

FlexNet Operations End-User Portal

Help Library



Legal Information

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Introduction

The FlexNet Operations End-User Portal help library contains the following main sections.

Section	Description
Introduction	<p>This section provides an overview of help library content as well as an introduction to license lifecycle management and other topics relevant to most users.</p> <ul style="list-style-type: none">• Managing the License Lifecycle• Registering for an Account using an Entitlement ID or Activation ID• Logging In to the End-User Portal• Displaying Administrator Information• Performing Searches• Map Entitlement and Activation IDs• Product Support Resources• Contact Us
Managing Entitlements	<p>Provides an overview of entitlement management and detailed topics about entitlements and bulk entitlements, license activation, entitlement line item transfers, entitlement line item and bulk entitlement splitting, manual activation, and emailing entitlement line items.</p>
Managing Licenses	<p>Contains topics on returning, repairing, rehosting, upgrading, upselling, renewing, and consolidating licenses; manual returns and repairs; managing hosts; and advanced support operations.</p>
Managing Devices	<p>Includes device management topics for client, server, and served-client devices that use FlexNet Embedded licensing. Here you can find out more about registering devices, generating licenses, adding partners, moving devices, and viewing device details, history, and usage.</p>

Section	Description
Managing Usage	Shows how to view usage reports for your products that use usage-based licensing.
Managing Downloads	Describes how to use the commands in the Downloads menu to locate and download files for the products to which you are entitled.
Managing Containerized Applications	Describes what containerized applications are and how to view and download them.
Managing Users and Accounts	Provides an overview of user and account management. Mainly for portal administrators, topics include creating, editing, deleting and deactivating users; creating, editing, and deleting accounts; and editing your own user profile, changing your password, and recovering access to your account if your password is lost. Also explains how to manage and create access tokens.

Managing the License Lifecycle

The FlexNet Operations End-User Portal aids customers of software publishers and intelligent device manufacturers in the management of their software entitlements and licenses. It enables automation of the stages of the software license lifecycle. Customers can self-serve their license fulfillment, return, rehosting, and repair needs.

Registering for an Account using an Entitlement ID or Activation ID

You clicked the **Register** link in the End-User Portal login page, and you are now at the **Register for Account** page. If you have an entitlement ID or activation ID, you can self-register and create your own End-User Portal account.



Task To self-register and create your own End-User Portal account:

1. Enter your entitlement ID or activation ID in the **Activation ID** field. This is a required field.
2. Provide your **Last name** and **First name**. These are required fields.
3. Enter a valid **Email** address (in order to receive a system-generated password). A valid email address is required and, for most users, later serves as a user name on the login page.
4. Optionally, users can select the **Register for Existing Account** check box if they want to be associated with an existing Self-Registered account. The existing account is automatically identified using the information that you provide in the **Activation ID** field (in [Step 1](#)). Note that if you select the **Register for Existing Account** check box, you are not required to provide a company name in [Step 5](#).

If you do not select the **Register for Existing Account** check box, you are registering as a new user under a new account.

5. For **Company**, type the name of your company or organization. This is a required field unless you have selected the **Register for Existing Account** check box.
6. Optionally, type your **Phone, Fax, Street, City, State, Zip/Postal Code**, and **Country**.
7. Select a **Locale** and a **Time Zone** from the drop-down lists provided.
 - The *locale* is used to display dates in the appropriate format. In addition, if the End-User Portal has been localized, the End-User Portal will show pages in the locale's language and format. For example, for a French locale, dates will be displayed in the format dd/mm/yy and the text will appear in French.
 - *Timezone* is used to determine when a certain transaction is completed. For example, if a user in the GMT timezone created an object at 4 PM, a user in the PST timezone would see the created time at 8 AM.
8. You may **Opt in to receive email** from the marketing department of your software publisher or hardware manufacturer.
9. Click **Complete**.

The End-User Portal sends a welcome message to the email address you provided. That email message includes your user name and a temporary password. The next time you log in to the End-User Portal using your new user name, you will be prompted to change this password.

If you have additional entitlement IDs or activation IDs that you want to activate or manage through this End-User Portal account, after you log in to the End-User Portal, [map the IDs](#) to your account.

Logging In to the End-User Portal

You can log in to the End-User Portal in one of four ways:

Table 1-1 ▪ Logging into the End-User Portal




Method	Description
Using a producer-issued User Name and Password	<p>Logging in with this method enables you to see all the entitlements and fulfillments, if any, associated with your organization (as defined by your producer).</p> <p>After creating a user account, your producer emails you a temporary password, which you use to log in to the End-User Portal for the first time. You are then prompted to reset your password and enter a secret question and answer for password retrieval. If you ever forget your password, the secret question is used to identify you and generate a new password.</p> <div>  </div> <p>Note ▪ You can change your password through a link on the Start Page. See Changing Your Password.</p>

Table 1-1 ▪ Logging into the End-User Portal

Method	Description
Using an End-User Portal account User Name and Password	<p>Logging in with this method enables you to see entitlement line items and fulfillments, if any, associated with the entitlement IDs and activation IDs that you map to your Portal account.</p> <p>If you have an entitlement ID or activation ID, you can create your own End-User Portal account by self-registering through the End-User Portal.</p> <div></div> <p>Note ▪ For more information, see Registering for an Account using an Entitlement ID or Activation ID.</p> <div></div> <p>Note ▪ You can change your password through a link on the Start Page. See Changing Your Password.</p>
Using an Entitlement ID	Logging in with this method enables you to see all entitlement line items and fulfillments, if any, associated with the entitlement ID.
Using an Activation ID	Logging in with this method enables you to see the entitlement line item and fulfillments, if any, associated with the activation ID.

Auto-Login

If your FlexNet Operations End-User Portal is integrated with your corporate portal (Single Sign On) then you may only be prompted for user name instead of user name and password. Consult your FlexNet Operations administrator for details on your End-User Portal integration.

Displaying Administrator Information

You can display a list of the administrators that are assigned to your user account. This is particularly useful for end-users who want to contact their administrator.

The Account Administrators page lists the administrators' names and accounts. Clicking an administrator name opens a new email message in your default email client, where the To: field is prepopulated with the administrator's email address.

If you are assigned more than one account, the administrators for all your accounts are displayed.



Note ▪ The **List all administrators** link only appears in the **Accounts & Users** menu of the End-User Portal for users with roles that include the End-User Portal permissions **View Accounts** or **View Users**.



Task **To display a list of the administrator accounts assigned to you:**

1. Click **Accounts & Users > List all administrators**.

This command opens the Account Administrators page.
2. On the **Account Administrators** page, you can view the names and accounts of your administrators.

Performing Searches

The End-User Portal includes powerful search functionality on most pages. You can use the search functionality to filter lists of entitlements, fulfillments, devices, machines, accounts, and so forth by a wide variety of criteria. Refer to the following subsections for instructions:

- [Performing a Simple Search](#)
- [Performing an Advanced Search](#)
- [Exporting Search Results to CSV](#)

Performing a Simple Search

You can perform simple searches on any page that has search controls. The search controls appear near the top of the page.

The following table describes the purpose of each of the search controls.

Table 1-2 ▪ Simple Search Controls

Control	Description
Search Scope	<p>A drop-down menu that contains short list of the most common elements to search for on the current page. For example, on the License Activation page, the Search For menu includes Activation ID, Product, Part Number, Sold To Display Name, Sold To ID, License Host IDs, Fulfillment ID, and Trusted Client Platform Type.</p> <p>If the element you want to search on does not appear in the Search For menu, it may be available as part of an advanced search.</p>

Table 1-2 ▪ Simple Search Controls

Control	Description
Search Operator	<p>A drop-down menu that contains a short list of possible search operators. These operators specify how the End-User Portal conducts the search. Operators include Contains (default), Equals, Starts With, and Ends With.</p> <ul style="list-style-type: none">● Contains matches any entity for which the search value appears in the Search For element. The search value can occur anywhere in the element that is searched.● Equals matches only entities for which the search value exactly matches the entirety of the Search For element. Partial matches are not included.● Starts With matches any entity for which the search value occurs at the start of the Search For element.● Ends With matches any entity for which the search value occurs at the end of the Search For element.
Search Value	<p>A text field where you can enter the value you want to find in the Search For element. (Wild card characters are not necessary nor permitted. Spaces can be used.)</p>
Search Button	<p>The first button in the search controls, the Search button has a magnifying glass icon. Click the Search button to search the entities on the current page for elements that match the contents of the Search Value field.</p>
Advanced Search Button	<p>The Advanced Search button is the third button in the search controls. It has an icon that shows a magnifying glass with a plus sign on it. When you click the Advanced Search button, the End-User Portal opens the Advanced Search page in a new window.</p>



Task

To perform a simple search:

1. In the **Search Scope** menu, choose an element to search. The elements available depend on the End-User Portal page you are currently using.
2. In the **Search Operator** menu, choose a search operator. Default: **Contains**.
3. In the **Search Value** field, type the characters you want to search for.
4. Click **Search**.

the End-User Portal searches the entities that correspond to the current page for instances where the search value occurs in the search element according to the method specified by the search operator. It then reloads the current page showing only those entities that matched the search criteria.

Performing an Advanced Search

While the simple search controls provide quick access to the most commonly searched elements on a given portal page, the advanced search controls offer a wider selection of elements to search on and the ability to search multiple elements for multiple values. When you click the Advanced Search button, the End-User Portal opens the Advanced Search page in a new window.

The Advanced Search page lists every element that can be searched for in the context of the main entity of the page on which you clicked the Advanced Search button. An advanced search from the account management pages allows you to search on Name, Display Name, Description, City, State/Province, Zip, Country, and Region. All elements meaningful to searches of accounts. An advanced search from the license management pages, in contrast, shows a wide array of elements—from common elements like Entitlement ID and Activation ID, to date elements like Start Date and Expiration date, to detailed elements like individual Custom Attributes and Custom Host Attributes. You can search for multiple elements using various search operators. Search results reflect all the entities that match all the search criteria.





Task

To perform an advanced search:

1. Click **Advanced Search**. This button opens the Advanced Search page in a new window. Searchable elements depend on the context of the page on which you initiated the advanced search. An advanced search from the device management pages shows different searchable elements than an advanced search from the entitlement management pages.
2. For the elements you want to search, set the search operator and type a search value. Operators vary by the element type. For textual elements, the typical search operators are the same as the simple search operators: Contains, Equals, Starts With, and Ends With. For date elements, the common search operators are Before, After, and On.



Tip ▪ You can also search on producer-defined custom attributes. (Not all custom attributes are searchable.) To use multiple attributes, select an attribute, a search operator and search value, then click the **Add** button . Continue adding attributes as needed. Click the **Remove** button  after a custom attribute to remove only that attribute from the search criteria.



Note ▪ You cannot search for custom attributes that were created with either of these properties:

- **Long text** value for the **Type** field
- **Multi-valued text** value for the **Text type** field

3. Click **Search**.

The End-User Portal closes the Advanced Search page and reloads the current portal page to show only entities that match all the search criteria in the advanced search.

You can clear the search criteria in the Advanced Search page. Clearing the search criteria in the Advanced Search page only clears the fields on that page. It does not clear the current query, if one has been applied.



Task

To clear advanced search criteria:

On the Advanced Search page, click **Clear**.

Exporting Search Results to CSV

The contents of most landing pages and search results pages can be exported as comma-separated value (CSV) files. (This functionality is available on pages with an Export button where Export Selected Items as CSV and Export All Items as CSV commands appear.) You can export all the rows on the current page (including rows shown on subsequent pages) or select specific rows to be included in the CSV.



Task

To export selected items as a CSV file:

1. On the landing page or search results page for the entity, click the checkboxes for the rows of the items you want to export.
2. Click **Export > Export Selected Items as CSV**.

FlexNet Operations End-User Portal generates a CSV from the rows you checked and prompts you to open or save the file. (The exact user experience, here, depends on web browser you are using.)

3. Save the CSV file.



Task

To export all items as a CSV file:

1. On the landing page or search results page for the entity, click **Export > Export All Items as CSV**.

FlexNet Operations End-User Portal generates a CSV from all the rows that match the current search criteria and prompts you to open or save the file. For example, on the license management pages, if you export all items the CSV will contain an entry for every fulfillment.

2. Save the CSV file. (The exact user experience, here, depends on web browser you are using.)

By default, the CSV filename corresponds roughly to the entity type you are exporting. For example, when exporting from the license management pages, the default CSV filename is `SupportLicenses.csv`.

The CSV file also includes the table heading row, even if it is not expressly selected prior to exporting. This way, all CSV files include column headings to clearly describe the contents of the columns.

Map Entitlement and Activation IDs

When you self-register to create an End-User Portal account, you must provide an entitlement ID or activation ID (line item ID or web register key) to ensure that you are eligible to access the End-User Portal. If you have additional entitlement or activation IDs that you would like to activate or manage through the End-User Portal, you must map these IDs to your account after you log in.

Self-registered users can use the steps below to map line items, entitlements, or web register keys. Customer users can use the steps below to map only web register keys. The Map Activation IDs command is not available to other types of users. (See [About Users](#) for a short description of different End-User Portal user types.)

Once mapped, these items will be displayed on the **Manage Entitlements** page.



Task

To map IDs to your account:

1. Log in with your End-User Portal account user name and password.
2. Click **Activation & Entitlements > Claim Activation IDs**. The End-User Portal opens the **Claim Activation IDs** page.
3. In the **ID** field, enter type an entitlement ID or activation ID and click **OK**.

If you map an entitlement ID, all of the activatable items on that entitlement will be accessible from your account. If you map an individual activation ID, the activatable item identified by that ID will be accessible from your account. There is no limit to the number of IDs that can be mapped to an account, but only one ID can be mapped at a time.

Product Support Resources

The following resources are available to assist you:

- [Revenera Product Documentation](#)
- [Revenera Community](#)
- [Revenera Learning Center](#)
- [Revenera Support](#)

Revenera Product Documentation

You can find documentation for all Revenera products on the [Revenera Product Documentation](#) site:

<https://docs.revenera.com>

Revenera Community

On the [Revenera Community](#) site, you can quickly find answers to your questions by searching content from other customers, product experts, and thought leaders. You can also post questions on discussion forums for experts to answer. For each of Revenera's product solutions, you can access forums, blog posts, and knowledge base articles.

<https://community.revenera.com>

Revenera Learning Center

The Revenera Learning Center offers free, self-guided, online videos to help you quickly get the most out of your Revenera products. You can find a complete list of these training videos in the Learning Center.

<https://learning.revenera.com>

Revenera Support

For customers who have purchased a maintenance contract for their product(s), you can submit a support case or check the status of an existing case by first logging into the [Revenera Community](#), clicking **Support** on the navigation menu to open the **Support Hub** page, and then clicking the **Open New Case** or **Case Portal** button.

Contact Us

Revenera is headquartered in Itasca, Illinois, and has offices worldwide. To contact us or to learn more about our products, visit our website at:

<http://www.revenera.com>

You can also follow us on social media:

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- [LinkedIn](#)
- [YouTube](#)
- [Instagram](#)

Managing Entitlements

The **List Entitlements** page displays activatable entitlement line items. The **Bulk Entitlements** page displays activatable bulk entitlements. You can also search for activatable entitlements based on specific criteria. From these pages, you can view entitlements, bulk entitlements, entitlement certificates, and web register keys; activate licenses; and split, print, email, or export entitlements. See the following topics for more information:

- [Overview of Managing Entitlements](#)
- [Viewing Entitlements to Activate](#)
- [Downloading Download Packages for an Entitlement](#)
- [Viewing Bulk Entitlements](#)
- [Activating a License](#)
- [Transferring Entitlement Line Items](#)
- [Splitting Entitlement Line Items](#)
- [Splitting Bulk Entitlements](#)
- [Short Code Activation](#)
- [Manual Activation](#)
- [Emailing an Entitlement Line Item](#)
- [Viewing Expiring Entitlements](#)
- [Exporting Entitlements](#)

Overview of Managing Entitlements

To manage entitlements, you need to become familiar with the following concepts:

- [What is Activation?](#)
- [What is an Entitlement?](#)

- [What is a License?](#)
- [What is Activating a License?](#)
- [What is Batch Activation?](#)
- [What is License Consolidation?](#)

What is Activation?

Activation is the entire process of requesting, generating, delivering, and installing license rights. Generating a license using the End-User Portal can be one of the steps in the activation process.

What is an Entitlement?

An entitlement gives a customer account the right to get a license for a product. An order represents what a customer has bought; an entitlement represents what a customer is allowed to *fulfill*. Entitlements are created and tracked in FlexNet Operations.

Entitlements are associated with

- An account
- One or more products

An entitlement ID uniquely identifies an entitlement. Each line item in an entitlement is an activatable unit and has an activation ID.

Sometimes, a producer creates a bulk entitlement for a single product against which multiple end users (who may not be known at the time the entitlement is created) can generate licenses. A bulk entitlement can be sold to a retailer who distributes web register keys to end users.

What is a License?

A license allows the use of software capability. FlexNet licenses are delivered as certificates or as fulfillment records. If your software producer uses a custom license technology, license delivery may vary.

A license file is a text file containing license certificates from one or more software producers.

Trusted storage is a secure location in which a producer can install license rights—in the form of fulfillment records. Unlike a license file, which is immutable once it is delivered to an end user, license rights in trusted storage can be updated by the producer.

What is Activating a License?

Activating licenses is the process of turning on license rights for a product or set of products. It involves

- Selecting an entitlement
- Generating a license certificate

What is Batch Activation?

To simplify activation, FlexNet Operations supports simultaneous activation of multiple entitlement line items, provided either

- All line items pertain to the same certificate-based license model: nodelocked uncounted, nodelocked counted, floating uncounted, or floating counted.
- For trusted activations, all line items must belong to the same account and must be either all retail licenses or all server licenses.
- Or all line items pertain to the same custom license technology.

In other words, licenses for different customer accounts, trusted storage-based license models, or different certificate-based license models cannot be activated together. Products in the line items can vary. The line items need not share the same entitlement ID.

You may consolidate licenses generated during batch activation.

What is License Consolidation?

License consolidation is the process of combining multiple licenses into a single license file. Consolidating licenses can simplify subsequent rehosting tasks because it allows you to convert several separate licenses into a consolidated license.

License consolidation can take place during batch activation, or post-activation, by simply selecting a group of fulfillments to be consolidated.

License Consolidation Limitations

License consolidation is only possible for certificate licenses, and for some custom (non-FlexNet) licenses

It is not possible to consolidate trusted storage licenses.

To be consolidated, licenses must belong to the same customer account. The licenses you consolidate can be based on different license models, use different license generator configurations, or even belong to different license technologies; however, when license technologies are different the consolidation process does not result in a single license. One consolidated license is created for each license technology.

License Consolidation Processing


For certificate licenses, a separate consolidated license is generated for each host. A separate consolidated license file is generated for floating or node-locked licenses on each license server. For example, floating counted and floating uncounted certificates can be consolidated on a single server. Also floating counted and node-locked counted certificates can be consolidated on a single server. (This is because the node-locked counted model requires a license server system.)



Note ▪ For custom license technologies, the result of license consolidation depends on how the producer codes the consolidator class, where custom consolidation rules are defined.

Viewing Entitlements to Activate

Entitlements appear on the **List Entitlements** page.

By default, the **List Entitlements** page shows only unexpired line items. Use the filter  above the table to show or hide fulfilled, expired, or unexpired line items.

Typically, entitlement line items are displayed with the following information:

- **Type:** Line items can be certificate-based, trusted storage-based, or may use a custom license technology. Certificate- and custom-based activations can be performed from the FlexNet Operations End-User Portal.
- **Activation ID:** See [What is an Entitlement?](#) for more information.
- **Entitlement ID:** See [What is an Entitlement?](#) for more information.
- **State:** If Deployed, the entitlement line item can be fulfilled (by default, this column is not displayed).
- **Parent Bulk:** After a web register key is activated, the ID of the bulk entitlement moves to the Parent Bulk column, and the entitlement ID of the simple entitlement created when the web register key is redeemed replaces it. The ID of the new simple entitlement is `web_register_keyENT` (by default, this column is not displayed).
- **Sold to:** Account associated with the entitlement. The account information is presented in the format *Account ID (Account Name)*.
- **Product:** Product(s) defined for the line item, including version numbers.
- **Features:** The name and the version of the feature that is associated with a product. If a product includes more than one feature, a **more...** link is displayed. Point to the link to list all features that are linked to the product.
- **Version:** Product version.
- **Available quantity:** Number of activatable copies remaining in the line item. Note that this number may be subject to policies.
- **Total quantity:** Total number of activatable copies in the line item.
- **Expiration:** Expiration date or duration of licenses issued from this line item.
- **Order ID:** Entitlement's order ID.
- **Order line number:** Entitlement's order line number.
- **Fulfilled amount:** The number of activatable copies in the line item that have been fulfilled.
- **Maintenance:** Entitlement's maintenance product.
- **Downloads:** Shows a Download Now link if the activation ID is associated with a download package.



Tip - When an entitlement has been upgraded, upsold, or renewed, the **List Entitlements** page shows only the most recent entitlement in its lifecycle chain. Earlier entitlements are grouped under the most recent entitlement but initially hidden. These entitlement groups have a **Show Upgrades** button to reveal earlier entitlements in the list.

- Click **Show Upgrades** to reveal the earlier entitlements.

- Click **Hide Upgrades** to collapse this expanded list.



Task

To print an entitlement:

Select one or more entitlements and click **View > Print**.



Note - Availability of the **View certificate** menu item depends on the role assigned to your user account and the configuration of the End-User Portal.



Task

To view an entitlement certificate:

Select the box next to a line item and click **View > View certificate**.

Viewing Custom Attributes

Custom Attributes appear on the **Maintenance Entitlement Details** pop up.



Task

To view custom attributes:

On the **List Entitlements** page, in the Maintenance column, you can click the maintenance hypertext to view the custom attributes in the **Maintenance Entitlement Details** pop up.

Downloading Download Packages for an Entitlement

You can view the download packages to which you are entitled and download the packages directly from the **List Entitlements** page.

By default, the **List Entitlements** page lists all the activatable entitlement line items to which your account is entitled. However, you can use the search to locate entitlements for which you want to download any download packages.

You can download current download packages in the following ways:

- By clicking the **Download Now** link for a line item in the **Downloads** column. Using this method, you can download only one download package at a time.
- By selecting line items and clicking **View > View Download Packages**. This enables you to download the download packages for multiple line items in one action.

Both ways are described in the following topics:

- [Downloading a Single Download Package](#)
- [Downloading Multiple Download Packages](#)

Downloading a Single Download Package

You can use the **Download Now** link on the **List Entitlements** page to download a download package for a single line item.

The **Download Now** link in the **Downloads** column indicates whether a line item is associated with a download package.



Important - If a proxy configuration is used and the proxy server is hosted on a cloud platform, you can only use the Download Manager to download files after you have logged in to your cloud account. You only need to log in once.



Task

To download a download package for a single line item:

1. On the **List Entitlements** page, in the **Downloads** column, click the **Download Now** link for the desired activation ID. This opens the **Download Order** page for the selected activation ID.
2. Select the tab for the relevant version. Current download packages appear on the **New Versions** tab; older download packages appear on the **Previous Versions** tab.
3. Click the link for the relevant download package. This opens the **Downloads** page. The **Files** tab shows all the download package's files.
4. Click the check boxes to select the files you want to download.
5. Click **Download Selected Files**. The Download Manager opens in a new window.



Important - To complete your download, the Download Manager must be installed on your system. If it is not installed, follow the instructions in the Download Manager window to download and run the installer, then accept the license agreement. If the Download Manager is already installed but a newer version is available, you are prompted to upgrade the Download Manager. Note that you need to restart your browser after installing the upgrade.



Important - Only validated packages can be downloaded. For information about validation, see [Validating Download Packages](#).

6. In the Download Manager, choose the download location on your system and click **Save**.

The Download Manager shows the download progress. Close the Download Manager window when your downloads are complete.

Downloading Multiple Download Packages

You use the **View > View Download Packages** option on the **List Entitlements** page to download current download packages for multiple activatable line items in one action.

Before you attempt the download, note the following:

- The **View Download Packages** option is visible only if your producer has enabled its display.
- The **Download** button is visible only if your producer has enabled its display.



Important - If a proxy configuration is used and the proxy server is hosted on a cloud platform, you can only use the Download Manager to download files after you have logged in to your cloud account. You only need to log in once.



Task

To download multiple download packages:

1. On the **List Entitlements** page, select the line items for which you want to download current download packages.
2. Click **View** > **View Download Packages**. This opens the **Download Packages** page in a new window.
3. If you are registered under more than one account, use the accounts dropdown above the grid to select the account for which you want to view download packages. You can only view download packages and files to which your account is entitled to.
4. In the **Download Packages** page, do one of the following:
 - To download all files from a download package, select one or more download packages and click **Download**.



Tip - You can also select multiple download packages across pages. Simply select the download packages you want to download from a page and use the arrow buttons to navigate through the pages. Your selection on each page will be remembered when you click **Download**.

- To download individual files from a single download package, click the relevant download package ID. In the **Files** window that opens, select the file or files that you want to download and click **Download selected**.



Important - To complete your download, the Download Manager must be installed on your system. If it is not installed, follow the instructions in the Download Manager window to download and run the installer, then accept the license agreement. If the Download Manager is already installed but a newer version is available, you are prompted to upgrade the Download Manager. Note that you need to restart your browser after installing the upgrade.



Important - Only validated packages can be downloaded. For information about validation, see [Validating Download Packages](#).

The Download Manager shows the download progress in a new window. Close the Download Manager window when your downloads are complete.

Validating Download Packages

Before a download, packages are validated. You can only download validated packages. The validation checks the following:

- whether you are entitled to the download package or file
- whether you have accepted the license agreement, if applicable
- whether any export compliance restrictions apply

If you try to download several download packages at once, and one of the download packages fails validation, the entire download fails. After the validation, icons next to the download package ID indicate the result of the validation.

If the validation fails, the Download Packages page shows a validation error message. Click the **review and resolve** link in this message to see the failed packages. Correct the validation errors to validate the download package. This might be, for example, that you need to accept the license agreement. If you do not want to download a particular download package, click the **X** in the **De-select** column.

Viewing Bulk Entitlements

Bulk entitlements appear on the **Bulk Entitlements** page. Bulk entitlements allow producers to create an entitlement for a single product against which multiple end users can generate licenses. Web register keys represent an individual entitlement associated with a bulk entitlement. You can view a bulk entitlement's associated web register keys on the **Bulk Entitlements** page, as well.



Task

To view bulk entitlements:

Click **Activation & Entitlements > Bulk Entitlements** to view the **Bulk Entitlements** page.



Task

To view a bulk entitlement's web register keys:

1. On the **Bulk Entitlements** page, select the bulk entitlement.
2. Click **View > View web register keys**. This opens the **Web Register Keys** page for the selected entitlement in a pop-up window.

Activating a License

Certificate-based and custom licenses can be activated from the **List Entitlements** page.



Task

To generate a license:

1. Click **Activation & Entitlements > List Entitlements**.
2. Search for an activation ID (entitlement line item, or web register key for Embedded) against which to generate a license.
3. Select one or more activation IDs and click **Action > Activate** or **Action > Trusted activate**, depending on the license type of the line item (certificate or trusted).



Note - Embedded entitlements cannot be activated from this page.

4. Enter settings for the first step in the Activate License wizard or the Trusted Activate wizard. (Required fields are indicated on the screen by a red asterisk.)
5. Click **Next** to configure hosts.
 - To configure hosts for certificate-based licenses, see [Specifying Host IDs](#).
 - To configure hosts for trusted storage-based licenses, see [Configuring Hosts for Trusted Activate](#).

The following is a table of fulfill-time license attributes that you may have to fill in. Some custom attributes may also be present.

Table 2-1 ▪ License Attributes

License Attribute	Description
Sold To	This is the account to which the entitlement was sold to.
Start Date	<p>This is the start date of the generated licenses.</p> <ul style="list-style-type: none"> • If the start date was set in the entitlement line item, it is displayed and not editable. • If the start date was not set in the entitlement line item, it must be set when the first license is activated against the line item. This start date is written back to the line item and cannot be modified. <p>When activating several line items together, you are asked to specify the start date for those items without one. This date, once set at activation time, applies to all items that did not have a start date set during entitlement creation.</p>
Ship To Email	<p>The email address where a license generated against this entitlement should be sent. It may be the email address of one of the contacts in your organization and may have already been entered in the entitlement.</p> <ul style="list-style-type: none"> • A Search button is displayed next to the Ship To Email field. Click the Search button to select an email address for one of the contacts in your organization. • Additional email addresses may be entered in a comma-separated list that contains no spaces.

Table 2-1 ■ License Attributes

License Attribute	Description
Ship To Address	The mailing address where a license generated against this entitlement should be sent—your producer may already have entered the address of a contact at your organization.
Version Date	This is a date that identifies the version of the product or license.
Version Start Date	Define the date that will be used to compute the version date. This date plus the Version Date Duration (defined elsewhere) is used to compute the Version Date. The Version Date is a date that identifies the version of the product or license.
Do you want to consolidate generated licenses?	Select Yes (default setting) if you are activating several line items together , and would like to consolidate multiple licenses into a single license file. When activating a single license, choosing to consolidate effectively produces only one license certificate, as there aren't multiple licenses to consolidate.
Terminal Server	<p>This setting enables or disables a license to run under Windows Terminal Server. To disable access via a Terminal Server Client, select Not Used.</p> <p>To allow an application to run via a Terminal Server Client window, node-lock the license to the Terminal Server machine. The ONE_TS_OK (one session permitted) or TS_OK (multiple sessions permitted) keyword is added to the license.</p> <p>Using this setting requires knowledge of the version of FlexNet Licensing the software application was built with—please contact your software producer.</p>
FLEXid Sharing	<p>Applicable to node-locked uncounted licenses. Enables mobile licensing by associating a license with a dongle. When the FLEXid is attached to a license server, the license floats on the network. When the FLEXid is removed from the license server, the license is available only on the standalone computer with the FLEXid attached.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>

Table 2-1 ■ License Attributes

License Attribute	Description
Time Zone	<p>Controls whether or not licensing is limited to specified regions (expressed as time zones).</p> <p>To limit usage based on time zone, choose a time zone value from the list.</p> <p>To limit usage to machines running in the same time zone as the license server machine (served licenses only), choose Server Time Zone Only.</p> <p>To ignore time zones for licensing purposes, choose Not Used.</p> <p>Using this setting requires knowledge of the version of FlexNet Licensing the software application was built with—please contact your software producer. Time zone-based licensing applies to certificate-based licenses: floating counted, floating uncounted, nodelocked counted, and nodelocked uncounted.</p> <p>The special Time Zone setting, Server Time Zone Only, is not applicable to licenses that do not include a SERVER line nor to nodelocked uncounted licenses, generally.</p>
Virtualization Restrictions	<p>Controls whether or not licensed applications are restricted to running only on physical machines or only on virtual machines.</p> <p>To limit usage to physical machines only, choose Restrict to Physical Machines. This adds VM_PLATFORMS=PHYSICAL to the feature line.</p> <p>To limit usage to virtual machines only, choose Restrict to Virtual Machines. This adds VM_PLATFORMS=VM_ONLY to the feature line.</p> <p>To operate without restrictions, choose Not Used.</p> <p>Using this setting requires knowledge of the version of FlexNet Licensing the software application was built with—please contact your software producer. Virtualization Restrictions apply to certificate license models: floating counted, floating uncounted, nodelocked counted, and nodelocked uncounted.</p>
Borrowing	<p>Applicable to counted, certificate-based licenses. A borrowed license can be used to run an application on a machine that is no longer connected to a license server.</p> <p>To disable borrowing, select Not Used. If any other setting is selected, license borrowing is enabled.</p> <p>If borrowing is allowed, the maximum number of hours that the license can be borrowed for can be specified as the default (168 hours, or one week).</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>
User or Host Based	<p>Applicable to certificate-based counted licenses and trusted floating transferable and floating borrowable licenses. Using this setting allows you to specify the number of users or host names that the license should be restricted to. This list is part of your options file.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>

Table 2-1 ■ License Attributes

License Attribute	Description
Overdraft	<p>Overdraft is applicable to certificate- and trusted storage-based counted licenses and allows the customer extra usage. It allows for users not to be denied service when in a “temporary overdraft” state. This permission is given using the OVERDRAFT license keyword.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>
Issuer	<p>Applicable to all license models—Issuer of the license</p> <p>This can be the software producer or the name of a retailer. If you are required to set this attribute, please follow instructions provided by your software producer.</p>
Serial Number	<p>Applicable to all license models—Serial number used to identify feature lines</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>
Vendor String	<p>Applicable to all license models—Vendor string used to identify feature lines</p> <p>This field usually contains a string value that is used by the software producer to track certain licenses.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>
Reinstall	<p>Applicable to trusted license models, for server activation requests, select the check box for reinstalls. The effect of the Reinstall check box is that it prevents the activation from consuming the line item count. For retail (client) requests, the Reinstall check box is not shown. (Any repeat retail activation is automatically treated as a reinstall.)</p>
Notice	<p>Applicable to all license models—Notice string used to identify feature lines</p> <p>This field can be used by the software producer to pull in values of macros or variables. Or else it can be used to specify that a license is for evaluation only. If you are required to set this attribute, please follow instructions provided by your software producer.</p>
Use Server	<p>Applicable only to certificate-based licenses.</p> <p>For uncounted features, USE_SERVER is used to force logging of usage by the daemons.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>

Table 2-1 ▪ License Attributes

License Attribute	Description
Platforms	<p>Applicable to all license models—Usage is limited to the selected platforms. The platforms are selected with check boxes and expressed using the PLATFORMS license keyword.</p> <p>If you are required to set this attribute, please follow instructions provided by your software producer.</p>

Specifying Host IDs

When a license is issued to the customer, it can contain information to validate that it is being used on only a specific license server. In addition, it can contain configuration to allow only a specific client can check out the feature. Host IDs are used to define this information.



Note ▪ Depending on the license model defined for this product, you will be prompted for one or more of the following attributes. For instructions on configuring hosts for trusted storage activations, see [Configuring Counts for Trusted Activation](#).

Depending on the license model (see the following table) for this product, there are two types of hosts you can to define:

- **Server host:** this defines the information used to identify the license server that will be able to serve these licenses.

For example, when you define the server host to be HOSTNAME=dogma, the license can only be served from a system with a hostname 'dogma'. The license cannot be used on a system with a different hostname.

Each license server machine is identified by a host ID.

- If specifying redundant license servers, the three server definition is counted as single line item.
- To specify the value of a special host ID type that requires a keyword (such as an IP address or FLEXid), enter the host ID as a keyword=value pair.

If you specify multiple server host IDs, then multiple license files will be created—one for each host ID (license server system).

In the case of the nodelocked counted license model, you need to define nodelocked host IDs for each server host ID (or three-server configuration) specified.

- **Nodelocked Host:** this defines information used to identify the client that is checking out the feature. This creates a restriction that a product can only check out a feature if it is run on a specific client system.

Enter a host ID value for the machine to which to lock the application.

- To lock an application to more than one machine, click the Add Nodelocked Host button and enter multiple host ID values.
- To specify the value of a **special host ID type** that requires a keyword (such as an IP address or FLEXid), enter the host ID as a keyword=value pair.


The following table explains the type of Host IDs that you will be prompted for based on the license model type.

Table 2-2 ▪ Definition of Hosts based on License Model

	If the license type is:			
	Nodelocked Counted	Nodelocked Uncounted	Floating Counted	Floating Uncounted
You are prompted to define the:	Server Host	Not Required	Server Host	Server Host
	Nodelocked Host	Nodelocked Host	Not Required	Not Required

The following buttons are available when defining server and nodelocked hosts:

- **Select Existing Host** allows you to select a pre-defined host identifier. This dialog lists all host identifiers defined for the account (either by the producer or during previous activations). This displays the **Select License Host** dialog. Select the hosts that will be able to serve these licenses.
- **Add New Host** allows you to define a new host identifier. This displays the **Create License Host** dialog. Select the host identifier from the dropdown list, and then enter the value that will identify the system. The section [Special Host ID Types](#) provides information about the types of information that can be used to identify a server.

To configure a license for a redundant servers, click the triangle icon  to the right of the **Server Hosts** drop-down menu in the **Create License Hosts** dialog. You will be prompted to define all three servers.

- **Remove** allows you to remove a host identifier from the list.

For each server host identifier, you may be prompted to specify a fulfill count. See the section [Specifying Fulfill Counts](#) for more information.

If you are not required to specify a fulfill count (for uncounted license models, for example)

- Click the **Verify** button to check that the parameter values you have entered are valid.
- **Generate** button to generate a license.

After a license is generated, you can view the license information. For unconsolidated licenses, a certificate is issued for each product on each server. For consolidated licenses, one file is issued per server.

To view a license, click on fulfillment id, a pop-up window will appear displaying the entire license text with other information about the fulfillment record.

Configuring Hosts for Trusted Activate

After identifying the ship-to and specifying any fulfillment-time custom attributes for the activation, you must configure one or more hosts. In this step, you must upload one or more valid retail (client) or server request files (xml).

**Task****To add a host:**

1. On the Configure Host page of the Trusted Activate wizard, click **Add Host**. This opens the **Create Host** page in a pop-up window.
2. Click **Browse**, select a valid request file, and click **Save**. The **Create Host** page closes and the host identified by the request file is added to the Host list on the **Configure Host** page.

You can add multiple hosts in this step. Click **Next** to configure counts for the trusted activation.

Special Host ID Types

The following table lists the available host ID types. Depending on how the login user is configured, only a subset of these host ID types will be displayed. Depending on how the license model is defined, you will only be able to use a subset of these Host IDs to create the license certificate.

Table 2-3 ■ Host ID Types

Host ID Type	Description
ANY	Special FlexNet Licensing host ID ANY. Allows the license to run on any machine.
DEMO	Special FlexNet Licensing host ID DEMO. Can be used only for node-locked licenses, never for Server Host IDs. Allows the license to run on any machine.
Ethernet	Ethernet address and also called MAC address. This is the hardware address from the Network Interface Card (NIC). This value consists of 12 hexadecimal digits (a 48-bit number).
TPM ID	The Trusted Platform Module host ID adds an additional layer of security for Windows platform certificate based licensing to minimize software piracy. This feature is available with VCG kit 16.2.2.0. The length of the TPM ID should be in the following format: xxxxx-xxxxx-xxxxx (4 sequences of 5 characters and 3 hyphens for a total of 23 characters). TPM ID can be used in conjunction with other host ID types in case of redundant servers.
Long	Used only with Solaris machines. It is the Solaris 32-bit hardware machine ID. This value consists of 8 hexadecimal digits (a 32-bit number).
User	User name: Enter as USER=user_name in the Activate Licenses page. The FlexNet C/C++ Licensing toolkit uses the login name. FlexNet Licensing for Java uses the username environment variable.
Host Name	This can be a simple host name or a fully qualified DNS name. Host name: Enter as HOSTNAME=host_name in the Activate Licenses page.
Display	On Unix, this is the X display name. On Windows, it is the display adapter. Display name: Enter as DISPLAY=display_name in the Activate Licenses page.

Table 2-3 ■ Host ID Types



Host ID Type	Description
Routable IP Address	<p>This setting allows you to define the host ID as a routable, public IP address. Use the format, <code>INTERNET=w.x.y.z</code>, where each letter represents an octet with a decimal value between 0 and 255.</p> <p>FlexNet Operations End-User Portal validates that the address is not among the private, non-routable sets. The routable address cannot be an address in the primary three reserved, private network address ranges: 10.0.0.0-10.255.255.255, 172.16.0.0-172.31.255.255, and 192.168.0.0-192.168.255.255. In addition, the address cannot be 127.0.0.1 (localhost).</p>  <p>Note ■ In some cases, a software producer may opt to disable some aspects of IP address validation. If so, follow the IP address guidelines provided by that producer.</p>
Routable IP Address with Wildcards	<p>This setting allows you to define the host ID as a routable, public IP address with a wildcard (*) as one or more octets. Use the format, <code>INTERNET=w.x.y.z</code>, where each letter represents an octet with a decimal value between 0 and 255.</p> <p>FlexNet Operations End-User Portal validates that the address is not among the private, non-routable sets. The routable address cannot be an address in the primary three reserved, private network address ranges: 10.0.0.0-10.255.255.255, 172.16.0.0-172.31.255.255, and 192.168.0.0-192.168.255.255. In addition, the address cannot be 127.0.0.1 (localhost).</p> <p>The wildcard rules for routable IP addresses also apply. For an IP address of <code>w.x.y.z</code></p> <ul style="list-style-type: none"> ● If <code>w</code> is less than or equal to 127, then <code>x</code>, <code>y</code>, and <code>z</code> can be wildcards. ● If <code>w</code> is between 127 and 192, then only <code>y</code> and <code>z</code> can be wildcards. ● If <code>w</code> is greater than or equal to 192, then only <code>z</code> can be a wildcard.  <p>Note ■ In some cases, a software producer may opt to disable some aspects of IP address validation. If so, follow the IP address guidelines provided by that producer.</p>
Non-routable IP Address	<p>This setting allows you to define the host ID as a non-routable, private IP address. Use the format, <code>INTERNET=w.x.y.z</code>, where each letter represents an octet with a decimal value between 0 and 255.</p> <p>The address you specify must be an address within the primary three reserved, private network address ranges: 10.0.0.0-10.255.255.255, 172.16.0.0-172.31.255.255, and 192.168.0.0-192.168.255.255.</p>  <p>Note ■ In some cases, a software producer may opt to disable some aspects of IP address validation. If so, follow the IP address guidelines provided by that producer.</p>

Table 2-3 ■ Host ID Types


Host ID Type	Description
Non-routable IP Address with Wildcards	<p>This setting allows you to define the host ID as a non-routable, private IP address with a wildcard (*) as one or more octets. Use the format, INTERNET=w.x.y.z, where each letter represents an octet with a decimal value between 0 and 255.</p> <p>FlexNet Operations End-User Portal validates that the address is among the permitted, non-routable sets. The address you specify must be an address within the primary three reserved, private network address ranges: 10.0.0.0-10.255.255.255, 172.16.0.0-172.31.255.255, and 192.168.0.0-192.168.255.255.</p> <p>The wildcard rules for non-routable IP addresses also apply. For an IP address of w.x.y.z</p> <ul style="list-style-type: none"> ● If w is less than or equal to 127, then x, y, and z can be wildcards. ● If w is between 127 and 192, then only y and z can be wildcards. ● If w is greater than or equal to 192, then only z can be a wildcard.  <p>Note ■ In some cases, a software producer may opt to disable some aspects of IP address validation. If so, follow the IP address guidelines provided by that producer.</p>
Disk SN	<p>This is used with windows systems only and is the disk serial number.</p> <p>Locks the software to a PC with this C:/ drive serial number. Enter as DISK_SERIAL_NUM=sn in the Activate Licenses page.</p>
FLEXid	<p>This is for Windows, Mac, Linux only. Locks the software to a PC with a hardware dongle (hardware key) with serial number id_string. The format of this identifier depends on the brand of dongle used.</p> <p>Enter as FLEXID=id_string in the Activate Licenses page.</p>
Serial	<p>Functionally equivalent to ANY because it runs on any machine. Because the report log records the id string, the identifier should represent a specific end user. Enter as ID=n in the Activate Licenses page.</p>
Composite	<p>A composite host ID combines multiple FlexNet Licensing host IDs together to provide a more secure host ID. For instance, you can use USER and Disk SN to identify a host id. A composite host ID is a hashed 12-character hexadecimal value formed by combining the values of multiple simple host IDs types.</p> <p>If you select the Composite format, you must have a program to calculate the Composite host ID for the host machine. If you have any questions about this, contact the software producer. Enter as COMPOSITE=comp_id in the Activate Licenses page.</p>

Table 2-3 ■ Host ID Types

Host ID Type	Description
Vendor Defined	<p>The user selects the <code>VENDOR_DEFINED</code> item from the drop-down and then enters the vendor-defined host as <code><name>=<string></code></p> <div></div> <p>Note ■ If you specify a vendor-defined host ID, you must build your VCG to support your vendor-defined host ID type.</p>
Virtualization-Aware	<p>Virtualization-aware host ID prefixes define server host ID types that permit or restrict the kind of virtual environments, if any, on which a license server can run. These host ID types begin with <code>PHY_</code>, <code>VM_</code>, <code>VMW_</code>, <code>HPV_</code>, or <code>LMB_</code>.</p> <ul style="list-style-type: none">● Use the <code>PHY_</code> prefix with <code>ETHER</code>, <code>INTERNET</code>, <code>HOSTNAME</code>, <code>DISPLAY</code>, <code>USER</code>, <code>DISK_SERIAL_NUMBER</code>, or <code>FLEXID</code> to restrict license operation to physical machines.● Use the <code>VM_</code> prefix with <code>UUID</code> to restrict license server operation to any supported virtual environments: Xen, Hyper-V, and VMWare. <code>VM_UUID</code> supersedes <code>VMW_UUID</code> and <code>HPV_UUID</code>.● Use the <code>VMW_</code> prefix with <code>UUID</code>, <code>ETHER</code>, <code>INTERNET</code>, and <code>HOSTNAME</code> to restrict license server operation to VMWare Workstation and ESX Server virtualizations. <code>VMW_UUID</code> is still supported, but has been superseded by <code>VM_UUID</code>.● Use the <code>HPV_</code> prefix with <code>UUID</code>, <code>ETHER</code>, <code>INTERNET</code>, <code>HOSTNAME</code>, and <code>VSN</code> to restrict license server operation to Microsoft Hyper-V virtualizations. <code>HPV_UUID</code> is still supported, but has been superseded by <code>VM_UUID</code>.● Use the <code>LMB_</code> prefix with <code>ETHER</code>, <code>INTERNET</code>, <code>HOSTNAME</code>, or <code>FLEXID</code> (9 or 10) to permit license server operation with bare metal binding. This permits operation in a virtualization but binds the license to the physical host machine. <div></div> <p>Note ■ <code>VMW_HOSTNAME</code>, <code>HPV_HOSTNAME</code>, and <code>LMB_HOSTNAME</code> host IDs cannot contain wildcards (asterisks).</p> <div></div> <p>Note ■ When used with three-server redundancy, virtualization-aware host ID types for all servers in the triad must use the same prefix: <code>PHY_</code>, <code>VW_</code>, <code>VMW_</code>, <code>HPV_</code>, or <code>LMB_</code>.</p>

Table 2-3 ▪ Host ID Types

Host ID Type	Description
Cloud-Specific	<p>Cloud-specific host ID types permit the kinds of cloud-hosted environments, if any, in which the product can operate. There are two server host ID type options and two nodelocked host ID type options:</p> <ul style="list-style-type: none"> • AMZN Routable EIP Address and AMZN Routable EIP Address with Wildcards—The AMZN_EIP host ID types permit license server operation in Amazon EC2 (public cloud) environments with binding to an elastic IP address. Routable and Routable with Wildcard addresses are supported. Non-routable addresses are not supported. This host ID type cannot be used with three-server redundancy. • AMZN AMI Template ID and AMZN IID Instance ID—The AMZN_AMI and AMZN_IID host ID types permit nodelocked licensing in Amazon EC2 environments with binding to the AMI template ID or AMI instance ID, respectively. Template ID binding is typically used in virtual appliance scenarios. Instance ID binding supports more generic cloud-based usage such as running software in the public cloud or in a virtual private cloud.

Specifying Fulfill Counts

Specify a fulfill count for each of the Server Host IDs and Nodelocked Host IDs. Depending on the license model, you will be prompted to define a fulfillment count for either the server host or the nodelocked host.



Note ▪ For instructions on configuring counts for trusted storage activations, see [Configuring Counts for Trusted Activation](#).

Table 2-4 ▪ Fulfillment counts for Hosts based on License Model

You must define a fulfillment count for each:		
	Server Host	Nodelocked host
When the license model is:	Floating Counted	Nodelocked Uncounted
	Floating Uncounted	
	Nodelocked Counted	

Configure Counts

If the entitlement line item contains a counted license model (nodelocked or floating), you will be prompted to define a fulfill count for each server host ID. The available information and options on this screen are different depending on the license model.

If this is an upgraded product, upsold product, or a renewal (with either a counted or uncounted license model), see the following subsection, [Activation Wizard](#).

If the entitlement line item is NOT for an upgraded, upsold or renewed product and the license model is counted, enter the following information for each host identifier that you defined in the previous screen. You will be prompted with these fields for each host defined in the previous screens.

Table 2-5 ▪ Configure Counts

Property	Description
Fulfill Count	<p>This is the total number of seats you want to fulfill from the entitlement line item.</p> <p>Specify a fulfill count for each of the fulfillments you are generating. In the case of the floating counted license model, you need to specify a count for each server or three-server configuration on which you want licenses activated. In the case of the nodelocked counted license model, you need to provide counts for each server (or three-server configuration) specified, and the nodelocked hosts attached to that server.</p>
Overdraft	<p>Enter the number of overdraft licenses you want this fulfillment to allow.</p>

Activation Wizard

If this is a Renew, Upgrade, or Upsell Entitlement Line Item, you will be prompted with a series of questions for each host that you define in the previous screen. The following steps are the same for Upgrade, Upsell, and Renew entitlement line items.



Important ▪ FlexNet Operations does not evaluate the count of available copies when an upgrade is created. Therefore it is possible to create an upgrade count that exceeds the number of available copies; however, the count is evaluated at fulfillment time. On fulfillment, upgrades that exceed the available count are rejected.



Task

To activate using Activation wizard:

1. What kind of activation you want to perform on this host?

This question is displayed if the license model is uncounted. It allows you to either activate copies without upgrading/upselling/renewing fulfillments created for the original product or upgrade these fulfillments also.

- **<Upsell/Renew/Upgrade>**: You can select an existing entitlement line item for products with an “Upgrade To” relationship with this product. You can decide to allocate seats from any of these fulfillments to the new upgrade fulfillment. The system will automatically allocate the seat count from the existing fulfillments to the new upgraded product fulfillment.

If there are multiple entitlements line items that meet this criteria, they will all be displayed.

- **Activate**: You can activate the entitlement without upgrading an existing fulfillment. A new fulfillment will be created.
- **None**: You will not activate any seats for this host.

2. Copies Available To Upgrade From Previous Fulfillments on host <...>:

This question is displayed for both counted and uncounted license models. If the following conditions apply, you will be prompted to enter the Upgrade Count, Upsell Count, or Renew Count:

- You selected Upsell, Renew, or Upgrade in the previous step.
- There are currently fulfillments against a product with an Upgrade.

The Copies Available... List (see [Understanding the Copies Available... List](#)) displays the entitlement line items for that account that specify a product that has an Upgrade To or Upsell To relationship with this product. The Available <Upgrade/Upsell/Renew> Count represents the total number of seats that have been fulfilled using that specific entitlement line item for that host. If multiple fulfillments have been created for this host from that entitlement line item, then the value displayed is the sum of these fulfillment counts.

Enter the number of seats from each of the entitlement line items that you want to transfer to this new fulfillment. The system will determine automatically which fulfillment the seats will be transferred from. If you want more control over which fulfillment the upgrade count is transferred from, use the Upgrade/Upsell/Renew capabilities on the **License Activation** page.

3. After you have defined all properties, verify the values and generate the license certificate:
 - To check that the values defined can be used to generate a valid license, click the **Verify** button.
 - To generate a license certificate, click the **Generate** button.

After a license is generated, you can view the license text. For unconsolidated licenses, a certificate is issued for each product on each server. For consolidated licenses, one file is issued per server.

Understanding the Copies Available... List

This section describes the information displayed in the Configure Counts section of the Activation Wizard when you are activating an upgrade entitlement line item.

The following scenario describes an entitlement for Customer A and explains what is displayed in the activation wizard when activating an upgrade entitlement line item in this scenario.

- P1 can be upgraded to P3. It has an **Upgrade To** relationship with P3.
- P2 can be upgraded to P3. It has an **Upgrade To** relationship with P3.
- There are two entitlement line items for Product P1 (L1-P1 and L2-P1).
- Entitlement line item L1-P1 was activated twice to create two fulfillments:
 - F1-L1-P1: two seats were activated for a server with the hostname *dogma*
 - F2-L1-P1: three seats were activated for a server with the hostname *dogma*
- Entitlement line item L2-P1 was activated once to create one fulfillment:
 - F1-L2-P1: two seats were activated for a server with the hostname *dogma*
- Entitlement line item L1-P2 was activated once to create one fulfillment:
 - F1-L1-P2: two seats were activated for a server with the hostname *dogma*
- There is an upgrade entitlement line item for product P3 (not shown). Upgrade entitlement line items are created using the Upgrade capability in FlexNet Operations. There are no fulfillments against the upgrade entitlement line item for product P3.

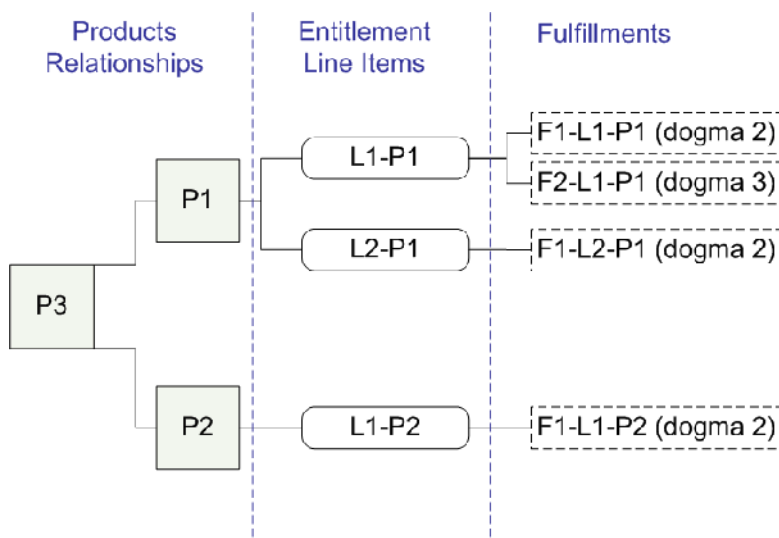


Figure 2-1: Relationships between products, entitlement line items, and fulfillments

In End-User Portal, you activate the upgrade entitlement line item for product P3. In the Activation Wizard, you are prompted for the information presented in the following figure.

Node-locked Hosts

☒ Host

☐ ANY

Copies Available To Upgrade From Previous Fulfillments on host HOSTNAME=dogma

Parent Activation ID	Product	Version	Expiration	Available Upgrade Count	Upgrade Count
L2-P1	P1	1	PERMANENT	2	<input type="text"/>
L1-P2	P2	2	PERMANENT	2	<input type="text"/>
L1-P1	P1	1	PERMANENT	5	<input type="text"/>

Figure 2-2: The Copies Available grid

Each row in the **Copies Available...** grid represents a separate entitlement line item for Company A. The **Available Upgrade Count** value is the total number of seats that can be upgraded to product P3. This number is the sum of the seats from all fulfillments created using that entitlement line item. Notice that line L1-P1 has an **Available Upgrade Count** of 5. This is because there are two fulfillments (quantity 2 and 3) against that entitlement line item.

In the **Upgrade Count** field, define how many seats from each fulfillment you want to upgrade to product P3. In the case of line L1-P1, if you enter a number less than 5 (for example 4), the system will automatically determine which fulfillments will be affected. It will upgrade a certain number from one fulfillment and the remaining quantity from the other.

If you want more control over which fulfillments are upgraded, use the Upgrade capability on the **License Activation** page.

Configuring Counts for Trusted Activation

If the entitlement line item contains a counted license model (trusted, server), you will be prompted to define a fulfill count for each server host. If the entitlement line item contains a

- retail license (uncounted) and you define multiple host IDs, then:
 - multiple licenses files are created, one for each host ID.
 - the Copies value for the entitlement line item decrements by the number of hosts you define.
- server license (counted) and you define multiple host IDs, then:
 - multiple licenses files are created one for each host ID.
 - the Copies value for the entitlement line item decrements by the sum of the fulfillment counts for each server.

Whether an upgrade, upsell, or renew entitlement line item, the available information and options in the **Configure Counts** page are the same.



Important • FlexNet Operations does not evaluate the count of available copies when an upgrade is created. Therefore it is possible to create an upgrade count that exceeds the number of available copies; however, the count is evaluated at fulfillment time. On fulfillment, upgrades that exceed the available count are rejected.



Task

To configure counts for trusted activation:

1. Review the prepopulated fields on the **Configure Counts** page. The number of data fields that are displayed vary depending on how the license model was defined. An important value in this list is:

Total Remaining Copies: The number of copies in the entitlement line item that can be activated. This is the maximum number of licenses that the customer can fulfill against this entitlement line item, regardless of whether the fulfillment is a new or is an upgrade, upsell, or renew of another product.

Table 2-6 • Configure Count Fields

Property	Description
Available Copies	This is the number of copies in the entitlement line item that can be fulfilled as a new activation. It does not include the number of copies that are available as an upgrade to another product. This does not include Extra Activations.
Extra Activations Available	This number is the set when you define the License Model. This is the number of extra copies of the product (beyond what they have purchased) that they can activate.
Pending Copies	If you have defined multiple server host IDs, this value is the number of copies that have already been assigned to the other Hosts IDs in this activation action.
Fulfill Count	This is the total number of licenses you want to fulfill for this server host ID. Specify a fulfill count for each of the fulfillments you are generating.

Table 2-6 ■ Configure Count Fields

Property	Description
Remaining Overdraft	This is the number of remaining unused Overdraft Licenses.
Overdraft	Enter the number of Overdraft licenses you want to allow for this server host ID.

2. Finish specifying the Configure Counts properties for the current host.
3. Click **Next** to go to the **Generate Licenses - Review** page.



Note ■ When the activation includes multiple hosts, an arrow in the Hosts list indicates the current host. Clicking **Next** on the Configure Counts page moves to the next host. When counts are configured for the last host, clicking **Next** moves you to the Review step.

4. To generate a license, click **Generate** on the Review page. One response/license is generated per host.

On the Generated Licenses page, you can choose to **Save to File** or **Print** one or more licenses.

Emailing a License

A newly or previously generated license (certificate-based or custom) can be sent as an email attachment to one or more email addresses. The email attachment is sent as a file, by default called `LicenseFile.lic`

Your license file for product <XXX> is attached.

where <XXX> is the name of the Product.

The **Ship To Email** field contains the email address where the license should be sent. This field contains email addresses that were specified in the entitlement or during [license generation](#). A **Search** button is displayed next to the **Ship To Email** field. Click the **Search** button to select an email address for one of the contacts in your organization. Additional email addresses can be entered, and multiple email addresses are formatted in a comma-separated list with no spaces.

If you have configured End-User Portal to support multiple languages, the **Language for Email** field allows you to select the language that the email will be sent. To send an email in a particular language, you must configure FlexNet Operations to support localization in that particular language.

After the email is sent, a confirmation message appears on the page.

Transferring Entitlement Line Items

If a company spins-off a division and sets up a separate company, it can transfer some of its license entitlement line items to the new company by using the Transfer feature. However, an entitlement can be transferred only if there are no active fulfillments against any of its line items.

- Administrator privileges are required to transfer entitlement line items.
- Transfer of entitlement line items can only be performed between accounts in the same account hierarchy.



Task

To transfer entitlement line items:

1. On the **List Entitlements** page, select a trusted line item to activate and click **Action > Transfer**.
2. In **Transfer Amount**, enter the number of copies you wish to transfer.
3. In **Target Account**, specify the account to which you want to transfer the entitlement line item. Do one of the following:
 - Type the account name. After you have typed three or more characters, a list of account names that match that pattern is displayed, enabling you to select from these account names.
 - Click the search icon next to the **Target Account** field. The **Select Account** window opens. Search for and select the account that will receive the new entitlement line item, then click **OK**. The **Select Account** window closes.
4. Click **Transfer**. The line items are transferred to the account, and you are notified by email about the transferred line items.

Newly transferred line items are placed in an on-hold status. The FlexNet Operations administrator must approve these transfers in the Producer Portal.

Splitting Entitlement Line Items

The count of an entitlement line item with a count greater than 1 can be split, by the producer or its channel partners, so that the ownership of some subset of the count can be transferred to a related target account. This moves the specified count from one distribution partner to another, and can either create a new entitlement for the target account or pool the count with an existing line item, if a similar line item already exists with the target account.



Task

To split an entitlement:

1. On the **List Entitlements** page, select the check box for the entitlement you want to split and then click **Action > Split**. The **Split Entitlement Line Item** page opens.
2. Click the **Search Account** button at the **Target account** prompt to open the **End Customer and Channel Partners** page in a pop-up window.
3. Select a **Distribution Tier Type**, and then choose the account with which you want to split the entitlement. This account is then the target account of the split operation.
4. Click **Next**. This shows the contacts list for the target account.
5. Select a contact. The contact you select will automatically receive an email whenever an event occurs that requires email messaging.
6. Click **Save**. The pop-up window closes and you return to the **Split Entitlement Line Item** page, where the target account information has been populated.
7. On the **Split Entitlement Line Item** page, choose whether you want the target account to pool the split line items into an existing line item count or to create a new entitlement. For **Do you want to split to a similar line item owned by the target account?**

- To pool line items, click **Yes**, and then select the line item of the target account that you want to receive the count from the split.
 - To create a new line item, click **No**.
8. Specify a **Split Amount**.
 9. Click **Split**, and then click **OK** to confirm the split operation.
 10. Click **Complete** to return to the **List Entitlements** page.

Splitting Bulk Entitlements

Partner users can split bulk entitlements. This process is similar to splitting entitlement line items, but starts on the **Bulk Entitlements** page and consumes the specified count from the web register keys associated with the bulk entitlement.



Task

To split a bulk entitlement:

1. Click **Activation & Entitlements > Bulk Entitlements**.
2. Select the bulk entitlement you want to split, and then click **Action > Split**. The **Split Bulk Entitlement** page opens.
3. Click the **Search Account** button at the **Target Account** prompt to open the **End Customer and Channel Partners** page in a pop-up window.
4. Select a **Distribution Tier Type**, and then choose the account with which you want to split the entitlement. This account is then the target account of the split operation.
5. Click **Next**. This shows the contacts list for the target account.
6. Select a contact. The contact you select will automatically receive an email whenever an event occurs that requires email messaging.
7. Click **Save**. The pop-up window closes and you return to the **Split Bulk Entitlement** page, where the target account information has been populated.
8. On the **Split Bulk Entitlement** page, choose whether you want the target account to pool the entitlements into an existing or to create a new entitlement. For **Do you want to split to a similar entitlement owned by the target account?**
 - To pool entitlements, click **Yes**, and then select the line item of the target account that you want to receive the count from the split.
 - To create a new entitlement, click **No**.
9. Specify a **Split Amount**.
10. Click **Split**, and then click **OK** to confirm the split operation.
11. Click **Complete** to return to the **Bulk Entitlements** page. Notice that a number of web register keys (matching the Split Amount) have been assigned to the target account.

Short Code Activation

Trusted activations are normally done programmatically as transactions between a client or server activation utility and the FlexNet Operations server. Usually, the activation utility generates a request that is submitted programmatically and the FlexNet Operations server generates a response that is used to complete the activation.

However, if a customer's environment does not support communication with the FlexNet Operations server, FlexNet Operations can generate a short code activation specification record (ASR) that can be used to generate an activation request. Short code activations are typically used in activations performed over the phone.

- A producer uses FlexNet Operations to generate a short code ASR and bundles it with the product.
- A FlexNet Licensing activation utility running on the machine where the license will be activated uses the short code ASR bundled with the product to generate a short request code.
- The short request code is sent to the producer and loaded into FlexNet Operations to generate a short response code.
- The response code is saved to a file; the file is sent to the customer and is used by the FlexNet Licensing activation utility to process the activation response and activate the license.



Task *To activate a line item through short code activation:*

1. On the **List Entitlements** page, select a trusted line item to activate and click **Action > Short code activation**.
2. On the **Short Code Activation** page, enter the short request code and activation ID for the item.
3. Click **Next**. The short response code is generated and displayed.
4. Save the short response code to a file.
5. Send the file to the customer with instructions for using the activation utility to process the response and activate the license.

Manual Activation

Trusted activations are normally done programmatically between a client or server activation utility and the FlexNet Operations server. The activation utility generates a request that is submitted over the Internet or other network, and the FlexNet Operations server generates a response that is used to complete the activation.

However, an activation request can also be generated and written to a file by a FlexNet Licensing activation utility running on the machine where the license will be activated. Such a manual activation is useful when there is no internet connectivity on the host. The file containing the request is sent to the producer and loaded into FlexNet Operations to generate a response.



Task *To manually activate a line item:*

1. Click **Activation & Entitlements > Offline Trusted Activation**.
2. On the **Offline Trusted Activation** page, browse to the location of the activation request XML file.

3. Click **Submit**. The item is activated and the response file is displayed. Verify the Activation ID, Product, Version, Fulfillment ID, and Sold To account.
4. Click **Save To File** to save this response to a file. The default file name is responseXML.xml.
5. Send the file to the customer with instructions for using the activation utility to process the response and activate the license.

Emailing an Entitlement Line Item



Note - Availability of the **Email** menu item depends on the role assigned to your user account and the configuration of the End-User Portal.



Task

To email an entitlement line item:

1. Click **Activation & Entitlements > List Entitlements**.
2. On the **List Entitlements** page, select the check box next to the line item you want to email; click **View > Email**.
3. Enter the email address you want the entitlement sent to. Use the search icon to look for contacts in your organization.
4. Click **Send**; click **Cancel** to cancel the operation and return to the **List Entitlements** page.

Viewing Expiring Entitlements

The **Expiring Entitlements** page shows the expiring entitlements for the accounts to which you belong and gives special emphasis to those that are soon to expire.



Note - This page only appears for end users with sufficient permissions to view expiring entitlements when the End-User Portal is configured to show the **Expiring Entitlements** page. Not all producers provide expiring-entitlement functionality.

By default, this page shows all entitlements that are due to expire and lists them in order of fewest days remaining before their expiration date. (Expired entitlements are not shown by default, but you can use the filtering controls to include those entitlements. See [Filtering, Searching, and Sorting](#), below.) The default filter setting shows both subscriptions and maintenance lines that are due to expire.



Task

To view expiring entitlements:

Click **Activations & Entitlements > Expiring Entitlements**.

The End-User Portal opens the **Expiring Entitlements** page. This page lists expiring entitlements for the accounts to which you belong and sorts them in order of fewest days remaining until expiration. Entitlements closest to their expiration date appear first. Entitlements furthest from their expiration date are last.

From this page you can view information about an entitlement or send an email to get the renewal process started for one or more entitlements.

- To see information about an entitlement, click its Activation ID.
- To send an intent-to-renew email message, select one or more entitlements and click **Request**.



Tip • You can elect to receive email messages about your expiring entitlements as well. To do so, in your user profile, select the check box for **Expiring Entitlements Email** notifications under the **Email Subscriptions** heading.

Requesting Renewal for Expiring Entitlements

The **Request** button on the **Expiring Entitlements** page sends an email message to the producer who provided the entitlement and also sends a copy of the same message to the end user who clicked **Request**. (The End-User Portal shows a notice to indicate that the email message has been sent, but there is no opportunity for an end-user to customize the message content.)



Important • The **Request** button is for communication purposes only. On receiving the intent-to-renew message, your producer can then follow up and begin the process of creating renewal entitlements or renewing the expiring entitlements directly.



Tip • If renewal entitlements already exist for an expiring entitlement, it may be unnecessary to formally request a renewal. Follow the instructions in [Upgrading, Upselling or Renewing a License](#) to renew the entitlement.

Filtering, Searching, and Sorting

You can alter what the **Expiring Entitlements** page displays by using the filter, search, and sort controls.

Filtering

The **Expiring Entitlements** page supports filtering to show expired entitlements, expiring entitlements, subscriptions, and maintenance lines. By default, filters for **Expiring**, **Subscription**, and **Maintenance** lines are active while the rendering of **Expired** entitlements is suppressed.

A filter is active when its check box is selected; the number in the filter icon's red bubble indicates how many filters are active. Because all entitlements shown on the **Expiring Entitlements** page are either expiring or expired, you must include at least one of those filters: **Expiring** or **Expired** (or both).

Searching

The **Expiring Entitlements** page supports searches on **Products**, **Activation IDs**, **Account IDs**, and **Account Names**. You can use the search controls to show expiring entitlements that are related to a specified product or that belong to a specified account, for example.



Important ▪ When searching on the **Expiring Entitlements** page, you must use an asterisk (*) to perform a wildcard search. The asterisk character stands in for one or more characters of any type. Searches that do not include wildcard characters are literal searches; the End-User Portal only returns entitlements that match precisely to the search criteria you enter.

Sorting

Some columns on the **Expiring Entitlements** page can be used to sort the list of entitlements on the page. On the **Expiring Entitlements** page, you can sort the entitlement list by the following columns:

- **Days Remaining**
- **Expiration**
- **Type**
- **Account Name**

To sort on a column, click its column name.

Notice, when expired entitlements appear, their Days Remaining values are expressed as negative numbers. These values indicate the number of days an entitlement is beyond its expiration date.

Exporting Expiring Entitlements

You can export entitlements, in CSV format, from the **Expiring Entitlements** page.



Task

To export expiring entitlements:

1. On the **Expiring Entitlements** page, select the lines you want to export.
 - Select the check boxes for the lines to include in the export.
 - Select the check box in the table heading to select all lines on the current page. Note that the number of lines or rows per page is something producers can configure. Hence the number of lines may vary for end users. Default: 20 lines.



Tip ▪ If no lines are selected, the End-User Portal exports all the lines that match the current filter and search criteria—up to 1000 lines.

2. Click the **Export** button .

The End-User Portal creates a CSV file (ExpiringEntitlements.csv, by default) that includes all selected lines and serves the file for download. (The exact user experience, here, depends upon the browser you are using.)

Exporting Entitlements

You can export entitlements, in CSV format, from the **List Entitlements** page (or bulk entitlements from the **Bulk Entitlements** page).



Task

To export entitlements:

1. Click **Activation & Entitlements > List Entitlements** (or **Activation & Entitlements > Bulk Entitlements**).
2. On the **List Entitlements** page (or **Bulk Entitlements** page), select the entitlement(s) you want to export.
3. Click **Export > Export selected items** or **Export > Export all Items**.
4. When you are prompted to do so, save the .csv file that lists the entitlements you exported.

Managing Licenses

The **License Support** menu allows you to perform additional license lifecycle processes for license certificates,

Lifecycle Process	Description
Returning a License	A license is returned to allow it to be fulfilled again at a later time. The number of returns against a fulfillment can be limited by a producer's return policy.
Repairing a License	A certificate license is repaired to change license parameters other than a host ID. The number of repairs against a fulfillment can be limited by a producer's repair policy.
Rehosting a License	A license is rehosted to change one or more host IDs. The number of rehosts against a fulfillment can be limited by a producer's rehost policy.
Upgrading, Upselling or Renewing a License	Many licenses can be upgraded, upsold, or renewed: <ul style="list-style-type: none">• A license can be <i>upgraded</i> to a new version only if there is an upgrade entitlement line item in the entitlement.• A license can be <i>upsold</i> only if there is an upsell entitlement line item in the entitlement.• A license can be <i>renewed</i> only if there is a renew entitlement line item in the entitlement.
Consolidating Licenses	You can consolidate several licenses into a single file.

The **License Activation** page automatically displays your fulfillment records for custom and certificate-based licenses. From this page, you can also [view fulfillment records](#) and [print fulfillment records](#).

It is also possible to perform manual returns and repairs, host management, and other advanced support operations. For instructions, see the following topics:

- [Manual Return](#)

- [Manual Repair](#)
- [Manage Hosts](#)
- [Advanced Support Operations](#)

Viewing Fulfillment Records (Licenses)

[Fulfillment records](#) are displayed with the following information:

- **Type:** This column displays symbols for certificate-based, trusted storage-based, or custom licenses. Certificate and custom licenses can be managed from the FlexNet End-User Portal.
- **Fulfillment ID** (generated for each fulfillment against an [entitlement line item](#))
- [Activation ID](#) of the entitlement line item
- **Product** name, of the product, suite, or maintenance
- **Version** number of the orderable
- **Server Id:** This is the host ID that appears in the license's SERVER lines.
- **Node Id:** This is the host ID that appears in the license's FEATURE lines.
- **Count:** fulfill amount
- **Support Type:** This field tracks whether the original fulfillment (MASTER) has been rehosted (REHOST) or repaired (REPAIR). Partially returned fulfillments (RETURN) and obsolete fulfillments also appear on this page.
- **Fulfill Date:** The date that the license was fulfilled or made available for the customer to use.
- **Expiration Date:** The date that the license expires.

To print a fulfillment record and its associated license, check one or more fulfillment records and click the **Print** button.

What is a Fulfillment?

A fulfillment is a transaction against an entitlement in which some portion (of the licenses) of an entitlement is assigned to a specific license server system or to a specific application's machine.

A fulfillment record is said to contain license rights for a specific application.

Returning a License

To return a license, perform the following steps.



Task

To return a license in order to regenerate it at a later time:

1. Click **License Support > List Licenses**.
2. **Search** for a fulfillment for which a license is to be returned. Search by **Activation ID**, **Product**, **Sold To**, **Hostid**, or **Fulfill ID**.
3. Check exactly one fulfillment ID and click **Action > Return**.
4. Enter a **Ship to Email** and/or a **Ship to Mail** address, if applicable.
5. The **Return Count** shows the entire fulfill count of the fulfillment. If you want to return only part of this count, specify that amount.
6. The **Return Overdraft Count** shows the entire overdraft count of the fulfillment you want to return. If you want to return only part of the original overdraft count, specify that amount.
7. Verify that the return is valid. The license won't actually be returned until the **Return** button is clicked later in the process.
8. Click the **Return** button to return the specified fulfillment.

The new fulfillment will be displayed as MASTER and the original fulfillment's support type will be called RETURN.



Note - For more information, see [What is a License Return?](#)

What is a License Return?

A license return transfers license rights back to an entitlement, generally in order to allow a different license to be created. The replacement license may be initiated by a FlexNet Operations user to make a correction to a license, or it may be initiated by a customer who wants to move license rights from one machine to another. The number of allowed license returns per unit time per fulfillment can be governed by a producer policy.

Repairing a License

To repair a license, perform the following steps.



Task

To repair a license because you want to change a license parameter other than a host ID:

1. Click **License Support > List Licenses**.
2. **Search** for a fulfillment to be repaired. Search by **Activation ID**, **Product**, **Sold To**, **Hostid**, or **Fulfill ID**.
3. Check exactly one fulfillment ID and click **Action > Repair**.
4. Verify that you want to repair the license. The license won't actually be repaired until the **Repair** button is clicked later in the process.
5. Enter a **Ship to Email** and/or a **Ship to Mail** address, if applicable.

6. Replace the original attribute value with the one to be used for the new license. Host ID values cannot be changed with a repair. The entire count of the fulfillment is repaired.
7. To check that the parameter values can be used to generate a valid license before actually generating a license, click the **Verify** button. To generate a license, click the **Repair** button.
8. After a license is generated, the license text can be saved to a file on disk by clicking the **Save To File** button or it can be [sent as an email attachment](#) by clicking the **Email** button.

The new fulfillment will be displayed as MASTER and the original fulfillment's support type will be called REPAIR.



Note - For more information, see [What is a License Repair?](#)

What is a License Repair?

The meaning of a license repair is different for trusted storage-based and certificate-based licenses. For a certificate-based license, a repair is a customer-initiated change to a license parameter other than a host ID. A repair initiates a license return, then generates a modified license.

The number of allowed license repairs per unit time per fulfillment can be governed by a producer policy.

Rehosting a License

To rehost a license, perform the following steps.



Task

To rehost a license because a customer wants to change a host ID:

1. Click **License Support > List Licenses**.
2. [Search](#) for a fulfillment to be rehosted. Search by **Activation ID**, **Product**, **Sold To**, **Hostid**, or **Fulfill ID**.
3. Check exactly one fulfillment ID and click **Action > Rehost**.
4. Verify that you want to rehost the license. The license won't actually be rehosted until the **Rehost** button is clicked later in the process.
5. Enter a **Ship to Email** and/or a **Ship to Mail** address, if applicable.
6. Replace the original host ID with the one to be used for the new license. No other license model attributes can be changed.
7. The **Rehost Count** shows the entire fulfill count of the fulfillment. If you want to rehost only part of the original fulfill count, specify that amount.
8. The **Rehost Overdraft Count** shows the entire overdraft count of the fulfillment. If you want to rehost only part of the original overdraft count, specify that amount.
9. To check that the parameter values can be used to generate a valid license before actually generating a license, click the **Verify** button. To generate a rehosted license certificate, click the **Rehost** button.

10. After a license is generated, the license text is displayed. The license text can be saved to a file on disk by clicking the **Save To File** button or it can be [sent as an email attachment](#) by clicking the **Email** button.

The new fulfillment will be displayed as MASTER and the original fulfillment's support type will be called REHOST.



Note • For more information, see [What is a License Rehost?](#)

What is a License Rehost?

For a certificate-based license, a rehost is a customer-initiated change to a host ID in a license. A rehost initiates a license return, then generates a modified license. The number of allowed license rehosts per unit time per fulfillment can be governed by a producer policy.

Upgrading, Upselling or Renewing a License

To upgrade a license through End-User Portal, the producer must have created and deployed the upgrade entitlement line item through FlexNet Operations. This process will generate a new license.



Task **To upgrade, upsell, or renew a license:**

1. Click **License Support > List Licenses**.
2. [Search](#) for a fulfillment to be rehosted. Search by **Activation ID**, **Product**, **Sold To**, **Hostid**, or **Fulfill ID**.
3. Check exactly one fulfillment ID and click either
 - **Action > Upgrade**
 - **Action > Upsell**
 - **Action > Renew**
4. If there are multiple entitlement line items in the Entitlement that each specify products you can upgrade to, you will be given a choice of which product you want to upgrade to. Select one.
5. Define the following values (these fields are displayed for the Upgrade, Upsell, and Renew processes).

Table 3-1 • Upgrade/Upsell/Renew Fields

Field	Description
Start Date	The start date for the new license. To specify a start date, click the Calendar button next to the Start Date field and click a date. This will not appear if the Start Date was define when the entitlement line item was created.

Table 3-1 • Upgrade/Upsell/Renew Fields

Field	Description
Ship to Email	This field defines the email address where the license for this entitlement line item should be sent. Click the Search button to select an email address for one of the contacts in the sold-to account. Additional email addresses may be entered in a comma-separated list that contains no spaces, or may be specified later when a license certificate is sent by email.
Ship to Mail	Enter the mailing address where the license should be sent. It may be the mailing address of one of the contacts in the account.

6. Under the **License Model Attributes** section, enter the values for any producer-defined attributes. These are custom attributes that the software producer might have defined.
7. Click either
 - **Verify** button to verify that the license is valid.
 - **Generate [Upgrade/Upsell/Renew] License** button to create the Upgrade License. See [Viewing a License Summary](#), for information about the next display.



Important • *FlexNet Operations does not evaluate the count of available copies when an upgrade is created. Therefore it is possible to create an upgrade count that exceeds the number of available copies; however, the count is evaluated at fulfillment time. On fulfillment, upgrades that exceed the available count are rejected.*

What is an Upgrade?

An upgrade occurs when a customer replaces an older version of a product with a newer version, such as moving from MyProgram Version 4.5 to MyProgram Version 5.0.

What is an Upsell?

An upsell occurs when a customer replaces a product with another product that provides a superset of the original product's functionality, such as moving from the MyProgram Standard Edition to the MyProgram Professional Edition.

What is a Renew?

A renewal extends the expiration date of a product's original entitlement to a date in the future. It is not necessary to define a relationship for a renew operation because the product involved does not change.

Viewing a License Summary

After a license is generated, the license summary is displayed. The license text can be

- saved to a file on disk by clicking the **Save To File** button
- sent as an email attachment by clicking the **Email** button

- printed by clicking the **Print** button

Consolidating Licenses

License consolidation, or the generation of a single license file for several certificate-based or custom licenses, can be done during batch activation, or post-activation, from the **Manage Licenses** page. Only FlexNet certificate-based licenses, or custom licenses belonging to the same customer account can be consolidated.

For more information, see [What is License Consolidation?](#)



Task

To consolidate a license:

1. Click **License Support > List Licenses**.
2. Check the boxes next to the fulfillments you would like to consolidate. Ensure that these records meet the consolidation criteria.
3. Click **Action > Consolidate**. One file is generated for each group of floating or nodelocked licenses on each server.
4. The consolidated license summary will be displayed in the **License Summary Screen**.
5. Click the **Complete** button.

Consolidated Licenses Page

The **Consolidated Licenses** lists all consolidated license files. The files are listed with the following information.

Table 3-2 • Consolidated License Information

Information	Description
Type	Displays if a consolidated license is active. (Trusted storage-based licenses cannot be consolidated.)
Consolidated license ID	Machine-generated unique identifier for each consolidated license file
Criteria	Mostly lists the host ID of the machine on which nodelocked or floating licenses have been consolidated.
Sold To	Name of the customer account that owns the consolidated licenses.
Consolidation Date	Date on which licenses were consolidated—not necessarily the same as activation date.

To complete this action, click **Complete**.

From this page you can also

- **View Shipment Records** for the consolidated file.

- **View Fulfillments** contained with the consolidated file.

Rehosting a Consolidated License

Rehosting a consolidated license reassigns it from one host ID to another.



Task

To rehost a consolidated license:

1. Click **License Support > Consolidated Licenses**.
2. On the **Consolidated Licenses** page, search for the fulfillment for the license by, for example, **Consolidated license ID** or **Criteria** (usually, a server host ID).
3. Select the box next to the fulfillment ID you want to rehost.
4. Click **Action > Rehost**.
5. Select a new Host ID for the consolidated license. Alternatively, add a new host ID to rehost this license by creating a new host on the **Create License Host** page.
6. Click **Rehost**. The license is assigned to the new Host ID.

Manual Return

Trusted returns are normally done programmatically as transactions between a client or server activation utility and the FlexNet Operations server. The activation utility generates a request that is submitted programmatically and the FlexNet Operations server generates a response that is used to complete the return.

However, when there is no internet connection, a return request can also be generated and written to a file by a FlexNet Licensing activation utility running on the machine from which the license will be returned.

- The file containing the request is sent to the producer and loaded into FlexNet Operations to generate a response.
- The response is saved to a file. The file is sent to the customer and is used by the FlexNet Licensing activation utility to process the response and return the license.



Task

To generate a response to a return request submitted in a file:

1. Click **License Support > Manual Return**.
2. Browse to the XML file that contains the return request.
3. Click the **Submit** button to generate and view the return response.
4. Verify the Activation ID, Product, Version, Fulfillment ID, and Sold To.
5. Click the **Save To File** button to save this response to a file. The default file name is responseXML.xml.
6. Send the file to the customer with instructions for using the activation utility to process the response and return the license.

7. The end user should apply the response to the client machine.

Manual Repair

Trusted repairs are normally done programmatically as transactions between a client or server activation utility and the FlexNet Operations server. The activation utility generates a request that is submitted programmatically and the FlexNet Operations server generates a response that is used to complete the repair.

However, a repair request can also be generated and written to a file by a FlexNet Licensing activation utility running on the machine on which the license will be repaired.

- The file containing the request is sent to the producer and loaded into FlexNet Operations to generate a response.
- The response is saved to a file; the file is sent to the customer and is used by the FlexNet Licensing activation utility to process the response and repair the license.



Task

To generate a response to a repair request submitted in a file:

1. Click **License Support > Manual Repair**.
2. Browse to the XML file that contains the repair request.
3. Click the **Submit** button to generate and view the repair response.
4. Verify the Activation ID, Product, Version, Fulfillment ID, and Sold To.
5. Click the **Save To File** button to save this response to a file. The default file name is responseXML.xml.
6. Send the file to the customer with instructions for using the activation utility to process the response and repair the license.

Manage Hosts

The **Manage Hosts** page shows a list of hosts to which the portal user has access and provides buttons for viewing fulfillments, downloading licenses, and transferring hosts.

Transferring Hosts

Transfer Hosts allows you to transfer fulfillments from one or more hosts to a related account.



Note ▪ When a host is moved, entitlements that belong to devices assigned to that host are moved as well. The result of the move is to either create new entitlements for the target account or to pool the line items—incrementing the counts of the target account's existing (and matching) entitlements by the counts on the hosts' entitlements that were moved.



Task

To transfer hosts:

1. In the End-User Portal, click **License Support > Hosts**. On the **Manage Hosts** page you can select hosts to transfer.
2. On the **Manage Hosts** page, select the hosts you want to transfer and click **Transfer**. This button opens the **Transfer Hosts** page.
3. On the **Transfer Hosts** page, set the **Target Account**:
 - a. Click the **Search Account** button to open the **Select Account** page in a pop up window.
 - b. Select the customer account to which you want to move the selected hosts.
 - c. Click **OK**. This button closes the **Select Account** window and returns you to the **Transfer Hosts** page. Note that the Target Account is now set to the account you selected.
4. Next, choose a setting for **Pool Line Items**:
 - **Yes**—If matching entitlements exist in the target account, those entitlements are incremented by the counts in the hosts' entitlements. Otherwise, if no matching entitlements exist, new entitlements are created at the target account.
 - **No**—The End-User Portal creates new entitlements at the target account, even if matching entitlements already exist.
5. Click **Transfer**. The portal queues the transfer for processing.
6. Click **Complete**.



Note ▪ You can check the status of the host transfer job by its Job ID on the **Host/Device Transfer Jobs** page. To go to the **Host/Device Transfer Jobs** page, click **Manage Licenses > Host/Device Transfer Jobs** (listed under the **Manage Hosts** heading).

Advanced Support Operations

The Customer user can perform two operations that allow you to move groups of licenses from one server to others: redistributing licenses and transferring licenses.

Topic	Description
Batch Rehost	Describes how to rehost a group of products among various license servers. Batch rehosting is only possible for counted licenses and for users with the Portal Admin role.
Transferring Licenses	Explains how to transfer licenses from one host to another host. The use of the Transfer Licenses functionality of Advanced Operations is limited to users with the Portal Admin role.

Batch Rehost

A customer user can Batch Rehost for a group of products among various license servers to change the license count of products on different servers. For example, you could use Batch Rehost to change 20 licenses for Product 1 on Server A, to 10 licenses on Server A and 10 on Server B.

The Batch Rehost feature only works only counted licenses—that is, floating counted or nodelocked counted models.



Task

To redistribute licenses for a group of products using Batch Rehost:

1. Click **Licenses Support > Licenses**. The End-User Portal opens the **License Activation** page.
2. On the **License Activation** page, click **Action > Batch Rehost**. This opens the **Batch Rehost** page.
3. For **Account**, choose the account whose licenses you want to rehost, and click **Next**.
4. If desired, enter the common attributes you wish to assign to each of the redistributed licenses, and click **Next**.
5. Add new hosts as needed.
6. In **Final Count**, enter the number of copies to assign to each selected host. (The green arrow indicates the current host assignment. The green check mark indicates that the count has been changed.) Click **Next**.
7. Review the summary page for your redistribution. If needed, click **Back** to correct any incorrect entries. If correct, click **Generate**. The licenses are redistributed.

Transferring Licenses

When you *transfer* licenses, you move all licenses from one host to another. This is typically used when a host crashes and licenses on it need to be moved to a new machine.



Task

To transfer licenses from one account to another:

1. Click **Licenses Support > Licenses**. The End-User Portal opens the **License Activation** page.
2. On the **License Activation** page, click **Action > Transfer Licenses**. This opens the **Transfer Licenses** page.
3. In **Source Host**, select the host of the source licenses.
4. In **Target Host**, select the host that you will transfer licenses to.
5. Select whether or not you wish to consolidate the licenses into a single file.
6. Click **Next**.
7. On the summary page, review the details of your transfer. If needed, click **Back** to correct any incorrect entries. If correct, click **Transfer**. The licenses are transferred to the specified host.

Managing Devices

When configured to support devices, the End-User Portal includes a **Devices** menu. A device is a hardware component that has its features licensed using FlexNet Embedded. Examples of devices include high-end medical equipment, routers, and microchip ID scanners.

A device is identified by a device ID (typically, a serial number) and its type. Device types are:

- **Standalone**—FlexNet Embedded device that connects to FlexNet Operations, which manages device ownership, state, features, and more.
- **Server**—FlexNet Embedded server that communicates with FlexNet Operations to manage device ownership, state, and features for a collection of served devices. (When a FlexNet Embedded server is used, its served devices connect with the server rather than connecting directly to FlexNet Operations.)
- **Served**—FlexNet Embedded device that is managed via a FlexNet Embedded server. In FlexNet Operations, served devices are essentially read-only entities.



Note ▪ One-time activation standalone devices are not managed by the local license server, and therefore are not shown on the FlexNet Operations user interface.

This section includes a number of topics about tasks available to end users, depending on the roles assigned to their accounts and the configuration of the End-User Portal. Not all features are available to all users.

Topic	Description
About Device Ownership	Discusses how device ownership is set, the function of the account check and how users' related accounts and their entitlements affect the devices they can see, and the entitlements on the device that they control.
About Device Attributes	Lists the attributes of standalone and served devices. These attributes are used in searching and managing these types of devices.
About Server Attributes	Lists the attributes of servers. These attributes are used in searching and managing servers.

Topic	Description
About Overriding the Expiration Date of an Entitlement	Discusses the conditions under which a license expiration date can be overridden on a device, and the limitations of doing so.
About the Device–Device User Association	Describes what a device user is, the system configuration options, and the user permissions required to view and edit device users.
Listing Devices	Explains how to list existing devices.
Searching for Devices	Shows how to search for a device (or devices).
Creating a Device	Explains how to create a FlexNet Embedded device.
Working with Devices	<p>Describes how to manage existing devices. Subtopics include</p> <ul style="list-style-type: none"> ● Filtering the Devices List ● Previewing Licenses on a Device ● Viewing Device Virtualization Information ● Viewing a Server’s Served Devices ● Viewing Device History ● Viewing Standalone Device Updates ● Viewing Standalone Device Downloads ● Downloading Download Packages for a Device ● Associating a Device with a Device User ● Mapping Entitlements to a Device ● Mapping Entitlements to a Device by Activation ID ● Removing Licenses from a Device ● Returning a Device ● Moving a Device ● Setting a Password for a Cloud License Server
Offline Device Management	<p>Describes manual offline device management activities.</p> <ul style="list-style-type: none"> ● Uploading a Capability Request ● Uploading Synchronization History
Downloading a Capability Response	Describes how to download a capability response.
Claiming a Device and Activating a License	Explains how to claim a device or server and map one or more activation IDs to it.

About Device Ownership

In the End-User Portal, the device owner always retains full control of the device and the licenses on it. But for users in other accounts, the visibility and control of devices depends upon multiple factors—mainly related to the end user’s account(s), the account(s) on entitlements, and the account that owns the device.

These factors are discussed in detail in the following subsections:

- [Ownership Account Check](#)
- [Skip Account Check](#)
- [Assignment of Ownership for Unowned Devices](#)
- [Device Visibility in the End-User Portal](#)



Note ▪ In all cases, users working with devices must have the appropriate permissions to interact with them. For example, users who do not have roles with the **Manage Devices** permission cannot make changes to FlexNet Embedded devices.

Ownership Account Check

By default, FlexNet Operations performs an account check when entitlements are mapped to a device. In the End-User Portal, the account check compares the user’s accounts, entitlement accounts, and device owner accounts when entitlements are mapped to a device. Specifically, in the End-User Portal,

- Users can map any entitlement owned by their accounts to any device they can see in the End-User Portal. (See [Device Visibility in the End-User Portal](#), below, to learn about which devices a user can see in the End-User Portal.)
- Users with roles that include the **View Child Devices** permission can also map entitlements owned by sub-accounts of their accounts.
- Users with roles that include the **Claim Device and Activate** permission can also map their entitlements to unowned devices if they can identify the device by its device ID.

Producers can optionally configure FlexNet Operations to skip the account check. This configuration permits mapping of entitlements from unrelated accounts on the same device. Therefore, the behavior of the End-User Portal during entitlement mapping operations depends on how FlexNet Operations is configured. See [Skip Account Check](#), next, to learn how entitlement mapping works when FlexNet Operations does not perform the account check.

Skip Account Check

Some producers configure FlexNet Operations to skip the account check ordinarily performed when an entitlement is mapped to a device. Because the account check is not performed, FlexNet Operations permits entitlements that belong to accounts unrelated to the device owner to be mapped.

Skipping the account check permits users to map entitlements to devices that are owned by unrelated accounts. In this configuration, End-User Portal users can perform all the operations for which they have permission when the account check is run. But they can also map any of their entitlements to any device as long as they know its device ID and the activation IDs of the entitlements. (Standard permission requirements apply.)

End users with entitlements on a device owned by an unrelated account can only manage their own entitlements (such as removing licenses or reducing quantities) on that device.

Channel partner users can only manage entitlements for which they are a distribution partner.



Important ▪ Channel partners cannot map entitlements to devices unless the system is configured to skip the account check.



Note ▪ In the End-User Portal, skipping the account check applies only to mapping methods for which the user is free to specify device IDs and activation IDs: capability requests, mapping by activation ID, and claiming and activating. It does not apply for methods in which the system pre-determines the list of available entitlements (based on account check rules), such as [Mapping Entitlements to a Device](#).

Assignment of Ownership for Unowned Devices

As new devices are created, the account that owns the device is determined by a number of different factors. Devices can be created in FlexNet Operations manually or programmatically.

In some cases, such as when a device is manually created in the End-User Portal, ownership is assigned when the device is created. In other cases, devices are created without an owner.

Unowned devices can be claimed by end users in the End-User Portal. The process of claiming and activating a device can also assign an owner to an unowned device. When an end user clicks **Devices > Claim and Activate**, the End-User Portal shows the **Claim and Activate** page. On this page, the user identifies the device—typically, by specifying its device ID—and then lists one or more activation IDs for licenses to activate on that device. In this process, for an unowned device, the account to which the first activation ID belongs becomes the owner of the device. (See [Claiming a Device and Activating a License](#) for instructions.)



Tip ▪ **Claim and Activate** only appears in the **Devices** menu of the End-User Portal for users with roles specifically granted the End-User Portal permissions **Claim Device and Activate** and **Generate Licenses**.

Device Visibility in the End-User Portal

A user's ability to see a device in the End-User Portal depends on the accounts he or she belongs to and the user's relationship (if any) with the account that owns the device. The visibility of devices to End-User Portal users also depends on whether or not one of the user's accounts (or sub-accounts thereof) has an entitlement mapped to the device.

Device Visibility Guidelines

The following organizational and entitlement factors determine which devices are visible to an end user:

- Devices that are owned by an account to which a user belongs are visible.
- Devices that are owned by a sub-account of the accounts to which a user belongs are also visible, if the user has a role with the **View Child Devices** permission.
- Devices with an entitlement that belongs to one of the user's accounts are visible.

- Devices with an entitlement that belongs to a sub-account of the user's accounts are also visible, if the user has a role with the **View Child Devices** permission. (This is true even if the device itself is not owned by any of the user's related accounts.)
- For channel partner users, devices with an entitlement for which the channel partner account is a distribution partner are visible.
- For channel partner users, devices with an entitlement for which one of the sub-accounts of the user's account is a distribution partner are also visible, if the user has a role with the **View Child Devices** permission.

Devices that are visible to an end user appear in search results for devices.

Restricted Information on the device's default view and View Server Pages

The end user can see these devices, but not all details about the device are shown in cases where none of the end user's related accounts is the device owner. In particular, while the activation IDs of licenses owned by an end user's accounts (or their sub-accounts) are shown, the activation IDs of unrelated accounts are masked—all but the last three characters of the activation ID are replaced with asterisks.

Similarly, channel partner users can see all the entitlements on a visible device, but the End-User Portal masks the activation IDs of entitlements for which the channel partner is not a distribution partner. And, for greater privacy among producers, distributors, resellers, and end customers, entitlements that belong to accounts other than the channel partner account or its sub-accounts do not show the account that owns the entitlement. In these cases, instead of the owner account, they see Name Withheld. (For more information about channel partner accounts, see [About Accounts](#).)

About Device Attributes



The following attributes are used when searching for, claiming, and managing standalone and served devices. For server attributes, see [About Server Attributes](#).

Attribute	Description
Device ID	The device's unique identity.
Device Name	The device's short, alternate name.

Attribute	Description
Device Host ID Type	<p>One of several possible device host ID types. This is the complete list; only types that are permitted are displayed.</p> <ul style="list-style-type: none"> • Ethernet • Internet • Internet IPV6 • FlexID 9 • FlexID 10 • String • User • VM UUID • Tolerant • Extended • Publisher defined
Last Modified	The last date that the device was changed, or had entitlements mapped or licenses removed. For served devices, the date is updated when a sync record is processed.
Model	The device's model.
Notes	Additional information about the device.
Account	The current holder of the device (typically, a customer account).
Series	The device's series.
Site name	The device's site name.
Status	The device's status. A standalone device's status can be ACTIVE, RETURNED, or OBSOLETE. A served device's status can be NORMAL, RETURNED, DROPPED, or EXPIRED.
Type	CLIENT for standalone devices, or SERVED_CLIENT for served devices.
User	The device user associated with the device.
Updates	<p>The update activity is for a device. In the Devices grid view, the Updates column displays the Update Info with a link for that device, or No updates. Hovering over the Updates link triggers a pop-up that contains the update name, update ID, the status of the update and the date of the last activity.</p>

About Server Attributes

The following attributes are used when searching for, creating, and managing servers.

Attribute	Description
Backup Server ID	The ID of the server's backup server.
Device ID	<p>The server's unique identity.</p>  <p>Note ▪ Not shown when servers of Cloud deployment type are created. In this case, it is automatically generated by FlexNet Operations.</p>
Server Host ID Type	<p>One of several possible device host ID types. This is the complete list; only types that are permitted are displayed.</p> <ul style="list-style-type: none"> • Ethernet • Internet • Internet IPV6 • FlexID 9 • FlexID 10 • String • User • VM UUID • Tolerant • Extended • Publisher defined  <p>Note ▪ Not shown for servers of Cloud deployment type. In this case, it is set by server host type.</p>
Device Name	The server's short, alternate name.
Identity	The server's publisher identity. When creating a server, you can choose from existing identities or keep the default setting: As Defined by Server Host ID Type .
Last Modified	The last date that the server was changed, or had entitlements mapped or licenses removed.
Notes	Additional information about the server.
Account	The name of the account specified in Account ID .

Attribute	Description
Server Deployment	The server's deployment type. Choose Local or Cloud . (Cloud is not an option for all users.)
Server Status	The server's status. A server's status can be ACTIVE, RETURNED, or OBSOLETE.
Site Name	Site Name is optional for local license servers but required for servers that use the Cloud Licensing Service deployment type. Site Name is a label used to distinguish between different servers when a customer account is given multiple Cloud Licensing Service servers.
Type	SERVER for license servers.
User	The device user associated with the server.

About Overriding the Expiration Date of an Entitlement

FlexNet Operations enables End-User Portal users to override an entitlement's configured expiration date with an earlier, user-specified expiration date when the entitlement is mapped to a device as an additional product. This feature allows finer control of license expiration, and makes licenses available for other hosts in a more planned and automated way.

When the ability to override license expiration dates is enabled, the End-User Portal displays the **License expiration date** field—in which the user can enter a shorter-term expiration date—on its **Map Entitlements** page.

The user-specified expiration date must be later than the current date and earlier than the configured license expiration date. For example:

- If the license is configured to be a permanent license, the user can set the expiration to any date later than the current date.
- If the license is configured with an expiration date such as 31 December 2025, the user can set the expiration to any date later than the current date and before 31 December 2025.
- If the license is configured with a duration-based expiration and a "Use Each Activation Date" start, the start date (license generation date) is the current date.
- If the license is configured with a duration-based expiration and a "Use First Activation Date" start, the start date is the first license generation date. In other words, the current date is the start date if no licenses have been generated for the entitlement on that device yet. However, after licenses have been generated, the actual activation date is the start date.

A user-specified expiration date can be set for each entitlement (however, additional copies of an entitlement are assigned the same user-specified expiration date) and can be different for each host with the same entitlement. After it is set, the date is displayed in the **Expiration Date** column of the device's default view and **View Server** page.

Licenses with user-specified expiration dates are automatically removed from a host when that date has passed. An automated process removes licenses with a user-specified expiration date when they expire,

- regardless of other rules about license removal,
- once a day at 10 AM Coordinated Universal Time (UTC),
- and does not require confirmation from the host (in other words, the licenses are returned directly to the pool and are available for other hosts).

Limitations

A user-specified expiration date can be set only in the End-User Portal; it cannot be set in capability requests or web services.

Because of the risk for license abuse, the user-specified expiration date cannot be changed. If the wrong user-specified expiration date is entered, it can be changed using standard license removal and entitlement mapping procedures.

About the Device–Device User Association

A FlexNet Operations End-User Portal device can be associated with an end user or contact called the **Device User**. Associating a device with a device user allows an End-User Portal administrator to communicate with someone regarding the licenses on that device. For example, if the End-User Portal administrator needs a license for a new device but there are no licenses available, the administrator can search for all existing devices using that license and request that one of those device users return their license so it can be used on the new device.

With the proper combination of system configuration and user permission settings, a device user can be added, edited, or deleted via capability request, sync request, the End-User Portal, or Web Services. The same device user can be associated with multiple devices, but a device can only be associated with one device user. The behavior of this capability varies, depending on how the producer configures it.

User Permissions

An End-User Portal user with **Edit user on device** permission can edit the **User** field of a device.

When **Device User Option** is ON with validation, an End-User Portal user with **Manage User** permission can click the user name link—located below the **User** name—to display the **Edit User** page.

Listing Devices

Use the following instructions to list existing devices on the End-User Portal.



Task

To list devices:

1. Click **Devices > Devices**. The **Devices** page opens.
2. On the **Devices** page, you can filter the device list by device type and status.
3. To view a particular device, click its **Name**. On the device's default view (or the **View Server** or **View Served Device** page), you can perform device editing and support activities such as viewing device history or moving a device.


Searching for Devices

Existing devices can be easily located by performing a search based on an attribute of the device you want to see. You can perform a simple search on a single attribute, or an advanced search on multiple attributes. For both searches, you can use the * wild card to match zero or more characters in the text string.



Task

To search for a device:

1. Click **Devices > Devices**. The **Devices** page opens.
2. Optionally, to reduce the size of your devices list, you can filter it by device type and activation status before you search:
 - a. On the **Devices** page, hover the cursor over the  filter icon to display the filter selection list.
 - b. On the selection list, select the device **Type** (or types) and **Status** you want to view.
 - c. Click **Apply** to filter the devices according to your selection(s). The number in the red bubble indicates how many filters are active.
3. Perform a simple search or an advanced search for a device:

Simple Search

- a. On the **Devices** page, click the drop-down list next to the filter icon and select the search criterion.
- b. Type the search string in the text field next to the drop-down list.
- c. Click **Search**.

Advanced Search

- a. On the **Devices** page, click the + icon (next to the **Search** button) to open the **Advanced Search** window.
- b. Type search criteria in the attribute text fields.
- c. Click **Search**.

A list of the devices that match your search criteria is shown on the **Devices** page.



Note ▪ FlexNet Operations tenants configured with a **Device user option** setting other than Off, listed below, can enter these **User** search criteria with wild cards:

- On with no validation – free-form string
- On with validation – email address



Note ▪ Searches that include **Account** as a search criterion may return devices that are not owned by an account that matches the search criteria. When **Account** is part of the search criteria, search results include

- Devices owned by an account that matches the search criteria
- Devices with licenses that belong to an account that matches the search criteria



Tip ▪ To view a particular device, click its device **Name**. On the device's default view (or the **View Server** or **View Served Device** page), you can perform device editing and support activities such as viewing device history or moving a device.

Creating a Device

You can create a new standalone device, local license server, or cloud license server. After it is created, a server can submit its own capability requests to FlexNet Operations and serve its own licenses to served devices.



Note ▪ You are permitted to create a server and a nodelocked device with the same **Device ID** and **ID Type**.



Tip ▪ Producers who use FlexNet Cloud Licensing Service can support two **Deployment** options: one to create a server as **Local** (default) and another to create a server as **Cloud**.



Task

To create a standalone device:

1. Click **Devices > Create Device**. The **Device | New Device** page opens.
2. Type a device **Name**.
3. Optionally, choose a **Model** from the drop-down list.
4. Choose an **ID Type** from the drop-down list. In the field below it, type the **ID** for the device you want to create.
5. Optionally, choose an **Account** from the drop-down list. The account identifies the customer account to which the device belongs.
6. Optionally, type a **Site name**.
7. Click **Save**. The new standalone device is created and its default view opens.



Task

To create a local license server:

1. Click **Devices > Create Device**. The **Device | New Device** page opens.
2. Type a device **Name**.
3. Select the **Runs license server?** check box. For **Deployment**, choose **Local** server.
4. Optionally, choose a server **Model** from the drop-down list.
5. Choose an **ID Type** from the drop-down list. In the field below it, type the **ID** for the server you want to create.
6. Optionally, specify a **Backup server ID**.
7. Optionally, choose an **Account** from the drop-down list. The account identifies the customer or partner account of the server.

8. Optionally, type a **Site Name**.
9. Click **Save**. The new local license server is created and its **View Server** page opens.



Task

To create a Cloud Licensing Service license server:

1. Click **Devices > Create Device**. The **Device | New Device** page opens.
2. Type a device **Name**.
3. Select the **Runs license server?** check box. For **Deployment**, choose **Cloud** server.
4. Optionally, choose a server **Model** from the drop-down list.
5. Optionally, choose an **Account** from the drop-down list. The account identifies the customer or partner account of the server.
6. Optionally, type a **Site Name**.
7. Click **Save**. The new cloud license server is created and its **View Server** page opens.

Working with Devices

The following topics address device management activities.

Topic	Description
Filtering the Devices List	Explains how to filter the devices list by device type and activation status.
Previewing Licenses on a Device	Explains how to quickly view which licenses are on a device.
Viewing Device Virtualization Information	Shows how to see virtualization information for a device.
Viewing a Server's Served Devices	Explains how to view the devices served by a license server.
Viewing Device History	Shows how to see a history of transactions for a device.
Viewing Standalone Device Updates	Explains how to view updates for a standalone device.
Viewing Standalone Device Downloads	Explains how to view downloads for a standalone device.
Downloading Download Packages for a Device	Describes how to download selected download packages or individual files contained in a download package.
Associating a Device with a Device User	Explains how to associate a device with a device user.
Mapping Entitlements to a Device	Explains how to map entitlements to a device.

Topic	Description
Mapping Entitlements to a Device by Activation ID	Shows how to add capabilities to a device by manually mapping activation IDs.
Removing Licenses from a Device	Explains how to remove licenses from a device.
Returning a Device	Describes how to return a device.
Moving a Device	Describes how to change the account of a device.
Setting a Password for a Cloud License Server	Explains how to set a cloud license server's password for an administrative user.


Filtering the Devices List

To quickly reduce the size of the devices list, filter it by device type and activation status.



Task

To filter the Devices list:

1. On the **Devices** page, hover the cursor over the  filter icon to display the filter selection list.
2. On the selection list, select the device **Type** (or types) and **Status** you want to view.
3. Click **Apply** to filter the devices according to your selection(s). The number in the red bubble indicates how many filters are active.
4. You can also search a filtered devices list (see [Searching for Devices](#)).

Previewing Licenses on a Device

In the devices list, the **Licenses** column enables you to preview which licenses are on a device and decide whether to view that device in more detail. A preview pane shows up to ten of the licenses on the device, and includes a link to view the rest of the licenses if there are more than ten. Served devices have features only; their licenses reside on a server, so no license information is available for them. If there are no licenses on a device, that is also indicated.

- On the **Devices** page, hover the cursor over the **License info** link in the **Licenses** column of the device whose licenses you want to preview.

Viewing Device Virtualization Information

You can view the virtualization details of a single device from its default view. The **View Virtualization Info** page shows device details (device **ID** and device **Name**) and virtualization details, if any.



Task **To view the virtualization information for a device**

From the default view of a device, click **View** > **View Virtualization Info**.

The **View Virtualization Info** page opens.

Viewing a Server's Served Devices

You can view the devices served by a license server from the server's **View Server** page.



Task **To view the served devices of a license server**

On the **View Server** page, click **View** > **View Served Devices**.

The **Devices** page opens.

Viewing Device History

You can view a device's history from its default view (or **View Server** page). The **Device History** (or **Server History**) page lists all the events from device creation, to ownership changes, to activation requests.



Task **To view the history of a device**

On the device's default view (or the **View Server** page), click **View** > **View History**.

The **Device History** (or **Server History**) page opens.

Viewing Standalone Device Updates


When an update has been generated for a standalone device, you can view it from the Updates tab.



Version ▪ This tab is only visible if your producer has purchased the Updates and Insights module.



Task **To view updates for a standalone device:**

1. From the default view of a standalone device, click the **Updates** tab. If the Updates tab is not visible, select **View** > **View this Device**.
2. On the **Updates** tab, hover the cursor over the  filter icon to display the filter selection list. By default, the **Updates** tab is set to display all updates.
3. You can sort the update list by any column in ascending or descending order.

4. Click the link in the **Status** column to see additional information about the update's status. Note that this information is available only if the device provided a status reason.
5. You can also search a filtered update list. Use the drop-down menu to narrow your search to either **Update ID** or **Update Name**.

The updates for a device are displayed in a grid with the **Update name**, **Update ID**, **Status** and date/time of **Last activity**. You can sort the list by any of the grid columns.

Viewing Standalone Device Downloads

Any downloads that are available for a standalone device are displayed in the **Downloads** tab. For more information about download packages, see [About Downloads](#) in [Managing Downloads](#).



Version - The **Downloads** tab is only visible if your producer has purchased the Software Delivery module and if they have enabled its display.




Task

To view downloads for a standalone device:

1. From the default view of a standalone device, click the **Downloads** tab.
2. If you are registered under more than one account, use the accounts dropdown above the grid to select the account for which you want to view download packages. You can only view download packages and files to which your account is entitled to.
3. You can perform a simple search to identify the download package you want to find:
 - a. On the **Downloads** tab, click the search drop-down list and select the search criterion.
 - b. Type the search string in the text field next to the drop-down list.
 - c. Click **Search**.
4. Click the link in the **Download package ID** column to see the files contained in the download package.



Important - You can view only files of validated packages. For information about validation, see [Validating Download Packages](#) in [Downloading Download Packages for a Device](#).

The downloads for a standalone device are displayed in a grid. You can sort the list by any of the grid columns that contains the  icon.

You can also download selected download packages or files. For more information, see [Downloading Download Packages for a Device](#).

Downloading Download Packages for a Device

The **Downloads** tab on the device's default view enables you to download selected download packages or individual files contained in a download package.

By default, the **Downloads** tab lists all the device's download packages. However, you can use the search to locate download packages from which you want to download files (see [Viewing Standalone Device Downloads](#)).



Version ▪ The **Downloads** tab is only visible if your producer has purchased the Software Delivery module and if they have enabled its display. In addition, you can only download files or download packages for a device if this capability has been enabled by your producer.



Task

To download a download package or individual files for a standalone device:

1. From the default view of a standalone device, click the **Downloads** tab.
2. If you are registered under more than one account, use the accounts dropdown above the grid to select the account for which you want to download items. You can only download packages and files to which your account is entitled.
3. Do one of the following:
 - a. To download a download package, select one or more download packages and click **Download**.
 - b. To download individual files, click the relevant download package ID. In the **Files** window that opens, select the file or files that you want to download and click **Download**.



Important ▪ To complete your download, the Download Manager must be installed on your system. If it is not installed, follow the instructions in the Download Manager window to download and run the installer, then accept the license agreement. If the Download Manager is already installed but a newer version is available, you are prompted to upgrade the Download Manager. Note that you need to restart your browser after installing the upgrade.



Important ▪ Only validated packages can be downloaded. For information about validation, see [Validating Download Packages](#).


The Download Manager shows the download progress in a new window. Close the Download Manager window when your downloads are complete.

Validating Download Packages

Before a download, packages are validated. You can only download validated packages. The validation checks the following:

- whether you are entitled to the download package or file
- whether you have accepted the license agreement, if applicable
- whether any export compliance restrictions apply

If you try to download several download packages at once, and one of the download packages fails validation, the entire download fails. After the validation, icons next to the download package ID indicate the result of the validation.

If the validation fails, perform the step indicated by the Help icon  next to the download package ID to validate the download package. This might be, for example, that you need to accept the license agreement. In this case, click the download package ID to open a window where you can read and accept the license agreement.

Associating a Device with a Device User

When the **Device User Option** is enabled, the **User** field is visible on the device's default view (or the **View Served Device** or **View Server** page) and a device can be associated with an end user or contact called the device user. Associating a device with a device user allows an End-User Portal administrator to communicate with someone regarding licenses on the device.

You can associate a device with a device user from the device's default view (or the **View Served Device** or **View Server** page).



Task

To associate a device with a device user:

When the **Device user option** is enabled (not set to Off), you can enter the device user in one of these two formats:

1. **Device user option** is set to On with no validation – free-form string
 - a. In the **User** field, type the device user information.
 - b. Click the **Save** icon next to the **User** field to save the change.
 - c. To remove an associated user, click the **User** field's **Remove (X)** icon.
2. **Device user option** is set to On with validation – an existing user's email address
 - a. In the **User** field, click the search icon to display a list of available users.
 - b. Select one user, then click **Save** to save the change.
 - c. To remove an associated user, click the **User** field's **Remove (X)** icon.

Mapping Entitlements to a Device

Devices often include pre-installed licenses, but also permit the addition of new features or more capacity via additional entitlements.

When the current account of a device is entitled to additional capabilities, you can manually map those entitlements to it.

You can map entitlements from the device's default view (or the **View Server**) page.



Note - Channel partners are not permitted to map entitlements to a device, even if the device is owned by the channel partner's account. For channel partner users who have End-User Portal Generate License permission, **Map Entitlements** appears on the device's **Action** menu, but it is disabled. For channel partner users who do not have End-User Portal Generate License permission, **Map Entitlements** does not appear on the device's **Action** menu.

Channel partners are permitted to map entitlements to a device by activation ID. See [Mapping Entitlements to a Device by Activation ID](#).



Task

To map an entitlement:

1. On a device's default view (or the **View Server** page), click **Action > Map Entitlements**. The **Map Entitlements** page opens. On this page, the table lists entitlements that can be mapped to the current device.



Tip ▪ When an entitlement has been upgraded, upsold, or renewed, the **Map Entitlements** page shows only the most recent entitlement in its lifecycle chain. Earlier entitlements are grouped under the most recent entitlement but initially hidden. These entitlement groups have a **Show Upgrades** button to reveal earlier entitlements in the list.

- Click **Show Upgrades** to reveal the earlier entitlements.
- Click **Hide Upgrades** to collapse this expanded list.

2. In the table, type values into **Qty to add** for the entitlements you want to map.
3. (Optional) If the capability is enabled, you can override an entitlement's configured **Expiration**, as shown in the table, with a shorter-term expiration. (Refer to [About Overriding the Expiration Date of an Entitlement](#) for details.)

To override an entitlement's expiration,

- a. Click the pencil icon next to its expiration. The End-User Portal shows a calendar control.
- b. On the calendar control, select the short-term expiration.

After the change is saved, the new expiration appears in the **Licenses** table on the device's default view (or the **View Server** page), and is denoted by an asterisk in the table on the device's **Map Entitlements** page.

4. Click **Save**.

The entitlements are mapped to the current device and its default view (or the **View Server** page) is shown.

Mapping Entitlements to a Device by Activation ID

When you have one or more known activation IDs, you can add new capabilities to your device by activation ID rather than searching for entitlements on the **Map Entitlements** page.

First locate the device to which you want to map new activation IDs. (See [Searching for Devices](#) for instructions.) Then you can map entitlements by activation ID from its default view (or the **View Server** page).

On **Map by Activation ID** page, you can type the activation IDs to map to the current device.



Task

To map an entitlement by activation ID:

1. On the device's default view (or the **View Server** page), click **Action > Map by Activation ID**. The **Map by Activation IDs** page opens.
2. In **Activation IDs**, type one or more activation IDs (one activation ID per line) to map to the current device.

3. Click **Validate**. The End-User Portal evaluates the activation IDs you provided and shows whether they can be mapped to the current device.
 - If all activation IDs provided can be mapped to the device, proceed to [Step 4](#).
 - If one or more activation IDs cannot be mapped to the device, the End-User Portal highlights the activation IDs that did not pass validation and allows you to either remove them from the list or cancel the mapping operation.
 - To continue without the activation IDs that failed validation, first remove the failed activation IDs and then click **Re-validate**. When the re-validation passes successfully, proceed to [Step 4](#).
 - To cancel the mapping, click **Cancel**.
4. After the activation IDs have been validated, type values into **Qty to add** for the capabilities you want to map.
5. Click **Save**.

The activation IDs are mapped to the current device and its default view (or the **View Server** page) is shown.

Removing Licenses from a Device

Licenses already mapped to a device can be manually removed. You can remove licenses from a device's default view (**View Server** page).



Task

To remove a license:

1. On the device's default view (or the **View Server** page), click **Action > Remove Licenses**. The **Remove Licenses** page opens. On this page, the **Licenses on Device** table lists licenses that can be removed from the current device.
2. In the **Licenses on Device** table, type values into **Qty to remove** for the licenses you want to remove.
3. Click **Save**.

The licenses are removed from the current device and its default view (or the **View Server** page) is shown.

Returning a Device



Important • Returning a device or a server is an irreversible action. It is intended for cases in which

- the device will no longer receive a capability response or license file.
- the server will no longer serve devices or communicate with the FlexNet Operations back office.

A customer may need to return a malfunctioning device to a manufacturer or reseller. During the return process, you have the option to move all its licenses to a replacement device. In this case, you might want to create the new device before returning the existing device, so that it is ready to receive the existing device's licenses (for more information, see [Creating a Device](#)). If you do not move a license, the license is returned to the pool of unused licenses and you can allocate it later to another device.

You can return a device from its default view (or the **View Server** page).



Task

To return a device:

1. Click **Action > Return Device** (or **Return Server**). The **Return Device** (or **Return Server**) page opens.
2. Optionally, identify the device you want to receive the current device's licenses in **Destination device to transfer licenses** (or **Destination server to transfer licenses**) in either of these ways.
 - Type the ID of the device to receive the current device's licenses.
 - Click the search icon to open the **Search Devices** window.
 - a. Choose a device.
 - b. Click **Submit**.

The **Search Devices** window closes and the **Destination device to transfer licenses** (or **Destination server to transfer licenses**) is set to the value of the device you chose.

3. Optionally, type a Return Material Authorization number in **RMA Number**. RMA number values are recorded by the End-User Portal but are not required by FlexNet Operations.
4. Click **Confirm** (or **Return**).

The device is returned and its default view (or the **View Server** page) is shown. The status of a returned device is RETURNED.

Moving a Device

A device that has not yet been assigned to a customer account can be moved from your account to a related account. For example, the parent account can move the device from one of its child accounts (a regional division, for example) to another child account.

When a device is moved, any entitlements that belong to that device are moved as well. The result of such a move is to either create new entitlements for the receiving account or to increment the count of that account's existing (and matching) entitlements by the count on the device that was moved.

You can move a device from its default view (or the **View Server** page).



Task

To move a device:

1. Click **Action > Move Device** (or **Move Server**). The **Move Device** (or **Move Server**) page opens.
2. For **To Account**, click an account to receive the device.
3. Click **Submit**.

The End-User Portal changes the account of the device and opens its default view (or the **View Server** page).

Setting a Password for a Cloud License Server

A password can be set for an administrative user of a cloud license server instance. This password is required if you want to use the REST API to communicate with your cloud license service. The password must meet these criteria:

- a length between 8 and 30 characters
- at least one upper case alpha character and one lower case alpha character
- at least one digit
- at least one of these special characters: (^ * \$ - + ? _ & = ! % { } / #)
- no spaces

You can set a password for a cloud license server from its **View Server** page.



Task

To set a password for a cloud license server:

1. Click **Action** > **Set Password**. The **Set Password** page opens.
2. Type a password that meets the criteria in the **Password** field.
3. Type the same password in the **Confirm Password** field.
4. Click **Set Password**.

The End-User Portal opens the cloud license server's **View Server** page with a message saying that the password was successfully set.

Offline Device Management

Manual offline device management activities are covered here.

Topic	Description
Uploading a Capability Request	Explains how to upload a capability request for a device from the Offline Device Management page.
Uploading Synchronization History	Explains how to upload synchronization history from the Offline Device Management page.

Uploading a Capability Request

Capability requests can be manually uploaded on the End-User Portal. You can upload a capability request from the **Offline Device Management** page.



Task

To upload a capability request:

1. On the **Offline Device Management** page, for **Upload type**, select **Generate license**.
2. Click **Browse** and locate the capability request (.xml, .bin, or .key) on your local system. (The controls vary depending on the browser you are using.)
3. Click **Upload**.

The End-User Portal processes the capability request.

While processing the capability request, FlexNet Operations validates activation IDs in the request against the device's account hierarchy. If the device does not yet exist in FlexNet Operations or if the device currently exists but has no owner account, the device may be created without an owner or it may be assigned an owner as a result of processing:

- For a device that does not yet exist in FlexNet Operations, FlexNet Operations creates it without an owner account assigned.
- For an existing device that does not currently have an owner account, FlexNet Operations assigns the account based on the first activation ID in the request.

After the capability request is processed, download the capability response and process it on your device.

Uploading Synchronization History

Synchronization history can be manually uploaded on the End-User Portal. You can upload synchronization history from the **Offline Device Management** page.



Task

To upload synchronization history:

1. On the **Offline Device Management** page, for **Upload type**, select **Upload synchronization history**.
2. Click **Browse** and locate the sync history files (.xml, .bin, or .syncreq) on your local system; up to 100 files per submission can be selected. (The controls vary depending on the browser you are using.)



Important • Files uploaded as part of one submission must be located on the same license server.

3. Click **Upload**. The sync history files are uploaded, device details are displayed, and a confirmation message is shown.
4. The application offers you a response file (sync acknowledgment) to download and process on your license server.

Downloading a Capability Response

You can download the capability response from the device's default view (or the **View Server** page).



Task

To download a capability response

- On the device's default view (or the **View Server** page), click **Action > Download Capability Response**.

The capability response is sent (typically, <device ID>.bin or <license server ID>.bin). The download experience depends on the web browser you are using.

Claiming a Device and Activating a License

To claim a device and activate licenses on that device, use the **Claim and Activate** command in the **Devices** menu.



Note ▪ The **Claim and Activate** command is not visible to all users. It is visible in the **Devices** menu only for user roles with permissions **Claim Device and Activate** and **Generate Licenses**.

For devices that have not yet been claimed, the End-User Portal assigns the end customer account on the activation ID's entitlement as the device owner. For devices that have already been claimed, the current device owner remains unchanged.



Task

To claim a device and activate a license:

1. Click **Devices > Claim and Activate**. The **Claim and Activate** page opens.
2. For **Device ID**, type the ID for the device you want to claim.



Note ▪ If more than one device exists with the specified **Device ID**, the End-User Portal shows a list of ID types. Choose an **ID Type** to more precisely identify the device. (See [About Device Attributes](#) for more a list of possible ID types.)

3. In **Activation IDs**, type one or more activation IDs for the licenses you want to activate on the current device.



Tip ▪ When entering multiple activation IDs, separate the activation IDs with commas, spaces, or carriage returns. Other delimiter characters are not supported.

4. Click **Validate**. The End-User Portal evaluates the activation IDs you provided and shows whether they can be mapped to the current device.
 - If all activation IDs provided can be mapped to the device, proceed to [Step 5](#).
 - If one or more activation IDs cannot be mapped to the device, the End-User Portal highlights the activation IDs that did not pass validation and allows you to either remove them from the list or cancel the mapping operation.
 - To continue without the activation IDs that failed validation, first remove the failed activation IDs and then click **Re-validate**. When the re-validation passes successfully, proceed to [Step 5](#).
 - To cancel the mapping, click **Cancel**.

5. After the activation IDs have been validated, customize values in **Qty to add**, if necessary, for the capabilities you want to map.
6. Click **Save**.

The activation IDs are mapped to the current device and its default view (or the **View Server** page) is shown.

Managing Usage

The **Usage** pages are where you can view usage reports and usage summaries. These pages show how your metered products are being.

Topic	Description
About Usage	Briefly discusses usage reports and usage summaries.
About Usage Report Types	Discusses usage report types: gauge, table, timeline, and comparison.
Viewing Usage Reports	Shows how to view usage reports for a selected customer account.
Viewing Usage Summary	Explains how to show usage summary information for FlexNet Embedded clients owned by a selected customer account. You can also filter the usage summary list or choose to view line item details and usage summary details for a selected activation ID.

About Usage

In the End-User Portal, you can view usage reports and see usage summaries for a selected customer account.

- **Usage Reports**—On the Usage Reports page, you can see reports of the usage for a customer account illustrated as gauges, listed in tables, or rendered in graphs.
- **Usage Summaries**—On the Usage Summary page, you view usage summary information, filter the usage summary list, view line item details, and view usage summary details. (See [Viewing Usage Summary](#).)

About Usage Report Types

Usage reports render usage data for a selected customer account. There are four usage report types:

Table 5-1 ▪ Usage Report Types

Usage Report Types	Description
Usage Gauges	Usage data rendered as gauges for each meter.
Usage Tables	Usage data represented in a tabular format.
Usage Timelines	Usage data for a single meter graphed by date (according to usage model settings).
Usage Comparisons	Usage data for multiple meters graphed by date (according to usage model settings).

Use the report type buttons to select the type of graph in which to display the usage data.



Figure 5-1: Buttons for selecting the usage report type

Usage Gauges

This type of graph shows usage data as a graphical gauge representing the percentage of usage compared to the overall entitled amount. The green region of the gauge indicates usage of none to 75 percent of the available count; the yellow region indicates 75 percent to 100 percent of the available count; and the red region indicates over 100 percent (overage) of the entitled amount.

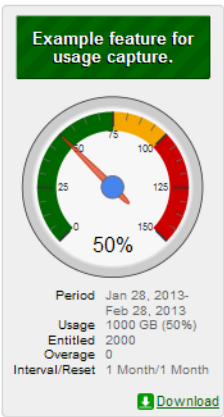


Figure 5-2: Usage gauge

Details of the usage information are displayed beneath the gauge.

Usage Tables

Usage information can also be displayed in a textual table.

Meter	Unit	Actual Use	Entitled	Overage (since statement)	Overage (since reset)	%	Interval/Reset	Period
End2EndUHRP_MC-ReCH Download	copies	111	150	0	0	74	3 Month/12 Month	Feb 11, 2015– May 11, 2015
End2EndUHRP_MUC-NonRe Download	gb	101	100	0	1	101	3 Month/Never	Feb 11, 2015– May 11, 2015

Figure 5-3: Usage table

Usage Timelines and Comparisons

Usage information can also be displayed in an interactive Flash-based timeline. Commands in the upper left corner enable zooming in to different time periods, and you can click and drag the graph left and right to control the dates for which data are being displayed.



Figure 5-4: Interactive usage timeline

A similar interactive option is the **Compare Meters** graph, which simultaneously displays multiple features' usage information over the same period of time.

Viewing Usage Reports

End-User Portal users can view usage history reports, when available, in the End-User Portal. Choose an enterprise (customer account) for which to see usage reports.



Task **To view a usage report:**

1. In the Producer Portal, click **Usage > Usage Report**.
2. For **Account**, specify the customer account for which you want to see usage reports.
3. Click **Search**.

The End-User Portal opens the View Usage for Account: <customer account> page. This page includes usage gauges (default), tables, timelines, and comparisons for the designated product line and date. Click the report type buttons to switch between report types.

This page also allows you to select different product lines and to alter the dates for which usage history data is shown.

Attribute	Description
Product Family	The product line for which you want to see usage reports. Only reports that include usage history for products in the specified product line are included in the search results.
As of Date	The date limit for usage reports. Reports that occur after the specified As of Date value are excluded from the search results.

Viewing Usage Summary



Note ▪ One-time activation client devices are not managed by the local license server, and therefore are not shown on the FlexNet Operations user interface.

FlexNet Operations End-User Portal can show usage summary information for the devices owned by a selected customer account. The Usage Summary list shows counts of the units ordered, units provisioned, and units used for each activation ID, and includes the entitlement and product associated with that activation ID. In addition, the Usage Summary page shows the currently selected Sold To account and the Usage Summary Time—the time when usage data was last summarized.

On the Usage Summary page, you view usage summary information, filter the usage summary list, view line item details, and view usage summary details.



Task **To view usage summary information:**

1. On the Manage Devices page, click **Usage > Usage Summary**. The End-User Portal opens the Usage Summary page.
2. On the Usage Summary page, set the **Sold To** value:
 - a. Click the **Search Account** button to open the **Select Account** page in a pop up window. This button looks like a small magnifying glass at the end of the Sold To field.

- b. Select the customer account for which you want to see usage summary information.
 - c. Click **OK**. This button closes the **Select Account** window and returns you to the Usage Summary page. Note that the Sold To value is now set to the account you selected.
3. On the Usage Summary page, click **Next**. FlexNet Operations End-User Portal shows the Usage Summary information for all devices that were sold to the selected customer account.

Filtering the Usage Summary List

By default, the Usage Summary list shows all the device-related activation IDs for the selected customer account. You can filter the Usage Summary list using the **Show Line Items** control:

- Click **Where Units Used > Units Provisioned** to show only activation IDs where the number of units used exceeds the number of units provisioned.
- Click **Where Units Used > Units Ordered** to show only activation IDs where the number of units used exceeds the number of units ordered.
- Click **All** to show all activation IDs.

Units Ordered represents the activation's line item count. Units Provisioned represents the number of those line items activated. Units Used indicates the number of those line items for which features have been checked out. (Technically, Units Used is determined by calculating the minimum line item count necessary to account for the total number of features—associated with the license for that line item—currently checked out.)



Note - When the number of units used exceeds the number of units provisioned, the Units Used count is rendered in red.

Viewing Line Item Details on the Usage Summary Page

You can view line item details for any activation that appears in the Usage Summary list. To view line item details, click the **activation ID** for the activation in the Usage Summary list. This link opens the Line Item Details page in a popup window.

Viewing Usage Summary Details

You can view usage summary details for any activation in the Usage Summary list. To view the usage summary details, click the **Units Used** value for that activation. Usage summary details shows a view that includes the **License Server** and the **Last Sync Time** for the current activation. (Click **Back** to return to the Usage Summary list.)

Managing Downloads

The **Downloads** pages are where you can locate download packages to which you are entitled and download the files included in those packages. The **Downloads** pages also permit users to track their own download activity.



Note - Downloads containing Docker images and Helm charts are discussed in a separate topic, [Managing Containerized Applications](#).

Topic	Description
About Downloads	Discusses what download packages are as well their relationships to your entitlements, licenses, and license agreements.
Viewing Downloads	Explains how to use End-User Portal functionality to search, filter, sort, and show the download packages available to you. <ul style="list-style-type: none">• Listing Downloads• Searching Downloads• Showing Recent Releases• Showing Recently Added Files
Installing the Download Manager	Describes how to download and install the Download Manager when you download files for the first time.
Downloading Files	Explains how to download files from the End-User Portal.
Viewing Download Logs	Describes how to display a log of files you have previously downloaded.
Viewing Notifications for a Download Package	Explains how to show the notification log for a particular download package on the package's Download List page.

Topic	Description
Ordering Files on Physical Media	Describes how to request delivery of the files you to which you are entitled on physical media.

About Downloads

Downloads appear in the End-User Portal categorized by their producer (when product lines from multiple producers are available) and product line. To obtain a download file to which you are entitled, first choose the producer and product line, and then choose from one or more download packages associated with that product line. (Current download packages appear on the New Versions tab; older download packages appear on the Previous Versions tab.) Download packages are groups of download files.

In the End-User Portal, you can browse the producers and product lines for the products to which you are entitled and then choose the download packages and individual files you need to download.

Download packages often require you to read and accept license agreement terms before the End-User Portal will present the downloadable content.



Tip - When supported, you can also request copies of the download files to which you are entitled on physical media.

In addition to locating and downloading the files to which you are entitled, the End-User Portal also retains records of download activity as well as email notifications sent for each download package or file. You can view this information by choosing the **Download Log** or **Notification Log**.

Viewing Downloads

The End-User Portal includes a number of commands to help you quickly locate the downloads you require. The following topics explain how to use commands like **List Downloads**, **Search Downloads**, **Recent Releases**, and **Recent Files Added**.

Topic	Description
Listing Downloads	Explains how to show downloads to which you are entitled.
Searching Downloads	Explains how to show only those downloads that match your search criteria.
Showing Recent Releases	Describes how to show a list of downloads for recently released versions of products.
Showing Recently Added Files	Describes how to show a list of files that have been recently added to the End-User Portal.

Listing Downloads

The End-User Portal provides access to downloads to which you are entitled. On the End-User Portal, the **Downloads** menu provides a number of commands for finding and viewing those downloads. Use the **List Downloads** command to show all downloads.



Task **To list all downloads**

- Click **Downloads > List Downloads**.

The End-User Portal shows the **Downloads** page that lists all the downloads to which you are entitled. Choose a producer and then a product line to list available download packages.



Note ▪ The downloads to which a user is entitled depends in part upon the user's account. Users who are members of multiple accounts can use the Change Account control on the **Downloads** page to select from the accounts to which they belong.

Searching Downloads

The End-User Portal provides access to downloads to which you are entitled. On the End-User Portal, the **Downloads** menu provides a number of commands for finding and viewing those downloads. Use the **Search Downloads** command to locate a download package or download file according to its name, product, version, and so forth.



Task **To search downloads:**

1. Click **Downloads > Search Downloads**. The End-User Portal opens the **Download Search** page.
2. On the **Download Search** page, for **Search for**, enter search criteria to identify the download file or package you want to find.
3. For **Show Results for**, choose which entity to show in the search results. Choose either **Download Packages** or **Files**.
4. For **Sort by**, choose how the search results will be sorted. Choose either **Relevance** or **Date**.
5. Click **Search**.

The End-User Portal shows a list of download packages or files that match the search criteria you entered. Click on a file or download package in the search results to view its **Download List** page.

Showing Recent Releases

The End-User Portal provides access to downloads to which you are entitled. On the End-User Portal, the **Downloads** menu provides a number of commands for finding and viewing those downloads. Use the **Recent Releases** command to show download packages that are part of a recent release.



Task

To show recent releases

- Click **Downloads > Recent Releases**.

The End-User Portal shows the **Recent Releases** page listing downloads that are part of a recent release. The recent releases list includes download packages for products released in the last 30, 60, 90, or 120 days. You can use the on-page filter to select the number of days.

The list shows the download package description, version, and the date it was added. Click a download package's description to see the files in that download package.

Showing Recently Added Files

The End-User Portal provides access to downloads to which you are entitled. In the End-User Portal, the **Downloads** menu provides a number of options for finding and viewing those downloads. Use the **Recent Files Added** command to show download files that have been recently added.



Task

To show recently added files

- Click **Downloads > Recent Files Added**.

The End-User Portal shows the **Recent Files Added** page listing recently added files. This page shows files that were added in the last 30, 60, 90, or 120 days. You can use the on-page filter to select the number of days.

The recent files list shows the file description, version, and the date it was added. Click a file's description to see that file in the **Download List** for its download package. There, you can choose to download the file.

Installing the Download Manager

You are prompted to download and install the Download Manager when you download files for the first time.

Note that the NetSession-based Akamai download manager has been replaced with a Revenera solution. This section covers the installation for customers who install Revenera's Download Manager for the first time or update Revenera's Download Manager, as well as installations where the Akamai download manager is replaced by Revenera's Download Manager.

Requirements for the Download Manager

Revenera's Download Manager supports the following browsers:

- Windows: Google Chrome, Mozilla Firefox, Internet Explorer
- OSX: Google Chrome, Safari
- Linux: Google Chrome, Mozilla Firefox

Revenera's Download Manager can be used on the following platforms:

- Microsoft Windows Server 2012 (64-bit)

- Microsoft Windows Server 2012 R2 (64-bit)
- Microsoft Windows Server 2016
- Microsoft Windows 10
- Microsoft Windows 11
- RedHat Enterprise Linux 7
- CentOS 7
- SUSE 15
- macOS 10.12 Sierra
- macOS 10.13 High Sierra
- macOS 10.14 Mojave

Download Manager Installation



Task

To prepare for and perform the Download Manager installation:

1. **Recommended:** If the Akamai download manager is already installed, uninstall the Akamai download manager.



Note ▪ Retaining the Akamai download manager has no known negative impact on Revenera's Download Manager.

2. Download the Download Manager when prompted.
3. Revenera recommends that you close your browser before starting the installation.
4. Run the installer to complete the installation.



Note ▪ The installation process might trigger a security notification, requesting your permission to allow the installation.

5. If your browser was open during installation, you might need to perform the following additional steps to enable HTTPS:
 - For Mozilla Firefox:
 - Open Mozilla Firefox. In the address bar, type **about:config** and press Enter.
 - If the warning page is displayed, accept the warning to continue to the about:config page.
 - Right-click anywhere in the list of preferences. Select **New** from the context menu and select **Boolean**.
 - Enter the preference name **security.enterprise_roots.enabled** and set the value to **true**.
 - For Google Chrome: Restart Google Chrome.

6. Ensure that the port 45786 is open, as the Download Manager will use this port. (The Akamai download manager also required an open port, but the port number was different.)

Downloading Files

From a download package's **Download List** page, you can download selected files.



Note - Use the instructions in [Viewing Downloads](#) to locate download packages from which you want to download files.

By default, the **Download List** page shows all the download package's files. However, you can use the filter to limit the files shown by their file type, platform, and other file details.



Task

To download files:

1. On the **Download List** page, click the **Files** tab. (The End-User Portal shows the Files tab, by default, when you open the **Download List** page.)
2. Click check boxes to select the files you want to download.
3. Click **Download Selected Files**. The Download Manager opens in a new window.



Important - To complete your download, the Download Manager must be installed on your system. If it is not installed, follow the instructions in the Download Manager window to download and run the installer, then accept the license agreement. If the Download Manager is already installed but a newer version is available, you are prompted to upgrade the Download Manager. Note that you need to restart your browser after installing the upgrade.

4. In the Download Manager, choose the download location on your system and click **Save**.

The Download Manager shows the download progress. Close the Download Manager window when your downloads are complete.

Viewing Download Logs

The End-User Portal records download activity for each download package. On the **Download List** page for a download package, you can view logs of download activity on the **Download Log** tab.



Task

To view download logs

- On the **Download List** page, click the **Download Log** tab.

The End-User Portal shows a list of download transactions in the **Download Log** tab. There, you can see records of which files from this download package have been downloaded. For each transaction, you can also see additional details by clicking a file description.



Task *To view a download transaction's details*

- In the File Description column, click the description of the file for which you want to see download transactions.

The End-User Portal shows the download transactions for that file in the **Download Log** tab. Each download transaction is listed by its Download Start date. Click a date to see details about that transaction, such as who downloaded the file and other transaction information.

Viewing Notifications for a Download Package

The **Download List** page for a download package has tabs to show the files in the package, a log of download transactions, and a log of notifications for that download package.



Note ■ Use the instructions in [Viewing Downloads](#) to locate the download package for which you want to view notifications.



Task *To view notifications for a download package*

- On the **Downloads** page, click the **Notification Log** tab.

The End-User Portal shows the **Notification Log** tab with a list of notifications that the producer has sent for the current download package. This list shows the date the notification email was sent and the subject of the email message. You can also see additional details about a notification by clicking on its date in the notifications list.

Ordering Files on Physical Media

When supported by the producers of the products to which you are entitled, the **Order Media** button lets you request copies of files for the current download package on physical media. This button opens the **Order Media** page. There, you can initiate an email request for the files you require when downloading them directly from the End-User Portal is not an option.



Task *To order files on physical media:*

1. On the **Downloads** page, click the **Order Media** button. The End-User Portal opens the **Order Media** page.
2. On the **Order Media** page, enter or verify your address information and click **Place Order**.

The End-User Portal submits your request and sends you a copy of the request message.

Managing Containerized Applications

This topic describes how you manage your downloads of containerized applications. In this documentation, the term “containerized applications” refers to Docker images and Helm charts. Just like file-based installers (often referred to simply as “files” in this documentation), containerized applications are included in download packages.

About Containerized Applications

Downloads appear in the End-User Portal categorized by their producer (when product lines from multiple producers are available) and product line. Downloads can include files, Docker images, and Helm charts. You use the Downloads page to identify download packages to which you are entitled. From the Downloads page, you navigate to a page that lists the files, Docker images and Helm charts to which you are entitled.

Unlike files, Docker images and Helm charts are stored in a separate registry that is hosted by Revenera. You cannot download containerized applications from the End-User Portal. Instead, you download them directly from the Revenera registry using a Docker or Helm client that you need to install on your machine beforehand. You use the Docker or Helm command-line interface (CLI) for login and pull operations on your container registry.

About the Revenera Registry

Docker images and Helm charts are stored in a separate registry that is hosted by Revenera. You use a Docker or Helm CLI to access images and charts that are stored in the registry.

When a software producer entitles you to download certain containerized applications, you have sufficient permissions to view and pull Docker images and Helm charts.

You find the URL for the Revenera registry in the **Download List** page, as described in [Viewing Details of Containerized Applications](#).

Viewing Containerized Applications

To view the containerized applications to which you are entitled, first choose the producer and product line, and then choose from one or more download packages associated with that product line. A download package can include files as well as Docker images or Helm charts.

For information about how to view specific downloads, see also [Searching Downloads](#) and [Showing Recent Releases](#).



Task To view Docker images and Helm charts in the End-User Portal

1. Click **Downloads** > **List Downloads**.

The End-User Portal shows the Downloads page that lists all the downloads to which you are entitled.

2. Choose a producer and then a product line to list available download packages.
3. On the Download Packages page, click the hyperlinked name of the desired download package.

The End-User Portal shows the files, container images and Helm charts that are available to download.



Note ▪ The downloads to which a user is entitled depends in part upon the user's account. Users who are members of multiple accounts can use the Change Account control on the Downloads page to select from the accounts to which they belong.

Viewing Details of Containerized Applications

You can view information about the Docker images or Helm charts included in a download package from the download package's **Download List** page. Available information includes a digest as well as the command for downloading the image or chart from the Revenera registry.



Note ▪ Use the instructions in [Viewing Containerized Applications](#) to locate Docker images and Helm charts that are available for you to download




Task To view details about Docker images and Helm charts in the End-User Portal


On the **Download List** page, do either of the following:

- **In the Container Images section**

- Click the + sign for the image for which you want to display details.

- Point to the  icon in the **Pull Command** column to display the pull command used for downloading the image from the Revenera registry.

- **In the Helm Charts section**

- The **Charts** tab displays a description, version and digest for each chart.
- Point to the  icon in the **Pull Command** column to display the pull command used for downloading the chart from the Revenera registry.

Downloading Containerized Applications

You can download Docker images or Helm charts to which you are entitled from the Revenera registry. This section lists the prerequisites and guides you through the download process.

- [Prerequisite: Docker and Helm CLI](#)
- [Logging in to the Revenera Registry](#)
- [Downloading Docker Images and Helm Charts](#)



Note - Use the instructions in [Viewing Containerized Applications](#) to locate Docker images and Helm charts that are available for you to download.

Prerequisite: Docker and Helm CLI

A Docker or Helm client must be installed on the machine that is used to download Docker images or Helm charts. You use the Docker or Helm command-line interface (CLI) for login and pull operations.

Refer to the Docker and Helm documentation for installing and running these applications.

Logging in to the Revenera Registry

You use your End-User Portal login and your container registry secret to log in to the Revenera registry. The Revenera registry can only be accessed using the Docker or Helm CLI.

Before you perform the steps below, determine the URL for the Revenera registry in the **Download List** page, as described in [Viewing Details of Containerized Applications](#).

You can also click the **Container Registry login** button on the **Downloads** page, which will copy the Docker login command with your tenant URL to the clipboard. You can then easily paste the command into the Docker command-line interface to log into the registry.



Note - Only end users who are entitled to download containerized applications are allowed to log in to the registry.



Task

To log in to the Revenera registry

1. In a terminal window on the client machine running Docker, enter the following to log in:

```
docker login <registry-URL>
```

where <registry-URL> is the location of the Revenera registry as displayed on the **Download List** page (see [Viewing Details of Containerized Applications](#)).

2. You are then prompted to enter your username and password.
 - Your user name is your FlexNet Operations End-User Portal user name.
 - Your password is the container registry secret, which you can find in your user profile (see [Finding Your Container Registry Secret](#)).

Downloading Docker Images and Helm Charts

Before you attempt to download Docker images or Helm charts, ensure that you have installed a Docker or Helm client (CLI) and that you can access the Revenera registry.



Note ■ If you are using a shared registry, the project name is prefixed with your tenant ID. As a result, you might need to adapt any paths accordingly when performing the tasks described in this section.

Downloading Docker Images



Task To pull an image from the Revenera registry

1. Log in to the Revenera registry, as described in [Logging in to the Revenera Registry](#).
2. In a terminal window on the client machine running Docker, use a command like the following to pull an image from the Revenera registry:

```
docker pull <registry-hostname>/<project-name>/<image>:<tag>
```

The following shows an example command:

```
docker pull container-registry.uat-1234.revenera.com/demo-project/new-demo-image:6.0
```

Downloading Helm Charts



Task To pull an image from the Revenera registry

1. Log in to the Revenera registry, as described in [Logging in to the Revenera Registry](#).
2. In a terminal window on the client machine running Helm, use a command like the following to pull an image from the Revenera registry:

```
helm pull <repo-name><chart>
```

The following shows an example command:

```
helm pull demo-repo demo-chart
```


Managing Users and Accounts

Follow the instructions in the following topics to manage users and account in the Enterprise Portal help library.

Section	Description
Managing Your User Profile	Describes how portal users can edit their profile, change their password, recover account access if their password is lost, and find their container registry secret.
Managing Users	Provides an overview of user management, mainly for portal administrators. Topics include browsing users; creating, editing, deleting, and deactivating users; and linking product lines to user accounts.
Managing Accounts	Provides an overview of account management, mainly for portal administrators. Topics include creating sub-accounts, partner accounts, and customer accounts; browsing and editing accounts and sub-accounts; and deleting accounts.
Registering for a Trial	Supports Trials for existing users.
Managing Access Tokens	Access tokens are used for securely authorizing SOAP and REST web service calls to FlexNet Operations. This section explains how to create, update, rotate, and delete access tokens.

Managing Your User Profile

Use the instructions in the following topics to manage your user profile.

Topic	Description
Editing Your User Profile	Describes how to make basic changes to your user profile such as your name, contact information, and other settings.

Topic	Description
Changing Your Password	Shows how to change your password.
If You Forget Your Password	Explains how users who have forgotten their password can reset their password without assistance if they have established a secret question and answer to verify their identity.
Finding Your Container Registry Secret	Describes how you to find your container registry secret that is required for downloading Docker containers or Helm charts.

Editing Your User Profile

If you are not a shared user, you can edit your user profile. A shared user can only view the profile.



Task

To view your profile or edit your profile (except your user name):

1. Click your user name and choose **Profile**. This command opens the **Edit User Profile** page.
2. Edit any of the following fields:
 - **First Name** and **Last Name**
 - **Email Address**
 - **Opt-in to receive email:** If your instance of FlexNet Operations is integrated with an external marketing tool and you want to receive promotional marketing email messages from that tool, set this option to **Yes**.



Note - This option does not control whether you will receive automatically-generated emails sent by FlexNet Operations based on certain event triggers, such as to communicate about new entitlements or other events.

- **Phone Number** and **Fax Number**
- **Street, City, State, Zip Code, Country**
- **Time Zone**
- **Email Subscriptions:** Choose whether or not to receive **Expiring Entitlements Email** notifications. (Not all end users have access to email subscriptions.)

The **Account** of the user and whether the user name is a **Shared Login** cannot be edited through the user profile.

3. Click the **Save** button.

This page displays the **Date of Last Login** and the **Date Created**. The list of roles assigned to you are not displayed in the **Edit User Profile** page.

Changing Your Password

When you first log in with a temporary, system-generated password, due to being a new user or due to a password reset, you must change your temporary password to one of your own choosing. On the **Change Password** page you can replace your password.



Task **To change your FlexNet Operations system-generated password:**

1. Enter the system-generated password that you entered when you logged in.
2. Enter and confirm a new password of your choice.
3. Select a secret question and its answer in case you **forget your password**. For security, enter a question whose answer would be hard to guess.

You must define a secret question and answer to reset your password yourself if you forget it. You can change your password or add a secret question and answer at a later time by editing your **user profile**.

4. Click the **Continue** button to complete the login process.



Task **To change your FlexNet Operations password on your Edit User Profile page:**

1. Click the **Password/Security** button. A **Set Password/Security** pop-up appears.
2. For **Password**, enter your current password.
3. For **New Password**, enter a new password of your choice.
4. For **Confirm new password**, enter the new password again.
5. Optionally, also change your secret question and its answer in case you **forget your password**. For security, enter a question whose answer would be hard to guess.

A secret question and answer must be present to enable you to reset your password yourself if you forget it. You can change your password or add a secret question and answer at a later time by editing your **user profile**.

6. Click **Save**.

If You Forget Your Password

If you forget your password, and have specified a secret question and its answer, you can reset your password.



Task **To reset your password using your secret question and answer:**

1. On the FlexNet Operations End-User Portal login page, click the **Forgot Password** link.
2. On the **Password Reset** page, enter your user ID and click **Continue**.

If the End-User Portal recognizes your account, it displays your secret question and prompts you to enter the answer you specified when the account was created. This is required.

3. Enter the answer to your secret question and click **Continue**.

If you correctly answer the security question, the End-User Portal sends an email containing a system-generated password to your email address. When you log in with that password, the End-User Portal prompts you to **change your password**.



Note - If you did not specify a secret question and answer, you must contact the End-User Portal administrator to get a new password sent to you.

Finding Your Container Registry Secret

If you are entitled to download Docker images or Helm charts, you need your container registry secret to log in to the Reverera registry. See **Managing Containerized Applications** for more information.



Note - The Container Registry Secret field only appears for end users with sufficient permissions to download containerized applications.



Task **To determine your container registry secret**

1. Click your user name and choose **Profile**. This command opens the **Edit User Profile** page.
2. The option **Container registry secret** shows your secret. You can use **Copy** to copy the secret to the clipboard.

Managing Users

You can manage users of the End-User Portal, including viewing, creating, modifying and deleting user accounts.

Topic	Description
About Users	Describes users in the End-User Portal.
Browsing Users	Explains how to use the List All commands to browse users.
Creating a User	Shows how to create a user.
Editing a User	Shows how to edit an existing user.
Deleting a User	Shows how to delete a user.
Deactivating and Reactivating a User	Explains how to deactivate or reactivate users by setting their status to Active or Inactive.

About Users

A user is registered with the End-User Portal. Users can be of one of four types:

- **Customer**—Users who are part of a customer account.
- **Self-Registered**—Customer users who registered in the End-User Portal with an entitlement ID or activation ID.
- **Producer**—Producer users are users that belong to a Producer account.
- **Partner**—Channel partner users who are distributors of producer products.

Browsing Users

You can browse users in your account.



Task *To browse existing users in your organizational sub-tree*

Click **Accounts & Users**, and then click

- **List All Customers**—to show all customer users.
- **List All Producers**—to show all producer users.
- **List All Partners**—to show all partner users.
- **List All Self-Registered**—to show all self-registered users.

The End-User Portal shows the search results page. To see the details of a specific user, click the display name of that user, and the End-User Portal opens the **Edit User** page. There, you can view the following information:

- Whether a user is a shared user (shared users are marked with an icon showing several people).
- **Account Name**: Full name of user.
- **User Name**: Login name of the user.
- **Email Address**: The user's email address.
- **Type**: Select either **User** or **Contact**. A contact is a user account that cannot log in, and is maintained for organizational contact purposes.
- **Accounts**: All accounts to which the user belongs.

Creating a User

Portal administrators can create new users in the End-User Portal.

Use the **List All** command appropriate for the type of user you want to create: **List All Producers**, **List All Customers**, **List All Self-Registered**, or **List All Partners**.



Task

To add an End-User Portal customer user:

1. Click **Accounts & Users > List All Customers**. The End-User Portal shows the **Customer Users** page.
2. Click **Actions > Create**. This opens the **Create User** page.
3. On the **Create User** page, provide User Information:
 - a. **Can the user log in?:** A user who can log in will be able to access FlexNet Operations. If not, the user account will be maintained for contact purposes only. If **Yes**, the **Shared Login**, **Status**, **User Name**, and **Time Zone** settings appear.
 - b. **Shared Login:** Select **Shared Login** if this user account will be shared by multiple people. A Shared Login can be useful for setting up proxy or group user accounts.
 - c. **Status:** Leave the user status set to Active. (The records of an Inactive user remain on file, but the user no longer has access to FlexNet Operations.)

Multiple entries of an incorrect password will automatically set the user's status to Inactive. The user can be reactivated by an administrator after confirming the user's legitimacy.

4. Enter the user's Contact Information:
 - a. Enter the **First Name** and **Last Name** of the user (required).
 - b. **Time Zone:** If the user can log in, select the user's time zone from the drop-down list.
 - c. Enter the **Email Address** of the user (required). If this is a shared login, specify the email address of a FlexNet Operations administrator in this field.
 - d. **Opt-in to receive email:** If your instance of FlexNet Operations is integrated with an external marketing tool and you want this user to receive promotional marketing email messages from that tool, set this option to **Yes**.



Note - This option does not control whether the user will receive automatically-generated emails sent by FlexNet Operations based on certain event triggers, such as to communicate about new entitlements or other events.

- e. **Expiring Entitlements Email:** Select whether the user should receive renewal reminders about expiring and expired entitlements.
 - f. **Phone, Fax Number, Street, City, State/Province, ZIP/Postal Code, and Country.**
5. Link the user to one or more accounts: Click **Actions > Link Accounts**. The End-User Portal opens a pop-up window for choosing accounts. Select either customer or partner accounts and choose roles for each selected account. Then, click **OK**.

Each user must be linked to one or more accounts: either the Home account if the user is internal, or a Customer account if the user is a customer, or a Partner account if the user is a distributor. (Once the user is saved as a member of the Home account, the account cannot be changed. Once a user is saved as a member of a Customer or Partner account, the account can be changed only to another of the same type.)

6. Optionally, for customer users, link the user to one or more product lines now, or product lines can be linked later. See [Linking Product Lines to User Accounts](#).

- Click **Save**.

When a new user account is saved, an email containing a system-generated password and login instructions is sent to the user's email address. To log in the first time, the user logs in using the system-generated password and is immediately prompted to change the password.

Editing a User

Portal administrators can edit user accounts on the End-User Portal.

You can locate the user to edit by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner user, choose the **List All Partners** command in the **Users** group of the **Accounts & Users** menu.

Follow the steps below to edit a user. Use the appropriate **List All** command to browse users of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all user types are available for all users.)



Task

To edit an existing End-User Portal user:

- Locate the user you want to edit by listing all users or searching for the user.
 - To search, click **Accounts & Users > Search Users**, enter your search criteria, and click **Search**.
 - To list users, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

- In the **Users** list, click the display name of the user you want to edit. This link opens the **Edit User** page.
- Edit the values of any of the editable fields. User name (login name) is never editable. At least one role must be assigned. If a user was created as a member of the Home account, the account cannot be changed. If a user was created as a member of a Customer account, the account can be changed to some other Customer account.
- Click the **Save** button to save your changes to the user.

If the user is shared, the email containing a system-generated password is sent to a FlexNet Operations administrator (if you specified the administrator's email address when the user was created). The administrator should log in to FlexNet Operations with the system-generated password, then change the password and keep a record of it. The administrator must send this new password to all users of the shared login.

Linking Product Lines to User Accounts

When the product lines feature is enabled, FlexNet Operations End-User Portal filters what a customer user sees based on the product lines linked to the user account. Only line items that include products in product lines to which the user account is linked are visible.



Important • A user account cannot be linked to product lines until the user has been linked to an account.



Task *To link product lines to a user account:*

1. On the **Create User** or **Edit User** page, click **Actions > Link Product Lines**. This button opens the **Select Product Lines for the User** page in a popup window.
2. On the **Select Product Lines** page, check the product lines you want to link, and click **OK**.

Product lines are linked to the current user account when you click **OK**. It is only necessary to save the user account if you have made other changes to the user.



Task *To remove product lines from a user account:*

1. On the **Create User** or **Edit User** page, check the product lines you want to remove and click **Remove Product Lines**.
2. Click **OK** to confirm the removal.

Deleting a User

Portal administrators can delete users from the End-User Portal. Deleted users are removed permanently. If you wish to keep the user in the database but wish to restrict access, consider deactivating the user instead.

You can locate the user to delete by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner users, choose the **List All Partners** command in the **Users** group of the **Accounts & Users** menu.

Follow the steps below to delete a user. Use the appropriate **List All** command to browse users of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all user types are available for all users.)



Task *To delete a user:*

1. Locate the user you want to delete by listing all users or searching for the user.
 - To search, click **Accounts & Users > Search Users**, enter your search criteria, and click **Search**.
 - To list users, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. In the **Users** list, select the user you want to delete. (Click a checkbox to select the user.)
3. Click **Action > Delete**.
4. Click **OK** to confirm deletion.

Deactivating and Reactivating a User

User status is displayed in the **Users** page. A user can be deactivated manually or automatically; a user can be reactivated only manually.

You can locate the user by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner users, choose the **List All Partners** command in the **Users** group of the **Accounts & Users** menu.

Follow the steps below to alter a user's status. Use the appropriate **List All** command to browse users of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all user types are available for all users.)



Task

To deactivate a user manually:

1. Locate the user you want to deactivate by listing all users or searching for the user.
 - To search, click **Accounts & Users > Search Users**, enter your search criteria, and click **Search**.
 - To list all users, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. In the **Users** list, click the display name of the user you want to deactivate. This link opens the **Edit User** page.
3. On the **Edit User** page, click **Status > Inactive**.
4. Click **Save**.

A non-shared user is deactivated automatically after more incorrect consecutive login attempts than allowed.

A deactivated user can only be reactivated manually.



Task

To reactivate a user:

1. Locate the user you want to reactivate by listing all users or searching for the user.
 - To search, click **Accounts & Users > Search Users**, enter your search criteria, and click **Search**.
 - To list all users, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. In the **Users** list, click the display name of the user you want to reactivate. This link opens the **Edit User** page.
3. On the **Edit User** page, click **Status > Active**.
4. Click **Save**.

A reactivated user is informed by email. Reactivation does not affect a user's password. If the reactivated user is shared, an administrator will get the email stating that the user has been reactivated.

Managing Accounts

Portal administrators can manage their accounts in the End-User Portal.

Task	Description
About Accounts	Discusses how accounts are used in the End-User Portal and explains how sub-accounts and partner accounts are related to their parent accounts.
Browsing Accounts or Sub-Accounts	Describes how to use the commands in the Users menu to browse accounts.
Creating a Sub-Account	Shows how to create sub-accounts in the End-User Portal.
Creating a Partner Account	Shows how to create partner accounts in the End-User Portal.
Linking Sub-Accounts to an Account	Shows how to manage accounts by linking sub-accounts to a parent account.
Creating a Customer Account	Shows how to create customer accounts in the End-User Portal.
Editing an Account or Sub-Account	Explains how to change an account's name or identifier.
Deleting an Account	Shows how to delete an existing account.

About Accounts

Each entitlement is tied to an account, or customer company. Each account can have one or more contact people.

Accounts and Sub-Accounts

Accounts can have sub-accounts, which can reflect the hierarchical nature of some company structures. Accounts and sub-accounts are defined in a parent-child relationship.

An account hierarchy can have multiple levels to flexibly accommodate different organizational models. For example, a single account can have multiple sub-accounts, which would share a sibling relationship. Sub-accounts can themselves have sub-accounts. In addition, accounts can have multiple parents.

For example, you could define Acme Global as the main account, and set up Acme US and Acme EMEA as sub-accounts.



Note ■ You can the End-User Portal to manage your account and its sub-accounts.

Partner Accounts

Partner accounts identify accounts in your distribution chain.

By default, FlexNet Operations End-User Portal includes only one partner account. FlexNet Operations End-User Portal includes a distribution tier for the Producer, and one for Distributor.



Note • Partner users can create other partner accounts and customer accounts on the **Related Accounts** page.

Unique to partner accounts is their relationship to the parent, producer account. Information about the transactions in the partner accounts flows up through the distribution chain so that these transactions are visible to the producers on the Producer Portal.

Some FlexNet Operations End-User Portal features are only available to the producer account and partner accounts. For example, only partner accounts can move a device to other distribution tiers on the End-User Portal site.

Browsing Accounts or Sub-Accounts

You can browse for accounts and explore account hierarchies, viewing the parent account and any sub-accounts associated with it by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner accounts, choose the **List All Partners** command in the Accounts group of the **Accounts & Users** menu.

Follow the steps below to browse customer accounts. Use the appropriate **List All** command to browse accounts of other types: **List All Partners** or **List All Producers**.



Task

To browse existing customer accounts:

1. Click **Accounts & Users > List All Customers**.

This command opens the **Customer Accounts** page.

2. On the **Customer Accounts** page, you can view the following information:

- **Account ID:** Unique identifier of the account
- **Account Name:** User-friendly name of the account

Users with sufficient permissions can perform a number of actions on this page.

To view details of a sub-account, click the + icon to expand the tree view.

To view an account's details, contact information, and users, click the Account name.

Use the Actions menu to create sub-accounts and users in a selected account or to delete accounts or sub-accounts.

Creating a Sub-Account

You can create new sub-accounts for customer accounts, if you are a portal administrator, producer, or partner user.

You can locate the parent account for your sub-account by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner accounts, choose the **List All Partners** command in the **Accounts** group of the **Accounts & Users** menu.

Follow the steps below to create a sub-account. Use the appropriate **List All** command to browse accounts of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all account types are available for all users.)



Task

To create a new sub-account:

1. Locate the account for which you want to create a sub-account by listing all accounts or searching for the account.
 - To search, click **Accounts & Users > Search Accounts**, enter your search criteria, and click **Search**.
 - To list all accounts, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. On the **Customer Accounts** page, select the account for which you wish to create a sub-account.
3. Click **Actions > Create a Sub-Account**.
4. Enter the **Account ID** (required).
5. Enter the **Account Name** of the account (required).
6. Set the **Visible to Other Partners** to **Yes** or **No**. Default: Yes.
 - Click **No** to prevent partners in different distribution tiers from seeing information about this account.
 - Click **Yes** to allow partners to see information about this account.
7. Add additional address information as desired.
8. Click **Save**.

The End-User Portal saves the new sub-account with the settings you provided. At this point, you can also decide whether to manage this account's users and whether or not to link sub-accounts to this account.

If you choose to manage users for the current account, you can create new users, link existing users, or remove users:

- Click **Actions > Create a User** to link a new user to the account. Then follow the steps outlined in [Creating a User](#) to create the new user account.
- Select users (and roles, if applicable) and click **Actions > Link Existing Users** to link selected users to the account.
- Select users and click **Actions > Remove Users** to remove selected user from this account.

If you choose to link sub-accounts to this account, follow the steps described in [Linking Sub-Accounts to an Account](#).

Creating a Partner Account

Partners are special accounts on the End-User portal. (See [About Accounts](#) for more information.) Only partner users can create new partner accounts on the portal site.



Task

To create a new partner account:

1. Locate the account for which you want to create a partner account by listing all accounts or searching for the account.
 - To search, click **Accounts & Users > Search Accounts**, enter your search criteria, and click **Search**.
 - To list all accounts, click **Accounts & Users > List All Partners**.

The End-User Portal opens the search results page.
2. On the **Partner Accounts** page, select the account for which you wish to create a partner account.
3. Click **Actions > Create a Partner Account**. This opens the **Create an Account** page.
4. Enter the **Account ID** (required).
5. Enter the **Account Name** of the account (required).
6. Set the **Visible to Other Partners** to **Yes** or **No**. Default: Yes.
 - Click **No** to prevent partners in different distribution tiers from seeing information about this account.
 - Click **Yes** to allow partners to see information about this account.
7. Add additional address information as desired.
8. Click **Save**.

The End-User Portal saves the new partner account with the settings you provided. At this point, you can also decide whether to manage this account's users and whether or not to link sub-accounts to it.

If you choose to manage users for the current account, you can create new users, link existing users, or remove users:

- Click **Actions > Create a User** to link a new user to the partner account. Then follow the steps outlined in [Creating a User](#) to create the new user account.
- Select users (and roles, if applicable) and click **Actions > Link Existing Users** to link selected users to the partner account.
- Select users and click **Actions > Remove Users** to remove selected user from this partner account.

If you choose to link sub-accounts to this account, follow the steps described in [Linking Sub-Accounts to an Account](#).

Linking Sub-Accounts to an Account

From an account's **Create an Account** or **Edit Account** page, you can manage the sub-accounts that are linked to it.

You can locate the parent account by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner accounts, choose the **List All Partners** command in the **Accounts** group of the **Accounts & Users** menu.

Follow the steps below to link a sub-account. Use the appropriate **List All** command to browse accounts of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all account types are available for all users.)



Task

To link sub-accounts to an account:

1. Locate the account to which you want to link sub-accounts by listing all accounts or searching for the account.
 - To search, click **Accounts & Users > Search Accounts**, enter your search criteria, and click **Search**.
 - To list all accounts, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. On the **Accounts** page, click the account to which you want to link sub-accounts. This opens the **Edit Account** page.
3. On the **Edit Account** page, click **Next**. This button opens the **Linked Sub-Accounts** page.
4. On the **Linked Sub-Accounts** page, click **Actions > Link Accounts**. This command opens a pop-up window for choosing accounts.
5. Select the sub-accounts you want to link to the current account and click **OK**.
6. Click **Complete**.

The End-User Portal links the selected sub-accounts with the current account and returns to the **Accounts** page.

Creating a Customer Account

Partner users can create new customer accounts on the portal site.



Task

To create a customer account:

1. Click **Accounts & Users > List Related Accounts**. The End-User Portal opens the **Related Accounts** page.
2. Click **Actions > Create Customer Account**. This opens the **Create Account** page.
3. Enter the **Account ID** (required).
4. Enter the **Account Name** of the account (required).
5. Set the **Visible to Other Partners** to **Yes** or **No**. Default: **Yes**.
 - Click **No** to prevent partners in different distribution tiers from seeing information about this account.
 - Click **Yes** to allow partners to see information about this account.
6. Add additional address information as desired.

7. Click **Save**.

The End-User Portal saves the new customer account with the settings you provided. At this point, you can also decide whether to manage this account's users and whether or not to link sub-accounts to it.

If you choose to manage users for the current account, you can create new users, link existing users, or remove users:

- Click **Actions > Create a User** to link a new user to the account. Then follow the steps outlined in [Creating a User](#) to create the new user account.
- Select users (and roles, if applicable) and click **Actions > Link Existing Users** to link selected users to the account.
- Select users and click **Actions > Remove Users** to remove selected user from this account.

If you choose to link sub-accounts to this account, follow the steps described in [Linking Sub-Accounts to an Account](#).

Editing an Account or Sub-Account

A portal administrator can edit an account or sub-account to change its name or to add, edit, or delete users, or to delete its sub-accounts.

You can locate the account to edit by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner accounts, choose the **List All Partners** command in the **Accounts** group of the **Accounts & Users** menu.

Follow the steps below to locate the account. Use the appropriate **List All** command to browse accounts of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all account types are available for all users.)



Task

To edit an existing account:

1. Locate the account you want to edit by listing all accounts or searching for the account.
 - To search, click **Accounts & Users > Search Accounts**, enter your search criteria, and click **Search**.
 - To list all accounts, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, or **List All Self-Registered**.

The End-User Portal opens the search results page.

2. On the **Accounts** page, click the account you want to edit. This opens the **Edit Account** page.
3. Edit the account name and identifier, or create or edit existing users.
4. Click **Save**.

Deleting an Account

A portal administrator can delete an account or sub-account from the End-User Portal.

You can locate the account to delete by starting with the **List All** commands in the **Accounts & Users** menu. For example, to list all partner accounts, choose the **List All Partners** command in the Accounts group of the **Accounts & Users** menu.

Follow the steps below to delete an account. Use the appropriate **List All** command to browse accounts of the correct type: **List All Producers**, **List All Customers**, **List All Partners**, or **List All Self-Registered**. (Not all account types are available for all users.)



Task

To delete an account:

1. Locate the account you want to delete by listing all accounts or searching for the account.
 - To search, click **Accounts & Users > Search Accounts**, enter your search criteria, and click **Search**.
 - To list all users, click **Accounts & Users > List All Customers**, **List All Producers**, **List All Partners**, **List All Self-Registered**.

The End-User Portal opens the search results page.

2. On the **Accounts** page, select the account you want to delete. Click the checkbox for the account or sub-account you plan to delete.
3. Click **Action > Delete** or **Action > Delete Subtree** depending on whether you want to delete the currently selected account and all its sub-accounts or to delete only the currently selected account or
 - Click **Action > Delete Subtree** to delete the selected account and all of its sub-accounts.
 - Click **Action > Delete** to delete the currently selected account.
4. Click **OK** to confirm deletion.

Registering for a Trial

Now, you are eligible to register for a trial and view all the part numbers in the Enterprise Portal. You can also register for multiple part numbers by registering for a trial.



Note ▪ Using the existing trial registration page, when the end users register for multiple part numbers; they will receive a notification on a new feature.

Follow the instructions below to register for a trial.



Task

To register for a trial:

1. Login to the portal using valid credentials.
2. On the **Home** toolbar, click **Activation & Entitlements** drop-down menu.
3. Click **Register for Trial**.
4. Select a product number from the list.
5. Select the appropriate name of the organization.

6. Click **Register**.



Note ▪ You can also select multiple part numbers consecutively.



Note ▪ When an end user registers for an 'x' part number from the Enterprise Portal, the part number disappears from the list soon after the submission of the request. And when an end user is already registered for an 'x' named part number, the selected part number will not be listed in the new screen.

Managing Access Tokens



Note ▪ The **Manage Access Tokens** page is visible only if your producer has enabled its display.

This section describes how to manage access tokens using the **Manage Access Tokens** page in the FlexNet Operations End-User Portal. Access tokens are a means to securely authorize SOAP and REST web service calls to FlexNet Operations.

This section covers the following:

- [Key Information About Access Tokens](#)
- [Access Token Tasks](#)



Note ▪ Access tokens can also be managed using the REST web service **access-token-controller**. This web service is described in detail in the [FlexNet Operations Web Services Integration Guide](#) on the [Reverera Documentation site](#).

Other authentication methods for FlexNet Operations APIs (for example, basic authentication) are also described in the [FlexNet Operations Web Services Integration Guide](#).

Key Information About Access Tokens

This section covers the following information:

- [Workflow for Using Access Tokens](#)
- [Which APIs Support Token-Based Authentication?](#)
- [Permissions for Managing Access Tokens](#)
- [Token Types and Their Uses](#)

Workflow for Using Access Tokens

On the **Manage Access Tokens** page, users can request an access token with a limited expiration from FlexNet Operations. The page returns an access token which is a hexadecimal string with an **rna_** prefix.

When firing requests to a FlexNet Operations API (REST or SOAP), this token must be added to the authentication header of the API request with the word Bearer followed by the token string.

The access token not only authenticates the requester but also defines the permissions of how the requester can use the API.

Which APIs Support Token-Based Authentication?

FlexNet Operations users can use access tokens to securely authorize calls to the following FlexNet Operations SOAP and REST APIs:

- SOAP APIs
- RESTful Services for Data Access
- Data Extract RESTful Services
- Application RESTful Services



Note ▪ For more information about these APIs, refer to the [FlexNet Operations Web Services Integration Guide](#) on the [Revenera Documentation site](#).

Permissions for Managing Access Tokens

Any FlexNet Operations user can create and manage NORMAL tokens for themselves.

To create and manage tokens for other users (IMPERSONATED tokens), users require the following permissions:

- **Create Impersonated Token**
- Plus at least one of the following permissions, depending on the type of user creating the IMPERSONATED token:
 - **View and Manage Users**
 - **View and Manage Customer Users**
 - **View and Manage Partner Users**

See also

[Token Types and Their Uses](#)

Token Types and Their Uses

FlexNet Operations uses different token types to manage different access levels and operations:

- NORMAL tokens can be requested by any FlexNet Operations user to authenticate themselves at a FlexNet Operations API.
- IMPERSONATED tokens can be requested by a privileged user for use by other FlexNet Operations users.

An IMPERSONATED token would typically be requested by a privileged user on behalf of another user with limited permissions. This enables the privileged user to access the web services securely and to act as the other user temporarily, with their actions logged.

In addition, in scenarios where a custom portal was built using FlexNet Operations APIs, a privileged user impersonating another user will see the content that is specific to the user that they are impersonating.



Important • To create and manage IMPERSONATED tokens, users require the **Create Impersonated Token** permission and a **Manage Users** permission (see [Permissions for Managing Access Tokens](#)).

Access Token Tasks

On the **Manage Access Tokens** page, you can view, create, update, rotate, and delete tokens. You access the **Manage Access Tokens** page from the **Accounts & Users** menu.

Use the following links to navigate to the relevant section:

- [Viewing Access Tokens](#)
- [Creating an Access Token](#)
- [Editing an Access Token](#)
- [Rotating an Access Token](#)
- [Deleting an Access Token](#)



Important • To perform any of the tasks described in this section for IMPERSONATED tokens, users require the **Create Impersonated Token** permission and a **Manage Users** permission (see [Permissions for Managing Access Tokens](#)).

Viewing Access Tokens

The **Manage Access Tokens** page displays a table with tokens. By default, the table lists only NORMAL tokens. To display IMPERSONATED tokens, or to search for specific tokens, use the search functionality above the table.

Note the difference between the columns **Created By** and **Created For**. **Created By** shows the name of the user who created the token, whereas **Created For** is the user on whose behalf a token was created. For NORMAL tokens, both columns show the same user. For IMPERSONATED tokens, the names will be different.

See also

[Permissions for Managing Access Tokens](#)



Creating an Access Token

Follow the steps below to create an access token.



Task **To create an access token**

1. Click **Accounts & Users > Manage Access Tokens**. The **Manage Access Tokens** page opens.
2. On the **Manage Access Tokens** page, click **Create**. The **Create Token** page opens. All fields are empty.
3. Provide the following information:

Option	Description
Token Creator	By default, this field is prepopulated with the name of the currently logged-in user.
Create for someone else	<p>Select this checkbox if you want to create an IMPERSONATED token (that is, a token that can be used by a privileged user to act as another user temporarily).</p> <p>Selecting this checkbox will show the Created For field.</p>  <p>Note ▪ This checkbox is displayed only for users with the Create Impersonated Token permission.</p>
Created For	<p>This field is available only if you selected the Create for someone else checkbox.</p> <p>Specify the name of the user for whom the token is generated (that is, the user who will be impersonated when the token is used).</p>  <p>Note ▪ This field is displayed only for users with the Create Impersonated Token permission.</p>
Token Name	<p>Specify a token name. The name must be 5 - 25 characters long.</p> <p>The following characters are not supported:</p> <p>* < > + \$? . ^ %] \\\ (four consecutive back slashes are not allowed)</p> <p>HTML tags that may indicate an XSS attack will be rejected.</p>
Description	Enter a description of the token. For IMPERSONATED tokens, this should capture the impersonation reason.

Option	Description
Expiration Time	<p>Specify when the token should expire. The minimum lifetime is 1 minute.</p> <p>Use the following format to specify the expiration time: Y=years, M=months, d=days, h=hours, m=minutes (case sensitive).</p> <p>Example: 3Y 4M 3d 9h 6m</p> <p>Best practice: Use a short duration and rotate tokens once every month or three months. See also .</p>

- Click **Save**. The **Create Token** page is displayed, which shows information for the token that you just created.
- The **Token Value** field shows the access token, which is a hexadecimal string with an **rna_** prefix. Click **Copy** to copy and paste the value to a secure location of your choice.



Note ▪ When accessing a FlexNet Operations SOAP or REST API, the token value must be added to the authentication header of the API request, preceded by the word *Bearer*.

- Click **Back to Manage Tokens** to return to the **Manage Access Tokens** page.

See also

[Permissions for Managing Access Tokens](#)

Editing an Access Token

Only the token creator or another privileged user can edit a token. The following attributes of an existing token can be edited:

- Token name
- Token description
- Expiration Time



Note ▪ You cannot change the expiration time to a value in the past.

You cannot change the user ID or token type. Expired tokens cannot be edited.



Task *To edit an access token*

1. Click **Accounts & Users > Manage Access Tokens**. The **Manage Access Tokens** page opens.
2. On the **Manage Access Tokens** page, click the hyperlinked name of the token that you want to update. The **Edit Token** page opens. You can edit the following fields:

Option	Description
Token Name	<p>The token name must be 5 - 25 characters long.</p> <p>The following characters are not supported:</p> <p>* < > + \$? . ^ %] \\\ (four consecutive back slashes are not allowed)</p> <p>HTML tags that may indicate an XSS attack will be rejected.</p>
Description	<p>For IMPERSONATED tokens, the token description should capture the impersonation reason.</p>
Expiration Time	<p>You can change the time when the token should expire. The minimum lifetime is 1 minute.</p> <p>Use the following format to specify the expiration time: Y=years, M=months, d=days, h=hours, m=minutes (case sensitive).</p> <p>Example: 3Y 4M 3d 9h 6m</p>

3. Click **Save** to return to the **Manage Access Tokens** page.

See also

[Permissions for Managing Access Tokens](#)

Rotating an Access Token

Token rotation is a security best practice that involves regularly replacing old tokens with new ones in a system where tokens are used for authentication and authorization. This practice enhances security and maintains the integrity of access control mechanisms. Token rotation also enables organizations to quickly generate a new token if the existing token value is compromised. Revenera recommend to frequently rotate access tokens (the frequency will depend on your organization's security policies).


Token rotation means that a token's properties (expiry strategy, expiry time, issue time, type, name and user ID) are retained, but a new token value is created. No values can be changed.

If a token is rotated halfway through its lifetime, the token expiration time does not change. For example, if a token is created on January 1 with a lifetime of 30 days (Expiration Time "30d"), and the token is rotated on January 20, its expiration time of January 30 remains unchanged.



Task

To rotate an access token

1. Click **Accounts & Users > Manage Access Tokens**. The **Manage Access Tokens** page opens.
2. On the **Manage Access Tokens** page, select the checkbox of the token that you want to rotate. Click the **Rotate Token** button .
3. When prompted, confirm that you want to change the token value. This opens the **Refresh Token Value** page.
4. The **Refresh Token Value** page shows new token value. Click **Copy** to copy and paste the value to a secure location of your choice.



Note ▪ When you rotate a token, only the token value is changed. To change other token attributes, you need to edit the token (see [Editing an Access Token](#)).

5. Click **Back to Manage Tokens** to return to the **Manage Access Tokens** page.

See also

[Permissions for Managing Access Tokens](#)

Deleting an Access Token

You can delete a token in case it has become compromised. Only the token creator can delete a token; this means that only users with the **Create Impersonated Token** permission and a **Manage Users** permission (see [Permissions for Managing Access Tokens](#)) can delete IMPERSONATED tokens. Once a token has been deleted it can no longer be used to access the APIs.



Task

To delete an access token

1. Click **Accounts & Users > Manage Access Tokens**. The **Manage Access Tokens** page opens.
2. On the **Manage Access Tokens** page, select the checkbox of the token that you want to delete. This will activate the **Delete** button.
3. When prompted, confirm that you want to delete the token.

The token is permanently deleted.

See also

[Permissions for Managing Access Tokens](#)

