2. Installation Instructions - Windows (Download)

First time installation of Gridgen is fairly simple. It mainly involves downloading a complete version of Gridgen from the Pointwise website then extracting and running files from the downloaded archive. This type of installation is generally performed by users who are evaluating Gridgen.

A typical Gridgen installation will result in the following layout of data (approximately 150 MBytes) in the *gridgen_home_path* folder:

- `doc/` - This directory contains the Gridgen User Manual, Glyph Reference Manual, Tutorial Workbook, and Gridgen Release Notes and Installation Instructions in PDF and HTML formats in the `pdf/` and `help/` subdirectories respectively. PDF files may be viewed and printed using Adobe Acrobat Reader. HTML files may be viewed by pressing **Help** within Gridgen.

- `examples/` - This folder contains Gridgen (.gg), database (.dba), and Glyph script (.glf) files for tutorials and other examples of Gridgen usage.

- `licenses/` - This directory is where we strongly recommend that you install your license file.

- `utils/` - This directory contains Glyph scripts that perform various utility functions.

- `win32/` - Your Gridgen, license manager, and scripting executables, as well as library files are installed here within subdirectories.

2.1 Planning Your Installation

Installation planning on workstations running the Windows operating system is fairly minimal. You should perform a first time installation on the workstation on which you will also run Gridgen's license server. On any other workstation on your network on which you will run Gridgen, you will need to install only Gridgen, not the Gridgen license server.

2.2 First Time Installation

There are five steps in a first time installation:

1. Download zipped Gridgen file for your platform from the Pointwise website.

2. Extract files from the zip archive.

3. Run `setup.exe`.

4. Install the Gridgen license file.

5. Start the license server.

If you have licensed a Native CAD Reader (NCR), there will be two additional steps:

6. Install an NCR license file.

7. Start the NCR server.

2.2.1 Gridgen Zip File Extraction

In a temporary directory, unzip the downloaded `gg-win32.zip` file using your favorite zip file utility. Once you have extracted all files from `gg-win32.zip`, you should see a directory listing containing vari-

ous installation files, including `setup.exe`.

| Name ▲	Size	Type
gg-win32.zip	41,600 KB	WinZip File
data1.cab	292 KB	WinZip File
data1.hdr	148 KB	HDR File
data2.cab	33,581 KB	WinZip File
doc		File Folder
engine32.cab	387 KB	WinZip File
gg_lm.sh	20 KB	SH File
layout.bin	1 KB	BIN File
Setup.bmp	93 KB	Paint Shop Pro 6 Im...
setup.boot	314 KB	BOOT File
setup.exe	96 KB	Application
setup.ini	1 KB	Configuration Settings
setup.inx	174 KB	INX File
setup.skin	224 KB	SKIN File

2.2.2   Running Setup.exe

Double-click `setup.exe` to begin the InstallShield Wizard for Gridgen that will lead you through the installation process.

Press **Next>** once the Welcome screen for the Gridgen InstallShield Wizard appears.
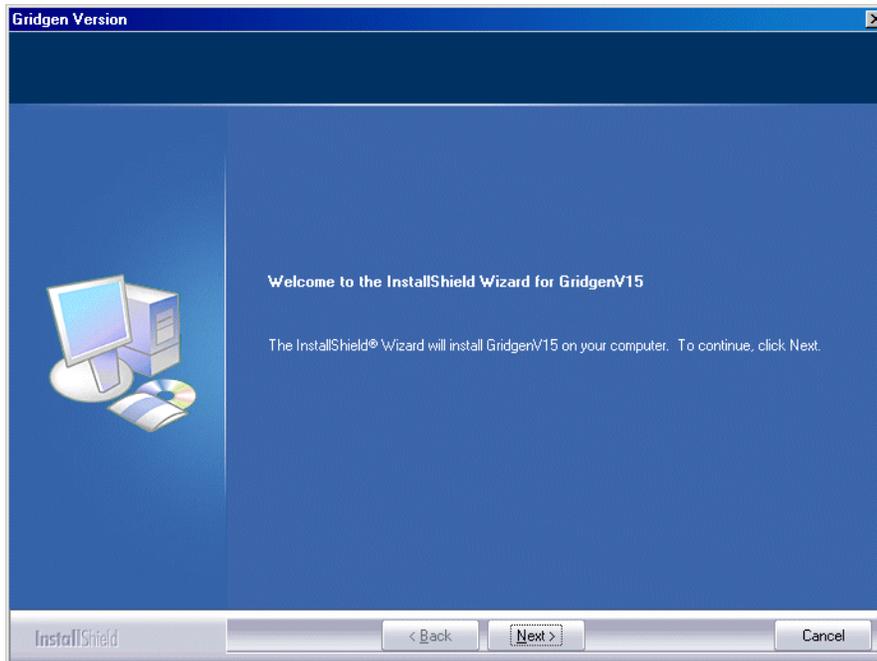
The next screen asks you to read and confirm your understanding of Gridgen's Right To Use License. Press the **I accept...** button after you have read and agreed to the terms of the Right To Use License.

Press **Next>**.
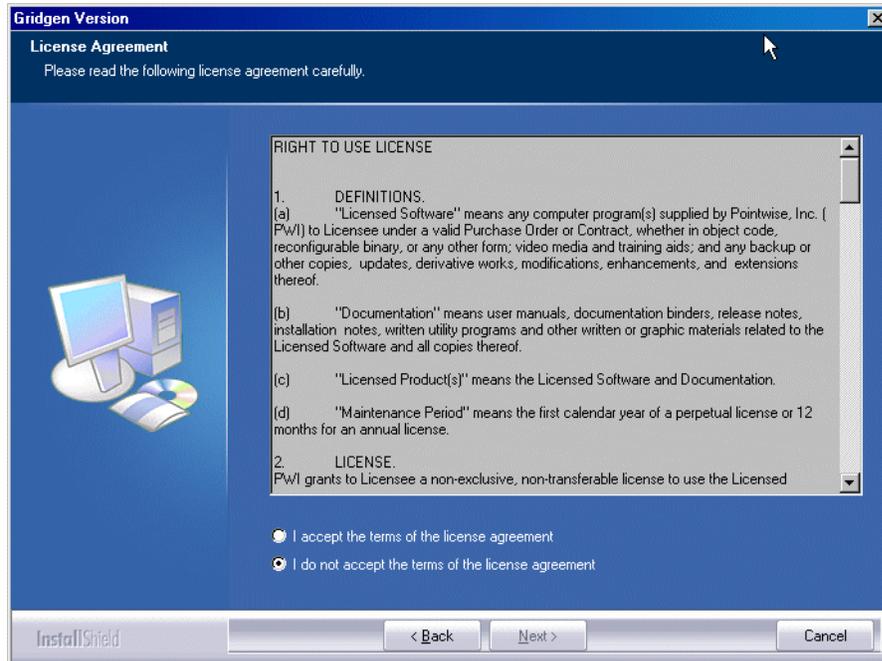
Next, select the folder on your workstation into which Gridgen's files will be installed. This folder is referred to as *gridgen_home_path*. By default Gridgen is installed in `C:\Program Files\Point-wise\GridgenV15`. You may choose another folder by pressing the **Change...** button. The Setup program will create the destination folder if it does not yet exist.

Pressing the **Next >** button confirms your choice of destination folder.
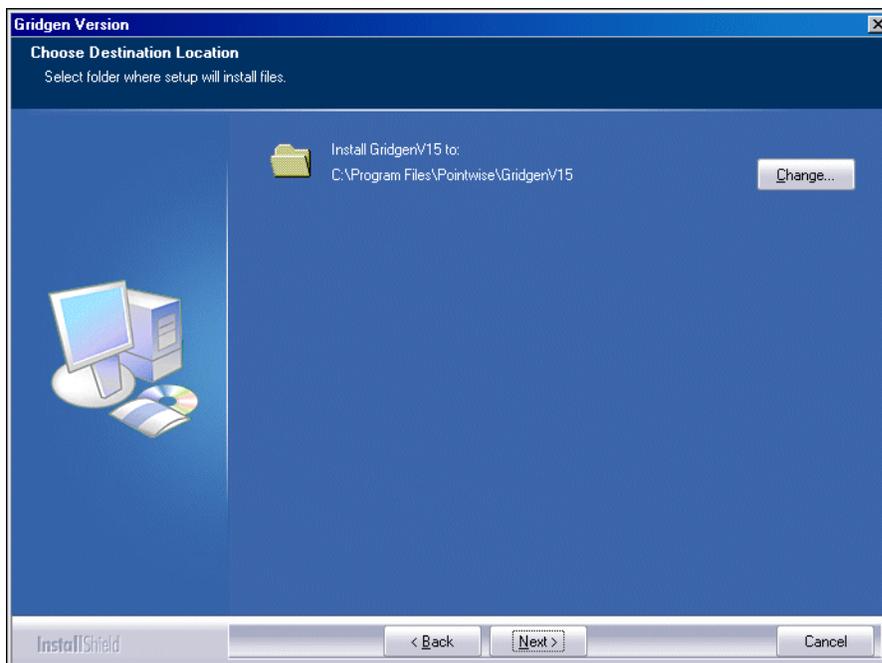
The fourth installation screen that appears allows you to choose the components to install from the zip files in your temporary directory. The three choices are:

Program Files - These are Gridgen's executable and related files. You will need these files in order to run Gridgen.

FLEXlm - These are Gridgen's license managers. If your Gridgen licenses are being served from another workstation at your site you do not need to install the FLEXlm component.
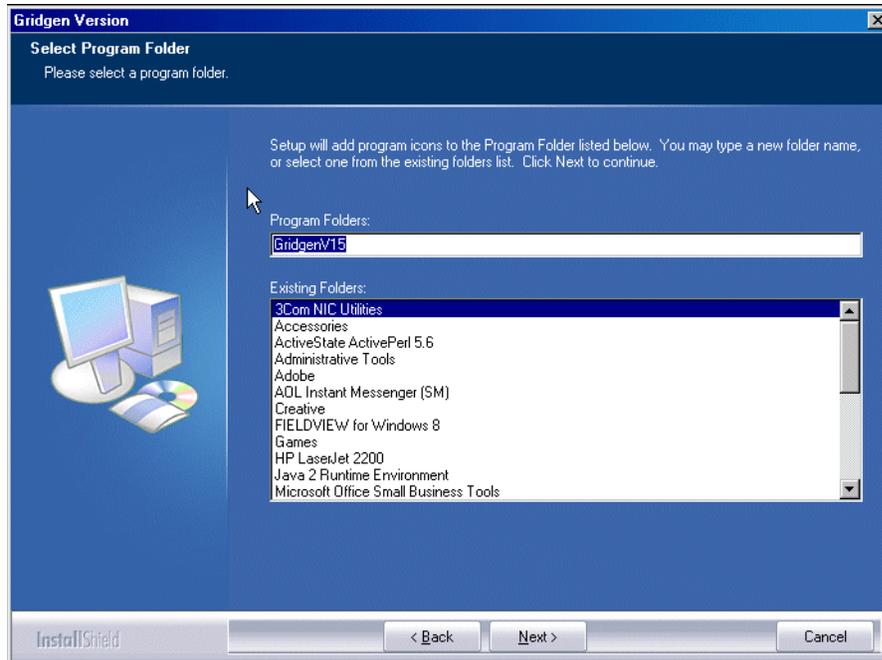
Docs - Gridgen's on-line help and printable PDF user manual are included here.

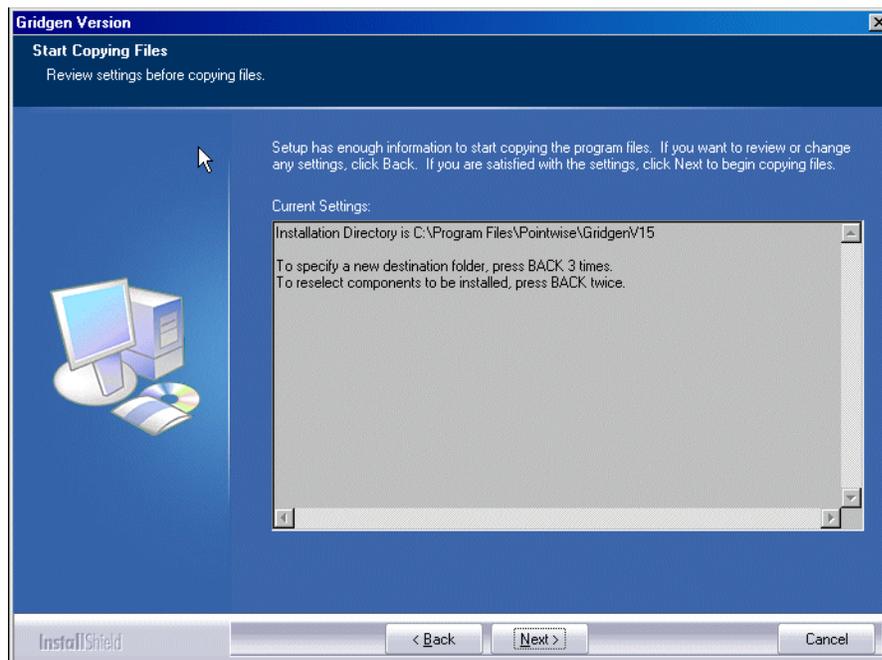Press the **Next>** button after choosing the components to be installed.
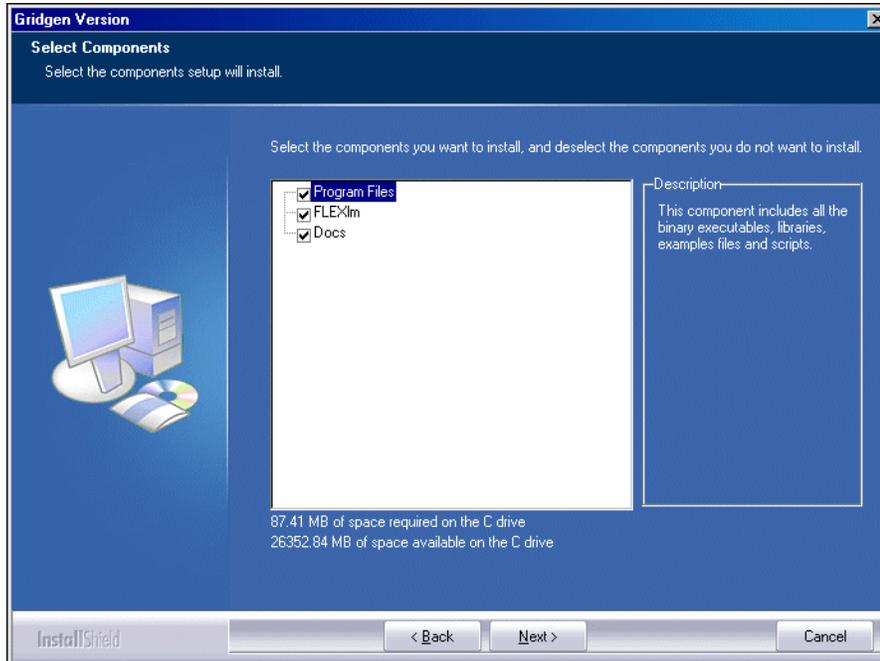
Next you must select the Program Folder in which Gridgen's program icons will be installed. The default folder is `GridgenV15`.
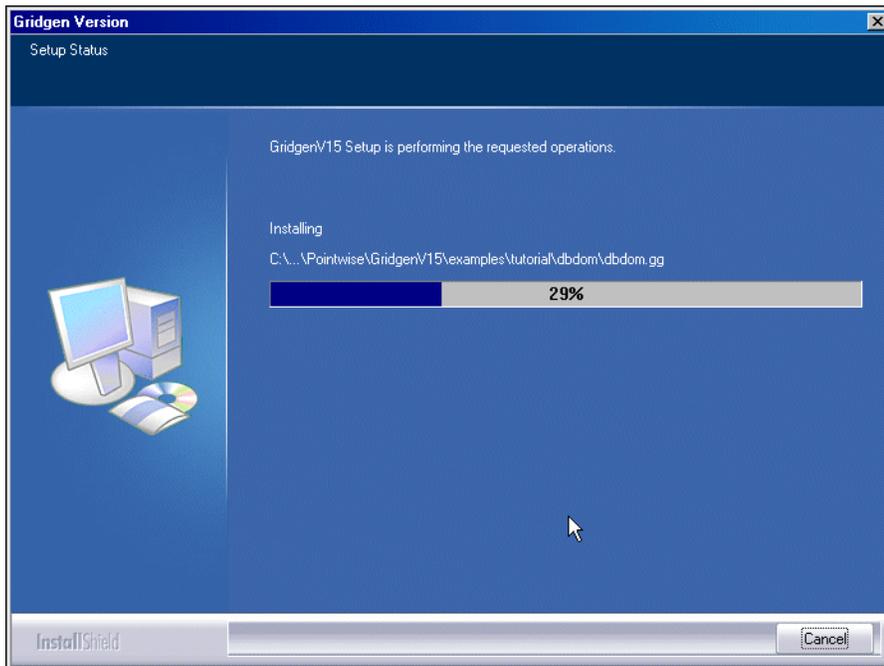
Press the **Next >** button after you select the Program Folder.

Now the InstallShield Wizard has enough information to begin installation. Press **Next>** to start installation.

The progress indicator provides status on the file copying process.

This completes the extraction of files from the temporary directory. The InstallShield Wizard will display a window with information about the new manner in which environment variables are handled in Gridgen Version 15 versus previous versions.
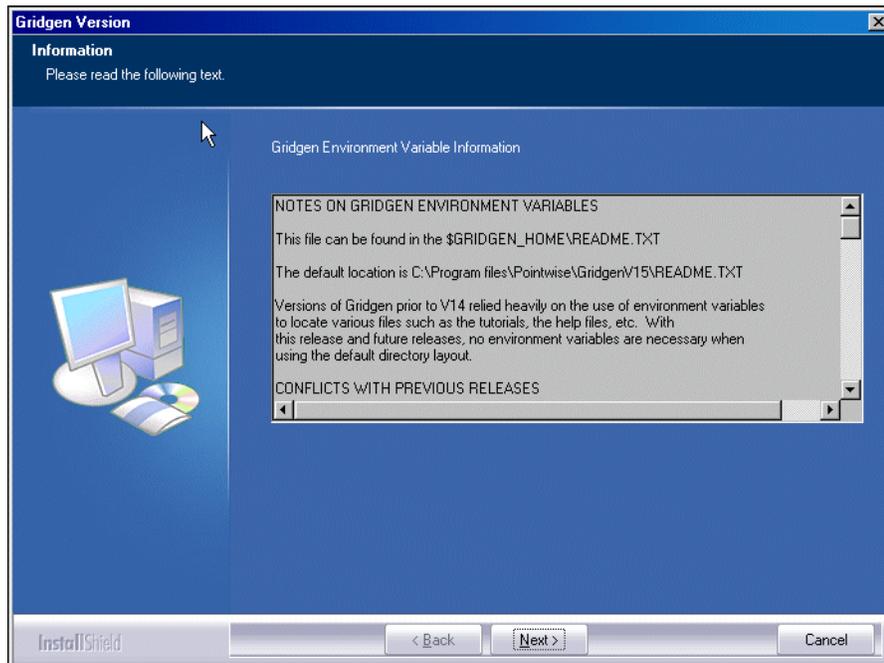
Your Gridgen installation is now complete and you may proceed to the next part of the process: installing a license file. Press **Finish** to exit the InstallShield Wizard.
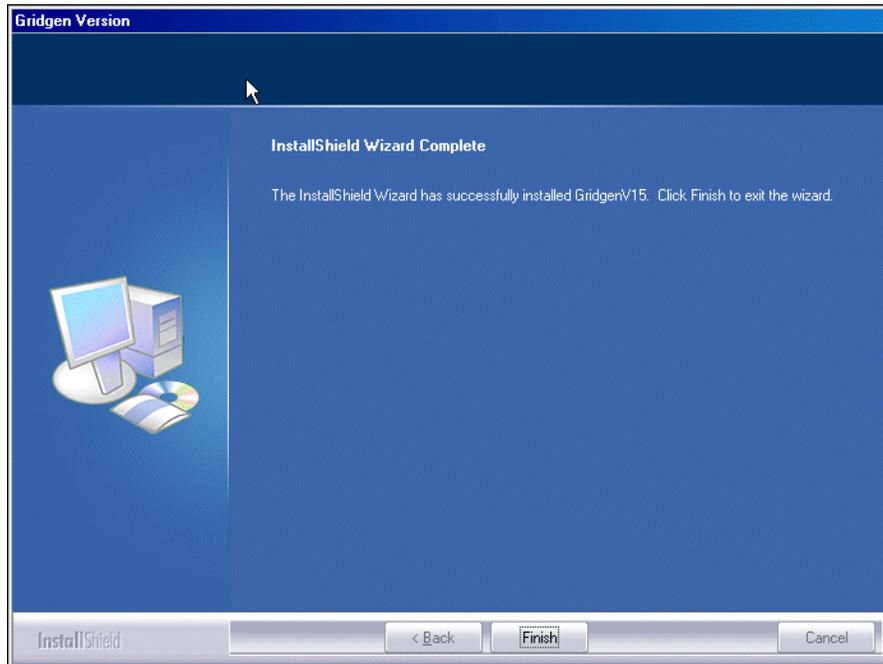
When your installation is complete you will find a GridgenV15 icon on your desktop. Double clicking this icon will start Gridgen Version 15 (assuming that a license file has been installed and the license server is running).

Your Start menu also contains four new entries under Start, Programs, Pointwise, GridgenV15.
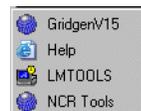
- **GridgenV15** executes Gridgen Version 15.

- **Help** opens your web browser and loads Gridgen's on-line help.

- **LMTOOLS** runs the LMTOOLS application for Gridgen's license management.

- **NCR Tools** runs the Native CAD Reader License Tool application for NCR license management.

Since your installation is now complete, you may now go to the temporary directory specified in Section 2.2.1 and remove the temporary files extracted there.

2.2.3   Install a License File

Gridgen uses a license manager called FLEXlm. In order for Gridgen to run you must install a *license file*. This file, only a few lines long, encodes information about your Gridgen license including the license dura-

tion, number of licensed processes, and any optional features. We generate the license file for you based on information that you supplied to us about your workstation, namely the *host name* and the *host ID*.

Evaluation sites should have already received an email containing a license file which should be saved in the *gridgen_home_path*/licenses folder as `pointwise_flexnet.lic`. We recommend that you do not change the license file name from `pointwise_flexnet.lic`.

2.2.3.1 Licensed Native CAD Readers

For licensed Native CAD Readers (NCR), Gridgen uses an additional license manager and server. To run your Gridgen NCR license server, you must install an *NCR license file*. This license file is based on the *NCR Host ID* which happens to be the same as the *Host ID* for Windows platforms.

Evaluation sites which signed up to evaluate a Native CAD Reader should have received an email containing both Gridgen and NCR license files after applying for the Gridgen evaluation. Both of these license files should be saved in the *gridgen_home_path*/licenses folder. These files, `pointwise_flexnet.lic` and `pointwise_ncr.dat,` will be used used in the FLEXlm and NCR license managers respectively. We strongly recommend that you do not rename these files.

2.2.4   Start the Gridgen License Server

2.2.4.1 Single FLEXlm Server

In this section, setting up a Gridgen license server for a system with **NO PREVIOUSLY INSTALLED FLEXLM-BASED SOFTWARE** will be covered. Please be aware that if you have multiple FLEXlm software packages on your server you will have to set up multiple FLEXlm services (see Section 2.2.4.2). Starting Gridgen's license server requires you to create a FLEXlm service via the following procedure

1. In the Start menu, go to All Programs, Pointwise, GridgenV15. Right-click on LMTOOLS and choose *Run as Administrator*.

2. Click on the Service/License File tab and select Configuration using Services.
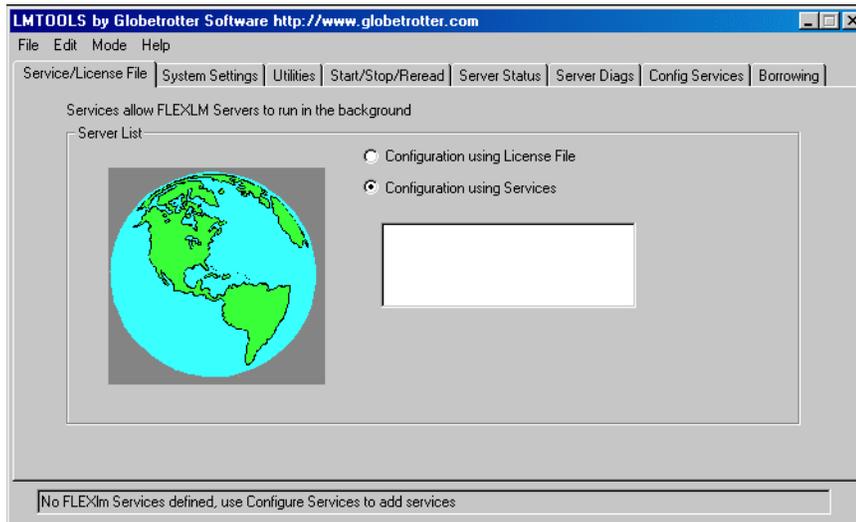

3. Click on the Config Services tab.

   a. Change the Service Name by highlighting the existing contents of the field and typing in your new service name. We recommend using a name such as `Gridgen FLEXlm Server` to delineate this new service from any new FLEXlm service that may be added later.

   b. Set Path to the lmgrd.exe file to *gridgen_home_path*\win32\flexlm\lmgrd.exe.

    c.   Set Path to the license file to *gridgen_home_path*\licenses\pointwise_flexnet.lic.

    d.   Set Path to the debug log file to *gridgen_home_path*\licenses\pointwise_flexnet.log. (FLEXlm will create this log file if it does not yet exist)

    e.   Select Use Services.

    f.   If you would like Gridgen's license server to be started automatically each time you restart your computer select Start Server at Power Up.

    g.   Press the **Save Service** button.
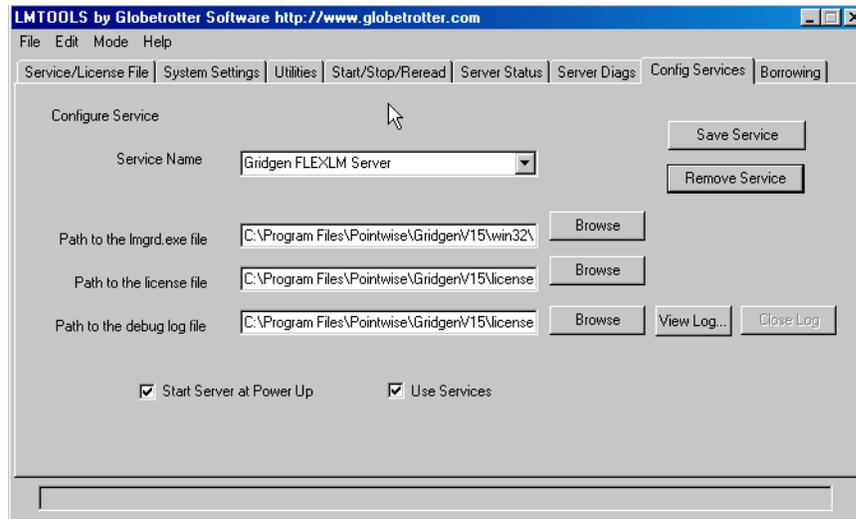

4.   Clicking on the Service/License File tab will show the new service that was just created.
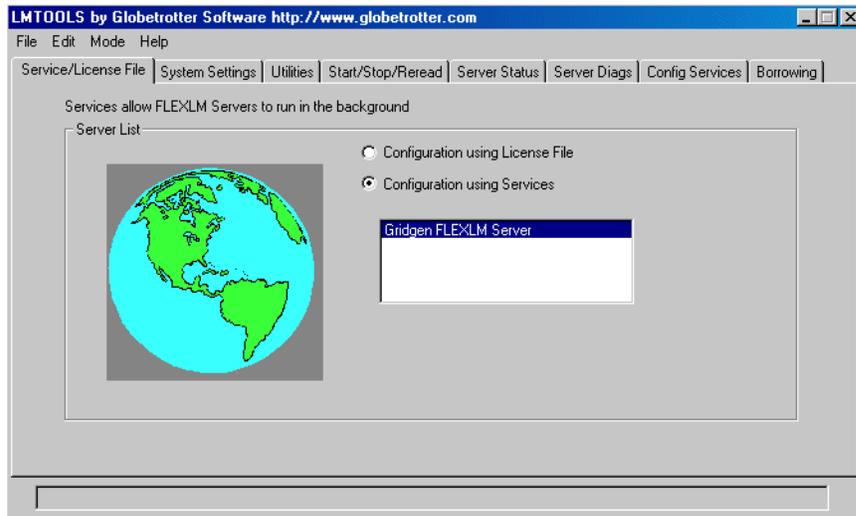
5.   To manually start the server click on the Start/Stop/Reread tab.

    a.   Make sure that Gridgen FLEXlm Server is highlighted.

    b.   Press the **Start Server** button and watch for the confirmation message Server Start Successful in the status bar.
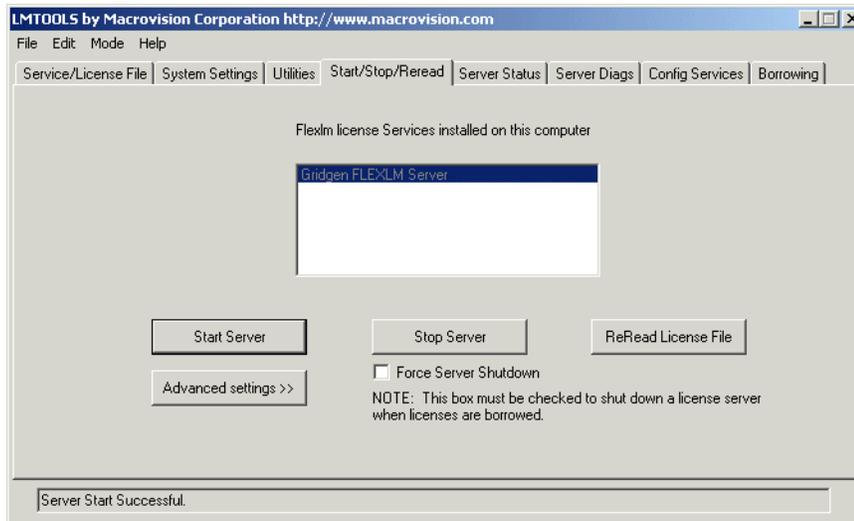
6. To verify that the license file has been installed correctly and that the license server is operating properly click on the Server Status tab.

   a. Select List All Active Licenses.

   b. Press the **Perform Status Enquiry** button.

   c. Read the results of the status query from the text output pane.
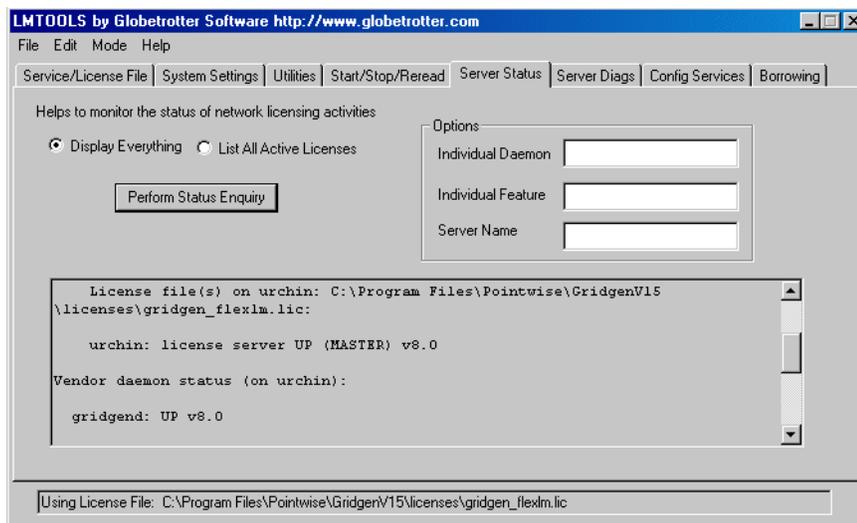
2.2.4.2 Multiple FLEXlm License Servers

FLEXlm has become a popular license server to use for many commercial software packages.   It is not uncommon to have more than one commercial software package on a system that uses FLEXlm. If your system already has FLEXlm, installing a license server for Gridgen is a simple case of creating a new service in FLEXlm.   The following steps show how to create a new service in FLEXlm.

1. In the Start menu, go to All Programs, Pointwise, GridgenV15. Right-click on LMTOOLS and choose *Run as Administrator*.

2. Click on the Service/License File tab. Check to make sure that Configure using Services is selected. Note that there should be one or more services in the display. Each one of these services should correspond to some other software package on your system that uses FLEXlm.
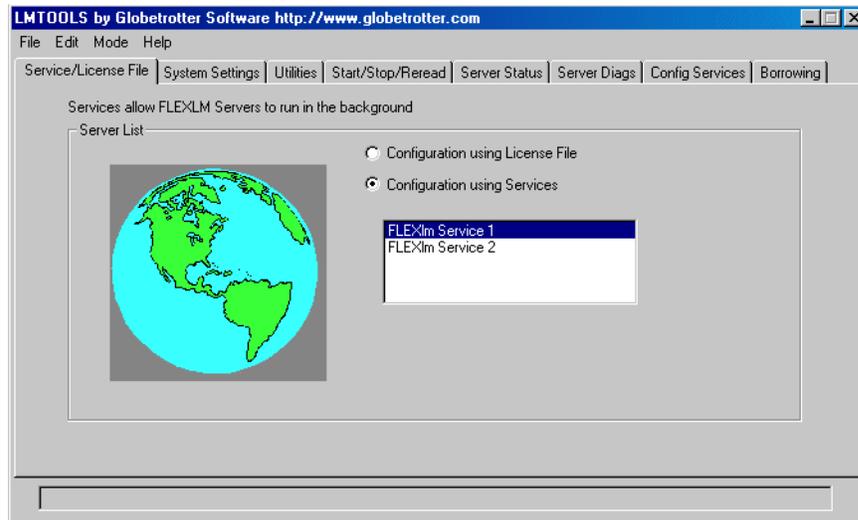

3. Click on the Config Services tab. The name of the new service will need to be specified so that another software's information is not overwritten. For the above example, two services already exist with the names FLEXlm Service 1 and FLEXlm Service 2. So, easily enough the service for Gridgen could be labeled FLEXlm Service 3. However, a more descriptive name is advised.

4. Follow Steps 3b - 3g from Section 2.2.4.1 to setup the service for Gridgen.

5. Select the Service/License File tab and check to see that the new service created appears in the display box.

6. To start the new server, follow Steps 5 - 6 from Section 2.2.4.1. Before doing so, make sure that the service selected is the newly created service.

2.2.5   Start the NCR License Server

If you are evaluating a Native CAD Reader, you will need to start the NCR Server to enable the Reader. To start the NCR Server, follow this procedure.

1. In the Start menu, go to All Programs, Pointwise, GridgenV15. Right-click on NCR Tools and choose *Run as Administrator*.
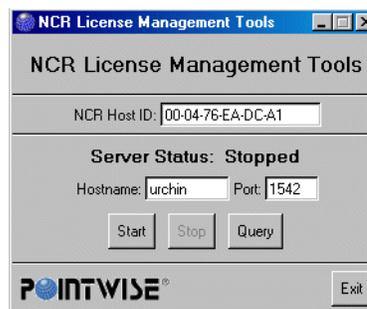
2. To manually start the NCR Server, press the **Start** button in the Server Status area. This will bring up the Start Server utility. Note that your user account used here must have Administrator privileges to start the license server.

    a. Set License File to *gridgen_home_path*\licenses\pointwise_ncr.dat.

    b. Set Log File to *gridgen_home_path*\licenses\pointwise_ncr.log.
        (The NCR server will create this log file if it does not yet exist.)

    c. Set Username to the username.

    d. Set Password to the username's password.

    e. Press the **Ok** button to start the NCR Server.
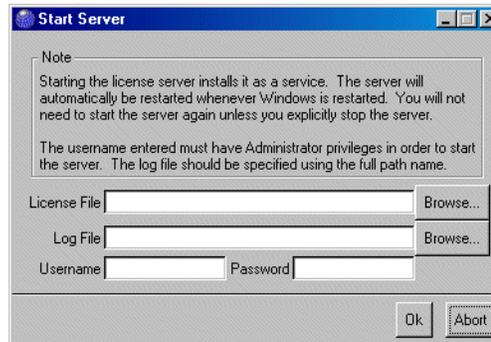
3. Server Status: Running (N/M used) will be displayed within NCR Tools to indicate the NCR Server is running. (N is the number of NCR processes being used and M is the number of NCR processes available.)
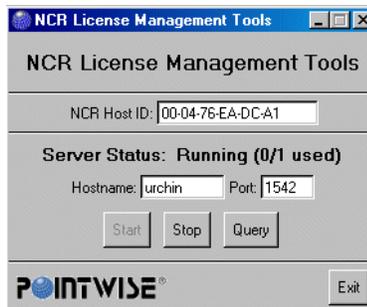
4. Press the **Query** button to show the number of NCR proccesses being used and the number of NCR processes that are available for the current NCR license file.
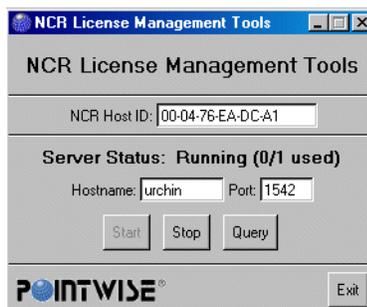
2.2.6   Concurrent V14 and V15 Processes

If you are interested in continuing to use V14 after upgrading to V15, please be aware that V14 can be run with a V15 license. However, V15 will not run under a V14 license.

2.3   Downloading A Maintenance Release

Periodically new Gridgen versions are released. These minor revisions are called maintenance releases. Usually a maintenance release consists solely of defect corrections to the software. You can determine your current Gridgen version by looking in the Version window in the upper left corner of the Gridgen screen. Maintenance releases are announced at the Pointwise web site and the Gridgen e-mail list.

You can obtain a maintenance release by downloading a new Gridgen executable file from the Maintenance Release Download site in the Pointwise Support area of our website(http://www.pointwise.com/support/dload.shtml).

Note: Users upgrading from Gridgen V15.10 to V15.11 or newer versions will need a new Gridgen license file. New license files can be requested online at http://www.pointwise.com/licenses/.

2.4   Maintenance Release Installation

If upgrading from Gridgen V15.10 to V15.11 or newer versions, you will need to first stop the Gridgen V15.10 license server and the NCR license server using the LMTOOLS and NCR Tools utilities respectively. More information on stopping these servers can be found in Sections 4.6 - 4.7 of the *License Management for Windows* document found online at http://www.pointwise.com/library/.

Copy to tape, disk, or an archived .zip file the contents of *gridgen_home_path*. This should be done in case a problem is encountered during maintenance release installation.

Unzip the `gridgen_win32.zip` archive to *gridgen_home_path*. This will replace the file in *gridgen_home_path*/`win32/bin` called `gridgen.exe` with the latest version. Occasionally, other files that need to be updated for a maintenance release may also be extracted in addition to the `gridgen.exe` executable.

Restart your Gridgen license server (and NCR Server, if applicable) once the zip file has finished extracting to *gridgen_home_path*.

Note: If upgrading to Gridgen V15.11 or newer versions, you will need to configure and start the server with the new Gridgen V15.11 or newer version of the LMTOOLS utility (Section 2.2.3) and your new license file (Section 2.2.3, Section 2.3) before running Gridgen again.

2.5   On-Line Help Updates

Periodically Gridgen's on-line help and other miscellaneous files are updated. Help updates are announced at the Pointwise web site and the Gridgen e-mail list.

On the ftp site you will find a file called `help_update_n.zip`, where `n` is replaced by the maintenance release number. The file is an archive containing updated HTML files for the on-line help and various other updated files. Some of these include updated PDF and image files for the documentation. You may download this file using the same techniques used to download a Gridgen maintenance release.

Once the help update has been downloaded you may install it using the following procedure.

1.   Open `help_update_n.zip` using WinZip.

2.   Extract files to the *gridgen_home_path* directory

2.6   Running Gridgen

Simply double click on the Gridgen shortcut on the desktop or press Start, All Programs, Pointwise,

GridgenV15, GridgenV15. Note that Gridgen opens a DOS window first. This window will contain any messages or output from Gridgen. Pressing the Enter key after exiting Gridgen closes this window.

2.7   Uninstalling

Use Start, Settings, Control Panel, Add/Remove Programs to uninstall Gridgen.

2.8   Troubleshooting

2.8.1   Graphics Anomalies

Verify that your graphics card fully supports 3D OpenGL hardware acceleration and that you have the most current display drivers for your card. Also, compare your screen resolution settings to the minimum required listed under Gridgen's Hardware Requirements in Section 7 of the Release Notes and Installation Instructions. Finally, make sure your card has sufficient VRAM to support your selected screen resolution.

2.8.2   NCR Server Start-up Problems

If you encounter difficulties starting your NCR Server, please verify that your Windows system environment variable TTF_LIC_ETHER is set to TRUE. This environment variable is typically set for you during the installation process. To check or set this system environment variable, go to Start, Settings, Control Panel, System, Advanced, Environment Variables. Please note that users of Windows 95/98 will have to check or set this environment variable manually within their `autoexec.bat` file.