Chapter 9

Licensing

Silicon Graphics products are licensed by either the NetLS or FLEX*lm* application. You should use the *FLEXlm End User Manual* and the *Network License System Administration Guide* (available online through IRIS InSight) as the primary sources of information on setting up and maintaining the licensing scheme at your site.

The remaining information in this chapter is specific to setting up FLEX*lm* on Silicon Graphics systems.

FLEX*lm* File and Utility Locations

When you install FLEX*lm* software, its files and programs are stored in these locations:

/usr/etc/lmgrd license manager daemon

/usr/etc/sgifd Silicon Graphics vendor daemon

/var/flexlm/license.dat
license file

/usr/sbin (*lmdiag*, *lmdown*, and so on)
FLEX*lm* license administration tools

/etc/init.d/flexlm
Startup script for the FLEX*lm* application

/etc/config/lmgrd.options
Configuration file containing arguments to the *lmgrd* command

/etc/config/flexlm
Text file for enabling or disabling automatic startup of the FLEX*lm* daemon

The FLEX*lm* Startup Sequence

The installation process installs a startup script, */etc/init.d/flexlm*, that starts and stops the FLEX*lm* license daemon. This script executes the *lmgrd* command to start the license daemon, using the values in the configuration file, */etc/config/lmgrd.options.*

To determine whether to start the license daemon, */etc/init.d/flexlm* reads the file */etc/config/flexlm.* By default, */etc/config/flexlm* contains the value `off`, which prevents the FLEX*lm* license daemon from starting during the system startup sequence.

Enter this command as superuser to start the FLEX*lm* license daemon:

```
# /etc/init.d/flexlm start
```

If you want FLEX*lm* to start automatically at system startup, change the value in */etc/config/flexlm* to `on` using this command:

```
# /etc/chkconfig flexlm on
```

Changing FLEX*lm* Software Locations

The FLEX*lm* configuration script, */etc/config/lmgrd.options*, specifies the location of *license.dat*, the FLEX*lm* license file. If you decide to change the location of the license file, you can do so by editing */etc/config/lmgrd.options* to contain the new location of *license.dat.*

If you change the location of the license file and you want the FLEX*lm* application to start automatically at system startup, set the new path with the *LM_LICENSE_FILE* environment variable. Enter a line like the sample below in the *.cshrc* file (*.profile* or *.kcshrc* for Bourne or Korn shells):

```
LM_LICENSE_FILE=<newpath>/license.dat
```

Note: If your license file is not at */var/flexlm/license.dat* and you plan to use License Manager, you must use the *LM_LICENSE_FILE* environment variable to specify the pathname to the license file.