Terra License Server/Manager

USER GUIDE

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Terra solid

POINT CLOUD INTELLIGENCE

Contents

TERRA License Server/Manager

USER GUIDE

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About this User Guide

This document serves as a user's guide for the Terra License Server/Manager. Terra License Server/Manager are Windows applications.

The PDF version of the user guide is created in order to provide an offline version of the online webhelp. It shall be updated together with the webhelp. Some parts of the webhelp may be left out on purpose in the PDF document. In case of inconsistency, the online webhelp is the primary source of information. The user is responsible for keeping his/her offline version updated.

Document conventions

The following conventions and symbols appear in this guide:

- OR - alternate procedures or steps in a procedure.
- C:\TERRA64 - paths to directories of files on a hard disk are written with capital letters.
- *To do* - the beginning of a workflow is introduced with bold-italic letters.

Notes and hints are highlighted in light blue boxes.

Introduction

Terra License Server and **Terra License Manager** provide the capability for the customer to maintain a pool of network licenses. Individual workstations (clients) can request licenses from the pool according to the processing needs. This gives flexibility in using licensed Terrasolid applications, such as TerraScan, TerraMatch, TerraPhoto, TerraModeler, etc. on different computers.

The network license system provides the following benefits:

- You can freely decide which computers run licensed Terra applications.
- You can easily move licenses from one client computer to another.
- When you start a long batch process, you only need to leave the license for that application on the client computer. You can return other licenses to the server and move those to another client.
- You can request a license to be used on a notebook computer for a given number of days. The notebook needs to be connected to the network only at the time of requesting the license. If the notebook never returns to the main office, the requested license becomes available again when the validity period ends.

Terra License Server runs on a machine acting as a server. Any Windows computer can act as a license server. The server computer stores a collection of network licenses. Clients can request a specific application license for a given number of days. The license server will grant the license if one is available for that application. The client can return the license to the server at any time. If not returned by the client, the license will automatically become available in the pool once the validity period ends.

Terra License Service is a service version of the license server. It runs in the background without a user interface. When **Terra License Service** is installed, **Terra License Server** will act merely as a user interface for viewing the status of the license pool being managed by the service and for changing settings. The use of the service is highly recommended because it makes the licenses requests/returns by clients independent of the **License Server** application running.

Terra License Manager is installed on the client computers where customers want to use the licensed Terrasolid applications. **Terra License Manager** communicates with **Terra License Server** through a Windows network whenever requesting or returning a license.

A computer can also act as the license server and be a client at the same time.

> The alternative to network licenses are so-called node-locked licenses. They are fixed to the name and ID of one computer and can not be moved to other computers. Node-locked licenses do not need any license management software. More information about Terrasolid license models are provided on the webpage.

Hardware and software requirements

Terra License Server and **Terra License Manager** are Windows-based applications. For running the x64 version of the application, a 64-bit Windows OS is required. Any Windows PC can act as a license server for Terrasolid licenses.

The individual workstation computers must be on the same network with the computer acting as the server and able to communicate with the server computer in that network.
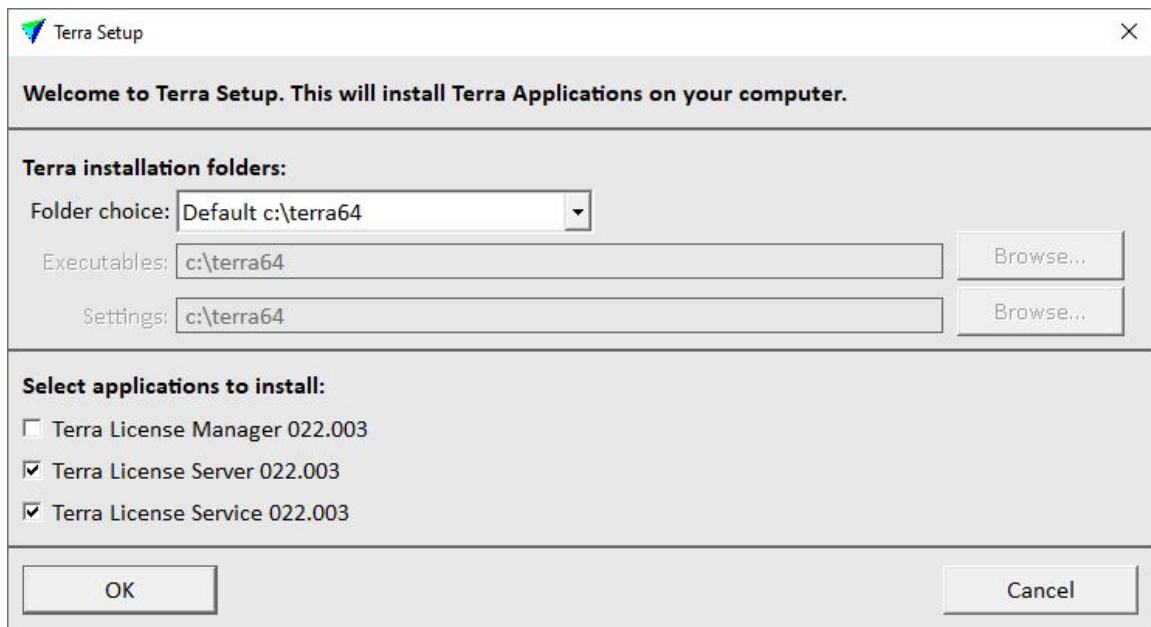
Installation

You should carefully consider to which computer to install the **Terra License Server**. The network licenses that you get from Terrasolid will only work on that specific computer. You should therefore install **Terra License Server** on a computer which you plan to use for a long time.

After the installation, you must configure the **Terra License Server/Manager**.

To install Terra License Server or Terra License Manager:

1. Start **setup.exe** in the installation package with **administrator permissions**.

    This opens the **Terra Setup** dialog:

2. Define the installation folder(s) where to install Terra License Server/Manager. The same installation folder must be used for all Terrasolid applications.

    The default **Folder choice** is **Default c:\terra64**. This installs all executables and setting files into the same folder C:\TERRA64. The folder is created automatically, if it does not exist.

As an alternative, if executables and settings files need to be separated, select another **Folder choice**:

- **Default 'Program files'** - executables are installed into C:\PROGRAM FILES\TERRASOLID, setting files are installed into C:\TERRA64.

- **Freely selectable folders** - the user defines a folder for **Executables** and **Settings** in the corresponding input fields. Click on the **Browse** button next to each input field in order to select a folder.

3. Select **Terra License Manager**, **Terra License Server** and/or **Terra License Service** to install.

   Terra License Server and optionally the **Service** must be installed on the computer that acts as license server for Terrasolid licenses. The installation of the **Service** is optional but highly recommended.

   Terra License Manager must be installed on any computer on which you want to run the licensed Terrasolid applications, such as TerraScan, TerraMatch, TerraPhoto, TerraModeler, etc..

   One computer can act as license server and run the Terrasolid applications at the same time.

4. Click OK.

   When the installation is finished, a message is displayed.

   The **Terra License Server** and **Service** executables are located in the folder defined above for executables, e.g. by default in C:\TERRA64\POOL0XX where XX stands for the current version number.

   The **Terra License Manager** executable is located in the folder defined above for executables, e.g. by default in C:\TERRA64\LICENSE.

Server information must be sent to Terrasolid when a new computer is taken into use as license server for Terrasolid applications. This may be the case if you become a new customer of Terrasolid or if you need to move your licenses from one to another server computer. Please note that Terrasolid does not accept frequent moves of licenses.

Starting Terra License Server

The **Terra License Server** application is located in the installation folder that is defined in the setup process. By default, the folder is C:/TERRA64/POOL0XX where XX stands for the current version number. Start the application with a double-click on the **license_server.exe**.

Terra License Service

The **Terra License Service** is a Windows service with the name **TerraLicenseService0XX** where XX stands for the current version number. It is started automatically after installation and also when the PC is restarted. You can manually start/stop/restart the service in the **Windows Services** window.

Restarting the service is always required after new network licenses files have been copied into the /POOL0XX folder, or after settings have been changed.

Starting Terra License Manager

The **Terra License Manager** application is located in the installation folder that is defined in the setup process. By default, the folder is C:/TERRA64/LICENSE. Start the application with a double-click on the **license_manager.exe**.

Configure License Server/Manager

To configure Terra License Server, you must perform the following steps:

1. Enter settings in the **License Server** application.

2. Enter settings in the **License Manager** application.

3. Test that **License Server** and **License Manager** can communicate with each other over the network.

4. Send server information to Terrasolid in order to request licenses for Terrasolid applications.

   Terrasolid will process your request and send the license files by email to the contact person of your company. The license files are only working on the specific computer from which they have been requested.

5. Copy the network license files to the installation folder of the **Terra License Server**, such as C:/TERRA64/POOL0XX where XX stands for the current version number.
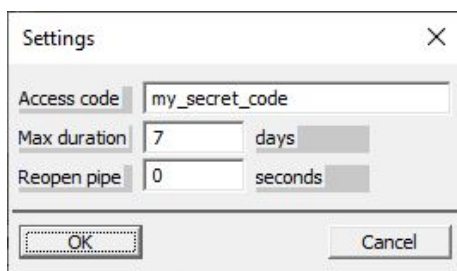
Enter License Server Settings

The **License Server** settings specify an access code for the server/manager communication, the maximum duration for which licenses can be checked out on client computers and a time interval for closing and reopening the communication pipe.

To enter server settings:

1. Start **Terra License Server** application.

2. Select **Settings** command from **File** pulldown menu.

   This opens the **Settings** dialog:

3. Specify an **Access code**. All client computers must use exactly the same access code.

4. Enter the **Maximum duration** for which licenses can be checked out. A short duration requires users to renew licenses more frequently, but it is safer -- if a computer with borrowed licenses breaks down, the licenses will become available as soon as the validity period ends.

5. Define a Reopen pipe value. The value determines the time interval for closing and reopening the communication pipe between server and client computers.

6. Click OK.

This saves the settings into a configuration file named LICENSE_SERVER.UPF and stored in the same folder as the **License Server** application.

> Licenses are returned to the server automatically after the check-out period ends or manually by the **License Manager** on the client computer. If a client computer breaks down or if the licenses can not be returned for another reason from the client computer, the licenses are blocked until the check-out period ends. There is no way of forcing the return of licenses in the server application. Therefore, it is strongly recommended to limit the maximum duration for the license check-out to a reasonable amout of days.
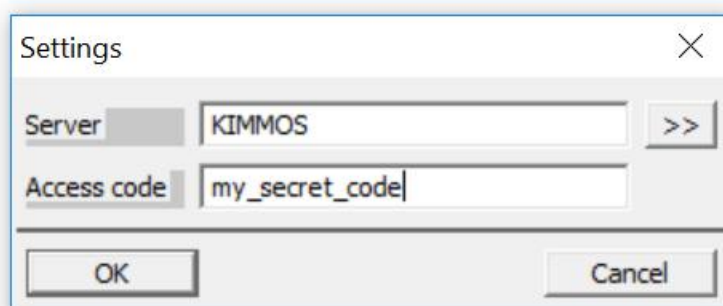
Enter License Manager Settings

The **License Manager** settings specify an access code for the server/manager communication and the name of the computer acting as **License Server** for Terrasolid applications.

To enter manager settings:

1. Start **Terra License Manager** application.

2. Select **Settings** command from **File** pulldown menu.

This opens the **Settings** dialog:

3. Enter the name of the computer acting as License **Server**. You can click on **>>** button to browse for computers in the network.

4. Specify the **Access code.** The code must excactly the access code defined in the License Server settings.

5. Click OK.

This saves the settings into a configuration file named LICENSE_MANAGER.UPF and stored in the same folder as the **License Manager** application.

Test License Server/Manager communication

To test the communication over a network, you need to have **Terra License Server** installed on one computer and **Terra License Manager** on another computer. Settings must have been defined in the License Server and License Manager applications.

To test Server/Manager communication:

1. Start **Terra License Server** application on the one computer.

   Check the **Event log** in the lower left part of the application window for the version number (018, 019, ...) that it is going to serve:

2. Start **Terra License Manager** application on another computer.

3. Select **Server state** command from the **View** pulldown menu.

   This opens the **Server state** dialog:
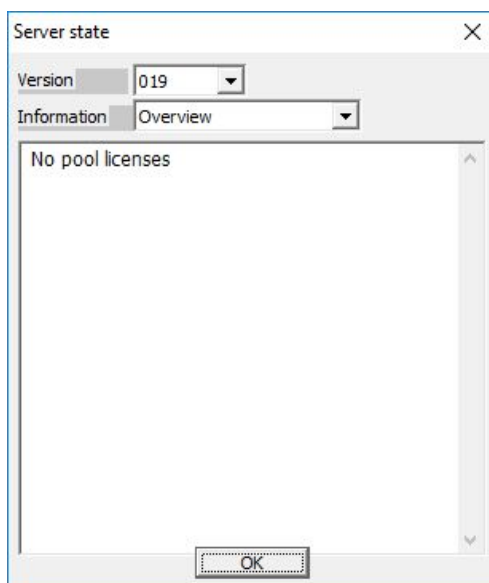
4. Select the **Version** number of the licenses that are served in the **License Server**.

   The dialog shows the number of free out of the number of available licenses on the server machine or another message.

   'No pool licenses' message indicates that the communication is successful but there are no network license files in the /POOL0XX folder on the server computer.

   'No reply from server' message indicates that the **License Manager** cannot establish communication with the server. Check the network connection between the computers, e.g. in the Windows Explorer. The client computer must see the server computer in the Network

section of the Windows Explorer. In addition, double-check all the installation and setup steps to make sure everything is done properly.

'Bad access code' message indicates that the access code values in the **License Manager Settings** and the **License Server Settings** do not match. It can also mean that the **License Service** has not been restarted after new license files have been added on the server machine, or after settings have been changed.

Send License Server information

You must send the server computer name and identification number to Terrasolid in order to request network licenses. The network licenses that you receive from Terrasolid will only work on that specific computer.

To send server computer details:

1. Start **Terra License Server** application.

2. Select **Server information** command from **File** pulldown menu.

   This opens the **Server information** dialog:
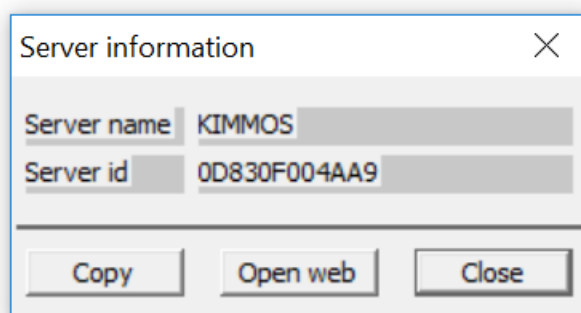
Click the **Open web** button in order to open a web form. In the form, you can fill all other necesary details for requesting licenses. This is the preferred procedure.

Alternatively, click the **Copy** button to copy the name and ID of the computer to the clip board. You can then paste the values into an E-mail that you send to Terrasolid. In the email, you must provide information about your company and why you are requesting licenses (new server computer, new license file request, etc.). Please note that the web form helps you to provide all necessary information and thus, the request may be handled faster.

If you are eligible for licenses, you or the contact person of your company provided in the web form will receive an email containing your license files. Copy the files to the installation folder of the **Terra License Server**, such as C:/TERRA64/POOL0XX where XX stands for the current version number. Restart the **License Service** after adding new license files to the license server.

Server information must be sent to Terrasolid when a new computer is taken into use as license server for Terrasolid applications. This may be the case if you become a new customer of Terrasolid or if you need to move your licenses from one to another server computer. Please note that Terrasolid does not accept frequent moves of licenses.

Run Terra License Server

Terra License Server needs to be running whenever client computers want to request or return licenses.

A better alternative is to install **Terra License Service** together with the License Server. The service runs as Windows service which is started automatically after installation and when the computer is rebooted. In this case, the **Terra License Server** application acts as user interface for viewing the status of the network licenses or for changing server settings.

The application window shows the current state of the network licenses and logs every license request and return event.
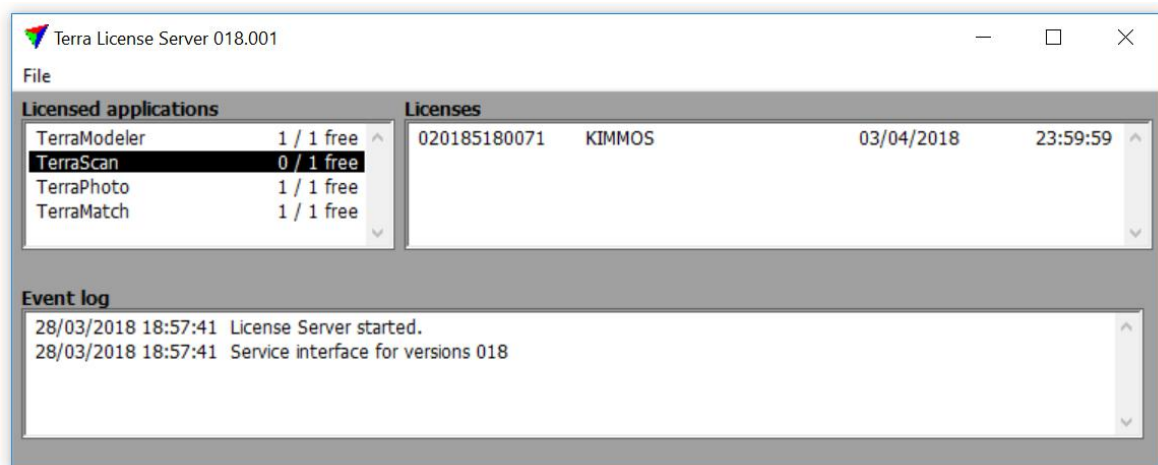
Licensed applications list shows a list of applications for which there are valid license files in the **License Server** installation folder, usually C:/TERRA64/POOL0XX where XX stands for the current version number.

Licenses list shows the status of each license for the application selected in **Licensed applications** list. This includes the license number, the name of the client computer that uses the license and the return date for the license.

Event log shows all the events since the program was last started. This includes information about licenses, for example issues arising from bad licenses (invalid license files, different major version licenses in the same folder, etc.). The events are also written into a text file named LICENSE_SERVER_LOG.TXT which is stored in the **License Server** installation folder, usually C:/TERRA64/POOL0XX where XX stands for the current version number. The text file contains all events since the **License Server** installation.

The **Terra License Server Settings** can be opened from the **File** pulldown menu.

Run Terra License Manager

Terra License Manager needs to be running whenever the user on a client computer wants to request or return a license..

The application window shows the list of all Terrasolid applications and any licenses that are currently used on this computer. For each license, the version number, license type and return date are displayed.
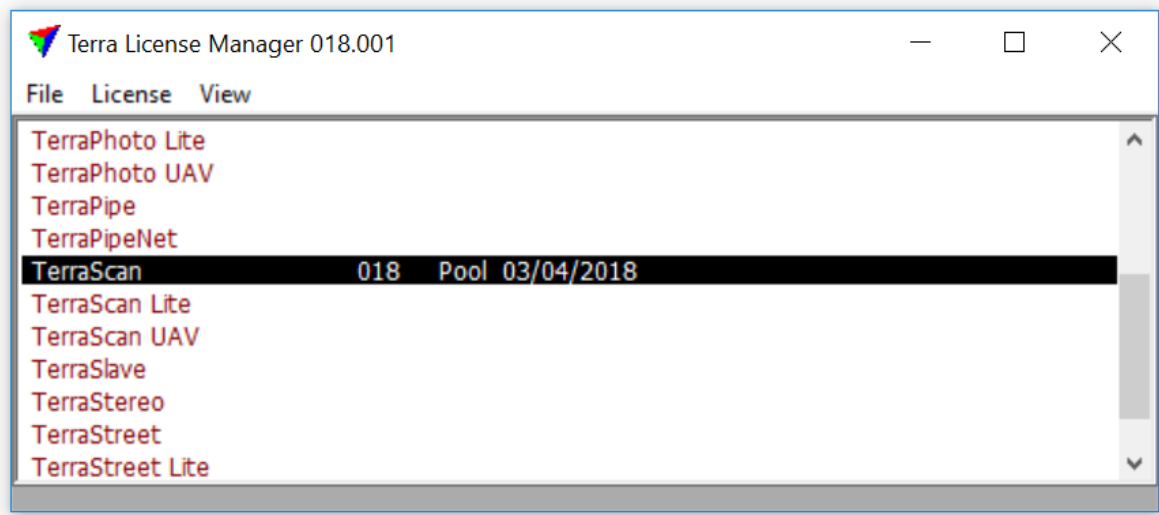
| COMMAND	EFFECT
File / Settings	Open **Terra License Manger Settings**.
License / Get from server	Request a license from the License Server.
License / Return to server	Return a license to the License Server
View / Hide selected applications	Hide applications from the list in the application window
View / Show all applications	Show all applications in the list in the application window
View / Server state	Check the state of the License Server and the communication between **License Manager** and **License Server**

Request a licenses

The most common task with **Terra License Manager** is to request new licenses from the server. This is required in order to run a licensed Terrasolid application on the client computer.

To request licenses:

1. Select all applications in the **Terra License Manager** window for which you want to request a license.

2. Select **Get from server** command from **License** pulldown menu.

   This opens the **Get from Server** dialog:
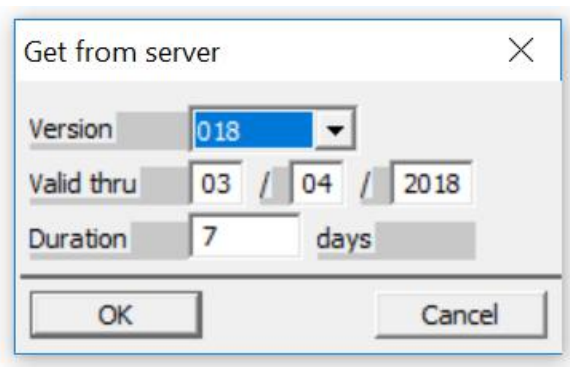
3. Select the **Version** of the application.

4. Enter the last date in the **Valid thru** fields on which the license should be usable on the computer. At the end of this day, the license is returned to the server and becomes available for check-out again. The format of the date is DD/MM/YYYY (day/month/year). The **Duration** field is updated accordingly and shows the amount of days the license is valid on this computer.

   OR

4. Enter the amount of days in the **Duration** field for which the license should be usable on hte computer. The **Valid thru** fields are updated accordingly and show the last day the license is valid on this computer.

5. Click OK.

   This sends a request to the server. If a license is granted, the version number, license type and return date are displayed in the application window. Settings on the server may limit the duration of the generated license.

The maximum duration for requesting a license is limited by the setting in the **Terra License Server** application. If a longer validity period is choosen in the **Get from server** dialog, the application sets it automatically to the maximum duration according the the server settings.

Change the validity of a license

To change the validity of a license, request it again with a new duration. You can request for a longer or a shorter duration. For example, if the computer is processing a long task with TerraScan, you may request a longer license while TerraScan is busy.

Return a license

You can return a license to the server at any time before it expires. This will make the license available for another client computer.

To return licenses:

1. Select all applications in the **Terra License Manager** window for which you want to return the license.

2. Select **Return to server** command from **License** pulldown menu.

   This sends a return message to the server. A license disappears from the client computer if the server confirms receiving the license.

There is no other way of returning a license than with the **License Manager**. Otherwise, a license becomes only available again if the its validity ends on the client computer. Therefore, it is recommended to request a license only for a reasonable short period of time. This avoids that licenses are blocked by a client computer that runs into problems, breaks or becomes otherwise unusable.

Hide selected applications

By default, the **Terra License Manager** window displays all licensed Terrasolid applications. Thus, the list may contain a lot of applications that you never use. It may be more convenient to hide unused applications and show only those for which you have licenses.

To hide selected applications:

1. Select all applications in the **Terra License Manager** window that you want to hide.

2. Select **Hide selected applications** command from **View** pulldown menu.

   This hides the selected applications from the list.

Show all applications

If you need to restore the visibility of all applications, select **Show all applications** command from **View** pulldown menu.

Installation Directories

Terra License Server/Manager share the same directory structure with all Terra Applications. It is recommended that you install all Terra Applications in the same directory.

The list below shows a typical directory structure when Terra License Server/Manager have been installed in path C:\TERRA64.

C:\TERRA64	directory where Terra License Server/Manager were installed
🗀 license	for License Manager and temporary license files
🗎 license_manager.exe	License Manager application
🗎 license_manager.upf	License Manager configuration file
🗀 pool0XX	for License Server and network license files, XX = version number
🗎 license_server.exe	License Server application
🗎 license_server.upf	License Server configuration file
🗎 license_server_log.txt	License Server log file
🗎 license_service0XX.exe	License Service executable

Further information

There are more sources of information about the **Terra License Server/Manager** installation and setup beyond this User Guide. The following list summarizes the different options:

SOURCE	SUITABLE FOR
Knowledgebase collection of FAQ	• troubleshooting the **Terra License Server/Manager** setup
Release notes for **Terra License Server/Manager** applications	• checking for new updates

Unfortunately, all other sources are no longer available.

Links last checked 13. September 2022