



Tekla Structures

FlexNet Licensing Administrator Guide

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1 About this guide

This is the **Tekla Structures FlexNet Licensing Guide**. This guide gives information on the activation based licensing system that Tekla Structures uses and explains how to install and set up a license server and manage licenses.

1.1 FlexNet licensing system

Tekla Structures uses FlexNet Publisher License Management version 11.12 (further FlexNet) licensing system. FlexNet is a licensing system provided by a company called Flexera Software. Tekla uses activation-based licensing that supports redundancy via a server list. Three-server redundancy is not supported.

In an activation-based licensing system you need to:

- install and set up a license server on a computer
- activate your licenses
- point each client computer with Tekla Structures to the license server.

The main benefits of the FlexNet licensing system are:

- You do not need hardware locks and password files.
- You can update and renew licenses more easily.
- You can create user groups with different access rights for different Tekla Structures configurations.
- You have multiple options for managing licenses. You do not have to activate all of your licenses on the same license server. You can activate some of your licenses on a common server and the rest locally on each user's laptop, for example. You can easily change the location of the licenses by deactivating them on one license server and activating on another server.
- You can handle licenses efficiently. You can activate licenses on a license server in a local area network. When you start Tekla Structures, a license is checked out from the license server. When you close Tekla Structures, the license is checked in and it is available for another user.

- You can borrow licenses for offline usage.

1.2 Prerequisites for using FlexNet licensing

There are several things you need to take into account before you start using FlexNet licensing. Your IT department can use the items provided in this section as a check list that helps in preparing for the license server installation.

You also need to decide how to manage your licenses. For more information, see [Management of license usage on page 9](#).

Items provided by Tekla

To get started with the FlexNet licensing, you need to have the following items provided by Tekla:

- **Entitlement certificate**

Tekla has sent you an entitlement certificate via e-mail. The entitlement certificate lists all the Tekla Structures licenses you are entitled to use and includes the activation IDs for those licenses. For entitlement requests, contact your local Tekla Structures representative.

- **Tekla Structures license server installation package**

The Tekla Structures license server installation package is available on the Tekla Structures installation DVD and on [Tekla Downloads](#) product download service. The updated versions that are released after the release of the DVD are available only on [Tekla Downloads](#). The installation package contains the license server files and **Tekla Structures License Administration Tool**.

- **Guides**

Tekla Structures FlexNet Licensing Guide contains specific instructions on how to install and manage the Tekla Structures license server.

FlexNet License Administration Guide by Flexera Software is a general guide that contains, for example, instructions on how to create user groups and manage access rights.

IT resources check list

You need to take the following things about IT resources into account:

- **Supported operating system**

The FlexNet licensing system for Tekla Structures supports Windows as operating system. The support for virtual servers is limited. For more information, see Tekla Structures 21.0 hardware recommendations in Tekla User Assistance.

- **Windows user account with administrator rights**

You need to have administrator rights to install and manage the license server. For more information, see [Running applications with administrator rights on page 8](#).

Your Windows login user name should not contain any special characters.

- **TCP/IP port 27007 for license server**

Tekla Structures licensing service (lmgrd) is automatically run in the TCP/IP port 27007. That port should be dedicated for Tekla Structures licensing service only. If required, you can manually set a different TCP/IP port for the licensing service, see [Setting the TCP/IP port manually on page 20](#).

- **Local area network**

The license server and the client computers need to be in the same local area network. The clients need to be able to contact the license server. If there is no local area network in your company, we recommend that you install the license server on each computer with Tekla Structures and activate one license on each computer.

- **Internal firewall**

The internal firewall of your company (for example, Windows Firewall) must allow the communication between the server computer and the computers with Tekla Structures. You must allow the applications `tekla.exe` and `lmgrd.exe` to operate through the firewall. For more information, see [Allowing Tekla Structures license server to operate through firewall on page 73](#).

- **Direct communication to the Internet**

Direct communication from the server computer to the Internet needs to be allowed while the license server at your company contacts the activation server at Tekla. The activation communication is done using SOAP over HTTP on the TCP/IP port 80. Your firewall should not block any incoming or outgoing information during the activation. To allow the activation communication, use the activation server address in your firewall settings:

```
http://activate.tekla.com:80/flexnet/services/  
ActivationService?wsdl
```

If direct communication from the server computer to the Internet is not allowed, contact your local Tekla Structures support for manual activation.

- **System backup settings**

If you have an automatic backup and restore system in your company, configure your system in a way that it does not overwrite your actual Trusted Storage with the backup

copy. Trusted Storage is the place where the licensing info is stored on your server computer, and it is located in `C:\Documents and Settings\All Users\Application Data\FLEXnet` or `C:\ProgramData\FLEXnet\`, depending on the operating system.

Running applications with administrator rights

You need to have administrator rights to install and manage the license server. Some applications also need to be run as administrator separately. That procedure depends on the Windows version you are using.

- In **Windows 7** and **Windows 8** you need to log in as administrator, and in some cases, you need to run applications as administrator. To do this, go to the folder containing the application, right-click the application and select **Run as administrator** from the pop-up menu.
- In **Windows Server** you need to log in as administrator, and in some cases, you need to run applications with unrestricted rights. To do this, right-click the application, select **Run as..** from the pop-up menu, and clear the **Run this program with restricted access** check box.

License server administrator

Your organization should assign a license server administrator. The license server administrator's primary responsibilities are:

- Install and maintain the Tekla Structures license server
- Activate licenses on the server to make the licenses available for Tekla Structures users
- Inform users of the license server name and port number so that they can connect to the server
- Inform users of the license usage policy of the company
- Manage license access rights by modifying an options file
- Monitor license usage
- Export a product ID file for borrowing and deliver it to users.

2 Management of license usage

The FlexNet licensing system offers several options for managing licenses. This chapter provides some examples and recommendations about the ways of managing licenses based on a company size and the amount of Tekla Structures users. We recommend you to think what kind of method of license management best suits your needs.

2.1 Basic ways of distributing licenses

There are two basic ways of distributing licenses to users:

- the licenses are available for multiple users in a common license server
- the licenses are activated on each user's own computer.

You can also use a combination of license distribution methods. For example, you can activate one license on a separate computer and activate the rest your licenses on a common license server.

Licenses activated on each user's computer

The following things are typical for management of licenses that are activated separately on each user's computer:

- No need for an assigned license server administrator
Each user manages the license server that is installed on the user's own computer.
- No need to manage license access rights
Each user activates only the licenses that they need. As the licenses are activated separately on the users' own computers, there is no need to manage license access rights.
- Using Tekla Structures out of office
If a user's license is activated on a laptop, license borrowing or a VPN connection is not needed.

- Usage rate of licenses can be quite low

Users have access only to the licenses that are activated on their computers. If a user needs a license that is activated on another computer, the user needs to use that computer. Another option is to deactivate licenses on one computer and then activate the licenses on another computer. Switching from using one license to another requires effort.

Licenses activated on a common server

The following things are typical for management of a common license server:

- Centralized maintaining and administration of licenses

A license server administrator is a person assigned to maintain the license server and to manage license usage. Typically, there are a few Tekla Structures main users in a company. The main users are good candidates for license server administrators, because they are already familiar with Tekla Structures. For more information on the responsibilities of the license server administrator, see [License server administrator on page 8](#).

- Managing license access rights

To manage the usage of licenses, the license server administrator can control access to different configurations for different users. The license server administrator needs to modify the options file to manage the license access rights. For more information on managing license access rights, see [Managing license access rights on page 52](#).

- Rules of license usage

Tekla Structures users should accept common rules or an internal company policy. The rules should contain regulations of managing the licenses, for example, who is allowed to borrow licenses. Usage of common rules minimizes the amount of conflicts in license management.

- Using Tekla Structures out of office

A user needs to borrow a license from the common license server or use a VPN connection to the license server to use Tekla Structures out of office.

- Usage rate of the licenses can be high

When the licenses are activated on a common server, they are available for multiple users. The licenses are checked out from the license server only when they are needed. When a user does not need a license, the user closes Tekla Structures and the license becomes available for another user. Switching from using one license to another is simple.

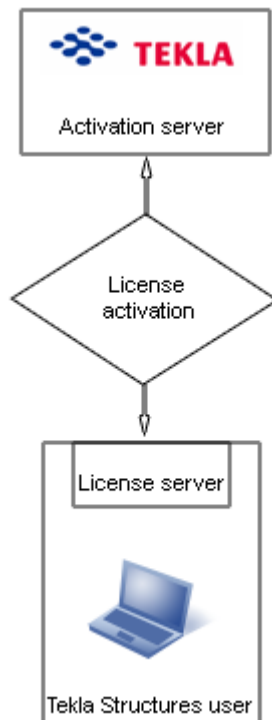
2.2 Examples of managing licenses

This chapter provides four examples of managing licenses. The purpose of the examples is to provide guidelines for license management in different sized companies.

Single user using Tekla Structures

Only one user in the company uses Tekla Structures. The user installs Tekla Structures and the license server on the same laptop.

- Installing the license server is straightforward. The user does not need to modify the license server settings, because the user runs the license server and Tekla Structures on the same computer. The default license server settings can be used.
- Because the user installs the license server on a laptop, the user does not need to borrow a license or use a VPN connection to use Tekla Structures out of office.

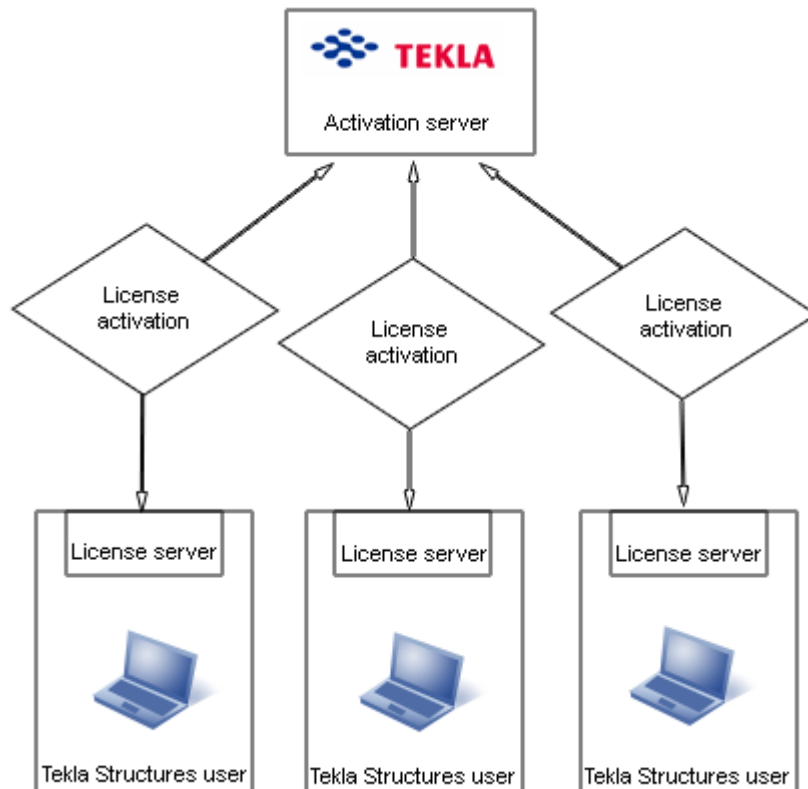


Three users using Tekla Structures

There are three Tekla Structures users in a company. The users do not use same Tekla Structures configurations, so each user installs a license server separately on the user's own laptop and activates only the licenses that they need.

- A license server administrator is not needed, the users maintain their license servers.

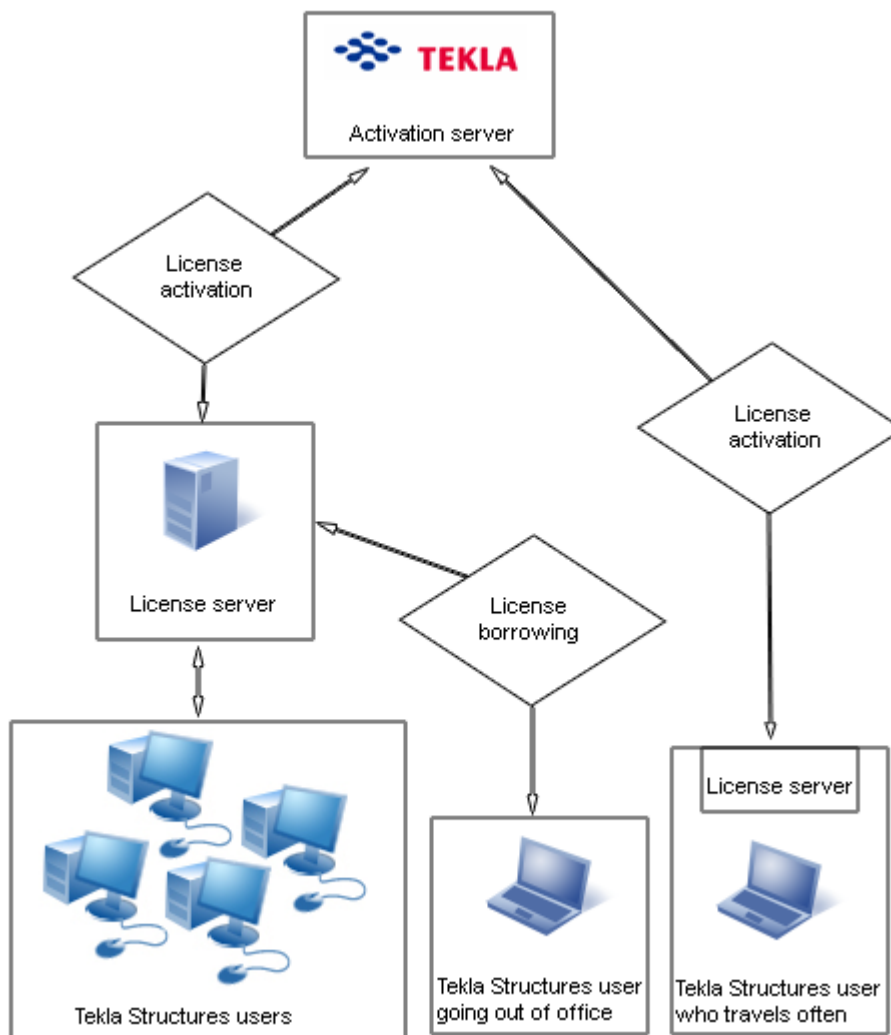
- Offline usage of Tekla Structures is straightforward, because the users install the license servers on their laptops.



Ten users using Tekla Structures

There are ten Tekla Structures users in a company. Because there are many users and the users need to use various configurations, the company uses a common license server.

- The company has an internal policy of license usage. The policy contains regulations of managing the licenses.
- One of the main users is assigned as a license server administrator. The administrator installs the license server and informs the other users of the host name and port number of the server. The license server administrator also performs other server maintenance duties.
- One user travels often and needs Tekla Structures on the journeys. A license server is installed separately on the user's computer, so the user does not need to borrow a license or use a VPN connection for offline usage of Tekla Structures.
- Other users borrow licenses from the license server when they need to use Tekla Structures offline.

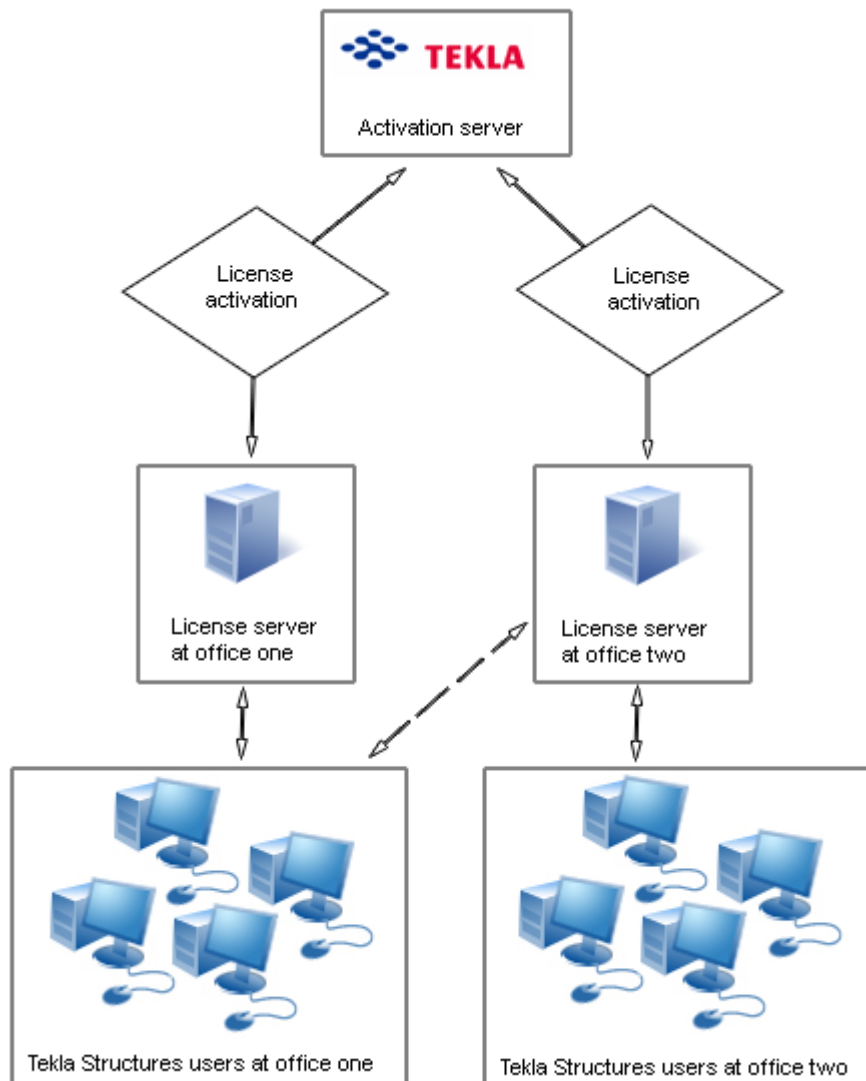


Fifty users using Tekla Structures

There are fifty Tekla Structures users in two separate offices. The both offices have their own license servers.

- The both offices have assigned license server administrators. The license server administrators install the license servers and perform server maintenance duties.
- The company has an internal policy of using licenses. The policy contains, for example, the rules that define who are allowed to borrow licenses.
- Because the amount of Tekla Structures users is large, the license server administrators create options files to control access rights for different licenses.
- Only a couple of users need to use Tekla Structures offline. The license server administrators modify the option files to enable the license borrowing only for the users who need to borrow licenses.

- If one server fails, the users can connect to the other license server. If there are available licenses on the license server, the users can use the licenses.



3 Installing the Tekla Structures license server

The Tekla Structures license server installation package contains license server files, applications for license management and guides. To install the license server, run the installation application available on the Tekla Structures installation DVD. You can also download the license server installation package with the latest updates from [Tekla Downloads](#) product download service.



If you are using other licensing services, you need to stop them before you install the Tekla Structures license server. When you have completed installing the Tekla Structures license server, you can restart the other licensing services.

3.1 Installing Tekla Structures license server to a new computer

To install Tekla Structures license server to a computer which does not have a previous version of Tekla Structures license server:

1. Start the installation and select the installation language.
2. Select the licensing service installation type.
 - Use the **Automatic** installation for normal setups.
 - Use the **Manual** installation if you are an advanced user of Flexnet or Flexlm licensing. If you select the **Manual** option, you need to finalize the licensing service installation manually. See [Manually installing Tekla Structures licensing service on page 16](#).
3. Select the folder where the license server is installed.
4. Tekla Structures license server is installed.

If you selected the **Automatic** installation option, go to [Saving the entitlement certificate on page 20](#).

Manually installing Tekla Structures licensing service

If you selected the **Manual** option for Tekla Structures licensing service installation, two additional files are installed: `installanchorservice.exe` and `uninstallanchorservice.exe`. You need the files when you manually install or uninstall FlexNet Licensing Service.

To finalize the manual licensing service installation:

1. Go to the **Start** menu and open **Command Prompt** as **Administrator**.
2. At the command prompt, enter the following commands.



If you have some other FlexNet licensing service already running on the server, stop it before entering the commands.

- a. `cd \TeklaStructures\License\Server`
- b. `installanchorservice.exe`

The licensing service is installed.

```
Administrator: Command Prompt
Microsoft Windows [Version 6.0.6001]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.

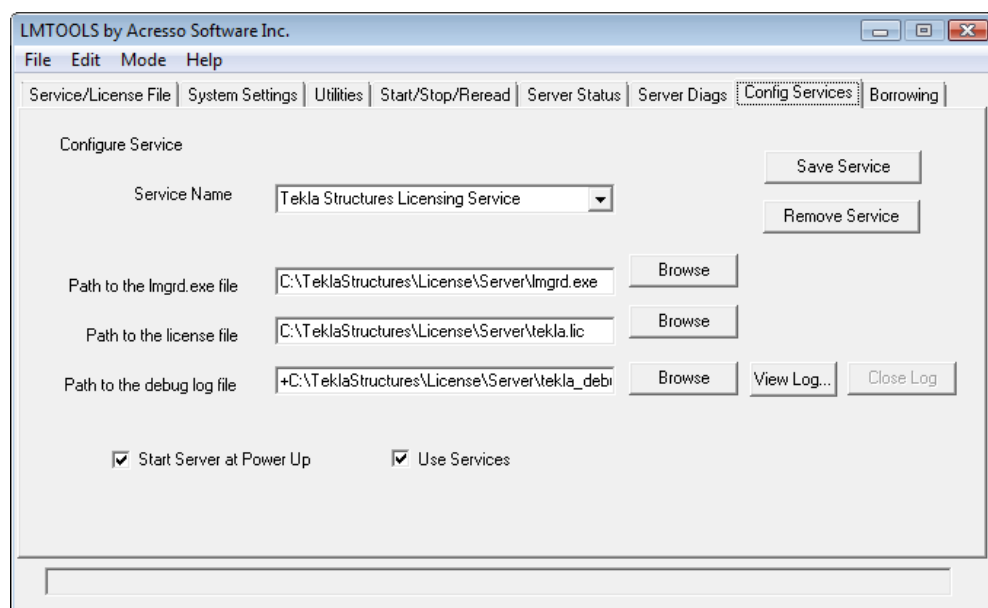
C:\Windows\system32>cd \TeklaStructures
C:\TeklaStructures>cd License
C:\TeklaStructures\License>cd Server
C:\TeklaStructures\License\Server>installanchorservice.exe
Installed FLEXnet Licensing Service for publisher Tekla, product TeklaStructuresLicenseAdministrationTool.
The existing FLEXnet Licensing Service driver was up to date.
C:\TeklaStructures\License\Server>
```

3. Modify the license file.
 - a. Open the `..\TeklaStructures\License\Server` folder on the server computer.
 - b. Open the `tekla.lic` file with a text editor.
 - c. Replace text `localhost` on the line `SERVER localhost ANY` with the host name or IP address of the license server.
 - d. Enter the TCP/IP port number after text `SERVER server_host_name ANY`.
 - e. Save the changes and close the text editor.

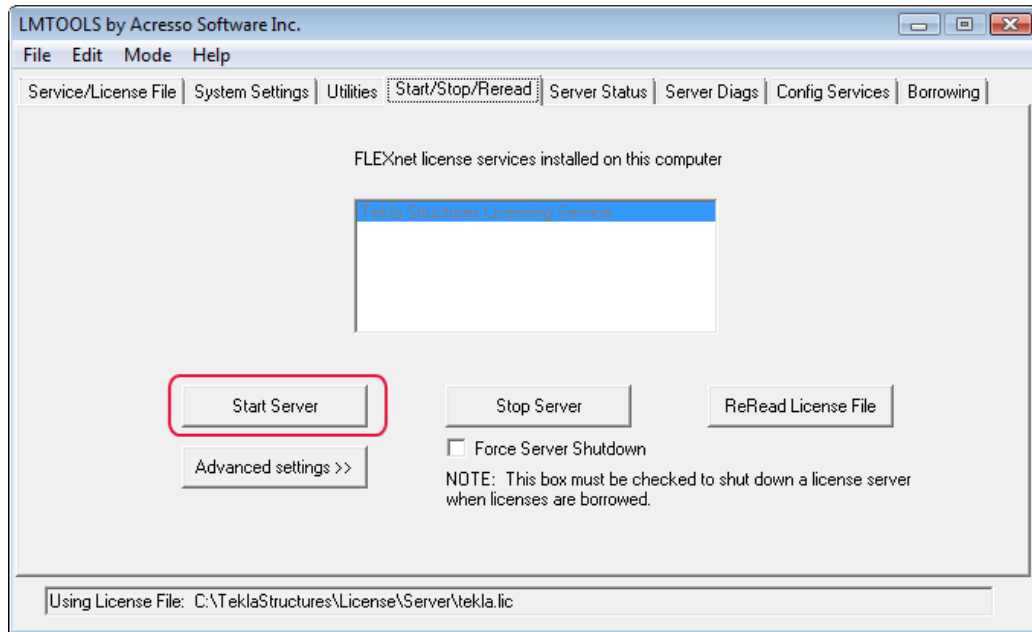
For more information, see [Modifying the license file on page 19](#).

4. Open **LMTTOOLS** and go to the **Service/License File** tab.
5. Select **Configuration using Services**.
6. Go to the **Config Services** tab.

- a. Click the **Service Name** box and enter the name of the service, for example, Tekla Structures Licensing Service.
- b. Click the **Browse** buttons to locate the `lmgrd.exe`, `tekla.lic` and `tekla_debug.log` files. By default, the `lmgrd.exe` and `tekla.lic` files are installed in the `C:\TeklaStructures\License\Server` folder and the `tekla_debug.log` in the `+C:\TeklaStructures\License\Server` folder.
- c. Select the **Use Services** check box to run the licensing service as a Windows service.
- d. Select the **Start Server at Power Up** check box to start the licensing service automatically after powering up the computer.
- e. Click **Save Service** to save the settings.



7. Go to the **Start/Stop/Reread** tab and click **Start Server** to start the licensing service.



8. Go to the **Server Status** tab and click **Perform Status Enquiry**.

In the status list, the line `License server status` displays the TCP/IP port and host name of the license server.

Uninstalling the licensing service manually

You may need to uninstall the licensing service manually if the automatic uninstallation cannot be performed. To manually uninstall the licensing service, stop the Tekla Structures licensing service in **LMTOOLS** and run the `uninstallanchorservice.exe` at the command prompt.

Modifying existing Tekla Structures license server installation

If you want to modify, repair, or remove your existing Tekla Structures license server installation, re-run the installation wizard.

- **Modify:** Select this option if you want to change the language of the documentation.
- **Repair:** Select this option if you want to, for example, repair corrupted files.
- **Remove:** Select this option if you want to remove your license server installation.



You cannot install an older version of the license server on top of a newer version.



If you upgrade the license server to a newer version, the old license server version is removed from the computer. Make sure before the upgrade that all the necessary files

from the old version are moved to a new location so that they do not get lost during the upgrade.

3.2 Modifying the license file

If you selected the **Automatic** installation option, the license server is set to `27007@your_host_name` (port@host).

You need to modify the `tekla.lic` license file if you

- chose the **Manual** installation option.
- want to change the TCP/IP port of the licensing service.
- want to use the IP address of your computer instead of the host name.

To modify the license file:

1. Open the `..\TeklaStructures\License\Server` folder on the server computer.
2. Open the `tekla.lic` file with a text editor.
3. Replace text `localhost` on the line `SERVER localhost ANY` with the host name or IP address of the license server.

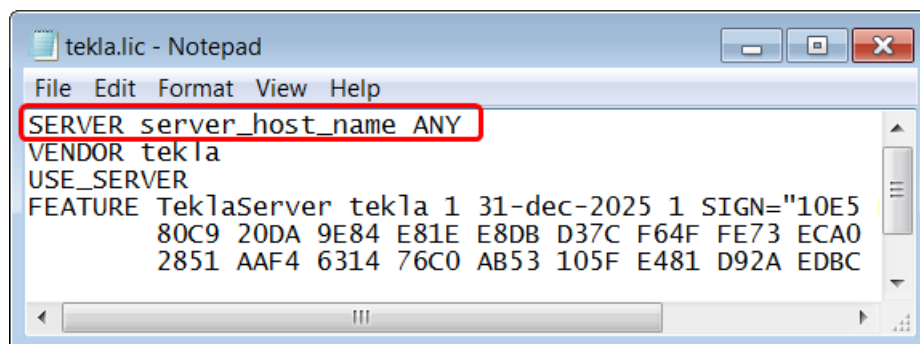
The following formats are valid:

- `server_host_name`
- `server_host_name.mycompany.com`
- IP address.

You can check the hostname of the license server on the **System Settings** tab in **LMTTOOLS**.



Do not delete texts `SERVER` and `ANY` when you enter the host name or IP address of the license server.

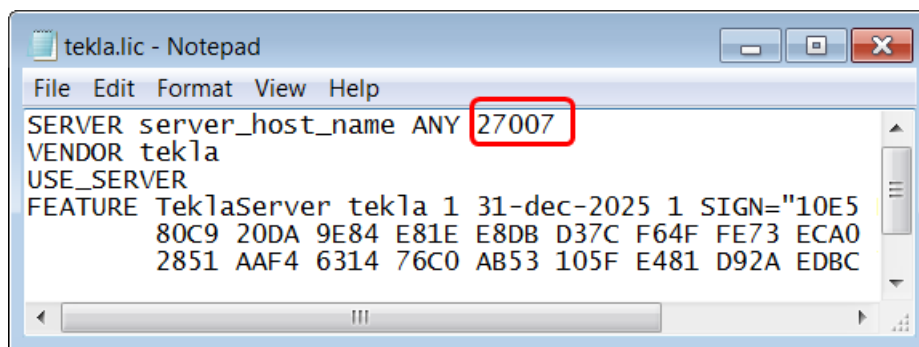


4. Save the changes and close the text editor.

Setting the TCP/IP port manually

The licensing system automatically searches for the available TCP/IP port and uses the first available port detected. If necessary, you can also set the TCP/IP port manually. To set the TCP/IP port manually, do the following:

1. Open the `..\TeklaStructures\License\Server` folder.
2. Open the `tekla.lic` file with a text editor.
3. Enter the TCP/IP port number after text `SERVER server_host_name ANY`.



The port number can be any free port in the range of 1024 - 64000. Flexera Software recommends using ports in the range of 27000 - 27009.

The **Automatic** installation option sets the port to 27007.

4. Save the changes and close the text editor.

3.3 Saving the entitlement certificate

You have been sent a Tekla Structures entitlement certificate in an e-mail. The entitlement certificate states the configurations, quantities and activation IDs of your Tekla Structures licenses. As a preliminary action for transferring license rights from Tekla to your license server, you need to save the entitlement certificate. Then you can open the entitlement certificate with **Tekla Structures License Administration Tool** and activate your licenses.

To save the entitlement certificate:

1. Open your e-mail application.
2. Open the entitlement certificate e-mail.

3. Save the attached `EntitlementCertificate.html` file in the `.. \TeklaStructures\License\Server` folder.



If you use a web-based e-mail service, open the e-mail service in Internet Explorer to save the entitlement certificate. Other web browsers may convert the `EntitlementCertificate.html` file into unusable format.

3.4 Starting Tekla Structures License Administration Tool

You need to activate the licenses on the license server to be able to use them. When you activate the licenses, the license rights are transferred from the activation server at Tekla to the license server at your company or, in the case of a single user, to your computer. **Tekla Structures License Administration Tool** is the application used for activating licenses.

To run **Tekla Structures License Administration Tool**, click **Start --> All Programs --> Tekla Structures Licensing --> Tekla Structures License Administration Tool**.

The **Tekla Structures License Administration Tool** dialog box opens.

When you open **Tekla Structures License Administration Tool**, it detects expired and broken licenses and asks if you want to repair or deactivate them. If you select **Yes**, an automatic deactivation or repair is run.

Notifying the license server

The license server is automatically notified when you activate, deactivate or repair licenses.

You can enable the automatic notification functionality when you start **Tekla Structures License Administration Tool** for the first time. You are asked whether you want to automatically notify the license server about the license changes. To enable the automatic notification functionality, select **Yes**.

If needed, you can later modify the notification settings by clicking **Notify Server**.

If you do not want that the license server is automatically notified about the license changes, you need to use **LMTTOOLS** to manually notify the license server after license activations, deactivations or repairs.



Do not use the automatic notification functionality if you are using some other FlexNet license and license server administration tool, such as FlexNet Manager.

[Manually notifying the license server about license changes on page 21](#)

Manually notifying the license server about license changes

To manually notify the license server about license activation, deactivation, or repair:

1. Click **Start** --> **All Programs** --> **Tekla Structures Licensing** --> **LMTTOOLS** .

The **LMTTOOLS** dialog box opens.

2. Go to the **Start/Stop/Reread** tab.
3. Click **ReRead License File**.

The license server reads the license information.

Selecting language

You can change the language of the **Tekla Structures License Administration Tool** user interface.

To change the language:

1. Click **Language...**
2. Select a language from the list.

Accessing help

Use the **F1** key to access the help. Use the following tabs to navigate the help in different ways:

- Contents - Books
- Index - Alphabetical list of keywords
- Search - Use for searching topics
- Favorites - Use for adding topics to your list of favorites.

You do not need an Internet connection to use the help.

3.5 Activating licenses

Use the **Tekla Structures License Administration Tool** to activate licenses. Note that you do not need to activate all the licences at once. You can activate part of the licenses now and

part of the licenses later on some other computer, for example. Different configurations and different versions need to be selected for activation separately.

To activate licenses:

1. If you did not save the entitlement certificate in the `.. \TeklaStructures \License \Server` folder, you need to open the entitlement certificate manually. To do so, click **Open...** and select `EntitlementCertificate.html`. Click **Open**.

The license information appears under the **Entitled Licenses** area.

Entitled Licenses									
Activate	Quantity	Order ID	Activation ID	Description	Configuration	Version	Type	Start Date	Expiration Date
	1	Tekla HQ	04C1-3F1E-5...	FULL-C	Full	18		1.5.2012	31.5.2012
	2	Tekla HQ	4B73-A2E9-...	STDLC	SteelDetailin...	18		1.5.2012	31.5.2012

2. Select the number of licenses for activation from the **Activate** list. You can also type the number.

Entitled Licenses									
Activate	Quantity	Order ID	Activation ID	Description	Configuration	Version	Type	Start Date	Expiration Date
	1	Tekla HQ	04C1-3F1E-5...	FULL-C	Full	18		1.5.2012	31.5.2012
1	2	Tekla HQ	4B73-A2E9-...	STDLC	SteelDetailin...	18		1.5.2012	31.5.2012

3. Click the **Activate** button.

Your license server contacts the activation server at Tekla. The activation progress is displayed on the **Activating Licenses** dialog box.

The activated licenses are displayed under the **Activated Licenses** area.

4 Starting Tekla Structures with FlexNet licensing

The instructions provided in this section apply to Tekla Structures 14.0 and later versions.

To define the license server:

1. Start Tekla Structures.
 - If you installed Tekla Structures and the license server on the same computer, the system automatically uses the license server on the computer when you start Tekla Structures.
 - If you installed Tekla Structures and the license server on separate computers, the system asks you to define the license server that you want to use when you start Tekla Structures for the first time.



2. Enter the port@host address of the license server in the **Server address** box.

For example, `27007@server_host_name`. The host name you enter here must correspond with the host name entered in the `tekla.lic` file on the server computer.



You can define several license servers by separating them with semicolons. For example,

`27007@server_host_name_1;27008@server_host_name_2`.

3. If you want to check which licenses are available on the license server, click **Check licenses**.
4. Click **OK** to start Tekla Structures.
5. If you need to redefine the license server at some point, click **Tools --> Change License Server...** in Tekla Structures.

The change comes into effect the next time you start Tekla Structures.

5 License information on Tekla Structures License Administration Tool

When you have loaded the entitlement certificate in **Tekla Structures License Administration Tool**, you can check information on the licenses under the **Licenses** tab.







Entitled Licenses The **Entitled Licenses** area displays information on the licenses:



Entitled Licenses									
Activate	Quantity	Order ID	Activation ID	Description	Configuration	Version	Type	Start Date	Expiration Date
	1	Tekla HQ	04C1-3F1E-5...	FULL-C	Full	18		1.5.2012	31.5.2012
	2	Tekla HQ	4B73-A2E9-...	STDLC	SteelDetailin...	18		1.5.2012	31.5.2012

Column	Description
Activate	Used for activating licenses. Displays the number of licenses to be activated.
Quantity	The number of total licenses of the configuration.
Order ID	The order ID of the license. The order ID helps to identify which licenses are linked to each other and which license needs to be deactivated before a new license can be activated.
Activation ID	The activation ID of the license.
Description	The abbreviation of the configuration.
Configuration	The name of the configuration.
Version	The version number of the configuration.
Type	Indicates whether the license is for domestic or enterprise use.
Start Date	The date when the license came into effect.
Expiration Date	The date when the license expires. If the license is permanent, the word <code>Permanent</code> is shown instead of the expiration date.

Activated Licenses

The **Activated Licenses** area displays information on activated licenses:

Activated Licenses											
	Deactivate	Trust Status	Enabled	Quantity	Borrowed	Configuration	Version	Expiration Date	Type	Activation ID	Order ID
		  		1	0	SteelDetailing...	18	31.5.2012	Enter...	4B73-A2E9-...	Tekla HQ

Column	Description
	<p>Click the  button to view the following information:</p> <ul style="list-style-type: none"> Fulfillment Id A unique transaction id which is used in mapping license activations and deactivations together. Borrow Info On which computer the license is borrowed and when the license expires. Start Date When the license starts to work. Borrowed Number of borrowed licenses.
Deactivate	Used for deactivating licenses.
Trust Status	<p>The Host (H), Time (T) and Restore (R) Trust Status. Green symbol indicates that the information is trusted. Red symbol indicates that the information is not trusted. If any of these are not trusted, the license cannot be used.</p> <p>Host indicates whether the server has been moved from one computer to another or whether the computer hardware has radically changed.</p> <p>Time indicates whether the system clock has been tampered with.</p> <p>Restore indicates whether the license is obtained from a backup copy.</p>
Enabled	Indicates whether the license is enabled or disabled. For example, a license may be disabled if there is a disconnection during the activation or deactivation. A disabled license cannot be used.
Quantity	The number of activated licenses of the configuration.
Borrowed	The number of borrowed licenses.
Configuration	The name of the configuration.
Version	The version number of the configuration.
Expiration Date	The date when the license expires. If the license is permanent, the word <code>permanent</code> is shown instead of the expiration date.
Type	Indicates whether the license is for domestic or enterprise use.
Activation ID	The activation ID of the license.
Order ID	<p>The order ID of the license.</p> <p>The order ID helps to identify which licenses are linked to each other and which license needs to be deactivated before a new license can be activated.</p>

6 License server statistics on Tekla Structures License Administration Tool

You can check the license server statistics under the **Statistic** tab.

Press the **Refresh** button to update the statistics before checking them.

License server statistics

The **License server statistics** area displays information on the license usage:

License server statistics					
Configuration	Description	Total	In Use	Borrowed	Free
SteelDetailingLimited	STDL-C	1	0	0	1

Column	Description
Configuration	The name of the configuration.
Description	The abbreviation of the configuration.
Total	The number of activated licenses.
In Use	The number of licenses in use.
Borrowed	The number of borrowed licenses.
Free	The number of free licenses.

7 License deactivation

Subsequent Tekla Structures licenses are linked to each other. This means that you need to deactivate the previous licenses in the chain before you can activate the subsequent licenses. Linking works also the other way around: if you have activated a subsequent license, you cannot activate the earlier license after that. You need to deactivate different types of temporary licenses before activating succeeding licenses linked to them. For example, you have to deactivate a temporary license before activating a permanent license. Also, when renewing the annual maintenance, for example when you switch from Tekla Structures 16 licenses to Tekla Structures 17 licenses, you need to deactivate the licenses from the previous year to be able to activate the licenses for the following year.

You also need to deactivate licenses if you have activated a wrong configuration or too many configurations. In addition, you need to deactivate licenses before rehosting the license server, before changing hardware or the IP address on the license server, before reinstalling Windows on your server computer, or before formatting your server computer. However, you do not need to deactivate licenses before uninstalling and reinstalling the license server.

When you deactivate licenses, you need to deactivate all the licenses that are displayed on the same row under the **Activated Licenses** area. After deactivation you can activate the licenses on the same or some other server.



Before you deactivate licenses, ensure that the licenses are not in use or borrowed. The borrowed licenses must be returned before they can be deactivated.

7.1 Deactivating licenses

To deactivate licenses:

1. Click **Start --> All Programs --> Tekla Structures Licensing --> Tekla Structures License Administration Tool** .
Tekla Structures License Administration Tool opens.
2. Go to the **Statistic** tab.

3. Ensure that no-one is using the licenses.
 4. If you do not use the **Notify Server** option in **Tekla Structures License Administration Tool**, you need to stop the license server manually.
 - a. With administrator rights, click **Start --> All Programs --> Tekla Structures Licensing --> LMTOOLS**.
 - b. Go to the **Start/Stop/Reread** tab.
 - c. Click the **Stop Server** button.
 5. In **Tekla Structures License Administration Tool**, go to the **Licenses** tab.
The **Activated Licenses** area displays the activated licenses.
 6. Select the **Deactivate** check box to select the license for deactivation.
-



If you activated more than one license of the same type in one go, you cannot deactivate those licenses separately. You need to deactivate all of those licenses in one go.

7. Click the **Deactivate** button.

The license server contacts the activation server at Tekla. After successful deactivation the **Tekla Structures License Administration Tool** dialog box is updated.

8 License borrowing

You can borrow an activated license from the license server when you want to work offline. The borrowed license is transferred from the license server to your computer, so it is not available for other users during the borrowing. You do not need to borrow a license for offline usage if you have installed a license server on your laptop.

8.1 Product ID file

A product ID (*.tpi) file is needed for borrowing licenses. A product ID file contains all the information needed in borrowing a license. You can either use the default product ID file or your license server administrator can export a product ID file that matches with the activated licenses on your server.

Using the default product ID file

When you install **Tekla Structures License Borrow Tool**, the `standard.tpi` file is automatically installed in the `..\TeklaStructures\License\Borrow` folder. The file contains all the Tekla Structures configurations and their product IDs.

When you use the default product ID file for borrowing licenses, **Tekla Structures License Borrow Tool** displays all the configurations. However, you can only borrow the licenses that are activated on the license server.

If you want that **Tekla Structures License Borrow Tool** displays only the activated licenses, export a product ID file in **Tekla Structures License Administration Tool**. For more information, see [Exporting the product ID file on page 32](#).

Exporting the product ID file

Tekla Structures License Borrow Tool uses the activation IDs of the licenses during borrowing when the options file is used. When you export a product ID file in **Tekla**

Structures License Administration Tool, the activation IDs of the activated licenses are written in the file. The activation IDs are encrypted, so no-one is able to see them.

You need to export the product ID file on the license server computer. To export the product ID file:

1. Click **Start --> All Programs --> Tekla Structures Licensing --> Tekla Structures License Administration Tool** to open **Tekla Structures License Administration Tool**.
2. Click **Export**.

The **Save Product ID file As** dialog box opens.

3. Enter the name of the product ID file and select a folder where you want to save the file. Click **Save**.
4. Send the product ID file to the Tekla Structures users who need to borrow licenses and inform the users about the usage of the file.



If the name of the file is `standard.tpi` and the file is saved in the `.. \TeklaStructures\License\Borrow` folder on the user's computer, the file is opened automatically when the user starts **Tekla Structures License Borrow Tool**.



Product ID files are not updated automatically. If you deactivate borrowable licenses or activate new licenses for borrowing, you need to export a new product ID file and send it to Tekla Structures users.

8.2 Starting Tekla Structures License Borrow Tool

Tekla Structures License Borrow Tool is used for license borrowing. You can download and install the latest **Tekla Structures License Borrow Tool** on [Tekla Downloads](#) product download page. The installer is also available on the Tekla Structures installation DVD.



You can use the same **Tekla Structures License Borrow Tool** to borrow licenses for different Tekla Structures versions.

To run **Tekla Structures License Borrow Tool**:

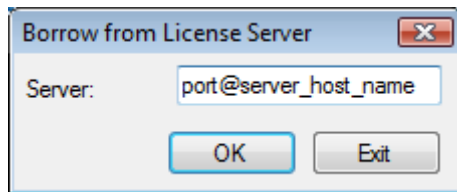
1. Click **Start --> All Programs --> Tekla Structures License Borrow --> Tekla Structures License Borrow Tool**.

The **Borrow from License Server** dialog box opens.

2. Enter the host name of the license server in the **Server** box. You can also enter the port number with the host name. Click **OK**.



You need to enter the same host name in the **Connect to License Server** dialog box when you start Tekla Structures.



Tekla Structures License Borrow Tool opens.

Selecting language

You can change the language of the **Tekla Structures License Borrow Tool** user interface.

To change the language:

1. Click **Language...**
2. Select a language from the list.

Accessing help

Use the **F1** key to access the help. Use the following tabs to navigate the help in different ways:

- Contents - Books
- Index - Alphabetical list of keywords
- Search - Use for searching topics
- Favorites - Use for adding topics to your list of favorites.

You do not need an Internet connection to use the help.

8.3 Opening the product ID file

When **Tekla Structures License Borrow Tool** starts, it automatically opens the `standard.tpi` file that is in the `..\TeklaStructures\License\Borrow`

folder. If your license server administrator has informed you to use a different product ID file for borrowing licenses, you need to open the file to be able to use it.

To open the product ID file:

1. Click **Open....** The **Select Product ID file** dialog box opens.
2. Select the product ID file to be opened.
3. Click **Open** to open the product ID file.


The **Products** area in **Tekla Structures License Borrow Tool** is updated.

8.4 Borrowing a license from the license server

You can borrow licenses from the license server when you want to work offline. Borrow the license on the same computer that you will use for offline work.

To borrow a license:

1. Close Tekla Structures.
2. Click the **Borrow Until** box and select the expiration date of the borrowing from the calendar.

Products					
Borrow Until	Configuration	Version	Activation ID In Use	Start Date	Expiration Date
19.5.2012 15	SteelDetailingL...	18		1.5.2012	31.5.2012

The maximum borrowing period is one month.


3. Click the **Borrow** button to borrow the license.

The borrowing progress is displayed on the **Borrowing License(s)** dialog box. After successful borrowing, the **Borrowed Licenses** area displays the borrowed license.

4. To ensure that the borrowing succeeded, disconnect your computer from the license server and start Tekla Structures with the borrowed license.



8.5 License information on Tekla Structures License Borrow Tool

The **Products** area displays information on licenses:

Products					
Borrow Until	Configuration	Version	Activation ID In Use	Start Date	Expiration Date
19.5.2012 15	SteelDetailingL...	18		1.5.2012	31.5.2012

Column	Description
Borrow Until	Used for borrowing licenses.
Configuration	The name of the configuration.
Version	The version number of the configuration.
Activation ID In Use	Indicates whether the activation ID is used for borrowing. The box is checked only if you are using an exported product ID file.
Start Date	The date when the license came into effect.
Expiration Date	The date when the license expires. If the license is permanent, the word Permanent is shown instead of the expiration date.

The **Borrowed Licenses** area displays information on borrowed licenses:

Borrowed Licenses						
Return	Trust Status	Enabled	Configuration	Version	Borrow Until	Borrowed From
<input type="checkbox"/>			SteelDetailing...	18	19.5.2012	Z-MAME

Column	Description
Return	Used for returning licenses.
Trust Status	<p>The Host (H), Time (T) and Restore (R) Trust Status. Green symbol indicates that information is trusted. Red symbol indicates that information is not trusted. If any of these are not trusted, the license cannot be used.</p> <ul style="list-style-type: none"> • Host indicates whether the server has been moved from one computer to another or the computer hardware has radically changed. • Time indicates whether the system clock has been tampered with. • Restore indicates whether the license is obtained from a backup copy.
Enabled	Indicates whether the license is enabled or disabled. For example, a license may be disabled if there is a disconnection during the activation. A disabled license cannot be used.
Configuration	The name of the configuration.
Version	The version number of the configuration.
Borrow Until	The date when the borrowing expires.
Borrowed From	The license server from where the license is borrowed.

8.6 Returning a borrowed license

You can return a borrowed license back to the license server before the expiration date.

A borrowed license is automatically available on the license server on the day following the expiration date. However, the **Borrowed Licenses** area in **Tekla Structures License Borrow Tool** is not automatically cleared. You need to return the expired license to the license server

to update the **Borrowed Licenses** area. We recommend that you return the expired licenses to clean the **Tekla Structures License Borrow Tool** after borrowing.

To return a license:

1. Ensure that you are connected to the license server.
2. Close Tekla Structures.
3. Select the **Return** check box in the **Borrowed Licenses** area to select the license for returning.
4. Click the **Return** button to return the license.

After successful returning of licenses, the **Borrowed Licenses** area is updated.

9 Usage of LMTTOOLS with Tekla Structures licenses

This chapter provides information on managing Tekla Structures licenses with **LMTTOOLS**, a license and licensing service management tool provided by Flexera Software. In addition to Tekla Structures licenses, you can also manage licenses of other software, if they are using FlexNet or FLEXlm. You can also run **LMTTOOLS** on the client computers to check the status of the license usage on the license server.

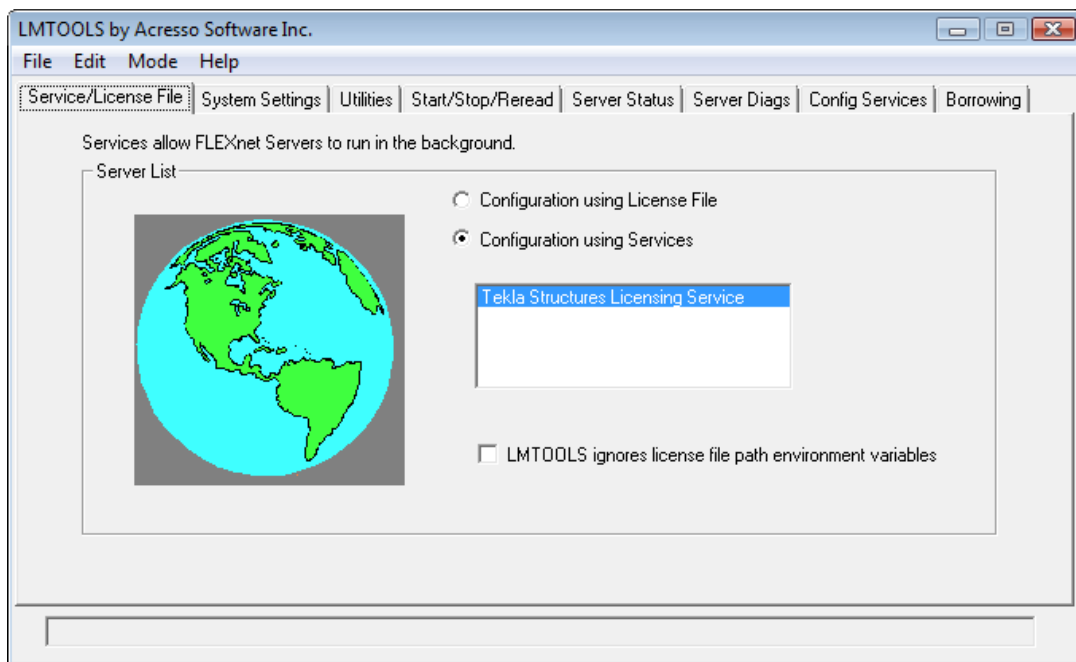


If you are using **FlexNet Manager** by Flexera Software for managing licenses, you should not use **LMTTOOLS**.

When you install Tekla Structures, **LMTTOOLS** is installed in the `..\Tekla Structures\<version>\nt\license` folder.

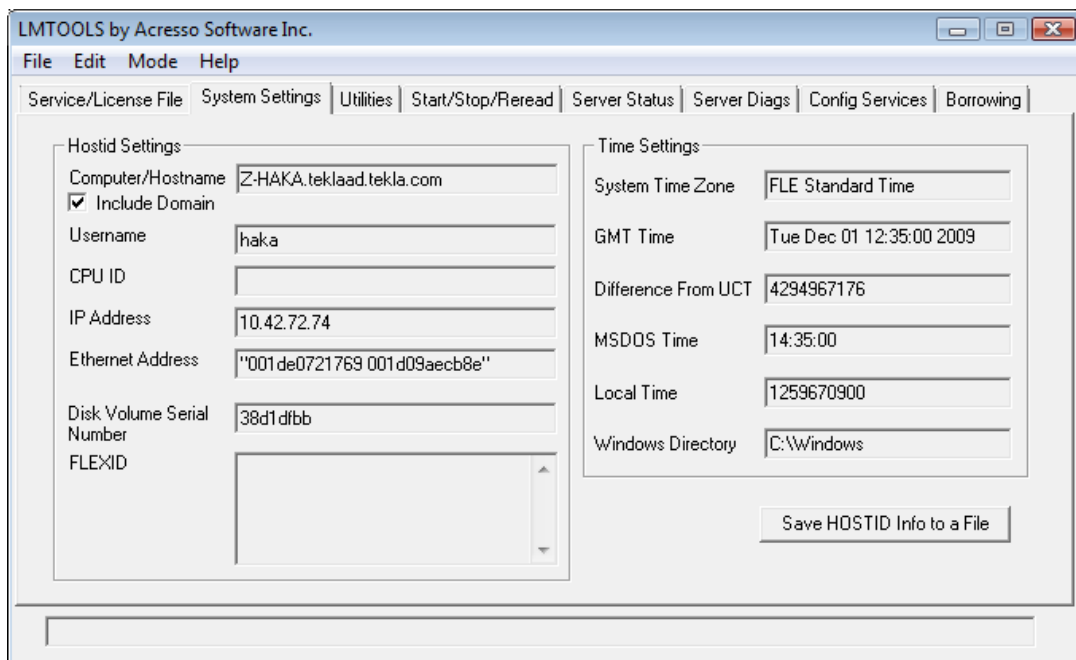
To start **LMTTOOLS**, click **Start --> All Programs --> Tekla Structures Licensing --> LMTTOOLS**.

9.1 Service/License File tab



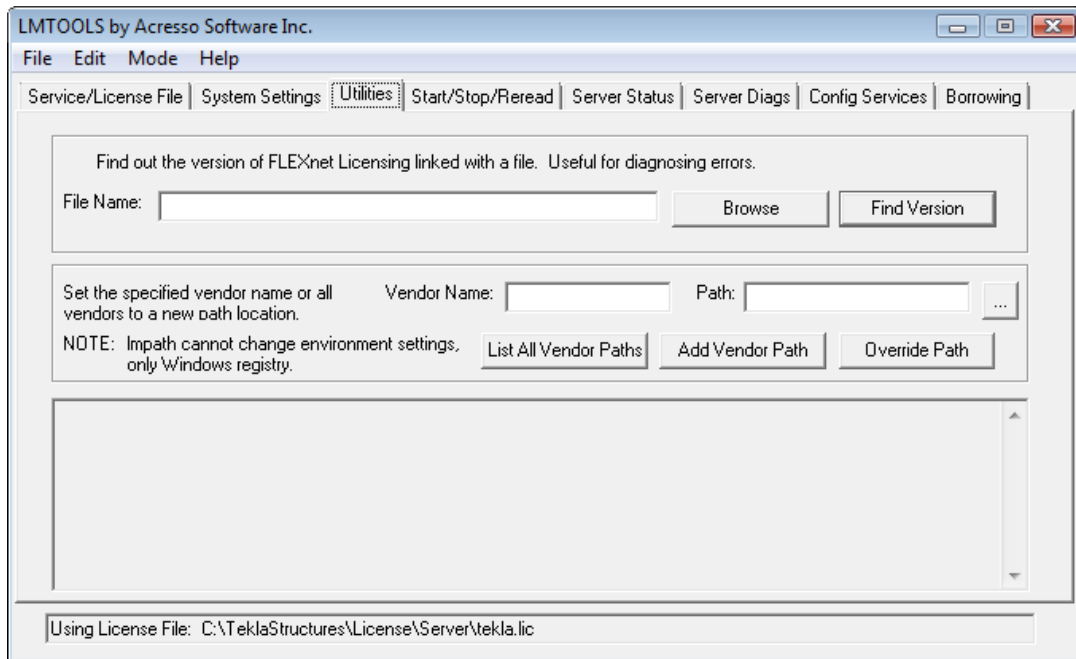
You must always have **Configuration using Services** and **Tekla Structures Licensing Service** selected on the **Service/License File** tab when you manage Tekla Structures licenses. These options are selected by default during the installation of the Tekla Structures license server. If you need to configure the license server manually, see [Configuring Tekla Structures license server manually on page 69](#).

9.2 System Settings tab



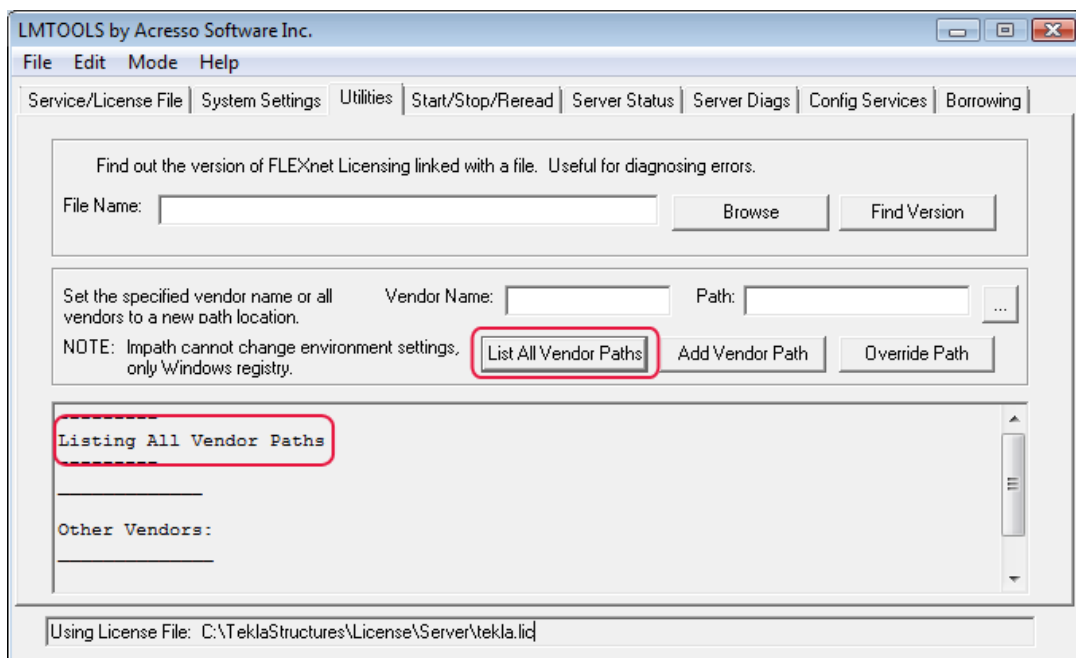
The **System Settings** tab displays common device and operating system information about the computer on which you are running **LMTOOLS**. All the relevant information on licensing is available. For example, you can check the host name of your server computer.

9.3 Utilities tab



You can affect on the information that is displayed in the status list in the **Server Status** tab by defining values on the **Utilities** tab. By default, the status list displays information on all the license servers you are connected to.

The **List All Vendor Paths** button lists all the licensing services that are displayed in more detail in the status list on the **Server Status** tab.



To add a licensing service to be listed in the status list, enter the vendor information in the **Vendor Name** and **Path** text boxes and click **Add Vendor Path**.



The vendor name that is used for Tekla Structures license server is `tekla` (all letters lowercase).

If you want the status list to display information only on certain license servers, enter the vendor information in the **Vendor Name** and **Path** text boxes and then click **Override Path** to replace the existing license servers displayed in the status list.

LMTOOLS by Acresto Software Inc.

File Edit Mode Help

Service/License File | System Settings | Utilities | Start/Stop/Reread | Server Status | Server Diags | Config Services | Borrowing

Find out the version of FLEXnet Licensing linked with a file. Useful for diagnosing errors.

File Name: Browse Find Version

Set the specified vendor name or all vendors to a new path location.

Vendor Name: Path:

NOTE: Impath cannot change environment settings, only Windows registry.

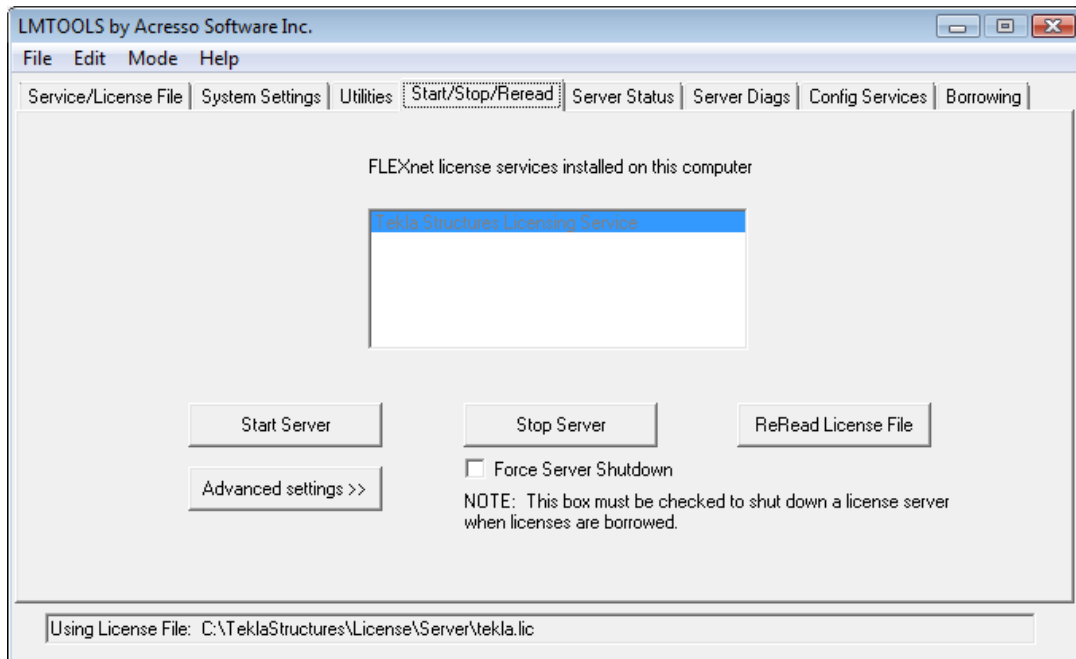
List All Vendor Paths Add Vendor Path Override Path

Override Vendor Path

New path for TEKLA_LICENSE_FILE: @localhost;27001@amme
Vendor name: tekla
Override path setting: @localhost;27001@amme

Using License File: C:\TeklaStructures\License\Server\tekla.lic

9.4 Start/Stop/Reread tab



The **Start/Stop/Reread** tab contains the buttons for stopping and starting the license server.



When you perform actions concerning the Tekla Structures license server, **Tekla Structures Licensing Service** must be active in **FlexNet license services installed on this computer** list. You can select **Tekla Structures Licensing Service** from the **Service Name** list on the **Config Services** tab.

Button	Description
Start Server	Starts the license server selected in the FlexNet license services installed on this computer list.
Stop Server	Stops the license server. When you click the button, the status bar displays the message Stopping the Server , and it takes a couple of seconds to stop the license server. The message does not change when the server is stopped.
ReRead License File	Updates the license server without stopping and starting it.

Advanced settings When you click **Advanced settings**, three advanced options are displayed.

Start Server Options

☐ Restrict lmdown to work only from node where lmgrd is running.

☐ Disable lmdown utility, use task manager.

☐ Disable 'lmremove' of license file.

Option	Description
Restrict lmdown to work only from node where lmgrd is running.	When this option is selected, you can stop the server only on the server computer. No-one can accidentally stop the license server on a client computer. We recommend that you use this option.
Disable lmdown utility, use task manager.	When this option is selected, you cannot stop the server in LMTTOOLS . The server can only be stopped in Windows Task Manager.
Disable 'lmremove' of license file.	This option is not in use in activation-based licensing.

9.5 Server Status tab

LMTTOOLS by Acrecco Software Inc.

File Edit Mode Help

Service/License File | System Settings | Utilities | Start/Stop/Reread | **Server Status** | Server Diags | Config Services | Borrowing

Helps to monitor the status of network licensing activities

Perform Status Enquiry

Options:

Individual Daemon

Individual Feature

Server Name

```

-----
Status
-----
Flexible License Manager status on Tue 12/1/2009 14:51

[Detecting lmgrd processes...]
License server status: 27000@localhost
  License file(s) on localhost: C:\TeklaStructures\License\Server\tekla.lic:

```

Using License File: C:\TeklaStructures\License\Server\tekla.lic

The **Server Status** tab displays the status of the license server and the licenses. Here you can check how many licenses are in use or borrowed.

To see the status of the license server and the licenses, click **Perform Status Enquiry**.



If you want to check the status of the Tekla Structures licenses only, enter **tekla** in the **Individual Daemon** box.

The status list displays the following information:

```
-----
Status
-----
Flexible License Manager status on Thu 7/10/2008 11:49

[Detecting lmgrd processes...]
License server status: 27001@amme
  License file(s) on amme: C:\TeklaStructures\License\Server\tekla.lic:

    amme: license server UP (MASTER) v11.4

Vendor daemon status (on amme):

  tekla: UP v11.4
Feature usage info:

Users of TeklaServer: (Total of 1 license issued; Total of 0 licenses in use)
Users of FUD-C: (Total of 10 licenses issued; Total of 8 licenses in use)
  "FUD-C" v14, vendor: tekla
  floating license

    ACTIVATED LICENSE(S) Z-PAL ACTIVATION (v14) (amme/27001 2879), start Fri 6/27 12:48
    ACTIVATED LICENSE(S) Z-elko2 ACTIVATION (v14) (amme/27001 4544), start Wed 7/9 19:19
    ACTIVATED LICENSE(S) Z-cro9 ACTIVATION (v14) (amme/27001 6979), start Mon 7/7 16:56
    alpo alpo1 alpo1 (v14) (amme/27001 5511), start Thu 7/10 10:50
    arto arto1 arto1 (v14.0) (amme/27001 2650), start Thu 7/10 11:01
    cahe cahe cahe (v14) (amme/27001 4127), start Thu 7/10 9:53
    frwa frwa2 frwa2 (v14) (amme/27001 3596), start Thu 7/10 10:44
    haka haka1 haka1 (v14.0) (amme/27001 6485), start Thu 7/10 8:11

Users of PCD-C: (Total of 10 licenses issued; Total of 4 licenses in use)
Users of VIE-C: (Total of 8 licenses issued; Total of 0 licenses in use)
```

Information on license server

```
-----
Status
-----

Flexible License Manager status on Thu 7/10/2008 11:49

[Detecting lmgrd processes...]
License server status: 27001@amme ①
    License file(s) on amme: C:\TeklaStructures\License\Server\tekla.lic:
    amme: license server UP (MASTER) v11.4 ②

Vendor daemon status (on amme):

    tekla: UP v11.4 ③
Feature Usage Info: ④

Users of TeklaServer: (Total of 1 license issued; Total of 0 licenses in use)
```

- ① The license server port@host.
- ② The license server is up and running.
- ③ License server with Tekla Corporation identity is up and running.
- ④ A default value for TeklaServer displayed in every status check.

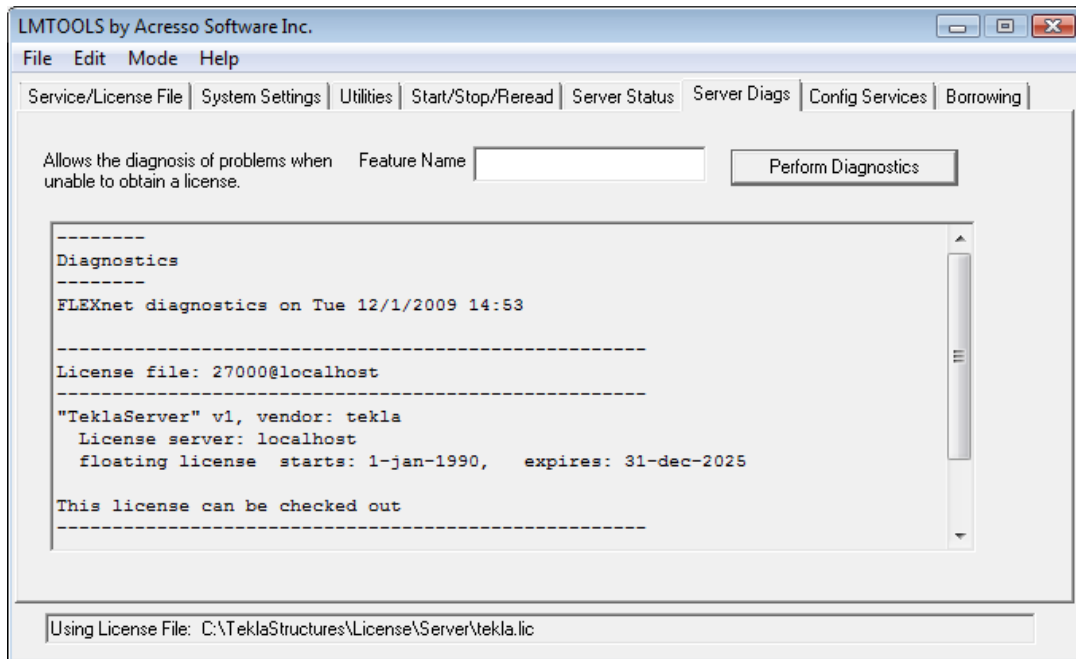
Information on licenses

```
Users of FUD-C: (Total of 10 licenses issued; Total of 8 licenses in use)
① "FUD-C" v14, vendor: tekla ② floating license ③
    ACTIVATED LICENSE(S) Z-PAL ACTIVATION (v14) (amme/27001 2879), start Fri 6/27 12:48 ④ ⑤ ⑥ ⑦
    ACTIVATED LICENSE(S) z-elko2 ACTIVATION (v14) (amme/27001 4544), start wed 7/9 19:19
    ACTIVATED LICENSE(S) z-cro9 ACTIVATION (v14) (amme/27001 6979), start Mon 7/7 16:56
    alpo alpo1 alpo1 (v14) (amme/27001 5511), start Thu 7/10 10:50
    arto arto1 arto1 (v14.0) (amme/27001 2650), start Thu 7/10 11:01
    cahe cahe cahe (v14) (amme/27001 4127), start Thu 7/10 9:53
    frwa frwa2 frwa2 (v14) (amme/27001 3596), start Thu 7/10 10:44
    haka haka1 haka1 (v14.0) (amme/27001 6485), start Thu 7/10 8:11
    ⑧ ⑨ ⑩ ⑪
Users of PCO-C: ⑫ (Total of 10 licenses issued; Total of 0 licenses in use)
Users of VIE-C: (Total of 8 licenses issued; Total of 0 licenses in use)
```

- ① On which configuration the information of licenses is displayed. In this case, Full Detailing.

- ② The number of activated licenses on the license server.
- ③ The number of the licenses in use; checked out from the license server or borrowed.
- ④ A borrowed license.
- ⑤ On which computer the license was borrowed.
- ⑥ Tekla Structures license version.
- ⑦ Time when the license was borrowed.
- ⑧ Licenses checked out from the license server.
- ⑨ On which computer and display the user has checked the license out. In this case, the user is haka, the computer and display are haka1.
- ⑩ The license server from where the license is checked out.
- ⑪ Time when the Tekla Structures session was started.
- ⑫ Usage of licenses of other configurations. In this case, Precast Concrete Detailing.

9.6 Server Diags tab



On the **Server Diags** tab, you can see same kind of information as in **Tekla Structures License Administration Tool**. For more details on the license information displayed in **Tekla**

Structures License Administration Tool, see [License information on Tekla Structures License Administration Tool on page 26](#).

Click **Perform Diagnostics** to display the diagnostics.

The server diagnostics displays the following information:

```
-----
Diagnostics
-----
FLEXnet diagnostics on Tue 6/24/2008 08:17

-----
License file: 27000@localhost ①
-----
② "TeklaServer" v1, vendor: tekla
   License server: localhost
   floating license starts: 1-jan-1990, expires: 31-dec-2025

This license can be checked out
-----
③ "VIE-C" ④ v14, vendor: tekla
   License server: localhost ⑤
   floating license starts: 1-jan-1990, ⑥ no expiration date
   TS_OK: Checkout permitted when client is using terminal client

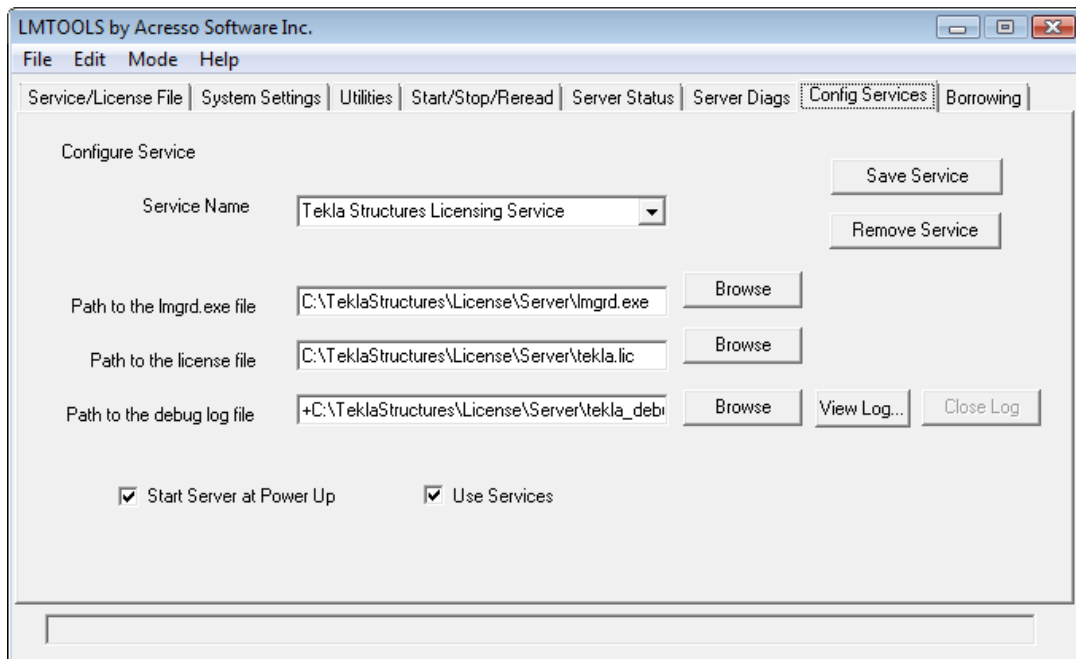
This license can be checked out
-----
```

- ① The license server port@host.
- ② Common information for all Tekla Structures license server installations.
- ③ On which configuration the information is displayed. In this case, Viewer.
- ④ Tekla Structures license version.
- ⑤ The license server host.
- ⑥ The expiration date of the license. In this case, the license is permanent.



If you have problems with the license server, send a copy of the `tekla_debug.log` file to your local Tekla Structures helpdesk. The information on the **Server Diags** tab is not detailed enough to aid in problem cases.

9.7 Config Services tab



The values on the **Config Services** tab are entered automatically during the installation of the Tekla Structures license server. However, if you encounter problems during the installation and the license server does not start automatically, you need to configure the settings manually. For more information, see [Configuring Tekla Structures license server manually on page 69](#).



Whenever you make modifications or perform any actions in **LMTOOLS** concerning the Tekla Structures license server, you need to have **Tekla Structures Licensing Service** selected in the **Service Name** list box.

9.8 Borrowing tab

LMTTOOLS by Acreesso Software Inc.

File Edit Mode Help

Service/License File | System Settings | Utilities | Start/Stop/Reread | Server Status | Server Diags | Config Services | **Borrowing**

To borrow licenses (with applications and licenses that support borrowing):
(1) Enter the date (and optionally time) you want the licenses to be returned.
(2) Use all applications you want to borrow while you're on the network.
(3) Disconnect.
Borrow expires on the date and time specified, or end-of-day, if no time is specified.

Vendor Name:

Return Date: dd-mm-yyyy Return Time: hh:mm

Display Name: (optional) Feature Name:



Use **Tekla Structures License Borrow Tool** for borrowing Tekla Structures licenses. Do not use the **Borrowing** tab of **LMTTOOLS** with Tekla Structures licenses.

10 Managing license access rights

A license server administrator can define user groups with different access rights by modifying the options file. For example, a license server administrator can allow or block certain configurations for certain users and allow or deny the usage of license borrowing.



If you use the options file for managing license access rights, you must export the product ID file to be able to borrow licenses. For more information, see [Exporting the product ID file on page 32](#).

10.1 Modifying the options file

To define users and user groups with different access rights, you need to modify the options file. The `tekla.opt` file is installed in the `..\TeklaStructures\License\Server` folder.

To modify the options file:

1. Open the `..\TeklaStructures\License\Server` folder.
2. Open the `tekla.opt` file with a text editor.
3. Enter your definitions of license access rights and restrictions.
4. Save the changes and close the text editor.
5. Click **Start** --> **All Programs** --> **Tekla Structures Licensing** --> **LMTTOOLS** to open **LMTTOOLS**.
6. Go to the **Start/Stop/Reread** tab and click the **ReRead License File** button to update the changes in the license file.

Basic rules for modifying the options file

The basic rules for modifying the options file are the following:

- Define user groups and host groups first, if needed. You need to use Windows user names and host names or IP addresses of computers when you define the users, hosts and the groups of hosts or users.
- Enter one definition per row. A definition consists of the following things:
 - an options keyword that defines the actions
 - a feature, such as a configuration, that is affected by the keyword
 - the type that is affected by the keywordThe options are: GROUP, HOST, HOST_GROUP, and USER.
- the name of the user, user group, host, or host group that is affected by the keyword



You can use the host names or IP addresses of the computers with the HOST and HOST_GROUP keywords.

- Use the proper abbreviations of configurations when you define access rights or limitations for the configurations.
- To disable a row in the options file, enter # in the beginning of the row.
- Note that the options file is case sensitive.

See also [Examples of options file definitions on page 55](#)

[Keyword list on page 53](#)

[Configuration list on page 54](#)

Keyword list

The following table lists the most common keywords that are used for defining license access rights and restrictions.

Keyword	Description	Usage information
EXCLUDE	Deny access to a Tekla Structures configuration.	Use with the abbreviation of the configuration.
EXCLUDE_ENTITLEMENT	Deny the right to borrow a license.	Use with the activation ID of the license.
EXCLUDEALL	Deny access to all Tekla Structures configurations.	

Keyword	Description	Usage information
GROUP	Define a user group for use with any options.	Use with Windows user names (separated with spaces).
HOST_GROUP	Define a host group for use with any options.	Use with computer host names or IP addresses (separated with spaces).
INCLUDE	Allow a user to use a Tekla Structures configuration.	Use with the abbreviation of the configuration.
INCLUDE_ENTITLEMENT	Allow a user to borrow a license.	Use with the activation ID of the license.
INCLUDEALL	Allow a user to use all Tekla Structures configurations.	
MAX	Limit the usage of a configuration	Use with the number of licenses and the abbreviation of the configuration.
RESERVE	Reserve licenses for a user or a group of users/hosts.	Use with the number of licenses and the abbreviation of the configuration.



When somebody is allowed to use a configuration with the `INCLUDE` keyword, other users are automatically denied the right to use the configuration.

When somebody is denied to use a configuration with the `EXCLUDE` keyword, other users are automatically allowed to use the configuration.

If no rules exist, everybody is allowed to use the configuration.

See also [Examples of options file definitions on page 55](#)

Configuration list

When you define access rights for different configurations, you need to use the proper abbreviations of the configurations. The following table lists the abbreviations and the configurations.

Abbreviation	Configuration
CM-C	Construction Modeling
DEV-C	Developer
DFR-C	Drafter
EDU-C	Educational
FUD-C	Full

Abbreviation	Configuration
PCD-C	Precast Concrete Detailing
RCD-C	Cast in Place
SDE-C	Engineering
STD-C	Steel Detailing
STD-L-C	Primary
VIE-C	Project Viewer

10.2 Examples of options file definitions

Examples of keywords usage are presented below:

Options file definition	Description
INCLUDE PCD-C USER scarlett	Only the user scarlett is allowed to use the Precast Concrete Detailing configuration.
EXCLUDE FUD-C USER justin	The user justin is not allowed to use the Full configuration. Other users are allowed to use the Full configuration.
GROUP tsusers jessica joe neil INCLUDEALL GROUP tsusers	The users jessica , joe and neil belong to the group tsusers . Only the group tsusers is allowed to use all configurations.
EXCLUDEALL HOST pcrobert	No configuration is allowed to be used on the computer pcrobert .
INCLUDE_ENTITLEMENT qwer-1234-asdf-5678-zx USER gwen	Only the user gwen is allowed to borrow a license whose activation ID is qwer-1234-asdf-5678-zx .
EXCLUDE_ENTITLEMENT rtyu-9876-fghj-5432-cv USER matt	The user matt is not allowed to borrow a license whose activation ID is rtyu-9876-fghj-5432-cv .
GROUP students amy chloe andy dean MAX 3 EDU-C GROUP students	The users amy , chloe , andy , and dean belong to the group students . The limit to the usage of the Educational configuration for the group students is three licenses.
RESERVE 1 RCD-C USER vera	One license of the Cast in Place configuration is reserved for the user vera .
INCLUDE VIE-C:VENDOR_STRING=Enterprise USER john	Only the user john is allowed to use the Project Viewer configuration which is of type Enterprise .

11 Troubleshooting

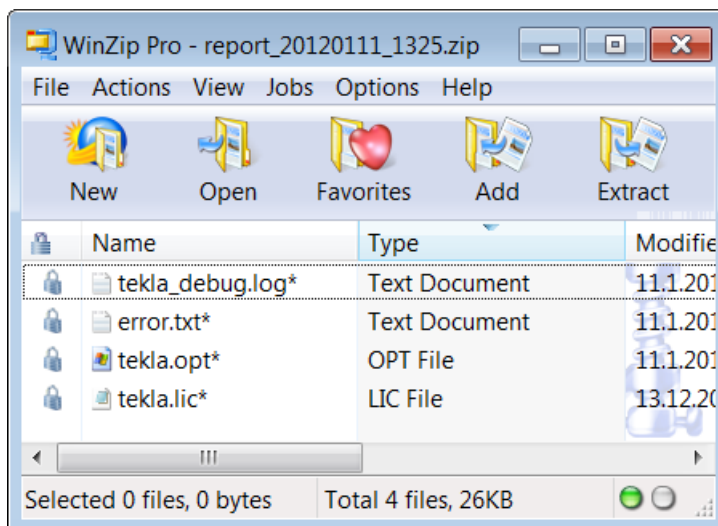
This chapter provides solutions to common errors encountered in installing and maintaining the Tekla Structures license server.

11.1 Error reports in license activation and deactivation

If you have problems with activating or deactivating licenses, **Tekla Structures License Administration Tool** displays an error message in the **Activating License(s)** or **Deactivating License(s)** dialog box.

You can view a more descriptive error report by clicking the **View...** button.

Tekla Structures License Administration Tool automatically creates a package of all necessary files that are required for diagnosing the problem. Click the **Browse...** button to view the folder containing the error report package. You can send the package to your local Tekla Structures helpdesk to get help.



Error codes The error codes presented later in this chapter refer to the codes in the error report (error.txt).

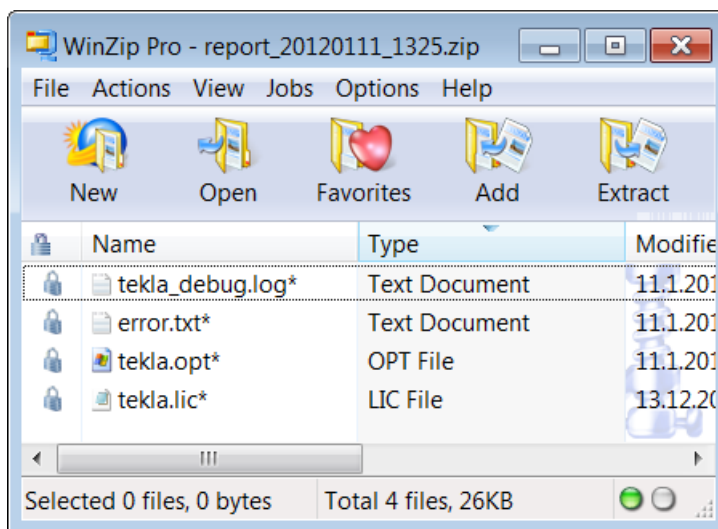
See also [License activation on page 59](#)
[License deactivation on page 63](#)

11.2 Error reports in license borrowing

If you have problems with borrowing licenses or returning borrowed licenses, **Tekla Structures License Borrow Tool** displays an error message in the **Borrowing License(s)** or **Returning Borrowed License(s)** dialog box.

You can view a more descriptive error report by clicking the **View...** button.

Tekla Structures License Borrow Tool automatically creates a package of all necessary files that are required for diagnosing the problem. Click the **Browse...** button to view the folder containing the error report package. You can send the package to your local Tekla Structures helpdesk to get help.



Error codes The error codes presented later in this chapter refer to the codes in the error report (`error.txt`).

11.3 Solutions to common problems

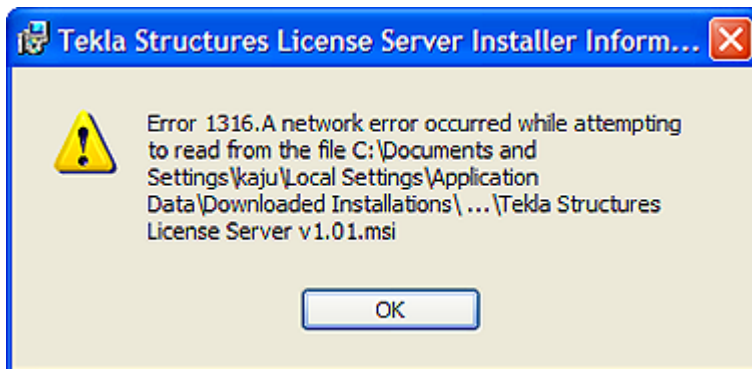
This section provides solutions to common problems encountered in the following actions:

- [License server installation on page 58](#)
- [License activation on page 59](#)
- [License borrowing on page 61](#)
- [License deactivation on page 63](#)
- [License general usage on page 63](#)

- [LMTTOOLS usage on page 65](#)
- [Starting Tekla Structures on page 67](#)
- [Options file usage on page 69](#)
- [Allowing Tekla Structures license server to operate through firewall on page 73](#)
- [License repairing on page 84.](#)

License server installation

Case

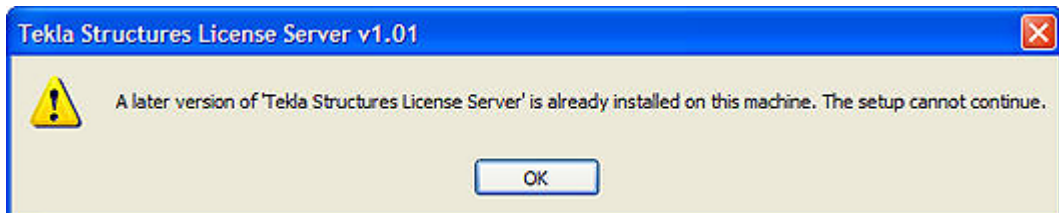


Problem: License server installation fails.

Reason: You have an older version of the license server installed.

Solution: Uninstall the old version and then install the new version of the license server.

Case



Problem: License server installation fails.

Reason: You have a newer version the license server installed.

Solution: You should not install an old version of the license server. Check the latest available license server release on the [Tekla Downloads](#) product download page.

If you need to use an older version of the license server for some reason, uninstall the newer version on your computer before installing the older version.

Case Problem: License server installation does not finish (no error message).

Reason: Another software using the FlexNet licensing system is running on the computer.

Solution: Stop all the licensing services in **LMTTOOLS**, then install the Tekla Structures license server and restart the licensing services you stopped earlier.

License activation

Case Error code: (50040)

Problem: License activation fails.

Reason: Your server was not able to connect to Tekla's activation server correctly. Usually this is a temporary problem in online activation.

Solution:

- Close **Tekla Structures License Administration Tool** and try to activate the license a while later.
- Try to activate another license.
- Contact your local Tekla Structures helpdesk and ask for a manual activation.

Case Error code: (50041)

Problem: License activation fails.

Reason: You do not have a connection to the activation server.

Solution: There are several things you need to check:

- Check that your Internet connection is working. An Internet connection is needed during license activation and deactivation. A low connection speed may also cause errors.
- Your firewall may block the activation communication. Check your firewall settings. For more information, see [IT resources check list on page 6](#).
- Your Windows login user name may contain special characters. Try to log in with another user name, for example, administrator.

If the problem still persists, contact your local Tekla Structures helpdesk for a manual activation workaround.

Case Problem: License activation fails and the following message is displayed: "Unable to activate more licenses than you are entitled to."

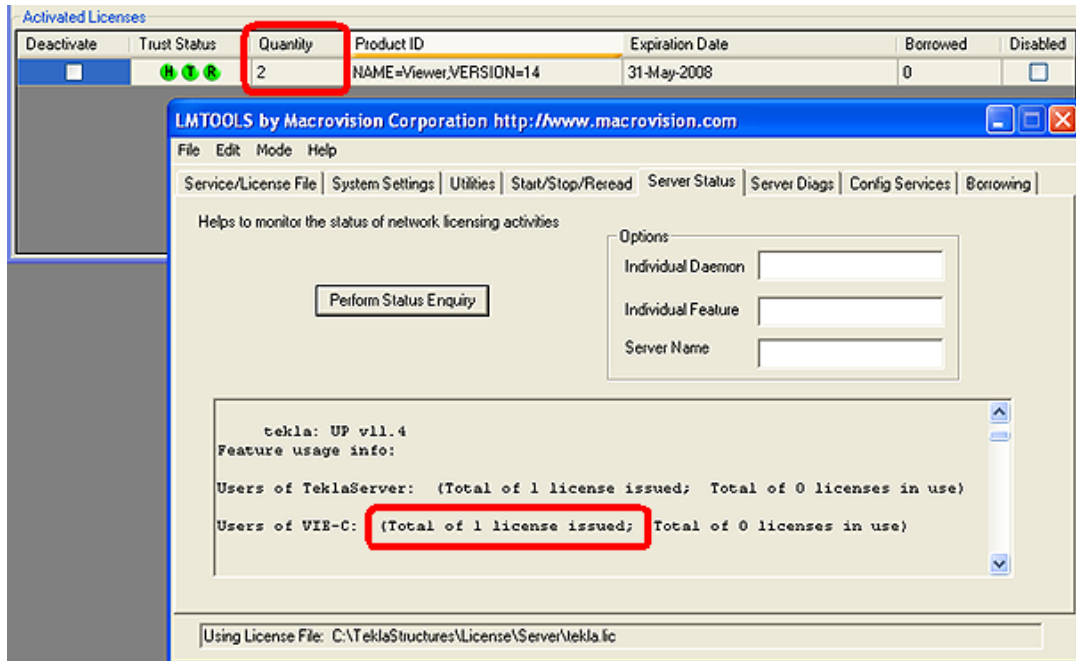
Reason: There are a couple of possible reasons for the problem:

- There may be activated licenses on another computer. You cannot activate more licenses than you are entitled to.
- You tried to activate a renewed temporary license or a permanent license without deactivating the previous temporary license.

Solution: There are two possible solutions:

- Deactivate a license on another computer and then activate the license on your computer.
- Deactivate the existing temporary license and then activate the succeeding linked license.

Case



Problem: The amount of activated licenses in Tekla Structures License Administration Tool and LMTTOOLS does not match.

Reason: The licensing service is not updated.

Solution: Reread the license file in LMTTOOLS. To do that, open LMTTOOLS, go to the **Start/Stop/Reread** tab and click **ReRead License File**.

If you are connected to several license servers, rereading the license file may not work. In that case, you need to stop the license server and then restart it.



To avoid the problem in the future, make sure the license server is automatically notified when you activate, deactivate, or repair licenses.

To enable the automatic notification functionality in Tekla Structures License Administration Tool, click **Notify Server**.

Case Problem: License activation fails, and the following message is displayed: "Only deployed entitlement line item can be fulfilled".

Reason: You are trying to activate an obsolete license.

Solution: You should have received a new entitlement certificate from your local Tekla Structures reseller. Try the activation again with the new entitlement certificate, and move the old obsolete entitlement certificate in the **Archive** folder.

Case Error code: (50005)

Problem: The activated licenses are not visible and it is not possible to activate new licenses. The following message is displayed: "Error fetching activated licenses. Initialization of API failed."

Reason: The installation package has failed to initialize or register some of the software components.

Solution:

1. Close **License Administration Tool**.
2. Stop Tekla Structures license server and other license servers on the same computer on the **LMTTOOLS** --> **Start/Stop/Reread** tab.
3. Go to `..\TeklaStructures\License\Server` folder.
4. Double-click **installanchorservice.exe**.
5. Start Tekla Structures license server and other license servers on the same computer on the **LMTTOOLS** --> **Start/Stop/Reread** tab.

Open **License Administration Tool**. The message should not be displayed anymore.

License borrowing

Case Problem: Unable to select a date from the calendar in the **Borrow Until** box.

Reason: The maximum borrowing period is one month.

Solution: Select a date that is within one month from the date of borrowing.

Case Error code: (50041)

Problem: License borrowing fails.

Reason: You are not connected to the license server.

Solution: There are several things you need to check:

- Check that your network connection is working.
- Restart **Tekla Structures License Borrow Tool** and check that you have entered the correct license server information in the **Borrow from License Server** dialog box.

Case Error code: (50035)

Problem: License borrowing fails.

Reason: You tried to borrow a license that is not activated on the license server.

Solution: There are several things you need to check:

- Check that your exported product ID file is up to date. If not, export a new product ID file in **Tekla Structures License Administration Tool** and use the file for borrowing.
- Check that your license information is up to date in **LMTTOOLS**. If not, reread the license file.

Case Error code: (50036)

Problem: License borrowing fails.

Reason: You are not allowed to borrow the license.

Solution: Do one of the following:

- Modify the options file to allow the borrowing of the license.
- Borrow another license.

Case Error code: (50018)

Problem: License borrowing fails.

Reason: The options file is in use but an exported product ID file is not used for license borrowing.

Solution: Do one of the following:

- Export an product ID file in **Tekla Structures License Administration Tool** and use the file for borrowing.
- Disable the options file. To disable the options file, open the `tekla.opt` file with a text editor and enter # in the beginning of each row. Then save the changes and reread the license file in **LMTTOOLS**.

Case Error code: (50033)

Problem: License borrowing fails.

Reason 1: Your license server may not be up to date.

Solution 1: In **LMTTOOLS**, stop and then restart the server.

Reason 2: The `INCLUDE` keyword in the options file prevents the borrowing of the configuration.

Solution 2: You need to add a dummy user into the group of the included users to enable the borrowing. Do the following:

1. Open `tekla.opt` using a text editor.
2. Add "ACTIVATED LICENSE(S)" in the group of the included users, for example:

```
GROUP steel "ACTIVATED LICENSE(S)" user1 user2 user3 user4
INCLUDE STD-C GROUP steel
```
3. Save the changes in `tekla.opt`.
4. In **LMTTOOLS**, stop the server, restart the server, and reread the license file.

Case Error code: (50037)

Problem: License returning fails.

Reason: You tried to return the license to a different license server where it was borrowed from.

Solution: You need to return the license to the same license server where it was borrowed from. Do the following:

1. Restart **Tekla Structures License Borrow Tool**.

2. In the **Borrow from License Server** dialog box, enter the name of the license server where you originally borrowed the license from. Click **OK**.
3. Return the license.

License deactivation

Case Error code: (50041)

Problem: License deactivation fails.


Reason: You do not have a connection to the activation server.

Solution: There are several things you need to check:

- Check that your Internet connection is working. An Internet connection is needed during license activation and deactivation. A low connection speed may also cause errors.
- Your firewall may block the activation communication. Check your firewall settings. For more information, see [IT resources check list on page 6](#).

If the problem still persists, contact your local Tekla Structures helpdesk for a manual activation workaround.

Case

Activated Licenses						
Deactivate	Trust Status	Quantity	Product ID	Expiration Date	Borrowed	Disabled
<input type="checkbox"/>		1	NAME=Viewer,VE...	31-May-2008	1	<input type="checkbox"/>

Problem: Unable to select a license for deactivation.

Reason: You cannot select a license for deactivation if the license is borrowed.

Solution: Return the license and then deactivate the license.

Case Problem: License deactivation fails, and the following message is displayed: "The return of the fulfillment is denied by the return policy because max return exceeded".

Reason: You have deactivated the license too many times in a 30 days period.

Solution: You can deactivate the license again when 30 days have passed since the first deactivation of the license in the time period. The number of deactivations of a license within a given time period is limited due to technical and security reasons.

Case Problem: License activation fails, and the following message is displayed: "Only deployed entitlement line item can be fulfilled".

Reason: You are trying to activate an obsolete license.

Solution: You should have received a new entitlement certificate from your local Tekla Structures reseller. Try the activation again with the new entitlement certificate, and move the old obsolete entitlement certificate in the **Archive** folder.

License general usage

Case



Problem: A license cannot be used.

Reason: The **Restore** trust status of your license is not trusted. Your backup system may have overwritten some licensing information.

Solution: You need to repair the license. For more information, see [License repairing on page 84](#).



We recommend that you configure your system backup settings so that the existing licensing software, tools and files are not automatically overwritten or replaced with the restored ones.

Case



Problem: A license cannot be used.

Reason: The **Host** trust status of your license is not trusted. Hardware setup of your server computer has changed radically.

Solution: You need to repair the license. For more information, see [License repairing on page 84](#).



We recommend that you run your license server on a proper server computer that is regularly maintained. You need to deactivate your licenses before performing any maintenance actions on your server computer. However, unnecessary deactivations should be avoided due to technical and security reasons.

Case



Problem: A license cannot be used.

Reason: The **Time** trust status of your license is not trusted. Time settings of your server computer have changed radically.

Solution: You need to repair the license. For more information, see [License repairing on page 84](#).



Do not manipulate system clock settings of your server computer.

LMTTOOLS usage

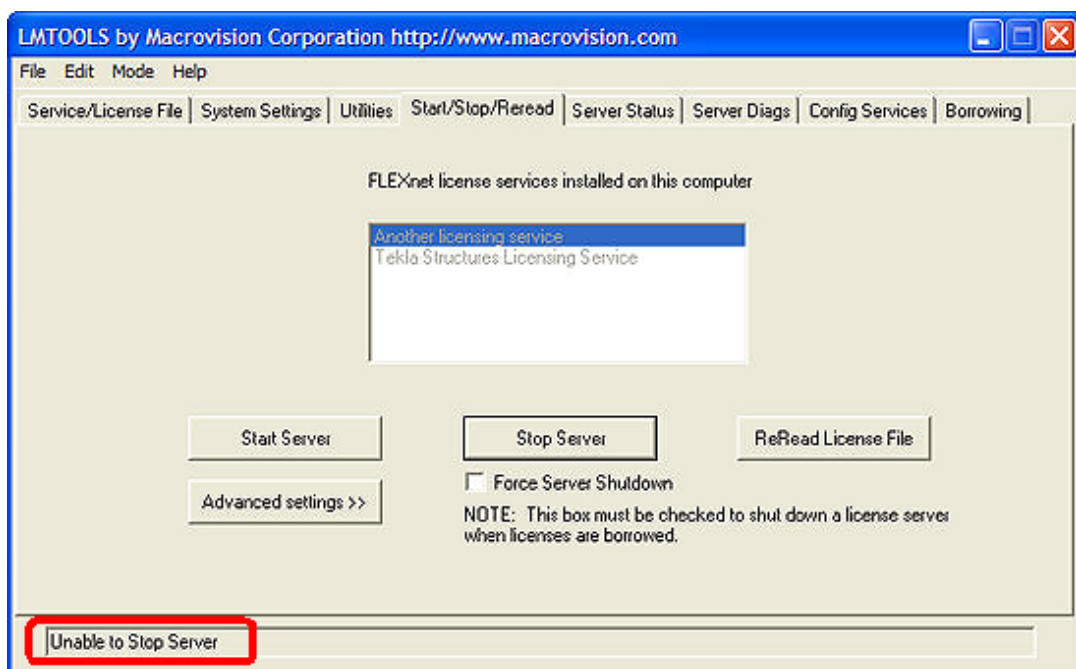
Case Problem: Rereading the license file does not take effect.

Reason: Rereading the license file does not work if you are running a licensing service locally on your laptop and you are connected to another license server at the same time.

Solution: You need to stop and restart the licensing service. Do the following:

1. Open **LMTTOOLS** and go to the **Start/Stop/Reread** tab.
2. Click **Stop Server** and wait a few seconds for the service to stop.
3. Click **Start Server**.

Case



Problem: LMTTOOLS is unable to stop the license server.

Reason: You may have selected an incorrect licensing service.

Solution: You need to select **Tekla Structures Licensing Service** as the licensing service. Do the following:

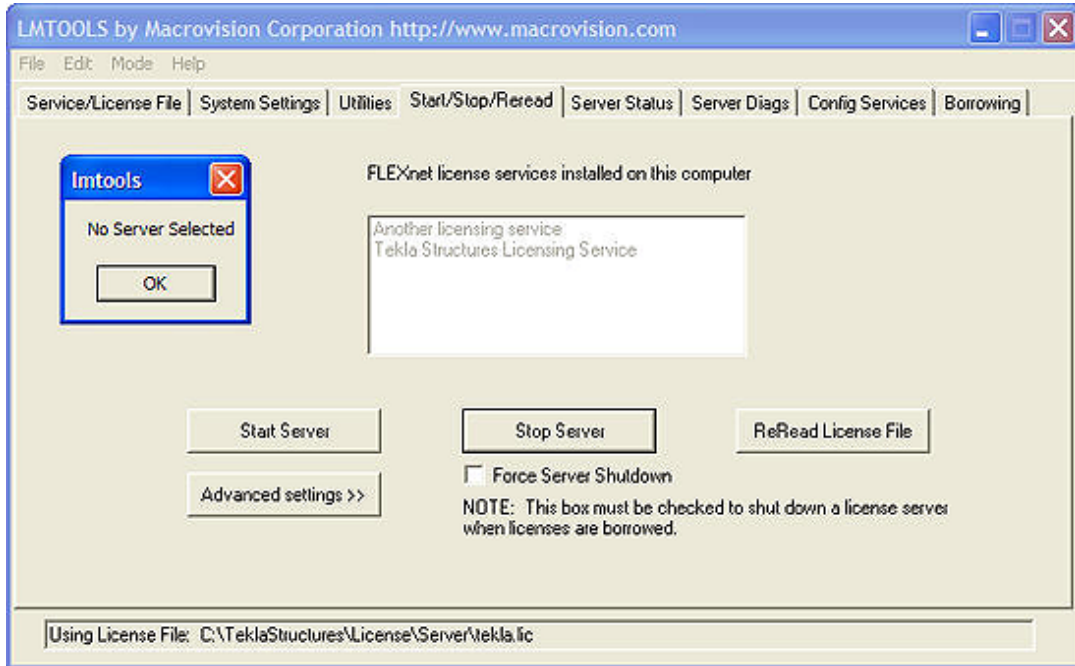
1. Open **LMTTOOLS** and go to the **Config Services** tab.
2. Select **Tekla Structures Licensing Service** in the **Service Name** box.
3. Go to the **Start/Stop/Reread** tab and click **Stop Server**.

Case Problem: LMTTOOLS is unable to stop the license server.

Reason: You did not run **LMTTOOLS** with administrator rights.

Solution: Run **LMTTOOLS** with administrator rights. For more information, see [Running applications with administrator rights on page 8](#).

Case



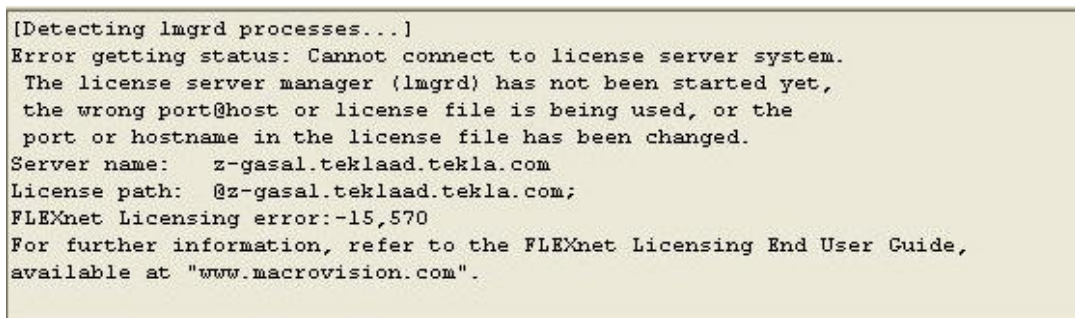
Problem: Starting or stopping the server or rereading the license file cannot be performed.

Reason: You have not selected the licensing service.

Solution: You need to select **Tekla Structures Licensing Service** as the licensing service. Do the following:

1. Open **LMTTOOLS** and go to the **Config Services** tab.
2. Select **Tekla Structures Licensing Service** in the **Service Name** box.

Case



Problem: Starting or stopping the server or rereading the license file cannot be performed. The status list in **LMTTOOLS** indicates that the license server manager (lmgrd) has not been started.

Reason: **LMTTOOLS** points to the wrong lmgrd.

Solution: You need to modify the settings in **LMTTOOLS**. Do the following:

1. Open **LMTTOOLS** and go to the **Config Services** tab.
2. Select **Tekla Structures Licensing Service** in the **Service Name** box.

3. Click **Browse** to locate the `lmgrd.exe` file. By default, the file is installed in the `..\TeklaStructures\License\Server` folder.
4. Click **Save Service**.
5. Go to the **Start/Stop/Reread** tab and click **Stop Server**.
6. Click **Start Server** to restart the server. The changes come into effect.

Case

```
Error getting status: Cannot find license file.
The license files (or license server system network addresses) attempted are
listed below. Use LM_LICENSE_FILE to use a different license file,
or contact your software provider for a license file.
Filename:      ..\adm\license.dat
License path:  @localhost;..\adm\license.dat;
FLEXnet Licensing error:-1,359. System Error: 2 "No such file or directory"
For further information, refer to the FLEXnet Licensing End User Guide,
available at "www.macrovision.com".
```

Problem: LMTTOOLS does not show the licensing service status.

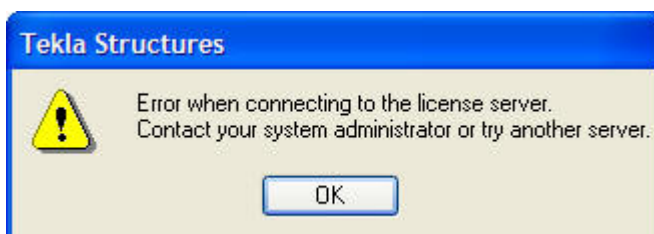
Reason: You are trying to perform a status enquiry of a licensing service that is not running.

Solution: You need to start **Tekla Structures Licensing Service**. Do the following:

1. Open LMTTOOLS and go to the **Start/Stop/Reread** tab.
2. Check that **Tekla Structures Licensing Service** is selected and click **Start Server**.

Starting Tekla Structures

Case



Problem: Tekla Structures does not start.

Reason: You are not connected to the license server.

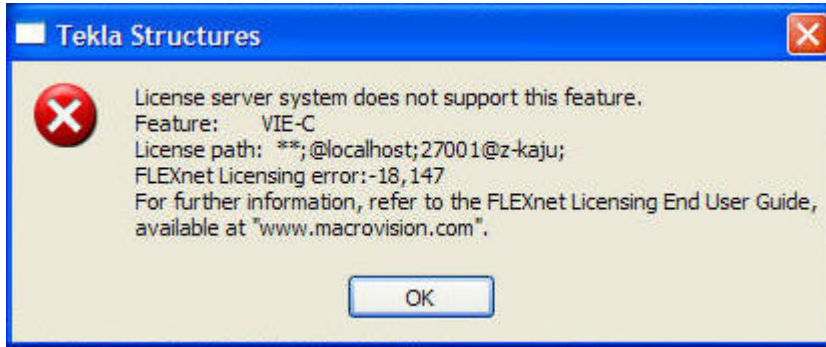
Solution: There are several things you need to check:

- Check that your network connection is working.
- Check that you have entered the license server name correctly.

See [Starting Tekla Structures with FlexNet licensing on page 24](#) for more information.

- Check that license information in LMTTOOLS is correct. If not, reread the license file in LMTTOOLS and try to start Tekla Structures again.

Case



Problem: Tekla Structures does not start.

Reason: Your license server may not be up to date.

Solution: Update the status of your license server. Do the following:

1. Start **LMTTOOLS** with administrator rights.
2. Go to the **Start/Stop/Reread** tab.
3. Click **Stop Server** and wait a couple of seconds.
4. Click **Start Server**.
5. Start Tekla Structures.

If the problem still persists, contact your local Tekla Structures helpdesk with a copy of the `tekla_debug.log` file.

Case



Problem: Tekla Structures occasionally does not start.

Reason: There may be communication problems between your license server and Tekla Structures user computers if the port of the license server is not defined.

Solution: Define the port for the license server. Do the following:

1. Stop the license server in **LMTTOOLS**.
2. On the server computer, define a free port for the license server in the `tekla.lic` file. For more information, see [Setting the TCP/IP port manually on page 20](#).

3. Restart the license server in **LMTTOOLS**.
4. Start Tekla Structures on a user computer.
5. In Tekla Structures, click **Tools --> Change License Server...** . Define the port and host name of the license server.
6. Close Tekla Structures.
7. Repeat steps 4 to 6 on all Tekla Structures user computers.

Options file usage

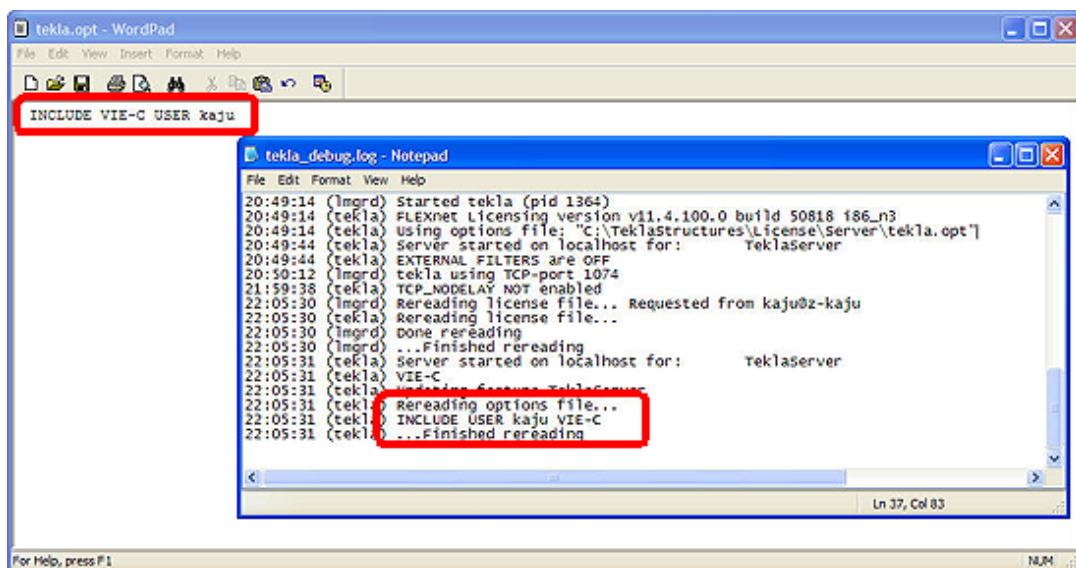
Case Problem: The `tekla.opt` file does not take effect.

Reason: The licensing service has not read the options file.

Solution: Do the following:

1. Open **LMTTOOLS**, go to the **Start/Stop/Reread** tab and click **ReRead License File**.
2. Open the `..\TeklaStructures\License\Server` folder and open the `tekla_debug.log` file and the `tekla.opt` file with a text editor.
3. Check that the `tekla_debug.log` file contains the same keyword syntaxes as the `tekla.opt` file.

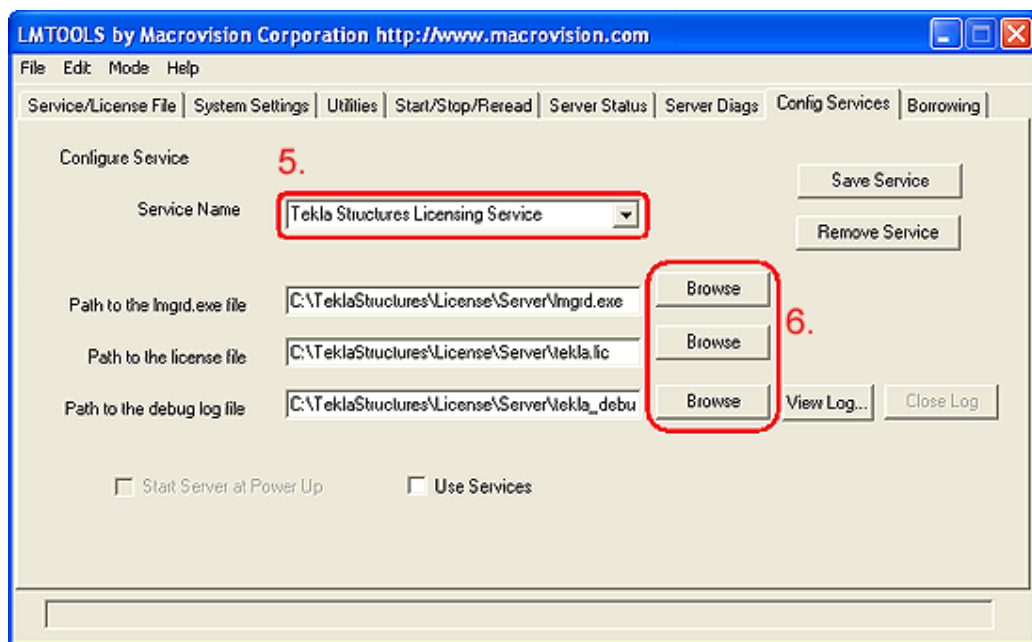
If this does not help, please contact your local support.



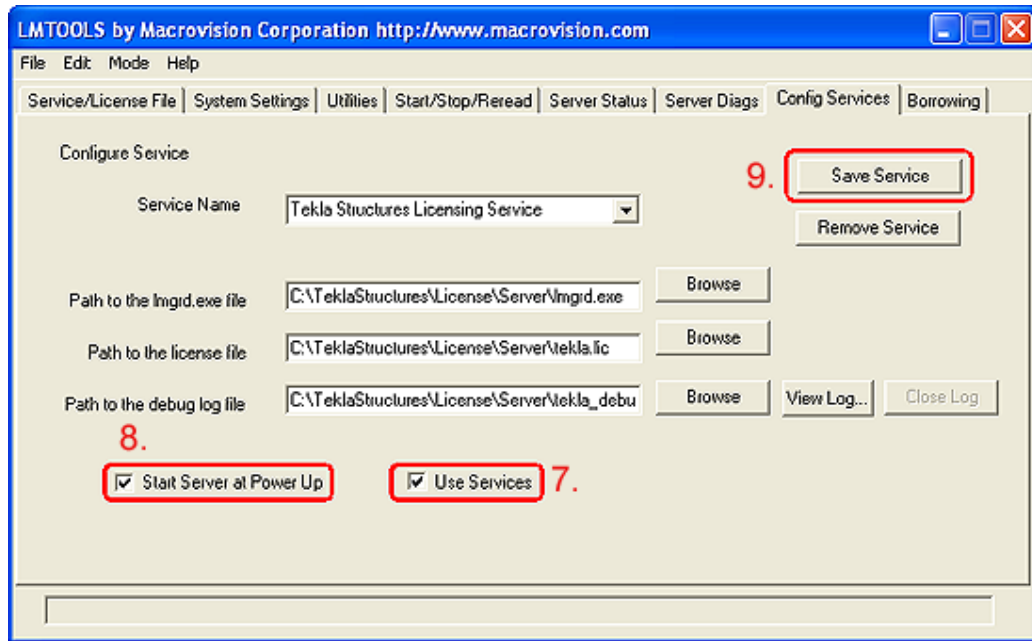
11.4 Configuring Tekla Structures license server manually

If you encounter problems during the Tekla Structures license server installation, it is possible that the license server does not start automatically. Then you need to configure the license server settings manually. To configure the settings:

1. With administrator rights, click **Start --> All Programs --> Tekla Structures Licensing --> LMTTOOLS**.
2. Go to the **Service/License File** tab.
3. Select **Configuration using Services**.
4. Go to the **Config Services** tab.
5. Click the **Service Name** box and enter the name of the service. For example, Tekla Structures Licensing Service.
6. Click the **Browse** buttons to locate the `lmgrd.exe`, `tekla.lic` and `tekla_debug.log` files. By default, the `lmgrd.exe` and `tekla.lic` files are installed in the `C:\TeklaStructures\License\Server` folder and the `tekla_debug.log` in the `+C:\TeklaStructures\License\Server` folder.



7. Select the **Use Services** check box to run the licensing service as a Windows service.
8. Select the **Start Server at Power Up** check box to start the licensing service automatically after powering up the computer.
9. Click **Save Service** to save the settings.



10. Go to the **Utilities** tab.

11. Enter `tekla` (all letters lowercase) in the **Vendor Name** box.

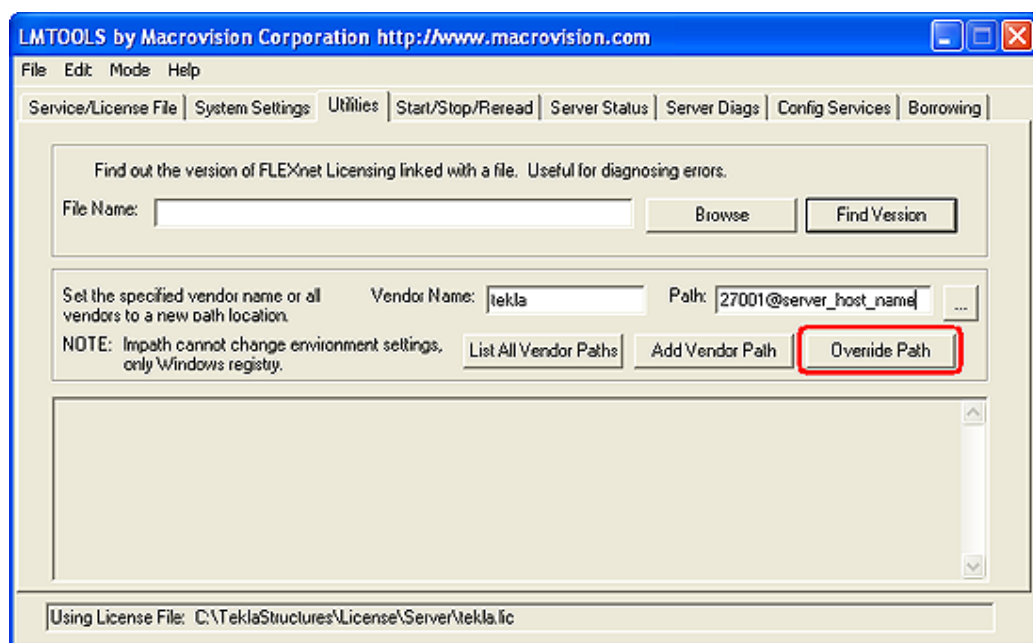
12. Enter the name of the license server in the **Path** box.

If you run the license server and Tekla Structures on the same computer, enter `@localhost`. You can also enter the TCP/IP port, for example, `27001@localhost`.

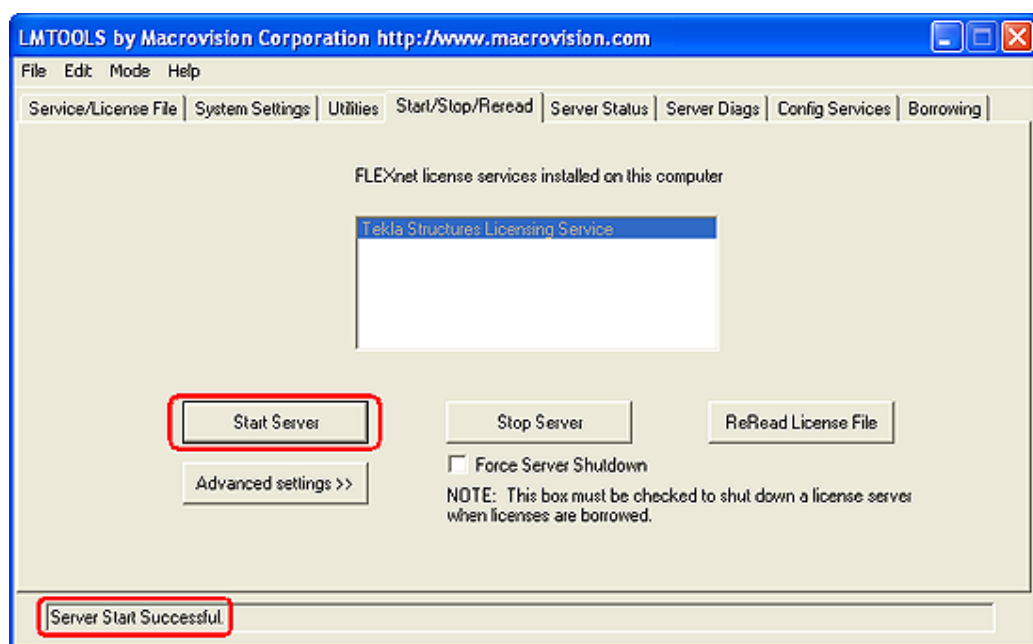
If you run the license server and Tekla Structures on separate computers, enter the host name of the license server, for example, `@server_host_name`. You can also enter the TCP/IP port of the license server, for example, `27001@server_host_name`.

You can also enter several license servers. Separate the server names with a semicolon. For example, `27001@server_host_name;27001@localhost`.

13. Click **Override Path**.

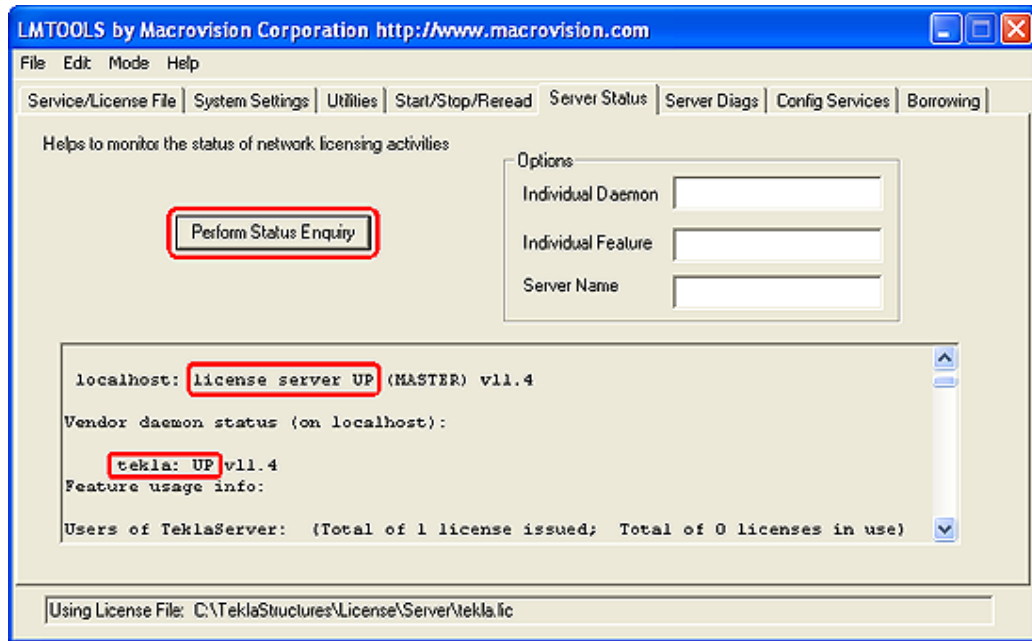


14. Go to the **Start/Stop/Reread** tab.
15. Click **Start Server**.



The status bar should display that server start was successful.

16. Go to the **Server Status** tab.
17. Click **Perform Status Enquiry**.



In the status list, the line `License server status` displays the TCP/IP port and host name of the license server. The list should indicate that license server is up and vendor daemon `tekla` is up. The list also displays all the activated licenses on the server.

11.5 Allowing Tekla Structures license server to operate through firewall

When you set up Tekla Structures license server in your network, you may also need to configure the firewall or antivirus settings.

The internal firewall of your company (for example, Windows Firewall) must allow the communication between the server computer and the computers with Tekla Structures. You must allow the applications `tekla.exe` and `lmgrd.exe` to operate through the firewall.

[Allowing exceptions for lmgrd.exe and tekla.exe on page 73](#) and [Allowing traffic in fixed TCP/IP ports on page 79](#) give information on how to modify the firewall settings so that the firewall allows Tekla Structures licensing traffic. The information given here applies to Windows Firewall as well as to other vendors' firewalls.

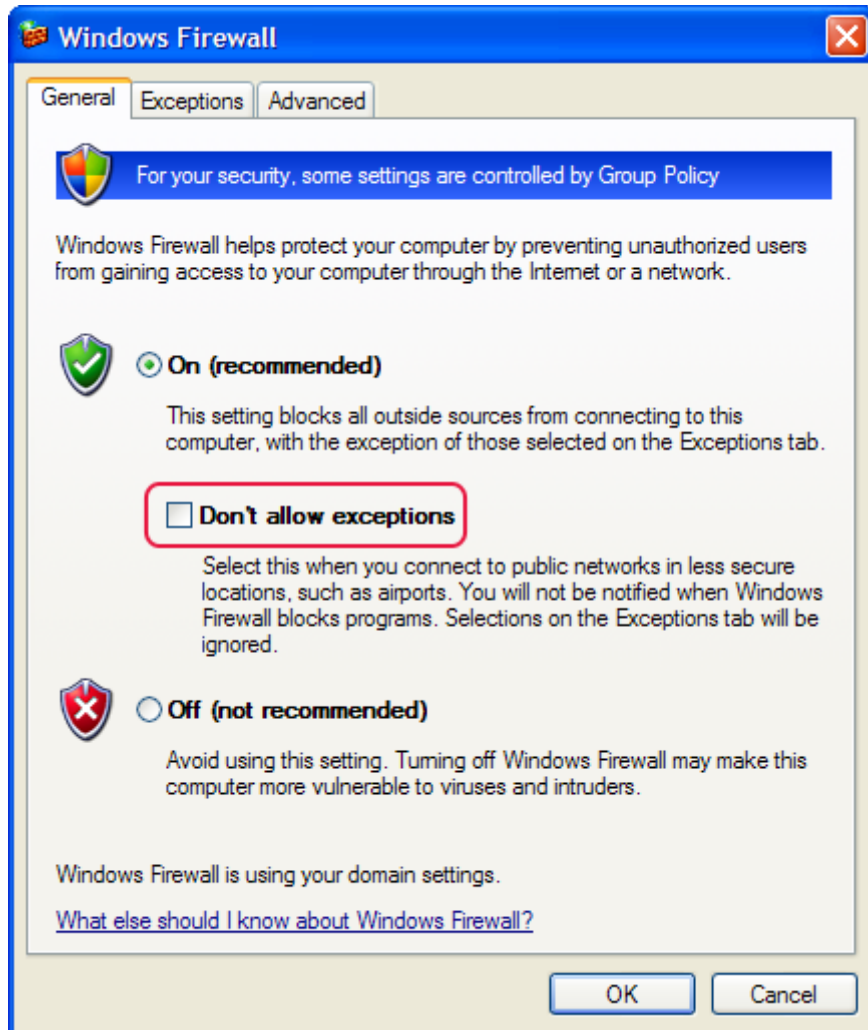
In addition to allowing the exceptions for your actual firewall, you may need to configure exceptions for Windows Firewall. Windows Firewall may be set on without you being aware of it, since some Windows updates may automatically turn on the Windows Firewall.

Allowing exceptions for lmgrd.exe and tekla.exe

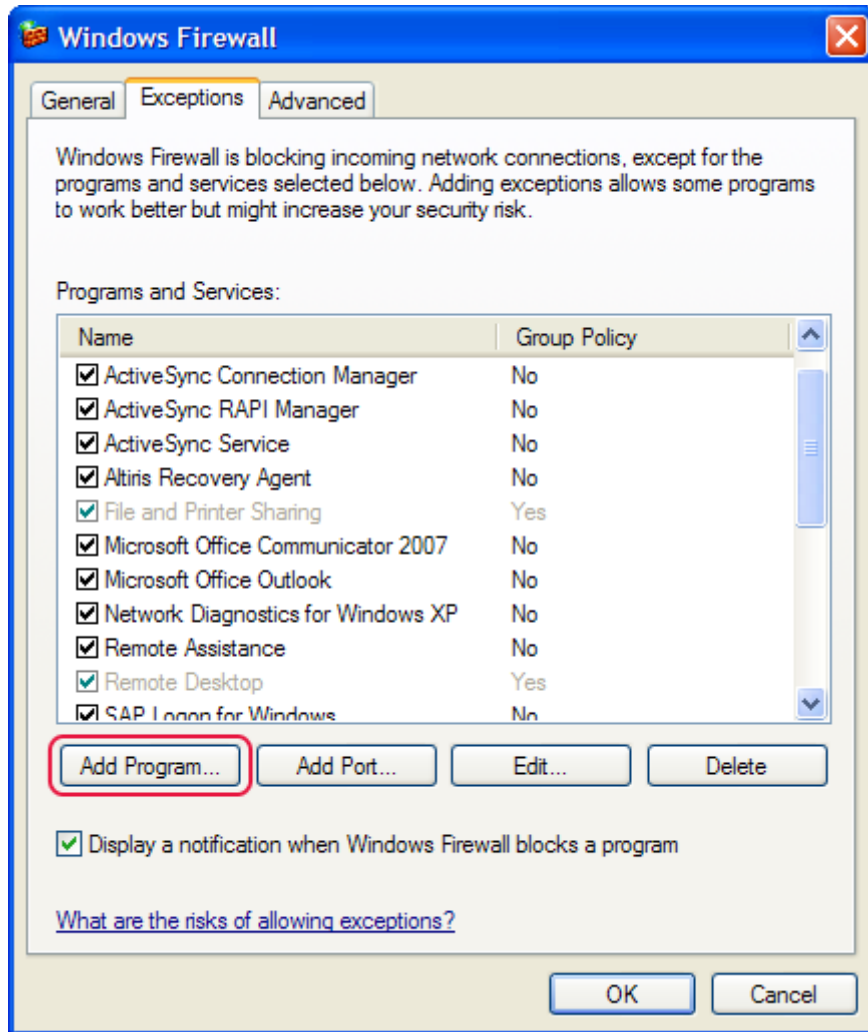
To allow exceptions for `lmgrd.exe` and `tekla.exe`:

1. On your server computer, go to **Start --> Control Panel --> Windows Firewall**.
2. On the **General** tab, make sure that you have not selected the **Don't allow exceptions** check box.

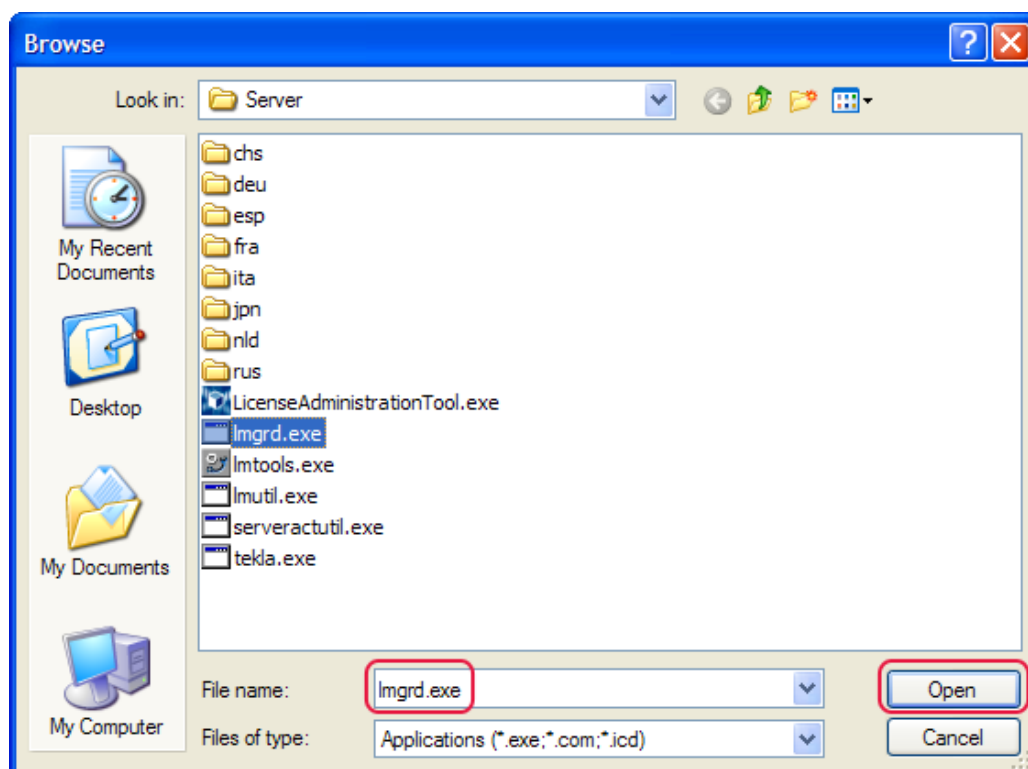
If you have selected the check box, the modifications do not take effect.



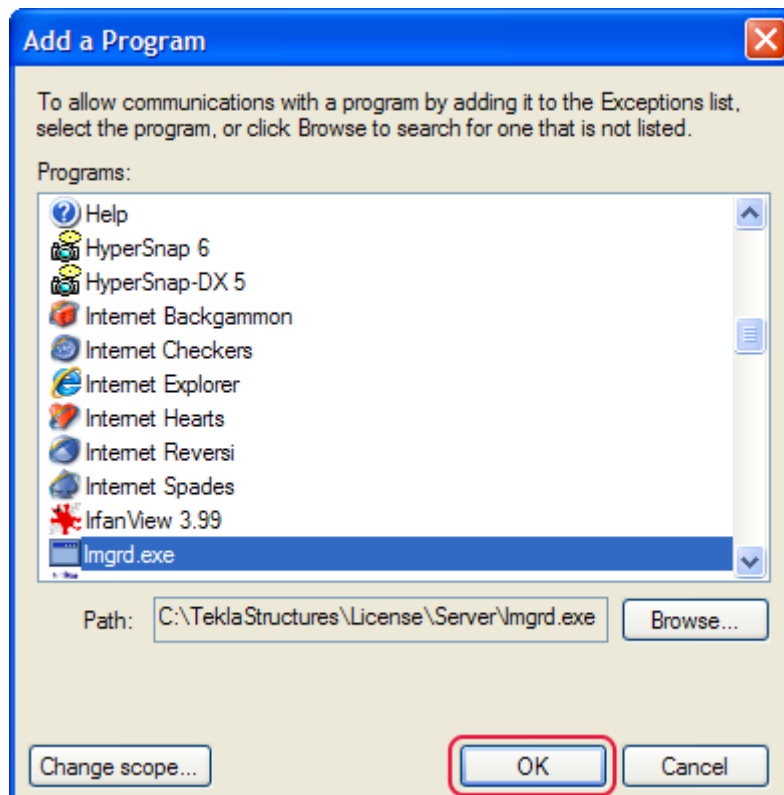
3. On the **Exceptions** tab, click **Add Program...** to open the **Add a Program** dialog box.



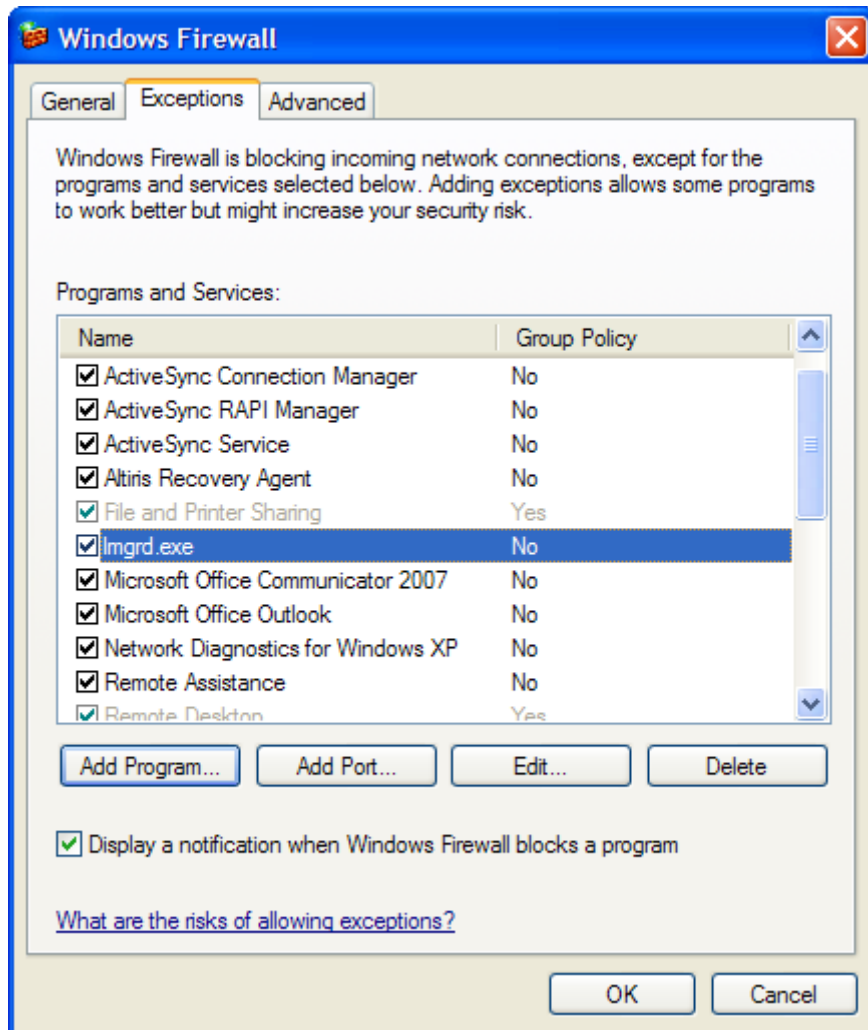
4. In the **Add a Program** dialog box, click **Browse...** and browse for your **Server** folder.
By default, the path is `... \TeklaStructures \License \Server`.
5. In the **Server** folder, select `lmgrd.exe`.



6. Click **Open** to add `lmgrd.exe` to the program list in the **Add a Program** dialog box.
7. In the **Add a Program** dialog box, select `lmgrd.exe` and click **OK**.

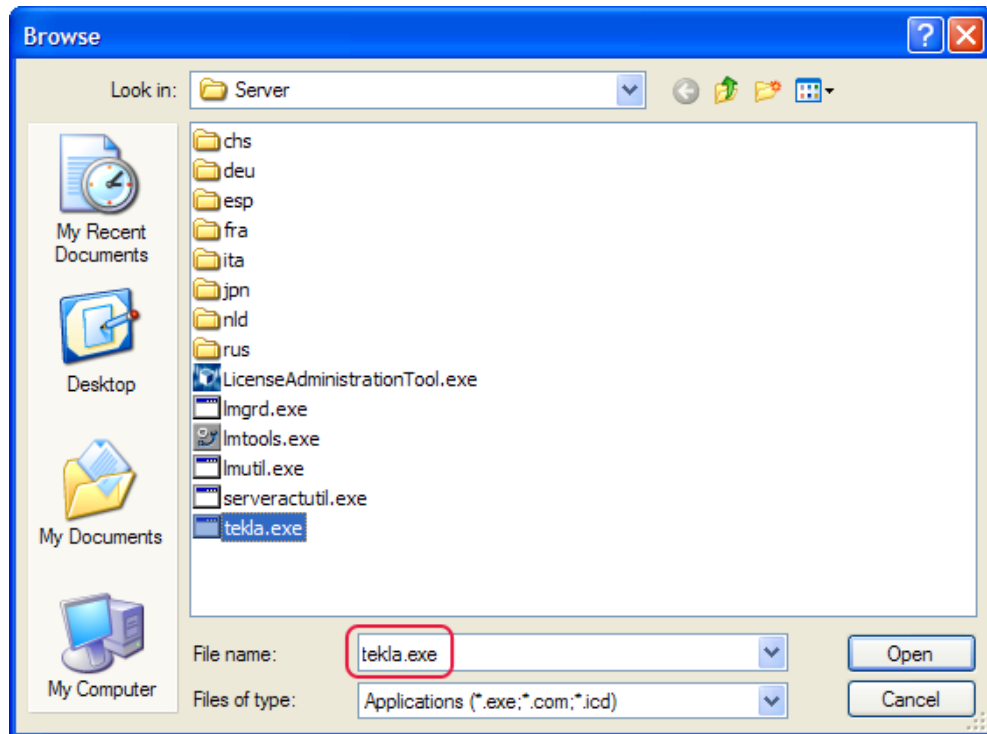


The `lmgrd.exe` application appears to the list of exceptions.

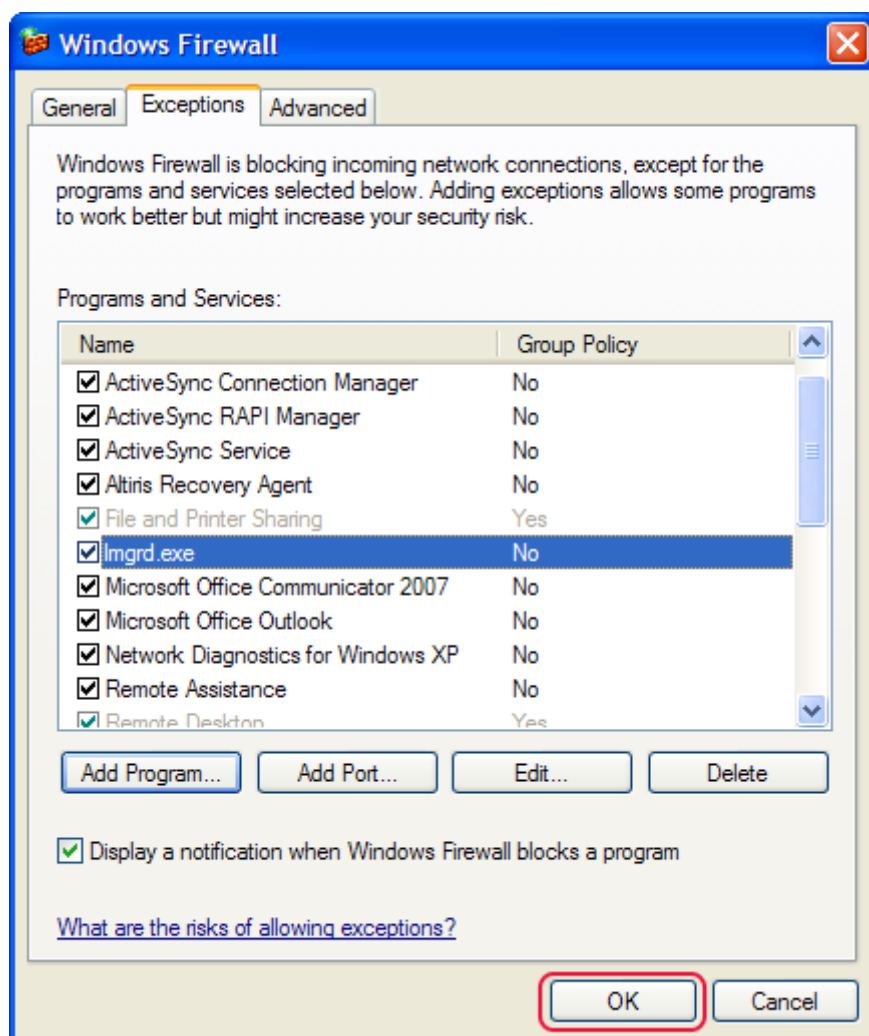


8. To allow the exceptions also for `tekla.exe`, repeat the steps 3 – 7:
 - On the **Exceptions** tab, click **Add a Program**.

- Browse for `tekla.exe`.



- Select `tekla.exe` to add it to the program list.
 - In the **Add a Program** dialog box, select `tekla.exe` to make it appear on the list of exceptions.
9. Click **OK** to confirm the changes.

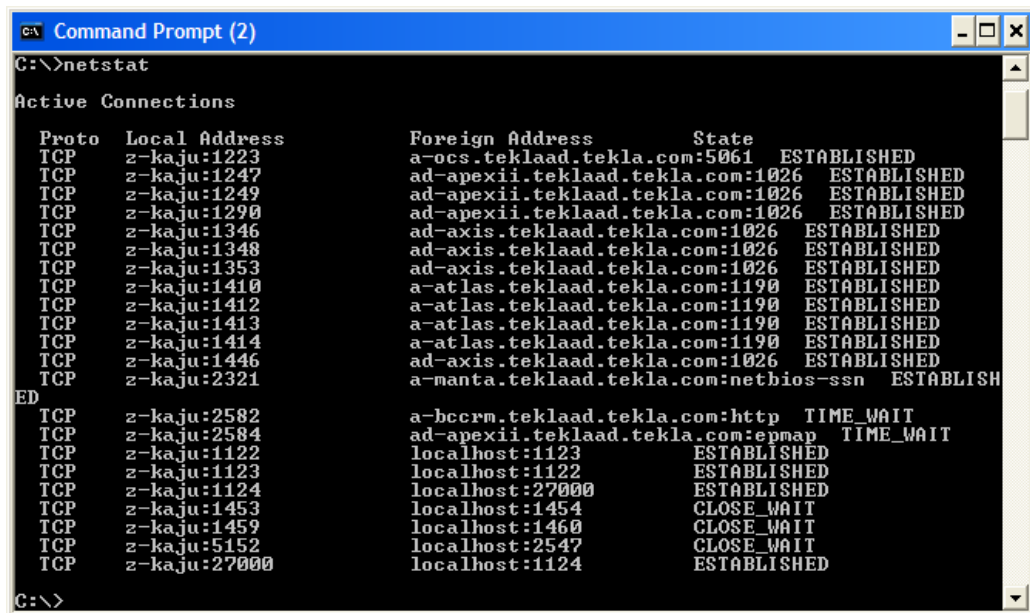


Allowing traffic in fixed TCP/IP ports

To allow traffic in fixed TCP/IP ports:

1. Make sure that some other software or service does not use the ports that you are about to set fixed.

Use the command line command `netstat` to find out which ports are in use.



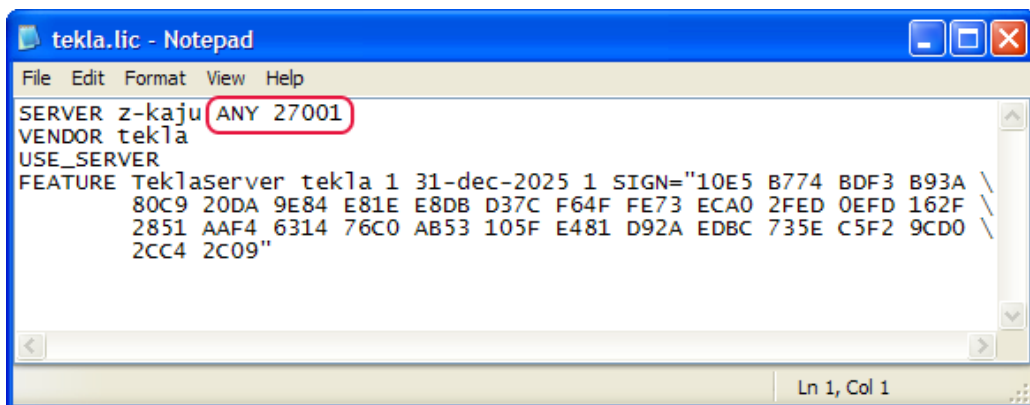
```
C:\>netstat

Active Connections

Proto Local Address          Foreign Address         State
TCP   z-kaju:1223             a-ocs.teklaad.tekla.com:5061 ESTABLISHED
TCP   z-kaju:1247             ad-apexii.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1249             ad-apexii.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1290             ad-apexii.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1346             ad-axis.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1348             ad-axis.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1353             ad-axis.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:1410             a-atlas.teklaad.tekla.com:1190 ESTABLISHED
TCP   z-kaju:1412             a-atlas.teklaad.tekla.com:1190 ESTABLISHED
TCP   z-kaju:1413             a-atlas.teklaad.tekla.com:1190 ESTABLISHED
TCP   z-kaju:1414             a-atlas.teklaad.tekla.com:1190 ESTABLISHED
TCP   z-kaju:1446             ad-axis.teklaad.tekla.com:1026 ESTABLISHED
TCP   z-kaju:2321             a-manta.teklaad.tekla.com:netbios-ssn ESTABLISH
ED
TCP   z-kaju:2582             a-bccrm.teklaad.tekla.com:http TIME_WAIT
TCP   z-kaju:2584             ad-apexii.teklaad.tekla.com:epmap TIME_WAIT
TCP   z-kaju:1122             localhost:1123           ESTABLISHED
TCP   z-kaju:1123             localhost:1122           ESTABLISHED
TCP   z-kaju:1124             localhost:27000          ESTABLISHED
TCP   z-kaju:1453             localhost:1454           CLOSE_WAIT
TCP   z-kaju:1459             localhost:1460           CLOSE_WAIT
TCP   z-kaju:5152             localhost:2547           CLOSE_WAIT
TCP   z-kaju:27000            localhost:1124           ESTABLISHED

C:\>
```

2. On the server compute, browse for `tekla.lic`, and open it using a text editor.
By default, the path is `..\TeklaStructures\License\Server`.
3. To set a fixed port for `lmgrd.exe`, enter the TCP/IP port number at the end of the SERVER row.



```
tekla.lic - Notepad
File Edit Format View Help
SERVER z-kaju ANY 27001
VENDOR tekla
USE_SERVER
FEATURE TeklaServer tekla 1 31-dec-2025 1 SIGN="10E5 B774 BDF3 B93A \
80C9 20DA 9E84 E81E E8DB D37C F64F FE73 ECA0 2FED 0EFD 162F \
2851 AAF4 6314 76C0 AB53 105F E481 D92A EDBC 735E C5F2 9CD0 \
2CC4 2C09"
```



The port number can be any free port in the range of 1024 - 64000. Flexera Software recommends using ports in the range of 27000 - 27009.

The **Automatic** installation option sets the port to 27007.

4. Enter the text `port=free_port` at the end of the VENDOR row, for example, `port=1234`.


```

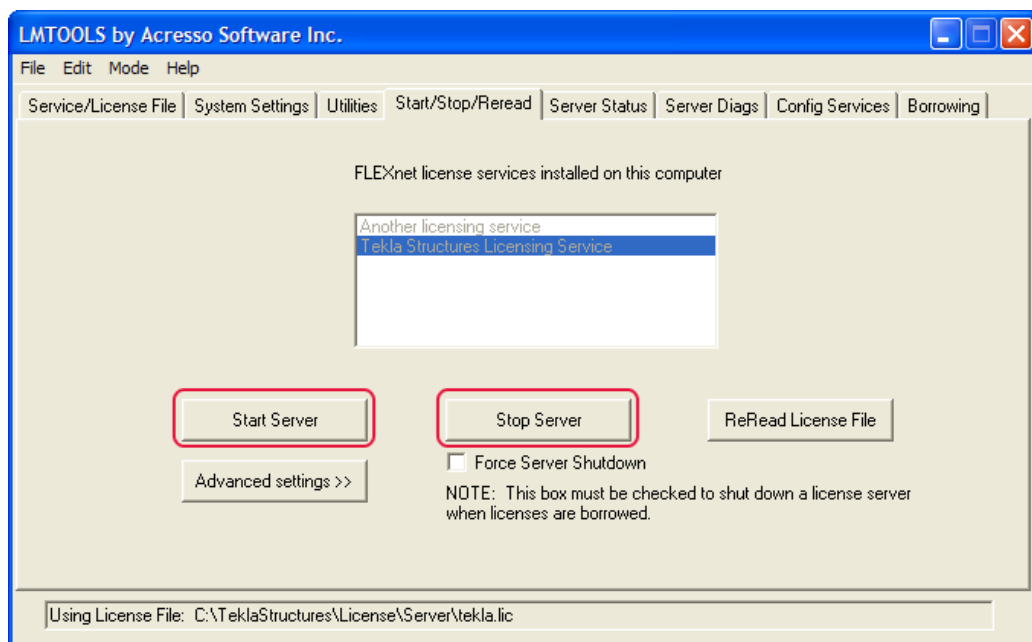
tekla.lic - Notepad
File Edit Format View Help
SERVER z-kaju ANY 27001
Vendor tekla port=1234
USE_SERVER
FEATURE TeklaServer tekla 1 31-dec-2025 1 SIGN="10E5 B774 BDF3 B93A \
80C9 20DA 9E84 E81E E8DB D37C F64F FE73 ECA0 2FED 0EFD 162F \
2851 AAF4 6314 76C0 AB53 105F E481 D92A EDBC 735E C5F2 9CD0 \
2CC4 2C09"
Ln 1, Col 1

```



Defining the TCP/IP port number on the **VENDOR** row may slow down Tekla Structures start-up.

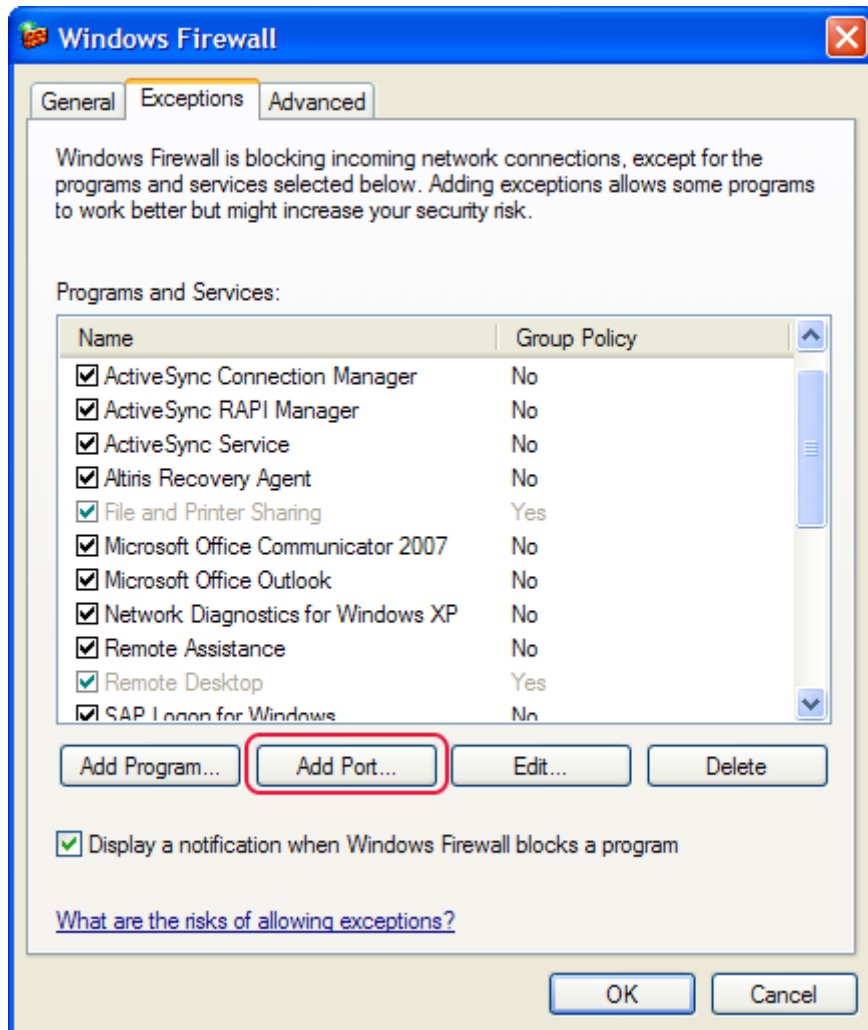
5. Save the changes and close `tekla.lic`.
6. To update your license server with the changes, go to the **Start/Stop/Reread** tab in **LMTTOOLS**.
 - a. Click **Stop Server**.
 - b. Click **Start Server**.



7. On your server computer, go to **Start --> Control Panel --> Windows Firewall**.
8. On the **General** tab, make sure that you have not selected the **Don't allow exceptions** check box.

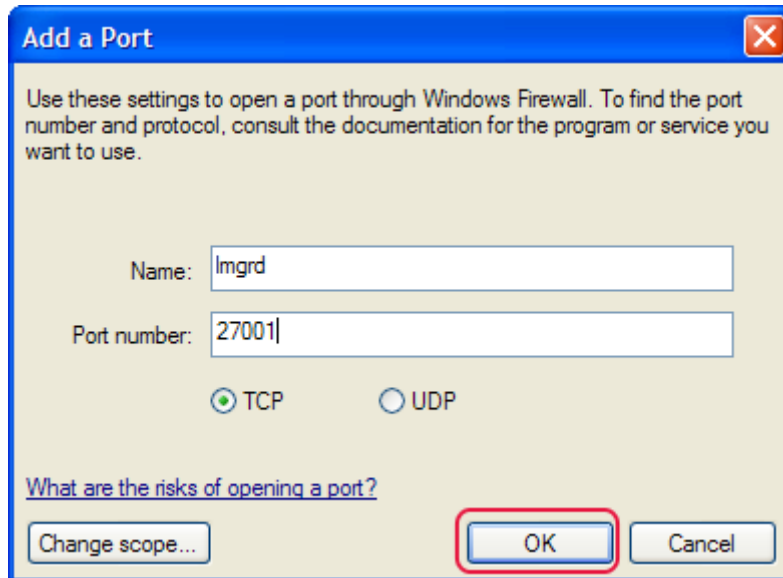
If you have selected the check box, the modifications do not take effect.

9. On the **Exceptions** tab, click **Add Port...** to open the **Add a Port** dialog box.

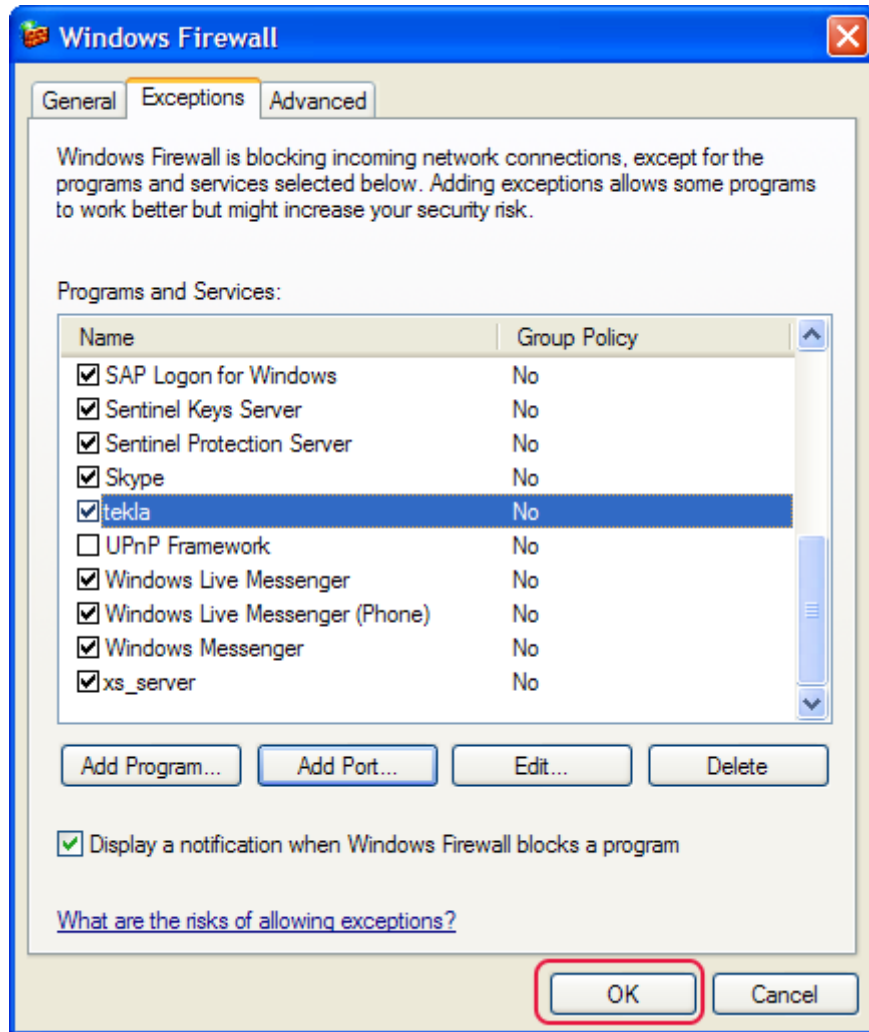


10. In the **Add a Port** dialog box:

- In the **Name** box, enter `lmgrd`.
- In the **Port** box, enter the TCP/IP port number that you set in step 3.



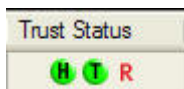
11. Click **OK** to confirm the changes.
lmgrd is added to the list of exceptions.
12. On the **Exceptions** tab, click again **Add Port...** to open the **Add a Port** dialog box.
13. In the **Add a Port** dialog box:
 - In the **Name** box, enter tekla.
 - In the **Port** box, enter the TCP/IP port number that you set in step 4.
14. Click **OK** to confirm the changes.
tekla is added to the list of exceptions.
15. Click **OK** to confirm the modifications.



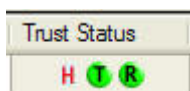
11.6 License repairing

If your licenses have become untrusted or disabled, you need to repair them.

License status is untrusted The **Restore** trust status of your license is not trusted:



The **Host** trust status of your license is not trusted:



The **Time** trust status of your license is not trusted:



Repairing the license

To repair a license:

1. Click **Start --> All Programs --> Tekla Structures Licensing --> Tekla Structures License Administration Tool**.

Tekla Structures License Administration Tool opens. The **Activated Licenses** area displays the activated licenses.

2. Click **Repair**.

The license server contacts the activation server at Tekla. After successful repairing the **Tekla Structures License Administration Tool** dialog box is updated.



Because of technical and security reasons, you can repair a license only a limited number of times. Therefore it is important that you inform your local Tekla Structures reseller about the license repairs you have been performing, and keep count of the repairs.

12 Glossary

Activation-based licensing

Activation-based licensing differs from license file-based licensing. Hardware locks and password files are not needed in activation-based licensing.

In an activation-based licensing system you need to activate your licenses to transfer the license rights from Tekla to your license server. The activation enables you to use the licenses.

Activation ID

A key that enables the transferring of license rights. Every license has an activation ID. Activation IDs are displayed in the entitlement certificate.

Activation server

The activation server at Tekla contains the license rights. When you activate your licenses, your license server contacts the activation server at Tekla and the license rights are transferred to your license server.

Configuration

Configuration is a software set-up for a specific user group. Tekla Structures encompasses several configurations, for example, Steel Detailing, Precast Concrete Detailing, and Viewer.

Entitlement certificate

Entitlement certificate contains all the licenses you are entitled to use, and the activation IDs for the licenses.

Expiration date

There are two types of expiration dates:

- Borrow expiration date is the date when the borrowed license returns to the license server it was borrowed from. The borrower sets the expiration date for borrowing.
- Temporary license expiration date is the date when the temporary license expires.

FlexNet Publisher License Management

The licensing program provided by Flexera Software. The FlexNet licensing system is a completely floating activation-based licensing system.

Host name

The unique name by which a computer or a server is known on a network.

IP (Internet Protocol) address

A numerical code that identifies a particular computer on the Internet.

License activation

License activation transfers the license rights from Tekla to your license server and enables you to use the licenses. Internet connection is required during the activation.

License borrowing

You can borrow licenses for offline usage of Tekla Structures. The licenses are borrowed from the license server to your computer, and nobody else can use the borrowed licenses.

License deactivation

License deactivation transfers the license rights from your license server back to Tekla. You need to deactivate licenses if you have activated too many or wrong configurations. You also need to deactivate temporary licenses before activating permanent licenses. Rehosting the license server, major hardware changes of the server computer and formatting the server computer also require license deactivation.

License return

You can return the borrowed license back to the license server before the borrowing expires. If you do not return the license, it automatically returns back to the license server at the expiration date.

License server administrator

A person assigned to set up and configure the license server. The license server administrator also monitors license usage and informs the Tekla Structures users about the license usage policy of the company.

Options file

License server administrator can create an options file to manage license access rights. For example, the license server administrator can allow or deny the use of certain configurations for certain users.

Renewal

An extended usage period of a temporary license. For example, a change in an expiration date from 31st January to 31st March. Before you activate a new temporary license you need to deactivate the old temporary license.

TCP/IP port

An application-specific software construct serving as a communications endpoint used by the Transmission Control Protocol (TCP). A specific port is identified by its number (commonly known as the port number).

Trusted Storage

An encrypted file where your license information is stored.

Trust status

A trust status indicates whether a license is trusted or not trusted. A license that is not trusted cannot be used.

13 Disclaimer

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