

# Setting up a Server for a Floating Multiuser License

MacKichan Software issues both floating and fixed licenses for its products. We license all our products with FLEX $lm$ <sup>®</sup>, license-management software by Globetrotter Software. Most MacKichan Software licenses are fixed licenses; the instructions for installing software with a fixed license appear in our user manuals. Installing floating licenses in multiuser environments requires a different process altogether, which we explain here.

If you experience any problems as you follow these instructions to install your floating license, please contact MacKichan Software technical support by email at support@mackichan.com or by telephone at 360-394-6033.

## Overview

When you run any of the MacKichan Software products, the program starts and immediately looks for a license. If it finds one, it runs with full functionality; if it doesn't find one, it runs with limited functionality, as a viewer only.

The program can find a license in two ways:

- The program can find a file that gives it permission to run only on a particular computer. This license is called a *fixed license*, or a node-locked license, since it is valid only on a particular computer or network node.  
or
- The program can find a file that names a server on which the license manager is running. The program then contacts the license manager to request permission to run. The license manager keeps track of the number of programs with permission to run, and permits new requests only if the number of programs already running concurrently doesn't exceed some predefined limit. If the license manager gives permission, the program runs with full functionality. This license is called a *floating license*, or a concurrent license, because it limits the total number of computers on a network that can run the program concurrently.

Setting up a server for a floating multiuser license involves two distinct steps: **installing the license manager on a server**, and **installing the program on one or more client computers**.

## Installing the license manager on a server

The files you need for installing the license manager are on your program CD in the Licensing directory. The directory includes these files:

- LMGRD.EXE - the license manager.
- LMTOOLS.EXE - a graphical version of lmutil.exe and the FLEX $lm$  user interface.
- LMUTIL.EXE - a utility program for interacting with FLEX $lm$ .
- MACKICHN.EXE - our vendor daemon.
- README.TXT
- Site License Admin-50.pdf - this document.

The directory also contains the FLEXUSER subdirectory, which contains documentation for the FLEX $lm$  license manager. The documentation consists of seven chapters plus eight appendices and an index. Please read the FLEX $lm$  documentation to gain an understanding of how the system works.

### Step 1. Choose a server for the license manager

The server on which you install and run the FLEX $lm$  license manager must be operating under one of the following systems:

- Windows NT
- Windows 2000
- Windows XP

- Windows 95
- Windows 98
- Windows Me

We strongly encourage you to use Windows NT, Windows 2000, or Windows XP for this purpose, as operation under Windows 95/98/Me is much less robust and secure.

You can choose a server that is already running a FLEX $lm$  license manager. In this case, you should read “Multiple License Files,” Chapter 4 of the FLEX $lm$  documentation. Many of our users successfully install our license manager software alongside other products that also use FLEX $lm$  licensing.

If you have floating licenses for two or more MacKichan Software products, such as Scientific WorkPlace and Scientific Notebook, you must use a separate server for the license manager for each product so that you avoid license interactions. We hope to remove this restriction in future implementations. If you have updated from Version 4.1 to Version 5.0, you will no longer use the 4.1 license on the server. However, Version 4.1 clients can run using the 5.0 license.

### Step 2. Install the license server software on the server

Installing the license server software is straightforward:

1. Create a directory on the server to hold the software. We suggest you name the directory C:\Licensing.
2. Copy the contents of the Licensing directory on your program CD to the new directory.

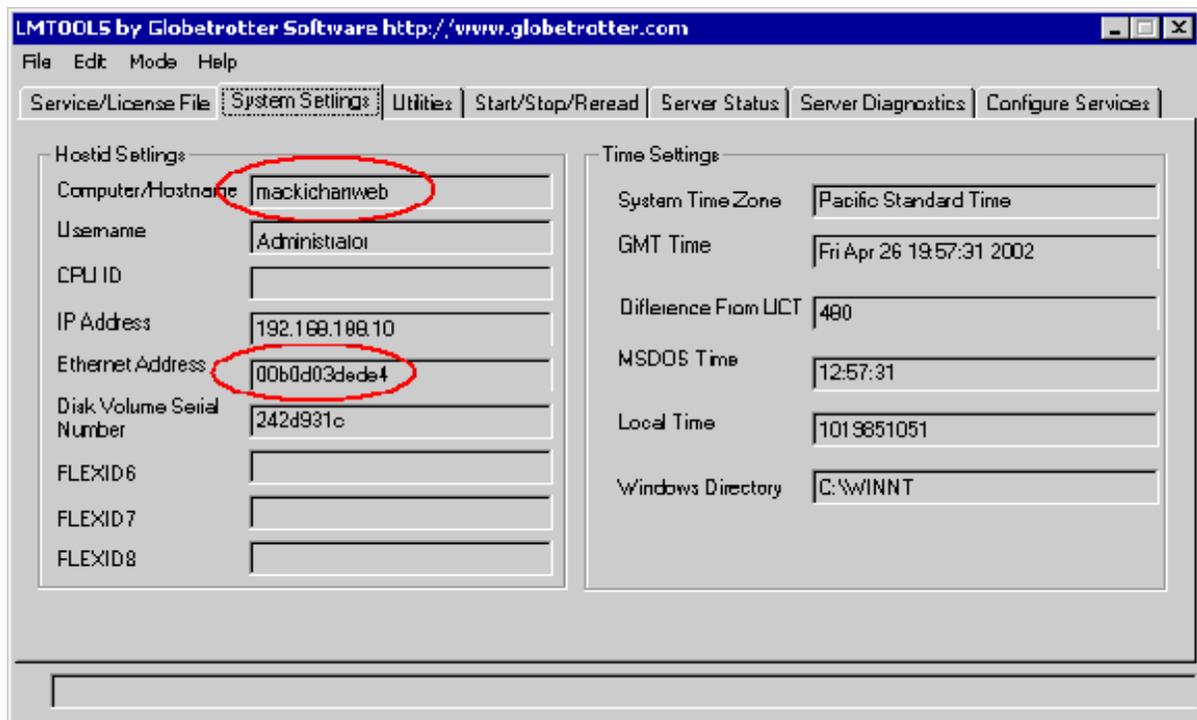
Note that when you insert your CD, it will start the main installation program by default. Exit the installation program. You don’t need to install your MacKichan Software product on the server.

3. Make sure all the files in the directory have been copied to the server.

### Step 3. Find your HostID and HOSTNAME

So MacKichan Software can generate a license file for you, we need some information about your server. Please complete this step even if you know the network card ID number, because the form in which the address is written is crucial.

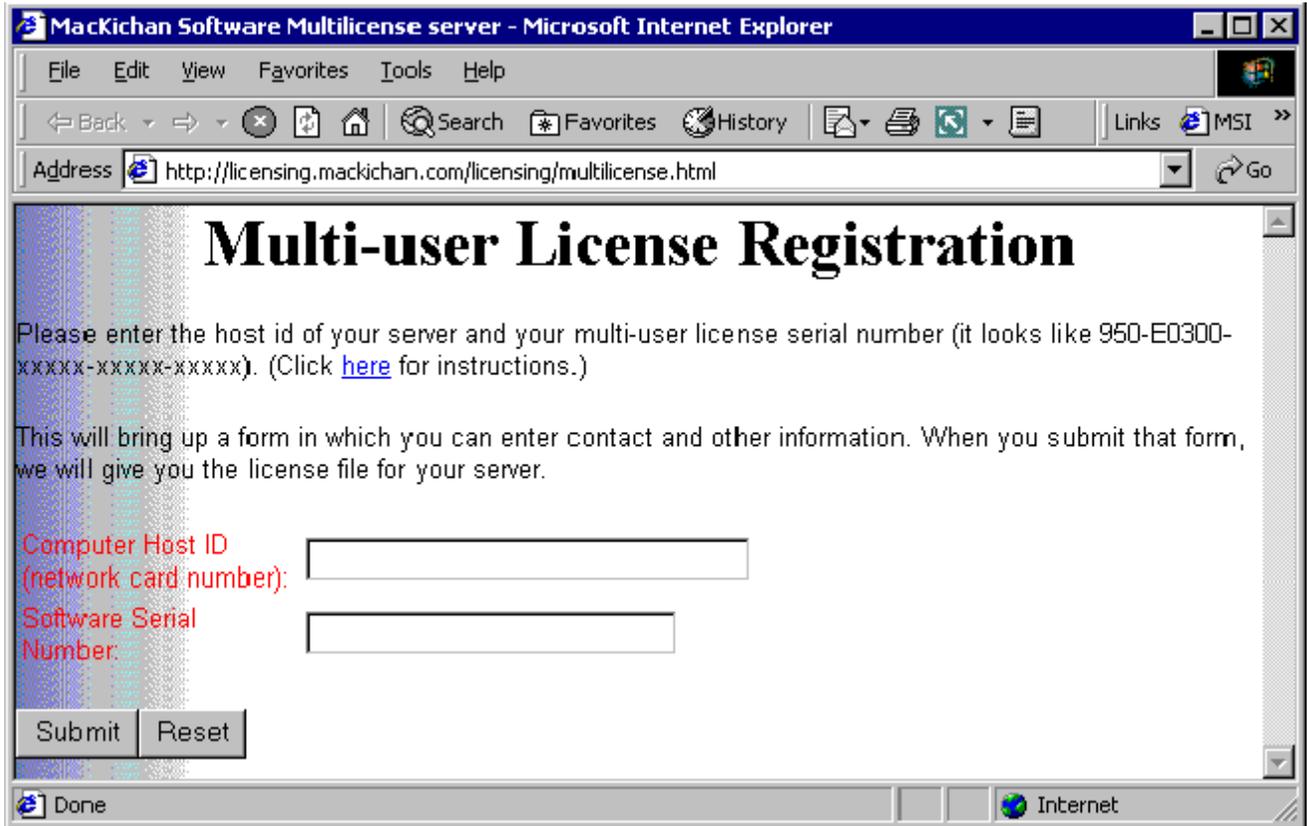
1. On the server, run LMTTOOLS.EXE.
2. Choose the System Settings tab.



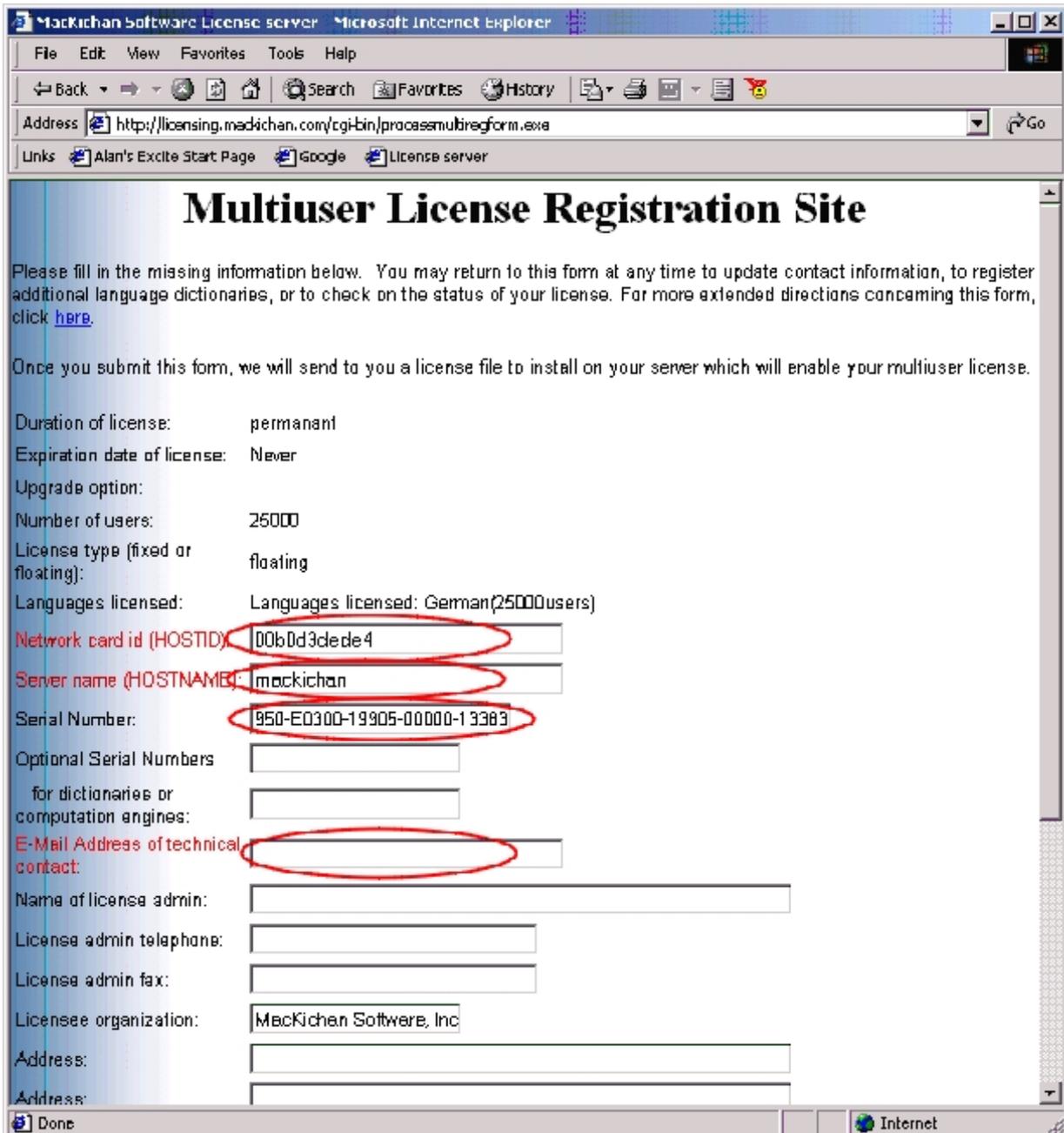
3. Write down the information in the Computer/Hostname box exactly as it appears.
4. Write down the information in the Ethernet Address box exactly as it appears.

#### Step 4. Activate the license

1. Using any browser (on the server or on another computer), connect to:  
**http://licensing.mackichan.com/licensing/multilicense.html** to display the registration form:



2. In the Computer Host ID box, enter the information from the Ethernet Address box exactly as you copied it in Step 3, above.
3. In the Software Serial Number box, enter the serial number we have provided to you. The number begins with the three digits 950 and has a total of either 21 or 27 characters, including hyphens.
4. Choose Submit to send the information to MacKichan Software.
5. When the browser displays the Multiuser License Registration Site form, check that all information on the form is complete and correct:

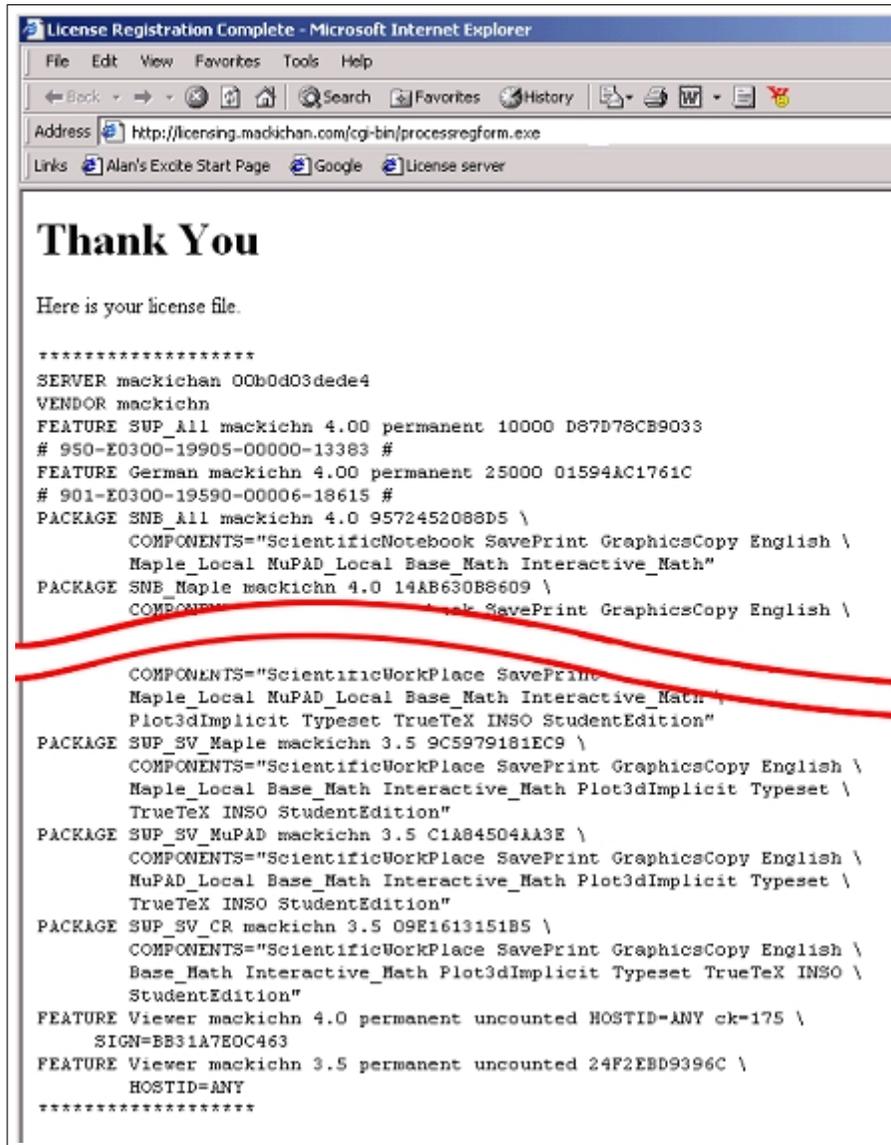


6. In the Server name (HOSTNAME) box, enter the information from the Computer/HOSTNAME box exactly as you copied it in Step 3, above.
7. Enter the email address of the technical contact for your license.
8. Make sure that you have completed all the required fields, which are circled in the illustration above.
9. Submit the form. We will send the license file for your server via your browser and via email.

Note that you may repeat this process at any time in order to update information about your license, such as the names of the technical support contacts.

## Step 5. Install the license file on the server

Your license file message looks like this:



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License Registration Complete - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://licensing.mackichan.com/cgi-bin/processregform.exe
Links Alan's Excite Start Page Google License server

Thank You

Here is your license file.

*****
SERVER mackichan 00b0d03dede4
VENDOR mackichn
FEATURE SUP_All mackichn 4.00 permanent 10000 D87D78CB9033
# 950-E0300-19905-00000-13383 #
FEATURE German mackichn 4.00 permanent 25000 01594AC1761C
# 901-E0300-19590-00006-18615 #
PACKAGE SNE_All mackichn 4.0 9572452088D5 \
COMPONENTS="ScientificNotebook SavePrint GraphicsCopy English \
Maple_Local MuPAD_Local Base_Math Interactive_Math"
PACKAGE SNE_Maple mackichn 4.0 14AB630B8609 \
COMPONENTS="ScientificNotebook SavePrint GraphicsCopy English \
Maple_Local MuPAD_Local Base_Math Interactive_Math"
PACKAGE SUP_SV_Maple mackichn 3.5 9C5979181EC9 \
COMPONENTS="ScientificWorkPlace SavePrint GraphicsCopy English \
Maple_Local Base_Math Interactive_Math Plot3dImplicit Typeset \
TrueTeX INSO StudentEdition"
PACKAGE SUP_SV_MuPAD mackichn 3.5 C1A84504AA3E \
COMPONENTS="ScientificWorkPlace SavePrint GraphicsCopy English \
MuPAD_Local Base_Math Interactive_Math Plot3dImplicit Typeset \
TrueTeX INSO StudentEdition"
PACKAGE SUP_SV_CR mackichn 3.5 09E1613151B5 \
COMPONENTS="ScientificWorkPlace SavePrint GraphicsCopy English \
Base_Math Interactive_Math Plot3dImplicit Typeset TrueTeX INSO \
StudentEdition"
FEATURE Viewer mackichn 4.0 permanent uncounted HOSTID=ANY ck-175 \
SIGN=BB31A7E0C463
FEATURE Viewer mackichn 3.5 permanent uncounted 24F2EBD9396C \
HOSTID=ANY
*****
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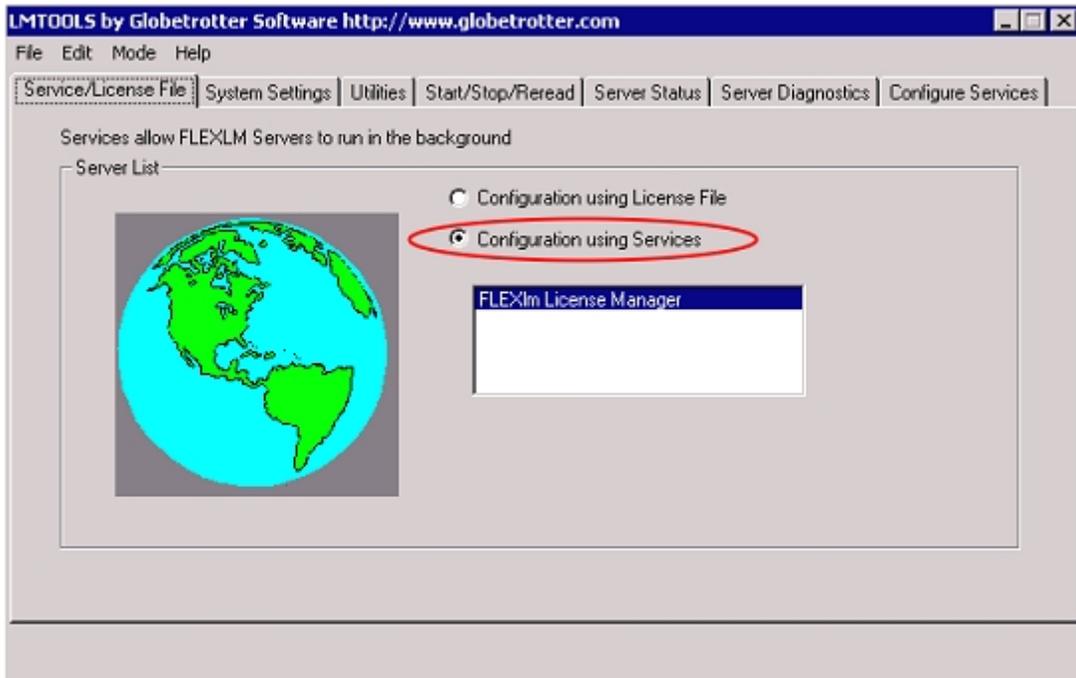
The portion of the message you see above is followed by a license client file and by a serial number to use for client installations. You'll need this additional information when you install the software on the client computers, later in the installation process, but should not be included in the license file for the server.

1. Save a copy of the license file message, in case you need it in the future.
2. Select the information in and between the two long lines of asterisks and copy it to the clipboard.  
Note: It has been shown on some systems that including the asterisks can be a problem, it is recommended that they are not included and to have several blank lines at the end of the license file.
3. Open a new file with a text editor and paste the information to the file.
4. Save the file with the name LICENSE.LIC in the C:\Licensing directory, which you created in Step 2, above.

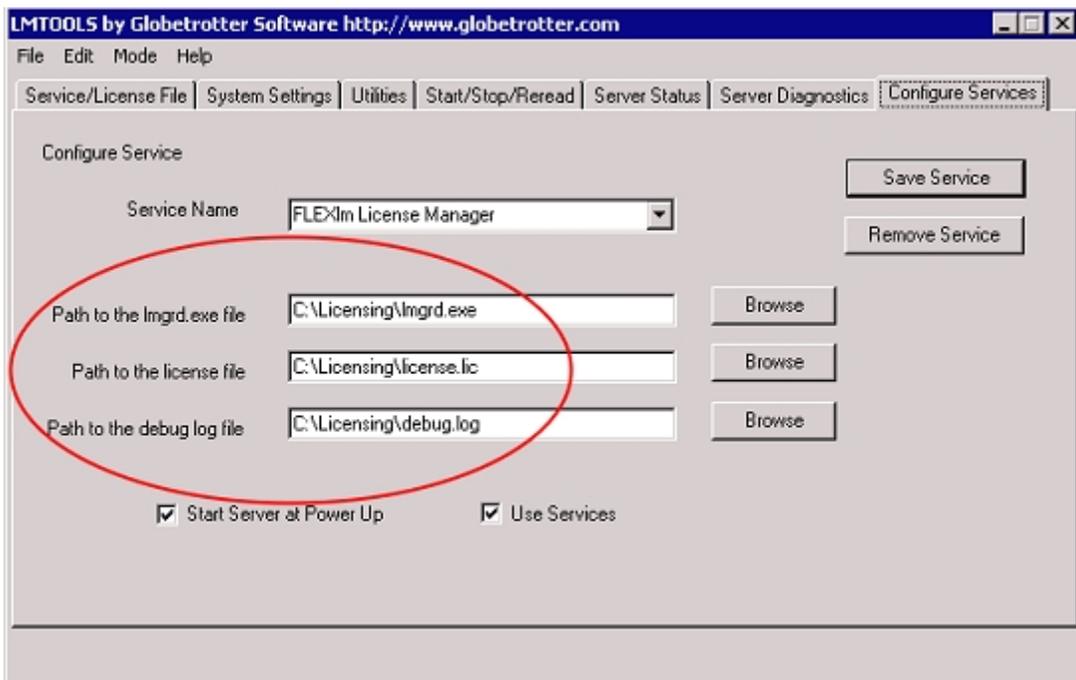
Note that some changes to the file are possible. You can edit the host name in the first argument of the SERVER line to use an IP address. You can also edit the (optional) daemon-path in the second argument of the VENDOR line. If you want the daemon to be visible through a fire wall, add a port number. See the FLEX $lm$  documentation for more information. Most other changes to the file will invalidate this license.

## Step 6. Start the license server

1. On the server, return to LMTOOLS.EXE if it is still running or run LMTOOLS.EXE as you did in Step 3.
2. Choose the Service/License File tab.
3. Change the option to Configuration using Services, if it is not already selected.



4. Choose the Configure Services tab.



5. Enter the path information for the lmgrd.exe file and the license file. Entering information for the debug log file is optional, but is highly recommended as it aids in troubleshooting.

6. Check Start Server at Power Up and Use Services.
7. Choose Save Service.
8. Choose the Start/Stop/Reread tab and choose Start Server.
9. Choose the Server Status tab and choose Perform Status Enquiry to check the status of the server and ensure that it is running properly.
10. Close the interface.

## Install the program on each client computer

After the license manager has been installed on the server, install your MacKichan Software product and the license client file on each client computer.

### Step 1. Install the software

- Follow the software client installation instructions in the *Getting Started with Scientific WorkPlace, Scientific Word, and Scientific Notebook* manual provided with the software. The serial number for the installation will be provided in the license file that is sent to you when you register for the server license.

### Step 2. Install the license client file

1. Open the license file message and find the statement "The license file that should go on each client installation is:"  
The 4-line license client file follows this line immediately and looks something like this:  
\*\*\*\*\*  
SERVER name 000000000000  
USE\_SERVER  
\*\*\*\*\*
2. Select the four lines and copy them to the clipboard.
3. Open a new file with a text editor and paste the information to the file.
4. Save the file with the name LICENSE.LIC in the licenses directory of the program installation on the client computer.  
Use the same licence client file for all the client computers.
5. Save a copy of the client license file in a backup directory on the server. ***Do not use the C:\Licensing directory.***

### Step 3. Run the software

1. Start the MacKichan Software product on the client computer.
2. From the Help menu, choose System Features.
3. Scroll the features list to check that all features are marked as Available.