

FLEXLM LICENSE MANAGER



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INSTALLATION MANUAL

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FLEXLM LICENSE MANAGER

INSTALLATION MANUAL

INTRODUCTION

The 3DVIA Composer license manager is based on Macrovision FLEXlm Technology.

The 3DVIA Composer license manager supports all FLEXlm functions, such as the use of redundant licenses or borrowing.

Document Conventions

Throughout this document, you will often see references to “Seemage”. Please note that the “Seemage” product has been renamed to “3DVIA Composer”.

Trademark Notices

Seemage, 3DVIA Composer, 3DVIA Sync, are trademarks of Dassault Systèmes.

Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Sun, Sun Microsystems, the Sun Logo, Sun Solaris, are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

All other product and brand names are trademarks or registered trademarks of their respective holders.

Supported Platforms

Platforms supported to date by 3DVIA Composer License manager are listed below:

- Microsoft Windows XP and VISTA 32-bit and 64 bit
- Microsoft Windows Server 2003 x32 and x64 bit
- Sun Solaris 7 32-bit
- Sun Solaris 7 64-bit
- Sun Solaris 8 32-bit
- Sun Solaris 8 64-bit

Dassault Systèmes is able to provide, on request, a version of its license manager for all the platforms and operating systems supported by Acresto Software.

3DVIA COMPOSER PACKAGE SERVER

The Server Package is a compressed ZIP file compiled for the chosen platform. Each ZIP file contains the following files:

- FLEXlm license manager: lmgrd
- Seemage daemon: SEEMAGE
- The lmutil utility to interrogate the license manager (the daemon)

Graphic utility lmtools is provided for the Windows operating system.

FILES INSTALLATION

It is recommended to install license file(s) in a directory dedicated to Dassault Systèmes applications.

If a license manager is already running on the server, it may be necessary to specify the number of a PORT on the level of the SERVER line. The syntax is:

SERVER *server_name* *server_hostid* [*port*]

By default, SEEMAGE.EXE daemon should be installed in the same directory as the license manager lmgrd.

If the license manager has to be installed elsewhere, it is necessary to modify the license files to show the path to FLEXlm license manager for SEEMAGE daemon.

This operation has to be made on the line VENDOR SEEMAGE which syntax is:

VENDOR *vendor* [*vendor_daemon_path*] [[**OPTIONS=**]*options_file_path*] [[**PORT=**]*port*]

Note:

- Specify all necessary paths under quotation marks,
- Specify full daemon path. For example: "F:\FLEXlm\Daemons\SEEMAGE.exe".

SERVER CONFIGURATION UNDER MICROSOFT WINDOWS

When several applications use FLEXlm®, a particular strategy of deployment can be established by the licenses administrator.

There are three principal configurations which have each their advantages and disadvantages.

Configuration under Microsoft Windows:

1. Use Imtools provided in the package.
2. Service creation and automatic installation when Microsoft Windows starts.
3. Start Imtools.
4. Click on the "Config Services" tab.
5. In " Service Name" combo box, enter the service name. For example: Seemage. In the three following fields:
 - a. Enter the absolute path to Imgrd.exe file
 - b. Enter the full path to the directory where licenses are saved. So when you receive new license files, you do not need to modify this service.

Warnings:

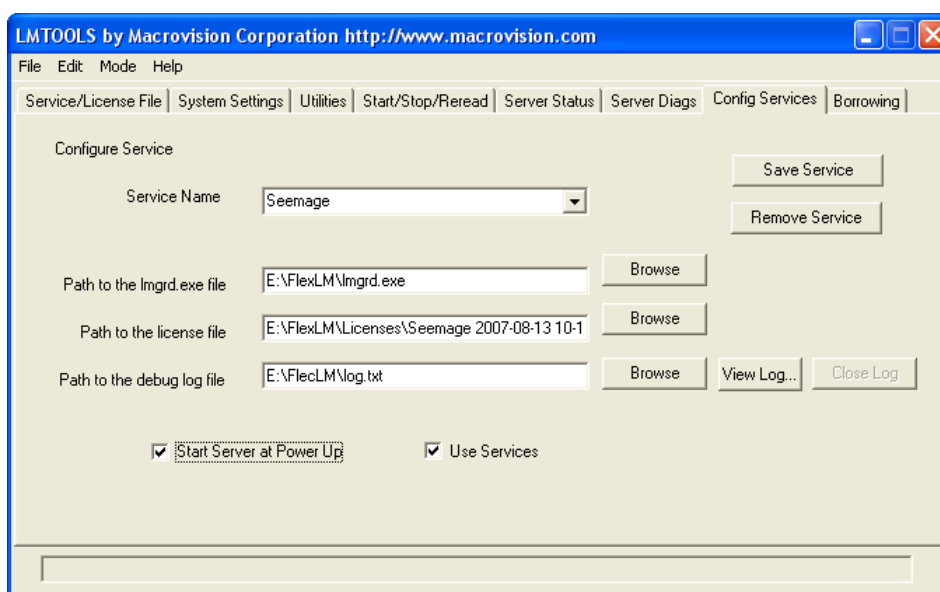
 - Never end this license path with « \ »).
 - Some troubles can happen if the path is too long.
 - c. Enter the full path to the log file which will be generated by the license manager.

Note :

If daemon SEEMAGE.EXE is not located in the same license files directory, it is necessary to specify absolute path licenses file (see "Installation of files").

Lastly, check the two boxes "Uses services" and "Start Server at Power Up" in this order so the daemon runs automatically when the computer starts.

Click on Save Service to save the modifications.



Starts of the server

Click on "Start/Stop/Reread" tab.

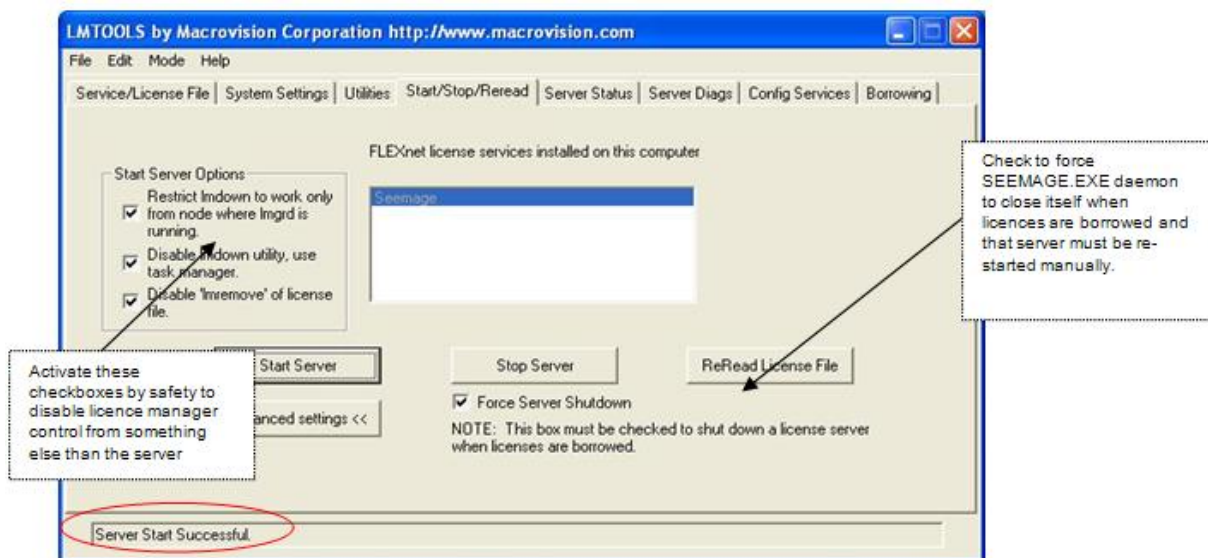
The service which has just been created (probably Seemage) must be selected. If it is not the case, go back to "Config Services" tab, select the service to be used, and then return to "Start/Stop/Reread" tab.

Click "Advanced Settings" tab.

Check boxes:

- Restrict lmdown to work only from node where lmgrd is running
- Disable lremove from the licence file

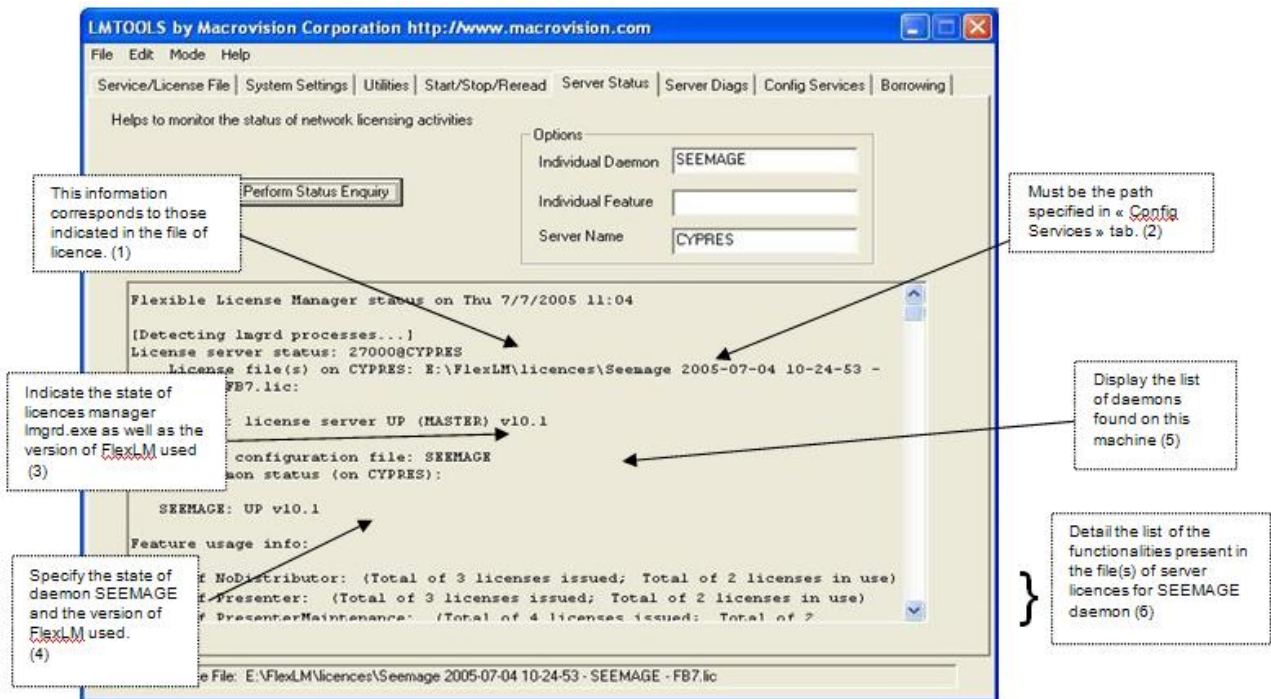
Click on "Start" icon to start the server. A message in the status bar should indicate "Server start successful".



Functional check that the server is running

Click on "Server Status" tab, and then on the "Perform Status Enquiry".

A similar result must be posted in the window:



- (1) Port number indicated in this window corresponds to the SERVER line of the file of licenses (cf chapter 2). It will be used by license file manager Imgrd to manage connection requests.
- (2) See chapter 3.1. It can be a list of paths with files, directories or network directories.
- (3) Shows that Imgrd.exe process is started. It might not start if :
 - a. Another process Imgrd.exe with the same characteristics (for example, same port number, same daemon...) is already started,
 - b. If the server name has not been modified (in certain cases). Change key word *this_host* of the SERVER line in the license file by its real name.
- (4) Specify that SEEMAGE daemon was found then started. If it did not start, there are two major causes:
 - a. If the daemon is installed in a different folder than the license manager Imgrd.exe which will be used, check the path on line VENDOR of licenses file (cf chapter 2),
 - b. Check that no SEEMAGE process is already running before the start of the server (and kill them if necessary).
- (5) Several daemons can be linked to the same Imgrd licenses manager, according to the strategy used by an employee. In this case, the list of daemons found will appear.
- (6) This list contains all the functionalities present in SEEMAGE license files such as their characteristics. It contains not only the valid licences, but also those expired or not still usable. Lastly, this list specifies also some information about the licenses used, borrowed or available. Several lists can be visible if several daemons are attached to the license manager.

SERVER CONFIGURATION UNDER SUN SOLARIS

This is available for 2.7 and next ones (32 bits and 64 bits).

Use `lmgrd` to start FLEXlm daemon.

Server Startup

Hereafter the command line that will launch the daemon:

```
lmgrd [-c license_file_list] [-l [+]debug_log_path] [-2 -p] [-local] [-x lmdown]
      [-x lmremove] [-v] [-z] [-help]
```

For example: `lmgrd -c licence.lic -l logseemage.log -2 -p -local -lmremove`

Notes:

- For each referenced file, one needs to specify the full path with quotes (""); if several license files have to be used, they have to be separated by ":". It even is possible to specify directories.
- If a license manager already is started at the server side, the `lmreread` command will take into account the modification of the license file without having to stop the `lmgrd` process.
- The SEEMAGE daemon cannot be started by `lmgrd` if it does not stand in the same directory than this last. In that particular case, it will be necessary to define the full path of the SEEMAGE daemon in the license file, updating the `VENDOR` line (cf. chapter 2. Files Installation).

Important:

- This command line must be placed in the initialization script of the server, in order for the daemon to be launched at each startup.
- Options in Bold are strongly advised. They prevent using the license manager from any machine other than the server. The parameters between brackets ([]) are optional.
- Although the log file is optional, it is strongly advised to specify it within the command line because it provides precious information that can help solving server startup problems. In particular, it indicates if other license managers are running on the same machine and if the SEEMAGE daemon could be found and launched, as well as its port nb. Finally, it specifies license files in use as well as the complete list of available functionalities.

Options of the `lmgrd` license manager are listed below:

-c <i>license_file_list</i>	Uses specified license file(s). It can be directories as well.
-l <i>[+]debug_log_path</i>	Writes debug information into the <i>debug_log_path</i> file. The + sign allows to add debug data at the end of the file (no rewrite). <i>Note : option is letter L lowercase (l) and not number 1</i>
-2 -p	Restrict the use of <code>lmdown</code> , <code>lmreread</code> , and <code>lmremove</code> to an administrator. If a <code>lmadmin</code> group was defined under Unix, use will be restricted to all members of this group. If the administrator is not member of this group, he will not be allowed to use these tools. If this option is specified at <code>lmgrd</code> startup, no Windows user will be allowed to top the server using <code>lmdown</code> .

-local	Restrict the use of the <code>lmdown</code> and <code>lmreread</code> tools to the machine where <code>lmgrd</code> is running. This option prevents distant manipulation of the <code>lmgrd</code> by unattended users.
-x lmremove	Disable the <code>lmremove</code> command (no user is allowed to run <code>lmremove</code>). (v4.0+ <code>lmgrd</code>)
-x lmdown	Disable the <code>lmdown</code> command (no user is allowed to run <code>lmdown</code>). If <code>lmdown</code> is disabled, one has to stop <code>lmgrd</code> using the <code>kill pid</code> command (Unix) or to terminate both <code>lmgrd.exe</code> and <code>SEEMAGE.exe</code> processes using Windows Task Manager or Windows Services. Under Unix, never use the <code>-9</code> parameter (v4.0+ <code>lmgrd</code>).
-z	Execute foreground. The default behavior is to run in background. If the option " <code>-l debug_log_path</code> " is on, no window will be used. Otherwise, distinct windows are used for <code>lmgrd</code> as well as for each client daemon.
-v	Display the <code>lmgrd</code> version number as well as copyright information and quit.
-help	Display usage information and quit.

Functional check that the server is running

The `lmutil lmstat` command is mandatory to verify the good functioning of the server.

For extra information, please refer to the online help using : `lmutil -help`

Note:

`lmutil` embeds the whole Macrovision® utilities: it is enough to specify the name of the tool after `lmutil`.

The syntax to get some help about the tool is:

```
lmutil utility_name -help
```

For example: `lmutil lmstat -help`

Hereafter the command line of `lmutil`. Names in bold correspond to the name of the Macrovision® utilities:

```
lmutil Imborrow -status
```

```
lmutil Imborrow -clear
```

```
lmutil Imborrow {all | vendor} dd-mmm-yyyy:[time]
```

```
lmutil Imborrow -return [-c licfile] [-d display_name] [-fqdn] feature
```

```
lmutil Imdiag [-c licfile] [-n]
```

```
lmutil Imdown [-c licfile] [-q] [-all] [-vendor name] [-force] [-help]
```

```
lmutil Imhostid [-ether | -internet | -user | -n | -string
```

```
    -display | -hostname | -hostdomain | -vsn | -flexid | -long | -utf8]
```

```
lmutil Iminstall [-i infile] [-o outfile]
```

```
    [-overfmt {2, 3, 4, 5, 5.1, 6, 7.1, 8}]
```

```
    [-odecimal] [-maxlen n]
```

```
lmutil Imnewlog [-c licfile] vendor new-file, or
```

```
lmutil Imnewlog [-c licfile] feature new-file
```

```
lmutil Impath -status
```

```
lmutil Impath -override {all | vendor } path
```

```
lmutil Impath -add {all | vendor } path
```

```
lmutil Imremove [-c licfile] feature user host display
```

```
lmutil Imremove [-c licfile] -h feature host port handle
```

```
lmutil Imreread [-c licfile] [-vendor name] [-all]
```

lmutil **lmswitchr** [-c licfile] vendor new-file, or

lmutil **lmswitchr** [-c licfile] feature new-file

lmutil **lmstat** [-c licfile] [lmstat-args]

lmutil **lmswitch** [-c licfile] vendor new-file, or

lmutil **lmswitch** [-c licfile] feature new-file

lmutil **lmver** flexlm_binary

The command **lmutil lmstat -a** allows to see functionalities available from all servers.

The command **lmutil lmstat -S SEEMAGE** displays functionalities proper to the SEEMAGE daemon.

PARAMETERS FOR FIRST LAUNCH FROM 3DVIA COMPOSER

During the first launch of a 3DVIA Composer or 3DVIA Sync product, a message box concerning the license will pop up. The following will depend on the type of license that you own.

Fixed licence

Click on the « Install License » button and then place the license file in the specified directory, following given indications.

Floating license

Click on the « Connect to a license » button, then select the radio button « Specify the licence server system » (checked by default) and then « Next ».

In the displayed entry field, enter the name of the server, using the following format: format `[numéro_port@]nom_serveur`.

Note : The port number is optional but it must be used if this last is specified in the license file (SERVER line).