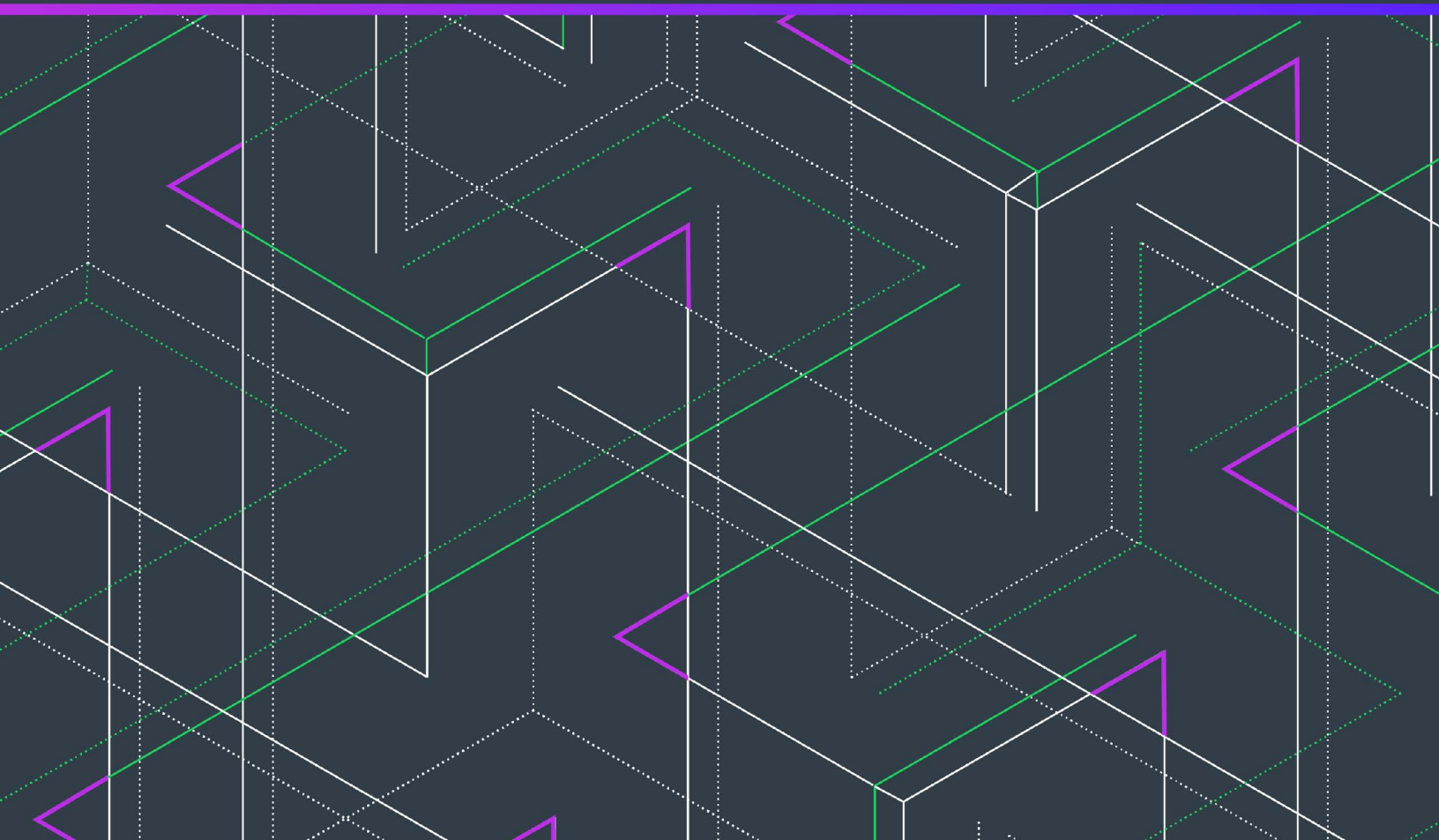
revenera

FlexNet License Server Manager Guide 2025.03

FlexNet License Server Manager Guide



Legal Information

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FlexNet License Server Manager Guide

The FlexNet License Server Manager is a browser-based interface used to monitor and configure the local license server or a Cloud License Server (CLS) instance. This tool is provided as a separate package, called `FlexnetLicenseServerManager-<version>.zip`. The package is a Docker container which holds the image `revenera/flsm:<version>`.

FlexNet License Server Manager Video Walkthrough

To watch a brief video that covers the end-to-end process for setting up and installing the FlexNet License Server Manager as well as a demonstration of its functionality, click one of the following links:

- Revenera Learning Center (login required): https://learning.revenera.com/flexnet-embedded-license-server/1828455
- YouTube: FlexNet License Server Manager Overview

Sections in this Guide

The *FlexNet License Server Manager Guide* includes the following chapters to describe how to use the License Server Manager:

- FlexNet License Server Manager Requirements
- Customizing the FlexNet License Server Manager
- Setting Up the FlexNet License Server Manager
- Starting the FlexNet License Server Manager
- Updating the FlexNet License Server Manager
- License Server Manager Information and Settings
- Providing Credentials on a Secured License Server
- License Server Properties View
- Page Navigation for Views in the License Server Manager
- Features View

- Named License Pools View
- Devices View
- Reservations View
- Online Server Updates View
- Offline Server Updates View
- Client Key Operations View

FlexNet License Server Manager Requirements

To run the FlexNet License Server Manager, you need a supported browser and run Docker.

Best Practice: Updating to Latest Version

Revenera recommend that you run the latest version of the FlexNet License Server Manager and local license server so that you benefit from recent fixes and enhancements.

Supported Browsers

The FlexNet License Server Manager UI supports the following browsers:

- Mozilla Firefox version 122 and later
- Google Chrome version 114 and later
- Microsoft Edge version 121 and later

Docker

The FlexNet License Server Manager is provided as a Docker image in the form of a .zip file. You must therefore install Docker to be able to run the License Server Manager.

The FlexNet License Server Manager runs on an Nginx web server. The Nginx web server is included in the `FlexnetLicenseServerManager-<version>.zip` package, therefore you do not need to install Nginx.

***Note** ▪ Installing Docker is not covered in this section. For information about downloading and installing Docker, see the Get Docker topic in the Docker documentation.*

You can verify if Docker is up and running using the following command:

```
docker -v
```

You will see output similar to the following:

```
root@Admin:~# docker -v
Docker version 20.10.7, build 20.10.7-0ubuntu5~20.04.2
```

Customizing the FlexNet License Server Manager

***Note** ▪ This step is optional and only relevant to producers. License server administrators can skip this section.*

This section describes the ways in which producers can customize the License Server Manager.

- Instead of the Revenera logo, FlexNet License Server Manager can show the logo of the producer organization. For the logo, the following file types are supported: JPG, JPEG, and PNG.
- The labels and icons of the navigation menu on the left side can be customized.

Producers edit the Docker container and create a new Docker image. They then distribute the Docker image to their customers who install the License Server Manager as described in the following section, Setting Up the FlexNet License Server Manager.

Task ***To customize the FlexNet License Server Manager user interface***

1. Change to the directory where the image file is located and run the following command to load the image file:

   ```
   docker load -i <Flexnet License Server Manager image .zip file>
   ```

   You will see output similar to the following:

   ```
   D:\Git\FLSM>docker load -i FlexnetLicenseServerManager-2024-03.zip
   7cd52847ad77: Loading layer [==================================================>]  7.338MB/7.338MB
   d8a5a02a8c2d: Loading layer [==================================================>]   5.32MB/5.32MB
   5e59460a18a3: Loading layer [==================================================>]  3.584kB/3.584kB
   152a948bab3b: Loading layer [==================================================>]  4.608kB/4.608kB
   c4d67a5827ca: Loading layer [==================================================>]  3.584kB/3.584kB
   f1bee861c2ba: Loading layer [==================================================>]  7.168kB/7.168kB
   042cd3f87f43: Loading layer [==================================================>]  29.85MB/29.85MB
   dd9369c9bea6: Loading layer [==================================================>]  4.096kB/4.096kB
   bf8fe155c7b7: Loading layer [==================================================>]   6.38MB/6.38MB
   Loaded image: revenera/flsm:2024-03
   ```

2. Use the following command to verify the image:

   ```
   docker images
   ```

   You will see output similar to the following:

   ```
   REPOSITORY          TAG         IMAGE ID         CREATED          SIZE
   revenera/flsm       2024-03     1c0383a444f7     5 hours ago      49.4MB
   revenera/flsm       2023-09     c829323eea31     5 months ago     47.7MB
   ```

3. Use a command like the following to run the FlexNet License Server Manager image and to set up the application environment:

   ```
   docker run -p 8080:80 -e API_PORT=8080 -t revenera/flsm:2024-03
   ```

   The command above uses the following flags:

- `-p`: Assigns the port configuration. Adjust the port numbers as required for your application environment. The first port is the Docker host and the second port is the port used by the License Server Manager application. The port numbers must be identical.
- `-e`: Sets an environment variable in the container.
- `-t`: Creates a tag that refers to the source image. In the example above, the image name is `revenera/flsm` and the tag value is `2024-03`.

You will see output similar to the following (shortened for brevity):

```
2024/03/04 11:53:20 [notice] 1#1: using the "epoll" event method
2024/03/04 11:53:20 [notice] 1#1: nginx/1.25.4
2024/03/04 11:53:20 [notice] 1#1: built by gcc 12.2.1 20220924 (Alpine 12.2.1_git20220924-r10)
2024/03/04 11:53:20 [notice] 1#1: OS: Linux 5.10.102.1-microsoft-standard-WSL2
2024/03/04 11:53:20 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2024/03/04 11:53:20 [notice] 1#1: start worker processes
2024/03/04 11:53:20 [notice] 1#1: start worker process 19
2024/03/04 11:53:20 [notice] 1#1: start worker process 20
2024/03/04 11:53:20 [notice] 1#1: start worker process 21
2024/03/04 11:53:20 [notice] 1#1: start worker process 22
2024/03/04 11:53:20 [notice] 1#1: start worker process 23
```

4. Open a separate command-line terminal and use the following command to locate the ID or name of the active License Server Manager container. (Alternatively, you can copy the ID from the Docker desktop application.)

   ```
   docker ps
   ```

   You will see output similar to the following (shortened for brevity):

   ```
   CONTAINER ID  IMAGE                  COMMAND                  CREATED      STATUS
   8d2b9756f86a  revenera/flsm:2024-03  "/docker-entrypoint.…"  2 weeks ago  Up 7 minutes
   ```

5. You can now perform one or both of the following customizations:

   - **Add a custom logo:**

     Use the following command to copy the image file for your organization's logo to the specified path within the running License Server Manager container:

     ```
     docker cp <path>\logo.jpg <container_ID>:/usr/share/nginx/assets/logo.jpg
     ```

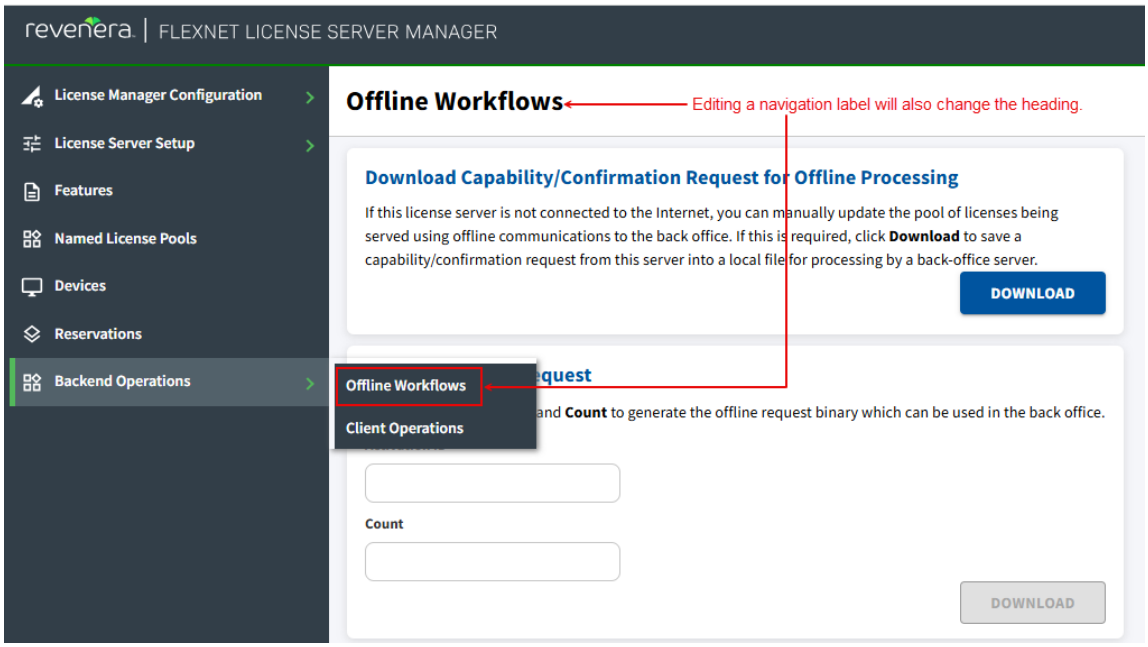
     Important ▪ *Valid names for the logo are **logo.jpg**, **logo.jpeg**, or **logo.png**. If the logo has a different file name or a different extension, Docker returns an error.*

     You will see output similar to the following:

     ```
     Successfully copied 37.9kB to 8d2b9756f86a:/usr/share/nginx/assets/logo.jpg
     ```

   - **Customize the left navigation menu:**

     You can edit the labels and icons that appear in the left navigation menu. When you edit a label in the navigation bar, the corresponding heading will also be changed, as shown in the following example screenshot:



The labels and icons are specified in a file called `data.json`. Prepare a custom `data.json` file where you edit the labels and icons as required. Use the icons from Material UI (see https://mui.com/material-ui/material-icons). Copy the icon name without the suffix; for example, to use the icon `PermDataSettingIcon`, specify `PermDataSetting`.

Tip ▪ *The Docker container contains a `sampleData.json` (located under `<container_ID>:/usr/share/nginx/assets/`) which helps you prepare your custom `data.json`.*

Important ▪ *Only edit fields called either "label" or "icon". Editing any other fields will result in errors.*

When you prepared your custom `data.json` file, use the following command to copy it to the specified path within the running License Server Manager container:

```
docker cp <path>\data.json <container_ID>:/usr/share/nginx/assets/data.json
```

You will see output similar to the following:

```
Successfully copied 37.9kB to 8d2b9756f86a:/usr/share/nginx/assets/data.json
```

6. Commit the changes made to the License Server Manager container to create a new Docker image with the updated logo:

```
docker commit <container_ID> <image>:<tag>
```

where <container_ID> is the ID output by the `docker ps` command (see Step 4), and <image>:<tag> is the name of the new Docker image and tag, for example:

```
docker commit 8d2b9756f86a revenera/flsm-custom:2024-03
```

You will see output similar to the following:

```
sha256:7272b5523871c7d4f61b91b358613f8d20dacc5dc352ff6790023bf0a13b4c26
```

7. Use the following command to verify the new image:

   ```
   docker images
   ```

   You will see output similar to the following:

   ```
   REPOSITORY                TAG         IMAGE ID       CREATED              SIZE
   revenera/flsm-custom      2024-03     20413816ea62   About a minute ago   49.5MB
   revenera/flsm             2024-03     1c0383a444f7   5 hours ago          49.4MB
   revenera/flsm             2023-09     c829323eea31   5 months ago         47.7MB
   ```

8. Optionally, use the following command to save the image as a zip file:

   ```
   docker save -o <file_name>.zip image_name:<tag>
   ```

You can now distribute the customized Docker image or zip to your customers.

To install the customized License Server Manager, the license server administrator needs to perform the steps as described in the following section, Setting Up the FlexNet License Server Manager.

Setting Up the FlexNet License Server Manager

This section guides you through the installation of the License Server Manager.

Task ***To install the FlexNet License Server Manager***

1. Change to the directory where the image file is located and run the following command to load the image file:

   ```
   docker load -i <Flexnet License Server Manager image .zip file>
   ```

   You will see output similar to the following:

   ```
   D:\Git\FLSM>docker load -i FlexnetLicenseServerManager-2024-06.zip
   7cd52847ad77: Loading layer [==================================================>]  7.338MB/7.338MB
   d8a5a02a8c2d: Loading layer [==================================================>]   5.32MB/5.32MB
   5e59460a18a3: Loading layer [==================================================>]  3.584kB/3.584kB
   152a948bab3b: Loading layer [==================================================>]  4.608kB/4.608kB
   c4d67a5827ca: Loading layer [==================================================>]  3.584kB/3.584kB
   f1bee861c2ba: Loading layer [==================================================>]  7.168kB/7.168kB
   042cd3f87f43: Loading layer [==================================================>]  29.85MB/29.85MB
   dd9369c9bea6: Loading layer [==================================================>]  4.096kB/4.096kB
   bf8fe155c7b7: Loading layer [==================================================>]   6.38MB/6.38MB
   Loaded image: revenera/flsm:2024-06
   ```

2. Use the following command to verify the image:

   ```
   docker images
   ```

   You will see output similar to the following:

   ```
   REPOSITORY        TAG         IMAGE ID        CREATED        SIZE
   revenera/flsm     2024-06     135f63352db8    9 days ago     47.4MB
   ```

Tip ▪ *Note the value of the tag; this is required in the next step.*

3. Use the following command to start the FlexNet License Server Manager with the default nginx configuration file. Use the -p flag to assign the port configuration:

   ```
   docker run -d -p 8080:80 revenera/flsm:<tag>
   ```

   where <tag> is the TAG value that is displayed when you run the `docker images` command, for example:

   ```
   docker run -d -p 8080:80 revenera/flsm:2024-06
   ```

4. To enable HTTPS mode for the License Server Manager, use a text editor to create a custom configuration file called `default.conf`. This will replace the existing `default.conf` file that is located inside the container under `/etc/nginx/conf.d` (see step 5). Create a `default.conf` file with the following text:

   ```
   server {
       listen 1443 ssl http2;
       listen [::]:1443 ssl http2;
       server_name  127.0.0.1;
       ssl_certificate /etc/nginx/conf.d/servercert.pem;
       ssl_certificate_key /etc/nginx/conf.d/serverkey.pem;

       #access_log /var/log/nginx/host.access.log main;
           location /assets {
               root /usr/share/nginx;
               autoindex on;
           }
           location / {
               root /usr/share/nginx/html;
               index index.html index.htm;
               try_files $uri $uri/ /index.html;
           }
       }
   ```

5. Obtain or create the `servercert.pem` and `serverkey.pem` files.

   ***Note** ▪ Revenera recommends using a certificate from a standard certificate authority. You can convert the certificate that you receive from the certificate authority to .pem format using a third-party tool (for example, see the SSL Converter tool from SSLShopper).*

   If you choose not to purchase a certificate from an authority, you can obtain a free certificate from providers such as Cloudflare or Certbot.

6. Use the following command to copy the `servercert.pem` , `serverkey.pem` and `default.conf` to the container in which the License Server Manager is running:

   ```
   docker run -it -v /<path>/default.conf:/etc/nginx/conf.d/default.conf -v /<path>/
   serverkey.pem:/etc/nginx/conf.d/serverkey.pem -v /<path>/servercert.pem:/etc/nginx/conf.d/
   servercert.pem -p 1443:1443 revenera/flsm:<tag>
   ```

   This command also starts the License Server Manager container on port 1443.

7. Point a web browser to **http://localhost:8080** (where *8080* is replaced by the correct port, if necessary) or **https://localhost:1443**.

   By default, the License Server Manager opens to the **About** view. However, if administrative security is enabled on the license server and you have not provided your authorization credentials, the **Login** view is opened instead so that you can enter these credentials before proceeding with the next steps. (See Providing Credentials on a Secured License Server for details.)

8. On the left side of the interface, click **License Manager Configuration** > **Settings**.
9. On the **Settings** view, check that the following settings are defined correctly:
    - **FlexNet License Server Host Name**—The hostname of the machine on which the license server is running.
    - **FlexNet License Server Port**—The port on which the License Server Manager will look for the license server. (The default port is `7070`.)

To stop the License Server Manager, close the web page and stop the container in Docker.

***Note** ▪ The License Server Manager runs in a container, therefore you cannot use the host name "localhost" for the local license server. For the License Server Manager to connect to a local license server that is running in https mode, License Server Manager must also run in https mode.*

Starting the FlexNet License Server Manager

This section describes how to start the License Server Manager.

***Note** ▪ Installing Docker is not covered in this section. For information about downloading and installing Docker, see the Get Docker topic in the Docker documentation.*

Task ***To start the FlexNet License Server Manager***

1. Start Docker Desktop.
2. In Docker Desktop, click the **Start** button for the `revenera/flsm:<version>` image.
3. Point a web browser to **http://localhost:8080** (where *8080* is replaced by the correct port, if necessary).

The web browser displays the **About** page of the License Server Manager.

Updating the FlexNet License Server Manager

This section describes how to update the License Server Manager when a new version becomes available.

***Important** ▪ To avoid potential caching issues, Revenera recommend that you clear your browser cache or perform a hard reload. For more information, refer to your browser's documentation.*

Task ***To update the FlexNet License Server Manager***

1. Perform the steps described in section Starting the FlexNet License Server Manager to start the License Server Manager.
2. Open a command prompt and run the following command to verify the current image version:

   ```
   docker image ls
   ```

   You will see output similar to the following:

   ```
   REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
   revenera/flsm       2023-06      135f63352db8      3 months ago     47.4MB
   ```

3. Use the following command to show all running containers:

   ```
   docker ps
   ```

   You will see output similar to the following (shortened for brevity):

   ```
   CONTAINER ID  IMAGE                  COMMAND                  CREATED       STATUS        PORTS
   1b8df6ec4636  revenera/flsm:2023-06  "/docker-entrypoint.…"   2 months ago  Up 9 seconds  0.0.0
   ```

4. Use the following command to stop the running FLSM container:

   ```
   docker stop <containerID>
   ```

5. Use the following command to remove the old FLSM container:

   ```
   docker rm <containerID>
   ```

6. Optionally, remove the old image file using the following command:

   ```
   docker rmi <imageID>
   ```

   You will see output similar to the following:

   ```
   Untagged: revenera/flsm:2023-06
   Deleted: sha256:e49c49ae2059d2a731cbd42fb88b53d852eeb03c11452e784310394f0a411ad7
   Deleted: sha256:a13e3fadbe610a1255b0c0458e2ebd0866c604997054fbcfa24792aa434999a2
   Deleted: sha256:9d3dbc2800ab74b817eae5f55c049e52b88d4881f06d537a48ebe72599d80a85
   Deleted: sha256:070f136fdcee1cb6669f5057d296e1bc1fcfe87ead5c4dac8ca4c7c6dabcda2c
   Deleted: sha256:84858bd9f6789f7b03241900b71d1324506222291d45d516d85c2f0d87f3299a
   Deleted: sha256:48e01136a4fe25c5cdcc1aa6c5c4bdedfbecc1725ff53972e7327c36c4323c8e
   Deleted: sha256:34325996f3c88e4aa749af90c2ae68985ff3ba7e530b07a54f73c6dbfaad2f39
   Deleted: sha256:063d62e474734c802a5b3443a8ee8b365cc914771c6ce98f94a8ce003dce96d8
   Deleted: sha256:6044cb9ca9f9c6b001c626536bba1d45e96dcd9bff5b35232201c52010047cdf
   Deleted: sha256:7e6c041bf6dfaff2f3084f510f9ce4803c5c6916554533816c0b774f48bd563f
   Deleted: sha256:f1417ff83b319fbdae6dd9cd6d8c9c88002dcd75ecf6ec201c8c6894681cf2b5
   ```

   This concludes the steps for removing the old version of the License Server Manager.

7. Perform the steps described in section Setting Up the FlexNet License Server Manager to install the new version of the License Server Manager.

License Server Manager Information and Settings

Important ▪ *You must first fill out all fields on the* ***License Manage Configuration*** > ***Settings*** *page before you can access any other License Server Manager pages.*

The top menu item is the **License Manage Configuration** group, which contains the **Settings** and **About** views. The **About** view (not pictured) displays build, system, and browser information. In the **Settings** view, you set the server type (local license server or CLS instance), specify the port number/CLS instance ID and host name (network name or IP address) for the license server, as well as the number of records to show on a page. These configuration settings appear in a separate list because they can be modified even if the license server is inaccessible, unlike the license server policy settings and configuration properties.

The default port for the local license server is 7070.

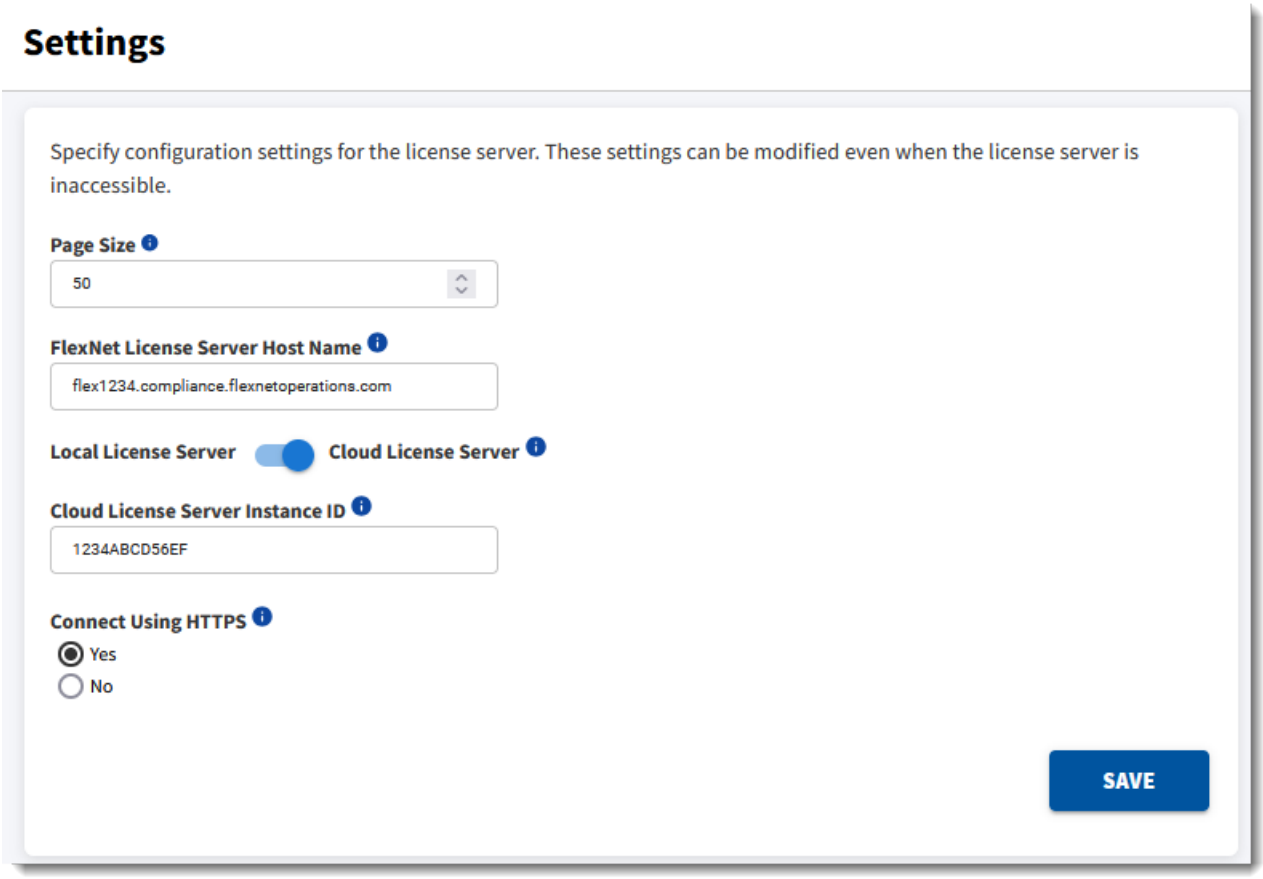


Figure 1: Settings view for License Server Manager

The properties available in this view include:

- **Page size**—The number of records to display per page

- **FlexNet License Server Host Name**—For a local license server, enter the hostname of the machine the license server is running on. For a CLS instance, enter the base URL in the following format:

  `siteID.compliance.flexnetoperations.com`

  Example:

  `flex1234.compliance.flexnetoperations.com`

  Ask your producer to provide the site ID.

- **Local License Server | Cloud License Server**—The type of server that is being monitored. Depending on your selection here, fill out the following required field:

  - **FlexNet License Server Listen Port**—The port number for the license server. (The default port for the server is `7070`.)

  - **Cloud License Server Instance ID**—The instance ID that uniquely identifies this CLS instance.

- **Connect Using HTTPS**—The option indicating which protocol—HTTP or HTTPS—must be used for FlexNet License Server Manager communications with the license server:

  - **Yes**—Use HTTPS communications.

    Note ▪ *(Communication to a Cloud License Server will always be over HTTPS.)*

  - **No**—Use HTTP communications.

Providing Credentials on a Secured License Server

When administrative security is enabled on your license server, anyone attempting to administer the license server will need to provide a set of authorization credentials before starting administrative operations. When you provide your credentials as a license server administrator, you will have administrative privileges on the license server. Additionally, other enterprise users can have credentials to perform limited administrative privileges. Refer to Managing Administrative Security on a Local License Server or CLS Instance in the FlexNet Embedded License Server Administration Guide for details.

To enter authorization credentials, navigate to **License Server Setup** > **Login**. Enter the user name for your account in the **User Name** field, enter your password in the **Password** field, and click **Login**.

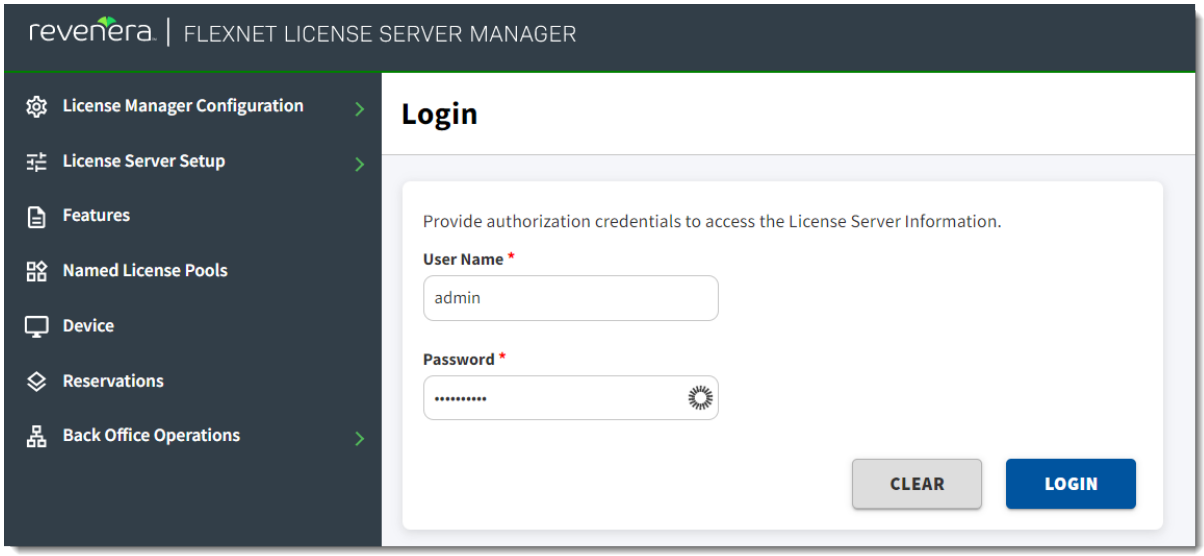


Figure 2: Login view to enter authorization credentials

Once the credentials have been verified, you can use the License Server Manager to perform the administrative operations for which you are authorized.

If you attempt to perform an operation in the License Server Manager that requires authorization, but you have not provided credentials or are not authorized to perform the operation, you receive an “access denied” message.

License Server Properties View

The **License Server Properties** view (available by selecting **Properties** from the **License Server Setup** menu) displays the current policy settings used by the FlexNet Embedded local license server. Settings can be overridden in this view, with the exception of settings that could present a security vulnerability if editable by anyone but the producer—such as response lifetime, failover maintenance interval, or enablement of synchronization to the back office.

Any changes made in this view take effect when you click **Save** at the bottom of the page.

Refer to the Reference: License Server Policy Settings to determine which policy settings you are allowed to update, the internal name for each setting, and its description.

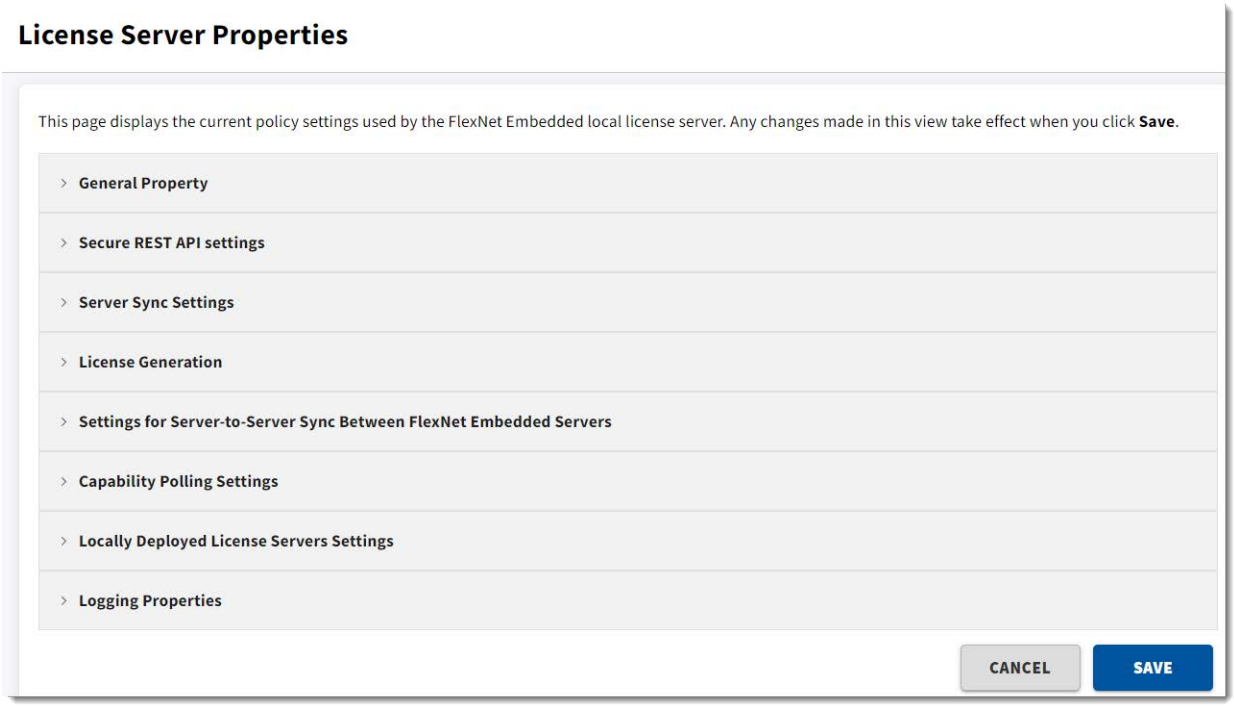


Figure 3: License Server Properties view

The properties exposed on this page include:

- **General Properties:** The license server hostid, license server version, device UUID, and status.
  The license server's hostid value is used to fulfill capability requests against a back-office server. If the server has multiple hostid values, the list contains the available hardware Ethernet addresses and dongle IDs. If virtual hosts are supported, the VM UUID will also be listed. Select the value registered with your back-office system.
- **Secure REST API Settings:** Settings that control administrative security on the license server.
- **Server Sync Settings:** Properties for synchronizing to the back office.
- **License Generation:** Polices that help manage served features.
- **Settings for Server-to-Server Sync Between FlexNet Embedded Servers:** Policies for failover synchronization.
- **Capability Polling Settings:** Settings that control whether and how often the license server contacts the back office for license updates and how often the server should retry communications after a failed attempt.
- **Locally Deployed License Server Settings:** Settings specific to your license server and environment.
- **Logging Properties:** Log locations and the lowest level of granularity for log messages captured in the log.

The license server's producer settings are stored in the `producer-settings.xml` file. These settings are described in Reference: License Server Policy Settings.

Page Navigation for Views in the License Server Manager

The Features View, Named License Pools View, Devices View, and Reservations View provide a navigation tool that enables you to move easily between pages in the view to locate records you want to see. Note that the number of records per page is determined by the **Page Size** setting (under **License Manager Configuration** > **Settings**).

The navigation tool shows the total number of records available and enables you to select a specific page to which to navigate:

Figure 4: Page navigation tool

Features View

Summary Tab

In the **Features** view, the **Summary** tab displays all the features installed on the license server.

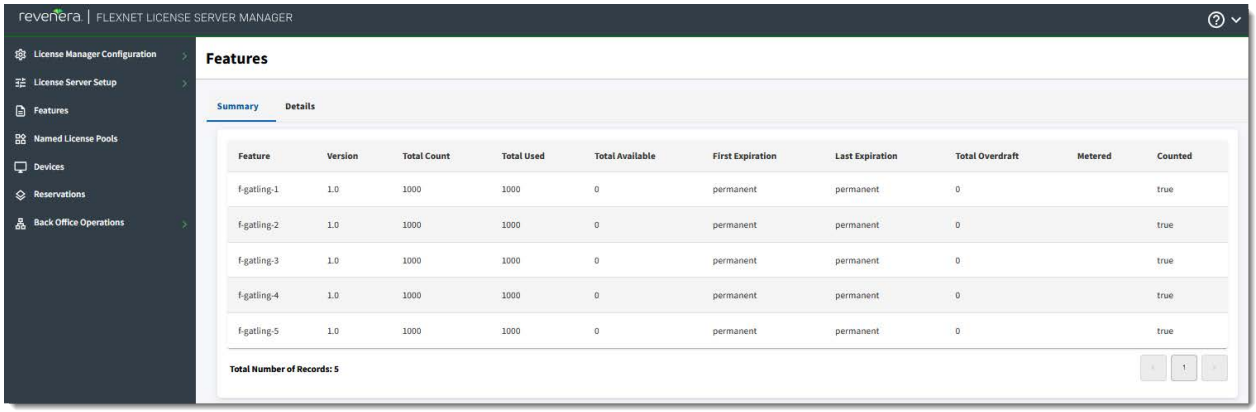


Figure 5: Features view, **Summary** tab

Details Tab

Switch to the **Details** tab to see further information about each feature.

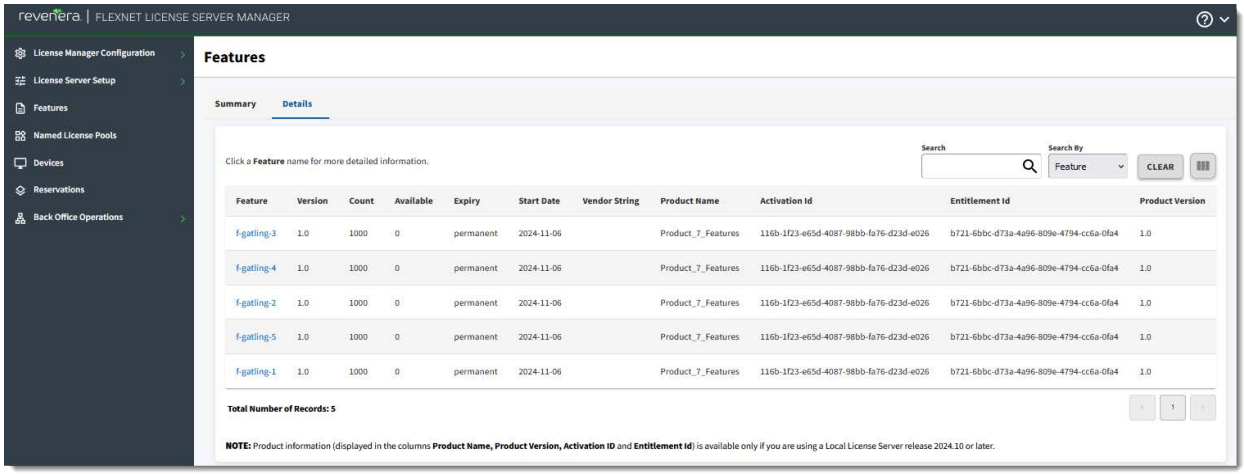


Figure 6: Features view, **Details** tab

The following functionality helps you find specific features and focus on information that is important to you:

- **Page navigation**—If the list of features is extensive, you can use the navigation tool at the bottom of the page to locate records, as described in Page Navigation for Views in the License Server Manager.

- **Show/hide columns**—Click the **View Columns** button to see a list of columns available for the page. Select the columns that should be shown in the table.

  ***Note** ▪ The columns **Product Name**, **Product Version**, **Activation Id** and **Entitlement ID** display product information for features on a local license server only if the local license server is running release 2024.10 or later.*

- **Search**—You can also search for a specific feature by entering its name in the **Search** field and then clicking the “magnifying glass” icon. (Provide the exact and complete feature name for the search string.)

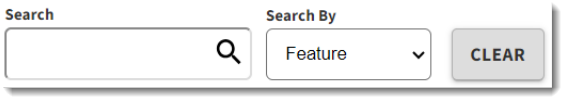


Figure 7: Search tool for features

Feature Details Page

When you click a feature name, the **Feature Details** page is displayed, containing detailed information about the feature, including the feature start date, the total count allocated to the server, the count currently being used, the number of reserved licenses within the used count, and any feature selectors and vendor string information defined for the feature.

This page also shows a **Served Info** section, listing the client devices that currently have the feature’s counts checked out.

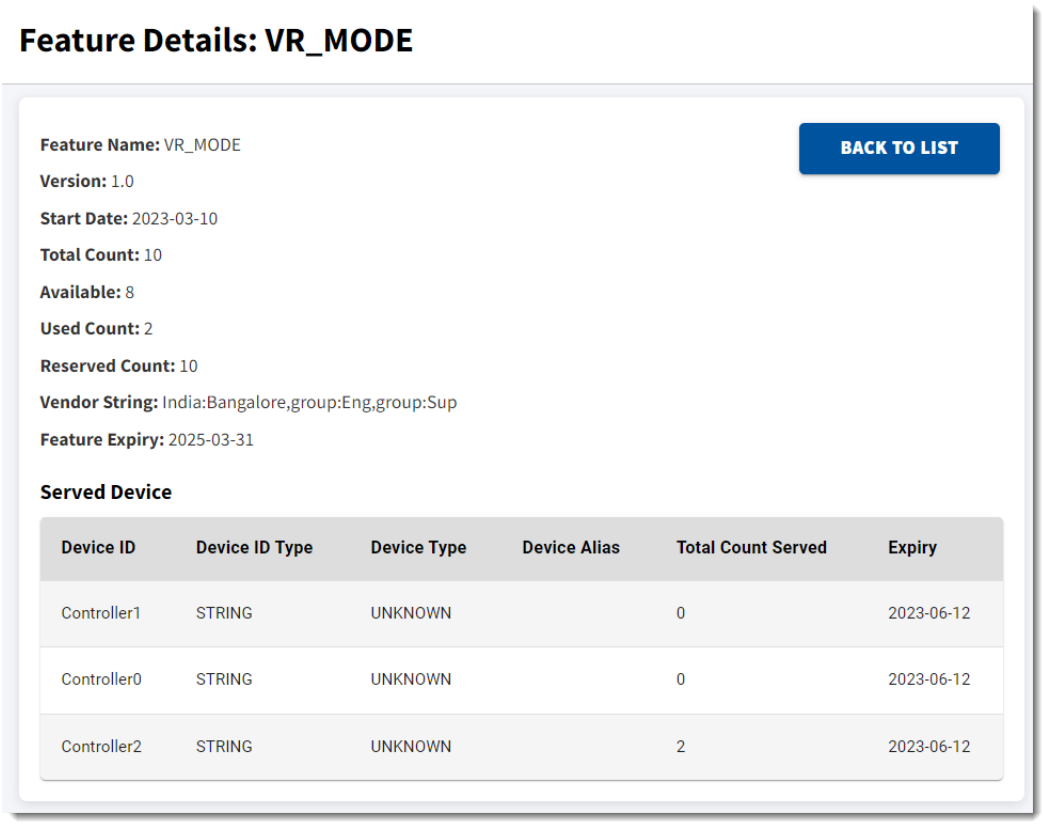


Figure 8: Feature Details page

Named License Pools View

About Named License Pools

Important ▪ *You can use either reservations or named license pools for license allocation. Reservations and named license pools cannot coexist alongside each other.*

Note ▪ *In previous releases of the FlexNet Embedded license server, named license pools used to be referred to as "partitions".*

In a generic setup, each license server has a license pool which contains all the licenses available to its client devices. The license server distributes licenses from this license pool on a first-come-first-served basis to client devices requesting them. This license pool is also referred to as the *default license pool*.

However, in addition to the server's default license pool you can create *named license pools*, which divide your license estate into groups of licenses. By defining rules of access, you can allocate licenses to a group of client devices or users to help ensure that these entities have access to the features they need.

Thus, a license server serves licenses from its default license pool and any named license pools that you create. Each named license pool contains license counts for one or more features, which can be allocated to client devices or users. It is important to note that in a named license pool, licenses are not assigned to individual client devices or users. Instead, counts allocated to a named license pool can be accessed by a number of devices or users that meet certain criteria, such as, for example, be member of a particular business unit or have a certain hostid. Allocated license counts can be checked out by any device or user that fulfills the specified criteria.

As the license server administrator, you can choose to allocate the entire pool of licenses, a portion of the licenses, or none of the licenses. Any license that is not allocated to a named license pool remains in the default license pool and is available to any device on a first-come-first-served basis.

The Named License Pools Tab

The **Named License Pools** tab in the **Named License Pools** view displays the list of named license pools that have been defined on the license server as well as the default license pool.

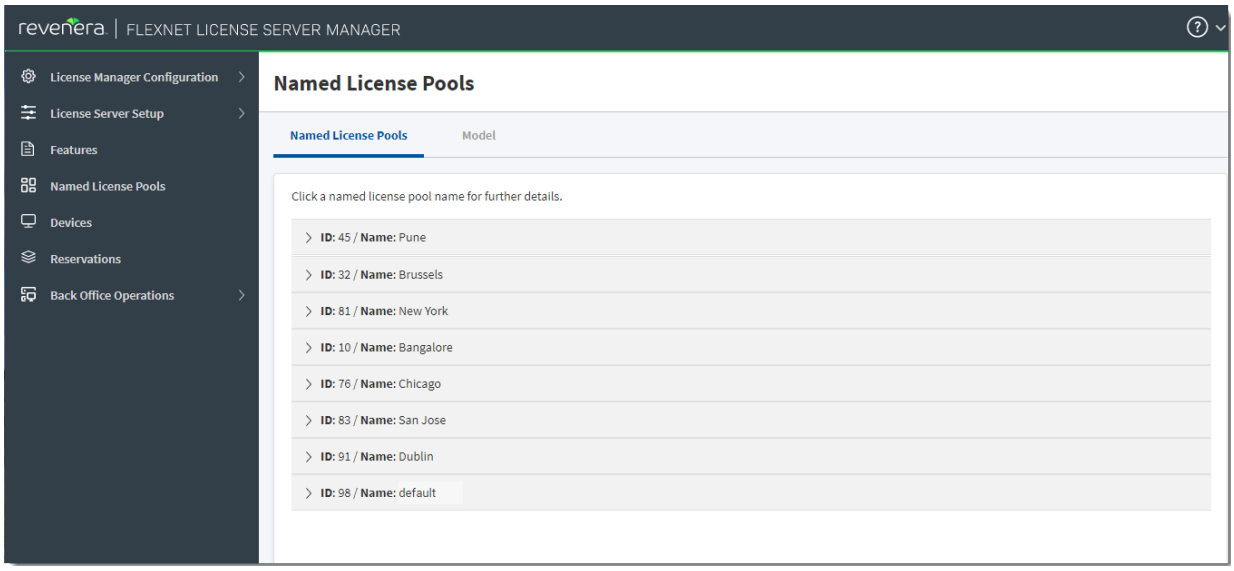


Figure 9: Named License Pools view

When you click a license pool name, the view expands to show details about the features that are currently included in the license pool.

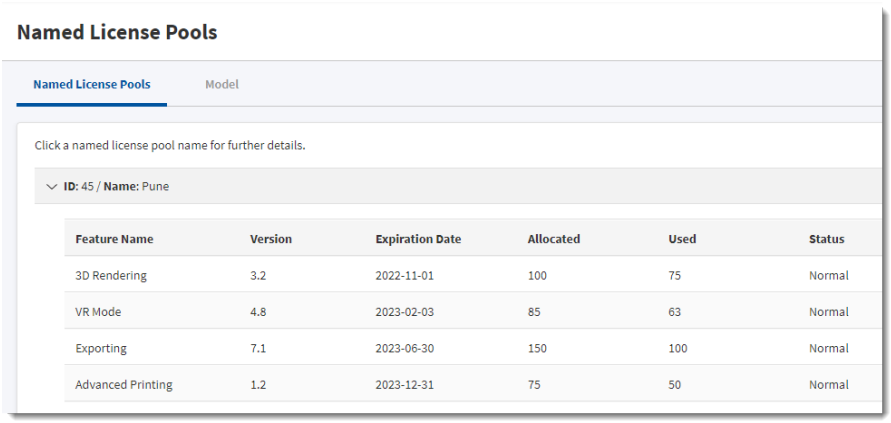


Figure 10: Details of named license pool

The Model Tab

The **Model** tab displays the model definition that is currently active on the license server. The model definition specifies the license pools and the rules of access that define how licenses are allocated to license pools (named or default).

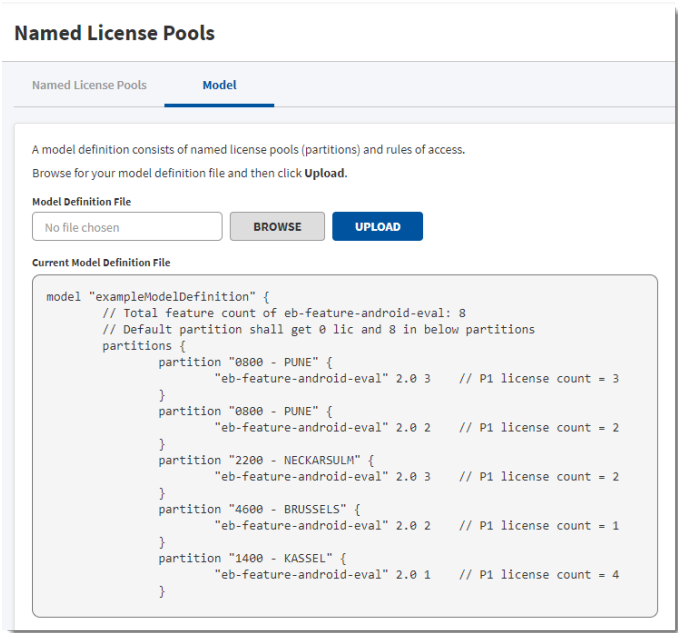


Figure 11: Model tab in the Named License Pools view

To change the model definition, browse for the model definition that you want to use by clicking **Browse** and then click **Upload**.

Devices View

The **Devices** view displays the client devices recognized by the license server as having been served licenses from the server's shared pool or from licenses reserved for the client. Each client is identified by its device ID, the ID type, and the device type—physical, virtual, or unknown. In addition, a device alias might be displayed if this has been set on the device. (A device alias is also sometimes referred to as a device name or host name. It is a human-readable alias—in contrast to the hostid—which can optionally be included in a capability request.)

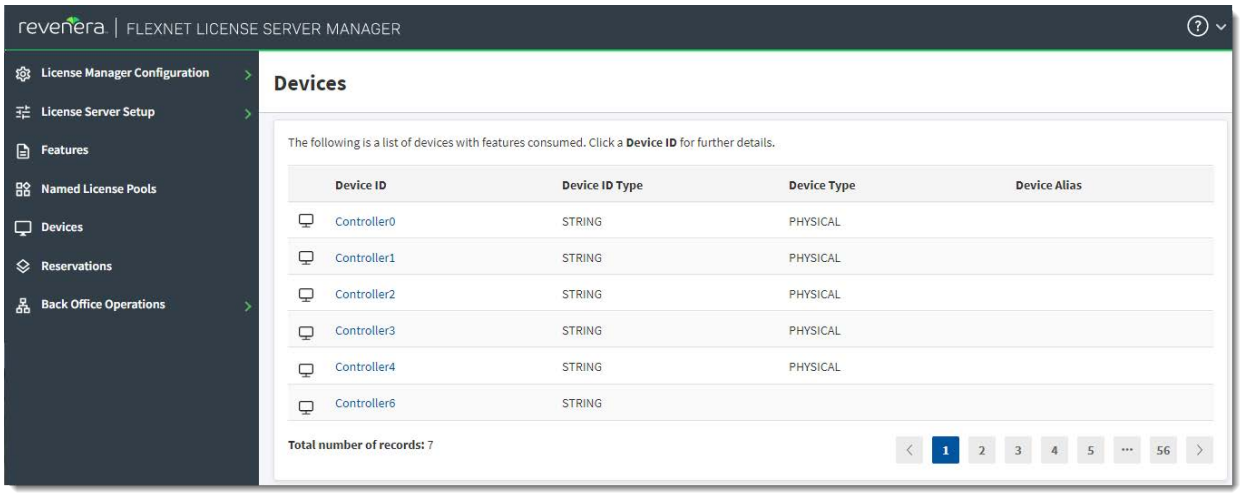


Figure 12: Devices view

If the list of devices is extensive, you can use the navigation tool to locate records, as described in Page Navigation for Views in the License Server Manager.

When you click the device ID for a specific client, the **Device Details** view opens, showing details about the client device and the list of features currently served to the client. (Click **Back** to exit the **Device Details** page.)

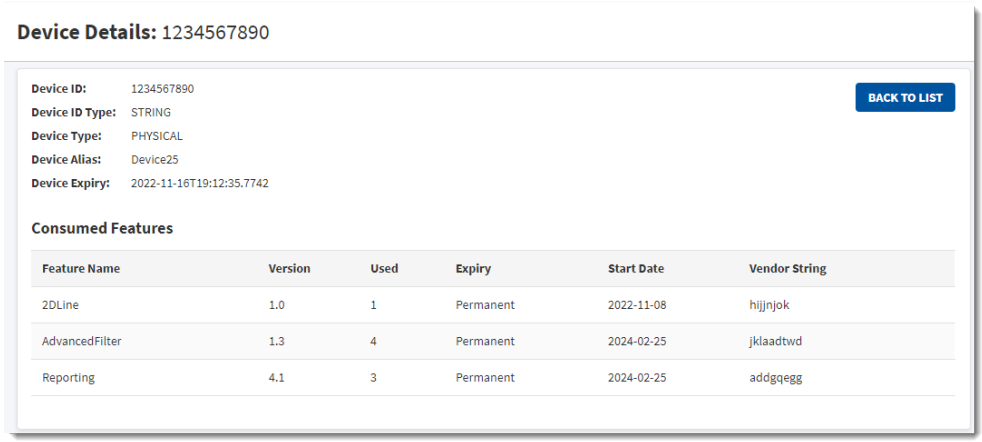


Figure 13: Device Details page

Note that the **Device Expiry** field in the **Device Details** section shows the timestamp when all currently checked-out features will expire on the device. This timestamp is determined either by the borrow expiration for the checked-out concurrent features or the final expiration date (as defined in the back office) for checked-out metered features.

The **Expiry** field for a feature in the **Consumed Features** list shows its final expiration date as defined in the back office.

Reservations View

About Reservations

A factor that can affect the feature set included in the license server's responses is the use of *reservations*. A reservation is an optional mapping of a client device or user to a feature name, version, and count, which represents licenses to be reserved for that specific client devices or users in the enterprise. When a particular client sends the license server a capability request with no desired features, the license server response contains all features reserved for that client (and user, if the user has reservations). When a capability request contains desired features, the license server grants the client device these features based on reserved counts and available shared counts.

The reservations saved to the license server are ordered in a hierarchy, enabling more granularity in the managing them. For example, *reservation entries* are the actual feature reservations that you define for a *reservation,* which specifies the hostid for the specific client device or user to which the feature reservations apply. One or more reservations are assigned to a *reservation group*, which represents a more global entity to which the client devices and users identified by the reservations belong.

For more information about the reservation format and how the license server processes reservations, see License Reservations in the More About License Server Functionality FlexNet Embedded License Server Administration Guidechapter.

Important ▪ *You can use either reservations or named license pools. Reservations and named license pools cannot coexist alongside each other. For more information, see Named License Pools vs. Reservations in the FlexNet Embedded License Server Administration Guide. For general information about named license pools, see Allocating Licenses Using Named License Pools in the FlexNet Embedded License Server Administration Guide.*

The Reservations View

The **Reservations** view enables you to view existing reservations, add reservations to a new reservation group, delete a reservation group, as well as import and export reservation definitions in a JSON format.

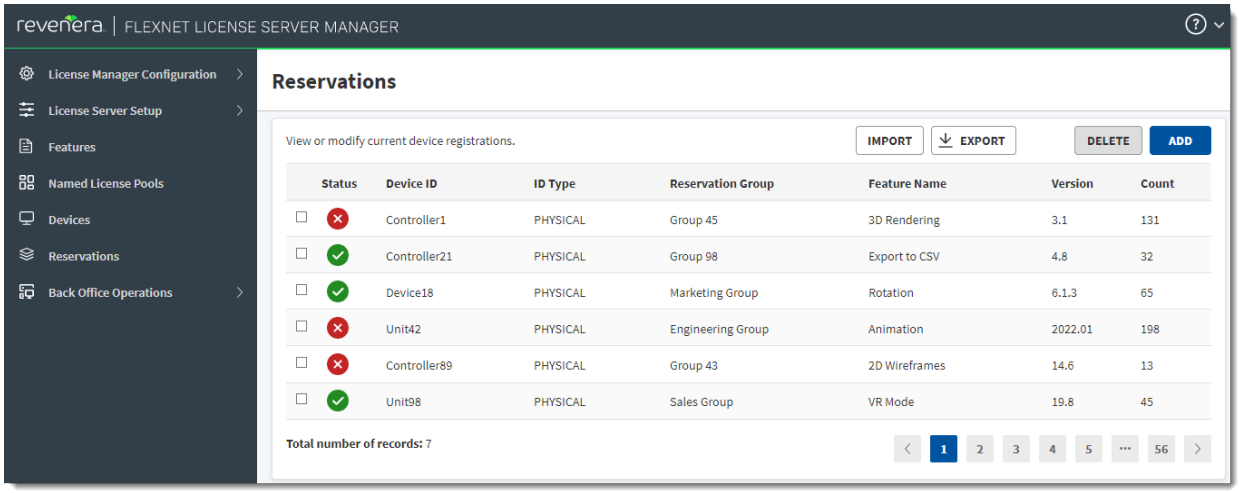


Figure 14: Reservations view

The **Reservations** view displays the contents of the currently defined reservations. The notation in the **Status** column indicates whether enough licenses exist on the license server to satisfy the reservation. The green circle indicates that a reservation can be satisfied, and the red circle with an exclamation point indicates a reservation that cannot be satisfied.

If the list of reservations is extensive, you can use the navigation tool to locate records, as described in Page Navigation for Views in the License Server Manager.

Clicking **Add** displays the **Add Reservation** page, where you add a single reservation entry to a new reservation group. You can add multiple reservation entries to the same group by using the same group name for each entry you create. You can also create multiple groups.

Important ▪ *If you were previously using partitions, you must delete the active model definition before you can manage reservations. See Delete the Model Definition in the FlexNet Embedded License Server Administration Guide*

Also note that, in the **Device ID** field, you can specify either a client device hostid to define a device-based reservation or a user hostid to define a user-based reservation. Be sure specify the correct hostid type in the **ID Type** field.

Note ▪ *Currently the License Server Manager only adds reservations to a new reservation group. If you want to add or delete reservations in an existing group, you must delete that group and then re-create it using the **Add Reservation** page or the **Import** function to import a JSON file with the re-created group and its reservations.*

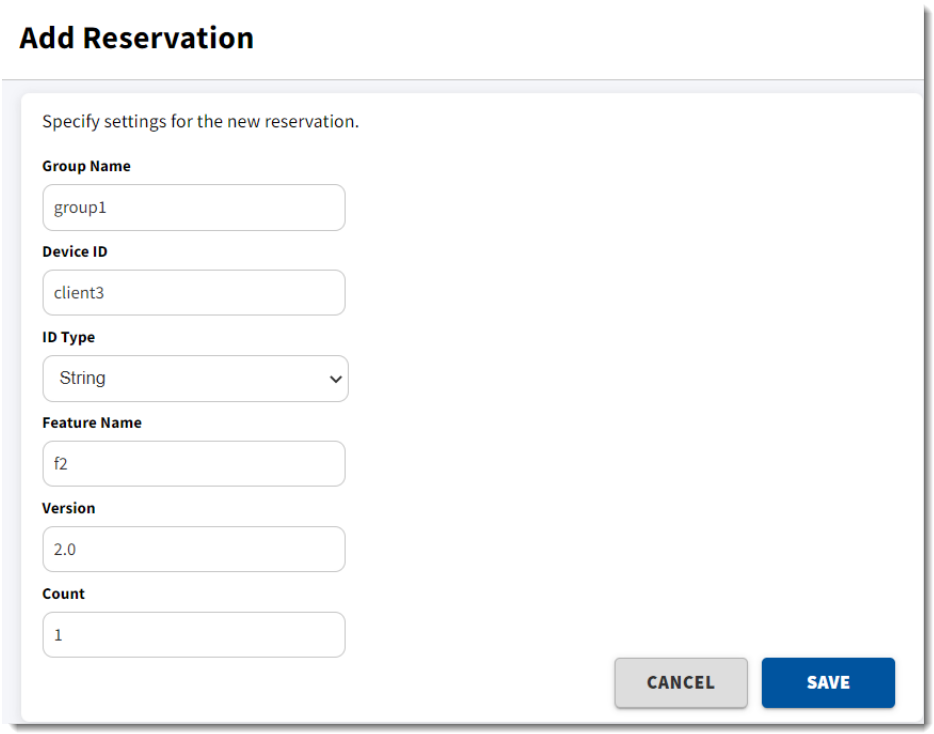


Figure 15: Add Reservation page

In a reservation entry, the version of the feature to be reserved must be a valid FlexNet Embedded version in numeric *a.b* format, and the reserved count must be a valid positive numeric value.

Note that the version of a feature reservation need not exactly match an actual feature's version: the reservation will succeed if the feature version is greater than or equal to the reserved version. For example, a reservation for version 1.0 of a feature can be satisfied by version 2.0 of that feature, but not the other way around. (Reservation versions follow normal feature-version syntax rules.)

Click **Add** to add the reservation entry to the pending reservation group, or click **Clear** to reset the current entry value without saving. Reservation entries are saved in a **Reservations (Pending Submission)** table below the edit fields. Click **Submit** to finalize the reservation list, or click **Cancel** to exit.

Clicking **Delete** in the **Reservations** view enables you to delete an existing reservation group.

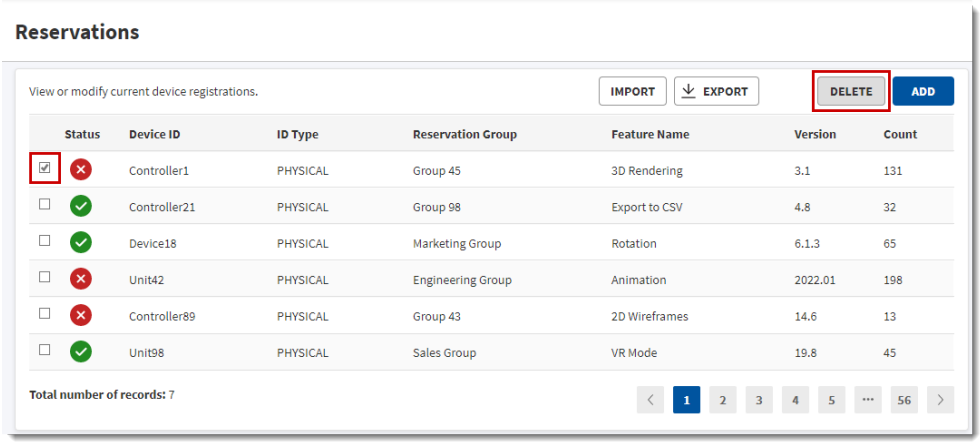


Figure 16: Deleting reservation groups

To delete a reservation group, select the check box to the left of the group, and click **Delete** to add it to the list of pending deletions. After you have selected the groups, click **Submit** to delete them from the license server.

You can also click **Import** to import a JSON file containing new groups and their reservation entries, or click **Export** to save the current reservations in a JSON file format.

Online Server Updates View

The **Online Server Updates** view (available from the **Back Office Operations** menu) enables you to activate entitlements online and to trigger an immediate sync with the back office (FlexNet Operations).

Online Activations

On the **Online Activations** tab, you can activate the product licenses that you received with your welcome email. If you received multiple activation IDs, you can activate them in a single request. Enter your activation ID or IDs (click the **+** button to add a new field to the page) and their count, then click **Activate**.

To delete a line, click the button.

After submitting a request, FlexNet License Server Manager displays the activation status for the request. If activation fails (for example, due to an invalid activation ID, insufficient entitlements or connectivity issues), FlexNet License Server Manager displays a meaningful error message. Otherwise, it shows that the request was successful and that entitlements have been activated.

The following screenshot shows an example of the **Online Activations** tab:

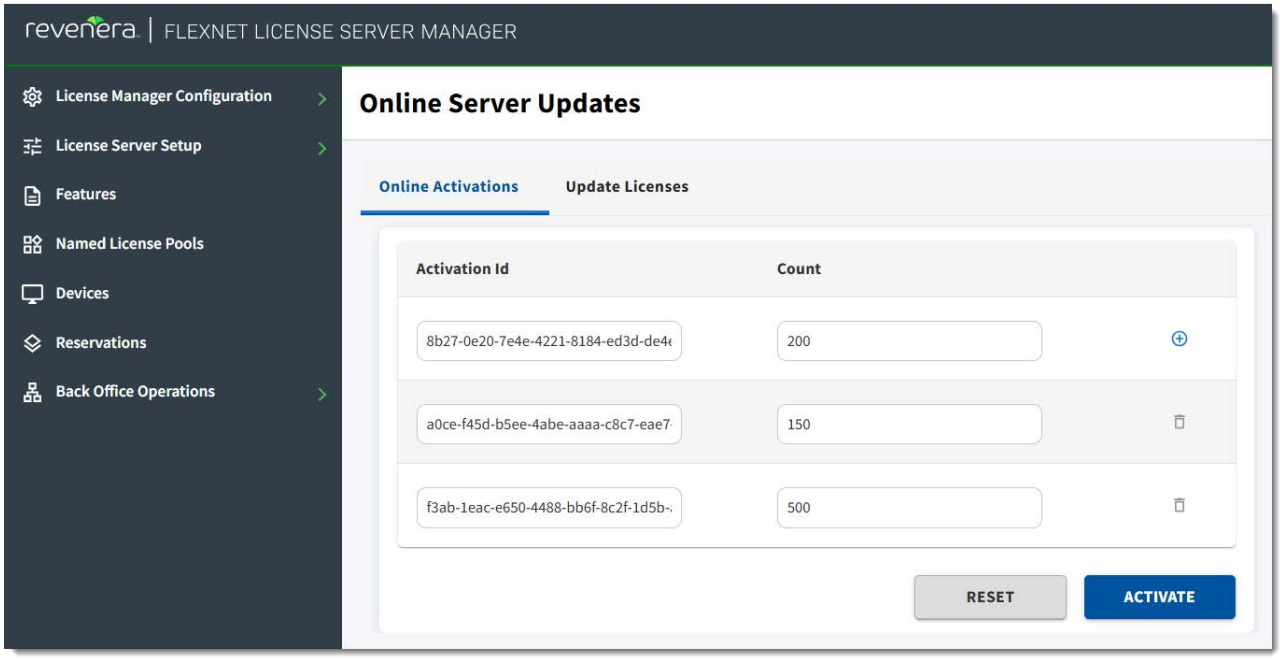


Figure 17: Example of the **Online Activations** tab

Update Licenses

On the **Update Licenses** tab, click the **Refresh** button to trigger a synchronization with the back office (FlexNet Operations). This forces the license server to retrieve any pending license updates from the back office.

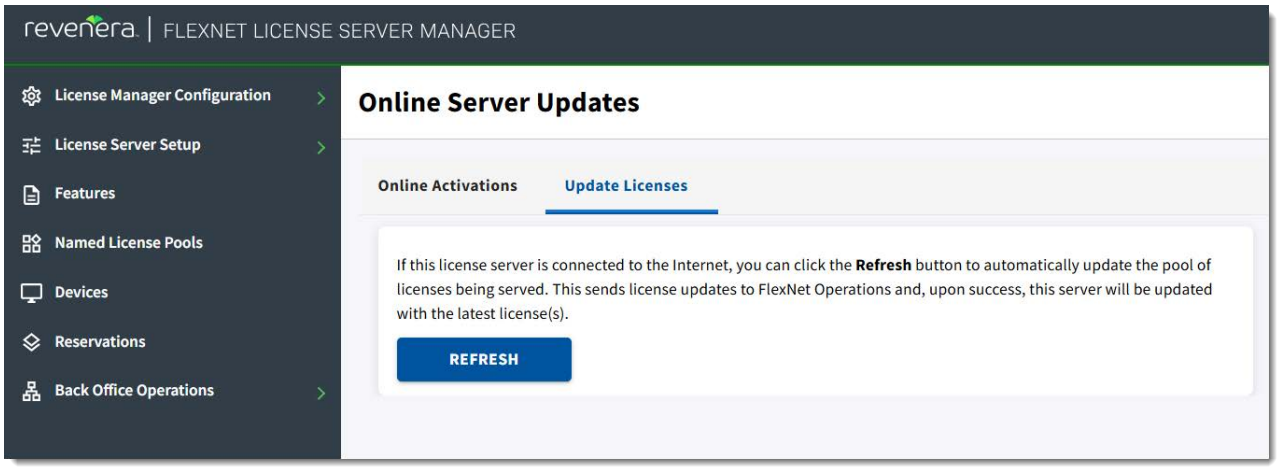


Figure 18: The **Update Licenses** tab

Offline Server Updates View

The **Offline Server Updates** view (available from the **Back Office Operations** menu) enables you to update the served license pool using offline operations instead of direct communication to a back-office server. In the upper half of the view, you can do either:

- Save a capability request into a local binary file by clicking **Download** in the **Download Capability/ Confirmation Request...** section. This request is used to poll for any license updates for the license server.
- Enter an activation ID and count in the **Generate Offline Request** section. When you click **Download**, the activation request is saved as a binary file. This request is used to obtain license rights for the license server through a specific activation ID that the software producer has provided you.

Once the request is downloaded as a binary file, you then communicate the binary request to the back-office server through an offline means.

When you have received a binary response file from the back office, browse for the file by clicking **Choose File** in the lower half of the view and then click **Upload**. The license server then processes the response, which updates the contents of the server's trusted storage.

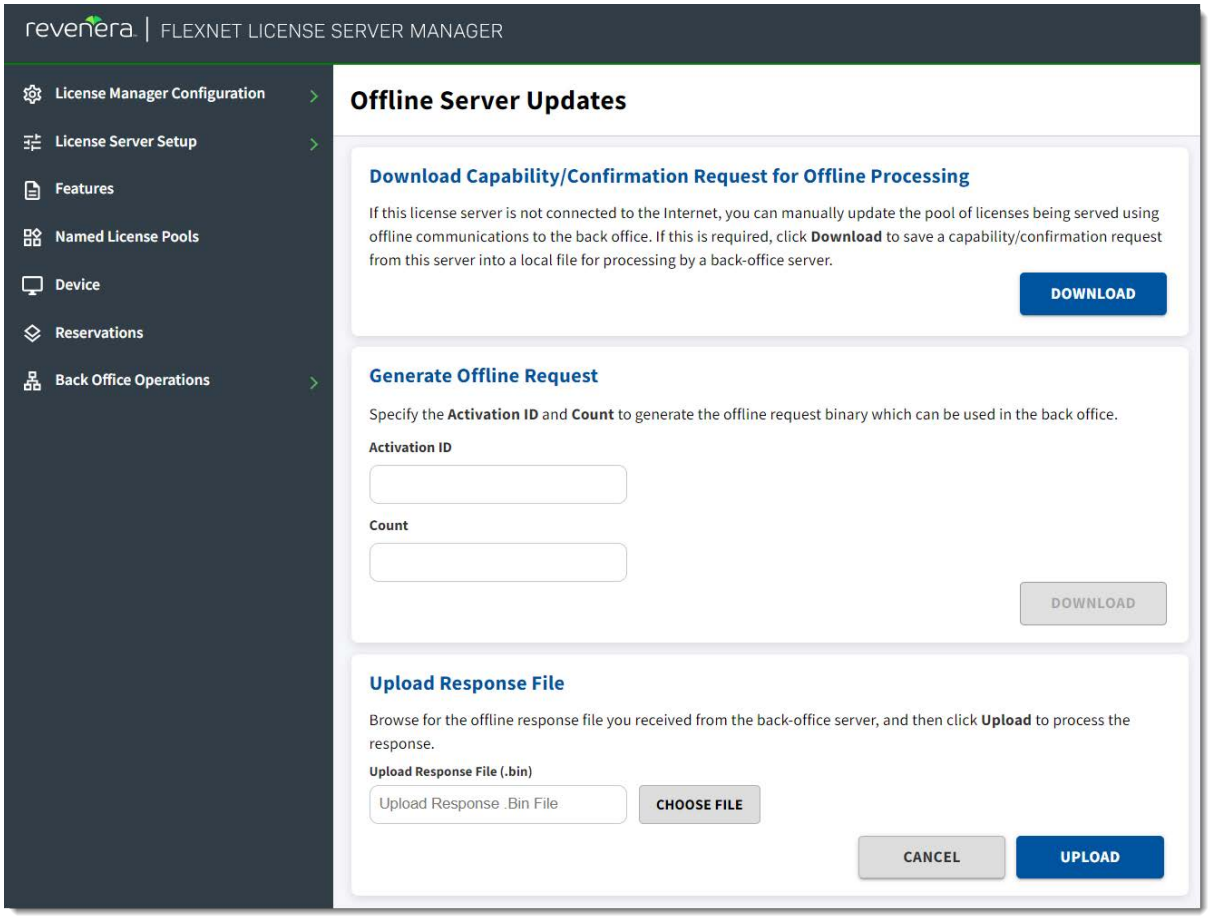


Figure 19: Offline Server Updates view for performing offline capability exchanges with the back office

Client Key Operations View

The **Client Key Operations** view (available from the **Back Office Operations** menu) provides a means of uploading a file containing a client-side RSA public key (2048-bit DER-encoded) in octet-stream format to the license server. The producer will provide details about obtaining and uploading this key should such a key be required. License-server administrator credentials are required to use this option.

To upload the file, click **Choose File** to browse for and select the appropriate file, and then click **Upload**.

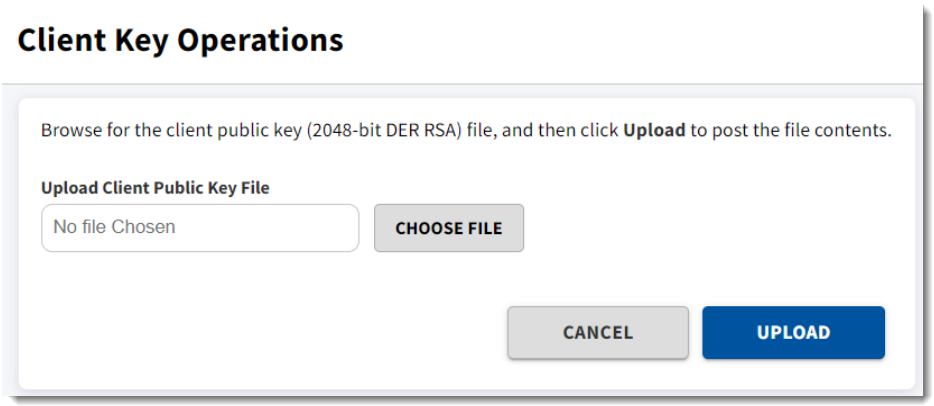


Figure 20: Client Key Operations view for uploading a public key from the client

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

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- Instagram