



MATE Design Floating License Server

The FlexNet Publisher license server must be set up if MATE Design users are to use floating licenses. Using this server, you can control access to the licenses, monitor who has them checked out, and check log activity.



Note

All instructions and examples assume you used `/opt/cariden` as the default installation directory. If you did not, then substitute your installation directory for `/opt/cariden`.

The FlexNet Publisher license server has two interfaces. One is a CLI, which requires that you start an `lmgrd` daemon so all users can access the floating licenses. The other is a web UI, wherein you must install and configure an `lmadmin` tool; this option offers more flexibility and administration tools. Best practice is to use only one or the other interface (CLI or web) to administer the license server.

For information about FlexNet Publisher, refer to the *FlexNet Publisher License Administration Guide* (`FlexLM_EndUser_LicAdmin.pdf`), which is located in `$CARIDEN_HOME/docs`.

Prerequisites

You must have the required packages installed. For a list of package dependencies, see the *System Requirements* document posted on the [Cisco download site](#) for this release.

Pre-Installation: Windows, Mac, or Different Linux Devices

Follow these steps under these circumstances.

- If you are installing the FlexNet Publisher license server for use with Windows or Mac operating systems.
- If you are installing the FlexNet Publisher license server on a different Linux device than the one on which MATE Design Linux resides.

Step 1 Log in to the FlexNet Publisher license server as root or as a user with administrative capabilities.

Step 2 Create a lowercase, alphanumeric username where the first letter is an alphabetical character.

```
/usr/sbin/useradd <username>
```

Set a password.

```
passwd <username>
```

- Step 3** Create an installation directory that has root privileges. The best practice is to use the default installation directory, which is `/opt/cariden`.

```
cd ~/
mkdir -p /opt/cariden
```

- Step 4** Change the owner of the installation directory to the newly created user.

```
chown <username> /opt/cariden
```

Pre-Installation: All Operating Systems

Follow these steps on the device where FlexNet Publisher license server resides.

- Step 1** Ensure there are no local firewalls blocking the services. This step is beyond the scope of these instructions, though following is an example. For a list of ports used, see the *System Requirements* document on the [Cisco download site](#) for this release.

Example: This shows how to disable the iptables firewall as root.

```
service iptables save
service iptables stop
sudo chkconfig iptables off
```

- Step 2** Download the License Server package from the [Cisco download site](#). Navigate to the MATE Design, MATE License Server Software page.

- Step 3** The MATE license file's SERVER statement must be the same hostname as the output from the hostname CLI command.

- a. Determine the hostname.

```
hostname
```

- b. Edit the `/etc/sysconfig/network` file to include the hostname returned in the above step.

```
HOSTNAME=<hostname>
```

- Step 4** Ensure the `/etc/hosts` file on the client devices contains the same hostname as identified in step 3. (Client devices are the devices that will be checking the licenses in and out of the server.)



Note

If you need the license server to listen to a different port other than the default 27000 port, contact your support representative.

Install MATE License

- Step 1** Download the MATE floating license file (.lic extension) to a directory of your choice on the device where the license server will be installed.
- Step 2** Install the license. You are given the option of where to put the file. Best practice is to put the license in `~/.cariden/etc`. Once the license is installed, it is renamed to `MATE_Floating.lic`.
- ```
license_install -file <path>/<license_name.lic>
```
- Example:** `license_install -file /opt/cariden/licenses/MATEFLOATING12345678901234567.lic`

## Install License Server

- Step 1** Go to the directory where you installed FlexNet Publisher license server package, and execute the installer. The package is, itself, the executable that automates the installation process.
- ```
chmod 755 ./<License server package>.sh; ./<License server package>.sh
```
- Example:**
- ```
chmod 755 ./MATE_License_Server-2.0rc2-Linux-x86_64.sh; ./MATE_License_Server-2.0rc2-Linux-x86_64.sh
```
- Step 2** If you are going to run the license server web UI, run the `lmadmin` installer from the `/opt/cariden/software/flexlm/current/bin` directory.
- Although the default is to install `lmadmin` into `/opt/FNPLicenseServerManager`, the best practice is to install it into `/opt/cariden/software/flexlm/current/web`.
- ```
chmod 755 ./<lmadmin_package>.bin; ./<lmadmin_package>.bin
```
- Example:** `chmod 755 ./lmadmin-i86_lsb-11_11_1_1.bin; ./lmadmin-i86_lsb-11_11_1_1.bin`

Start License Server



Note

The following instructions are for using either the CLI or license web server, but not both. The recommended practice is to install and use one or the other.

CLI

To start the license server daemon (`lmgrd`), enter the following from `/opt/cariden/software/flexlm/current/bin`.

```
./lmgrd -c <license_filename> -l <log_filename>.log
```

Example: `./lmgrd -c ~/.cariden/etc/MATE_Floating.lic -l /opt/cariden/logs/lmgrd.log`

Web UI

- Step 1** To start the license server using the web UI, first configure the following parameters from the `/opt/cariden/software/flexlm/current/web` directory. For more information, see `lmadmin -help`.
- By default, the `lmadmin` server has a user named “admin” with a password of “admin.” If needed, add another user to this `lmadmin` server.
- ```
./lmadmin -useradd <username> - pass <password>
```
- Import the MATE license file that was installed.
- ```
./lmadmin -import <path>/<license_filename>
```
- Example:** `lmadmin -import ~/.cariden/etc/MATE_Floating.lic`
- Start the `lmadmin` process with its default settings.
- ```
./lmadmin
```
- Step 2** Start the license server web UI, which by default uses a non-secure port of 8090. By entering the following in a web browser, you are redirected to the secure port.
- ```
http:<server_hostname>:8091
```
- Step 3** Click the Administration link, and log in using the an administrative username and password. Both have a default of “admin.”
- Step 4** Click the Vendor Daemon Configuration tab, click the Administer link, and then and click Start.

Post-Installation

- Step 1** Verify the license server port 27000 is running. For example, you can telnet to this port to verify that it is running.
- Step 2** Verify the license server is running and listening to port 27000, as well as to the established connections.
- Example:** `netstat -a | egrep '27000[0-9]'`

tcp	0	0	*:27000	*.*	LISTEN
tcp	0	0	localhost:48245	localhost:27000	ESTABLISHED
tcp	0	0	localhost:27000	localhost:48245	ESTABLISHED

- Step 3** Either distribute the same floating .lic file that you installed to all MATE Design users who need it, or give them both the MAC address and hostname for the license server.
- After end users install the floating license once, the license is automatically validated from the server each time the user opens the MATE GUI or runs the MATE CLI tools.

Set Up Access Control List for Web Server

If you are using the web server to administer licenses, you can set up an access control list. This is optional, but doing so can improve the security of who can access the web server, as well as give you an easily maintainable list of license users. To do this, you need to know the user ID for all users who are checking out licenses from the license server. The user ID is what they use to log in to their operating systems.

For more information about setting up access control lists, refer to the *FlexNet Publisher License Administration Guide* (FlexLM_EndUser_LicAdmin.pdf), which is located in \$CARIDEN_HOME/docs.

Step 1 Create and open a file named `cisco.opt` in `/opt/cariden/software/flexlm/current/bin`.

Step 2 For each user that you want to grant license access, add an `INCLUDEALL USER` line.

```
INCLUDEALL USER <user ID>
```

Example:

```
INCLUDEALL USER akd123
```

```
INCLUDEALL USER gbd456
```

```
INCLUDEALL USER odd789
```

Step 3 For each user you want to exclude from accessing the license server, add an `EXCLUDEALL USER` line.

```
EXCLUDEALL USER <user ID>
```

Example:

```
EXCLUDEALL USER fea123
```

```
EXCLUDEALL USER rgu456
```

```
EXCLUDEALL USER ilt789
```

Step 4 Save the file.

