



MagiCAD Network Licenses

User's Guide
2018

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1. Important information

Licensing of MagiCAD has changed in version 2010.11. If you have used network licensing with previous MagiCAD versions, you need to upgrade the license utilities.

Licenses of MagiCAD 2010.11 and later are activated in the server machine, and the previously used license file solutions do not apply to the new version.

Note that you need administrator rights to install and configure the license services.

MagiCAD license services must be stopped, and LMTOOLS and Network License Server Management Utility must be closed before you can upgrade. It is recommended that you uninstall the previous version of MagiCAD license utilities before you install the new version. This does not affect the licenses that are activated on the server; they are usable again when you install the new versions of the utilities.

If you have defined AutoCAD and MagiCAD license services separately, you do not have to stop your AutoCAD license service when you upgrade MagiCAD license services.

Setting up the license management consists of two phases:

1. [Install the licensing utilities and activate the licenses](#)
2. [Set up the license management as a Windows service](#)

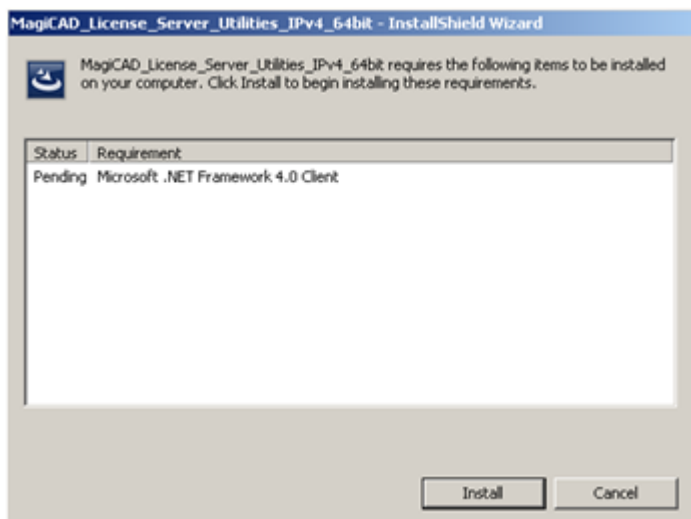
If you upgrade from 2010.5 or earlier, please note that the license file (magicad.lic) no longer contains information about the application licenses or the unique host name / MAC address of the server machine. The new licenses are activated to the workstation and the license file only contains information which vendor daemon is started (magicad.exe).

If you upgrade from version 2010.11 or later, please read [these instructions](#).

See *FLEXnet Publisher License Administration Guide* for more information about FLEXnet licensing. You can download the document from [MagiCAD software delivery site](#).

.NET Framework 4 Client Profile is required

The installation package of MagiCAD License Server Utilities includes the setup of this program module. If the program module is not already installed on the server machine, the setup prompts to install it as follows:

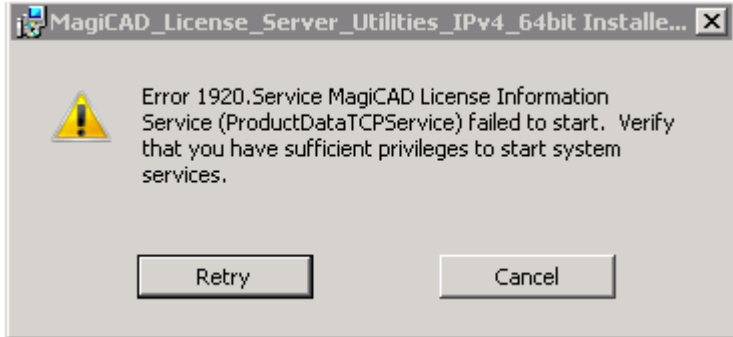


Click "Install" to proceed with installing Microsoft .NET Framework 4 Client Profile and MagiCAD License Server Utilities.

Possible problem

In some operating systems (e.g. Windows Server 2008 SP2), the automatic detection may not work properly, which causes the setup fail if Microsoft .NET Framework 4 Client Profile is not installed.

In that case, the setup cannot start a required service and the following message is displayed:

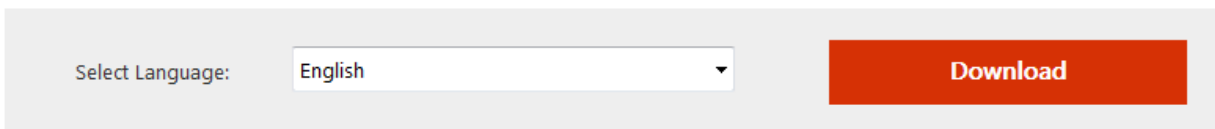


Workaround

To fix this issue, install Microsoft .NET Framework 4 Client Profile separately and run MagiCAD License Server Utilities setup again.

You can download Microsoft .NET Framework 4 Client Profile e.g. from <http://www.microsoft.com/download/en/details.aspx?id=24872> (see the picture below).

Microsoft .NET Framework 4 Client Profile (Standalone Installer)






The Microsoft .NET Framework 4 Client Profile redistributable package installs the .NET Framework runtime and associated files that are required to run most client applications.

2. Install the utilities and activate the licenses

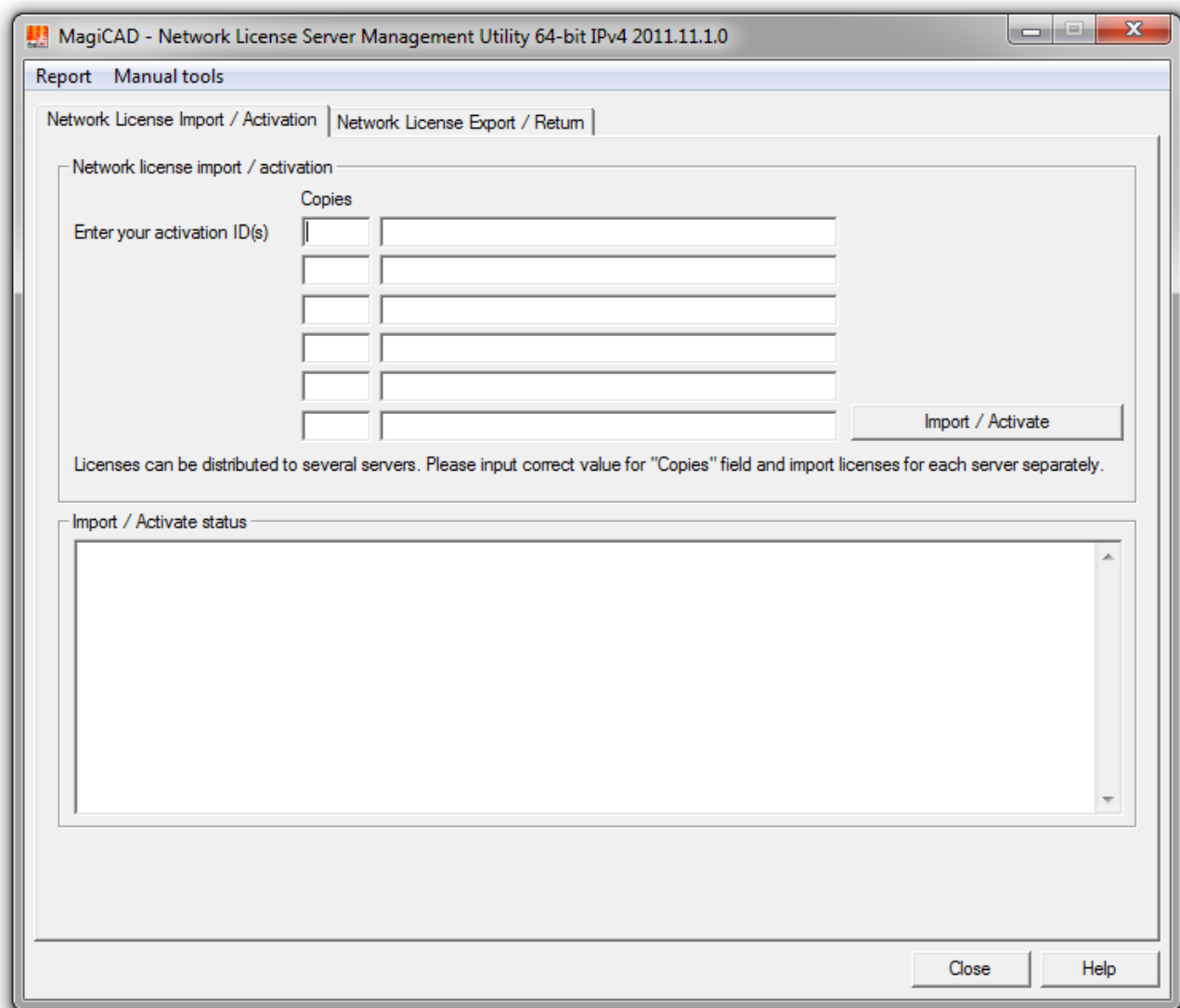
Install the license server utilities following the onscreen instructions of the setup program. There are separate installers for 32-bit and 64-bit license server machines.

The default program directory is `C:\Program Files\MagiCAD License Server Utilities`

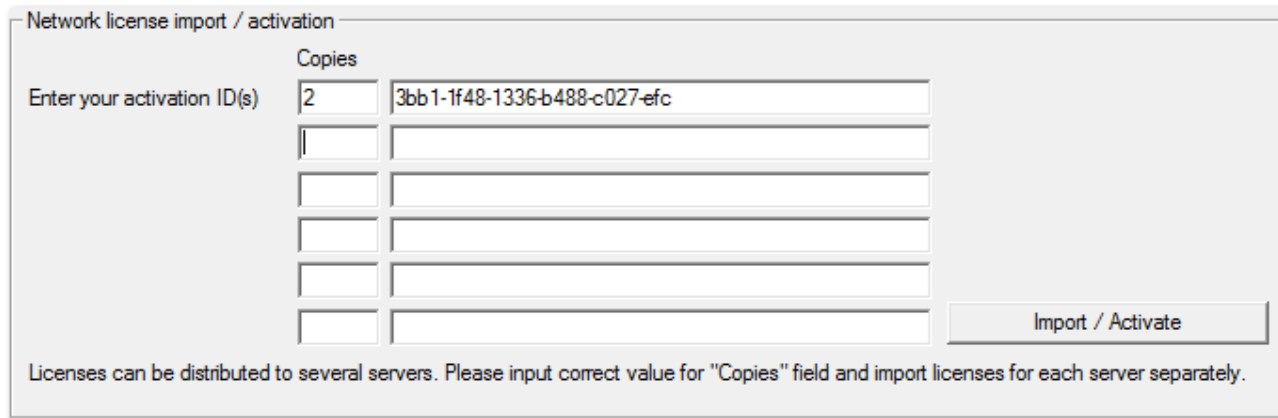
The installation creates MagiCAD License Server Utilities folder on the desktop. The folder contains the following items:

-  Instructions for Use
-  LMTOOLS by Flexera Software, Inc
-  Network License Server Management Utility

Activate the licenses to the server. Start **Network License Server Management Utility**.



2.1. Network License Import / Activation functions



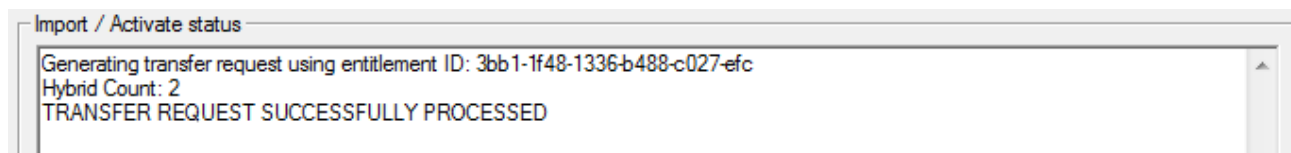
Enter your activation ID(s)	Copies
3bb1-1f48-1336-b488-c027-efc	2

Licenses can be distributed to several servers. Please input correct value for "Copies" field and import licenses for each server separately.

You have received one or more activation IDs from the software vendor by email. For each license there is a unique activation ID and the maximum number of licenses you can activate. You can freely distribute the licenses to as many servers as you prefer as long as the maximum number of licenses is not exceeded.

For each license, input the activation ID and the number of licenses you want to activate. Next, click the **Import / Activate** button.

The license management utility connects to the software vendor's system to activate the licenses. If the activation was successful, the following message is displayed and the licenses can be used. If the program displays an error message, check that you are online and try activation again.

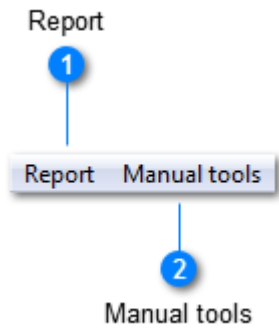


Import / Activate status

Generating transfer request using entitlement ID: 3bb1-1f48-1336-b488-c027-efc
 Hybrid Count: 2
 TRANSFER REQUEST SUCCESSFULLY PROCESSED

If your server does not have an internet connection e.g. for security reasons, you can use the [manual activation functions](#) instead of the **Import / Activate** function. Please note that in this case the licenses are not immediately available in use, because the requests are handled manually within the software vendor's business hours.

2.2. Report and Manual tools



These pull-down menus contain special functions you can use if you need the software vendor's assistance with your licenses.

1 Report

Report

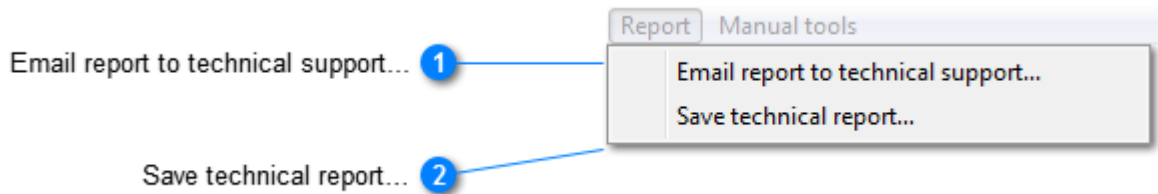
With this function you can create a report of your license storage. You can send the report to MagiCAD technical support, if necessary.

2 Manual tools

Manual tools

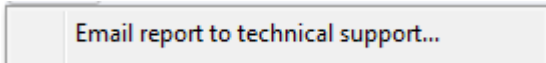
If your server is not allowed to connect to internet, you need to perform manual activation with these functions.

Report



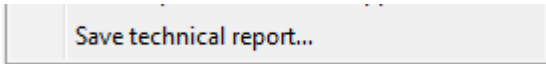
With the help of these functions you can generate a report of your licenses and send it to technical support, if necessary.

1 Email report to technical support...



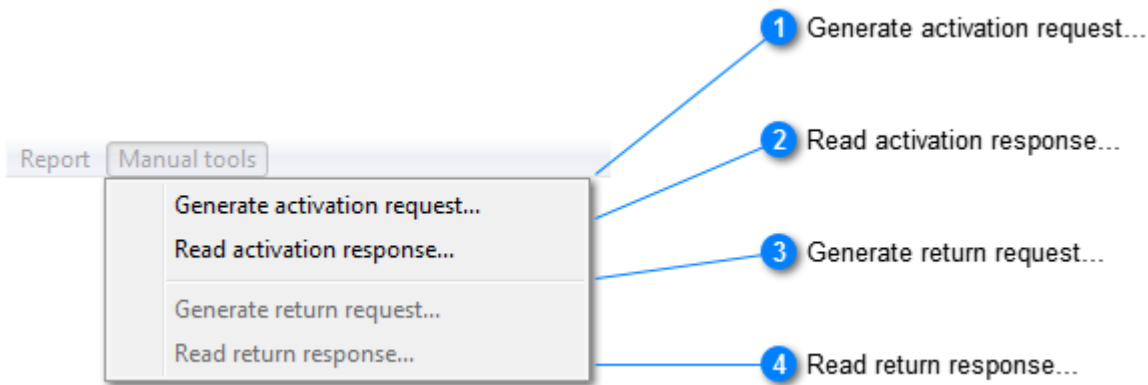
If your server machine has an email client, you can create a message to MagiCAD technical support with this function. Information of your licenses is applied as the body text of the message.

2 Save technical report...



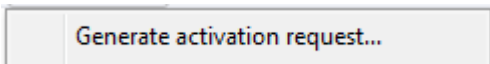
If your server machine does not have an email client, you can save the report as a plain text file, which you can send to the technical support from another machine.

Manual tools



This menu contains functions for manual activation and return. You need to use these functions if your server is not allowed to connect to internet e.g. for security reasons.

1 Generate activation request...



This function creates an xml file of each activation ID you have entered in the main window. You can select the directory where the files are saved.

Send the request files by email to address flex@progman.fi

If your server has an email client, it is automatically opened and the xml files are attachments in the message.

2 Read activation response...



When the software vendor has processed your license request, you will receive files that you can use for manual activation. Copy the response files to a suitable directory, and use this function to activate the licenses.

3 Generate return request...



You can use this function if you need to deactivate the licenses from your server, for example, to make it possible to move the licenses to another server or upgrade the licenses to a newer version.

This function creates an xml file of each activation ID you have entered in the main window. You can select the directory where the files are saved.

Send the request files by email to address flex@progman.fi

If your server has an email client, it is automatically opened and the xml files are attachments in the message.

4 Read return response...

Read return response...

When the software vendor has processed your return request, you will receive files that you can use for manual return. Copy the response files to a suitable directory, and use this function. Then your license status will be up-to-date and the licenses can be activated on another server machine or upgraded to a newer version.

3. Set up the license service

Components of the license service

The license service consists of two executables: **license daemon** (lmgrd.exe) and **vendor daemon** (magicad.exe).

The setup program installs and starts the license service automatically. The service also starts automatically each time the server machine is restarted.

The license service can also be started manually with the help of **LMTOOLS** program. This may be necessary, for example,

- if the licenses are not yet activated (the service shuts down automatically if there are no licenses to serve)
- if the license service has been stopped for another reason

In addition there is another service, which makes it possible to the end-users to see the list of available licenses and borrow the licenses with the client computers' license management utility. This service is installed with the network license management utility and starts automatically.

License file and options file

The license file (magicad.lic) contains information about the license service being started. The most significant information in the file is

```
VENDOR magicad
```

which means that the vendor-specific component (i.e. vendor daemon) of the license service is magicad.exe.

With the options file (magicad.opt) it is possible to add some additional definitions for the license service. By default, the options file installed with MagiCAD license management utilities contains line

```
TIMEOUTALL 1800
```

(inactive MagiCAD license returns available for other users after 30 minutes; this setting applies to all MagiCAD applications).

magicad.opt is installed in the same directory as the other license management files (C:\Program Files\MagiCAD License Server Utilities by default).

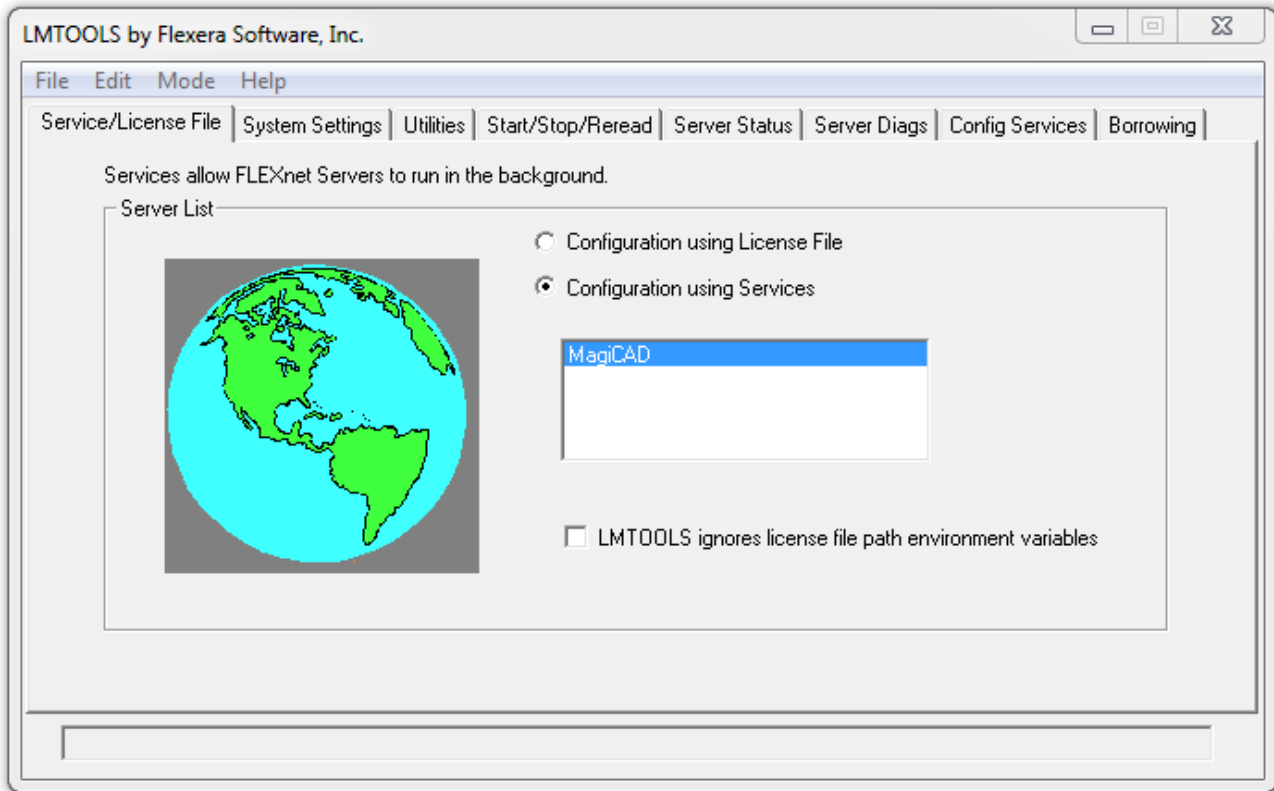
Check the options file and make the changes if necessary. You can edit magicad.opt e.g. with Notepad.

Use the LMTOOLS utility to set up the service

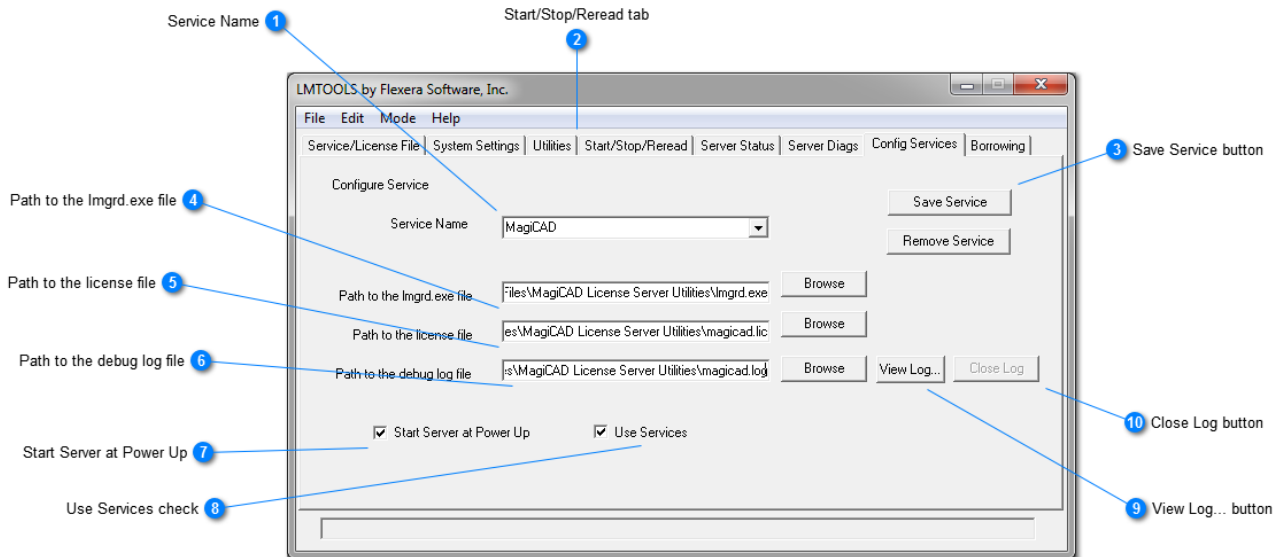
Note that you need administrator rights to set up the license server as a service.

Start **LMTOOLS by Flexera Software, Inc.** The installation program has preconfigured MagiCAD license service to the utility.

Click the *Configuration using Services* radio button and then click the *Config Services* tab to [review the settings](#) of the license service.



3.1. Review the settings of the license service



1 Service Name

MagiCAD

This list contains the service that is currently being configured. The installation program creates settings for a service named **MagiCAD**.

2 Start/Stop/Reread tab

Start/Stop/Reread

When you have reviewed and saved the service settings, go to this tab to start the service.

3 Save Service button

Save Service

Click this button to accept the settings and save the service.

4 Path to the Imgrd.exe file

Files\MagiCAD License Server Utilities\Imgrd.exe

This field contains information which license daemon is started.

5 Path to the license file

es\MagiCAD License Server Utilities\magicad.lic

The installation program has copied a bootstrap license file (magicad.lic) which contains information about the license service to be started. This file contains the filename with full path.

6 Path to the debug log file

es\MagiCAD License Server Utilities\magicad.log

This field contains the filename of the debug log file.

7 Start Server at Power Up

Start Server at Power Up

When this option is selected, the license service is automatically started when the server machine is restarted. Otherwise the service must be manually started after each power up.

8 Use Services check

Use Services

When this option is selected, the license server is started as a service. If this is not used, the license service is run as an application, which means that there must be a user logged in the server machine.

9 View Log... button

View Log...

This function opens a window that displays the debug log file of the license service.

10 Close Log button

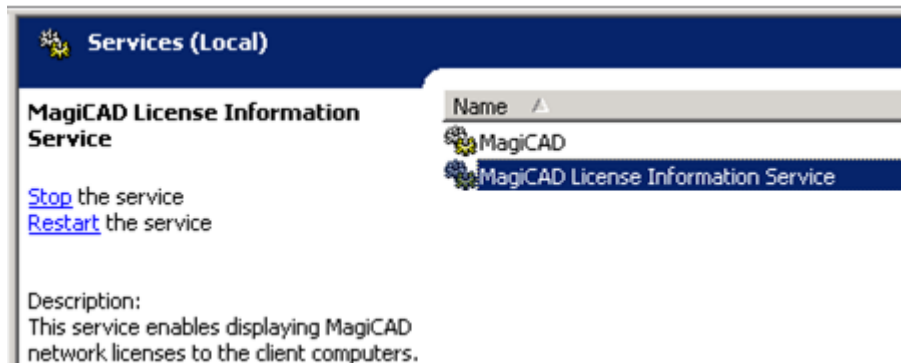
Close Log

This function closes the debug log window.

3.2. License borrowing service

The setup program installs a separate service to enable displaying the licenses to the client computers. This service makes it possible to borrow licenses to the workstations.

You can find the service in the server's list of services:



By default, the service uses port 2194. If you want to change the port, do as follows:

1. Edit the configuration file of the service. The file is named `ProductDataService.exe.config`, and its location is the Service subdirectory of the program directory (i.e. `C:\Program Files\MagiCAD License Server Utilities\Service` by default). The configuration file is an XML file which you can edit e.g. with Notepad. The line to be changed is `<add key="port" value="2194" />`. Change the value to the port you prefer. Please note, however, that it cannot be the same port number that is used by `lmgrd.exe`, `magicad.exe` or any other service.
2. Restart the service.
3. Specify the new port number in the *Options* dialog of the client computers' *License Management Utility*.

License borrow port

You can stop this service if you want to prevent the users from borrowing the licenses.

License inactivity timeout

When using MagiCAD for Revit, the periods of time when the user uses native Revit functions without activating any MagiCAD tools are counted as idle time for the MagiCAD license. MagiCAD's idle time limit for automatic license return is set to 2 hours. To prevent untimely license returns and interruptions in design work due to license unavailability, the limit is fixed.

If it is necessary to return the license to the license pool before the 2-hour limit expires, the license can be returned at any time by ending the Revit session (i.e. by closing Revit).

Maximum borrow time

Maximum borrow time can be restricted in the license borrowing service. `ProductDataService.exe.config` has new configuration item `maxBorrowTime`, which can be used to limit borrow time.

Change the value in the following line to the desired value. Maximum borrow time is defined in days.

```
<add key="maxBorrowTime" value="30"/>
```

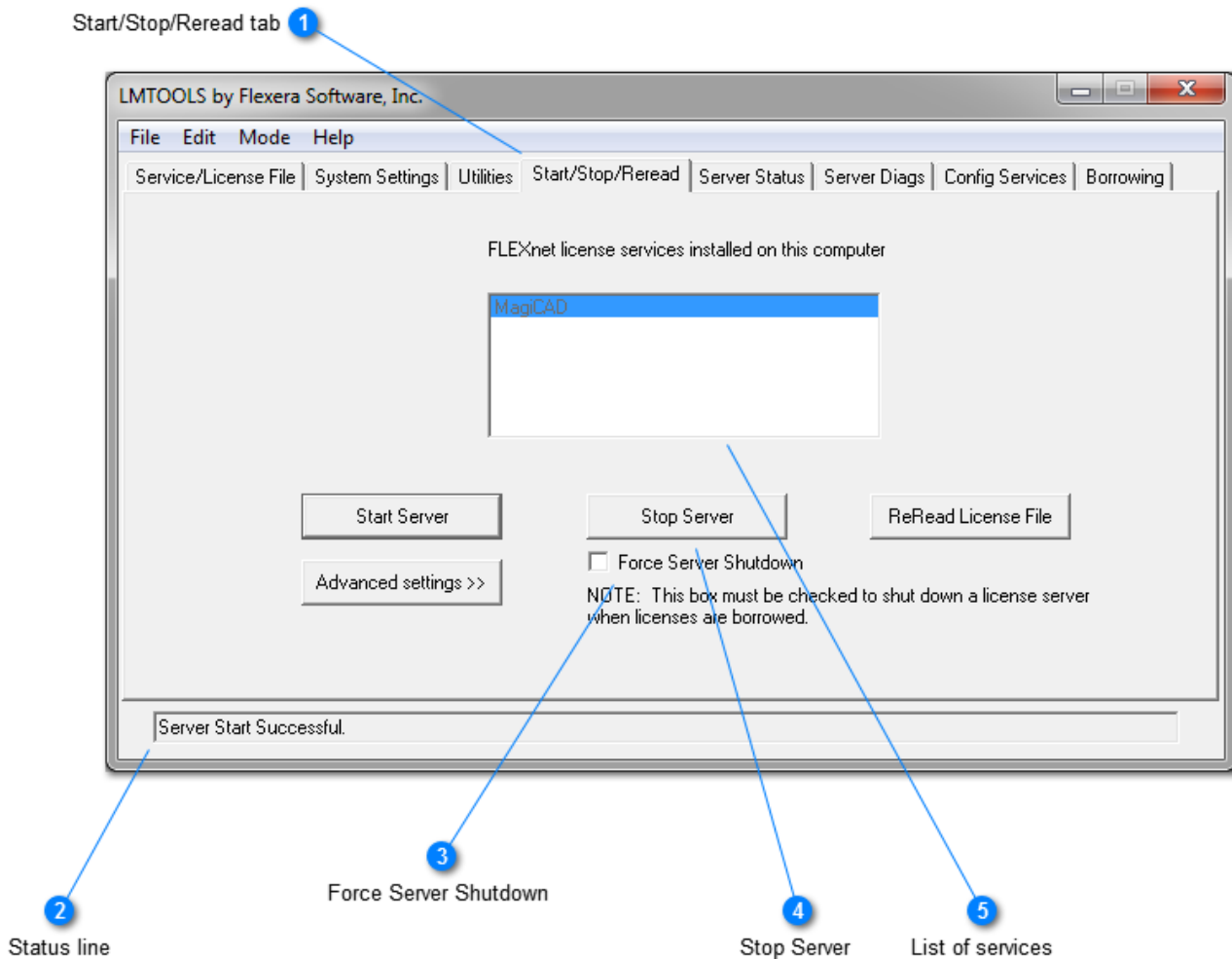
Remember to restart *MagiCAD License Information Service* after changing the configuration. To use this feature, the client computer needs to have *License Management Utility* version 2015.11 or newer.

4. Returning and upgrading the licenses

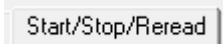
You need to return the licenses to the software vendor's system if you intend to move them to another license server or upgrade them to a newer version.

Stop the license service and uninstall the license server utilities if you no longer intend to use MagiCAD licenses on the license server.

4.1. Stopping the service

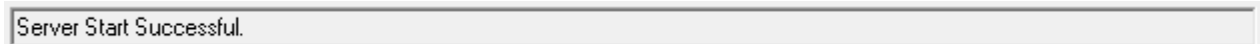


1 Start/Stop/Reread tab



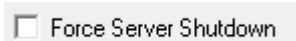
The service is started or stopped in this dialog tab.

2 Status line



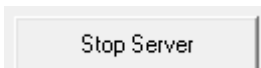
Check the contents of this line each time you attempt to start or stop the service. The line contains information whether the selected operation was successful or has an error occurred.

3 Force Server Shutdown



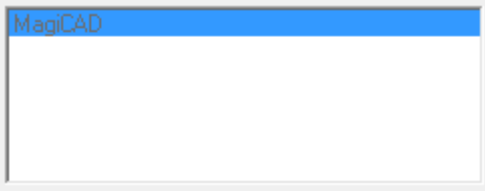
It is recommended that you select this option before you stop the service, especially if there are licenses in use or borrowed.

4 Stop Server



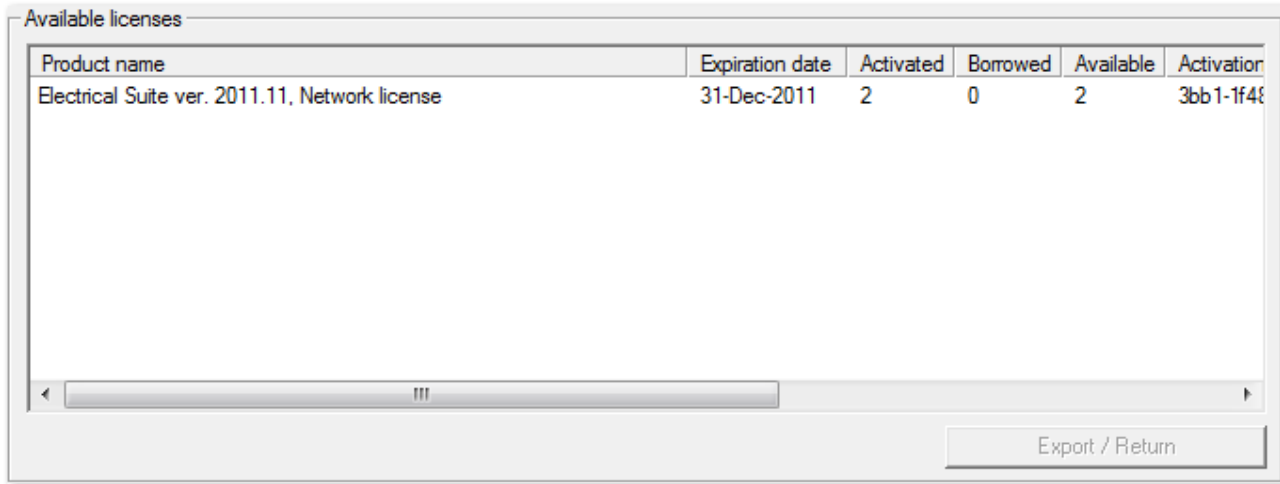
Click this button to stop the license service

5 List of services



If you have multiple license services in the same server (e.g. Autodesk products and MagiCAD), check that the right service is selected before you attempt to stop the service.

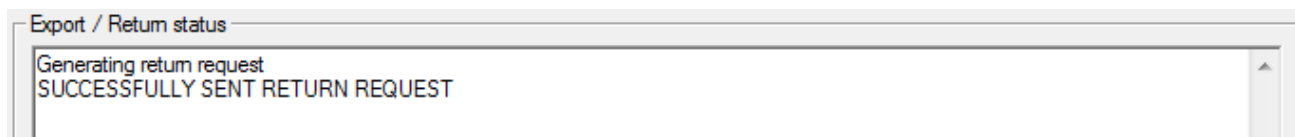
4.2. Network License Export / Return functions



The Available licenses window panel contains a list of licenses that are currently activated on your server.

Select the license(s) you want to transfer - with **Ctrl** key pressed you can select multiple licenses at a time - and click the **Export / Return** button.

The license management utility connects to the software vendor's system to return the licenses. If the return was successful, the following message is displayed and the licenses can be activated on another server or upgraded. If the program displays an error message, check that you are online and try returning again.



The licenses that are borrowed to workstations cannot be returned to the software vendor's server. You can, however, return the licenses that are not borrowed. The borrowed licenses remain in your system, and you can return them later when they are no longer borrowed.

If your server does not have an internet connection e.g. for security reasons, you can use the [manual activation functions](#) instead of the **Export / Return** function. Please note that in this case the return process takes some time, because the requests are handled manually within the software vendor's business hours.

5. Troubleshooting

Check list in the error situations

The license cannot be activated (error code 50041)

If the operating system of your license server is Windows Server 2003, it is possible that your server cannot obtain certificates from a server with SHA2 256 or higher encryption. In this case you will need to get a hotfix to this issue. More information: <http://support.microsoft.com/kb/968730>

The license service does not start

- Check with [LMTOOLS](#) that the license service configuration is correct. Save the service.
- Check that there is no other MagiCAD license service already running. It is possible to run only one instance of MagiCAD license service at the same server.
- Check that you have activated your licenses. If there are no licenses features to serve, the service stops. (This information is written to the debug log file.)
- Updating the utilities may have failed. There may be files that are incompatible with each other. In that case:
 - 1) Stop the service and utilities
 - 2) Uninstall the utilities
 - 3) Check that the installation directory of the utilities is empty
 - 4) Reinstall the utilities.

Error code 0x36b1 (File=magicad.exe) in the debug log file

In some environments, such as Windows Server 2003 or 2008, it may be that certain Visual Studio redistributables are not installed in the license server machine. In that case, please download and install the redistributables from the following address:

<https://www.microsoft.com/en-us/download/confirmation.aspx?id=5582>

Please note that despite of the file name the package applies to both 32-bit and 64-bit systems.

MagiCAD cannot find a license

Check the error code that MagiCAD gives. Some typical error situations:

- 15 The client computer cannot connect to the server machine. It may be necessary to specify a port setting for the service.
- 18 The license service does not contain a license for the application that the user is trying to run.
- 97 The license service does not appear to be running. Check that the server is properly given at the end-user's license management utility (it directs to the right server).

In some cases it is necessary to specify a vendor port number in the license file (magicad.lic). This way it can be made sure that the same vendor port is taken into use every time the service is started, and it can be taken into account in firewalls and other network configurations. Decide the port you intend to use (in this example, 1234 is selected as the vendor port number), open the license file, and change line

```
VENDOR magicad
```

to

```
VENDOR magicad port=1234
```

The other port that the license service uses is the port number of the license daemon. By default it is within range 27000...27009.

The third port that MagiCAD license system uses is the port for the service that displays the end-users the list of available MagiCAD licenses. By default, the port number is 2194, but it can be changed if necessary. The port number is specified in file *ProductDataService.exe.config*, which is an XML file in the *Service* subdirectory.

The settings in the options file do not seem to work

The options file (magicad.opt) is located in the same directory as the license server files. In some cases, for example, it may occur that the settings (timeout etc) do not work as intended. You can check the situation from

the debug log file of the license service. If there is no information about the options file in the log file, specify the name of the options file containing the full path in the license file; for example, change line

```
VENDOR magicad  
to  
VENDOR magicad options="C:\Program Files\MagiCAD License Server Utilities  
\magicad.opt"
```

Restart the service. You should see the effect in the license file.

There is a SERVER port conflict between MagiCAD license service and another license service

By default (i.e. if there is no SERVER port specified in the license file), the license service (Imgrd.exe) takes the first available SERVER port from range 27000...27009. For example, Autodesk license service takes port 27000, MagiCAD license service takes port 27001, etc.

However, a port conflict may occur if some of the services are using IPv4 and some are using IPv6. MagiCAD license service uses IPv4, and if Autodesk service uses IPv6, both services may try to use port 27000, and licensing does not work as intended.

The workaround is to specify different port numbers in the license files (add the port number to the end of the SERVER line), e.g.

```
SERVER this_host ANY 27001
```

means that the service using this license file always takes port 27001 as the SERVER port when started.

Preparing to contact MagiCAD technical support

When you contact MagiCAD technical support, please provide the following information:

- Description of the problem; for example, error message/code given by MagiCAD
- Complete debug log file of the license service
- [Report](#) of the license storage contents