

The Chemstations License Manager

Overview

The Chemstations License Manager is a software solution to authorizing Chemstations products over a network. When installed onto a machine which is networked, the license manager controls Chemstations licenses from a single location.

This new method of authorizing Chemstations products gives users freedom from dongles. As long as there is an open license on the network, they can use CHEMCAD or any of our other products. The license manager includes advanced reporting capabilities, giving the system managers vital information such as:

- Who is using CHEMCAD?
- When are they using it?
- How much are they using it?

How it Works

An engineer, whose computer is attached to a network, starts CHEMCAD. CHEMCAD searches all local possibilities (authorization code or locally attached dongle). Finding none, it activates the license manager, which will search for a License Server machine. You can even configure CHEMCAD with either the server's IP address or name, and CHEMCAD will go right to it, no searching required. This powerful feature lets you put the License Server anywhere even across the country or world, and CHEMCAD will go right to it.

The CHEMCAD License Server, also attached to the network, receives this packet. It checks the current number of licenses in use against its pre-set limit. If there is a license to be had, it checks that license out and sends a packet back to the engineer's computer, telling it to proceed.

Every few minutes a heartbeat signal is sent from CHEMCAD, making sure the License Server is still running. The License Server returns a heartbeat signal back to the computer. If the server stops receiving heartbeats from the client, the server assumes the client machine failed and releases its license.

Technical Considerations

The License Manager system is flexible enough to be used over any network, as long as it's a TCP/IP network. This system can work via a LAN (Local Area Network) or a WAN (Wide Area Network). While most WAN routers do not allow broadcast messages to be sent, the ability to explicitly declare the license server name in CHEMCAD means that the license server can be located anywhere.

Note: CHEMCAD License Manager is currently available with TCP/IP networks ONLY. Please contact your sales representative regarding the use of Novell networks with License Manager.

Machine requirements for the license server machine are as follows:

- Windows 95 (or later) or Windows NT 4.0 or later
- 486 or faster processor
- 10 Mbytes of disk space

Setting up a CHEMCAD License Server

Now that we know what a license server is, it's time to set one up. We must do the following:

- Select a computer to be a license server
- Install the software
- Contact Chemstations (at 1-800-CHEMCAD) to license the server.

Each step is discussed in detail below.

Step 1: Select a computer to be a License Server.

Just about any computer attached to the network with an open parallel port can be a license server. You can use any of the following:

- Existing File Server (running Windows NT 4.0 or higher) or
- Windows 95 (or later) or Windows NT 4.0 or later
- 486 or faster processor
- 10 Mbytes of disk space

Step 2: Install the Software.

In NT, you must be logged into the machine as an administrator to install the software.

Installing the software is easy and intuitive for anyone who has installed software on a machine. Follow the directions below.

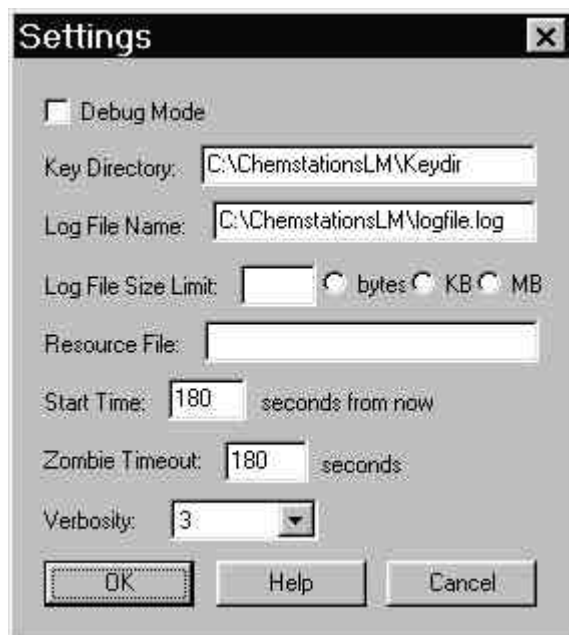
Locate the first disk of the set labeled "Chemstations License Manager". Run the setup program on this disk and follow the directions of the setup program. Setup will install all the necessary drivers and files on your machine. You will have to restart the machine for these changes to take effect.

Step 3: LM basics and getting a license

Most of the time you will not need any special configuration of the server program. After installing the software, go to the Control panel and start the “Chemstations” icon. You will see the following screen:



Let's set up the Startup option to automatic. This will start the LM whenever the computer reboots. Let's take a look at the settings (Press the Settings...button). You will see the following screen:



The settings are explained below:

Debug Mode: Setting this option puts diagnostic messages into a text file
Key Directory: Directory where the license files reside.
Log File Name: Filename where information regarding usage is stored
Log File Size Limit: You can limit the size of the Log File.
Resource File: An optional file to specify users
Start Time: Time in seconds after "Launch" is pressed that a license is available
Zombie Timeout: Time in seconds between heartbeats before a client is assumed dead and license freed.
Verbosity: Ranking from 1 to 9, 9 being the most detailed, of comments in the Log File. Level 3 is recommended.

Now that we understand the LM functions, we can get our licenses for Chemstations products. In the START menu, go to the program group "Chemstations LM" or whatever you called it during setup. Run the "Administrator" application and you will see the following screen:



The Key Directory is where the key files are located, and it should be the same as the Key Directory Chemstations License Manager was seeing. If it is not the same, change the Key Directory here to match the License Manager settings.

Use the information on this screen to complete the enclosed fax form. We will fax or email back to you a key or many keys, depending on the products authorized. Enter the key number in the space provided, exactly as given. Once you have entered the key number, press the "Install Key" button and either Exit or wait to install another key.

If you are installing CHEMCAD from a network, you can use the Key Directory and Host Name information shown here to automatically configure your clients with the License

Manager information. The instructions for doing this are in the “How to Install CHEMCAD for Windows” document, in the “Network Considerations” section.

License Manager Reporting Features

The Chemstations License Manager logs information about licenses used to Log File specified in the settings of the Chemstations control panel. Another program, called the “Sentinel LM DDE Server”, which is placed in your startup menu, allows the real time creation of reports from this Log File. The Reports are shown by selecting the “Reports” icon in the “Chemstations LM” program group.

A number of report formats are possible, depending upon your choices here. License manager uses the following codes to track Chemstations products:

01	CC-BATCH
02	CC-THERM
03	PHYSICAL PROPERTIES
04	CC-REACS
05	CHEMCAD