

# TopSolid v6

## Design, Wood and WoodCam Installation



**TopSolid® 2021**  
©1993-2021 TOPSOLID. All rights reserved.



- ✓ Installation: TopSolid'Design
- ✓ Installation: TopSolid'Interop Spatial Kernel (Required component)
- ✓ Installation: TopSolid'Design Libraries (Required component)
- ✓ Installation: TopSolid'Design Samples (Required component)
- ✓ Installation: TopSolid'Fold
- ✓ Installation: TopSolid'Wood

MASTER YOUR  
MANUFACTURING PROCESS

© 2021, TOPSOLID SAS.

7, Rue du Bois Sauvage

F-91055 Évry, France

Web: [www.topsolid.com](http://www.topsolid.com)

Email: [contact@topsolid.com](mailto:contact@topsolid.com)

All rights reserved.

TopSolid® is a registered trademark of TOPSOLID SAS.

TopSolid® is a product name of TOPSOLID SAS.

The information and the software contained within this document are subject to change without prior warning and should not be construed as a commitment by TOPSOLID SAS.

The software covered by this document is supplied under license, and may only be used and duplicated in compliance with the terms of this license.

Hard copy or digital materials provided during training or accessible on-line as part of the training represent a protected original work that is the property of the training organization. They cannot be reproduced in part or in full without the express consent of the training organization.

All the texts, comments, works, illustrations and images reproduced on these materials are protected by copyright worldwide. Any use other than that designed for the purposes of training is subject to the prior authorization of the training organization, subject to prosecution. The Customer shall refrain from using, reproducing, representing, lending, exchanging, transmitting or transferring and more generally exploiting all or part of the documents without the prior written consent of TOPSOLID SAS. The Customer shall also refrain from extracting all or part of the data and/or transferring it to another material, and from modifying, adapting, arranging or transforming it without the prior written consent of the training organization. The Customer is only granted a right of use, to the exclusion of any transfer of ownership in any form whatsoever. Therefore, only the reproduction and representation of the content authorized by the French Intellectual Property code on a screen, and a single hard copy for archiving purposes, are authorized, for strictly personal purposes, and for professional use. The Customer also undertakes to not take part in competing, directly or indirectly, with the training organization by transferring or communicating these documents to anyone.

Version 6.22 Rev.01

**Note:** If you are experiencing problems using this training guide, please feel free to send your feedback and comments at [edition@topsolid.com](mailto:edition@topsolid.com).

# Contents

<b>Introduction .....</b>	<b>1</b>
<b>System Requirements Since Version 6.22 .....</b>	<b>1</b>
Compatible operating systems .....	1
Equipment and hardware .....	1
Graphic cards .....	1
<b>TopSolid v6 Setup .....</b>	<b>2</b>
Download using TopSolid'Downloader .....	2
Software installation on user workstations .....	2
<b>License Installation.....</b>	<b>5</b>
Managing standalone licenses .....	5
Managing floating licenses .....	6
<b>Additional Configuration.....</b>	<b>10</b>
Language setup .....	10
Library configuration .....	10
Configuring graphics settings.....	11
<b>Uninstalling TopSolid v6.....</b>	<b>13</b>
<b>Additional Features of the TopSolid v6 Setup .....</b>	<b>14</b>
PDFCreator.....	14
TopID .....	14
What's new in TopSolid .....	14
<b>Request Codes.....</b>	<b>15</b>
Standalone license .....	15
Floating license .....	15
<b>Advanced .....</b>	<b>17</b>
Floating license server .....	17
<b>Frequent Issues .....</b>	<b>18</b>
Standalone license .....	18
License server.....	18
Configuration .....	19
<b>Notes.....</b>	<b>20</b>



## Introduction

Since the **TopSolid 2019** version (version **6.20**), the installation interface has been modified.

This tutorial is a step-by-step summary of the instructions to follow in order to install the software and its licenses. However, before any installation, it is advisable to think about how to set up the licenses based on specific needs.

Different procedures are therefore described according to the installation framework:

- Installation of **TopSolid** with standalone license
- Installation of a license server and several client workstations

## System Requirements Since Version 6.22

This requirement is updated on the **TopSolid** website in the **SERVICES > Requirements** section.

[www.topsolid.com](http://www.topsolid.com)

### *Compatible operating systems*

- Windows 7 64-bit
- Windows 8 and 8.1 (version 6.14 minimum)
- Windows 10 Pro 64-bit (version 6.17 minimum)

WinRT and Windows 10 S are not compatible.

**Note:** **TopSolid** strongly advises against the use of Avast and Trend Micro anti-virus software because they generate false alerts with the **TopSolid** files.

### *Equipment and hardware*

- **Intel i3, i5 and i7** processor-based machine
- Random Access Memory: **16 GB**
- **1 TB** hard drive
- Graphics resolution **1280x1024**
- Keyboard and mouse (preferably with the wheel)
- DVD player
- Parallel or USB port (to connect the protection key)
- Internet Explorer 6 minimum (for online help)

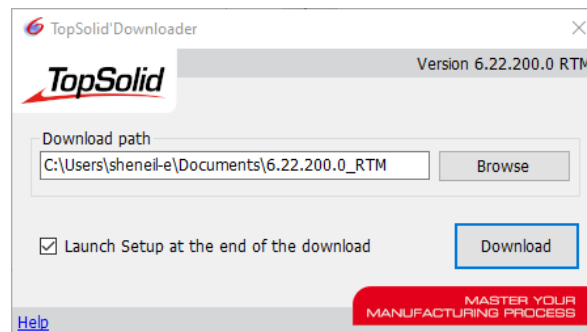
### *Graphic cards*

**TopSolid** has been optimized to use the latest nVidia GeForce, Quadro and AMD Radeon Pro cards.

## TopSolid v6 Setup

### Download using TopSolid'Downloader

- Download and run the **TopSolid'Downloader** program using the link received by email.



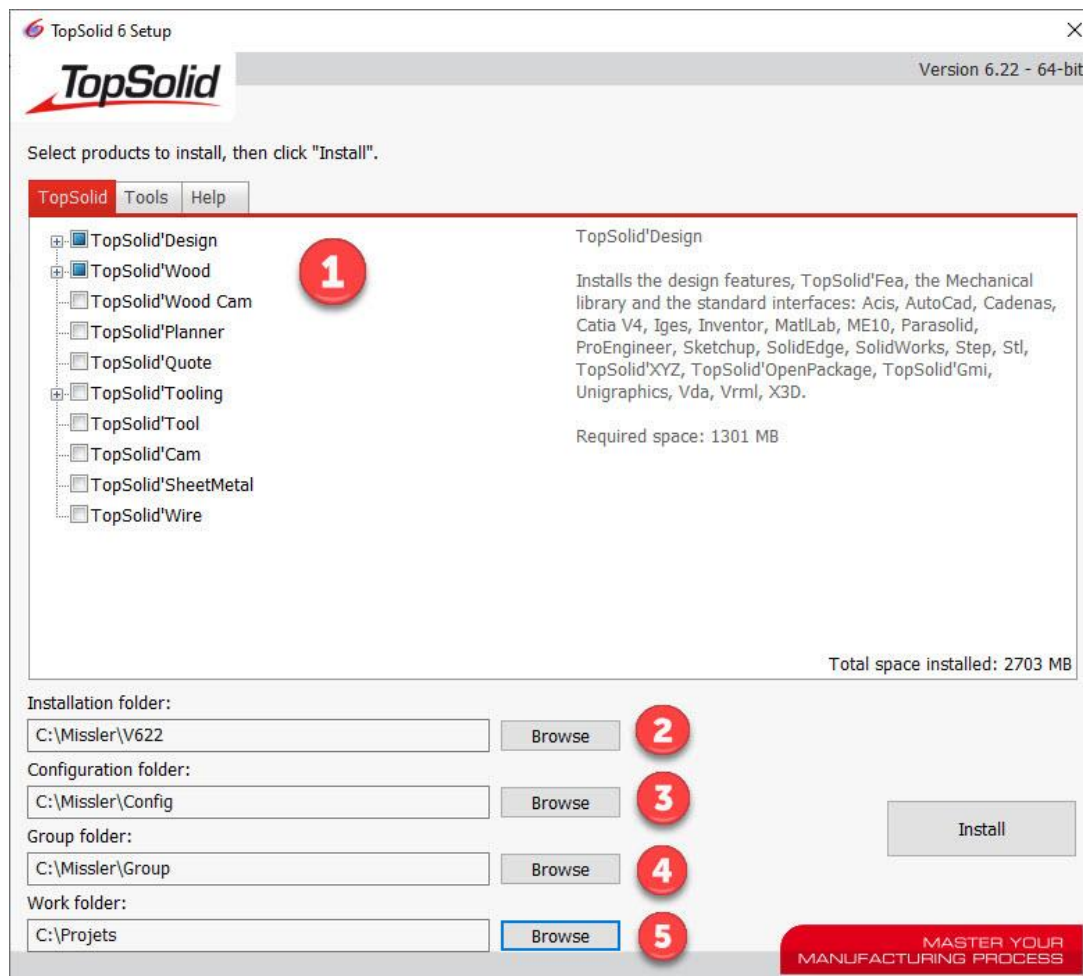
- Indicate the **download path** to install **TopSolid**.
- Click on the **Download** button.

**Note:** If **TopSolid** should not be installed on the computer that is downloading the version, you simply have to uncheck the **Launch Setup at the end of the download** box.

### Software installation on user workstations

After launching the setup, the installation interface is displayed.

- Select the products to be installed and select the paths according to the numbered information detailed below.



## 1: TopSolid and Tools tabs

These tabs regroup the different products available for installation.

- Check only the items associated with your licenses.

### TopSolid tab

For **TopSolid'Wood** (CAD) customers, you simply have to check the **TopSolid'Wood** box.

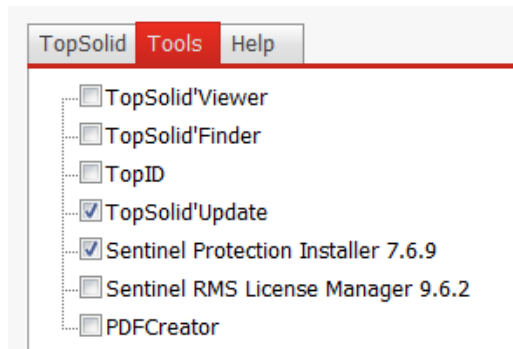
For **TopSolid'WoodCam** customers (CAD + CAM), you simply have to check the **TopSolid'WoodCam** box.

All the necessary modules, **Textures** and **Libraries**, are automatically selected.

### Tools tab

You simply have to leave the elements checked by default (**TopSolid'Update** and **Sentinel Protection Installer**).

If necessary, you can check the other modules (see the *Additional Features of the TopSolid v6 Setup* chapter).



## 2: Installation folder

- Leave the default path indicated for the location of the installation folder.

## 3: Configuration folder

This folder contains the **TopSolid** settings specific to each user's workstation such as interface customization, screen background color, keyboard shortcuts, etc.

By default, this folder will contain the **TopSolid** authorization code file (*top.cod*).

When installing **TopSolid** for the first time, the **Config** folder is located in "C:\Missler\Config". We recommend that you create a **Config** folder specific to each version installed. For example, for version 2021, the configuration folder could be "C:\Missler\Config 2021". For version 2022, the configuration folder would be "C:\Missler\Config 2022".

The advantage of this method is to make each installed version independent. Merging the configuration folders will force you to use the latest version of **TopSolid**.

**Note:** The installation folder and the configuration folder cannot be the same.

## 4: Group folder

This folder contains the **TopSolid** settings specific to the company which will benefit all users (drawing model, propagations, materials, etc.). This folder is therefore available on the network so that it can be accessible and used by several users. It is important to make sure that each user workstation select the same group folder. Companies with a single user workstation can place the **\Group** folder at the same level as the configuration folder.

Example:

- C:\Missler\Config 2021
- C:\Missler\Group 2021

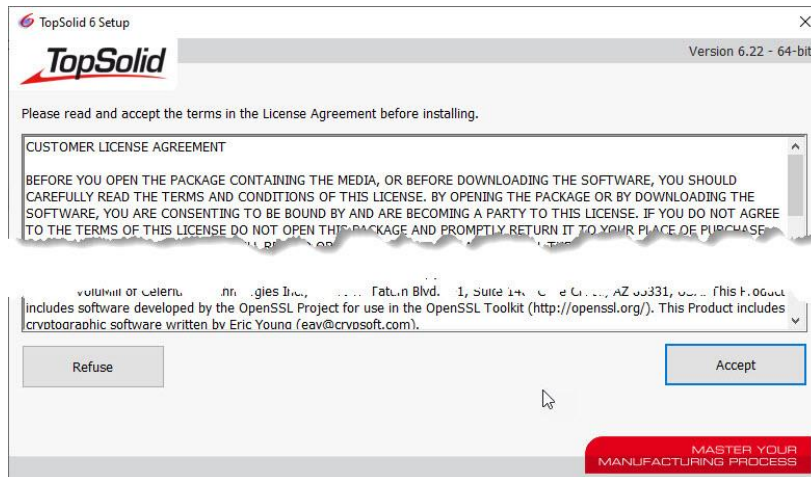
## 5: Work folder

This is a default backup folder for projects.

**Note:** Placing this folder in a network location may affect the read/write performances.

- Once the products have been selected and the folder paths filled in, click on the **Install** button.

The license agreement is displayed.

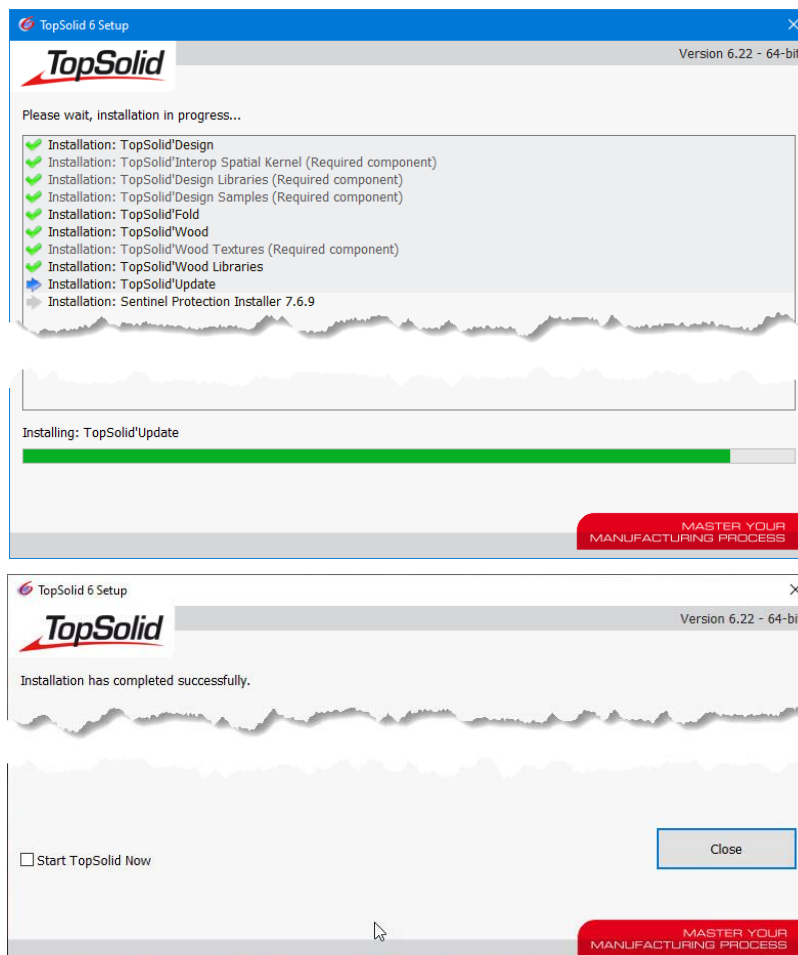


- Click on the **Accept** button.

The list of products to be installed appears.

- Make sure that nothing is missing or, on the contrary, there are no extra products selected.
- Click on the **Install** button.

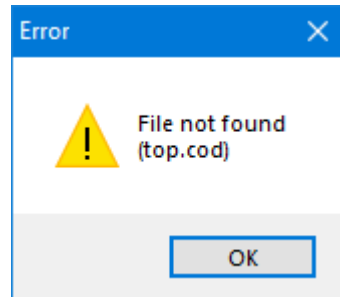
The installation can take several minutes.





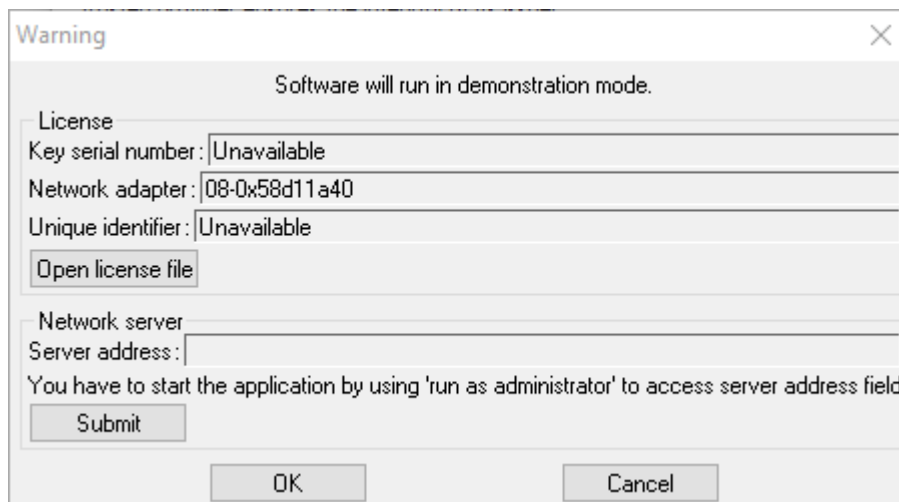
## License Installation

When launching the program, if you do not have a **TopSolid** license for the current version, the following message is displayed.



- Click on the **OK** button.

A new dialog box is then displayed. Two choices are available depending on how you manage your license.

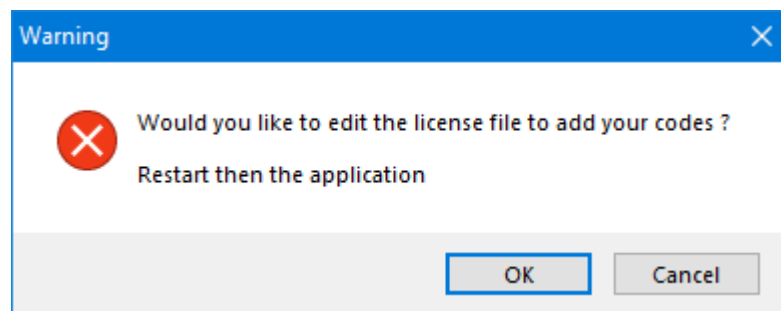


### Managing standalone licenses

Cases of licenses associated with a machine ID or a fixed key

- Click on the **Open license file** button and **confirm** the operation.

The following warning message is displayed.



A notepad document called **top.cod** opens.

**Note:** When opened, this file is automatically created in the configuration folder.

- Enter the lines of code received by email. To do this, copy and paste the lines of code to avoid typing errors.
- **Save** and **close** the file.

## Managing floating licenses

### Case of a license server and several client workstations

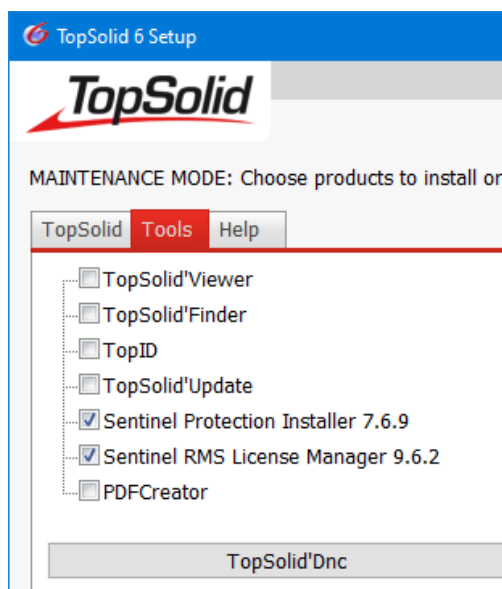
#### License server installation

**Note:** This is a server and not a user workstation for server use!

- On the license server, run the **setup.exe** file from the installation DVD or from the **TopSolid** mounted disk image.

The dialog box of the products available for installation is displayed.

- In the **TopSolid** tab, uncheck all the boxes.
- In the **Tools** tab, check only the **Sentinel Protection Installer** and **Sentinel RMS License Manager** boxes.



- Start the installation.

**Sentinel RMS License Manager** is the license server and **Sentinel Protection Installer** is the driver that manages the communication with the protection key.

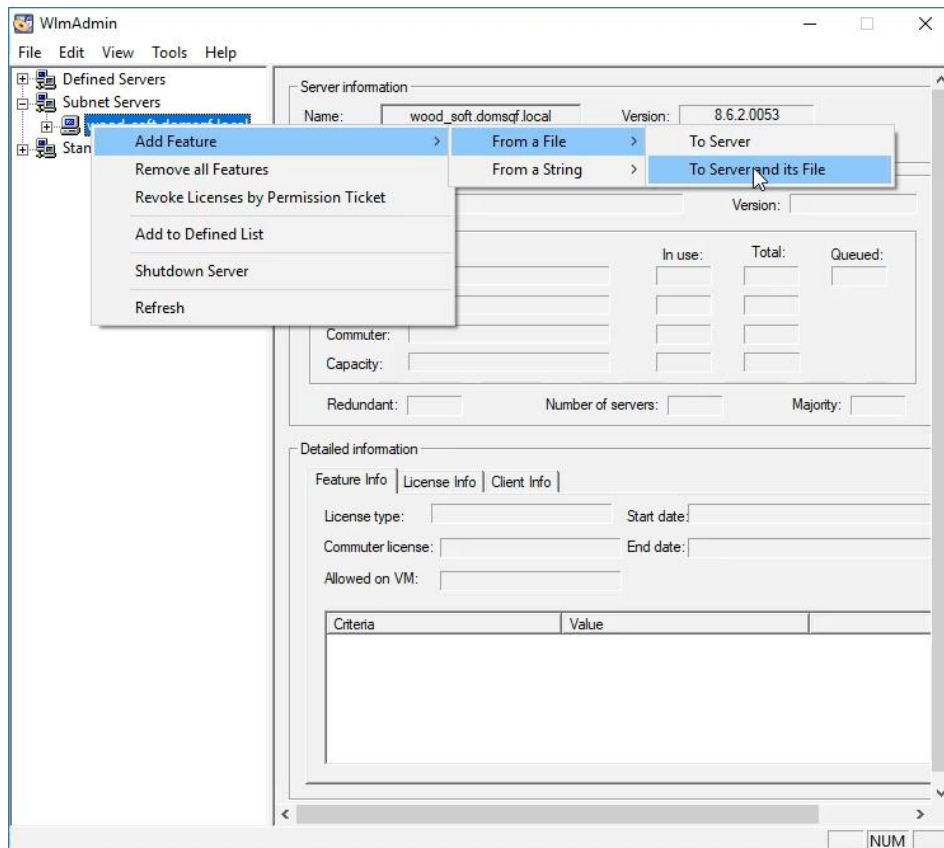
#### Adding floating licenses on the server

- Select a backup folder for the **.lic** files on the server sent by your sales agency.

**Warning:** It is important not to move this folder after completing the following steps, otherwise you may have to start all over again.

- Select the **TopSolid v6** DVD drive, follow the **TopSolid 6 DVD Drive > Setup > Redist > Sentinel RMS License Manager > Tools** path, then run the **WlmAdmin.exe** file.
- Copy the **Tools** folder to the license backup folder, then run the **WlmAdmin.exe** file.
- Expand the **Subnet Servers** node.
- Right-click on the server, select **Add Feature > From a File > To Server and its File** and then search for each file.

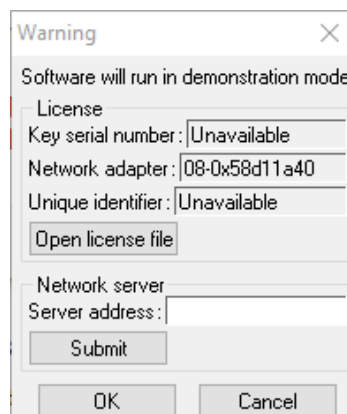
**Note:** This step must be performed as many times as there are **.lic** files.



## Adding license modules on user workstations

On each user workstation, **TopSolid** must be launched in administrator mode to be able to enter the address of the license server.

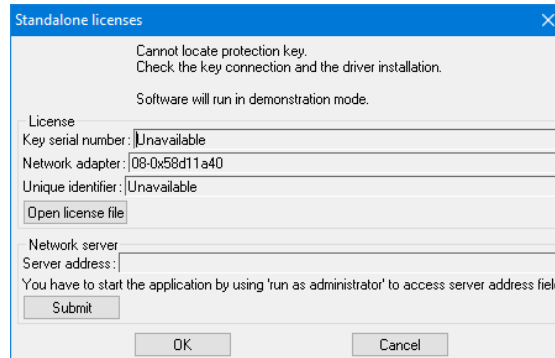
- Right-click on the **TopSolid** desktop shortcut and select **Run as administrator**.
- Click on the **OK** button to **confirm** the operation.



- When the program is launched, the license management dialog box is displayed. Enter the name of the license server or the IP address in the dialog bar.
- Click on the **Submit** button.

This step automatically creates the **LSFORCEHOST** environment variable (selection of a single license server). This variable is available in **Control Panel > System > Advanced system settings > Environment Variables** or by typing "variable" in the Windows command bar and selecting **Edit system environment variables**.

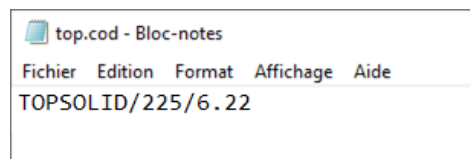
The **LSFORCEHOST** environment variable can be used to force the application to search for a computer with only one license server (saves time when searching for the server). If the license server indicated in the variable cannot be found, the application stops the search and sends an error message.



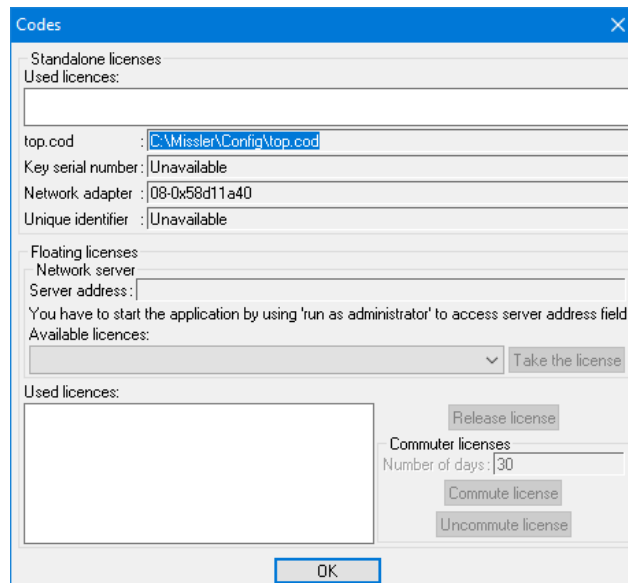
Once the address of the license server has been entered, you have to link the licenses of the modules to be used. To do this, several solutions are possible.

#### Solution using a "top.cod" file per user (common method)

- On each workstation, declare the floating license modules in the **top.cod** file. Insert one line per module as **TOPSOLID/Module No./Version No.** and **PolePpSa/Module No./Version No.** for the PostPro licenses.



**Reminder:** The **top.cod** file is available by clicking on the **Open license file** button in the dialog box that appears when starting **TopSolid** or in the **Config** folder. To know the path of the **top.cod** file, you simply have to go back to the **TopSolid** software and select the **Help > Codes** command.



#### Solution using a "top.cod" file centralized on the server

This solution has the advantage of allowing the license administrator to manage the allocation of licenses to each client workstation and to manage only one license file.

- From the **TopSolid** software, select the **Help > Configuration** command. Make sure that all workstations have the same path to the **TOPGROUP** folder.
- Create a blank **.txt** file from the notepad and name it **top.cod**.
- Open this file and detail the allocation of modules workstation by workstation with the following syntax:
  - PC1: TOPSOLID/Module No./Version No.*
  - PC2: TOPSOLID/Module No./Version No.*
  - PC3: TOPSOLID/Module No./Version No.*
  - etc.

*PC1, PC2, PC3* must be replaced by the *computer name* of the company's subnet.

**Note:** For the post-processor license, the syntax is *PolePpSa/Module No./Version No.*

### Desktop shortcut solution

This final solution consists of entering an argument in the **TopSolid** desktop shortcut of the appropriate version. This method allows management without filling in the **top.cod** file.

- Right-click on the appropriate shortcut and select **Properties**.
- In the **Target** field, enter *-fTOPSOLID/Module No./Version No. followed by version no.exe*.
- Replace *Module No.* with one of the floating license module numbers available on the server(s).

You can request several licenses by cumulating the arguments: *top621.exe -fTOPSOLID/200/6.22 -fTOPSOLID/2/6.22*, etc.

**Note:** You can enter the licenses common to all workstations and/or the unlimited licenses for the post-processors in the **top.cod** file, then customize it by using the necessary licenses from the shortcut.

### **Additional license server information**

The protection key is required to identify the server machine. Only licenses generated with the key identification number can be added to the license server.

The license server runs through a Windows service called **Sentinel RMS License Manager** and a **lservnt.exe** process. The service automatically starts each time the system is launched. For more information on **Sentinel RMS License Manager**, please refer to the **TopSolid** media help available in **Setup\Redist\Sentinel RMS License Manager\Help\Default.htm**.

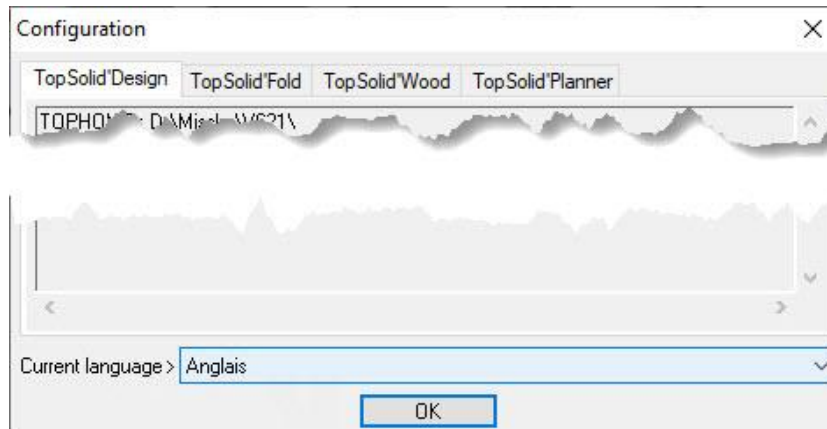
#### **Notes:**

- You have to make sure that the license server workstation is visible, via the network, by the client workstations.
- The **lservnt.exe** executable manages the available licenses and their allocation to client workstations.
- This executable is launched automatically each time the system is rebooted.
- The **lservnt.exe** process must be present in the Windows task manager of the license server workstation. It should also appear in the list of Windows services in **Start** mode and **Automatic** mode.
- The client and server firewall must have port 5093 open in entry and exit (in UDP mode).
- If **Sentinel RMS License Manager** is already installed, its version must be at least version 9.4.0.

## Additional Configuration

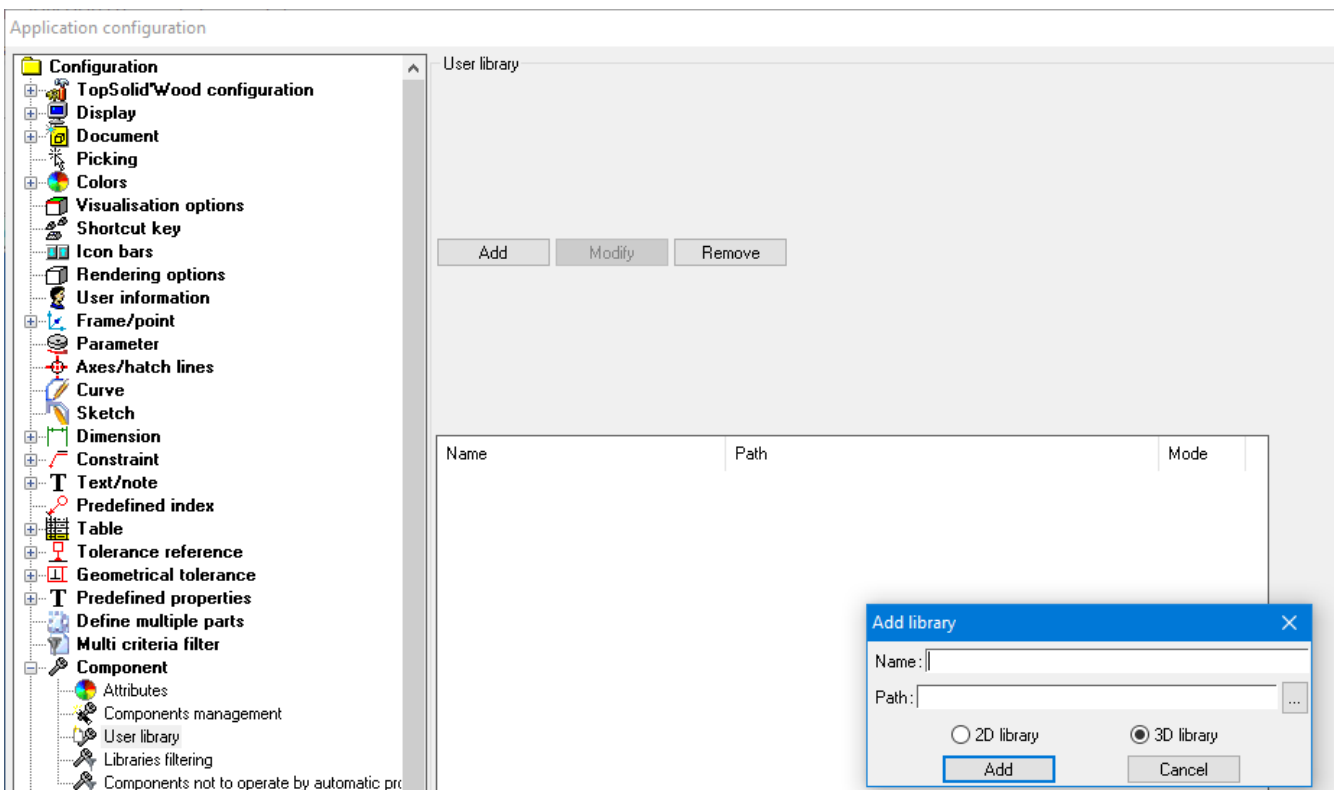
### Language setup

You have to configure the language using the **Help > Configuration** command.



### Library configuration

The paths to the **user libraries** are available in the **Tools > Options > Component > User library** command.

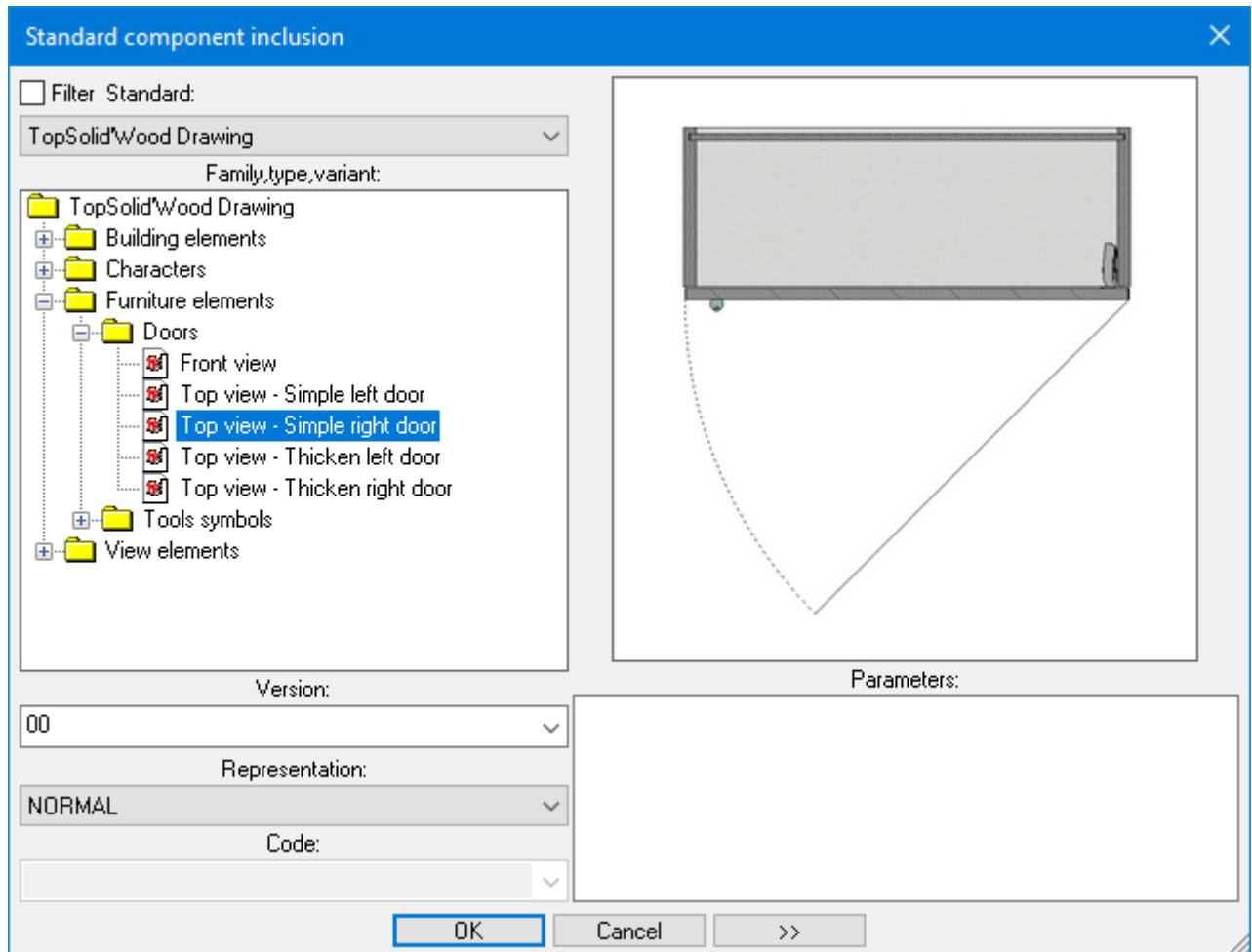


In the case of several users, it is imperative that the name and path to the libraries are identical and are located on a common network server.

**Note:** It is preferable to enter short folder names, without using accents or special characters `\ / : * < > |`. Excessively long path documents can lead to loss of links when exporting projects.

**Recommendation:** Since these are the standard element libraries to be used in common, the library folder should be created in the group configuration folder. The beginning of the path can then be written as **\$STOPGROUP**.

- Separate large identifiable assemblies by allowing elements to be managed via the **Family, Type, Variant** tree structure available with the **inclusion standard components**.



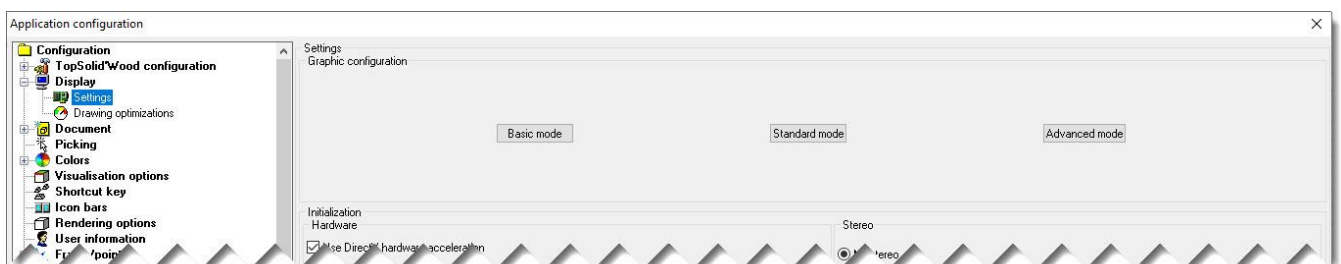
Example:

**Name:** Furniture      **Path:** \$TOPGROUP/Lib/Furniture

**Name:** Hardware      **Path:** \$TOPGROUP/Lib/Hardware

## Configuring graphics settings

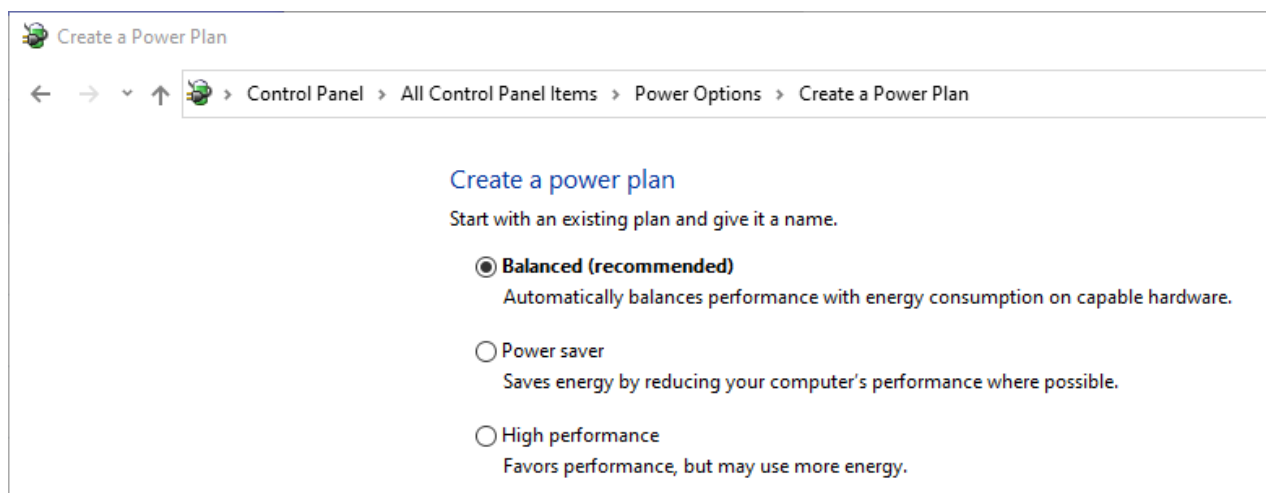
You can adjust the graphics settings in the **Tools > Options > Display > Settings** command.



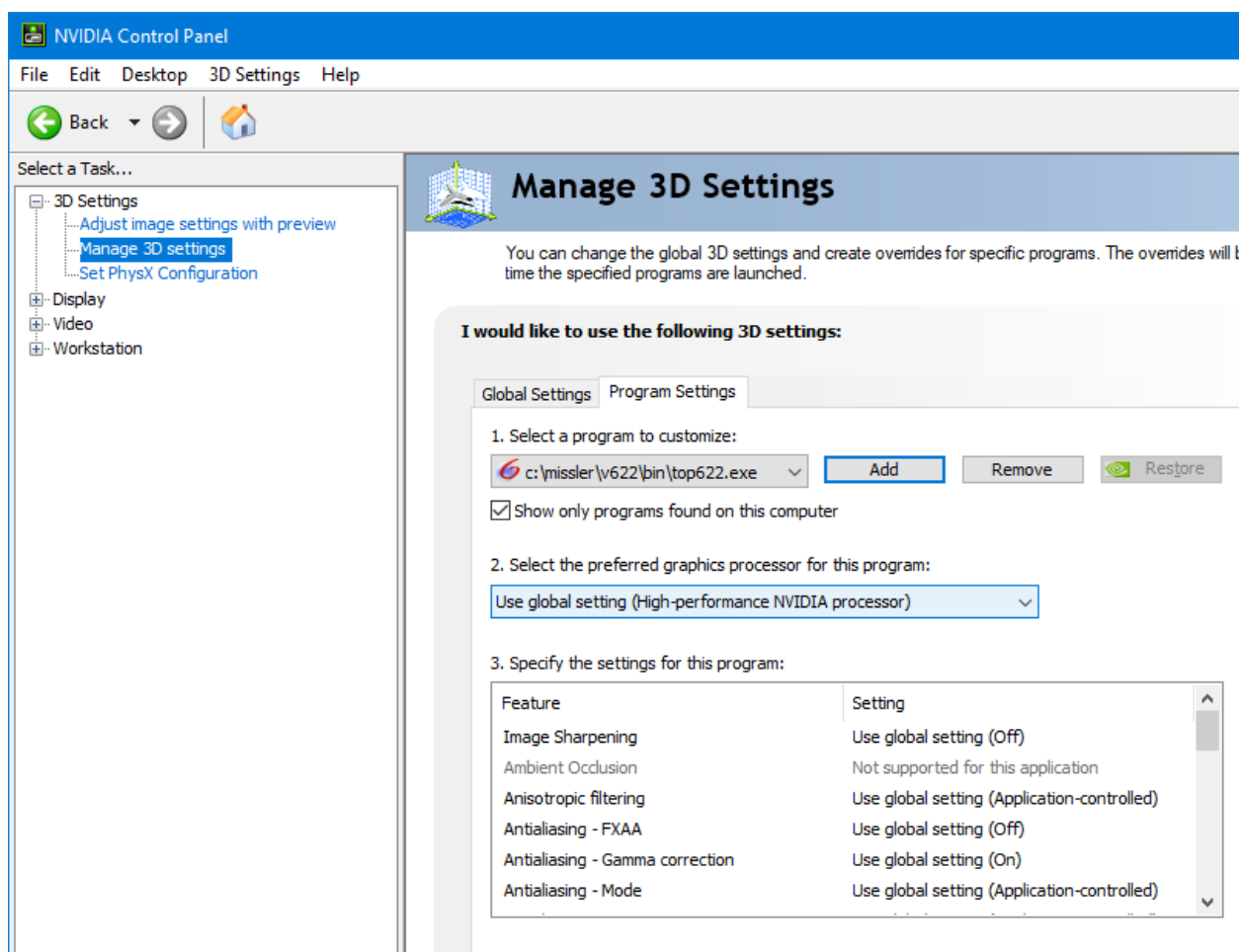
Increasingly more laptops are equipped with an integrated graphics card coupled with the commonly recommended NVIDIA graphics card. Often, the integrated graphics card is used by default. This can however result in a decrease in display performance or even graphic issues in **TopSolid**.

In order to overcome these possible issues, it is necessary to perform the following actions.

- Make sure that your computer's power options are not set to **Power saver** mode.



- If necessary, open the **control panel** for your graphics card and then add **TopSolid** in the **program settings** to assign personalized settings to it.



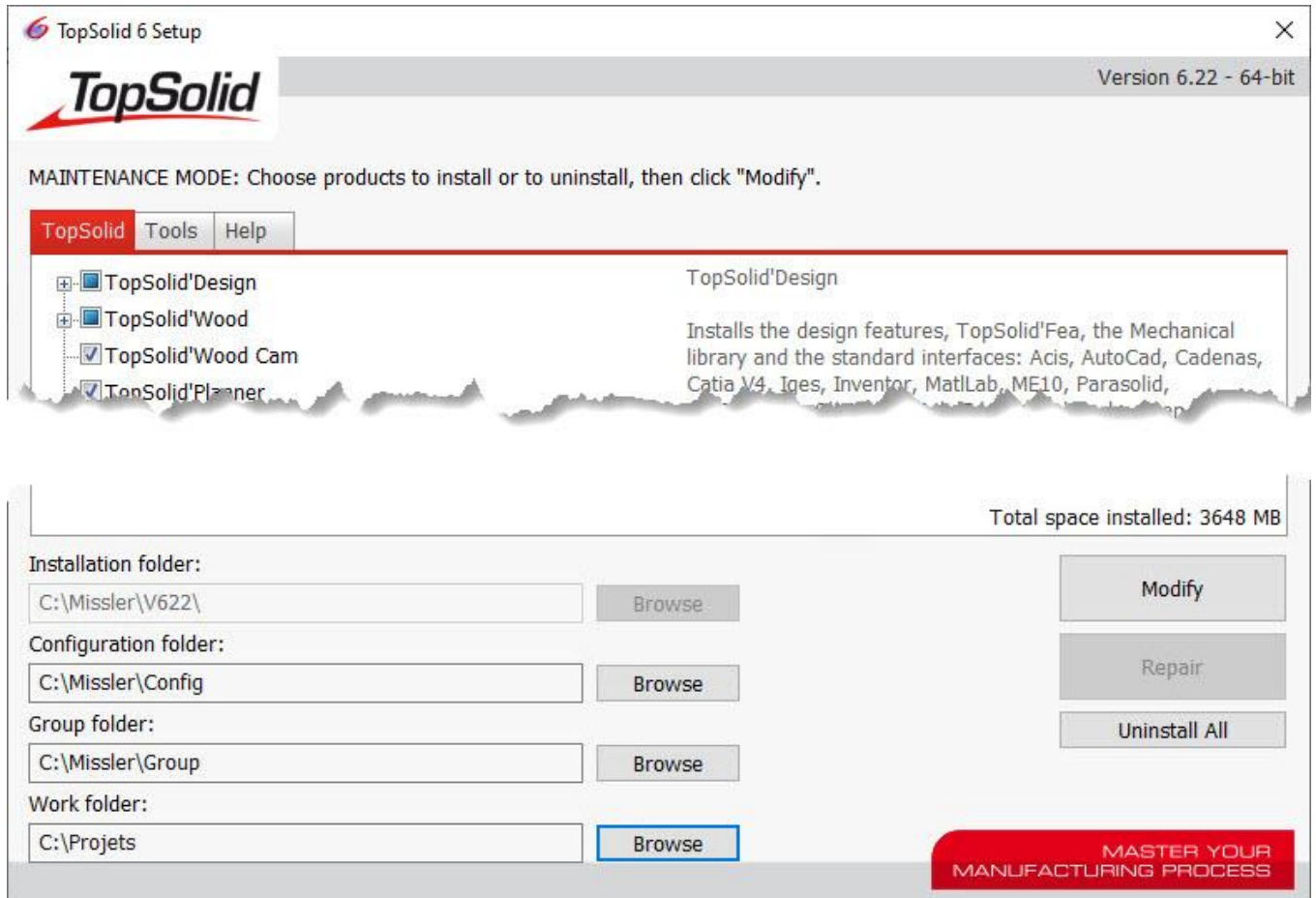


## Uninstalling TopSolid v6

You can now uninstall **TopSolid v6** from the same installation setup file.

The **Uninstall All** button ensures that all installed applications are removed.

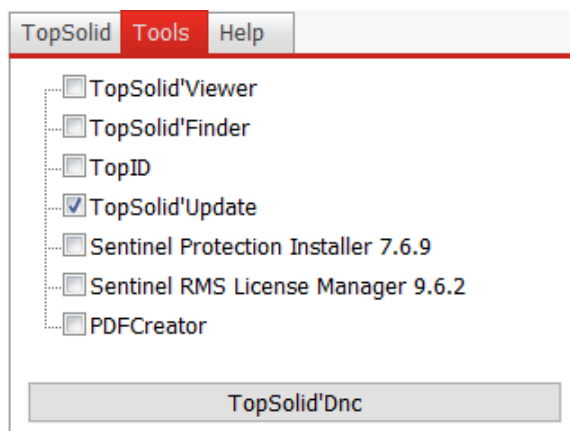
It is important not to use the Windows program manager.



## Additional Features of the TopSolid v6 Setup

### PDFCreator

The installation of **PDFCreator** is available in the **Tools** tab of the **TopSolid v6** installation menu.



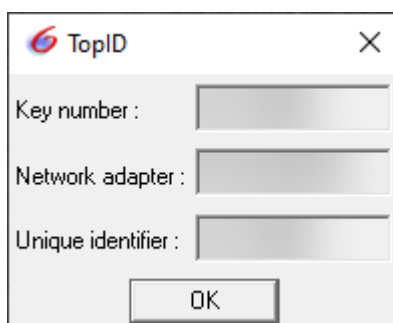
This allows you to have a PDF printer that can be used during the multi-draft.

### TopID

Since version **6.22**, **TopID** is available in the **Tools** tab of the **TopSolid** installation set up file.

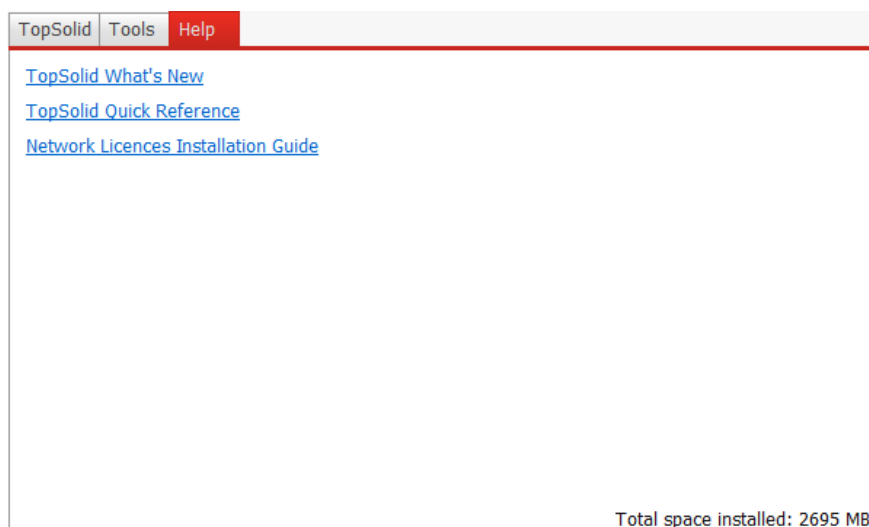
It allows you to know:

- the protection key number used;
- the network card ID;
- the unique identifier.



### What's new in TopSolid

From the **Help** tab of the installation menu, you can access the document about the new features of the version currently being installed.



Before starting the license setup steps, you simply have to make sure that the server and the user workstations are communicating properly.

## Request Codes

### ***Standalone license***

## With the protection key or on a network card

- Ask your **TopSolid** reseller for the codes.

You have to provide your protection key or your network card number.

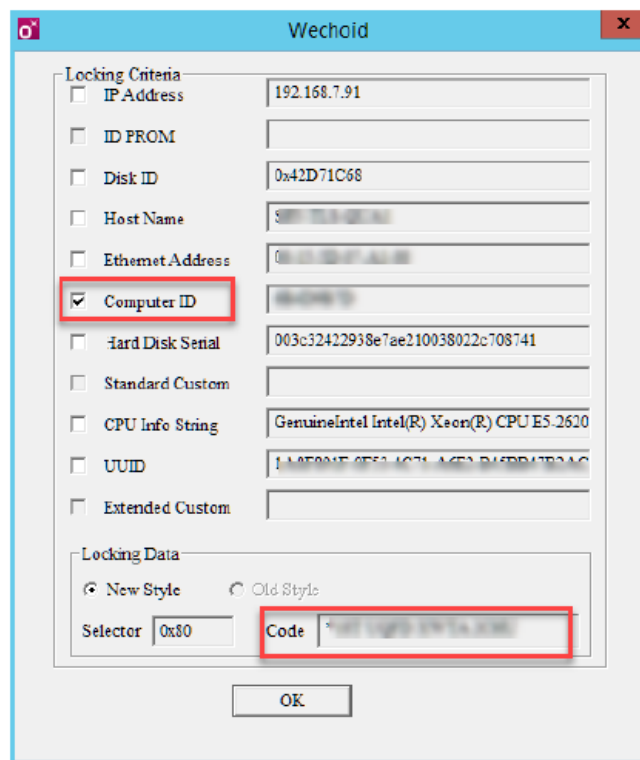
**Reminder:** To know your key or network card number, you simply have to launch **TopSolid** and go to **Help > Codes**.

### ***Floating license***

When you request licenses for the new version or their renewal from your sales office or **TopSolid** reseller, it is necessary to provide the credentials that you can find via the **Wechoid** tool of **Sentinel RMS**.

### Protection key (or Dongle)

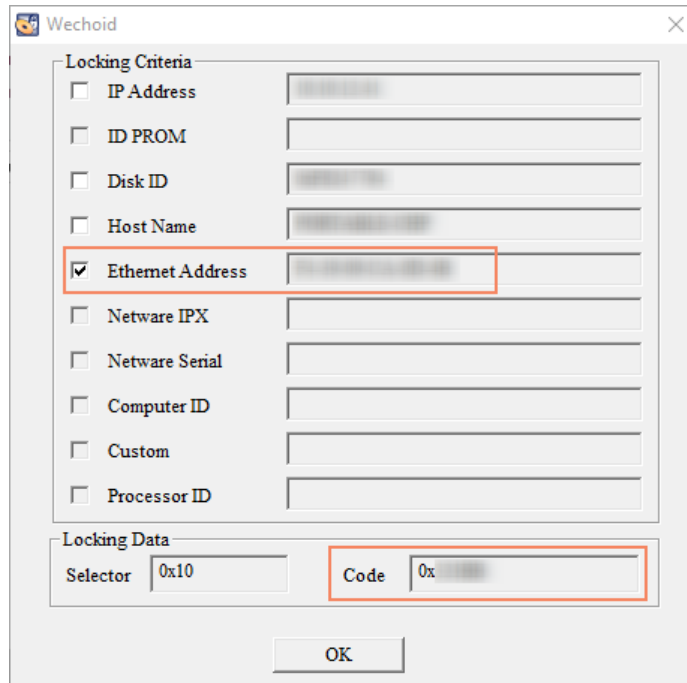
- Browse through the **TopSolid** setup to launch the **Wechoid.exe** program available in the **TopSolid > Redist > Sentinel RMS License Manager > Tools** folder.
- Check only the **Computer ID** box.
- Transmit the code available in the **Code** field.



## On machine identifier

- Browse through the **TopSolid** setup to launch the **Wechoid.exe** program available in the **TopSolid > Redist > Sentinel RMS License Manager > Tools** folder.
- Uncheck all boxes except **Ethernet Address**.
- Transmit the number available in the **Code** field to your sales department.

**Note:** It is best to **copy and paste** the code to avoid typos.



The screenshot shows the 'Wechoid' dialog box. It has two main sections: 'Locking Criteria' and 'Locking Data'. In the 'Locking Criteria' section, there are several checkboxes: 'IP Address', 'ID PROM', 'Disk ID', 'Host Name', 'Ethernet Address' (which is checked and highlighted with a red box), 'Netware IPX', 'Netware Serial', 'Computer ID', 'Custom', and 'Processor ID'. Each checkbox has a corresponding text field to its right. In the 'Locking Data' section, there are two fields: 'Selector' (containing '0x10') and 'Code' (containing '0x' followed by a blurred number, also highlighted with a red box). An 'OK' button is located at the bottom center of the dialog.

## Advanced

### Floating license server

#### Installation on different subnets

If the client and server workstations are located on different subnets or communicate via the Internet, the following actions must be performed:

- Open port 5093 on the router and firewall. This port is reserved for **Sentinel License Manager**.
- Declare the **LSPORT** environment variable on the client machine with the value **5093** (set **LSPORT=5093**).
- Declare the **LSEVOPTS** environment variable on the server machine with the value **-port5093** (**LSPORT=5093**).

#### Installation on a virtual machine

You can install a license server and its protection key driver on certain virtual servers. Depending on the type of virtualization technology, the USB connectivity is either compatible or not:

- VirtualBox, VmWare Workstation = USB compatible
- Hyper-V, Citrix, VmWare ESX = USB not compatible

This creates a problem as **Sentinel RMS License Manager** needs to access the USB drive to protect the licenses. Protecting a license on a network card ID (MAC address) is not reliable on a virtual server since it can be modified very easily.

#### Solution 1

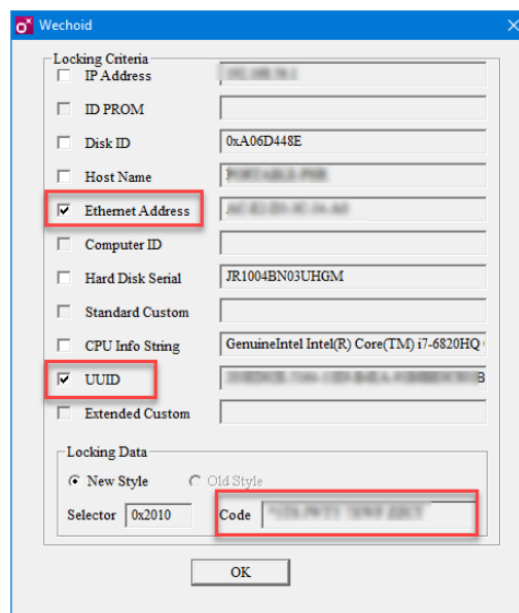
When protecting a license server, a USB hub must be used. This makes the USB drive available on the network. Two solutions are recommended by **TOPSOLID SAS**:

- Anywhere USB (<http://www.digi.com>)
- DongleServers (<http://www.dongle-server.com>)

The purchase of these hubs is at the customer's expense.

#### Solution 2

You can generate a license using the MAC address of the network card combined with the UUID. To do this, you simply have to use the **Wechoid** tool and check the **Ethernet Address** and **UUID** boxes. The indicated code will have to be communicated to generate the license. This license will have to be renewed every year.



## Frequent Issues

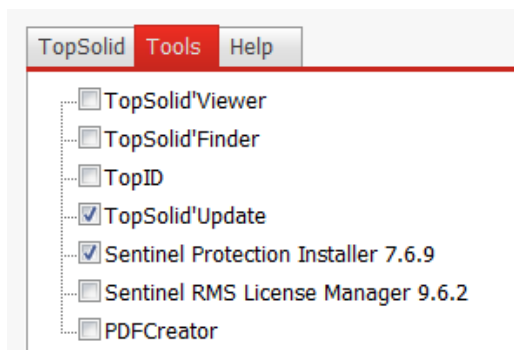
### *Standalone license*

#### The protection key is not detected at startup

- Make sure that the protection key is properly plugged in and that it lights up.

If the protection key does not light up, it means that it is not detected by Windows:

- If the **protection key is red or orange**, make sure that the driver is properly installed.
- To reinstall the driver, you have to relaunch the **TopSolid** setup and select **Sentinel Protection Installer** in the **Tools** tab.



- If the **protection key is yellow**, no driver is required and must not be installed on the workstation.
- Change the USB port.

#### Invalid codes at startup

Codes are available on the network card, but when launching **TopSolid**, an error message is displayed indicating that the codes are invalid.

- In the **Help > Codes** command, make sure that the network card number is the same as the one provided when the codes were requested.

If the codes are not the same, it is possible that this is because the network cards activated when launching **TopSolid** are not the same as when the codes are requested.

- Try to activate or deactivate the network cards by relaunching **TopSolid** between each attempt.

**Note:** The PC power saver can sometimes disable some network cards.

### *License server*

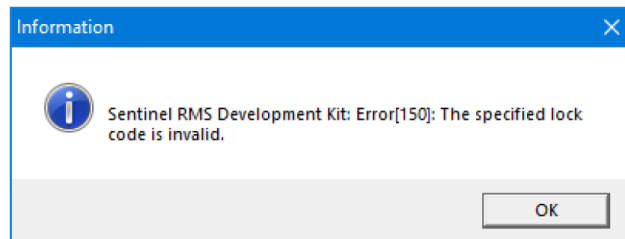
#### Starting in Demonstration mode

- On the server:
  - Check the TCP/IP (ping, route...).
  - Make sure that the **lservnt.exe** process is running.
  - Make sure that the names of the client and server workstations do not contain the "\_" or "-" character.
  - The **Wechoid** utility sends the ID key code (this code is different from the serial number of the key). This code must be different from 0.
  - With **WlmAdmin**, check if there are licenses in the same version as **TopSolid**.

- On the client workstation:
  - Make sure that the workstation has access to the server with **WlmAdmin**. The name of a server should appear. If the client workstation does not find the server, the system environment variable **LSFORCEHOST** = *the name of the server* can be added.
  - Make sure that a floating license has been accepted by **TopSolid**.
  - In the event of a sudden shutdown, **TopSolid** attempts to release the license acquired from the server before shutting down. Unfortunately, it is possible that this license will not be released. If the application is immediately relaunched but no other license is available, the application will run in **Demonstration** mode. Unused licenses are released after five minutes. You simply have to wait for this period of time before relaunching the application.

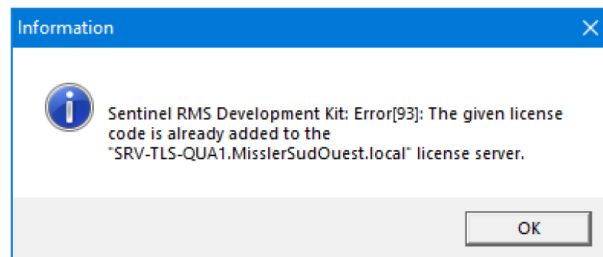
## Unable to add a license

When inserting a license in the **Sentinel RMS License** server, the following message is displayed.



This message indicates that the license does not correspond to the key or ID. Either the floating key is not connected or the RMS server is not on the correct server.

It is also possible to get the following error message when adding the license.



This error message indicates that the license has already been added to the license server.

## Configuration

### Blank configuration following a version update

When launching a new version of **TopSolid**, it is possible that the configuration of edges, automatic assembly, material overvaluations, etc. is not found.

- Make sure that the files from the **TOPGROUP** of the old version have been copied to the **TOPGROUP** of the newly installed version.

**Reminder:** You can find out the path to the **TOPGROUP** using the **Help > Configuration** command.

If that still does not work, you will find two folders in the **GROUP** folder: one folder with the old version number and another folder with the new version number. You would have to copy the files from the old version to the folder of the new version.

**Example:** To switch from **TopSolid 2019** to **TopSolid 2020**, you have to copy and paste the **Group/V620** folder into the **Group/V621** folder.

## Notes