

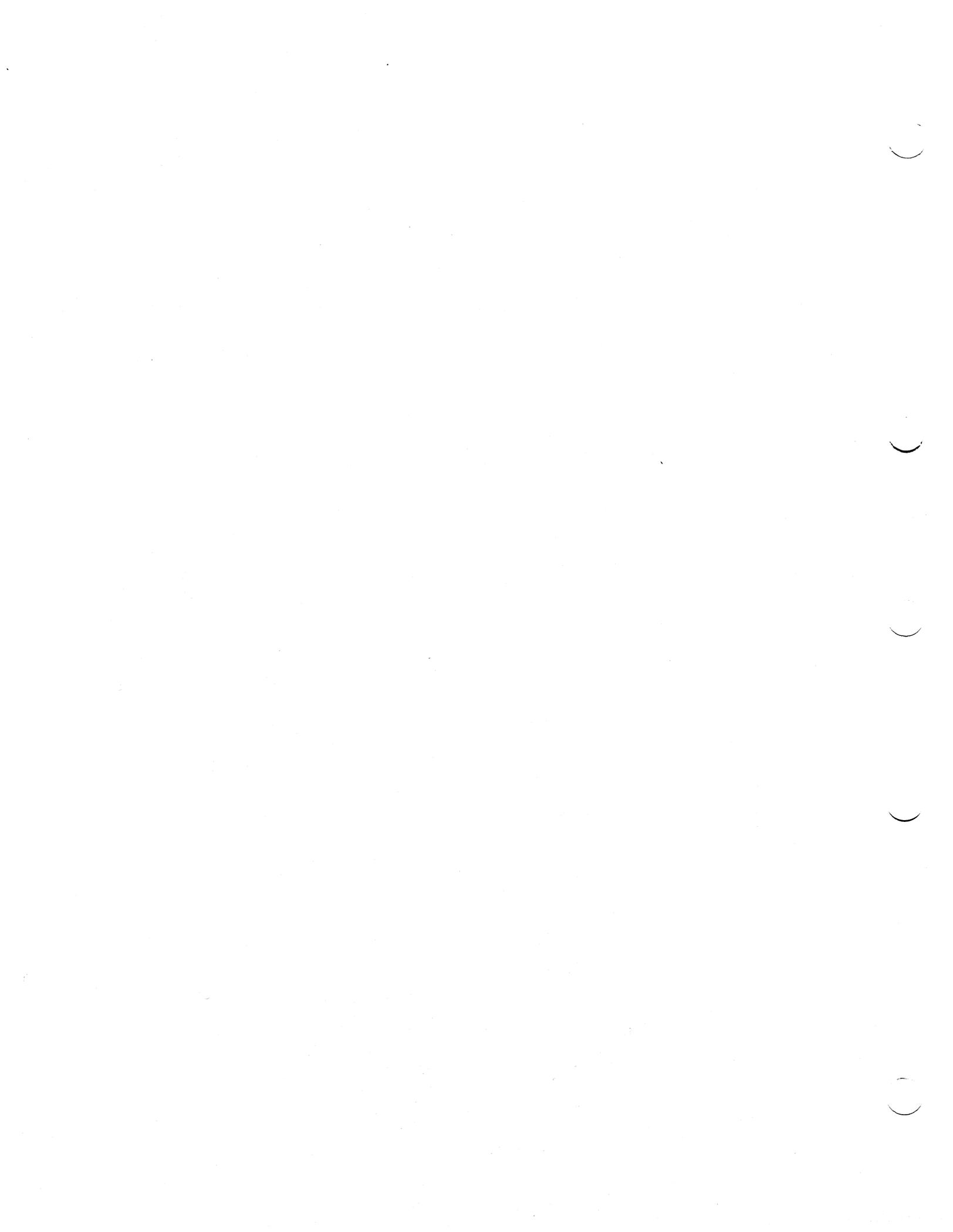
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## Section

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# Section 1

## Introduction

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- **LMS Overview**
- **Determining LMS Configuration**

# LMS Overview

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*The License Management System (LMS) controls loading and execution of Computervision proprietary software on CADDStation systems. There are standard and delta time licenses.*

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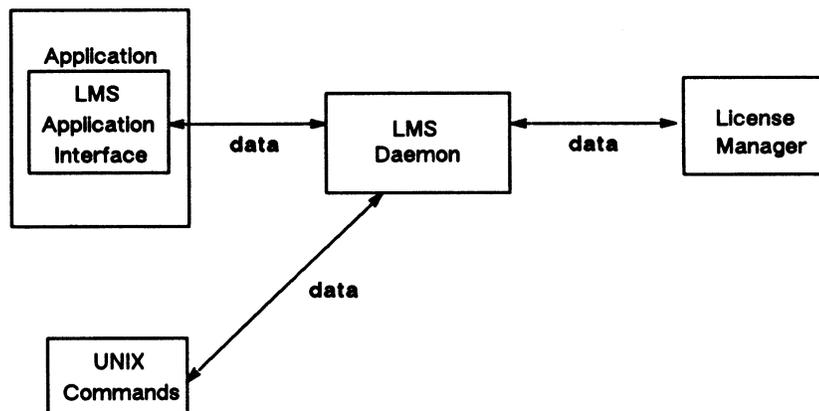
The LMS controls loading and execution of Computervision proprietary software on CADDStation systems. The LMS comprises the License Manager and a UNIX-based security facility.

The License Manager secures application licenses (permission to run applications) through the use of an embedded memory and its own CPU.

The LMS daemon is part of the UNIX-based facility. The LMS daemon is crucial to the proper functioning of the LMS, since it only provides the sole access to the License Manager. The figure depicts the relationship between a typical application and the LMS.

---

## Product Architecture



Through the LMS interface, the application queries the LMS daemon for license information stored in the data base of the License Manager. For Computervision proprietary software applications, this query is for the right to execute. For UNIX commands, this query may be a request to either transfer licenses or display detailed information about a model number.

---

## Types of Licenses

The LMS offers two types of licenses:

- Standard
- Delta time

A *standard* license is programmed at Computervision to expire on a specific date, not to exceed the year 2000. All *standard* licenses must be assigned before activating *delta time* licenses.

A *delta time* license is programmed at Computervision to expire after a specific number of days, with a maximum of 1000 days.

The expiration date for a *delta time* license is calculated when the license is first used. A *delta time* license cannot be deactivated after it has been activated.

When the expiration date arrives for either a *standard* or *delta time* license, the license is automatically removed from the License Manager.

# Determining LMS Configuration

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*Before installing the License Managers, decide which will be the LMS systems; that is, the systems that will be running applications. Illustrate your configuration and use the illustration for reference when installing License Managers.*

---

You have received License Managers with licenses to run a specific number of applications simultaneously.

Before installing the License Managers, decide which systems will be running applications; these will be the LMS systems.

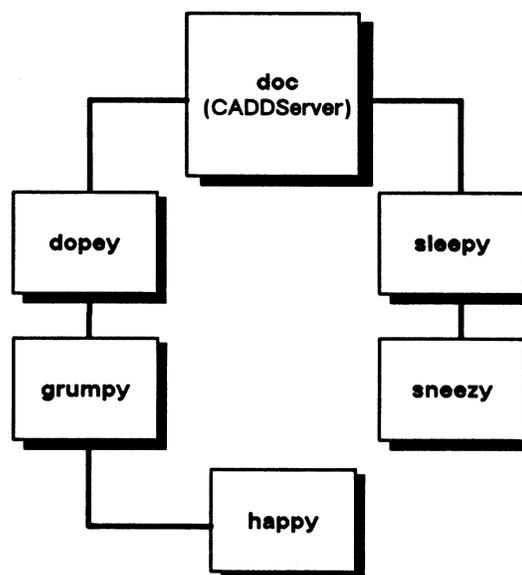
Keep in mind that any system running an application that executes locally must have a License Manager installed on it. The following is a list of the applications that execute locally:

- CADDs (1000, 2000, 3000, 5000, and 6000 Series) executed locally
- Electronic applications (4000 Series)
- Engineering Calculator
- Tech Pubs (Engineering Notebook)
- Factoryvision
- DDF
- CVPN-A
- CVGP-U
- CVGPII

First, draw an illustration of your configuration, labeling each system. For example, suppose you have a server and five clients (Figure 1).

---

**Figure 1. System Configuration**



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Suppose you have purchased the following:

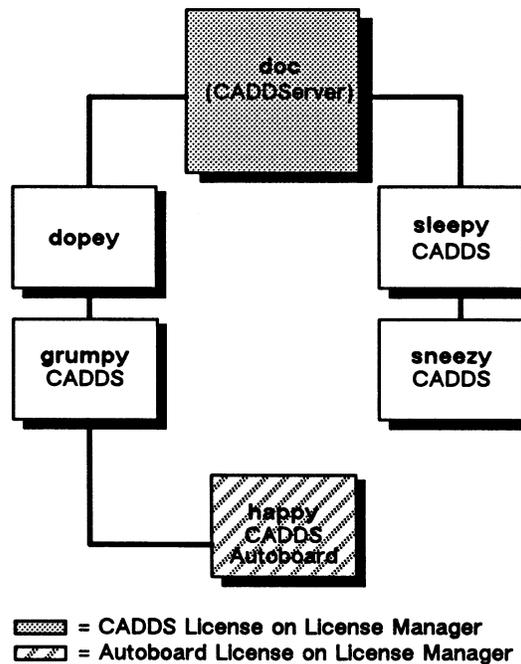
- Four licenses for CADDs
- One license for Autoboard

You would have received two License Managers: one for the server, with four CADDs licenses on it, and one for the client running Autoboard, since Autoboard executes locally (Figure 2).

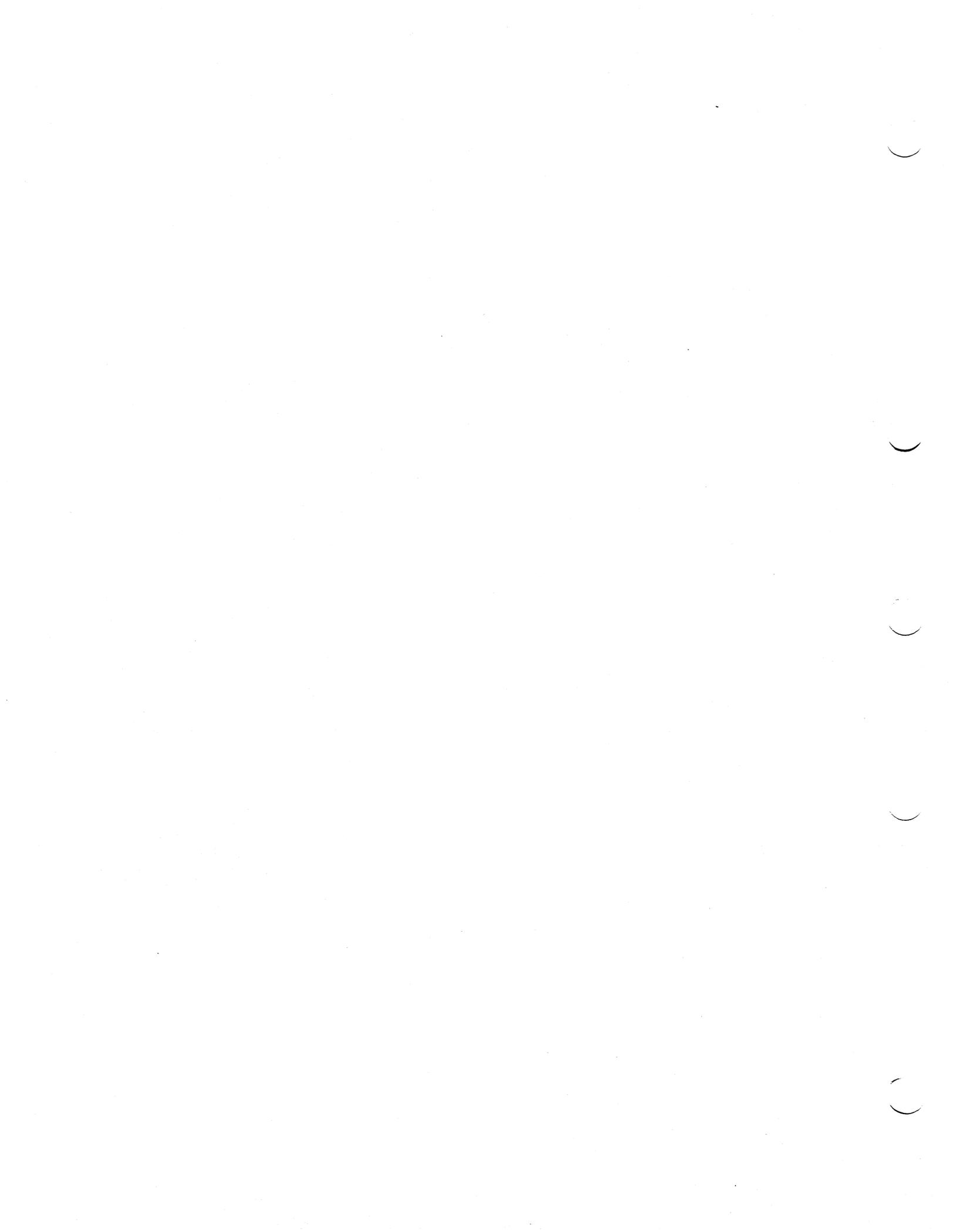
Next, add the applications to be run on each system to your illustration. Indicate on which systems the License Managers will be installed.

---

**Figure 2. License Locations**



Based on your illustration, you know which will be the LMS systems, which applications will be running on those systems, and where the License Managers will be installed. Use this illustration for reference when you install License Managers and set up the LMS software environment.







## Section 2

# License Manager

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- **Installing the License Manager**
  - Attaching Cabling
  - Attaching License Manager
- **Replacing the License Manager**

# Installing the License Manager

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*Attach License Managers to your systems, based on the configuration plan you developed in the module called Determining LMS Configuration.*

---

## **WARNING**

This equipment generates, uses, and can radiate radio frequency power. Install the License Manager according to the instructions within this guide to prevent radio communication interference.

The License Manager has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

Operating this equipment in a residential area is likely to cause interference. If such interference occurs, the user (at his own expense) will be required to take any measures necessary to correct the interference.

---

The following modules provide instructions for attaching LMS cabling and the License Manager.

## Attaching the Cabling



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*Attach the LMS cabling, as described below. If the cable is already attached to the CPU, read the note below.*

---

If the LMS cable is not already attached to the CPU, connect it as follows:

---

### WARNING

Install only shielded cables on the License Manager to ensure compliance with FCC regulations for a Class A computing device.

---

### NOTE

If the LMS cable is already installed on your system and is attached to the keyboard, do not power down the system or unplug the power cord. Use the `/etc/halt` command to halt the system. Disconnect the LMS cable from the keyboard cable and continue with step 11.

---

1. Power down the system and unplug the power cord.
2. Loosen the captive screw on the rear cover of the module. Remove cover.
3. Locate the keyboard cable and the female port labeled **KEYBOARD** on the CPU board.
4. Loosen the retention screws on the 15-pin male connector on the keyboard cable and unplug the cable connector from the port.
5. Locate the 15-pin male connector on the LMS cable. The connector is labeled **TO KEYBOARD PORT ON CPU** (see the figure).
6. Attach the LMS cable connector to the keyboard port on the CPU board, and tighten the retention screws.
7. Replace the rear cover.
8. Ensure that the LMS cable exits the desktide module from the bottom and hangs down from the CPU. This position enables you to close the rear cover.
9. Engage the rear cover on the retention hooks; push the cover in and down, securing it in position.
10. Tighten the captive screw.

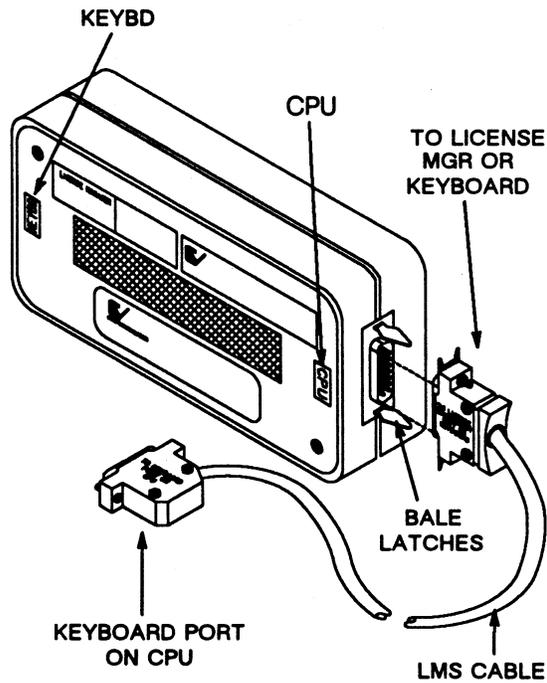
---

Attach the LMS cable to the License Manager as follows (see the figure):

11. Locate the 15-pin female connector (labeled TO LICENSE MGR OR KEYBOARD) on the LMS cable.
12. Attach the connector to the male connector on the License Manager (labeled CPU). Secure the bale latches.
13. Attach the 15-pin male keyboard cable connector to the female connector on the License Manager (labeled KEYBD) and tighten screws.

---

### License Manager and Cabling



## **Attaching the License Manager**



*Attach the License Manager to the system.*

---

Attach the License Manager to the system as follows:

---

**NOTE** For single-board and three-slot CADDStations, mount the License Manager on the base unit.

---

1. Place the License Manager near its installation position (see the figure) on the desktide module. Ensure that the cable is not pulled taut.
  2. Locate the Velcro® fastener on the side of the License Manager.
  3. Peel off the outer Velcro® strip backing tape, and mount the License Manager in position (see the figure) by pressing the License Manager against the desktide module.
- 

**CAUTION** Do not remove the License Manager for 8 hours. The adhesive needs 8 hours to form a permanent bond.

---

4. Plug the power cord into the outlet.
  5. Power up the system.
- 

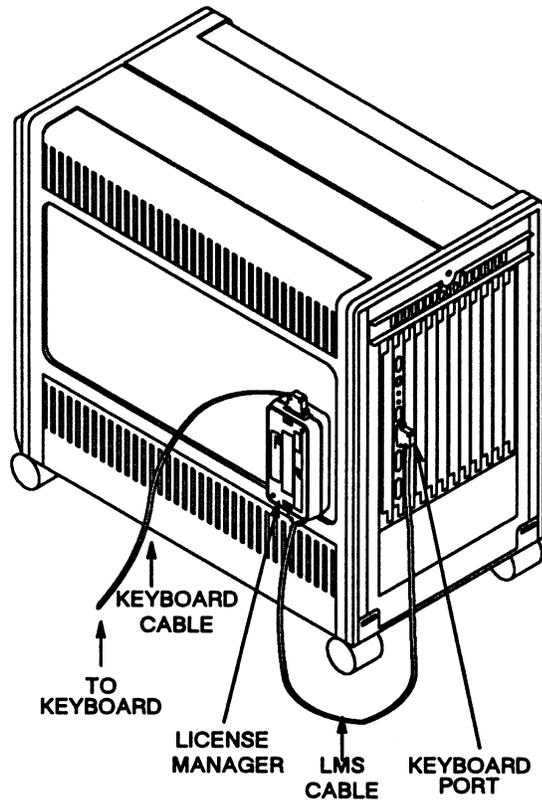
**NOTE** Repeat the hardware installation instructions for each system in your configuration on which you are installing a License Manager.

---

---

## License Manager Position

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# Replacing the License Manager

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*If you want to move or replace a License Manager follow this procedure.*

---

## WARNING

The License Manager contains two lithium batteries, which are classified as hazardous waste material. Return unused License Managers to Computervision.

---

Replace the License Manager as follows:

---

## CAUTION

If you remove or replace a License Manager without rebooting the system, the system is automatically brought down to single-user state in 30 min. Any licenses you are transferring to/from this system may be lost.

---

1. Ensure that the LMS daemon is idle. (See the module called LMS Daemon Status in Section 3).
  2. Enter `/etc/halt` or `/etc/fasthalt`.
  3. Uncable the original License Manager and remove it. (Reverse the installation instructions in the module called Attach LMS Cabling.)
  4. Install the new License Manager. (See the module called Attach License Manager.)
- 

## NOTE

If you are replacing only the cabling, refer to the module called Attach LMS Cabling.

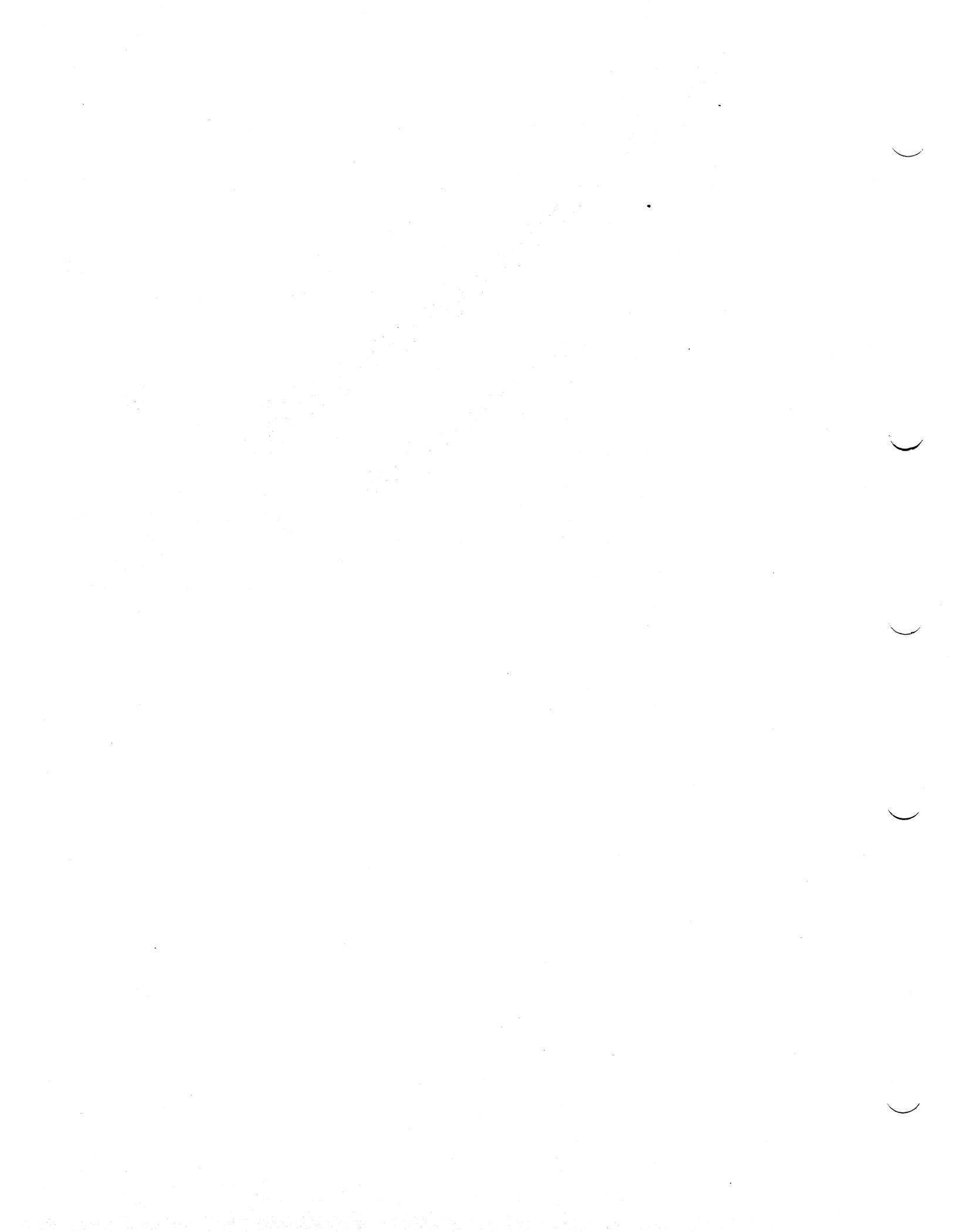
---

5. Enter `b` at the boot prompt.

After the system has been rebooted, wait for the following message before you begin processing information:

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The LMS daemon can now process requests.





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## *Section 3*

# **LMS Software**

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- **LMS Daemon**
- **Installing LMS Network Files**



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*The LMS daemon allows actions to be taken on groups of licenses, and performs the necessary processing for each license.*

---

The LMS daemon is initiated at boot time via a command in the `/etc/rc.local` file. It performs the following functions:

- Services requests, both locally and remotely
- Coordinates License Manager access
- Monitors processes having assigned licenses for termination

The LMS daemon enables you to take actions on groups of licenses, and performs the necessary processing for each license. It resides in the `/etc` directory and is not available on the 68010 architecture.

---

## CAUTION

Ensure that the LMS daemon is operating when licensed software applications are executing. Any interference with the LMS daemon can result in the loss of license information.

---

## LMS Daemon Status

The LMS daemon must be running for the LMS to function. To verify LMS daemon status, enter `ps ax | egrep charon`. One of the following displays if the LMS daemon is present:

- If the LMS daemon is running, the STAT column displays an S or an R, as in the following example:

| PID | TT | STAT | TIME | COMMAND      |
|-----|----|------|------|--------------|
| 397 | CO | S    | 0.06 | /etc/charon  |
| 751 | CO | S    | 0.09 | egrep charon |

- If the LMS daemon is idle, the STAT column displays an I. The following is an example of what is displayed:

| PID | TT | STAT | TIME | COMMAND      |
|-----|----|------|------|--------------|
| 397 | CO | I    | 0.06 | /etc/charon  |
| 751 | CO | S    | 0.09 | egrep charon |

---

### Starting the LMS Daemon

If the LMS daemon is not present, you will not be able to run an application. Start the LMS daemon in the following manner:

```
login: root
```

Change to root status.

```
# /etc/charon
```

Start the LMS daemon.

### Killing the LMS Daemon

If you need to kill the LMS daemon, change to root status and enter the following:

---

## CAUTION

Ensure that the LMS daemon is idle before you kill it, or you may lose license information.

---

```
# ps ax | egrep charon
```

Obtain the Process ID number (PID) of the LMS daemon and ensure that the LMS daemon is idle. The display will be similar to the following:

| PID | TT | STAT | TIME | COMMAND      |
|-----|----|------|------|--------------|
| 397 | CO | I    | 0.06 | /etc/charon  |
| 751 | CO | S    | 0.09 | egrep charon |

```
# kill -9 PID
```

Kill the specified process.

# Installing LMS Network Files

---



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*LMS is loaded when you load UNIX. You use the **setup** procedure to load both UNIX and LMS. Each LMS system has files that control access to license information.*

---

LMS software is a part of the operating system software and is loaded when you load UNIX.

On your system, perform the **setup** procedure to load the operating system and LMS. See the *CADDStation Systems Software Installation Guide*.

Each LMS system has these files:

- `/etc/hosts.lm_authorize_systems`
- `/etc/hosts.lm_search_systems`

The `/etc/hosts.lm_authorize_systems` file contains the names of systems that can take licenses from the current system (the one on which you are working). Available licenses may be transferred only to CADDStations whose names are in this file. If this file does not exist or it is empty, no licenses may be transferred from this CADDStation.

Refer to your configuration illustration. In your current system's `/etc/hosts.lm_authorize_systems` file, enter the names of only those systems that will be able to take licenses from the current system. Do not enter the current system name.

---

**NOTE** Do not use alias system names in the `/etc/hosts.lm_authorize_systems` file.

---

The `/etc/hosts.lm_search_systems` file contains a list of CADDStation names. When a user requests an application license that is not available on his local License Manager, the LMS searches through this file for a CADDStation with an available license. CADDStations are searched in the order that they appear in this file. If this file does not exist or is empty, the LMS does not search for available licenses on other CADDStations.

In the current system's `/etc/hosts.lm_search_systems` file, enter the names of only those systems that the local LMS daemon may search for licenses. Do not enter the current system name.

---

**NOTE** Do not use alias system names in the `/etc/hosts.lm_search_systems` file.

---

---

**NOTE** To reduce processing time, avoid entering unnecessary system names in the `/etc/hosts.lm_search_systems` file.

---

Make sure that

- The owner of the files is `root`
- The protection mode is `644`
- The group is `staff`

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## Section 4

# UNIX Commands and Network Icons

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- **Help** (`lm_help` command)
  - **Display** (`lm_display` command)
  - **Transfers**
    - Explicit Transfers (`lm_transfer` and `lm_update` commands)
    - Implicit transfers (transferring a single license)
  - **Network Icons**
- 

**NOTE** `lm_help`, `lm_display`, `lm_transfer`, and `lm_update` commands are in the `/usr/license/cmds` directory. You must change to this directory to use these four UNIX LMS commands.

---



---

*The **lm\_help** command displays help information about the LMS. It provides a menu from which you can choose the type of help needed about the LMS.*

---

**Purpose** The **lm\_help** command displays information about the LMS.

**Syntax** **lm\_help**

**Description** The **lm\_help** command displays the following menu:

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LICENSE MANAGEMENT HELP MENU

---

1. Overview
2. Display Facility
3. Transfer Facility
4. Error Conditions
5. Quit

Enter menu selection: 1

Enter the number of the menu selection about which you want information.

If you receive an error message, enter the **lm\_help** command and choose item 4 (Error Conditions) to obtain information on how to correct the error.

# lm\_display

---



---

*The lm\_display command displays license information.*

---

- Purpose** The `lm_display` command provides license information stored on a License Manager.
- Syntax** `lm_display [-h | -l | -k] [-hostname]`
- Options**
- h**  
Displays License Manager header information, including plant location, serial number, revision level, CCN, and CPU ID.
  - l**  
Displays information about available licenses, including model number, application name, and number of available licenses on the License Manager. This is the default.
  - k**  
Displays header information and complete information for all licenses on the License Manager.
  - s**  
Displays specific information for a particular system. The default is the current system.

The following are examples of the `lm_display` command and its options:

## Example 1

```
orion# lm_display -h
```

```
Copyright (c) 1988 by Computervision Corporation as an  
unpublished work. All rights reserved.
```

```
Please wait for display information ...
```

```
LICENSE MANAGER DISPLAY FOR orion
```

```
HEADER INFORMATION
```

```
Plant Location: Bedford R&D  
Serial Number: 444  
Rev. Level: 1.5  
CCN: 432  
  
CPU ID: 12014b60
```

---

**Example 2**

```
orion# lm_display -l
```

```
Copyright (c) 1988 by Computervision Corporation as an  
unpublished work. All rights reserved.
```

```
Please wait for display information ...
```

```
LICENSE INFORMATION for orion
```

```
Model    Available    Product  
Number   Count         Description
```

---

|      |   |   |
|------|---|---|
| 3579 | 1 | CVGP11 M2 POST W/OUT CONFIGURATION TOOL |
| 3580 | 1 | CVGP11 M2 POST AND CONFIGURATION TOOL   |
| 3581 | 1 | CVGP11 M5 POST W/OUT CONFIGURATION TOOL |
| 3582 | 1 | CVGP11 M5 POST AND CONFIGURATION TOOL   |
| 3583 | 1 | CVGP11 T2 POST W/OUT CONFIGURATION TOOL |
| 3584 | 1 | CVGP11 T2 POST AND CONFIGURATION TOOL   |
| 3585 | 1 | CVGP11 T4 POST W/OUT CONFIGURATION TOOL |
| 3586 | 1 | CVGP11 T4 POST AND CONFIGURATION TOOL   |
| 3587 | 1 | CVGP11 P2 POST W/OUT CONFIGURATION TOOL |

```
Do you want to continue (y/n RETURN = y) ? n
```

**Example 3**

orion# lm\_display -k

Copyright (c) 1988 by Computervision Corporation as an unpublished work. All rights reserved.

Please wait for display information...

LICENSE MANAGER DISPLAY FOR orion

HEADER INFORMATION

Plant Location: Bedford R&D  
Serial Number: 444  
Rev. Level: 1.5  
CCN: 432  
  
CPU ID: 12014b60

Do you want to continue (y/n RETURN = y) ? y

LICENSE INFORMATION

| Model Number | Original Standard Count | Current Standard Count | Original Delta Count | Current Delta Count | Assigned Count | Each License                        |
|--------------|-------------------------|------------------------|----------------------|---------------------|----------------|-------------------------------------|
| 3579         | 1                       | 1                      | 0                    | 0                   | 0              | Exp.Date:<br>(yymmdd)<br><br>991231 |
| 3580         | 1                       | 1                      | 0                    | 0                   | 0              | Exp.Date:<br>(yymmdd)<br><br>991231 |
| 3581         | 1                       | 1                      | 0                    | 0                   | 0              | Exp.Date:<br>(yymmdd)<br><br>991231 |

Do you want to continue (y/n RETURN = y) ? n

# Transfers

---



---

*The LMS transfer facility allows you to move licenses from one License Manager to another with two types of transfers.*

---

You use the transfer facility to move available standard and delta time licenses between Licensor Managers having the same CCNs. To transfer licenses over the network, the destination CADDStation's name must be found in the `/etc/hosts.lm_authorize_systems` file on the source CADDStation.

There are two types of transfers:

- Explicit transfers
- Implicit transfers

## Explicit Transfers



Information

---

*Use explicit transfers to move single and multiple licenses.*

---

You use explicit transfers to transfer single or multiple licenses.

- Use the `lm_transfer` command to transfer licenses from one License Manager to another over the network.
- Use the `lm_update` command to transfer licenses from one License Manager to another on the same system.

Use one of the following commands to perform explicit transfers.

# lm\_transfer

---



---

*The **lm\_transfer** command transfers licenses from one License Manager to another over the network.*

---

## Purpose

The **lm\_transfer** command transfers licences from one License Manager to another over the network. These conditions must be met:

- License Managers on these systems must have the same CCNs.
- Command user must have **root** status.
- The destination system must be in the `/etc/hosts.lm_authorize_systems` file of the source system.

## Syntax

**lm\_transfer**

The command asks for the source system name, the destination system name, and the model number and quantity for each license to be transferred.

---

**Example**

orion# lm\_transfer

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The lm\_transfer command allows licenses to be moved from one License Manager to another over the network.

ENTER SOURCE SYSTEM NAME: orion

ENTER DESTINATION SYSTEM NAME: milky-way

Select licenses to be transferred from orion to milky-way as follows:

<model number> <quantity>

Enter license selection (RETURN = quit): 3591 1

Enter the next license selection (RETURN = End of List): 3592 1

Enter the next license selection (RETURN = End of List):

Please wait for the transfer results ...

TRANSFER RESULTS:

| Model Number | Status      |
|--------------|-------------|
| 3591         | TRANSFERRED |
| 3592         | TRANSFERRED |

# lm\_update

---



Instruction

---

*The **lm\_update** command transfers licenses from one License Manager to another on the same system.*

---

## Purpose

The **lm\_update** command transfers licenses from one License Manager to another on the same system. These conditions must be met:

- License Managers must have the same CCNs.
- Command user must have root status.

## Syntax

### **lm\_update**

The system displays the following:

- Instructions to disconnect the cables from the old License Manager and connect them to the new License Manager.
- Listing of all licenses on the new License Manager.
- Request for the model number and quantity of each license to be transferred.
- Instructions to reconnect the cables to the old License Manager.
- Update results, with a list of all licenses transferred.

After the **lm\_update** command has successfully executed, the system is automatically rebooted.

## Example

```
orion# lm_update
```

```
Copyright (c) 1988 by Computervision Corporation as an  
unpublished work. All rights reserved.
```

```
The lm_update command allows licenses to be moved from one  
License Manager to another on the same CADDStation.
```

```
This command will terminate all executing licensed  
applications and the LMS daemon. Upon its successful  
completion, the CADDStation will be rebooted.
```

```
Do you want to continue (y/n RETURN = y) ?
```

```
Please wait while the License Manager is scanned . . .
```

```
Disconnect the cables from the old License Manager and connect  
them to the new License Manager. Enter 'c' at the boot prompt  
and press RETURN to continue:
```

```
> c
```

---

LICENSE INFORMATION

| Model<br>Number | Available<br>Count | Product<br>Description           |
|-----------------|--------------------|----------------------------------|
| 0305            | 1                  | CALCOMP 965 FORMAT SUPPORT       |
| 0306            | 1                  | CALCOMP 960 FORMAT SUPPORT       |
| 0307            | 1                  | CALCOMP 1043 FORMAT SUPPORT      |
| 0308            | 1                  | HP7580/85/86 FORMAT SUPPORT      |
| 0309            | 1                  | VERSATEC FORMAT SUPPORT          |
| 0310            | 1                  | BENSON ELECTROSTATIC FORMAT      |
| 0311            | 1                  | CVP1000 FORMAT SUPPORT           |
| 0314            | 1                  | BENSON PLOTTER SUPPORT 1313/1332 |

Do you want to continue (y/n RETURN = y) ? n

Select licenses to be transferred from the new key as follows:

<model number> <quantity>

Enter license selection (RETURN = transfer all licenses):305 1

Enter the next license selection (RETURN = End of List):306 1

Enter the next license selection (RETURN = End of List):

Reconnect the cables to the old License Manager. Enter 'c' at the boot prompt and press RETURN to continue:

>c

UPDATE RESULTS:

| Model Number | Status      |
|--------------|-------------|
| 0305         | TRANSFERRED |
| 0306         | TRANSFERRED |

---

## Implicit Transfers by Applications



---

*Implicit transfers transfer a single license. In Implicit mode, the system automatically assigns available licenses.*

---

Implicit transfers are employed by the application to transfer a single license.

To request a license for an application, enter the name of the application; for example, the `cadds` command.

If a requested license is not available on the local License Manager, the LMS looks at the `/etc/hosts.lm_search_systems` file for the names of systems that may have an available license. CADDStations are searched in the order they appear in this file.

After the transfer has been completed, the LMS assigns that license to the requesting application. When the application releases the license, the license is transferred back to the License Manager it came from.

---

### NOTE

If you want to prevent licenses from being transferred to any License Manager over the network, remove all names from the `/etc/hosts.lm_authorize_systems` file.

---

# Network Icons

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Use the Network Administration Tool (NAT) icons to operate the LMS. Icons you use are Display Licenses, Display License Manager, and Transfer License.

---

Use the following NAT commands to operate the LMS. (For more information on the NAT, see *Setting Up and Managing the Network* in the *CADDStation Systems Network Guide*.)

---

**NOTE** You must load the NAT with the operating system to use these commands.

---

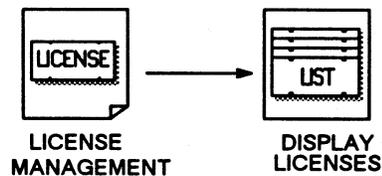
## Display License Icon

Select the system about which you want information. The LMS provides a list of model numbers, available licenses, and applications.

Choose the icons shown in Figure 1 to display license information.

---

**Figure 1. Display License Information**



---

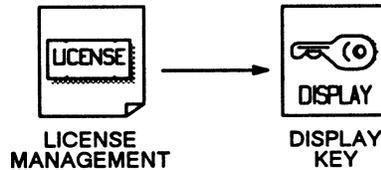
### Display License Manager Icon

Select the system about which you want information. Information about the License Manager is displayed.

Choose the icons shown in Figure 2 to display License Manager information.

---

**Figure 2. Display License Manager Information**



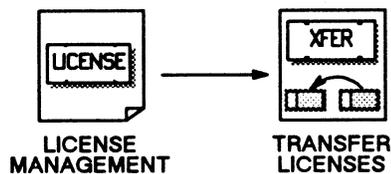
### Transfer Licenses Icon

Select the system from which you want to transfer licenses.

Choose the icons shown in Figure 3 to transfer licenses. The LMS then requests the the destination node name, the license number, and the count (number of licenses to be transferred.)

---

**Figure 3. Transfer Licenses**







## Section 5

# CADDS Commands

---

- **CADDS LMS Commands**

Implicit Mode

LIST LICENSE, RELEASE LICENSE commands

Explicit Mode

SELECT LICENSE, LIST LICENSE, RELEASE LICENSE commands

# CADDS LMS Commands

---



---

*Use CADDs commands to operate the LMS. You may change the CADDs execution mode to Implicit or Explicit mode. In Implicit mode, the system automatically assigns you an available license. In Explicit mode, you must enter a command to assign an available license from the system. You can specify the mode by setting the CADDSLICENSE environment variable in the .caddsrc file.*

---

The CADDs environment for LMS is preset to one of two execution modes, Implicit or Explicit. In Implicit mode, the system automatically assigns you an available license. In Explicit mode, you must enter a command to assign an available license from the system.

To set the execution mode to Implicit, set the CADDSLICENSE environment variable in the .caddsrc file as follows:

```
setenv CADDSLICENSE 'implicit'
```

To set the execution mode to Explicit, set the CADDSLICENSE environment variable in the .caddsrc file as follows:

```
setenv CADDSLICENSE 'explicit'
```

If the CADDSLICENSE environment variable is not set, then CADDs defaults to Explicit mode if you have CADDsHOST set in the .caddsrc file as follows:

```
setenv CADDsHOST servername
```

If CADDsHOST is not set, CADDs LMS defaults to Implicit mode.

---

**NOTE** Before using the CADDs commands, be sure that /usr/apl/cadd and /usr/apl/cadd/data are in your working directory path.

---

## Implicit Mode



*In Implicit mode, the system automatically assigns available licenses.*

---

In Implicit mode, enter the **cadds** command. The system automatically assigns you an available license. You may then enter the following commands:

- LIST LICENSE
- RELEASE LICENSE

# LIST LICENSE

---



Instruction

---

*The LIST LICENSE command lists the partition and license names assigned to the current system. Its modifiers are GRANTED, ASSIGNED, and EXPANDED.*

---

**Purpose** Lists the partition and license names assigned to the current system. LIST LICENSE does *not* show Base CADDs.

**Syntax** LIST LICENSE <modifier>

**Modifiers** GRANTED  
Lists all licenses installed on your system.

---

**NOTE** The LIST LICENSE GRANTED command may take a half hour or more to execute if the License Manager contains a large number of licenses.

---

ASSIGNED  
Lists all licenses assigned to a specific user.

EXPANDED  
Lists individual licenses within a license group. This grouping is preset at the factory.

---

**NOTE** The EXPANDED modifier requires the ASSIGNED modifier: LIST LICENSE ASSIGNED EXPANDED

---

# RELEASE LICENSE

---



---

The *RELEASE LICENSE* command makes a license available to other users. The */usr/apl/cadds/data/masterfile* file lists the valid partition and license names.

---

**Purpose** Makes a license available to other users.

**Syntax** *RELEASE LICENSE partitionname licensename*

**Example** *RELEASE LICENSE MD SOLIDS*

To release all licenses, substitute the word *ALL* for *licensename* in the command line.

---

**NOTE** See the */usr/apl/cadds/data/masterfile* file, on-line, for a complete list of the valid partition and license names available.

---

## Explicit Mode



*In Explicit mode, enter the **cadds** command, then the **SELECT LICENSE**, **LIST LICENSE**, or **RELEASE LICENSE** command.*

---

If your system is set for Explicit mode, you must enter a command to assign a license to your system.

Enter the **cadds** command. Then enter the **SELECT LICENSE** command discussed next. You may also use the **LIST LICENSE** and **RELEASE LICENSE** commands described in the previous subsection.

# SELECT LICENSE

---



---

*The SELECT LICENSE command selects and assigns a license. The /usr/apl/cadds/data/masterfile file lists the valid partition and license names.*

---

**Purpose** Selects and assigns a license.

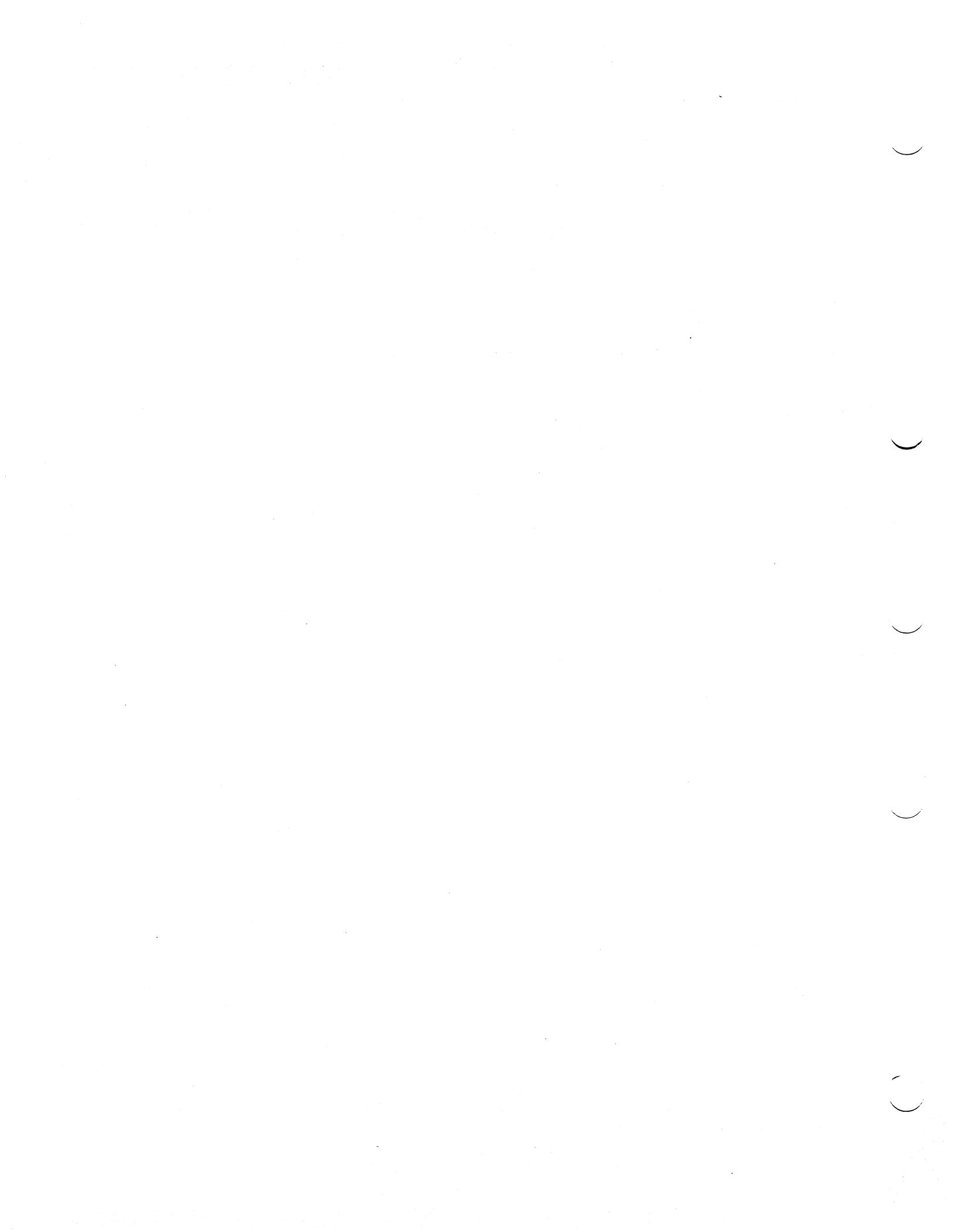
**Syntax** SELECT LICENSE *partitionname licensename*

**Example** SELECT LICENSE AEC AECHLR

---

**NOTE** See the /usr/apl/cadds/data/masterfile file, on-line, for a complete list of the valid partition and license names available.

---





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## *Section 6*

# **System Messages**

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- **LMS System Messages**

# LMS System Messages

---



---

*The LMS returns messages.*

---

The LMS returns the following messages:

---

**NOTE** All LMS messages are sent to the `/usr/cvkv/lm_errlog` file. Empty this file periodically.

---

A license has been transferred to this License Manager.

A license has not been transferred to this License Manager.

A license was not found on this License Manager.

This message is issued during the loading of CADDs object tapes for every feature that is not available on the installed License Manager.

The CCNs on the License Managers do not match.

This license was lost during a transfer.

Licenses must be transferred between two CADDStations.

Unable to display license description information.

The system time on this host is incorrectly set.

Unable to determine system boot time.

Unable to allocate the requested amount of memory.

No License Manager was detected on this system. Install License Manager and reboot.

---

**NOTE** No License Manager is necessary if this is a client running CADDs with the `CADDShost` environment variable in your `.caddsrc` file set to a server name.

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# RESPONSE

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