

Cosmic Software Compiler Floating License

Quick Start Guide

(UNIX Host)

This document is intended to provide a quick guide to installation and setup for floating licenses managed with Globetrotter's FlexLM license management software. Detailed information on setup and configuration is provided in the flex_enduser.pdf file included on the Cosmic FLEXlm Vendor Daemon disk.

Cosmic Software compiler products are available in two licensing models as described below.

- 1) Node Locked (Single CPU and Single User) – This type of license allows the compiler software to be installed on only one computer (Node) and used only by a single user physically using the licensed computer. Executing the compiler across a network is not allowed. This type of license is read directly by the compiler so no license manager software or services are needed.
- 2) Floating Licenses (Concurrent) Licenses - This type of license allows the compiler software to be installed on any number of computers (clients), but limits concurrent usage to the number of licenses purchased. This allows the greatest flexibility for part time or occasion users or where user's need access to the compiler on more than one computer on the same network. E.g. The user's office computer and a computer lab or test lab. This type of license is counted and requires the installation of the FLEXlm license manager software as described below. All floating licenses are checked out for a minimum of 30 minutes and same license reuse is set to same user on same workstation and display.

License Server

The first thing you need to do is choose a license server computer. This computer must have a TCP/IP connection to every computer that will execute the Cosmic software. It is recommended that the license server operating system be one of the following: SUN Solaris, HP9000/700, Redhat Linux v6 or Caldera Linux v2.3+ or Windows NT 4.0 server. Note, Cosmic software itself does not need to run on the license server and the license server can manage client Cosmic software running on different hosts or combinations of hosts.

Installation and configuration of License server

- 1) Copy the license manager (lmgrd) and FLEXlm utility (lmutil) from the supplied disk to a folder on the license server.
- 2) Copy the Cosmic FLEXlm vendor Daemon, License File and end user's manual from the supplied disk to the same directory as the license manager.
- 3) Start the license manager with the Cosmic license file as described below:

Recommended procedures for starting lmgrd on Unix systems:

Any normal, non-privileged user (not root) can start lmgrd. We do not recommend that lmgrd be run as the root user, since security experts recommended that users and administrators avoid running daemons as root when such daemons do not require root privileges, lmgrd does not require root privileges.

To start lmgrd from system startup scripts (/etc/rc files), we recommend that you use the following command to ensure that it runs a

```
su username -c "umask 022; lmgrd -c license.dat -l log"
```

username - is a normal, non-privileged user

lmgrd - is the path to the lmgrd binary

license.dat - is the path to the license file

log - is the path to the lmgrd debug log file

Compiler Installation

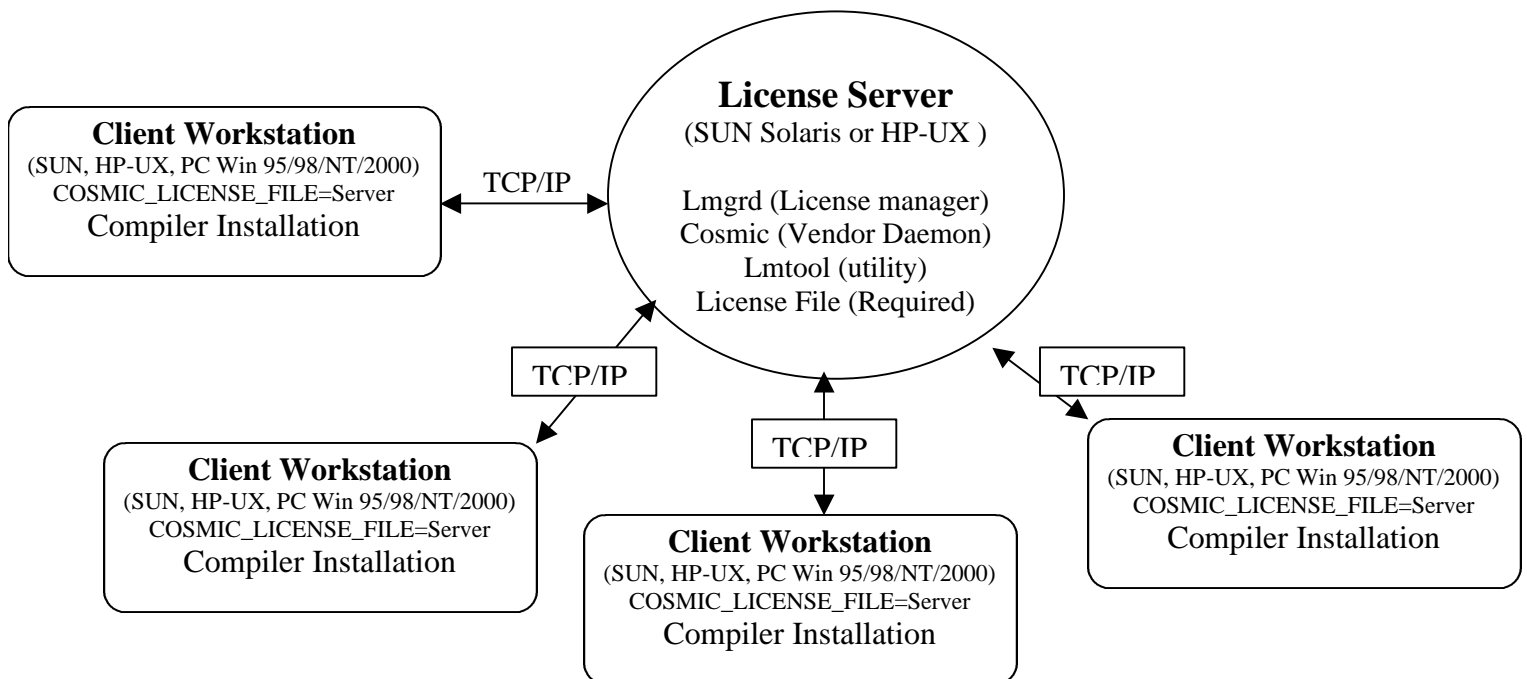
There are several possible scenarios for installation. The following examples describe two popular scenarios.

Example 1

License server is used to run only the license manager and compiler software runs locally on the network clients. Install license manager and utilities on the license server as described above and install the compiler on each of the client machines. This scenario is usually more efficient since the compiler runs on the client and there's only a small amount of network traffic in order to check licenses in and out from the server.

Installation and configuration on Client Workstations

- 1) Install the compiler on each client workstation and allow installation to add the compiler path to the client's execution path. See the compiler User's manual for details.
- 2) Set the environment variable "COSMIC_LICENSE_FILE" to "@server name" so the compiler can access the license manager over the network.
 - a. e.g. on PC if the license file server name is FS2 the command is:
set COSMIC_LICENSE_FILE=@FS2
 - b. e.g. on UNIX if the license server name is FS2 the command would be
setenv COSMIC_LICENSE_FILE @fs2
 - c. For efficiency when compiling source files located on a network, you can optionally set the compiler TEMP variable to a local temp folder for faster execution. See the compiler options section of the User's manual for details.
 - a. E.g. on PC the command is:
set CXTEMP=C:\TEMP
On UNIX: setenv CXTEMP /usr/tmp



Example 2

The License server is used to run both the license manager and compiler software. Install the license manager and utilities and the compiler on the license server. This scenario is usually more efficient for managing compiler versions and projects since there is only one compiler installation that is shared by all clients.

Installation and configuration on License server

- 3) Install the license manager, utilities and license file on the license server as described above.
- 4) Install the compiler on the license server.
- 5) Change access permissions on the compiler folder to allow read and execute access by clients workstations.

Installation and configuration on Client Workstations

- 2) On PC, create a network drive attached to the compiler installation on the license server.
- 3) Add the compiler executable folder to the workstations execution path.
- 4) Set environment variable "COSMIC_LICENSE_FILE" equal to the license server name.
 - a. e.g. on PC if the license file server name is FS2 the command is:
set COSMIC_LICENSE_FILE=@FS2
 - b. e.g. on UNIX if the license server name is FS2 the command would be
setenv COSMIC_LICENSE_FILE @fs2
- 5) Set compiler TEMP variable to a local temp folder for faster compiler execution. See the compiler options section of the User's manual for details.
 - a. E.g. on PC the command is:
set CXTEMP=C:\TEMP
On UNIX: setenv CXTEMP /usr/tmp

