



WAE Design Floating License Server

This section contains the following topics:

- [About FlexNet Publisher Licenses, on page 1](#)
- [Prerequisites, on page 1](#)
- [Pre-Installation, on page 2](#)
- [Install License Server, on page 3](#)
- [Start License Server, on page 3](#)
- [Post-Installation, on page 4](#)
- [Licenses Configuration in crontab, on page 5](#)

About FlexNet Publisher Licenses

The FlexNet Publisher license server must be set up if WAE 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.

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, where you must install and configure an `lmadmin` tool. Best practice is to use only one or the other interface (CLI or web) to administer the license server.

- For information about FlexNet Publisher and for more details on all FlexNet Publisher CLI commands and GUI, refer to the *FlexNet Publisher License Administration Guide* (`FlexLM_EndUser_LicAdmin.pdf`). This is located in `$CARIDEN_HOME/docs`, which by default is `/opt/cariden/software/mate/current/docs`. This section includes some FlexNet Publisher instructions for both the CLI and GUI that could change without Cisco's knowledge.
- All instructions and examples assume you used `/opt/cariden` as the default installation directory. If you did not, substitute your installation directory for `/opt/cariden`.
- Throughout this section, `bin` is `/opt/cariden/software/flexlm/current/bin`.

Prerequisites

- You must have the required packages installed. For a list of package dependencies, see the “Installation Requirements” chapter in the [Cisco WAE Installation Guide](#).

- You must have a WAE Design floating license installed on the same device or VM as the FlexNet Publisher floating license server, which means you must have WAE Design installed. Contact your Cisco representative for this license, and see License Installation to install this license.

Pre-Installation



Note If you are installing the FlexNet Publisher license server on a different Linux device than the one on which a WAE server installation resides, complete Step 1 to Step 3. Otherwise, skip to Step 4. Follow all steps on the device where the FlexNet Publisher license server 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>
```

Step 3 Set a password.

```
passwd <username>
```

Step 4 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 5 Change the owner of the installation directory to the newly created user.

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

Step 6 Verify that there are no local firewalls blocking the services. For a list of ports used, see the “Installation Requirements” chapter in the *Cisco WAE Installation Guide*.

The following example shows how to disable the iptables firewall as root:

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

Step 7 Check if the redhat-lsb (Linux Standards Base) package is installed. This package is required to run the FlexLM license server.

```
yum list installed | grep redhat-lsb
```

If it is not there, then install it.

```
yum install redhat-lsb
```

Step 8 If you already have a license server installed and running, enter one of the following commands to stop it gracefully:

```
bin/lmdown -c <license_file>
bin/lmdown -all
```

If the server is distributing borrowed licenses, enter one of the following commands:

```
bin/lmdown -c <license_file> -force  
bin/lmdown -all -force
```

Step 9 Download the License Server Software package from the [Cisco WAE Automation software download](#) site. You must download a new license package regardless of whether this is an upgrade or a new installation.

Step 10 The WAE Design 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 preceding step.

```
HOSTNAME=<hostname>
```

Step 11 Ensure that the /etc/hosts file on the client devices contains the same hostname as identified in Step 4.

Install License Server

Before you begin

Confirm that you have the Cisco WAE License Server installer package (WAE_License_Server-3.0-Linux-x86_64.sh) downloaded from the [WAE Automation Software Download site](#).

Step 1 Upload or copy WAE_License_Server-3.0-Linux-x86_64.sh into the WAE server. Make it an executable file owned by waeuser:

```
chmod 775 WAE_License_Server-3.0-Linux-x86_64.sh  
chown wae:wae WAE_License_Server-3.0-Linux-x86_64.sh
```

Step 2 As waeuser, run the installation:

```
# su - wae  
sh WAE_License_Server-3.0-Linux-x86_64.sh
```

Start License Server

To start the license server, you must have access to its license file, which is not the same as the WAE license. Download the floating license server file (.lic extension) to a directory of your choice on the device where the license server will be installed. The best practice is to put it in /opt/cariden/etc.

To start the CLI server daemon (lmgrd) and specify the lmgrd log file name and location, enter the following from /opt/cariden/software/flexlm/current/bin:

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

Post-Installation

- [Log Files, on page 4](#)
- [Verify Ports, on page 4](#)
- [Distribute Information to Clients, on page 4](#)
- [Licenses Configuration in crontab, on page 5](#)

Log Files

By default, the lmadmin logs are in `/opt/cariden/software/flexlm/web/logs`.

The lmgrd log files are located wherever you specified the `<log_path_filename>.log` when starting the lmgrd daemon (`lmgrd -l <log_path_filename> .log`).

Verify Ports

To verify the ports, you can use any of several methods, as follows:

Step 1 Verify the license server daemon port is running. For example, you can telnet to this port to verify that it is running:

```
telnet <license_server_IP_address> <license_server_daemon_port>
```

For example:

```
telnet 127.0.0.1 27000
```

Step 2 Verify the license server is listening to the specified port.

For example:

```
netstat -a | egrep '27000[0-9]'
```

Step 3 View the lmgrd log file, which indicates on which ports the license server and Cisco daemons are listening.

For example:

```
13:00:14 (lmgrd) lmgrd tcp-port 27001
13:00:14 (lmgrd) cisco using TCP-port 42207
```

Distribute Information to Clients

Either distribute the same floating .lic file that you installed to all WAE Design users who need it, or give them both the MAC address and hostname for the license server. Having users install licenses via the MAC address and port is the recommended practice since it eases administration.

After end users install the floating license once, the license is automatically validated from the server each time the user opens the WAE Design GUI or runs the CLI tools.

Licenses Configuration in crontab

Licenses enablement is also included as part of crontab for waeuser:

```
$ crontab -l
```

License files are located inside the /opt/wae/.cariden/etc/ directory and cover up to all devices:

```
$ ll /opt/wae/.cariden/etc/  
$ lmstat
```

