 63](#)- Published items only

View Bundled Catalog Item

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, click the bundled catalog item you want to view. The **Details** view is displayed.
3. In the **Details** view, click **Bundle Items**.



The list of catalog items included in the bundle and the dependent service catalog items are displayed.

Add Items to Bundled Catalog Item

This task assumes you are in the **Bundle Items** view. (See ["View Bundled Catalog Item" on page 61](#) for instructions.) To add items to a bundled catalog item:

1. In the **Bundle Items** view, click the **Add** button next to **List of Catalog Items included in bundle**. The **Add Catalog Item to Bundle** dialog is displayed.
2. In the **Add Catalog Item to Bundle** dialog:
 - a. Select the catalog item to be added.
 - b. *Optional:* Specify if the item is optional in the bundle (check box).
 - c. Specify the number of items.
 - d. Specify the approval policy.
3. Click the **Add** button to finish and save your changes.

The newly added catalog item is included in the bundled catalog item.

Tip: You can also edit and delete catalog items that are included in a bundled catalog item by clicking the  and  icons next to the catalog item.



Add Item Dependencies

This task assumes you are in the **Bundle Items** view. (See "[View Bundled Catalog Item](#)" on page 61 for instructions.) If there are item dependencies, link the dependent item's input parameter with catalog item's output parameter to associate two items.

To add dependencies to the bundled catalog item:

1. In the **Bundle Items** view, click the **Add** button next to **Item Dependencies**. The **Add Dependencies** dialog is displayed.
2. In the **Add Dependencies** dialog:
 - a. Select the dependent catalog item.
 - b. Select the input parameter.
 - c. Select the catalog item that the dependent catalog item depends on.
 - d. Select the output parameter.
3. Click the **Add** button to finish and save your changes.

The dependency is included in the bundled catalog item.

Tip: You can also edit and delete dependencies that are included in a bundled catalog item by clicking the  and  icons next to the catalog item.

Publish Bundled Catalog Item

Note: This task is for template items only; however, catalog items can be published to more than one catalog.

This task assumes you are in the **Bundle Items** view. (See "[View Bundled Catalog Item](#)" on page 61 for instructions.) To publish a bundled catalog item in the **Bundle Items** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Publish** button.

3. In the **Publish item to catalog** dialog, select the new catalog. (Only catalogs to which the catalog item has not been published are listed.)
4. To finish and save your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Note: This task is for template items only.

Remove Bundled Catalog Item

Note: This task is for templates only.

This task assumes you are in the **Bundle Items** view. (See "[View Bundled Catalog Item](#)" on page 61 for instructions.) To delete a bundled catalog item in the **Bundle Items** view:

1. Select the **Template** tab (top) to view the template item.
2. Click the **Remove** button.
3. Confirm removing the catalog item.

The catalog item—template item and any published items—is removed and no longer visible.

Unpublish Bundled Catalog Item

Note: This task is for published items only.

This task assumes you are in the **Bundle Items** view. (See "[View Bundled Catalog Item](#)" on page 61 for instructions.) To unpublish a bundled catalog item in the **Bundle Items** view:

1. Select the tab (top) for the catalog from which to unpublish the catalog item.
2. Click the **Unpublish** button.
3. Confirm unpublishing the catalog item.

The catalog item is unpublished from the HPE Propel catalog and no longer available for fulfillment in the HPE Propel Portal.

Publish Catalog Item

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.


A catalog item must be published into a catalog by the Organization Administrator before it can be ordered in the HPE Propel Portal.

The Organization Administrator can publish template items to one or more catalogs.

Tasks

Publishing a Single Catalog Item

To publish a catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).
3. In the **Catalog Items** view, for the template item you want to publish, click  and select **Publish**.
4. In the **Publish item to catalog** dialog, select the catalog that will contain the published catalog item. (Only catalogs where the catalog item is not currently published are listed.)
5. To finish and change your changes, click the **Publish** button.

The catalog item is published in the specified catalog and available for fulfillment in the HPE Propel Portal.

Publishing Multiple Catalog Items

The Organization Administrator can also publish multiple catalog items at one time in a batch operation.

To publish multiple catalog items in a batch:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).

3. Select the catalog items for the batch by clicking the radio button next to each catalog item. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items.)
4. Click the **Publish** button.
5. In the **Publish item to catalog** dialog, select the catalog to publish the catalog item in. (Only catalogs where the catalog items are not currently published are listed.)
6. To finish and change your changes, click the **Publish** button.

All of the selected catalog items are published and available for consumer fulfillment.

Publishing a Catalog Item from Details View

To publish a catalog item from **Details** view:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).
3. Click on the template item you want to publish. The **Details** view opens.

Notice the tabs above the catalog item name: *Template*, *Catalog 1*, *Catalog 2*, and so on. These indicate that the item is a template item as well as any catalogs where the item is already published.

4. Click the **Publish** button.
5. In the **Publish item to catalog** dialog, select the catalog that will contain the published catalog item. (Only catalogs where the catalog item is not currently published are listed.)
6. To finish and change your changes, click the **Publish** button.

Remove Catalog Item

Concepts


A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

A catalog item can be removed by the Organization Administrator.

Tasks

Removing a Single Catalog Item

To remove a catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).
3. For the catalog item you want to remove, click  and select **Remove**. A confirmation dialog is displayed.
4. Confirm the catalog item removal.

The former catalog item—both template item and any published items—is removed and is no longer available for consumer fulfillment; however, pending orders for the HPE Propel catalog item will be fulfilled.

Removing Multiple Catalog Items

The Organization Administrator can also remove multiple catalog items at one time in a batch operation.

To remove multiple catalog items in a batch:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).
3. Select the catalog items for the batch by clicking the radio buttons next to each catalog item. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items.)
4. Click the **Remove** button.
5. Confirm removing the catalog items.

The former HPE Propel catalog items are removed—both template items and any published items—and are no longer available for consumer fulfillment; however, pending orders for the catalog items will be fulfilled.

Removing a Catalog Item from Details View

To remove a catalog item from **Details** view:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Template Items** (on the left side of the page).
3. Click the catalog item you want to remove.
4. Click the **Remove** button. A confirmation dialog is displayed.
5. Confirm the catalog item removal.

The former catalog item—both template item and any published items—is removed and is no longer available for consumer fulfillment; however, pending orders for the HPE Propel catalog item will be fulfilled.

Remove Catalog Item from Categories

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.


Catalog items can be grouped into categories within a catalog. A catalog item can be in multiple categories.

The Organization Administrator can remove a catalog item from a category in a catalog.

Tasks

Removing a Single Catalog Item from Categories

To remove a catalog item from categories:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, for the catalog item you want to remove from a category, click  and select **Remove Categories**.
3. In the **Remove categories** dialog, select the category to remove the catalog item from, and then click **Remove Selected**.

The HPE Propel catalog item is removed from the category.

Removing Multiple Catalog Items from Categories

The Organization Administrator can also remove multiple catalog items from categories at one time in a batch operation.

To remove multiple catalog items from categories in a batch:

1. In the **Catalog Items** view, select the catalog items for the batch by clicking the radio buttons next to each catalog item. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items.)
2. Click **More** and select **Remove Categories**.
3. In the **Remove categories** dialog, select the categories to remove the catalog items from, and then click **Remove Selected**.

All of the selected HPE Propel catalog items are removed from the categories.

Unpublish Catalog Item

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.


A published catalog item can be unpublished by the Organization Administrator so that it is no longer available for ordering in the HPE Propel Portal.

Note: You can only unpublish items that are already published.

Tasks

Unpublishing a Single Catalog Item

To unpublish a catalog item:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Published Items** (on the left side of the page).
3. For the catalog item and the specific catalog you want to unpublish, click  and select **Unpublish**.
4. Confirm unpublishing the catalog item.

The HPE Propel catalog item is unpublished from the catalog and is not available for consumer fulfillment in the HPE Propel Portal.

Note: Repeat the process if there are multiple catalogs from which you want to unpublish the catalog item.

Unpublishing Multiple Catalog Items

The Organization Administrator can also unpublish multiple catalog items at one time in a batch operation.

To unpublish multiple catalog items in a batch:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Published Items** (on the left side of the page).
3. Select the catalog items and the specific catalogs for the batch by clicking the radio button next to each catalog item/catalog. (You can also use the **Select All** radio button as a toggle to select all or none of the catalog items/catalogs.)

4. Click the **Unpublish** button.
5. Confirm unpublishing the catalog items.

The HPE Propel catalog items are unpublished from the catalogs and they are not available for consumer fulfillment in the HPE Propel Portal.

Unpublishing a Catalog Item from Details view

To unpublish a catalog item from **Details** view:

1. From the Launchpad, click the **Catalog Items** application. The **Catalog Items** view is displayed.
2. In the **Catalog Items** view, select **Published Items** (on the left side of the page).
3. Click on the Published item with specific catalog that you want to unpublish. The **Details** view opens.

Notice the tabs above the catalog item name: *Template*, *Catalog 1*, *Catalog 2*, and so on. These indicate that the item is a template item as well as any catalogs where the item is already published. You can also click the tab of the catalog from which you want to unpublish the item.

4. Click the **Unpublish** button.
5. Confirm unpublishing the catalog item from the catalog.

The HPE Propel catalog item is unpublished from the catalog and is not available for consumer fulfillment in the HPE Propel Portal.

View Catalog Items in Localized Languages

Concepts

Multiple HPE Propel applications enable you to translate the properties of items into a foreign language and then view the items in the localized language. The properties of catalogs, categories, and catalog items can be translated and viewed in localized languages.

Multiple foreign languages can be associated with an HPE Propel organization. The default language is initially specified by the Administrator.

The Organization Administrator manages the localized languages for an organization and enables HPE Propel catalogs, categories, and catalog items to be viewed in localized languages.

The HPE Propel Administrator manages foreign languages in all Consumer organizations. See ["Manage Languages" on page 151](#) for information on how the Administrator can add, delete, and set default languages.

Tasks

- ["Add Language" on page 71](#)
- ["Translate to Localized Language" on page 71](#)

Add Language

If the localized language has not been assigned to the organization, click the languages list under the HPE Propel avatar and select **Settings**. This takes you to the **Identity** application.

Note: See ["Manage Languages" on page 151](#) for information on how to add, delete, and set default languages in the **Identity** application.

Translate to Localized Language

In the **Catalog Items** application, to translate catalog items' properties and view them in a localized language:

1. Click the languages list under the HPE Propel avatar and select the localized language.

Tip: When viewing the catalog item in a localized language and it has not been translated into the localized language, the description of the catalog item appears in a non-black colored font. The non-black colored font is a convenient visual indicator that the catalog item is not translated in the localized language.

2. Edit the catalog item and translate its properties into the localized language:
 - a. Click the catalog item.
 - b. In the **Details** view, click the **Edit** button.
 - c. In the **Details** dialog, translate the catalog item's properties—**Display Name**, **Description**, **Details**, and **Main Image**—into the localized language.
 - d. To finish and save the translated changes, click **Save**.

The translated catalog item can now be viewed in the localized language.

Note: Only published catalog items can be translated into localized languages.

Categories

Concepts

A catalog contains published catalog items for consumer fulfillment in the HPE Propel Portal.

Categories are used to group catalog items within a catalog. The Organization Administrator uses the **Categories** application to manage categories.

Tasks

Available tasks:

- ["View Category Details" on page 73](#)
- ["Add Subcategory" on page 74](#)
- ["Edit Category Details" on page 75](#)
- ["Remove Category" on page 75](#) – You cannot delete a category that has any catalog items assigned.
- ["View Categories in Localized Languages" on page 76](#)

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

View Category Details

Concepts

Categories are used to group catalog items within a catalog.

Tasks

To view the details of a category:

1. From the Launchpad, click the **Categories** application. The **Categories** view is displayed.

Tip: To filter the list of categories that are displayed, type the search criteria. Only the categories that meet the search criteria are displayed.

2. *Optional:* To navigate through all of the subcategories within a category, expand the categories (left area). This is useful to identify unnecessary subcategories, such as duplicates due to alphabetic case differences.
3. *Optional:* Click on the parent category in the expanded category hierarchy (left area).
4. To view the details of a category, click the category in the main list.

The details of the category are displayed, including **Name**, **Description**, and **Parent Category** properties.

The category hierarchy is displayed at the top of the page. Click one of the other categories to see its details.

Add Subcategory

Concepts

Categories are used to group catalog items within a catalog.

The Organization Administrator can create new subcategories.

Tasks

To create a new category:

1. From the Launchpad, click the **Categories** application. The **Categories** view is displayed.
2. Click the **Add Subcategory** button. The **New Category** dialog is displayed.
3. Fill in and select the necessary fields in the **New Category** dialog:
 - a. Type the **Name** of the new category.
 - b. To change the Parent Category from what is displayed:
 - i. Click **Select Category**.
 - ii. Select the parent category for the new category.
 - iii. Click the **OK** button.
4. Click the **Create Category** button in the **New Category** dialog to finish and save your changes.

The new category and its properties are displayed. To edit additional properties of the new category, see "[Edit Category Details](#)" on page 75.

Tip: Subcategories can be created under any existing category.

Edit Category Details

Concepts

Categories are used to group catalog items within a catalog.

The Organization Administrator can edit the properties of a category, including **Name**, **Description**, **Parent Category**, and **Main Image** fields.

Tasks

To revise a category's properties:

1. From the Launchpad, click the **Categories** application. The **Categories** view is displayed.
2. *Optional:* Navigate to the parent category.
3. Click the category that you want to edit. The main image and details of the category are displayed, including **Name**, **Description**, and **Parent Category** properties.
4. Click **Edit**.
5. In the **Details** view, type or select new values for the **Name**, **Description**, **Parent Category**, and **Main Image** properties that you want revised in the category.
6. Click **Save** in the **Details** view to finish and save your changes.

The revisions for the category's properties are displayed.

Remove Category


Concepts

Categories are used to group catalog items within a catalog.

The Organization Administrator can remove categories.

Tasks

To remove a category:

1. From the Launchpad, click the **Categories** application. The **Categories** view is displayed.
2. *Optional:* Navigate to the parent category.
3. In the **Categories** view, for the category you want to delete, click  and select **Remove**. A confirmation dialog to delete the category is displayed.
4. Confirm the category deletion, and the category is deleted.

Note: You can also remove a category from the **Details** view. Click the **Remove** button and confirm the deletion.

View Categories in Localized Languages

Concepts

Multiple HPE Propel applications enable you to translate the properties of items into a foreign language and then view the items in the localized language. The properties of catalogs, categories, and catalog items can be translated and viewed in localized languages.

Multiple foreign languages can be associated with an HPE Propel organization. The default language is initially specified by the Administrator.

The Organization Administrator manages the localized languages for an organization and enables HPE Propel catalogs, categories, and catalog items to be viewed in localized languages.

The HPE Propel Administrator manages foreign languages in all Consumer organizations. See ["Manage Languages" on page 151](#) for information on how the Administrator can add, delete, and set default languages.

Tasks

- ["Add Language" on page 77](#)
- ["Translate to Localized Language" on page 77](#)

Add Language

If the localized language has not been assigned to the organization, click the languages list under the HPE Propel avatar and select **Settings**. This takes you to the **Identity** application.

Note: See ["Manage Languages" on page 151](#) for information on how to add, delete, and set default languages in the **Identity** application.

Translate to Localized Language

The Organization Administrator manages the localized languages for an organization and enables categories to be viewed in localized languages.

In the **Categories** application, to translate a category's properties and view them in a localized language:

1. Click the languages list under the HPE Propel avatar and select the localized language.

Tip: When viewing the category in a localized language and it has not been translated into the localized language, the description of the category appears in a non-black colored font. The non-black colored font is a convenient visual indicator that the category is not translated in the localized language.

2. Edit the category and translate its properties into the localized language:
 - a. *Optional:* Navigate to the parent category.
 - b. Click the category.
 - c. In the **Details** view, click **Edit**.
 - d. In the **Details** dialog, translate the category's properties—**Name**, **Description**, and **Main Image**—into the localized language.
 - e. To finish and save the translated changes, click **Save**.

The translated category can now be viewed in the localized language.

Catalog Connect

Concepts

Use the **Catalog Connect** application to create and manage *aggregations*.

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

Companies that currently use HPE SM, HPE SAW, HP Operation Orchestration (HP OO), and HPE Cloud Service Automation (CSA) will find HPE Propel aggregations to be a useful extension of their current environment. Service and product offerings from end-point systems are directly acquired and added to aggregations. Additionally, third-party end-point systems, such as *ServiceNow*™ and BMC Remedy ARS™ can be aggregated into aggregations.

Tasks

The Organization Administrator uses the **Catalog Connect** application to create an aggregation and then aggregates items from an end-point system (such as HPE SM or HPE SAW) into the aggregation. The Organization Administrator controls the catalog items that are aggregated into an aggregation by the use of query filters. After the catalog items are aggregated into an aggregation, they can be published for consumer fulfillment in the HPE Propel Portal.



The general procedure to create an aggregation and publish the catalog items for fulfillment is:

1. *Configure an end-point system to be a supplier.* First, an end-point system must be configured as a *supplier*. Refer to the ["Suppliers" on page 92](#) help for details.
2. *Add an aggregation.* Next, the Organization Administrator creates an aggregation so that service and product offerings can be acquired from the supplier. For some suppliers, the administrator can

also specify whether newly added, revised, or deleted catalog items are automatically updated in the HPE Propel aggregation.

3. *Define the set of catalog items.* Prior to adding catalog items to an aggregation, the Organization Administrator can preview the catalog items that would be added to the aggregation. To create a subset of catalog items, the Organization Administrator can specify filter criteria, such as the type of catalog item or the catalog item's owner. (For example, add only hardware catalog items to the aggregation.)
4. *Aggregate the catalog items.* The Organization Administrator creates the aggregation and the supplier's catalog items are added to the aggregation. Note that the catalog items are not yet published (available) in a catalog for fulfillment in the HPE Propel Portal.
5. *Publish the catalog items.* After the Organization Administrator has aggregated the catalog items, they can be published in a catalog. After publishing, the catalog items are available in the HPE Propel Portal for consumer fulfillment.

After an HPE Propel aggregation has been created, on-going aggregations (re-aggregations) can occur:

-  Automatic – This setting is available only for aggregations created with specific suppliers. After a catalog item is changed (added, updated, or deleted) in the supplier's system, the re-aggregation happens automatically for the catalog item and its status is updated in the HPE Propel aggregation.
-  Manual – This re-aggregation requires a manual action by the Organization Administrator. Manual re-aggregation requires the Organization Administrator to be aware of changed catalog items and manually trigger the re-aggregation to occur.

The Organization Administrator can perform the following tasks from the **Catalog Connect** application:

- ["View Catalog Aggregation Details" on page 81](#)
- ["Add Catalog Aggregation" on page 82](#)
- ["Delete Catalog Aggregation" on page 85](#)
- ["Edit Catalog Aggregation" on page 85](#)
- ["Resolve Catalog Aggregation" on page 86](#)
- ["Edit Catalog Item" on page 88](#)
- ["Publish Catalog Item" on page 89](#)
- ["Restart Catalog Aggregation \(Re-Aggregate\)" on page 90](#)

Best Practices

- Using HTTPS: If HTTPS is used between the HPE Propel VM and a supplier (end-point system), Secure Socket Layer (SSL) communication must be established. SSL certificates must be imported and trusted between HPE Propel and the supplier's system. For more information about configuring SSL, refer to the *HPE Propel Installation and Configuration Guide*.
- Integrating Suppliers:
 - The HPE Propel aggregation web service must be loaded into HPE Service Manager (SM) and the HPE SM unloads must be applied before attempting to create an aggregation.
 - HPE Cloud Service Automation (CSA) must be configured to use LDAP and for approval settings.
 - A new External System must be added to an HPE Service Anywhere (SAW) Group that has the integration account assigned as the Authorized user.

Refer to the *HPE Propel Installation and Configuration Guide* for instructions to connect suppliers.

- Re-aggregating: Configuring automatic re-aggregation is recommended because the HPE Propel catalog items are automatically updated when they change on the supplier's system. (Manual re-aggregation requires the Organization Administrator to be aware of catalog items changing on the supplier's system and a manual re-aggregation action.)
- Editing Catalog Items: Changes to an aggregation's catalog items persist in HPE Propel. That is, when an aggregation is re-aggregated, the catalog item's properties in the supplier's system do not override the catalog item's properties in the HPE Propel aggregation.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

View Catalog Aggregation Details

Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

Tasks

The Organization Administrator can view the details of an aggregation.



1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** appears.
2. Click the aggregation that you want to view. The **Aggregation Report** appears.
3. Click the **Aggregation Properties** tab. The general properties and the status of the aggregation are displayed.
4. Click the **Aggregation History** tab. Historical data for each catalog item action is displayed, including **Item**, **Status**, **Categories**, **Action**, and the date and time when the action was performed.

Tip: To filter the list of history items that are displayed, type the search criteria. Only the history items that meet the search criteria are displayed.

- Use the controls (found at the bottom) to navigate through multiple history pages.
- Click on a column header to re-sort the history based on that column. Use the up and down arrows to change from ascending to descending sort order.
- To view item history details, click on a history item.

A list of a historical actions related to that item is displayed, including **Change Description**, **Old Value**, **New Value**, and whether the action is **Resolved**. Any warnings or errors are listed.

Note: To view and update a catalog item offering, from the **Aggregation History**

view click  next to the history item or from the **Item History Details** view click  and select **Go to Offering**. Either takes you to the catalog item offering in the **Catalog Item** application. See "[Edit Catalog Item](#)" on page 88 for details.

Add Catalog Aggregation

Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

Tasks



Catalog items from suppliers, such as HPE Service Manager (SM), HPE Cloud Service Automation (CSA), and HPE Service Anywhere (SAW), can be added to aggregations and published into catalogs for fulfillment by consumers in the HPE Propel Portal. The Organization Administrator manages catalog items by creating aggregations.

Note: Refer to the *HPE Propel Installation and Configuration Guide* for instructions to connect suppliers, such as HPE SM, HPE CSA, and HPE SAW.

To create an aggregation, perform the following procedure:

1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** appears.
2. To add an aggregation, click the **Add Aggregation** button. The **New Aggregation** dialog appears.
3. In the **Aggregation Properties** tab of the **New Aggregation** dialog:
 - a. Type a descriptive aggregation name into the **Name** field.
 - b. Select the end-point system from the **Supplier** list.

Tip: To create a new HPE Propel supplier (integrated end-point system), click the **+ Create Supplier** button. This action displays the **New Supplier** dialog, in which you can add the new supplier, such as an HPE Service Manager (SM) end-point system.

- c. *Optional, depending on the Supplier.* Select the **Offering Type**. A **Service Offering** is a catalog item that is used for shopping in the HPE Propel Portal. A **Support Offering** is a catalog item that is used to request support. These offering types are defined in supplier's systems, such as HPE SM and HPE SAW.
- d. *Optional, depending on the Supplier.* Click the **Automatic** check box if changes to catalog items on the supplier's system should be automatically re-aggregated. See re-aggregation in "[Best Practices](#)" on page 84 for details.
- e. *Optional, depending on the Supplier.* To create a subset of catalog items in the aggregation, enter query criteria in the **Query Filter** field. See the Query Filter help  for details. (Note that you can also enter **Query Filter** criteria during the Preview process in step g.)
- f. *Optional, depending on the Supplier.* Select the **Source Catalog** to specify which HPE Propel catalog to use when importing catalog items from the supplier.
- g. *Optional, depending on the Supplier.* Enter any additional query conditions to further filter catalog items when importing catalog items from the supplier.
- h. Prior to creating the aggregation, preview the catalog items that will be added to the new aggregation.
 - i. Click the **Preview** tab. The list of catalog items is displayed.
 - ii. If you have not done so previously, to create a subset of catalog items, type the query criteria into the **Query Filter** field and click the **Apply Filter** button. (See the Query Filter help  for details.) Only catalog items that meet the query criteria are displayed and will be added to the aggregation.

- i. After validating the correct set of catalog items that will be added to the aggregation, click the **Save** button to create the aggregation. The new aggregation appears in the **Aggregation List**. A progress bar indicates the status of adding catalog items to the aggregation.
4. To display the aggregation's general properties and status, click the aggregation. The **Aggregation Report** appears.

Best Practices

- Using HTTPS: If HTTPS is used between the HPE Propel VM and a supplier (end-point system), Secure Socket Layer (SSL) communication must be established. SSL certificates must be imported and trusted between HPE Propel and the supplier's system. For more information about configuring SSL, refer to the *HPE Propel Installation and Configuration Guide*.
- Integrating Suppliers:
 - The HPE Propel aggregation web service must be loaded into HPE Service Manager (SM) and the HPE SM unloads must be applied before attempting to create an aggregation.
 - HPE Cloud Service Automation (CSA) must be configured to use LDAP and for approval settings.
 - A new External System must be added to an HPE Service Anywhere (SAW) Group that has the integration account assigned as the Authorized user.

Refer to the *HPE Propel Installation and Configuration Guide* for instructions to connect suppliers.

- Re-aggregating: Configuring automatic re-aggregation is recommended because the HPE Propel catalog items are automatically updated when they change on the supplier's system. (Manual re-aggregation requires the Organization Administrator to be aware of catalog items changing on the supplier's system and a manual re-aggregation action.)

Delete Catalog Aggregation


Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

The Organization Administrator can delete an aggregation.

Tasks

The Organization Administrator can delete an aggregation.

1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** appears.
2. In the **Aggregation List**, click the aggregation to be deleted. The **Aggregation Report** appears.
3. Click  near the top-right area of the **Aggregation Report** and select **Delete**.
4. Confirm the aggregation deletion.

The aggregation is deleted and all catalog items that were previously in the aggregation are deleted.

Edit Catalog Aggregation

Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*)

such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

After an aggregation is created and aggregated, the Organization Administrator can edit the properties of the aggregation.

Tasks

The Organization Administrator can change the general properties of an aggregation.

1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** is displayed.
2. In the **Aggregation List**, click the aggregation that you want to edit. The **Aggregation Report** is displayed.
3. Click **Edit**. General and status fields for the aggregation appear. You can change the following general fields:
 - The aggregation **Name**.
 - Click the **Automatic** check box if changes to catalog items on the supplier's system should be automatically re-aggregated. **Note:** automatic re-aggregation is limited to specific suppliers.

Note: Clicking on the name takes you to the **Suppliers** application (see "[Suppliers](#)" on page 92) where the supplier can be redefined.

4. To save your changes to the aggregation, click **Save**. The **Aggregation Report** shows the aggregation's revisions, with a time stamp of when the aggregation was last updated.

Resolve Catalog Aggregation

Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*)


such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

The HPE Propel Organization Administrator can mark aggregations that are resolved/read.

In the typical flow, automatic aggregation changes catalog items and then the Organization Administrator needs to review the changes and manage them appropriately in HPE Propel. The automatic conflict resolution cannot work in all cases so the Organization Administrator can mark changes as resolved/read. This can be done at the aggregation level or catalog item level. The Organization Administrator needs to review the changes because not all changes can be propagated to the portal; some may need adjustment, correction or even removal.

Tasks

The Organization Administrator can set the status for any aggregation to Resolved.

1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** appears.
2. Click the aggregation that you want to view. The **Aggregation Report** appears.
3. Click the **Aggregation History** tab. Historical data for each catalog item action is displayed.
4. *Optional:* To conveniently group all warnings or errors together, click on the Status column header to re-sort the history based on the status.
5. To set the status to Resolved for all history item issues, click  and select **Mark All Resolved**.
6. Confirm marking all items as resolved.

Note: You can also resolve a specific item from the **Item History Details** view. Click on

an item to view the item history details, click  and then select **Mark All Resolved**.

Edit Catalog Item

Concepts


The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

The properties of a catalog item can be edited by the Organization Administrator. For example, the default price of a catalog item can be changed.

Tasks

The Organization Administrator can edit individual catalog items in an aggregation.

Note: If a catalog item in an aggregation is changed, the changes persist. That is, when an aggregation is re-aggregated, the catalog item's properties in the supplier's system do not override the catalog item's properties in the HPE Propel aggregation.

1. From the Launchpad, click the **Catalog Connect** application.
2. In the **Aggregation List**, click the aggregation that contains the catalog item you want to edit.
3. In the **Aggregation Report**, click **Aggregation History**. All catalog items in the aggregation are displayed.
4. In the row of the catalog item you want to edit, click  in the **Offering** column. The **Catalog Items** view displays the properties of the catalog item.

Note: This takes you to the **Catalog Items** application. You may need to log in again.

5. In the **Catalog Items** view, click **Edit**. The catalog item's **Details** dialog appears.

6. Make your changes to the catalog item and then click **Save** to finish and save the changes. (See ["Catalog Items"](#) on page 25 for details of editing a catalog item.)

Best Practices

- Editing Catalog Items: Changes to an aggregation's catalog items persist in HPE Propel. That is, when an aggregation is re-aggregated, the catalog item's properties in the supplier's system do not override the catalog item's properties in the HPE Propel aggregation.

Publish Catalog Item


Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

Tasks

The Organization Administrator can publish catalog items that have been added to an aggregation. After catalog items are published, they are available in the HPE Propel Portal for consumer fulfillment.

1. From the Launchpad, click the **Catalog Connect** application.
2. In the **Aggregation List**, click the aggregation that contains the catalog item you want to publish.
3. In the **Aggregation Report**, click **Aggregation History**. The list of catalog items in the aggregation are displayed. To publish an individual offering:

- a. Click  in the **Offering** column of the catalog item you want to publish. The catalog item's **Details** view appears. (You can edit the catalog item's properties if necessary.)
- b. In the **Details** view, click the **Publish** button.
- c. In the **Publish item to catalog** dialog, select the catalog and then click the **Publish** button.

The catalog item is published and available for fulfillment by consumers in the HPE Propel Portal.



Tip: See "[Catalog Items](#)" on page 25 for details of publishing multiple catalog items at once.

Restart Catalog Aggregation (Re-Aggregate)

Concepts

The Organization Administrator can manage HPE Propel catalog items by creating aggregations. An HPE Propel *aggregation* contains catalog items that are imported from an end-point system (*supplier*) such as HPE Service Manager (SM) and HPE Service Anywhere (SAW). After an aggregation is created and the end-point system's catalog items are imported, the Organization Administrator publishes the HPE Propel catalog items into a catalog, and then they are available for fulfillment in the HPE Propel Portal.

After an HPE Propel aggregation has been created, on-going aggregations (re-aggregations) can occur:


-  Automatic – This setting is available only for aggregations created with specific suppliers. After a catalog item is changed (added, updated, or deleted) in the supplier's system, the re-aggregation happens automatically for the catalog item and its status is updated in the HPE Propel aggregation.
-  Manual – This re-aggregation requires a manual action by the Organization Administrator. Manual re-aggregation requires the Organization Administrator to be aware of changed catalog items and manually trigger the re-aggregation to occur.

Note: If a catalog item in an aggregation is changed, the changes persist. That is, when an aggregation is re-aggregated, the catalog item's properties in the supplier's system do not override the catalog item's properties in the HPE Propel aggregation.

Tasks

The Organization Administrator can re-aggregate an existing aggregation and newly added, revised, or deleted catalog items in the supplier's system are updated in the HPE Propel aggregation.

1. From the Launchpad, click the **Catalog Connect** application. The **Aggregation List** appears.
2. In the **Aggregation List**, click the aggregation you want to re-aggregate. The **Aggregation Report** appears and the general and status fields are displayed.

3. In the **Aggregation Report**, click  near the top-right area of the **Aggregation Report** and select **Restart Aggregation**.

The status bar indicates the progress of the re-aggregation. The status fields provide details of the re-aggregation.

You can click the **Aggregation History** tab in the **Aggregation Report** to review changes to individual catalog items.

Tip: The **Aggregation History** provides a visual representation of whether the catalog items have been resolved since being aggregated from a supplier's system. That is, unresolved catalog items have a green bar to the left of them and resolved catalog items do not.

Best Practices

- Re-aggregating: Configuring automatic re-aggregation is recommended because the HPE Propel catalog items are automatically updated when they change on the supplier's system. (Manual re-aggregation requires the Organization Administrator to be aware of catalog items changing on the supplier's system and a manual re-aggregation action.)

Suppliers

Concepts

A *supplier* consists of an end-point system and its properties to enable integration with HPE Propel.

Examples of suppliers are:

- Provider systems
- Fulfillment systems
- Ticketing systems

For example, a supplier can be added for an HPE Service Manager (SM) system, and then the supplier's offerings can be imported into HPE Propel.

Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

Tasks

Available tasks:

- "[View Supplier Details](#)" on page 93 — View the properties and diagnostics of a supplier. Additionally, failed requests, due to a supplier system being unavailable, can be manually resubmitted.
- "[Add Supplier](#)" on page 95 — Create a new end-point system to be integrated with HPE Propel.
- "[Edit Supplier Details](#)" on page 98 — Revise the properties of a supplier.
- "[Synchronize Requests](#)" on page 99 — Import either support requests, service requests, or both.
- "[Delete Supplier](#)" on page 100 — Remove the integrated end-point system from HPE Propel.

Tip: Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter

your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

View Supplier Details

Concepts

Suppliers represent end-point systems that are integrated with HPE Propel. Examples of HPE Propel suppliers are: provider systems, fulfillment systems, and ticketing systems.

Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

Tasks

- ["View Supplier Overview" on page 93](#) — View the properties of a supplier.
- ["View Supplier Diagnostics" on page 93](#) — View the accessibility status and log-in status for a supplier.
- ["View Supplier Configuration Check" on page 94](#) — View the status of HPE Service Manager (SM) unload files (HPE SM suppliers only).
- ["Manually Retry Failed Requests for a Supplier" on page 94](#) — Manually retry failed requests for a supplier.

View Supplier Overview

To view the supplier overview:

1. From the Launchpad, click the **Suppliers** application.
2. In the **Suppliers** view, click the supplier in the main list. The details of the supplier are displayed in the **Overview** view.

View Supplier Diagnostics

To view the diagnostics for a supplier:

1. In the **Supplier Detail** view (see "[View Supplier Overview](#)" on page 93 for details), click the **Diagnostics** tab.

The Endpoint accessibility status and Login status of the supplier are displayed.

You can also view additional metrics, such as New Orders and Support Tickets, Response Time, and Request Status. To view detailed metrics, click a graph.

View Supplier Configuration Check

Note: The **Configuration Check** tab is available only for certain suppliers, such as HPE SM and HPE Service Anywhere (SAW).

To view the status of HPE SM unload files for a supplier:

1. In the **Supplier Detail** view (see "[View Supplier Overview](#)" on page 93 for details), click the **Configuration Check** tab.

The status of general settings and all HPE SM unload files for the supplier are displayed.

Manually Retry Failed Requests for a Supplier

Note: The **Manual Retry** tab is available only for certain suppliers, such as HPE SM and HPE Service Anywhere (SAW).

When a supplier system becomes unavailable for HPE Propel to deliver requests, failed requests are added to a manual retry list. The default number of automatically attempted requests re-deliveries is five and the interval is every 30 seconds. Refer to the *HPE Propel Administration Guide* for details of automatic retries.

The **Diagnostics** tab in the **Supplier Detail** view indicates a failed Synchronizations status for unsent requests.

To manually retry failed requests for a supplier:

1. In the **Supplier Detail** view (see "[View Supplier Overview](#)" on page 93 for details), click the **Manual Retry** tab.

The list of requests to be retried are listed. You can filter the list of requests to be manually retried.

2. Click the **Retry** button to manually retry the requests in the list.

Upon submission, the automatic retry will start again from the beginning. If it fails again, failed requests will be re-added to the manual retry list.

Note: To cancel failed requests in the retry list, you can use the **Terminate** button in the **Manual Retry** view. The termination removes the failed requests from the retry list and the requests are displayed as failed in the HPE Propel Portal.

Add Supplier

Concepts

Suppliers represent end-point systems that are integrated with HPE Propel. Examples of HPE Propel suppliers are: provider systems, fulfillment systems, and ticketing systems.

Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

The Organization Administrator can add new HPE Propel suppliers.

Tasks

To add a new supplier:

1. From the Launchpad, click the **Suppliers** application.
2. In the **Suppliers** view, click the **Add Supplier** button.
3. In the **Add Supplier** dialog, fill in and select the **Basic Supplier Properties**:
 - a. Type a descriptive name in the **Name** field for the new supplier.
 - b. Select the **Backend System Type**.
4. After the **Backend System Type** is selected, additional **General**, **User**, and **Proxy** fields are displayed. Fill in and select the required fields.

5. *Optional, only for HPE Service Manager (SM) suppliers* - if an HPE SM supplier is being added, additional LWSSO properties must be specified:
 - a. In the **LWSSO domain** field, type the domain of the HPE SM supplier.
 - b. In the **LWSSO init string** field, type the passphrase for the HPE SM supplier.
6. Click the **Create** button in the **Add Supplier** dialog to finish and save your changes. The new supplier and its properties are displayed.

Note: If HTTPS is used for communication between HPE Propel and the new supplier, then HTTPS must be configured. See ["Configure SSL for a Supplier" on page 96](#) for instructions.

Configure SSL for a Supplier

If HTTPS is used for communication between HPE Propel and a supplier, then HTTPS must be configured.

Configure SSL

Perform the following steps.

1. Import the HPE Propel VM's CA-signed certificate into the supplier's keystore. The general steps to do this are:
 - a. Copy the HPE Propel VM's `/opt/hp/propel/security/CA.crt` file to the supplier's `/tmp` directory.
 - b. On the supplier's system, import the CA-signed certificate:

```
# keytool -importcert -file /tmp/CA.crt -alias Propel_CA  
-trustcacerts -keystore <SUPPLIER-KEYSTORE-PATH>/cacerts
```

Where `SUPPLIER-KEYSTORE-PATH` is the location of the `cacerts` file on the supplier's system.

Examples of `cacerts` file locations are:

- HPE SM on Windows:
C:\Program Files (x86)\HP\ServiceManager9.X\Server\RUN\cacerts

- HPE SM on Linux:
/opt/HP/ServiceManager9.X/Server/RUN
 - HPE CSA on Windows:
C:\Program Files\Hewlett-Packard\CSA\openjre\lib\security\cacerts
 - HPE CSA on Linux:
/usr/local/hp/csa/openjre/lib/security/cacerts
- c. On the supplier's system, restart the supplier's services:
- For HPE SM:
service sm restart
 - For HPE CSA:
service csa restart
2. Import the supplier's CA certificate into the HPE Propel VM's truststore. The general steps to do this are:
- a. Obtain the supplier's CA certificate, and then copy it to the HPE Propel VM's /tmp directory. For examples of obtaining a supplier's certificate, see ["SSL Tips" on page 97](#). In the following step, the supplier's CA certificate is in a CA.crt file.
 - b. On the HPE Propel VM, import the supplier's CA-signed certificate:

```
# keytool -importcert -file /tmp/CA.crt -alias Supplier_CA  
-trustcacerts -keystore /opt/hp/propel/security/propel.truststore
```

(The default password is "propel2014" for the HPE Propel truststore.)
3. On the HPE Propel VM, restart the HPE Service Exchange (SX) services:
- ```
systemctl restart jetty-sx
```

**Tip:** To verify that HTTPS is correctly configured between HPE Propel and the supplier, view the supplier details in the **Suppliers** application, and then click the **Diagnostics** tab. The status should indicate there are no connection issues.

## SSL Tips

If you do not have an SSL certificate from the supplier's system, you can manually create a certificate. Examples of creating a supplier's SSL certificate are:

- ["Export SSL Certificate from Supplier's Truststore" on page 98](#)
- ["Create Supplier's Host Certificate" on page 98](#)

### **Export SSL Certificate from Supplier's Truststore**

Use the following command on the supplier's system to export an SSL certificate from the supplier's truststore:

```
keytool -exportcert -file <CERT-OUTPUT-FILE> -keystore
<SUPPLIER-KEYSTORE-PATH>/cacerts -alias <SUPPLIER-ALIAS>
```

Where:

- *CERT-OUTPUT-FILE* is the output file that will contain the exported certificate.
- *SUPPLIER-KEYSTORE-PATH* is the location of the `cacerts` file on the supplier's system.
- *SUPPLIER-ALIAS* is the alias used in the supplier's truststore to identify the supplier's certificate.

### **Create Supplier's Host Certificate**

Use the following procedure to create a supplier's host certificate:

1. On the HPE Propel VM, execute the following command:

```
openssl s_client -connect <SUPPLIER-HOST>:<PORT> > supplier.crt
```

2. Edit the `supplier.crt` file and retain only the lines beginning with "`-----BEGIN CERTIFICATE-----`" and ending with "`-----END CERTIFICATE-----`", deleting all other lines.

You can verify that the supplier's host certificate is valid with the following command:

```
keytool -printcert -file supplier.crt
```

The output of the `keytool` command should identify the certificate owner and issuer.

## **Edit Supplier Details**

### **Concepts**

Suppliers represent end-point systems that are integrated with HPE Propel. Examples of HPE Propel suppliers are: provider systems, fulfillment systems, and ticketing systems.

Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

The Organization Administrator can edit the properties of a HPE Propel supplier.

## Tasks

To revise a supplier's properties:

1. From the Launchpad, click the **Suppliers** application.
2. In the **Suppliers** view, click the supplier that you want to edit. The details of the supplier are displayed.
3. Click **Edit**.
4. In the **Supplier Details** dialog, type or select new values for the supplier's properties that you want revised.
5. Click **Save** in the **Supplier Details** dialog to finish and save your changes.

The revisions for the supplier's properties are displayed.

## Synchronize Requests

### Concepts

Suppliers represent end-point systems that are integrated with HPE Propel. Examples of HPE Propel suppliers are: provider systems, fulfillment systems, and ticketing systems.


Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

The Organization Administrator can synchronize support requests, service requests, or both into HPE Propel from a supplier, such as HPE Service Manager (SM).

## Tasks

**Note:** The **Synchronize requests** feature is only available for certain suppliers, such as HPE SM and HPE Service Anywhere (SAW).

To synchronize a supplier's requests:

1. From the Launchpad, click the **Suppliers** application.
2. In the **Suppliers** view, click the supplier from which you want to synchronize requests. The details of the supplier are displayed.
3. In the **Supplier Detail** view, click  and select **Synchronize requests**.
4. In the **Synchronize requests** dialog, specify the following:
  - a. **Start date**, which is the beginning date to synchronize requests from the supplier.
  - b. **Request type to synchronize**, which can be set to **All**, **Service Requests**, or **Support Requests**.
5. Click the **Execute synchronization** button.

All of the specified requests, beginning with the specified **Start date**, are synchronized.

## Delete Supplier

### Concepts


Suppliers represent end-point systems that are integrated with HPE Propel. Examples of HPE Propel suppliers are: provider systems, fulfillment systems, and ticketing systems.

Suppliers are associated with organizations, and the Organization Administrator manages the supplier systems for his organization.

The Organization Administrator can delete HPE Propel suppliers.

## Tasks

To delete a supplier:

1. From the Launchpad, click the **Suppliers** application.
2. In the **Suppliers** view, click the supplier you want to remove.
3. In the **Supplier Detail** view, click  and select **Remove**. A confirmation dialog to delete the supplier is displayed.
4. Confirm the supplier deletion, and the HPE Propel supplier is deleted.

**Caution:** If a supplier is deleted, then all of its aggregations and catalog items are also deleted.

## Policies

### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator uses the **Policies** application to manage approval policies.

There are three HPE Propel policy types:

- ["Named" on page 101](#)
- ["User Context" on page 102](#)
- ["Business Approval" on page 102](#)

### Named

The approver is a group of HPE Propel users that can collectively approve an order for catalog items by a consumer. You can add individual users to the approval group. All users in the specified group are

asked for approval and the following properties affect the approval process:

- The **Minimal Approvals** property specifies how many approvals are enough to authorize an order. If set to 0, all members in the group must approve the order.
- The **Minimal Denials** property specifies how many denials result in rejection of the order. If set to 0, this property is ignored.

## User Context

The approver is a manager of a consumer that ordered the service. The **Number of Levels** property specifies how many managers are involved in the approval process. For example, if the **Number of Levels** is set to 2, two levels of managers must approve the order. Managers are asked for approval in successive steps. All required managers must approve an order. (One denial results in a rejection of the order.)

## Business Approval

The approval process is performed according to the specified business process—created in the **Business Process** application. (See "[Business Processes](#)" on page 109).

## Automatic Approval Selection

For all policy types, if **Automatic Approval** is selected and the wait time for an order is exceeded, then the automatic response (approved or denied) is executed.

- The **Wait Time (days)** setting is how long to wait before a request is automatically approved or denied.
- The **Response** setting indicates whether to automatically approve or deny.

After an HPE Propel approval policy is created, it can be applied to a catalog or a catalog item. When applying an approval policy to a catalog, all catalog items in the catalog have the approval policy; however, the Organization Administrator can assign different approval policies to various catalog items in a catalog. Refer to the "[Catalogs](#)" on page 16 and "[Catalog Items](#)" on page 25 for more information about applying approval policies.

## Tasks

Available tasks:

- ["View Policies" on page 103](#)
- ["View Policy Details" on page 104](#)
- ["Create Policy" on page 105](#)
- ["Edit Policy Details" on page 107](#)
- ["Delete Policy" on page 108](#)

**Tip:** Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

## View Policies

### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator can view HPE Propel approval policies.

### Tasks

The following tasks are available from the **Policies** view:

- ["View List of Policies" on page 103](#)
- ["Sort List of Policies" on page 104](#)

### View List of Policies

To view the list of policies:

1. From the Launchpad, click the **Policies** application.

The **Policies** view is displayed.

## Sort List of Policies

**Note:** This task assumes you are in the **Policies** view. (See "[View List of Policies](#)" on [page 103](#) for instructions.)

To change the sort order of the policies:

1. Open the drop-down list.
2. Select the desired sort order: **Newest**, **Oldest**, **Reverse Alphabetical** or **Alphabetical**.

## View Policy Details

### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator can view HPE Propel approval policies.

### Tasks

To view the details of a policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. To search the list of policies that are displayed in the **Policies** view, type the search criteria in the **Search Policies** field. Only the policies that meet the search criteria are displayed.
3. To view the details of a policy, click the policy in the main list. The details of the policy are displayed, including **Name**, **Type**, and **Policy Attributes**. The **Policy Attributes** depend on the policy type and can include the **Number of Levels**, **Approvers**, **Minimum Approvals**, **Minimum Denials**, **Automatic Approval**, **Wait Time (days)**, and **Response** properties, and, in the case of Business Approval, a **Process Flow Diagram**.



## Create Policy

### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator can create new HPE Propel approval policies: Business Approval, Named, and User Context.

### Tasks

- ["Add Business Approval Policy" on page 105](#)
- ["Add Named Policy" on page 106](#)
- ["Add User Context Policy" on page 106](#)

### Add Business Approval Policy

**Note:** Business Approval policies are recommended and will be the ongoing type of policy for future HPE Propel releases.

To add a new Business Approval policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. In the **Policies** view, click the **Add Policy** button.
3. In the **New Approval Policy** dialog, fill in and select the necessary fields:
  - a. Select *Business Approval* as the new policy **Type**. (For details of the policy types, see ["Policies" on page 101.](#))
  - b. Type a descriptive **Name** for the new policy.
  - c. Select the **Business Process Type** from the drop-down menu.

**Note:** The business process must already be defined and published in the **Business Processes** application (for more information see ["Business Processes" on page 109.](#))

If you need to create or publish a business process, click the **management application** link to go to the **Business Processes** application.

4. Click the **Add Policy** button in the **New Approval Policy** dialog to finish and save your changes.

The new Business Approval policy and its properties are displayed.

## Add Named Policy

To add a new Named policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. In the **Policies** view, click the **Add Policy** button.
3. In the **New Approval Policy** dialog, fill in and select the necessary fields:
  - a. Select *Named* as the new policy **Type**. (For details of the policy types, see ["Policies" on page 101.](#))
  - b. Type a descriptive **Name** for the new policy.
  - c. Select the **Approvers**.
  - d. Type the number of **Minimum Approvals**.
  - e. Type the number of **Minimum Denials**.
  - f. *Optional:* If **Automatic Approval** is specified:
    - i. Type the **Wait Time (days)**, which is how long to wait before a request is automatically approved or denied.
    - ii. Specify the **Response**, which determines if the request is automatically approved or denied after the wait time for an order is exceeded.
4. Click the **Add Policy** button in the **New Approval Policy** dialog to finish and save your changes.

The new Named policy and its properties are displayed.

## Add User Context Policy

To add a new User Context policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. In the **Policies** view, click **Add Policy** button.

3. In the **New Approval Policy** dialog, fill in and select the necessary fields:
  - a. Select *User Context* as the new policy **Type**. (For details of the policy types, see "[Policies](#)" on [page 101](#).)
  - b. Type a descriptive **Name** for the new policy.
  - c. Type the **Number of Levels**, which is the number of managerial levels that are required to approve the request.
  - d. *Optional*: If **Automatic Approval** is specified:
    - i. Type the **Wait Time (days)**, which is how long to wait before a request is automatically approved or denied.
    - ii. Specify the **Response**, which determines if the request is automatically approved or denied after the wait time for an order is exceeded.
4. Click the **Add Policy** button in the **New Approval Policy** dialog to finish and save your changes.

The new User Context policy and its properties are displayed.

## Edit Policy Details

### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator can edit the properties of an HPE Propel approval policy.

### Tasks

To edit the properties of a policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. In the **Policies** view, click the policy you want to edit.
3. In the **Details** view, click **Edit**.
4. In the **Details** dialog, make your changes. Depending on the type of policy, you can revise various properties.

5. To finish and save your changes, click **Save**.

The revised properties for the policy are displayed in the **Details** view.

**Tip:** For details of the types of HPE Propel approval policies, see "[Policies](#)" on page 101.

## Delete Policy


### Concepts

A policy controls the approval requirements for orders placed by consumers in the HPE Propel Portal.

The Organization Administrator can delete HPE Propel approval policies.

### Tasks

To delete a policy:

1. From the Launchpad, click the **Policies** application. The **Policies** view is displayed.
2. In the **Policies** view, for the policy you want to delete, click  and select **Remove**. A confirmation dialog to delete the policy is displayed.
3. Confirm the policy deletion.

The HPE Propel approval policy is deleted.

**Note:** You can also delete a policy from the **Policy Detail** view (see "[View Policy Details](#)" on page 104 for instructions), when you click the **Remove** button and confirm the removal.

## Business Processes

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy. HPE Propel provides the following out-of-the-box business process definitions:

- **Simple Manager Approval** — A simple approval process that requires manager approval.
- **Simple External Approval** — An external approval process that is controlled in an HPE Propel supplier, such as HPE Service Manager (SM). This process requires a supplier with external approval support.
- **Manager Approval with Reminder** — An approval process that requires manager approval and has a reminder email sent periodically to the approver.
- **Conditional Approval** — A more complex approval process with the usage of a condition.
- **Parametrized Conditional Approval** — A complex approval process similar to conditional approval. The start activity has a price property in the form to avoid hard-coding a price in the process.
- **Advanced Approval** — A more complex approval process with the usage of a sub-process, timer, and conditions.

**Note:** It is highly recommended that you immediately clone the HPE Propel out-of-the-box business process definitions to new names and only edit those copies.

The Organization Administrator uses the **Business Processes** application to manage, customize, and create new business process definitions that HPE Propel can use for its approvals.

The **Business Processes** application is generally used within HPE Propel in the following order:

1. The Organization Administrator uses the **Business Processes** application to manage the business process definitions that HPE Propel uses for its approvals. The business process definitions must be published before they can be used.
2. The Organization Administrator uses the **Policies** application to create approval policies from business process definitions. (See "[Policies](#)" on page 101.)

3. The Organization Administrator uses the **Catalogs** application to associate an approval policy with a catalog and publish it to the HPE Propel Portal for consumer fulfillment. (See "[Catalogs](#)" on [page 16](#)).

The Organization Administrator can also use the **Catalog Items** application to associate an approval policy with specific items if a different approval policy is desired than for the catalog as a whole. (See "[Catalog Items](#)" on [page 25](#)).

4. The consumer uses the **Shop** application to request catalog items for fulfillment and to place the order.

**Note:** If requests require approval from HPE Propel users—alone or in conjunction with downstream fulfillment approvals—approval policies must previously be assigned to the catalogs or catalog items.

5. When items are ordered, a Business Process instance is started to manage the approval process. The items in the order are approved (or denied) according to the designated business process. The process may require more than one approver.

## Tasks

Available tasks:

- "[View Business Processes](#)" on [page 111](#)
- "[View Business Process Details](#)" on [page 114](#)
- "[Clone Business Process](#)" on [page 115](#)
- "[Edit Business Process](#)" on [page 116](#)
- "[Create Business Process](#)" on [page 141](#)
- "[Delete Business Process](#)" on [page 142](#)
- "[Publish Business Process](#)" on [page 143](#)

**Tip:** Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search

text box. In the results section, select the help PDF you are interested in that has the most recent date.

## View Business Processes

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy. HPE Propel provides the following out-of-the-box business process definitions:

- **Simple Manager Approval** — A simple approval process that requires manager approval.
- **Simple External Approval** — An external approval process that is controlled in an HPE Propel supplier, such as HPE Service Manager (SM). This process requires a supplier with external approval support.
- **Manager Approval with Reminder** — An approval process that requires manager approval and has a reminder email sent periodically to the approver.
- **Conditional Approval** — A more complex approval process with the usage of a condition.
- **Parametrized Conditional Approval** — A complex approval process similar to conditional approval. The start activity has a price property in the form to avoid hard-coding a price in the process.
- **Advanced Approval** — A more complex approval process with the usage of a sub-process, timer, and conditions.

The Organization Administrator can view business processes.

### Tasks

- [View List of Business Processes](#)
- [Change View](#)
- [Sort List of Business Processes](#)
- ["Generate Sample Business Processes" on page 113](#)

## View List of Business Processes

To view the list of business processes:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.

The details of the business processes are displayed, including **Name**, **Description**, and whether they are published.

**Tip:** To filter the list of business processes that are displayed, type the search criteria. Only the business processes that meet the search criteria are displayed.

2. To quickly switch between published, unpublished, and all business processes, click **Published Processes**, **Unpublished Processes**, or **All Processes**.

## Change View

**Note:** This task assumes you are in the **Business Processes** view. (See "[View List of Business Processes](#)" on page 112 for instructions.)

To change the view of the business processes:

- If you are in List View, click **Grid View** to see a graphical display of all business processes.
- If you are in Grid View, click **List View** to see a simple list of all business processes.

## Sort List of Business Processes

**Note:** This task assumes you are in the **Business Processes** view. (See "[View List of Business Processes](#)" on page 112 for instructions.)

To change the sort order of the business processes:

1. Open the drop-down list (at far right with default **Newest**).
2. Select the desired sort order: **Newest**, **Oldest**, **Alphabetical** or **Reverse Alphabetical**.



## Generate Sample Business Processes

HPE Propel provides sample out-of-the-box business processes that you can use directly or as templates to be customized. You may want to generate or regenerate the sample business processes in these cases:

- You would like the sample business processes for other organizations (by default, HPE Propel only generates the sample processes for the CONSUMER organization).
- You deleted a business process and would like to regenerate it.
- You modified an HPE Propel provided business process and would like to regenerate the original process. (If you want to keep the modified process, make sure to save or clone to a different name before regenerating the original process.)

**Note:** This task assumes you are in the **Business Processes** view. (See "[View List of Business Processes](#)" on page 112 for instructions.)

To generate—or regenerate—the HPE Propel provided set of sample business processes:

1. Click the **Generate Sample Data** button.
2. In the **Generate Sample Data** dialog, if desired, check the box for **Generate new sample processes even if processes of the same name already exist**.

**Note:** If this box is checked, existing business processes with the same names are overwritten.

If this box is not checked, existing business processes with the same names are not updated.

3. Click the **Generate** button.

The HPE Propel provided sample business processes are generated (or regenerated) according to whether the box was checked for **Generate new sample processes even if processes of the same name already exist**.

## View Business Process Details

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy.


The Organization Administrator can view business process details.

### Tasks

To view the details of a business process:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.

The details of the business processes are displayed, including **Name**, **Description**, and whether they are published.

2. Click the specific business process that you want to view or click the vertical ellipses  next to the business process and select **Detail**.

Additional details of the business process are displayed, including **Created** date, **Last Updated** date, and a diagram of the business process definition.

If the business process definition has been published, the bottom of the page displays information about the current published version, such as the version, when it was published, and its diagram.

If there are differences between the current diagram and the published diagram, **Contains unpublished changes** is displayed.

## Clone Business Process

### Concepts


Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy.

The Organization Administrator can clone (make a copy of) business processes.


**Note:** It is highly recommended that you immediately clone the HPE Propel out-of-the-box business process definitions to new names and only edit those copies.

### Tasks

To clone a business process:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.
2. In the **Business Processes** view, click the vertical ellipses  next to the business process that you want to clone and select **Clone**.
3. Fill in the fields in the **Clone process** dialog:
  - a. Type the **Name** of the newly cloned business process.
  - b. *Optional:* Type a **Description** for the newly cloned business process.
4. Click the **Create** button in the **Clone process** dialog to save your changes.

The **Business Processes** application takes you directly to the Process Editor. To modify the cloned business process, see "[Use the HPE Propel Process Editor](#)" on page 119.

**Note:** You can also clone a business process from the **Process Detail** view when you click the vertical ellipses  and select **Clone**.

## Edit Business Process

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy. HPE Propel provides the following out-of-the-box business process definitions:

- **Simple Manager Approval** — A simple approval process that requires manager approval.
- **Simple External Approval** — An external approval process that is controlled in an HPE Propel supplier, such as HPE Service Manager (SM). This process requires a supplier with external approval support.
- **Manager Approval with Reminder** — An approval process that requires manager approval and has a reminder email sent periodically to the approver.
- **Conditional Approval** — A more complex approval process with the usage of a condition.
- **Parametrized Conditional Approval** — A complex approval process similar to conditional approval. The start activity has a price property in the form to avoid hard-coding a price in the process.
- **Advanced Approval** — A more complex approval process with the usage of a sub-process, timer, and conditions.

**Note:** It is highly recommended that you immediately clone the HPE Propel out-of-the-box business process definitions to new names and only edit those copies.

The Organization Administrator can edit existing business process definitions or define new business processes.

### Strategy

As a strategy, first see whether the HPE Propel provided business processes meet your needs; setting parameter values is a simple way to customize the business processes.

If the HPE Propel provided business process definitions do not meet your needs, it is recommended to make a copy of the business process definition that is closest to your use case and modify it.

As a last resort, create a new business process definition using the provided example business process logic to design your own business process definition.

**Note:** It is recommended that you edit an existing business process definition rather than create a new business process definition.

## Structure of a Process

A business process is defined as a sequence of activities that carry out work. A process is depicted as a graph of flow elements—activities, events, gateways, and sequence flows—that describe the execution.

A valid process begins with a start event and ends with an end event. It contains one or more activities (tasks)—Named approval, User context approval, Script task, and so on—that are connected by flow sequence arrows. Tasks are where the work gets done, either manually (such as calling a customer or filling in a form) or automatically (via script). Gateways also direct the flow within the process.

A results variable carries status information throughout the business process execution. Generally the results variable is named `approved`. Its value is set to `true` (approved) or `false` (denied). The business process execution varies depending on its value. For example, the approval tasks are not executed if the results variable is already set to `false`.

Processes become more complex with the following:

- Branching the flow based on specified conditions
- Using different combinations of approval tasks
- Adding automated JavaScript tasks
- Defining sub processes
- Adding timers to exit or repeat events

For a business process definition to be valid and supported by HPE Propel, its tasks and sequence flows must be connected at both ends—must have at least one input and one output—except for Start and End tasks that only have a single output or input.

Execution of Approval Tasks: During business process execution, Approval tasks—Named approval, User context approval, and Group approval—are skipped if the `Approved` result variable is already set to `false` by some preceding activity or script task. It is assumed the result is already decided, therefore the activity is skipped. This simplifies the approval processes by avoiding an exclusive gateway after each approval activity.

Once a business process is defined, multiple instances of the process can be run in HPE Propel. The **Diagnostics** application provides the status of the BPM Backend Service and Business Processes UI Services (see "[Diagnostics](#)" on page 183).


## Tasks

- [Edit a Business Process](#)
- [Use the HPE Propel Process Editor](#)

### Edit a Business Process

To edit a business process definition:


1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.

2. Click the vertical ellipses  next to the business process that you want to edit and select **Open in editor**. The **HPE Propel Process Editor** opens.

**Note:** You can also access the **HPE Propel Process Editor** from the **Process Detail** view. Click the business process that you want to edit to open the **Process**

**Detail** view. Click the vertical ellipses  and then select **Open in editor**.

3. Make the desired changes to the business process definition (see "[Use the HPE Propel Process Editor](#)" on page 119 for instructions).

4. Click  to save your changes. Update the model **Name** and **Description**. Click the **Save and close editor** button to save the model and return to the **Business Processes** view.

**Note:** Saving as a new name replaces the name of the original business process. To retain the original business process, first clone the original business process and then edit the copy. (See "[Clone Business Process](#)" on page 115 for instructions.)

If you are customizing an HPE Propel provided business process, clone it as a unique name rather than overwriting the HPE Propel provided business process and then edit the copy.

## Use the HPE Propel Process Editor

The **Process Editor** is a powerful tool used to define and edit business process definitions.

**Note:** You open the **Process Editor** when editing an existing business process (here), cloning an existing business process (see "[Clone Business Process](#)" on page 115), or creating a new business process (see "[Create Business Process](#)" on page 141).

To use the **Process Editor**:

- Understand the layout of the **Process Editor**.

**Process Editor Layout**

| Area                                 | Description                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Process design area</b>           | The main editing area that displays the current business process definition.                                                                                                                                                                                                                                                                                                            |
| <b>Process elements area</b>         | The area (on the left side) that contains design elements that can be added to the business process definition. Each category can be expanded to display all elements within the category. Elements can be dragged and dropped into the <b>Process design area</b> . Refer to <a href="#">"Elements in the Process Elements Area" on page 122</a> for instructions to use the elements. |
| <b>Process element options icons</b> | The icons that pop up in the <b>Process design area</b> when an element is selected. The icon tools edit the element or add the next element to the business process definition. Refer to <a href="#">"Process Element Options Icons" on page 124</a> for instructions to use the icons.                                                                                                |
| <b>Process toolbar area</b>          | The toolbar (at the top) with icons for the editing tools. Refer to <a href="#">"Tools in the Process Toolbar Area" on page 126</a> for instructions to use the tools.                                                                                                                                                                                                                  |
| <b>Process task parameter area</b>   | The area (at the bottom) that provides details, such as parameter values, for the overall business process or for the selected element. Refer to <a href="#">"Parameters in the Process Task Parameter Area" on page 127</a> for instructions to set and use the parameters.                                                                                                            |

- Walk through the steps to create a simple business process definition using the **Process Editor**.  
 These instructions walk you through the basic mechanics of using the **Process Editor** to create a simple business process definition. The steps are explained at a high level; detailed instructions and definitions follow.
  - Follow the instructions in ["Create Business Process" on page 141](#). The **Process Editor** opens with a blank **Process design area**.
  - In the **Process elements area**, expand **Start Events**, and then drag and drop *Start event* to the **Process design area**.
  - With the *Start event* selected in the **Process design area**, click the *Exclusive gateway* icon from the **Process element options icons**. You now see two elements connected by a *Sequence flow arrow*.
  - With the *Exclusive gateway* selected in the **Process design area**, click the *Named approval* icon from the **Process element options icons**.

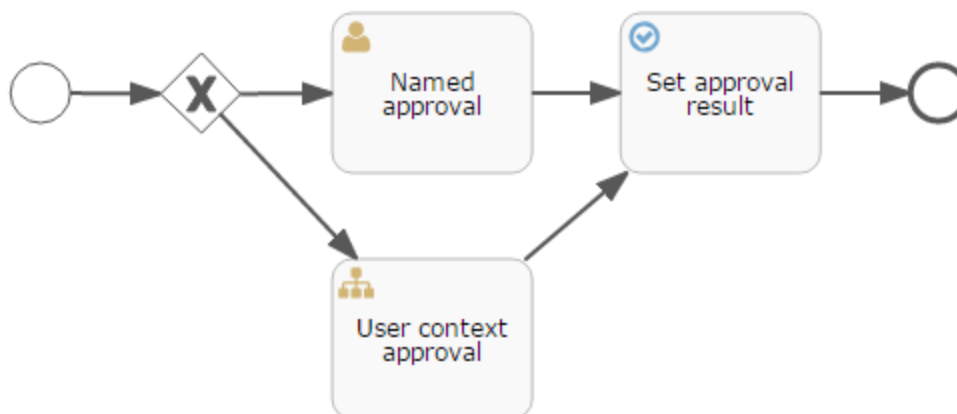


- e. With the *Named approval* task selected in the **Process design area**, click the *Set approval result* icon from the **Process element options icons**. Note that every business process definition must include the *Set approval result* task before it ends.
- f. With the *Set approval result* task selected in the **Process design area**, click the *End event* icon from the **Process element options icons**. You now see five elements connected by *Sequence flow* arrows.
- g. You notice that the *Exclusive gateway* in the sequence should have another output. In the **Process elements area**, expand **Activities**, and then drag and drop *User context approval* to the **Process design area** below the existing sequence.

To connect the *Exclusive gateway* to the *User context approval* task, select the *Exclusive gateway* to open its **Process element options icons**. Drag and drop the *Sequence flow* icon on top of the *User context approval* task.

- h. Since all paths from *Start event* to *End event* must include the *Set approval result* task, you need to merge the second path into the *Set approval result* task. To do so, select the *User context approval* task to open its **Process element options icons**. Drag and drop the *Sequence flow* icon on top of the *Set approval result* task.

You should now have a business process definition that looks similar to the following:



- i. You still need to perform other steps to complete the business process definition:
  - Provide parameter values for process elements. Some parameters are required in order for the process to be valid.
  - Improve the appearance of the process.
  - Save the process.
- Drag and drop elements from the **Process elements area** (at the left side) to the **Process design**

**area** (main working area).

**Elements in the Process Elements Area**

| Category     | Element                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Start Events | <i>Start event</i>           | <p>Add a start event without a specific trigger.</p> <p>Required for every business process definition.</p> <p>Refer to "<a href="#">Start event</a>" on page 128 for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Activities   | <i>Named approval</i>        | <p>Add a new task that initiates approval by specified users.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">Named approval task</a>" on page 128 for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              | <i>User context approval</i> | <p>Add a new task that initiates approval by the specified number of levels in manager hierarchy.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">User context approval task</a>" on page 128 for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                  |
|              | <i>Group approval</i>        | <p>Add a new task that initiates approval by specified group.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">Group approval task</a>" on page 128 for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              | <i>External approval</i>     | <p>Add a new task that initiates approval by a supplier, which is external to HPE Propel. Final approval can be provided either through HPE Propel or the supplier.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">External approval task</a>" on page 129 for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                    |
|              | <i>Set approval result</i>   | <p>Add a new task that sets the result of the business approval (true=approved, false=denied).</p> <p>This task is needed to synchronize with the <b>Catalog</b> application's <i>Request Status</i> for the requested item. The <i>Set approval result</i> task should always be the last task prior to <i>End event</i> in the business process definition. The results variable (approved) is input to this task so it must always be set to true or false before this task is executed. If this task is not included, the business process execution fails and gives the error message "Approval process {} completed without deciding approval state."</p> |

**Elements in the Process Elements Area, continued**







|                  |                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                                                                                                             | Refer to <a href="#">"Set approval result task" on page 129</a> for parameter instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                  | <i>Script task</i>                                                                                          | <p>Add a new automatic task with script logic—JavaScript or Java Unified Expression Language (JUEL).</p> <p>When the process being executed arrives at the <i>Script task</i>, the corresponding script is executed.</p> <p>Refer to <a href="#">"Script task" on page 129</a> for parameter instructions and to <a href="#">"Edit Business Process" on page 116</a> for information about Scripting.</p>                                                                                                                                                   |
| <i>Mail task</i> | <p>Add a mail task.</p> <p>Refer to <a href="#">"Mail task" on page 129</a> for parameter instructions.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Structural       | <i>Sub process</i>                                                                                          | <p>Add a sub process scope.</p> <p>A sub process is like a process-inside-a-process. It can be used for standardization or easy reuse. It can be used in conjunction with a <i>Boundary timer event</i> (see <a href="#">"Boundary Events" on page 123</a>) to specify when the process instance should stop, send an email, or such. For example, the <i>Boundary timer event</i> can stop the process instance after 14 days if approval or denial has not occurred, and then deny the request.</p>                                                       |
| Gateways         | <i>Exclusive gateway</i>                                                                                    | <p>Add a choice gateway.</p> <p>An exclusive gateway (XOR gateway) indicates a decision in the process. When a process being executed arrives at this gateway, all outgoing sequence flows are evaluated in the order in which they are defined. The first—and only the first—sequence flow that evaluates to TRUE is selected for continuing the process. If no sequence flow evaluates to TRUE, the default flow is taken (if a default flow is defined).</p> <p>Refer to <a href="#">"Exclusive gateway" on page 130</a> for parameter instructions.</p> |
| Boundary Events  | <i>Boundary timer event</i>                                                                                 | <p>Add a boundary event with a timer trigger.</p> <p>A timer boundary event acts like an alarm clock or stopwatch. When a boundary event is attached to an activity, a timer is started when that activity is executed. When the timer fires (the timer goes off after</p>                                                                                                                                                                                                                                                                                  |

**Elements in the Process Elements Area, continued**







|           |                        |                                                                                                                                                                                                  |
|-----------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           |                        | <p>the specified period), the activity is interrupted and the new execution path is followed.</p> <p>Refer to "<a href="#">Boundary timer event</a>" on page 131 for parameter instructions.</p> |
| End event | <i>End event</i>       | <p>Add an end event without a specific trigger.</p> <p>Required for every business process definition.</p> <p>Refer to "<a href="#">End event</a>" on page 131 for parameter instructions.</p>   |
| Artifacts | <i>Text annotation</i> | <p>Annotate elements with description text.</p> <p>Refer to "<a href="#">Text annotation</a>" on page 131 for parameter instructions.</p>                                                        |

- Use the **Process element options icons** (small icons that pop up next to an element in the **Process design area**) to delete or change the element, or to add the next element to the process.

**Process Element Options Icons**

| Icon                                                                                | Element                      | Description                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Delete                       | Delete the element from the process.                                                                                                                                                                                                                                           |
|  | Change                       | Change the element type to another element in the same category.                                                                                                                                                                                                               |
|  | <i>Named approval</i>        | <p>Add a new task that initiates approval by specified users.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">Named approval task</a>" on page 128 for parameter instructions.</p>                                            |
|  | <i>User context approval</i> | <p>Add a new task that initiates approval by the specified number of levels in manager hierarchy.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">User context approval task</a>" on page 128 for parameter instructions.</p> |
|  | <i>Group approval</i>        | <p>Add a new task that initiates approval by specified group.</p> <p>If the approval is already denied, the task is not executed.</p> <p>Refer to "<a href="#">Group approval task</a>" on page 128 for parameter instructions.</p>                                            |
|  | <i>External approval</i>     | <p>Add a new task that initiates approval by a supplier, which is external to HPE Propel. Final approval can be provided either through HPE Propel or the supplier.</p> <p>If the approval is already denied, the task is not executed.</p>                                    |

**Process Element Options Icons, continued**

|                                                                                     |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     |                            | Refer to <a href="#">"External approval task" on page 129</a> for parameter instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|    | <i>Set approval result</i> | <p>Add a new task that sets the result of the business approval (true=approved, false=denied).</p> <p>This task is needed to synchronize with the <b>Catalog</b> application's <i>Request Status</i> for the requested item. The <i>Set approval result</i> task should always be the last task prior to <i>End event</i> in the business process definition. The results variable (approved) is input to this task so it must always be set to true or false before this task is executed. If this task is not included, the business process execution fails and gives the error message "Approval process {} completed without deciding approval state."</p> <p>Refer to <a href="#">"Set approval result task" on page 129</a> for parameter instructions.</p> |
|    | <i>Script task</i>         | <p>Add a new automatic task with script logic—JavaScript or Java Unified Expression Language (JUEL).</p> <p>When the process being executed arrives at the <i>Script task</i>, the corresponding script is executed.</p> <p>Refer to <a href="#">"Script task" on page 129</a> for parameter instructions and to <a href="#">"Edit Business Process" on page 116</a> for information about Scripting.</p>                                                                                                                                                                                                                                                                                                                                                          |
|  | <i>Exclusive gateway</i>   | <p>Add a choice gateway.</p> <p>An exclusive gateway (XOR gateway) indicates a decision in the process. When a process being executed arrives at this gateway, all outgoing sequence flows are evaluated in the order in which they are defined. The first—and only the first—sequence flow that evaluates to TRUE is selected for continuing the process. If no sequence flow evaluates to TRUE, the default flow is taken (if a default flow is defined).</p> <p>Refer to <a href="#">"Exclusive gateway" on page 130</a> for parameter instructions.</p>                                                                                                                                                                                                        |
|  | <i>End event</i>           | <p>Add an end event without a specific trigger.</p> <p>Required for every business process definition.</p> <p>Refer to <a href="#">"End event" on page 131</a> for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|  | <i>Text annotation</i>     | <p>Annotate elements with description text.</p> <p>Refer to <a href="#">"Text annotation" on page 131</a> for parameter instructions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|  | <i>Sequence flow</i>       | <p>Add sequence flow to define the execution order of activities. To add sequence flow:</p> <ul style="list-style-type: none"> <li>○ Create the next element by dropping and dragging the element from the <b>Process elements area</b> to the <b>Process design area</b>.</li> <li>○ Click the <i>Sequence flow</i> icon for the previous element and drag to the</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                      |











**Process Element Options Icons, continued**

|  |  |               |
|--|--|---------------|
|  |  | next element. |
|--|--|---------------|









- Use the editing tools in the **Process toolbar area** (at the top).

**Note:** The tool icons change from gray to green when they are available for the specific edit that you are performing.

**Tools in the Process Toolbar Area**

| Icon                                                                                | Name                   | Description                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Save                   | Save the current model. Optional, update the <b>Name</b> and <b>Description</b> . Click <b>Save and close editor</b> to save the model and return to the <b>Business Processes</b> view or click <b>Save</b> to save the process and continue in the editor. |
|    | Cut                    | Cut the current selection.                                                                                                                                                                                                                                   |
|   | Copy                   | Copy the current selection.                                                                                                                                                                                                                                  |
|  | Paste                  | Paste the previously cut or copied selection.                                                                                                                                                                                                                |
|  | Delete                 | Delete the current selection.                                                                                                                                                                                                                                |
|  | Redo                   | Redo.                                                                                                                                                                                                                                                        |
|  | Undo                   | Undo the previous edit.                                                                                                                                                                                                                                      |
|  | Align model vertical   | Align the current selection vertically.                                                                                                                                                                                                                      |
|  | Align model horizontal | Align the current selection horizontally.                                                                                                                                                                                                                    |
|  | Same size              | Make the selection the same size.                                                                                                                                                                                                                            |

**Tools in the Process Toolbar Area, continued**

|                                                                                     |                     |                                                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Zoom in             | Zoom in.                                                                                                                                                                                               |
|    | Zoom out            | Zoom out.                                                                                                                                                                                              |
|    | Zoom to actual size | Zoom to actual size.                                                                                                                                                                                   |
|    | Zoom to fit         | Zoom to fit.                                                                                                                                                                                           |
|    | Add bend-point      | Add bend-point to the selected sequence flow. Click the Add bend-point icon and then click the Flow sequence arrow where you want to add a bend-point. Drag the bend-point to create the desired bend. |
|    | Remove bend-point   | Remove bend-point from the selected sequence flow. Click the Remove bend-point icon and then click the Flow sequence arrow that has a bend. The Flow sequence returns to a straight sequence flow.     |
|   | Information         | Access the HPE Propel Online Help.                                                                                                                                                                     |
|  | Close               | Close the <b>HPE Propel Process Editor</b> without saving.                                                                                                                                             |

- After selecting an element in the **Process design area** (main working area), set values for its parameters in the **Process task parameter area** (at the bottom). The available parameters depend on the selected element. The top-level parameters document the business process. The parameters for business process elements—approval tasks, script tasks, gateways, timer events, and so on—supply execution values.

**Note:** The following keys indicate where you need to specify parameter values:

- If an element is outlined in red in the **Process design area**, you must specify one or more parameter values before the business process can be published.
- If a parameter is in red in the **Process task parameter area**, a value is required.
- If a parameter has a red asterisk (\*) in the **Process task parameter area**, a value is required but a default is provided.

**Parameters in the Process Task Parameter Area**

| Selected | Parameters |
|----------|------------|
|----------|------------|

**Parameters in the Process Task Parameter Area, continued**

| Element                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Business Process                  | <ul style="list-style-type: none"> <li>○ Process author: Enter the name of the business process author.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <i>Start event</i>                | <ul style="list-style-type: none"> <li>○ Name: Enter a name for the start event.</li> <li>○ Form properties: Define a form with a list of form properties. See <a href="#">"Edit Business Process" on page 116</a> for details.</li> <li>○ Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <i>Named approval task</i>        | <ul style="list-style-type: none"> <li>○ Name: Enter a name for the task. The default is Named approval.</li> <li>○ Minimum approvals (required): Select an integer value for the minimum number of approvals that are necessary to approve the order. If 0, all members in the group must approve the order.</li> <li>○ Approval result variable: Enter the variable name in which to store the approval result. The default is <code>approved</code>. The variable is set to either <code>true</code> (approved) or <code>false</code> (denied) in the task.</li> <li>○ Approvers (required): Select one or more users that will be asked to approve the order. See <a href="#">"Edit Business Process" on page 116</a> for details.</li> <li>○ Minimum denials (required): Select an integer value for the minimum number of rejections that result in rejection of the order. If 0, this property is ignored.</li> <li>○ Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul> |
| <i>User context approval task</i> | <ul style="list-style-type: none"> <li>○ Name: Enter a name for the task. The default is User context approval.</li> <li>○ Approval result variable: Enter the variable name in which to store the approval result. The default is <code>approved</code>. The variable is set to either <code>true</code> (approved) or <code>false</code> (denied) in the task.</li> <li>○ Number of levels (required): Select an integer value for the number of management levels above the requester that are involved in the approval process. Managers are asked for approval in successive steps. All required managers must approve an order. One denial results in rejection of the order and no further managers are contacted for approval.</li> <li>○ Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                            |
| <i>Group approval task</i>        | <ul style="list-style-type: none"> <li>○ Name: Enter a name for the Group approval task. The default is Group approval.</li> <li>○ Minimum approvals (required): Select an integer value for the minimum number of approvals that are necessary to approve the order. If 0, all members in the group must approve the order.</li> <li>○ Approval result variable: Enter the variable name in which to store the approval result. The default is <code>approved</code>. The variable is set to either <code>true</code> (approved) or</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



**Parameters in the Process Task Parameter Area, continued**

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | <p><code>false</code> (denied) in the task.</p> <ul style="list-style-type: none"> <li>Group (required): Enter the Identity Management (IdM) group that is responsible for approval. As you start typing, groups are displayed. Select the desired group.</li> <li>Minimum denials (required): Select an integer value for the minimum number of rejections that result in rejection of the order. If 0, this property is ignored.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <i>External approval task</i>   | <ul style="list-style-type: none"> <li>Name: Enter a name for the External approval task.</li> <li>Supplier ID: Either select the supplier or specify that the supplier's value will be provided dynamically on the form.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>Set approval result task</i> | <ul style="list-style-type: none"> <li>Name: Enter a name for the task. The default is Set approval result.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> <li>Approval result expression: Enter an expression that evaluates to true or false. Typically the expression is <code>\${approved}</code> where <code>approved</code> is the variable that the various approval tasks set to true or false. The default is <code>\${approved}</code>. For more information, see <a href="#">"Edit Business Process" on page 116</a>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <i>Script task</i>              | <ul style="list-style-type: none"> <li>Name: Enter a name for the Script task.</li> <li>Script (required): Enter JavaScript code to execute or a JUEL expression to evaluate and click <b>Save</b>. Must be valid. For more information, see <a href="#">"Edit Business Process" on page 116</a>.</li> </ul> <p>For example, set Result variable to <code>approved</code> and Script to <code>true</code> or <code>false</code> (both are simple valid scripts).</p> <ul style="list-style-type: none"> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> <li>Script format: Enter the script format, either JavaScript or <code>juel</code>. The default is JavaScript.</li> <li>Result variable: Enter the variable name in which to store the result. For example, if the <code>approved</code> variable is used, the script can set the <code>approved</code> variable to either <code>true</code> (approved) or <code>false</code> (denied) in the task. If no result variable is specified, the task is executed but no result is saved.</li> </ul> |
| <i>Mail task</i>                | <ul style="list-style-type: none"> <li>Name: Enter a name for the Mail task.</li> <li>To (required): Enter a comma-separated list of valid email addresses—literal or with script—to which the email will be sent and click <b>Save</b>.</li> </ul> <p>Examples:</p> <pre>joe.user@mycompany.com</pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Parameters in the Process Task Parameter Area, continued**

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | <p><code>\${_request.approvers.pending.emails}</code></p> <ul style="list-style-type: none"> <li>○ Subject (required): Enter an email subject line.</li> </ul> <p>Examples:</p> <p>Order needs to be approved</p> <p>Order <code>\${_request.name}</code> for <code>\${_request.recipient.fullName}</code> needs to be approved</p> <ul style="list-style-type: none"> <li>○ Bcc: Enter a comma-separated list of valid email addresses—literal or with script—to which the email will be sent in the Bcc field and click <b>Save</b>.</li> <li>○ Html: Enter HTML code for the email message content and click <b>Save</b>. See <a href="#">"Edit Business Process" on page 116</a>.</li> <li>○ Documentation: Enter any additional documentation and click <b>Save</b>.</li> <li>○ From: Enter a valid email address—literal or with script—from which the email will be sent and click <b>Save</b>. The default is configured in <code>bpm.properties</code> in <code>/opt/hp/propel/bpm/WEB-INF/classes</code>.</li> <li>○ Cc: Enter a comma-separated list of valid email addresses—literal or with script—to which the email will be sent in the Cc field and click <b>Save</b>.</li> <li>○ Text: Enter Plain Text for the email message content and click <b>Save</b>. Email clients that do not support Rich Text format will fall back to this format. Can be used in combination with HTML.</li> <li>○ Charset: Enter the character set to be used for the mail. Different character sets are necessary for many non-English languages. For example, UTF-8.</li> </ul> <p>For more information, see <a href="#">"Edit Business Process" on page 116</a>.</p> |
| <p><i>Exclusive gateway</i></p> | <ul style="list-style-type: none"> <li>○ Name: Enter the name of the Exclusive gateway.</li> <li>○ Flow order: Define the order in which the gateway exit criteria are evaluated. See <a href="#">"Edit Business Process" on page 116</a> for details.</li> <li>○ Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><i>Sequence flow</i></p>     | <ul style="list-style-type: none"> <li>○ Name: Enter the name of the Sequence flow.</li> <li>○ Flow condition: Enter the flow condition expression in script and click <b>Save</b>. For more information, see <a href="#">"Edit Business Process" on page 116</a>.</li> </ul> <p>Examples:</p> <p><code>\${_request.totalInitialPrice.amount}&gt;=100}</code></p> <p><code>\${_request.totalInitialPrice.amount}&gt;=price}</code> where price is a variable defined in the Start Event form properties and will be a parameter in HPE Propel Policies.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Parameters in the Process Task Parameter Area, continued**


|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | <ul style="list-style-type: none"> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> <li>Default flow: Check the box if the flow is the default flow from a gateway. In the diagram, a slash mark appears on the arrow for the default flow.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>Text annotation</i>      | <ul style="list-style-type: none"> <li>Name: Enter the name of the Text annotation.</li> <li>Text: Enter descriptive text.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <i>End event</i>            | <ul style="list-style-type: none"> <li>Name: Enter the name of the End event.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Boundary timer event</i> | <ul style="list-style-type: none"> <li>Name: Enter the name of the Boundary timer event.</li> <li>Timer cycle: Enter the repeat period of the timer event in ISO-8601 format. For example: R3/PT10H (repeat 3 times over a period of 10 hours).</li> <li>Timer duration: Enter the duration of the timer event in ISO-8601 format. For example: PT5M (a period of 5 minutes).</li> <li>Cancel activity: Check the box if the Timer Event activity should be canceled and the process continue along the original path.</li> <li>Documentation: Enter any additional documentation and click <b>Save</b>.</li> <li>Timer date: Enter the date of the timer event in ISO-8601 format. For example: 2016-09-01 (September 1, 2016).</li> <li>Timer End Date: Enter the end date of the timer event in ISO-8601 format. Only specify a value if Timer Cycle is also specified. For example: 2016-12-31 (December 31, 2016).</li> </ul> <p><b>Note:</b> Only one of these timer parameters—Timer cycle, Timer duration, Timer date—must be specified.</p> <p>For more information, see <a href="#">"Edit Business Process" on page 116</a>.</p> |

**Instructions to Define a Form**

**Tip:** These instructions pertain to defining the *Form properties* parameter for a *Start event*. (See ["Start event" on page 128](#)).

A form provides a convenient, user-friendly method for the Organization Administrator to specify parameter values before executing a business process or sub process.

To define a form:

- In the **Change value for "Form properties"** box, click  to add a new property to the form. Define the property components.

#### Property Components

| Property component | Description                                                                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name               | Name of the property to display when the business process is executed.                                                                                                                                                   |
| Type               | Type of property. Valid values are string, long, boolean, date, and enum.                                                                                                                                                |
| Variable           | A variable name that can be used to reference the value in conditions or script. For example, if you enter price, you can use <code>\${_request.totalInitialPrice.amount}&gt;=price</code> as a sequence flow condition. |
| Required           | Checkbox to indicate whether a value is required for the property in the HPE Propel Policy form.                                                                                                                         |

- *Optional:* Select a property and click  to delete the property from the form.

- *Optional:* Click  or  to rearrange the order of the properties in the form.



- Click the **Save** button to save the form as part of the Start Event.

#### Instructions to Select Users

**Tip:** These instructions pertain to defining the *Approvers* parameter for a *Named approval task*. (See "[Named approval task](#)" on page 128).

To select users:

- In the **Select Users** box, start typing the name of a user.
- From the choices offered, select the desired user.

- Click  to add the user to the list.
- *Optional:* Select a user and click  to delete the user.
- Repeat if any other users are to be added.
- Click the **Save** button when the list of users is complete.

## Scripting

**Tip:** These instructions pertain to defining script based parameters for various elements: *Set approval result task* (see "[Set approval result task](#)" on page 129), *Mail task* (see "[Mail task](#)" on page 129), *Script task* (see "[Script task](#)" on page 129), and *Sequence flow* (see "[Sequence flow](#)" on page 130).

Several HPE Propel parameters can use scripting to refine and customize tasks and values. Two types of scripting can be used: Java Unified Expression Language (JUDEL) and JavaScript.

### Type of Scripting

| Task Element             | Parameter                          | Type of Scripting                                    |
|--------------------------|------------------------------------|------------------------------------------------------|
| Set approval result task | Approval result expression         | JUDEL                                                |
| Mail task                | To<br>Subject<br>Bcc<br>From<br>Cc | JUDEL                                                |
| Mail task                | Html                               | Any HTML                                             |
| Script task              | Script                             | By default uses JavaScript but can use JUDEL as well |
| Sequence flow            | Flow condition                     | JUDEL                                                |

### Java Unified Expression Language (JUDEL) Overview

JUEL allows designers to use simple expressions to dynamically access data.

JUEL evaluates expressions encased in the `{}` syntax and returns the results immediately.

JUEL evaluates literal expressions to the text of the expression (type String). Literal expressions do not use the `{}` delimiters. When a literal expression is evaluated, it can be converted to another type. For example, the literal expression 19 (a string) can be converted to integer type with the result of 19.

### JUEL Operators

| Operator categories | Operators                                                                  | Additional information                                                                                         |
|---------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Arithmetic          | + , -<br>(binary)<br><br>* , / , div<br><br>% , mod<br><br>- (unary)       |                                                                                                                |
| Logical             | and, &&<br><br>or,   <br><br>not, !                                        |                                                                                                                |
| Relational          | ==, eq<br><br>!=, ne<br><br><, lt<br><br>>, gt<br><br><=, le<br><br>>=, ge | Comparisons can be made against other values, or against boolean, string, integer, or floating point literals. |
| Empty               | empty                                                                      | The empty operator is a prefix operation that can be used to determine whether a value is null or empty.       |
| Conditional         | A ? B : C                                                                  | Evaluate B or C, depending on the result of the evaluation of A.                                               |

**Tip:** For more information about Java Unified Expression Language, see *The Java EE 6 Tutorial, Chapter 6 Unified Expression Language*:

<http://docs.oracle.com/javaee/6/tutorial/doc/gjddd.html>

### JavaScript

**Tip:** This information pertains to defining the *Script* parameter in the *Script task* (see "[Script task](#)" on page 129).

The code for Script Tasks can be JavaScript ECMAScript 5.1 (as well as JUEL).

**Tip:** For more information about the HPE Propel JavaScript, see *ECMAScript® Language Specification*:

<http://www.ecma-international.org/ecma-262/5.1/>

### Variables

Variables can be used in scripts. For example, you can use a variable in a condition on a sequence flow to determine the next task.

You can create your own unique variables in a *Start Event* (Form Properties parameter) or a *Script Task*. When a business process is executed, the form properties are passed to the process instance as variables and can be used in the business process tasks.

You can also use HPE Propel provided properties, such as a request's name, type, and price. An underscore (\_) precedes all HPE Propel provided properties. For example, to reference "request price", use the JUEL expression `${_request.totalInitialPrice.amount}`.

### HPE Propel Provided Properties

| Property group | Property | Description                                                                                                                                                                                                                  |
|----------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _request       | name     | Name of the request.                                                                                                                                                                                                         |
| _request       | type     | Type of the request. Valid values: <ul style="list-style-type: none"><li>○ SERVICE: HPE Propel service requests</li><li>○ SUPPORT: HPE Propel support tickets</li><li>○ ACTION: HPE Propel service instance action</li></ul> |
| _request       | state    | State of the request. Valid value: <ul style="list-style-type: none"><li>○ PENDING_APPROVAL (always the case when the business process is executed)</li></ul>                                                                |
| _request       | tenant   | The organization. For example, CONSUMER.                                                                                                                                                                                     |
| _request       | count    | The count for the catalog item that is requested.                                                                                                                                                                            |

**HPE Propel Provided Properties, continued**

|              |                                                                                                                                             |                                                                                                                                                                                    |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _request     | created                                                                                                                                     | Time when the request was created. Units are milliseconds since epoch.                                                                                                             |
| _request     | humanReadableId                                                                                                                             | The human-friendly ID shown in the UI. For example, PR00117.                                                                                                                       |
| _request     | createdBy <ul style="list-style-type: none"> <li>o name</li> <li>o fullName</li> <li>o email</li> </ul>                                     | User that generated the request.                                                                                                                                                   |
| _request     | recipient <ul style="list-style-type: none"> <li>o name</li> <li>o fullName</li> <li>o email</li> </ul>                                     | User that will receive the request.                                                                                                                                                |
| _request     | totalInitialPrice <ul style="list-style-type: none"> <li>o amount</li> <li>o currency</li> </ul>                                            | Total initial price where the amount (a number) is in the specified currency type (for example, USD).                                                                              |
| _request     | totalRecurrentPrice <ul style="list-style-type: none"> <li>o amount</li> <li>o currency</li> </ul>                                          | Total recurrent price where the amount (a number) is in the specified currency type (for example, USD).                                                                            |
| _request     | totalRecurrencePeriod <ul style="list-style-type: none"> <li>o timeUnit</li> <li>o unitCount</li> </ul>                                     | Recurrence period where the price will reoccur after unitCount (a number) repetitions of the timeUnit.<br><br>Valid values for timeUnit: MS, S, MIN, HOUR, DAY, WEEK, MONTH, YEAR. |
| _request     | approvers <ul style="list-style-type: none"> <li>o pending           <ul style="list-style-type: none"> <li>• emails</li> </ul> </li> </ul> | Comma-separated list of all pending approver emails.                                                                                                                               |
| _environment | propel <ul style="list-style-type: none"> <li>o host</li> </ul>                                                                             | Hostname of the HPE Propel installation.                                                                                                                                           |



## HTML Example

**Tip:** This information pertains to defining the *Html* parameter in the *Mail task* (see "[Mail task](#)" on page 129).

The following is an example of HTML for an email:

```
<!DOCTYPE html>
<html>
 <body style="margin: 0; padding: 0;">
 <p>
 Your approval is required for the ${_request.name}
 request created by ${_request.createdBy.fullName}
 for ${_request.totalInitialPrice.amount}.
 </p>
 <p>
 Please go to
 https://www.mycompany.com to either
 approve or deny the request.
 </p>
 </body>
</html>
```

**Tip:** For instructions to design HTML emails, see:  
<http://webdesign.tutsplus.com/articles/build-an-html-email-template-from-scratch--webdesign-12770>

## Instructions to Change the Flow Order



**Tip:** These instructions pertain to the *Flow order* parameter in the *Exclusive gateway* (see "[Exclusive gateway](#)" on page 130).

The Flow Order defines the order in which the gateway exit criteria are evaluated. The order is important for *Exclusive gateways* where the flow only continues to the first criteria that evaluates to TRUE.

To change the Flow Order:

- o In the **Change value for "Flow order"** box, view the flow order that is in effect.



- o Click  or  to change the order.
- o Click the **Save** button when the flow is in the desired order.

## Instructions to Define Timer Events

**Tip:** These instructions pertain to the time-based parameters in the *Boundary timer event* (see ["Boundary timer event" on page 131](#)).

The HPE Propel Boundary timer events use the internationally accepted date and time representations defined by ISO 8601.

General principles:

- o Date and time values are ordered from largest to smallest unit of time—year down to fraction of a second.
- o Values can be dropped from least significant to most significant—fraction of a second, seconds, minutes, and so on.
- o Each date and time value has a fixed number of digits that may be padded with leading zeros.
- o Standardized separators can be included to improve readability.

The following *Boundary Timer Event* parameters are based on ISO 8601 definitions:

- o *Time cycle*
- o *Timer duration*
- o *Timer date*
- o *Timer end date*

### ISO 8601 Definitions

Element	Format	Example	Comments
Year	YYYY	2016	
Calendar date	YYYY-MM-DD or YYYYMMDD	2016-03-18 or 20160318	

**ISO 8601 Definitions, continued**

Calendar month	YYYY-MM (but not YYYYMM)	2016-03	
Week	YYYY-Www or YYYYWww	2016-W26 or 2016W26	<p>Start a week designation with W. Replace ww with 01 to 53.</p> <p>Week 01 is defined as the week with the year's first Thursday.</p> <p>The ISO week-numbering year starts at the first day (Monday) of week 01 and ends at Sunday before the new ISO year so that there will be no overlap or gap. It consists of 52 or 53 full weeks.</p>
Week and day of week	YYYY-Www-D or YYYYWwwD	<p>2009-W01-1 is Monday, 29 December 2008</p> <p>2009-W53-7 is Sunday, 3 January 2010</p>	<p>Replace D with weekday number, 1 to 7, beginning with Monday and ending with Sunday.</p>
Ordinal date	YYYY-DDD or YYYYDDD	2016-040 is February 9, 2016	<p>Replace DDD with day number of the year, 001 to 365 (or 366 for leap years).</p>
Time	<p>hh:mm:ss.sss or hhmmss.sss</p> <p>hh:mm:ss or hhmmss</p> <p>hh:mm or hhmm</p> <p>hh</p>	13:47:30 or 134730	<p>Replace hh with hour, 00 to 24.</p> <p>Replace mm with minute, 00 to 59.</p> <p>Replace ss with second, 00 to 59 (or 60 for leap second).</p> <p>Midnight may be either 00:00 or 24:00. Thus, 2007-04-05T24:00 is the same as 2007-04-06T00:00.</p>
Time zone designators	<p>&lt;time&gt;Z</p> <p>&lt;time&gt;±hh</p> <p>&lt;time&gt;±hh:mm</p> <p>&lt;time&gt;±hhmm</p>	<p>09:30Z is 9:30 a.m. UTC</p> <p>144515Z is 2:45:15 p.m. UTC</p>	<p>If the location is unspecified, the time zone is assumed to be local time. This may be ambiguous when communicating across time zones.</p> <p>To designate UTC, append a Z after the time .</p>

**ISO 8601 Definitions, continued**

			To designate an offset from UTC, append + or - followed by hour and minute specification. Replace hh with hour, 00 to 24. Replace mm with minute, 00 to 59.
Date and time	<date>T<time>	2007-04-05T14:30	To specify a specific time on a specific date, append T and a valid time to a date.
Duration	PnYnMnDTnHnMnS PnW P<Date>T<Time>	P3Y6M4DT12H30M5S represents 3 years, 6 months, 4 days, 12 hours, 30 minutes, and 5 seconds  P1M is 1 month duration  PT1M is 1 minute duration	Durations define the amount of intervening time.  Replace n by the appropriate value for each of the date or time elements.  Start a duration representation with P.  Y indicates years.  M indicates months.  W indicates weeks.  D indicates days.  T precedes the time component.  H indicates hours.  M indicates minutes.  S indicates seconds.
Time interval	<start>/<end> <start>/<duration> <duration>/<end> <duration>	2007-03-01/2008-05-11  2007-03-01/P1Y  P1Y/2017-12-31  P1Y2M with additional context information	A time interval is the amount of time between two time points or a duration.  When two values are required, separate with a forward slash (/).  Replace <start> and <end> with valid date-time designations.  Replace <duration> with a valid duration designation.
Repeating intervals	Rnn/<interval> R/<interval>	R52016-05-01/P1W is repeat 5 times, starting	Repeating intervals define the repetitions.

### ISO 8601 Definitions, continued

		May 1, 2016, once per week	Start the repeating interval with R. Replace nn with the number of repetitions. If nn is not defined there are an unbounded number of repetitions. Replace <interval> with a valid time interval designation.
--	--	----------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Tip:** For more information about ISO 8601 format, see:

[https://en.wikipedia.org/wiki/ISO\\_8601](https://en.wikipedia.org/wiki/ISO_8601)

- Add descriptive text to an element.

To add descriptive text to an element such as an Activity or a Gateway, double-click the element and enter the desired text.

## Create Business Process

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy.

The Organization Administrator can create new business processes.

**Note:** It is recommended that you edit an existing business process definition rather than create a new business process definition.

### Tasks

To create a new business process:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.
2. Click the **Create New Process** button. The **Create new process** dialog is displayed.
3. Fill in the fields in the **Create new process** dialog:
  - a. Type the **Name** of the new business process.
  - b. *Optional*: Type a **Description** for the new business process.
4. Click the **Create** button in the **Create new process** dialog to save your changes.

The **Business Processes** application takes you directly to the Process Editor. To define the new business process, see ["Use the HPE Propel Process Editor" on page 119](#).

## Delete Business Process

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy.


The Organization Administrator can delete business processes.


**Note:** Only unpublished business processes can be deleted.

### Tasks

To delete a business process:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.

- 
2. In the **Business Processes** view, click the vertical ellipses  next to the business process that you want to delete and select **Delete**. A confirmation dialog to delete the business process is displayed.
3. Confirm the business process deletion, and the business process is deleted.

**Note:** You can also delete a business process from the **Process Detail** view when you click the vertical ellipses  and select **Delete**.

## Publish Business Process

### Concepts

Business processes tailor the HPE Propel approval policies to business needs. A business process along with its parameters make an approval policy.

The Organization Administrator can publish business processes. Processes should remain unpublished until they are fully designed and tested and are approved for use. Processes must be published before they are available to use as policies. You can publish business processes that are currently unpublished or that have changed since they were published.

### Business Process Versions

As long as a business process is unpublished, HPE Propel does not assign a version to it.

When a business process is initially published, HPE Propel assigns version 1 to it.

If you edit a published business process, the **Process Detail** view displays the current working business process definition at the top and the current published version (with its version number) at the bottom. **Contains unpublished changes** is displayed to remind you that changes to the business process have not yet been published.

When you republish the business process, HPE Propel increments the version number. If the business process is republished, it creates a new version of that business process which is related to all the business processes in that branch of the tree. The business process name is NOT unique across versions of that business process.

**Note:** Currently, you can only use the latest published business process for an approval policy.

If you potentially may want to revert to a previous business process version, clone that process before making changes.


## Business Process Used as Approval Policy

Business processes are used by the **Policies** application as approval policies for request fulfillment (see "[Policies](#)" on page 101). If you publish a business process that already has a policy using an older business process version, the policy continues to use the older version. To upgrade to the latest version, you must go to **Policies** application to edit the policy and select the same approval process (see "[Edit Policy Details](#)" on page 107 for instructions). The process selector always shows the latest business process version; therefore, after saving, the policy is upgraded to use the latest version.

This allows you to have a *Production policy* and *Test policy* using the same approval process. When you make changes in the process and publish it, you can upgrade the *Test policy* first, and try it on some test catalog item that is not visible to customers. If it works well, you can also upgrade *Production policy*. If you had upgraded *Production policy* immediately, you risk breaking new HPE Propel orders if your process contained an error.

## Tasks

To publish a business process:

1. From the Launchpad, click the **Business Processes** application. The **Business Processes** view is displayed.
2. In the **Business Processes** view, click the vertical ellipses  next to the business process you want to publish and select **Publish**. The business process is published.

**Note:** You can also publish a business process from the **Process Detail** view when you



click the vertical ellipses  and select **Publish**.

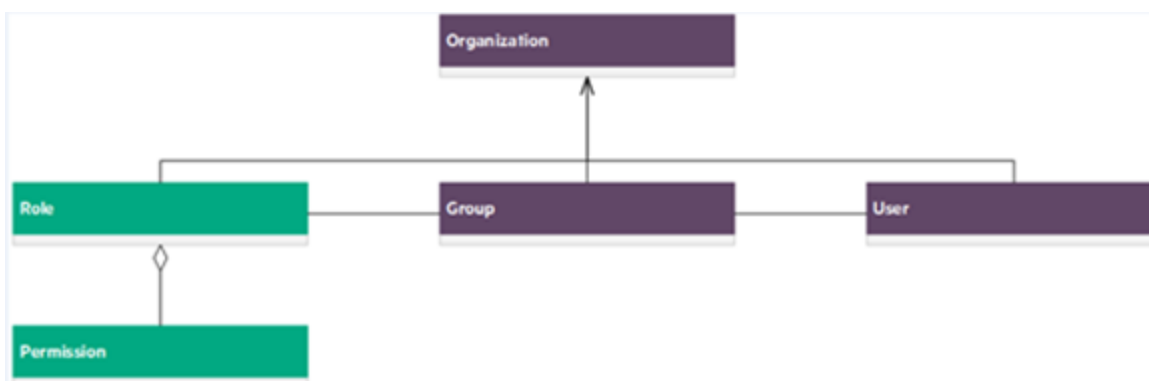
# Identity Management

## Concepts

HPE Propel Identity Management (IdM) uses *role-based access control*, which controls whether a user can perform an operation based on the user's assignment to a role and the role's association with application-defined permissions.

The relationships among organizations, groups, roles, and permissions in HPE Propel are:

- *Permissions* are the most basic unit of authorization. They enable access to HPE Propel applications and services.
- *Roles* are user-defined collections of permissions. Roles are associated with groups that contain members (users).
- *Groups* have one or more users. A group can be associated with one or more roles, and a group belongs to one or more organizations.
- *Organizations* can contain one or more groups.



An organization determines a user's HPE Propel entry point at log in and associates its group members with services and resources. Examples of organizations are companies, business units, and departments.

The HPE Propel Administrator configures an LDAP (Lightweight Directory Access Protocol) directory service to determine membership in an HPE Propel organization.

When a user logs in, LDAP authenticates the login credentials by verifying that the user name and password match an existing user in the LDAP directory.

Authorization and abilities of an organization's user (such as creating HPE Propel suppliers) are determined by predefined roles and permissions and membership to group DNs (distinguished names) in the LDAP directory. You assign a group DN to a predefined role that has predefined abilities.

Two default HPE Propel organizations are provided:

- **Provider Organization** - At installation, a single Provider organization is created. Members of the Provider organization use the **Identity** application to create one or more consumer organizations, manage configured organizations, and manage resources and services (such as designing, offering, and publishing resources and services for consumption).

The organizations, resources, and services that can be managed are determined by the roles and permissions assigned to the members of the Provider organization. The HPE Propel Administrator manages all organizations, roles, groups and permissions across all organizations.

There is only one Provider organization and it is automatically set up during installation. You may modify the Provider organization as needed; however, you cannot delete it.

- **Consumer Organization** - At installation, a single Consumer organization is created. The Administrator uses the **Identity** application to modify this default Consumer organization as needed. Additionally, the HPE Propel Organization Administrator can use the **Identity** application to manage roles, groups and permissions within an organization.

Members of the Consumer organization subscribe to, or consume, the resources and services provided by the Provider organization. There may be multiple consumer organizations configured by the Provider organization. However, each consumer or subscriber sees only the services and resources of the consumer organization of which he is a member. Membership to a consumer organization is determined by the LDAP configuration of the consumer organization.

## Tasks

The Administrator can perform the following tasks in the **Identity** application:

- ["Manage Organizations" on page 148](#) – Create, revise, and delete organizations.
- ["Manage Languages" on page 151](#) – Add, set as default, and delete languages within a Consumer organization.
- ["Manage Authentications" on page 153](#) – Set up an LDAP authentication for an organization. You set attributes and privileges for members, groups, and other basic authentication information for integration with your organization.
- ["Manage Customizations" on page 158](#) – Customize various aspects of the organization, such as the HPE Propel Portal title and welcome message.

- "[Manage Roles](#)" on page 162 – Create, revise, and delete roles within an organization. You can also associate permissions to roles and remove associated permissions from roles.
- "[Manage Groups](#)" on page 166 – Create, revise, and delete groups within an organization. You can also add users and roles to groups and remove users and roles from groups.
- "[Manage Permissions](#)" on page 171 – Create, revise, and delete permissions within an organization. You can also associate groups and permissions to roles and remove groups and permissions from roles.
- "[Manage Impersonations](#)" on page 175 – For request on behalf, create and delete impersonations.
- "[HPE Propel Automation License](#)" on page 177 – Manage HPE Propel licensing.

**Tip:** Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

## Manage Organizations

### Concepts

The HPE Propel Administrator can create new organizations that contain groups of users with specific roles and permissions. The Administrator can also revise or delete existing organizations.

HPE Propel users log in to an organization by specifying a *tenant*, which is the **Organization ID** for the organization. The **Organization ID** for an organization can be viewed in the **Organization Details** view. (See "[Edit an Organization](#)" on page 150 for instructions to view an organization's **Organization ID**.)

For example, to log in to the Consumer organization, enter this URL into a browser:

```
https://PROPEL_HOST:9000/org/CONSUMER
```

Where *PROPEL\_HOST* is the fully qualified host name of the HPE Propel system.

In this example, "CONSUMER" is the Consumer organization's **Organization ID**. To log in to an organization that was created in HPE Propel, use the organization's **Organization ID**.

## Tasks

- ["View all Organizations" on page 149](#)
- ["Create a New Organization" on page 149](#)
- ["Edit an Organization" on page 150](#)
- ["Delete an Organization" on page 150](#)

## View all Organizations

To view all organizations:

1. Click the **Identity** application in the Launchpad.

The **Organization List** view appears and the current HPE Propel organizations are displayed.

## Create a New Organization

To create a new organization:

1. Click the **Identity** application in the Launchpad.
2. Click the **Add Organization** button.
3. In the **Create Organization** dialog, type your new **Organization Name**. A unique **Organization ID**, based on your **Organization Name**, is created as a unique identifier.
4. Click the **Create** button to create the organization. The new organization appears in the **Organization Details** view.
5. In the **Organization Details** view, click **Edit**.
6. In the **Organization Information Editor**, you can optionally type an **Organization Description** and provide the URL of an image in the **Organization Image URL** field. There is a limit of 1,024 characters in the **Organization Image URL** field.
7. Click the **Save** button to finish and save your changes.

After you have created an organization and specified its basic properties, you must perform the following tasks to configure the new organization:

- ["Manage Authentications" on page 153](#) – Set up an LDAP authentication for your new organization. You set attributes and privileges for members, groups, and other basic authentication information for integration with your organization.
- ["Manage Customizations" on page 158](#) – Customize various aspects of the organization, such as the HPE Propel Portal title and welcome message.
- ["Manage Roles" on page 162](#) – Create roles for the organization and associate permissions with the roles.
- ["Manage Groups" on page 166](#) – Create groups for the organization and associate roles with the groups.
- ["Manage Permissions" on page 171](#) – Manage permissions and associate permissions with roles.

## Edit an Organization

To edit an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization you want to edit.
3. In the **Organization Details** view, click **Edit**.
4. In the **Organization Information Editor**, you can revise the organization's **Display Name**, **Organization Description**, and the **Organization Image URL** properties. There is a limit of 1,024 characters in the **Organization Image URL** field.
5. Click the **Save** button to finish and save your changes.

## Delete an Organization

To delete an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization you want to delete.
3. In the **Organization Details** view, click the **Remove** button.
4. Confirm deletion of the organization.

The HPE Propel organization is deleted.

# Manage Languages

## Concepts

Multiple foreign languages can be associated with a Consumer organization. Adding foreign languages to a Consumer organization enables the HPE Propel Organization Administrator to translate the properties of items into a foreign language so the items can be viewed in the foreign language. The properties of catalogs, categories, and catalog items can be translated and viewed in foreign languages.

The HPE Propel Administrator can manage languages in all Consumer organizations.

The HPE Propel Organization Administrator can manage languages within one Consumer organization.

## Tasks

The HPE Propel Administrator and Organization Administrator can perform these tasks in the **Languages** view:

- ["View Languages" on page 151](#)
- ["Add Language" on page 152](#)
- ["Set Default Language" on page 152](#)
- ["Delete Language" on page 152](#)

## View Languages

To view all of the languages in a Consumer organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the Consumer organization that contains the languages you want to view.
3. In the **Organization Details** view, click **Languages**.

The **Languages** view is displayed and all of the languages in the Consumer organization are listed.

## Add Language

**Note:** This task assumes you are in the **Languages** view for the organization. (See "[View Languages](#)" on page 151 for instructions.)

To add a language to a Consumer organization:

1. In the **Languages** view, click **Add Language**.
2. In the **Add Language** dialog, select the language to be added to the organization.
3. Click the **Add** button to finish and save your changes.

The new language is displayed in the **Languages** list.

## Set Default Language

**Note:** This task assumes you are in the **Languages** view for the organization. (See "[View Languages](#)" on page 151 for instructions.)

To set a language as the default language in a Consumer organization:


1. In the **Languages** view, for the language you want to set as the default language, click **Set as Default**.

The specified language is now the default language.

## Delete Language

**Note:** This task assumes you are in the **Languages** view for the organization. (See "[View Languages](#)" on page 151 for instructions.)

To delete a language from a Consumer organization:

1. In the **Languages** view, for the language you want to delete from the organization, click the delete  icon.
2. Confirm deleting the language from the organization.

The former language is deleted from the organization.



# Manage Authentications

## Concepts

The HPE Propel Administrator can use the **Authentication** view to configure and manage one or more LDAP (Lightweight Directory Access Protocol) identity servers for an organization.

LDAP is used to:

- Authenticate a user's login.
- Authenticate a user's access to information.
- Authorize a user's access to information.

To completely configure access with LDAP, you must configure LDAP to authenticate a user's login, configure LDAP for an organization to authenticate a user's access to information, and configure access control for an organization to authorize a user's access to information.

## Tasks

The HPE Propel Administrator can perform the following authentication tasks:

- ["View Authentication Configurations" on page 153](#)
- ["Add LDAP Configuration" on page 154](#)
- ["Edit an Authentication Configuration" on page 157](#)
- ["Delete an Authentication Configuration" on page 157](#)

## View Authentication Configurations

To view all of the authentication configurations for an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the authentication configurations you want to view.
3. In the **Organization Details** view, click **Authentication**.

The **Authentication** view is displayed and all of the authentication configurations for the organization are listed.

## Add LDAP Configuration

**Note:** This task assumes you are in the **Authentication** view for the organization. (See ["View Authentication Configurations" on page 153](#) for instructions.)

To configure LDAP for an organization:

1. In the **Authentication** view, click **Add Configuration**.
2. In the **Create new Authentication** dialog, select **LDAP Configuration** and then click the **Create** button.
3. In the **LDAP Server Settings** dialog, type the values for required fields.

**Note:** See ["LDAP Server Settings" on page 154](#) for details of the authentication fields.

4. Click the **Save** button to complete the authentication configuration.

The new LDAP authentication configuration appears in the list of authentications for the organization.

## LDAP Server Settings

### LDAP Server Information

Configure one or more LDAP servers and a user with access to the server.

Item	Description
Display Name	The display name for the LDAP server.
Hostname	The fully-qualified LDAP server domain name ( <i>server.domain.com</i> ) or IP address.

Item	Description
	Example: ldap.xyz.com
Port	The port used to connect to the LDAP server (by default, 389). Example: 389
SSL Connection	If the LDAP server is configured to require ldaps (LDAP over SSL), select the <b>SSL Connection</b> checkbox.
Base DN	Base distinguished name. The <b>Base DN</b> is the top level of the LDAP directory that is used as the basis of a search. Example: o=xyz.com
User ID (Full DN)	The fully distinguished name of any user with authentication rights to the LDAP server. If the LDAP server does not require a User ID or password for authentication, this value can be omitted. Example: uid=admin@xyz.com,ou=People,o=xyz.com
Password	Password of the <b>User ID</b> . If the LDAP server does not require a <b>User ID</b> or password for authentication, this value can be omitted.
Retype Password	Retype the password of the <b>User ID</b> .

### LDAP Attributes

Enter the names of the attributes whose values are used for email notifications, authentication, and HPE Propel approvals.

Item	Description
Full Name	The name of the LDAP attribute used to store the full name of the user. Often, this is <b>cn</b> or <b>Display Name</b> , but different LDAP directories may use different attributes. Contact your LDAP administrator to determine the proper <b>Full Name</b> . Default: cn
User Email	The name of the attribute of a user object that designates the email address of the user. The email address is used for notifications. If a value for this attribute does not exist for a user, the user does not receive email notifications. Default: mail
Group Membership	The name of the attribute(s) of a group object that identifies a user as belonging to the group. If multiple attributes convey group membership, the attribute names should be separated by a comma. Default: member,uniqueMember

Item	Description
Manager Identifier	The name of the attribute of a user object that identifies the manager of the user.  Default: manager
Manager Identifier Value	The name of the attribute of a user object that describes the value of the Manager Identifier's attribute. For example, if the value of the <b>Manager Identifier</b> attribute is a distinguished name (such as cn=John Smith, ou=People, o=xyz.com) then the value of this field could be dn (distinguished name). Or, if the <b>Manager Identifier</b> is an email address (such as admin@xyz.com) then the value of this field could be email.  Default: dn
User Avatar	LDAP attribute whose value is the URL to a user avatar image that is displayed for the logged-in user. If no avatar is specified, a default avatar image is used.

### User Login Settings

A user search-based login method is used to authenticate access to information.


Item	Description
User Name Attributes	The name of the attribute of a user object that contains the username that will be used to log in. The value for this field can be determined by looking at one or more user objects in the LDAP directory to determine which attribute consistently contains a unique user name. Often, you will want a <b>User Name Attribute</b> whose value in a user object is an email address.  Examples: userPrincipalName or sAMAccountName or uid
User Searchbase	The location in the LDAP directory where users' records are located. This location should be specified relative to the <b>Base DN</b> . If users are not located in a common directory under the <b>Base DN</b> , leave this field blank.  Examples: cn=Users or ou=People
User Search Filter	Specifies the general form of the LDAP query used to identify users during login. It must include the pattern {0}, which represents the user name entered by the user when logging in. The filter is generally of the form {<attribute>= 0}, with <attribute> typically corresponding to the value entered for <b>User Name Attribute</b> .  Examples: userPrincipalName={0} or sAMAccountName={0} or uid={0}
Search Option (Search Subtree)	When a user logs in, the LDAP directory is queried to find the user's account. The <b>Search Subtree</b> setting controls the depth of the search under <b>User Searchbase</b> .  If you want to search for a matching user in the <b>User Searchbase</b> and all subtrees under the <b>User Searchbase</b> , make sure the <b>Search Subtree</b> checkbox is selected.

Item	Description
	If you want to restrict the search for a matching user to only the <b>User Searchbase</b> , excluding any subtrees, unselect the <b>Search Subtree</b> checkbox.

## Edit an Authentication Configuration

**Note:** This task assumes you are in the **Authentication** view for the organization. (See ["View Authentication Configurations" on page 153](#) for instructions.)


To edit an authentication configuration:

1. In the **Authentication** view, for the authentication configuration to edit, click the edit  icon.
2. In the LDAP server settings dialog, type your changes, and then click the **Save** button to finish and save your changes.

## Delete an Authentication Configuration

**Note:** This task assumes you are in the **Authentication** view for the organization. (See ["View Authentication Configurations" on page 153](#) for instructions.)

To delete an authentication configuration:

1. In the **Authentication** view, for the authentication configuration to delete, click the delete  icon.
2. Confirm deletion of the authentication configuration.

The HPE Propel authentication configuration is deleted.

# Manage Customizations

## Concepts

The HPE Propel Administrator can customize various aspects of the HPE Propel Portal for an organization.

## Tasks

The Administrator can perform these tasks in the **Customization** view:

- ["View Customizations" on page 158](#)
- ["Add a New KeyPair" on page 158](#)
- ["Edit KeyPair" on page 159](#)
- ["Delete KeyPair" on page 159](#)

## View Customizations

To view all of the customizations for an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the customizations you want to view.
3. In the **Organization Details** view, click **Customization**.

The **Customization** view is displayed and all of the organization's KeyPairs and their values are listed.

## Add a New KeyPair

**Note:** This task assumes you are in the **Customization** view for the organization. (See ["View Customizations" on page 158](#) for instructions.)

To add a new KeyPair to an organization:

1. In the **Customization** view, click **Add KeyPair**.
2. In the **Create KeyPair** dialog, type a descriptive KeyPair **Name** and a **Value**. You can also specify the new KeyPair to be publicly accessible.
3. Click the **Save** button to finish and save your changes.


The new HPE Propel KeyPair for the organization is added.

## Edit KeyPair

**Tip:** See "[Customization Fields](#)" on page 160 for details of the default HPE Propel KeyPairs and their values.

**Note:** This task assumes you are in the **Customization** view for the organization. (See "[View Customizations](#)" on page 158 for instructions.)


To edit a KeyPair in an organization:

1. In the **Customization** view, for the KeyPair you want to edit, click the edit  icon.
2. In the **Edit KeyPair** dialog, you can change the **Value** for the KeyPair. Additionally, you can also specify if the KeyPair is publicly accessible.
3. Click the **Save** button to finish and save your changes to the KeyPair.

## Delete KeyPair

**Note:** This task assumes you are in the **Customization** view for the organization. (See "[View Customizations](#)" on page 158 for instructions.)

To delete a KeyPair from an organization:

1. In the **Customization** view, for the KeyPair you want to delete, click the delete  icon.
2. Confirm deletion of the KeyPair.

The HPE Propel KeyPair for the organization is deleted.

## Customization Fields

### Application Labeling

KeyPair Value	Description
portalTitle	Type a name that displays on the login screen and header of your organization's portal.
portalWelcomeMsg	Type a welcome message that displays below the Application Name when a user logs into your organization's portal.
portalFooterMsg	Type a footer message that displays below the login screen and header of your organization's portal.
portalLegalNoticeUrl	Type the link to your organization's legal or copyright statement that displays on the login page below the Log In button of your organization's portal.

### External Organization Links

KeyPair Value	Description
portalLegalNoticeUrl	Type the link to your organization's legal notices statements.
portalShowTermsOfUse	Not applicable.

### Application Enhancements

KeyPair Value	Description
featuredCategory	Type a featured category to use when displaying service offerings.
portalEndDatePeriod (12 months)	Not applicable.
portalEnforceEndDate	Not applicable.
portalShowConfirmDialog	Not applicable.
portalShowLegalNotice	Enables and disables showing a legal notice ( <b>portalLegalNoticeUrl</b> ) in the footer of the <b>Identity</b> application. Set to "true" to enable (default) or "false" to disable the feature.
requestOnBehalf	Enables and disables request-on-behalf feature. Set to "true" to enable (default) or "false" to disable the feature.



## Themes

KeyPair Value	Description
themeName	Type the custom theme name to change the appearance of the Launchpad and applications in the HPE Propel Portal. For details about unique color themes, refer to the <i>HPE Propel Administration Guide</i> .

## Security Settings

KeyPair Value	Description
securityLevel	Not applicable.
disclaimerText	Not applicable.


## Widgets

A default set of HPE Propel widgets are provided. You can add these widgets to your organization's Launchpad. These widgets include:

- PropelLink (URL)
- Clock


## Customize Widgets

Custom widgets are created by changing the KeyPair values, and allow you to add functionality that appears as a tile on the organization's Launchpad.

KeyPair Value	Description
widget:PropelLink	This widget connects your organization to the main HPE Propel website.
widget:Clock	This widget shows date information on the Launchpad, including month, day, and year.
Custom Widgets	Custom Widgets can be configured by clicking the edit  icon for the widget KeyPair.  Provide an easily readable display name for the KeyPair, and input the properties for the widget in the <b>Value</b> box. Note that only 10,000 characters are

KeyPair Value	Description
	allowed in the KeyPair <b>Value</b> box.  For the HPE Propel Portal to recognize a custom widget it must be named with a "widget:" prefix. See the format of default widgets for an example of this convention.

## Widgets Best Practices

If you want to delete a widget, click the delete  icon for the widget in the **Customization** view. Please note that this operation is permanent and cannot be undone.

## Localizing Content

The following organization attributes can accept localized content:

- portalTitle
- portalWelcomeMsg
- portalFooterMsg
- disclaimerText

Make sure your browser has the desired language activated in settings. Follow the ["Edit KeyPair" on page 159](#) process for the attribute you want localized. You will see localized content for these fields the next time you log into the HPE Propel Portal.

## Manage Roles

### Concepts

Roles contain permissions that enable HPE Propel capabilities, and roles are associated with an organization's group. This association enables HPE Propel capabilities for the group's members.

The following default HPE Propel roles are provided:

- The **Administrator** role has the capability to manage organizations, roles, groups, and permissions across all organizations. The Administrator can also manage content packs for HPE Service Exchange (SX), manage HPE Propel licensing, and view HPE Propel diagnostics.
- The **Consumer** role has basic access privileges within organizations. This role can be thought of as a typical end user with full membership within the organization and full access to the HPE Propel Portal.
- The **Organization Administrator** role can be thought of as an organization's administrator or manager. A typical job role is someone who approves requests or processes orders within the HPE Propel Portal, as a part of daily tasks for an organization. The Organization Administrator can manage catalogs, suppliers, approval policies, and aggregations. Additionally, the Organization Administrator can manage roles, groups, and permissions within an organization.

HPE recommends the following initial set of HPE Propel roles for each organization.

#### Provider Organizations

HPE recommends that provider organizations provide a single role: **Administrator**, assigned the permissions identified in the table below.

Permission
SUPER_IDM_ADMIN
CONTENT_ADMIN
DIAGNOSTICS_ADMIN
LICENSE_ADMIN
SUPPLIER_VIEWER

#### Consumer Organizations

Most organizations are consumer organizations. HPE recommends that consumer organizations provide two roles: **Organization Administrator** and **Consumer**, assigned the permissions identified in the table below.

Permission	Organization Administrator Role	Consumer Role
IDM_ADMIN	X	
AGGREGATION_ADMIN	X	
CATALOG_ADMIN	X	
CONSUMER		X

ROLE_REST	X	X
SUPPORT		X
SUBSCRIPTION_ADMIN	X	
SUPPLIER_ADMIN	X	

## Tasks

The HPE Propel Administrator can perform these tasks in the **Roles** view:

- ["View Roles" on page 164](#)
- ["Add Role" on page 164](#)
- ["Edit Role" on page 165](#)
- ["Delete Role" on page 165](#)
- ["Remove Organization" on page 165](#)

## View Roles

To view all of the roles within an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the roles you want to view.
3. In the **Organization Details** view, click **Roles**.

The **Roles** view is displayed and all of the roles associated within the organization are listed.

## Add Role

**Note:** This task assumes you are in the **Roles** view for the organization. (See ["View Roles" on page 164](#) for instructions.)

To add a role to an organization:


1. In the **Roles** view, click **Add Role**.
2. In the **Add Role** dialog, type the **Role Name** and a **Description**, and then click the **Save** button to finish and save your new role.

The new role is added to the organization.

## Edit Role

**Note:** This task assumes you are in the **Roles** view for the organization. (See "[View Roles](#)" on page 164 for instructions.)

To edit a role in an organization:

1. In the **Roles** view, for the role you want to edit, click the edit  icon.
2. In the **Edit Role Settings** dialog, make your changes in the **Role Name** and **Description** fields.


**Tip:** You can also add or delete associated permissions to the role in the **Edit Role Settings** dialog.

3. Click the **Save** button to finish and save changes to the role.

## Delete Role

**Note:** This task assumes you are in the **Roles** view for the organization. (See "[View Roles](#)" on page 164 for instructions.)

To delete a role from an organization:

1. In the **Roles** view, for the role you want to delete from an organization, click the delete  icon.
2. Confirm deletion of the role from the organization.

The role is no longer in the organization.

## Remove Organization

**Note:** This task assumes you are in the **Roles** view for the organization. (See "[View Roles](#)" on page 164 for instructions.)

To remove an organization:

1. In the **Roles** view, click the **Remove** button.
2. Confirm deletion of the organization.

The HPE Propel organization is deleted.

## Manage Groups

### Concepts

The HPE Propel Administrator can add groups to an organization to differentiate users and assign roles to users. After you define the groups within your organization, you can assign roles and permissions to the various groups of users.

There are three types of HPE Propel groups:

- *LDAP Representation* — members in this group are configured on an LDAP server, which is specified in an Authentication Configuration for the organization. After an LDAP Representation Group is created, members of the designated LDAP server can log in to HPE Propel.
- *Database Representation* — members in this group are manually added from an LDAP server by the Administrator. This type of group is local to HPE Propel. To manually add members, an LDAP Representation group must have previously been created, which specifies the LDAP server.

Eligible LDAP users for a Database Representation group are:

- Members who have previously logged in to HPE Propel.
- Members who are direct reports to a manager who previously logged in to HPE Propel.
- *Calculated Representation* — members in this group are added from an LDAP server according to criteria specified by the Administrator. To add members, the Administrator specifies calculation criteria that a user must match, such as the user's manager, given name, or email address. Additionally, for users to be added to the group, combining criteria is specified so that a user has to either match one of the defined criteria or all of the criteria. This can be treated as a logical OR if you select "At least one criteria must match", or a logical AND if you select "All Criteria Must Match."

## Tasks

The Administrator can perform these tasks in the **Groups** view:

- ["View Groups" on page 167](#)
- ["Add Group" on page 167](#)
- ["Edit Group" on page 168](#)
- ["Add User" on page 169](#)
- ["Add Role" on page 169](#)
- ["Remove Associated User" on page 170](#)
- ["Remove Associated Role" on page 170](#)
- ["Remove Group" on page 170](#)

## View Groups

To view all of the groups in an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the groups you want to view.
3. In the **Organization Details** view, click **Groups**.

The **Groups** view is displayed and all of the groups in the organization are listed.

## Add Group

**Note:** This task assumes you are in the **Groups** view for the organization. (See ["View Groups" on page 167](#) for instructions.)

To add a group to an organization:

1. In the **Groups** view, click **Add Group**.
2. In the **Add Group** dialog, provide the following required information:
  - Type a descriptive **Group Name**.
  - In the **Group Representation Type** field, select either:
    - **LDAP Representation** - for which you type the **Distinguished Name** and select the **Authentication** configuration.
    - **Database Representation** - for which you manually add **Associated Users** to the group. **Note**, see "[Concepts](#)" on page 166 for details of manually adding users to a Database Representation group.
    - **Calculated Representation** - for which you first specify a **Reference User**, and then a set of **User Profile Attributes** is displayed. Next, you add attributes to the **Calculation Criteria**. Finally, to complete the criteria for the Calculated Representation group, you select the **Combining Criteria** — either all criteria must match or at least one criteria must match. **Note**, see "[Concepts](#)" on page 166 for details of adding users to a Calculated Representation group.

Additionally, you can manually add **Associated Roles** to any of these group types.

3. Click the **Save** button to finish and save your new group.

The new group is displayed in the **Groups** list.

At this point, no roles have been associated with the group. You need to associate roles with this group to grant the roles for the organization's users. See "[Manage Roles](#)" on page 162 for details.


**Note:** The first time you add a group and associate roles within the group, it is an integrated process. You first input information into the **Groups** view, then access the **Roles** view and associate roles with a group. Finally, you associate permissions with roles in the **Permissions** view.

## Edit Group

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.)

To edit a group in an organization:




1. In the **Groups** view, for the group you want to edit, click the edit  icon.
2. In the **Edit Group Settings** dialog, you can change:
  - For *LDAP Representation* groups — the **Group Name**, **Distinguished Name**, and **Authentication**. Additionally, you can also add **Associated Roles**.
  - For *Database Representation* groups — the **Group Name**. Additionally, you can also add **Associated Users** and **Associated Roles**.
3. Click the **Save** button to finish and save your changes to the group.

## Add User

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.) You can add associated users only to *Database Representation* groups.

To add an associated user to a group:


1. In the **Groups** view, for the group you want to add a user, click the edit  icon.
2. In the **Edit Group Settings** view, click **Add User** (to the right of the **Associated Users** field).
3. In the **Add User** dialog, select the user you want to add to the group, and then click the **Save** button to finish.

The new user is listed under the **Associated Users** field.

## Add Role

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.)

To add an associated role to a group:


1. In the **Groups** view, for the group you want to add a role, click the edit  icon.
2. In the **Edit Group Settings** dialog, click **Add Role** (to the right of the **Associated Roles** field).
3. In the **Add Role** dialog, select the role you want to add to the group, and then click the **Save** button to finish.

The new role is listed under the **Associated Roles** field.

## Remove Associated User

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.) You can remove associated users only from *Database Representation* groups

To remove an associated user from a group:



1. In the **Groups** view, for the group you want to remove an associated user, click the edit  icon.
2. In the **Edit Group Settings** dialog, click the **X** to the right of the associated user to remove it from the group.
3. Confirm deletion of the associated user from the group to finish.

The associated user is removed from the group.

## Remove Associated Role

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.)

To remove an associated role from a group:


1. In the **Groups** view, for the group you want to remove an associated role, click the edit  icon.
2. In the **Edit Group Settings** dialog, click the remove  icon to the right of the associated role.
3. Confirm deletion of the associated role from the group to finish.

The associated role is removed from the group.

## Remove Group

**Note:** This task assumes you are in the **Groups** view for the organization. (See "[View Groups](#)" on page 167 for instructions.)

To remove a group from an organization.

1. In the **Groups** view, for the group you want to remove, click the remove  icon.
2. In the **Remove Group** dialog, verify removal of the group.

The HPE Propel group is removed.

## Manage Permissions

### Concepts

Permissions are the most basic unit of authorization and they enable access to HPE Propel applications and services.

Permissions are associated with a role, and the role is assigned to an organization's group so that members of the group have certain HPE Propel capabilities.

The following default HPE Propel permissions are provided:

#### Identity Management (IdM) Permissions

Permission	Type	Description	Use
IDM_ADMIN	Consumer	Enables all IdM operations, scoped to the user's organization.	Consumer organization administrators
SUPER_IDM_ADMIN	Provider	Enables all IdM operations on all organizations (except deleting the Provider organization).	Provider organization administrators
ROLE_REST	Consumer	Default role assigned to all users.	Automatically assigned to all users.

#### Catalog Permissions

Permission	Type	Description	Constraints
CATALOG_ADMIN	Consumer	Enables administration of catalogs.	Users must also be assigned the IDM_ADMIN permission to manage authorization of catalog items.

SUPSCRIPTION_ADMIN	Consumer	Enables managing subscriptions.	
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### HPE Service Exchange (SX) Permissions

Permission	Type	Description	Use
AGGREGATION_ADMIN	Consumer	Performs aggregation of offerings into catalogs.	Consumer organization administrators
INTEGRATOR	Provider	Enables SX transport user to perform catalog operations.	SX transport user

### Miscellaneous Permissions

Permission	Type	Description	Use
CONTENT_ADMIN	Provider	Manages content packs for HPE SX.	Provider organization administrators
LICENSE_ADMIN	Provider	Enables viewing license details and uploading new licenses.	Administrators who manage HPE Propel licenses.
CONSUMER	Consumer	Enables requesting and approving services.	Typically assigned to all Consumer organization users.
SEARCH	Provider	Enables search operations.	Search service transport user
SUPPORT	Consumer	Enables access to support items.	Consumer organization administrators
DIAGNOSTICS_ADMIN	Provider	Enables viewing and managing HPE Propel diagnostics metrics.	Provider organization administrators
SUPPLIER_ADMIN	Consumer	Enables managing HPE Propel suppliers.	Consumer organization administrators
SUPPLIER_VIEWER	Provider	Enables viewing HPE Propel suppliers.	Provider organization administrators

**Note:** You cannot edit or delete a default HPE Propel permission.

## Tasks

The Administrator can perform these tasks in the **Permissions** view:

- ["View Permissions" on page 173](#)
- ["Manage Permissions" on page 173](#)
- ["Associate Group with Role" on page 174](#)
- ["Associate Permission with Role" on page 174](#)
- ["Remove Group from Role" on page 174](#)
- ["Remove Permission from Role" on page 175](#)
- ["Remove Organization" on page 175](#)

## View Permissions

To view all of the permissions and groups associated with an organization's roles:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the permissions you want to view.
3. In the **Organization Details** view, click **Permissions**.

The **Permissions** view is displayed and all of the permissions and groups associated with the organization's roles are listed.

## Manage Permissions

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To manage the permissions for an organization:

1. In the **Permissions** view, click **Manage Permissions**. All of the permissions for the organization are listed.
2. In the **Permission List** view, you can add new permissions to the organization, edit permissions, and delete permissions.

**Note:** You cannot edit or delete a default HPE Propel permission.

## Associate Group with Role

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To associate an organization's group with a role:

1. In the **Permissions** view, for the role that you want to associate with a group, click **Add Group**.
2. In the **Add Group** dialog, select the group, and then click the **Save** button to finish.

The specified group is associated with the role and listed under the role.

## Associate Permission with Role

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To associate a permission with an organization's role:


1. In the **Permissions** view, for the role that you want to associate with a permission, click **Add Permission**.
2. In the **Add Permission** dialog, select the permission, and then click the **Save** button to finish and save your new permission.

The specified permission is associated with the role and listed under the role.

## Remove Group from Role

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To remove a group's association from an organization's role:


1. In the **Permissions** view, for the role you want to remove a group, click the remove  icon for the group.
2. Confirm removal of the group from the role.

The group is no longer associated with the role.

## Remove Permission from Role

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To remove a permission's association from an organization's role:

1. In the **Permissions** view, for the role you want to remove a permission, click the remove  icon for the permission.
2. Confirm removal of the permission from the role.

The permission is no longer associated with the role.

## Remove Organization

**Note:** This task assumes you are in the **Permissions** view for the organization. (See ["View Permissions" on page 173](#) for instructions.)

To remove an organization:

1. In the **Permissions** view, click the **Remove** button.
2. Confirm deletion of the organization.

The HPE Propel organization is deleted.

## Manage Impersonations

### Concepts

Members of a organization's group can request HPE Propel catalog items on behalf of members in a different group within the organization. This is called *request on behalf* (RoB).

The required groups for RoB are:

- *Impersonation Group* — members of this group can request catalog items on behalf of members in the impersonation target group.
- *Impersonation Target Group* — members of this group can be impersonated by members of the impersonation group, for the purpose of shopping or requesting catalog items available to the impersonated member.

To facilitate RoB, the HPE Propel Administrator manages impersonations.

## Tasks

The HPE Propel Administrator can perform these tasks in the **Impersonation** view:

- ["View Impersonations" on page 176](#)
- ["Add Impersonation" on page 176](#)
- ["Delete Impersonation" on page 177](#)

## View Impersonations

To view all of the impersonations in an organization:

1. Click the **Identity** application in the Launchpad.
2. In the **Organization List** view, click the organization that contains the impersonations you want to view.
3. In the **Organization Details** view, click **Impersonation**.

The **Impersonation** view is displayed and all of the impersonations in the organization are listed.

The group displayed under the **Manage On-Behalf-Of Groups** is the impersonation target group. Members of this group can have catalog items requested for them, on their behalf.

## Add Impersonation

**Note:** This task assumes you are in the **Impersonation** view for the organization. (See ["View Impersonations" on page 176](#) for instructions.) You must create the impersonation group and the impersonation target group prior to creating an impersonation. (See ["Concepts" on page 175](#) for information.)

To add an impersonation to an organization:




1. In the **Impersonation** view, click **Add Group**.
2. In the **Add Group** dialog, select the impersonation group, which contains members that will be able to request catalog items for members in the impersonation target group.
3. In the **Add On-Behalf-Of Group** dialog, select the impersonation target group, which contains members that will have items requested on their behalf.
4. Click the **Save** button to finish and save your changes.

The new impersonation is displayed in the **Impersonation** list.

## Delete Impersonation

**Note:** This task assumes you are in the **Impersonation** view for the organization. (See ["View Impersonations" on page 176](#) for instructions.)

To delete an impersonation from an organization:

1. In the **Impersonation** view, for the impersonation you want to delete from the organization, click the delete  icon.
2. Confirm deleting the impersonation from the organization.

The former impersonation is deleted from the organization.

## HPE Propel Automation License

### Concepts

The HPE Propel Administrator can view and manage HPE Propel software licenses. (Other users can only view licensing information.)

There are these types of HPE Propel licenses:

- Instant-on licensing – implemented when installing HPE Propel and limited to 60 days.
- Permanent – either unlimited or limited duration.

When users log in to HPE Propel, a licensing status banner will appear in the following situations:

- The license is due to expire.
- The license has expired.

The banner information is updated when you refresh your view, log in to HPE Propel, or navigate to a new section of the HPE Propel Portal by clicking an application in the Launchpad.

**Note:** You must be logged in as `admin` to manage licensing in the **License Management** view.

## Tasks

To perform the following tasks, go to the Launchpad, click the avatar, and select **License**.

**Tip:** When logged in as the `admin` user, the **License Management** view can be accessed by clicking the avatar and selecting **License** in any HPE Propel view.

- **View the following information about your software license:**
  - The name of the product.
  - The version of the product.
  - The type of license.
  - The expiration date of the license.
  - The reason the license was issued.
- **Download a license:**
  - For an evaluation license:  
[Propel Center](#)
- **Update a license:**
  - a. In the **License Management** view, click the **Upload License** button.
  - b. In the **File Upload** dialog, select the HPE Propel license that was previously downloaded, and then click **Open**.

The HPE Propel license is applied and details are displayed in the **License Management** view.

**Note:** The most recently applied license is displayed in the **License Management** view.

# HPE SX Content Management

## Concepts

Content packs are extension points to HPE Service Exchange (SX). In collaboration with adapters, content packs enable HPE SX to communicate with end-point systems such as HPE Service Manager (SM) and HPE Cloud Service Automation (CSA). A content pack is a ZIP or JAR file that can contain operation definitions, Free Marker templates, HPE Operation Orchestration (OO) flows, or other configuration files. Content packs contain the order message lifecycle modeled in HPE OO flows in request-to-fulfill (R2F) use cases. Content packs can be installed or uninstalled.

**Tip:** Refer to the *HPE Propel Service Exchange SDK* for more information on Content Management.

The HPE Propel Administrator uses the **Content Management** application to view, download, upload, and delete HPE Propel content packs. Upload and delete operations include upload or removal of relevant HPE OO JAR files (HPE OO content packs), and the merging of HPE SX customizations into HPE Propel.

## Content Pack Structure

Though the structure of content packs differs, the following folders and files are typical:

- `oo` - folder containing the HPE OO content packs of custom HPE OO flows
- `sx` - folder containing HPE SX-specific configuration files
- `template`- folder containing Free Marker templates
- `operations.json` - file containing HPE SX operation definitions
- `flows.json` - file containing the mapping of adapter and message type to OO flow
- `metadata.json` - the content pack description file

Examples with different content pack structures:

- HPE SM content packs contain an `sm` folder for the customization HPE SM unload files.
- Ticketing content packs do not contain OO flows (HPE OO content packs), so the `oo` folder and `flows.json` file are not present.

## Tasks

The HPE Propel Administrator can perform the following tasks from the **Content Management** application:

- ["View Content Packs" on page 180](#)
- ["Download Content Pack" on page 180](#)
- ["Upload Content Pack" on page 181](#)
- ["Delete Content Pack" on page 181](#)

## View Content Packs

To view HPE Propel content packs:

1. From the Launchpad, click the **Content Management** application.

The list of HPE Propel content packs is displayed in the **Content Pack List**.


See [Content Pack Details](#) for detailed information about a content pack.

## Download Content Pack

To download a content pack:

1. From the Launchpad, click the **Content Management** application. The list of content packs is displayed in the **Content Pack List**.



2. For the content pack to download, click  and select **Download**.
3. In the download dialog, save the content pack file.

The HPE Propel content pack is downloaded to your file system.

## Upload Content Pack

To upload a content pack:


1. From the Launchpad, click the **Content Management** application. The list of HPE Propel content packs is displayed in the **Content Pack List**.
2. Click the **Upload New Content Pack** button.
3. In the **File Upload** dialog, locate and select the .zip or .jar file to be uploaded.
4. Click **Open**.

When the upload is complete, a confirmation appears near the top of the **Content Management** view. The upload time for the content pack is updated.

**Note:** When uploading a content pack that was previously loaded, HPE SX replaces the existing version. Content packs are identified by an ID attribute provided in their metadata file.

## Delete Content Pack

To delete a content pack:

1. From the Launchpad, click the **Content Management** application. The list of HPE Propel content packs is displayed in the **Content Pack List**.
2. For the content pack to delete, click  and select **Delete**.
3. In the confirmation dialog, confirm deleting the content pack.

The HPE Propel content pack is deleted.

Related Topics

["Content Pack Details" on page 182](#)

**Tip:** Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

## Content Pack Details

The **Content Pack Details** view provides the following detailed information. This information is user defined, and is extracted from the content pack's metadata.json file.

To view this detailed information, click the HPE Propel content pack's name in the **Content Pack List** view.

Value	Description
Content Pack ID	The content pack's unique identifier.
Version	The user-defined content pack version number. <b>Note:</b> Update the version before uploading or re-uploading a content pack.
Adapter	The HPE Propel adapter that the content pack was created for.
Features	The user-defined features for the content pack. <b>Note:</b> Update the features before uploading or re-uploading a content pack.
OO Content Pack	The HPE Operations Orchestration content pack.

**Tip:** Refer to the *HPE Propel Service Exchange SDK* for more information on Content Management and HPE Propel content packs.

# Diagnostics

## Concepts

The **Diagnostics** application provides the HPE Propel Administrator with basic service monitoring and health status for HPE Propel services and suppliers.

Services include HPE Propel backend services and user interface (UI) services. Examples of backend services are Service Exchange, Identity Management (IdM), and Search. Examples of UI services are Catalog Connect, Launchpad, and Shop.

Suppliers are end-point systems integrated with HPE Propel. Examples of suppliers are provider systems, fulfillment systems, and ticketing systems. For HPE Service Manager (SM) suppliers, the status of unload files can be viewed in the **Supplier Detail** view.

**Note:** You must log in as the `admin` user to access the **Diagnostics** application.

## Tasks

The HPE Propel Administrator can perform the following tasks in the **Diagnostics** application:

- "[View HPE Propel Services Status](#)" on page 184
- "[View HPE Propel Service Details](#)" on page 185
- "[View Suppliers Status](#)" on page 186
- "[View Supplier Details](#)" on page 186 (includes **Overview** and **Configuration Check** views)

**Tip:** Click [here](#) for the latest English version of the HPE Propel Admin Help, and enter your HPE Passport credentials (user ID and password). Alternatively, go to the HPE Software Support site at <https://softwaresupport.hpe.com/group/softwaresupport>. Enter your HPE Passport credentials and then click **Sign In**. Type **Propel help** into the search text box. In the results section, select the help PDF you are interested in that has the most recent date.

# View HPE Propel Services Status

## Concepts

The **Diagnostic** application provides the HPE Propel Administrator with basic monitoring and health status for HPE Propel services. Services include HPE Propel backend and user interface (UI) services.

Examples of HPE Propel backend services are Service Exchange, Identity Management (IdM), and Search.

Examples of HPE Propel UI services are Catalog Connect, Launchpad, and Shop.

## Tasks

To view the health status of HPE Propel services:


1. From the Launchpad, click the **Diagnostics** application.
2. If not already selected, click **Propel**.

At-a-glance status is displayed for HPE Propel backend services and for UI services. The color coding for status information is as follows:

- Green = no known problems
- Red = one or more issues exist

Backend services are displayed as donut charts that show the number of successes and failures. Click a backend service to navigate to the **Service Detail** view.

UI services are displayed as icons with status indicators. Additional details are not available for UI services.

**Tip:** Click the refresh  icon to update the health status of HPE Propel services.



# View HPE Propel Service Details

## Concepts

The **Diagnostic** application provides the HPE Propel Administrator with basic monitoring and health status for HPE Propel services. Services include HPE Propel backend and user interface (UI) services.

Examples of HPE Propel backend services are Service Exchange, Identity Management (IdM), and Search.

Examples of HPE Propel UI services are Catalog Connect, Launchpad, and Shop.

## Tasks

To view the detailed health status of a backend service:

1. From the Launchpad, click the **Diagnostics** application.
2. If not already selected, click **Propel**. The high-level status of HPE Propel services is displayed.
3. Click a HPE Propel backend service to display service details. (Details are not available for UI services.)

The information displayed varies by service, but typically includes:

- Service health status.
- Whether all service dependencies are met (for example, dependency on another service such as IdM, or on an internal service such as a database).
- Basic monitoring chart with information for Heap Memory Used.

Additionally, you can view and purge failed messages for the Service Exchange service.

## View Suppliers Status

### Concepts

The **Diagnostics** application provides the HPE Propel Administrator with basic monitoring and health status for HPE Propel suppliers. Suppliers represent end-point systems that are integrated with HPE Propel, such as provider, fulfillment, and ticketing systems.

### Tasks


To view the health status of suppliers:

1. From the Launchpad, click the **Diagnostics** application.
2. Click **Suppliers**.

At-a-glance status is displayed for suppliers. The color coding for status information is as follows:

- Green = no known problems
- Red = one or more issues exist

Suppliers are displayed as donut charts that show the number of successes and failures. Click a supplier to navigate to the **Supplier Detail** view.

**Tip:** Click the refresh  icon to update the health status of HPE Propel suppliers.

## View Supplier Details

### Concepts

The **Diagnostics** application provides the HPE Propel Administrator with basic monitoring and health status for HPE Propel suppliers. Suppliers represent end-point systems that are integrated with HPE

Propel, such as provider, fulfillment, and ticketing systems.

## Tasks

The Administrator can perform these tasks in the **Supplier Detail** view:

- ["View Supplier Diagnostics" on page 187](#)
- ["View Supplier Overview" on page 187](#)
- ["View Supplier Configuration Check" on page 188](#)

## View Supplier Diagnostics

To view the detailed health status of a supplier:

1. From the Launchpad, click the **Diagnostics** application.
2. Click **Suppliers**. The high-level status of HPE Propel suppliers is displayed.
3. Click a supplier to display detailed status information.

The information displayed varies by supplier, but typically includes:

- Endpoint accessibility status.
- Success or failure of integration account log in.
- Basic monitoring charts with information such as New Orders and Support Tickets, Response Time, and Request Status.

**Tip:** If the health status of a supplier has a failed status, you can click the status icon for detailed information.

## View Supplier Overview

**Note:** This task assumes you are in the **Supplier Detail** view for a supplier. (See ["View Supplier Diagnostics" on page 187](#) for instructions.)

To view the general and user properties for a supplier:

1. In the **Supplier Detail** view, click **Overview**.

The following properties of the supplier are displayed:

- General properties, including endpoint, process designer, and LWSSO values.
- User properties, including login name and if a password is specified.

## View Supplier Configuration Check

**Note:** This task assumes you are in the **Supplier Detail** view for a supplier. (See "[View Supplier Diagnostics](#)" on page 187 for instructions.) Configuration checks are available only for HPE SM suppliers.

To view the configuration status for an HPE SM system:

1. In the **Supplier Detail** view, click **Configuration Check**.

The general settings and the status of various HPE SM unload files are displayed.

## Send Documentation Feedback

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

### **Feedback on HPE Propel Admin Help (Propel 2.20.p2)**

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to [Propel\\_IE@hpe.com](mailto:Propel_IE@hpe.com).

We appreciate your feedback!

