

# Cadra for Windows Installation Guide

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## Installation Overview

Cadra for Windows enables you to work with Cadra Design Drafting under Microsoft Windows 98, Windows 2000, Windows NT (SP3 or above) or Windows XP Pro running on an Intel-compatible PC. Your Cadra for Windows package is complete with software on CD-ROM.

The installation procedure involves two steps:

- Installing the Cadra software. Cadra uses the InstallShield Wizard for installations. The InstallShield Wizard is designed to make the installation of the Cadra software easier and more understandable.
- Setting up your Cadra software license(s).

## Hardware Requirements

Cadra for Windows runs on an Intel compatible Pentium-based workstation. The minimum, and in some cases the recommended requirements are listed below.

### Standard Cadra Program Files and Cadra Demo Drawings

- Hard disk with at least 21 MB of free disk space
- 15 MB additional disk space for demonstration files
- 25 MB additional disk space for documentation
- 15 MB additional disk space for Cadra NC
- 1.7 MB additional disk space for Kanji
- A hardware lock or network card (required for Cadra 12.0 licensed products)
- A CD-ROM drive

### Cadra Design Drafting

- 32 MB RAM for Windows systems (64 MB is recommended)
- 40 MB swap file

### CadraWorks

- 3 MB additional disk space for CadraWorks
- 220 MB additional disk space for the SolidWorks installation
- 64 MB RAM for Windows NT (128 MB is recommended)
- 100 MB swap file for CadraWorks
- On Windows NT, SP 5 is recommended for CadraWorks

## Installation Notes

- Cadra for Windows uses the video driver from Windows rather than providing a proprietary video driver as in previous releases of Cadra for DOS
- Cadra requires a graphics card that supports OpenGL.
- Depending on your hardware platform, Cadra for Windows supports the mouse pointer and tablet.
- A new license manager is available.

## Software Requirements

Cadra for Windows software is distributed on a CD-ROM. It requires that you are running Windows 98, 2000, Windows NT (SP3 or above) 4.0 or Windows XP Pro.

## Product Authorization License (PAL)

In order to install the Cadra software, you need the Product Authorization License (PAL).

Review your PAL and keep it available during the installation procedure. It provides you with information you will need to set up your license:

- Authorized optional software products you purchased
- Number of simultaneous sessions (licenses) allowed for each product
- Cadra software license expiration date
- License key for each product
- AutoVue installation serial number

## Installing a Hardware Lock

If you don't have an installed network card, Cadra for Windows installations (PC only) require a hardware lock. This is a device that is attached to the PC on which you will run Cadra for Windows. If your setup requires a hardware lock, you should have received a hardware license pack for each system you will set up. Each hardware license pack is delivered in an antistatic bag that contains:

- Hardware lock
- Product Authorization License (PAL)

**Note:** If your license pack does not contain these items, call Softech/Cadra Customer Service at 1-800-321-2372.

Insert the hardware lock into the parallel (LPT) port on the back of your PC. If a printer is connected, make sure the printer power is on.

**VERY IMPORTANT:** The serial and parallel connectors on the back of a PC look similar. However, the parallel port has sockets (female) while the serial port has pins. Connect the male portion of the hardware lock (the side with the gold plated pins) into the parallel port on the PC.

If you have only one parallel port on your PC and a local printer is connected to it, disconnect the printer cable, attach the hardware lock to the PC, and connect the printer cable to the hardware lock. In this case, the hardware lock is "between" the PC and the printer cable.

If you have more than one parallel port, plug the hardware lock into an unused port. Otherwise, insert the hardware lock between the PC and any existing parallel cable.

### Installing a SolidWorks/CadraWorks Hardware Lock

In certain cases, hardware locks are required for SolidWorks/CadraWorks installations. When a hardware lock is required, the hardware lock should be installed on the parallel (LPT) port. If multiple locks exist, the Cadra hardware lock must be the outermost lock. The printer cable, if one is present, must be connected directly to the Cadra hardware lock. After the lock is installed and the printer is powered on, you can create a Cadra license.

### SolidWorks/CadraWorks Installation Requirements

The SolidWorks product from SolidWorks Corporation must be installed locally before installing Cadra for Windows with the CadraWorks Integration Option.

During installation of Cadra for Windows with the CadraWorks Integration Option, the procedure verifies that SolidWorks is installed locally.

### SolidWorks Serial Number

During the SolidWorks installation as well as the CadraWorks installation, you will be required to enter a 16-digit SolidWorks serial number. You must contact SolidWorks for the serial number and for any SolidWorks license issues.

### Installing Cadra

Cadra supports multiple languages and hardware platforms. All languages and platform options are provided on the CD-ROM.

#### Before you begin:

- Have your Product Authorization License (PAL) available. You will need to refer to it during the installation procedure.
- Close all other programs. Other software applications should not be running, while Cadra installation is in progress.

#### Installing the Software if Autorun is Active

The quickest way to install the Cadra software from CD-ROM is to use the Install Shield wizard with Autorun active:

1. Insert the Cadra CD-ROM into the CD-ROM drive.
2. Follow the Install Shield wizard to complete the installation.
3. After you have installed Cadra, reboot your system.
4. Proceed to Installing the License.

#### Installing the Software if Autorun is Not Active

If Autorun is not active:

1. Insert the Cadra CD-ROM into the CD-ROM drive.
2. Click the Start button, then click Run.
3. Type the following in the Run dialog box:

```
d:\windows\intel\english\disk1\setup.exe
```

(Select from English, French, German, Italian, or Japanese for the language. In this example d is the CD-ROM drive)

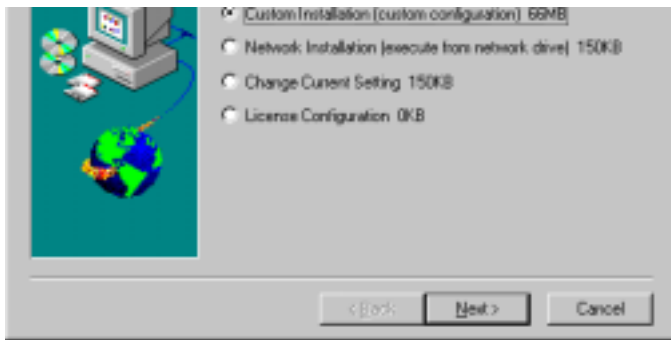
4. Click OK.
5. Follow the Install Shield wizard to complete the installation.
6. After you have installed Cadra, reboot your system.
7. Proceed to Installing the License.

#### Choosing an Installation Option

You chose which type of installation is appropriate for your system when the Select Setup Option dialog box appears.

If you want to...	Then choose...
Load all files necessary to run Cadra	Express Installation
Select which files and options to load, such as CadraNC	Custom Installation
Use Cadra on a network	Network Installation
Use Cadra with SolidWorks	Custom Installation



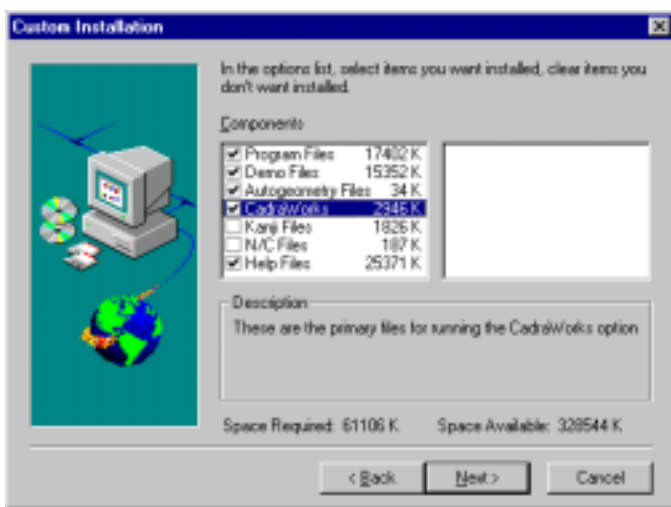


### Choosing Express Installation

Express Installation is the default choice. It loads all of the files necessary to run the Cadra product including text fonts, plotting software, online Help, demo Cadra files, and some sample Autogeometry programs and libraries.

### Choosing Custom Installation

Custom Installation loads all of the files necessary to run the Cadra product, but allows you to decide what other options you may or may not want to load.



### Choosing Network Installation

When using a network installation, you must first load Cadra on the PC that has been designated as the server. Fully install Cadra from the CD-ROM using either a Custom or Express installation.

#### Server Installation

1. Follow the instructions for *Installing Cadra from CD-ROM*. When prompted for the type of installation, select Express or Custom Installation.
2. When the Select Localization Options dialog appears, choose the appropriate Standards, Keyboard Type, and Menu Text.
3. Click the Next button and follow the instructions on your screen to complete the installation.

#### Client Installation

1. Map your drive to the fully installed version of Cadra.
2. Follow the instructions for installing Cadra from CD-ROM. When prompted for the type of installation select Network Installation.

**Note:** Cadra installs only a few files on the local PC. All other files and executables are on the mapped drive.

### Choosing a Monitor Size and Mouse Controls

Depending on your hardware, you may have a 2-button or a 3-button mouse. Cadra gives you the option of installing a setup that will work for either a 2- or 3-button mouse, or installing a 3-button only mouse.

The default settings for a 2-button mouse are:

**Left:** Select from the menus or the graphics area.

**Right:** Locate for geometry placement.

The default settings for a 3-button mouse with the 2- or 3-button mouse setup option are:

**Left:** Select from the menus or the graphics area.

**Middle:** Choice button or user-defined functions assigned using Autogeometry.

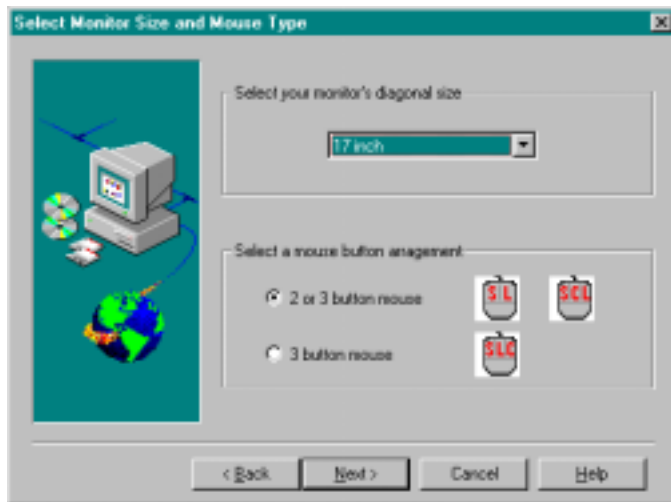
**Right:** Locate for geometry placement.

The default settings for a 3-button mouse using the 3-button only setup are:

**Left:** Select from the menus or the graphics area.

**Middle:** Locate for geometry placement.

**Right:** Choice button or user-defined functions assigned using Autogeometry.



### Finishing Installation

No matter which method you use to install Cadra, when you have finished installing the software you should restart your system.

### About Your Cadra License

If you are a first time user or if you are upgrading from version 11 to version 12, you will need to install and set up your license. There are three types of licenses available: dedicated, distributed, and floating license manager. Your PAL will indicate the type of license you have.

Licensed Cadra products include Cadra and all optional Cadra software, Cadra NC, Post, Postdf, the Nurestore tape utility, and the Flexible License Manager (FLM).

#### Dedicated License

A dedicated license is restricted to a single workstation.

#### Flexible License Manager, Distributed License

A distributed license is shared among multiple users of an application and is distributed by the Flexible License Manager (FLM). The FLM is a separate license that manages the distribution of licenses and is dedicated to the workstation that is running the license manager.

Both dedicated and distributed licenses can coexist in the same license database. The dedicated licenses are encrypted by the host ID of the single system for which it is intended while distributed licenses are encrypted by the host ID of the workstation running the FLM program. Only one FLM server process can run at any given time on a particular machine.

#### Using FLM 12.0

FLM 12.0 distributes version 12 and upgraded version 11 floating licenses only. Existing pre-version 12 floating licenses are not valid for use with FLM 12.0. They must be upgraded either to version 12 or to new version 11 floating licenses.

To make your version 12.0 upgrade as painless as possible, we will grant 30-60 day version 11 floating licenses compatible with FLM 12.0.

FLM 12.0 serves version 11.x products, only if there are available upgraded version 11 floating licenses. This service is for companies that must run both version 12 and version 11 Cadra products. In such an environment, you must use the version 12 FLM server, because version 12.0 Cadra products cannot access version 11.0 or earlier FLM servers.

FLM 12.0 distributes version 12.0 floating licenses exclusively to version 12.0 Cadra products. Upgraded version 11 license will be distributed to version 11.x Cadra products.

FLM 12.0 will not serve version 10.0 or earlier Cadra products.

Pre-version 12, upgraded version 11.0, and version 12.0 licenses can all reside within the same license file.

### Setting Up a Cadra License

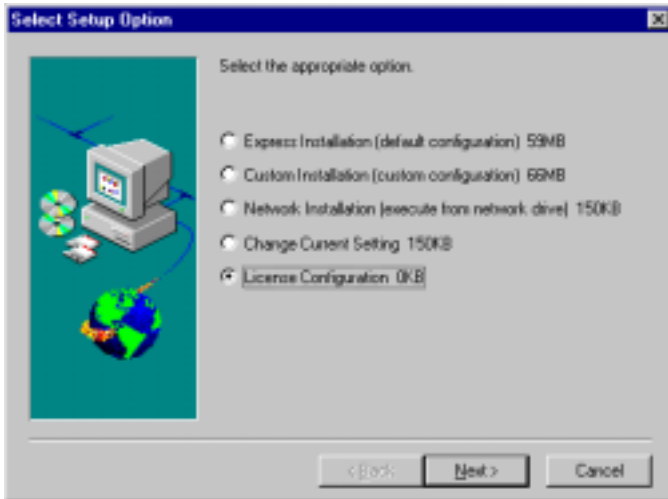
After you have installed the Cadra software you must set up a license before you can use Cadra. If your system requires the use of a hardware lock, make sure it was installed properly before Cadra installation.

**Note:** You must use a version 12.0 license installation interface to install a license into an environment that contains version 12.0 and pre-version 12.0 licenses or your license will not install correctly.

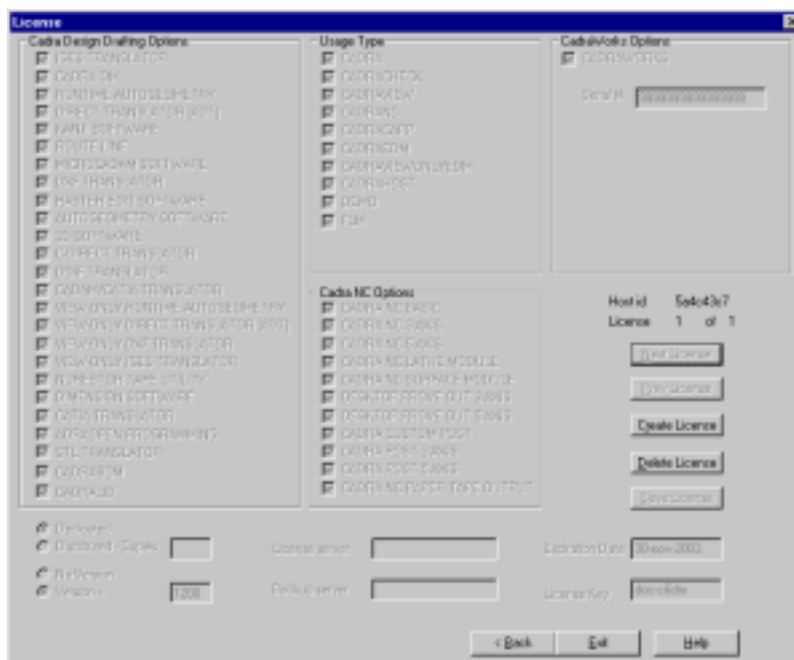
#### To Begin License Installation:

After you have restarted your system, you must get back to the Install Shield wizard. You can do this in several ways, as described in *Installing Cadra from the CD-ROM*.

1. To install your license, proceed to the Select Setup Option dialog and select License Configuration.



2. By default, the setup procedure indicates that the license file will be created in C:\CADRA (the Destination Directory). You can accept this location or click the Browse button to select a different directory.
3. After the appropriate Destination Directory is entered, click the Next button. The License dialog appears:



Your Cadra Host id is shown on this form. If this is a first-time installation or if you currently do not have a Cadra license installed, you should see License 0 of 0.

If you are using a hardware lock, the Host ID should match the Host ID listed on your hardware lock unit (attached to your parallel port). The setup program reads the Host ID from the hardware lock or network card and displays it on the screen.

If the setup program has a problem reading the hardware lock or network card, you may see a Host ID of zero. If this happens, call Cadra Customer support at 1-800-321-2372.

4. If you have an existing license (an existing NLS.txt file), it will appear here as License 1 of 1. You need to delete the existing NLS.txt file and all old licenses from the database. To delete the existing licenses, click Delete License for each existing license before installing the new ones.
5. Initially, all options on the License dialog appear disabled except the Create License button. Click the Create License button to begin the process of creating a license. Most objects on the License dialog will become active.
6. Click the box to the left of each item that corresponds to a licensed option marked by an asterisk (\*) on your PAL. A checkmark will appear in each checked box.

If you are installing CadraWorks, remember to enter the 16-digit CadraWorks integration key from your PAL.

7. After you have checked all Cadra components marked by an asterisk (\*) on your PAL, select the type of license. This information also appears on the

Product Authorization License (PAL). If you have a *dedicated* license no copies are indicated on the PAL. If your PAL indicates that you will run more than one copy, you have a *distributed* license.

If you want to...	Then...
Install a dedicated (local) license to be used with a pre-version 12 Cadra product	Select <b>Dedicated</b> and <b>No Version</b>
Install a floating license to be used with a pre-version 12 FLM server	Select <b>Distributed</b> and enter the correct number of copies, then select <b>No Version</b>
Install an upgraded version 11 floating license to be used with a version 12 FLM server	Select <b>Distributed</b> and enter the correct number of copies, then select <b>Version =</b> and enter <b>1100</b>
Install a version 12 dedicated license to be used with a version 12 Cadra product	Select <b>Dedicated</b> , then select <b>Version =</b> and enter <b>1200</b>
Install a version 12 floating license to be used with a version 12 FLM server	Select <b>Distributed</b> and type in the correct number of copies, then select <b>Version =</b> and enter <b>1200</b>
Install an upgraded version 11 dedicated license	You must install an upgraded version 11 floating license because such a license is required by the version 12 FLM server in order to serve version 11.x Cadra products.

- Enter the Expiration Date at the bottom of the dialog. Enter the Expiration Date in the exact format shown on the PAL (dd-mmm-yyyy, such as 31-dec-2001).
- Enter the License Key exactly as shown on your PAL. This key is case sensitive. To avoid confusion, the license key *does not* contain the lowercase letter 'l' nor does it contain the number zero (0). In all instances these characters will be the number one (1) and the lowercase letter 'o'.

Expiration Date: 31-aug-2001  
License Key: 10110101

- Click the Save License button. If all the information was entered correctly, you will get a message indicating the license was successfully created.

If any information was entered incorrectly or if the options you checked do not match the PAL exactly, you will get an Invalid license key error message.



- When you see the message, "License successfully created," click OK. The License dialog will show that you have "License 1 of x" (in the upper right corner). All fields are deactivated except the Create License and Delete License buttons. If you do not need to modify your license or create another license, click the Exit button.

**License**

Cadras Design Drafting Options:

- IGS TRANSLATOR
- CADRA DM
- RUNTIME AUTOGEOMETRY
- DIRECT TRANSLATOR (ADT)
- KANU SOFTWARE
- ROUTE LINE
- MICROCADAM SOFTWARE
- DWF TRANSLATOR
- PASTER EDIT SOFTWARE
- AUTOGEOMETRY SOFTWARE
- 3D SOFTWARE
- CORRECT TRANSLATOR
- DDF TRANSLATOR
- CADAN/CATIA TRANSLATOR
- VIEW-ONLY RUNTIME AUTOGEOMETRY
- VIEW-ONLY DIRECT TRANSLATOR (ADT)
- VIEW-ONLY DWF TRANSLATOR
- VIEW-ONLY IGS TRANSLATOR
- NURSTOR TAPE UTILITY
- DIMENSION SOFTWARE
- CATIA TRANSLATOR
- ADRA/OPEN PROGRAMMING
- STL TRANSLATOR
- CADRABOM
- CADRALIB

Usage Type:

- CADRA
- CADRA/HEX
- CADRA/VIEW
- CADRA/NC
- CADRA/CAPP
- CADRA/DEM
- CADRA/VIEWONLY/DEM
- CADRA/HOST
- DEDM
- FLM

Cadras/Works Options:

- CADRA/WORKS

Serial #: 000000000000

Hostid: 5044307  
License: 1 of 1

Cadras MC Options:

- CADRA MC BASIC
- CADRA MC 3/4/5
- CADRA MC 5/4/5
- CADRA MC LATHE MODULE
- CADRA MC SURFACE MODULE
- DESKTOP-PROVE OUT 3/4/5
- DESKTOP-PROVE OUT 5/4/5
- CADRA CUSTOM POST
- CADRA POST 3/4/5
- CADRA POST 5/4/5
- CADRA MC PAPER TAPE OUTPUT

Dedicated  
 Distributed - Copies:   
 No Version  
 Version =:

License server:   
Dedicated server:

Expiration Date: 31-dec-2001  
License Key: 10110101

Buttons: [Print License], [Delete License], [Create License], [Delete License], [Save License]



12. If you need to set up another license, use the License dialog box to set up each additional license. To modify an existing license, follow the procedure in the section titled, Modifying an Existing License.
13. When you have finished setting up all licenses, follow the install shield prompts to finish the license installation.

If you do not complete the license setup successfully, the following message will appear when you attempt to start Cadra:



### Modifying an Existing License

If you purchase additional software components after initial installation and license setup, you will need to update your license. To do so:

- Delete your existing license.
- Recreate a new license, as described in the section titled, *Setting Up a Cadra License*.

### Deleting Your Existing License

To delete an existing license, complete this procedure Refer to the section titled, *Setting Up a Cadra License*, as necessary.

1. Run the Cadra software installation procedure from your original Cadra software distribution media and proceed to the Select Setup Options dialog box.
2. Select the License Configuration option, and proceed to the License dialog box.
3. Click the Delete License button in the License dialog.
4. When asked, "Are you sure you want to delete this license?" click the Yes button. The message, "License successfully deleted," will appear.
5. Create a new license as described in *Setting Up a Cadra License*.

### Uninstalling Cadra on Windows Systems

To remove the Cadra software from your Windows system:

1. Exit Cadra if it is running.
2. Click the Start button then click Programs.
3. Open Cadra for Windows (this name may be different if Cadra was installed in a location other than the default location).
4. Click the Uninstall Cadra icon.
5. Reboot the system before installing a new version of Cadra.

### Ensuring Proper Network Setup

Before using the FLM, make sure your network is set up properly. Use the following Cadra Telnet checklist for Windows to ensure:

- A winsock compliant version of TCP/IP installed.
- The hosts file exists in the TCP/IP directory or a DNS server is available and correctly configured.
- The server must have a static IP address.
- A services file exists in the TCP/IP directory or a DNS server is available and correctly configured.
- Before installation, you must be able to ping the server and all clients.

### Configuring the FLM Server and the Client Workstations

If you have a distributed license, you must configure the FLM server and the client workstation.

#### Configuring the Server

1. Install the license using the distributed license PAL with Cadra active. This includes the server name, number of licensed Cadra copies, and Cadra options.
2. Save your license and exit Cadra.
3. On a Windows 98 server, execute FLMSERVE.EXE from the Windows Explorer. On a Windows NT server, execute FLMSERV.C.EXE from the MS-DOS prompt or double-click in the Explorer window. A window should appear with the FLM server running.

#### Configuring the Clients

1. Check to be sure that an NLS.TXT file includes the following statement. (A client workstation should have an NLS.TXT file.)

```
.primary [server name]
```

The server name is the name of the computer on which the FLM is running. In addition to the primary server designation, there may be an alternate server designation:

```
.alternate [server name]
```

If the primary server is not found, the license request goes to the secondary server.

2. Check to be sure the NLS.TXT file is in your Cadra directory (such as C:\CADRA).

## Environment Variables

### FLM as an NT Service

FLM can run as a Windows NT service. FLM will run regardless of whether or not the machine is logged on. The machine need only be booted.

### Setting the Environment Variables

Before installation, you must set certain environment variables in the `cadra.ini` file. The `cadra.ini` file must reside on the same machine as the FLM service (usually in the `WINNT` directory). These variables apply to *both* the FLM application and the FLM service.

Variable	Description
ADRA_NLS	<p>Lets FLM know where to look for the file containing license information for the user site. For example, consider that a license file is named <code>nls.txt</code> and it resides in <code>C:\CADRA</code>. Add the following line to <code>cadra.ini</code>:</p> <pre>ADRA_NLS=C:\CADRA\NLS.TXT</pre> <p>By default, this value is set to <code>%CADRA%\nls.txt</code> at installation time.</p> <p>This variable is <i>required</i> for both the FLM server application and the FLM service.</p>
ADRA_NLS_LOG	<p>Specifies where to open a log file which will contain FLM output messages, connections, license distributing and denying, license timeouts, and disconnections. This information usually appears in the FLM window; however, the FLM service does not display a window. Therefore, a log file is necessary if the user is interested in FLM output.</p> <p>For example, if a log file is to be <code>c:\flm\flmservice.log</code>, add the following line to <code>cadra.ini</code> for Windows NT:</p> <pre>ADRA_NLS_LOG=c:\Cadra\flmservc.log</pre> <p>Add the following line to <code>cadra.ini</code> for Windows 95 or Windows 98:</p> <pre>ADRA_NLS_LOG=c:\Cadra\flmserve.log</pre> <p>By default, this value is set to <code>%CADRA%\flmservice.log</code> at installation time.</p> <p>This variable is <i>optional</i>. If <code>ADRA_NLS_LOG</code> is not set, the FLM service attempts to open <code>flmservice.log</code> in the directory specified by the <code>CADRA</code> environment variable (also in <code>cadra.ini</code>). If this fails, FLM does not output any information.</p> <p>When setting up <code>ADRA_NLS</code>, be sure you have the necessary privileges for creating and writing to a file in that directory.</p>
ADRA_NLS_TIMEOUT	<p>Sets the FLM connection timeout value in minutes. For example, if the desired timeout value is 2 hours (120 minutes), add the following line to <code>cadra.ini</code>:</p> <pre>ADRA_NLS_TIMEOUT=120</pre> <p>This variable is <i>optional</i>. By default, this value is set to 60 minutes at installation time, after which the connection is closed and the license is taken back.</p>

### Installing FLM Service

The FLM service is a self-installing/controlling program contained in the executable file, `flmservc.exe`. In order to behave like a Windows NT service, the FLM service must be installed in the Windows NT Service Control Manager database.

**Note:** Installation requires administrator access rights.

To install FLM service, double-click `flmservc.exe` in the `Cadra` directory or open a DOS prompt and enter:

```
flmservc install <full path name of flmservc.exe>
```

For example, assume `flmservc.exe` was installed in `c:\cadra`. Set the current directory to `c:\cadra` and enter:

```
flmservc install C:\cadra\flmservc.exe
```

### Confirming FLM Service Installation

The FLM service will be installed in the Service Control Manager database and started. To confirm this:

1. Open the Windows Control Panel.
2. Double-click the Services icon.

3. Scroll through the list of services until you find a service called FLM License Server.
4. Confirm that the Status field is set to Started.
5. Confirm that the Startup field is set to Automatic.

### **Error Messages**

The following lists the problems that may be reported by the licensing software.

#### **NO DEDICATED LICENSE, SERVER NOT RESPONDING**

The license requested by Cadra was not found in the dedicated license list so a connection to the server was attempted and the connection request failed.

Make sure you specified the correct server name in the license file and the server process (if required) is running. If you believe only a dedicated license was required for your operation, check your license database to be sure the license was entered correctly.

#### **INVALID LICENSE KEY**

Information was entered incorrectly, or the options you checked do not match the PAL exactly.

#### **LICENSE NOT AVAILABLE**

The Cadra license is not in the database. Review your license database.

#### **LICENSE HAS EXPIRED**

The Cadra license has expired; the system's date has exceeded the date specified in the license.

#### **LICENSE LIMIT HAS BEEN REACHED**

The FLM has distributed all available licenses. The requesting client must wait until one becomes available, either by being release by another Cadra process that was previously granted a license by the FLM, or if the FLM has revoked a license because of a license or connection timeout. If possible, terminate any idle Cadra sessions so that you will be able to run.

#### **ERROR 1067**

This error usually indicates there is a problem with the nls.txt file. Verify that the server name is in lowercase letters and does not include any special characters (\* & \$ ^ @ # +). Also, there should not be a tab between .primary and the server name, verify that a space is used instead.