

# FlexNet Installation on Linux

This document describes the steps necessary to set up a FlexNet license server for Partek Genomics Suite on a Linux server. You are not required to install the full version of Partek on your license server; only the license server executables installed by the Partek License Server installer or contained in FLEXnet11.12.zip are required to serve Partek FlexNet licenses on your network.

You must log on to the license server with an account which has administrative or sudo root privileges to install a system service (sysv or systemd), create directories on system folders, and/or modify the system configuration. Partek recommends completing all installation instructions with an account with administrative or sudo root privileges. If you install into a non-system directory, you may run the license server manually (see the Run the License Server Manually section).

## Installation

Follow **either** the Automated Installation **or** the Manual Installation instructions below.

(make sure lsb-core is installed)

### Automated Installation

- 1 . Download the [Linux Installer](#).
2. When prompted, select "/opt/FlexNet" as the directory and click "Continue".
3. In the pop-up menu, select all components from the list and click "Continue".
4. Click "Install" and proceed to the Configuration section below.

### Manual Installation

- 1 . Unzip the [FlexNet11.12.zip](#) file into the folder of your choice. The recommended location is "/opt". This will create a folder called "FlexNet" (it's full pathname will be "/opt/FlexNet") containing the executable and providing a location to store your license.lic file.
2. Move all of the files from the linux64 subfolder to the /opt/FlexNet folder.
3. Proceed to the Configuration section below.

## Configuration

Save your license.dat or license.lic file into the FlexNet folder as license.lic. It's full pathname will be "/opt/FlexNet/license.lic", if you use the recommended installation directory.

Follow **either** the Systemd Installation **or** SYSV Installation instructions below.

### Systemd Installation

To install FlexNet to run as a system service (use admin privileges or right click and "Run as administrator"):

- 1 . Create user "parteklm" in group "parteklm"
  - sudo useradd -r -s /sbin/nologin parteklm
  - sudo chown parteklm:parteklm /opt/FlexNet
2. If not using default values, edit the file parteklm.service in the installation directory (/opt/FlexNet/parteklm.service) and change the non-default path, User, and/or Group
3. Make sure that /usr/tmp is created and has correct permissions by running the commands:
  - sudo mkdir -p /usr/tmp
  - sudo chmod 1777 /usr/tmp
4. Copy the parteklm.service file into place (/usr/lib/systemd/system may also be used):
  - sudo cp /opt/FlexNet/parteklm.service /etc/systemd/system/.
5. Enable the service:
  - sudo systemctl enable parteklm
6. Start the service:
  - sudo systemctl start parteklm

This will add a FlexNet server for Partek licenses into your set of system services that will automatically start on system restart. You can use the standard `systemctl` command to manage the service.

### SYSV Installation

To install FlexNet to run as an `sysv` system service (still using admin privileges or `sudo` root):

1. Create user "parteklm" in group "parteklm"
  - `sudo useradd -r -s /sbin/nologin parteklm`
  - `sudo chown parteklm:parteklm /opt/FlexNet`
2. If not using default values, edit the file `parteklm.init` in the installation directory (`/opt/FlexNet/parteklm.init`) and change the non-default path (`FLEXNETDIR`), `USER`, and/or `GROUP`
3. Make sure that `/usr/tmp` is created and has the correct permissions by running the following commands:
  - `sudo mkdir -p /usr/tmp`
  - `sudo chmod 1777 /usr/tmp`
4. Copy the `parteklm.init` file into place (`/usr/lib/systemd/system` may also be used):
  - `sudo cp /opt/FlexNet/parteklm.init /etc/init.d/parteklm`
  - `sudo chmod +x /etc/init.d/parteklm`
5. Enable the service (using `chkconfig`):
  - `sudo chkconfig --add parteklm`
  - `sudo chkconfig parteklm on`
6. Start the service:
  - `sudo service parteklm start`

This will add a FlexNet server for Partek licenses into your set of system services that will automatically start on system restart. You can use the standard `service` command to manage the service.

## Run the License Server Manually

To run the license server manually, you may use the command line (where `<path_to_FlexNet>` is `/opt/FlexNet` or the folder where you installed FLEXNet):

```
cd <path_to_FlexNet>
./lmgrd -c <path_to_FlexNet> -L <path_to_FlexNet>/log.txt
```

Putting a "+" (plus) character in front of the path to the log file (`log.txt`) causes the license manager server to append logging entries.

For more details, see the `lmgrd` - License Server Manager/Starting the License Server Manager on UNIX Platforms/Manual Start section of the [FlexNet License Administration Guide](#).

## Firewall Configuration

Refer to the [FlexNet License Administration Guide](#) and/or the `ReadMe_FlexNetFirewallPinholes.txt` document located in your FlexNet folder for information about firewall configuration.

## Advanced Configuration

Refer to the [FlexNet License Administration Guide](#) for advanced configuration options or questions.