# *Installing Terrasolid Products*
# *Version 020*
# *04 March 2020*

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# *Getting Help*

This guide provides information only about how to install your Terrasolid products and licenses.

We are sure that you will experience different problems with GeoCue, or Terrasolid products that range from installation issues to defects that made it through our testing undetected. We hope that you will immediately contact us with any problems or questions and have the patience to work with us through a successful GeoCue deployment.

Please browse our online searchable knowledgebase and user forum for the answers to your questions prior to contacting us via e-mail or phone for assistance with, or comments about GeoCue, or Terrasolid products.

Online searchable knowledgebase and forum for all our products:

**support.geocue.com**

E-mail:

**support@geocue.com**

Phone:

**+1-256-461-8289**

Just ask for Terrasolid Support and you will get connected with someone who can assist you. There is usually someone in the office between the hours of 0700 and 1800 CT, USA on weekdays. Weekends are sort of hit or miss.

Fax (always on):

**+1-256-461-8249**


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# *About this Document*

Welcome to GeoCue's *Installing Terrasolid Products Guide*. This guide will discuss typical download, installation and configuration of the Terrasolid products, as well as provide troubleshooting and recommendations on those topics.

For information on using the Terrasolid products, please refer to the applicable *User Guide*.


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# Introduction

This note covers setting-up the Terrasolid products and should be reviewed by your IT staff prior to registering for the permanent licenses.

## Invoice

Be sure to review your Terrasolid invoice to determine the exact products you purchased. Please take notice of the differences between the full products and the lite or UAV versions. For example, TerraScan and TerraScan Lite are different versions of the same product and have separate installation programs. Only one of the two product versions may reside on a machine at one time. Installing the incorrect product for your licenses will result in the product indicating that it has no license.

## About Terrasolid OY

Terrasolid software packages are used world-wide for airborne and mobile LIDAR data and image processing. Each package alone fills the requirements of their specific task. However, the best benefit comes from bundling different applications together and performing the whole work flow - data calibration, point classification, image processing and delivery product production - in one software environment.

## About GeoCue Group

GeoCue Group was founded in 2003 by a group of engineers with extensive experience in developing hardware and software solutions for primary remote-sensed data acquisition. Our initial products were aimed at reducing schedule and cost risk in geospatial production workflows by providing organizational, productivity and data management tools for base geospatial data production. These tools have been realized as the GeoCue product family. Today GeoCue workflow management tools are used by a majority of North American geospatial production shops. In 2005, GeoCue began selling and supporting Terrasolid tools for kinematic LIDAR data production. This was followed in 2009 by our acquisition of QCoherent Software LLC, the creator of the point cloud exploitation toolset, LP360. Today GeoCue is the largest supplier of kinematic LIDAR processing tools in North America and LP360 is the world's most widely used tool for exploiting point cloud data. In 2014, GeoCue Group started a division focused on using small Unmanned Aerial Systems for high accuracy mapping. Leveraging our expertise in production, risk reduction, and point cloud processing tools, we are continuing to bring new services and products to market to provide surveyors and other geomatics professionals exciting tools for geospatial data extraction using low cost drones including Loki, our plug-and-play PPK direct positioning system, and now our new True View LIDAR/Imagery fusion sensors. To learn more, visit www.geocue.com.


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# Downloading the Installation Packages

## Bentley MicroStation Based Packages

Terrasolid products are MicroStation based packages (MDL's) and will run on either the newer 64-bit **MicroStation CONNECT Edition** (10.00.00.25 or later), **Bentley Map PowerView CONNECT Edition** (10.01.00.22 or later), **MicroStation PowerDraft CONNECT Edition** (10.02.00.39 or later), and **Bentley OpenRoads Designer CONNECT edition** (10.01.00.15 or later) or the older 32-bit **MicroStation v08.05.xxx** (2004 Edition: 08.05.xxx), **MicroStation v8i** (08.11.07.443 or later), **Bentley PowerCivil v8i (**country versions 08.11.07.428 and 08.11.07.494), **Bentley Map v8i** and **Bentley Map PowerView v8i** (08.11.07.425, 08.11.09.91, 08.11.09.503). The licenses are the same for all versions of MicroStation, but the installation packages are different between the v8, v8i, and CONNECT Edition packages. The latest update for any of the 64-bit MicroStation, Map PowerView, PowerDraft, or OpenRoads Designer CONNECT Editions are recommended as the new tools and feature enhancements are only in the CONNECT edition packages. Map PowerView is typically the cheapest of the compatible 64-bit Bentley products.

1. Visit the Terrasolid download page at the following link: https://www.terrasolid.com/ssl/download_software.php
2. Select the Start Download Button.
3. Select the Language for the software (English or Finnish)
4. Click on the appropriate version for "software running on top of Bentley products".
    a. Note: If License Server/Manager, TerraSlave, or TerraStereo is desired then select "software running on top of Windows".
5. Select the appropriate Bentley platform.

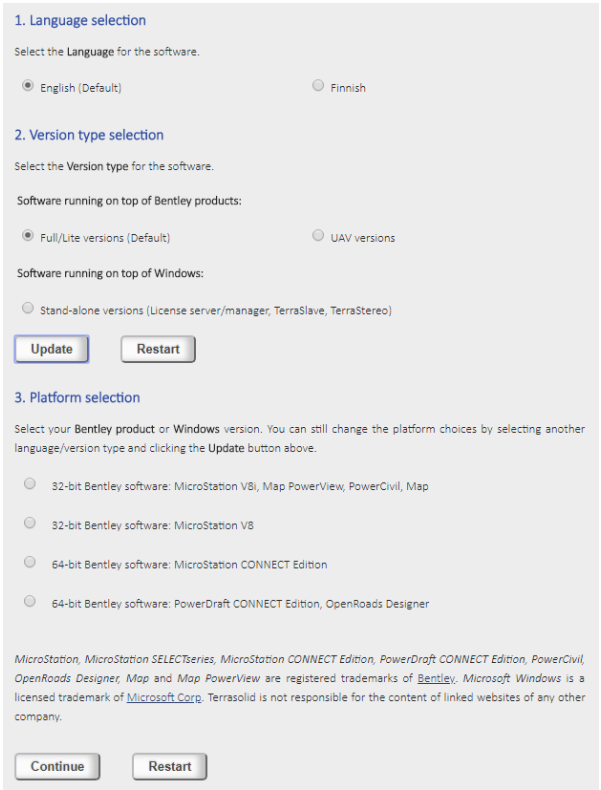


**Figure 1 - Terrasolid's Language and Platform Selection**


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6. Select the products that you have purchased.

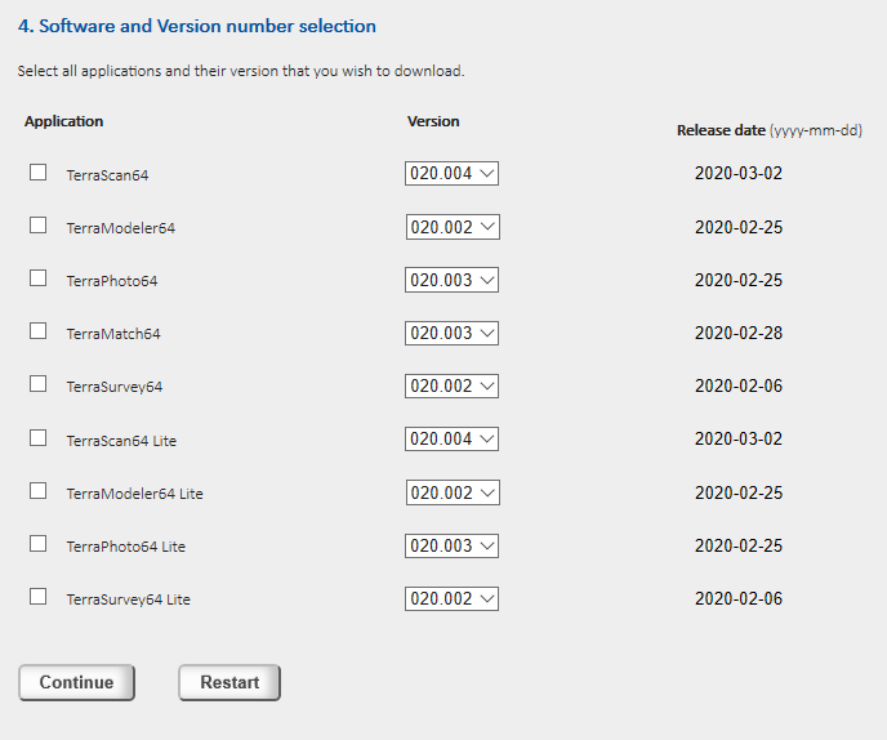


**Figure 2- Terrasolid's MicroStation Based Product Selection**

7. Once you select *continue* you will be prompted to enter your contact information, where you will need to enter the appropriate information and a valid e-mail address to which the download link will be sent.
8. Once submitted Terrasolid will send a confirmation e-mail with a download link to the provided address from Terrasolid Software Download no-reply@terrasolid.com. Please add this address to your exception list to ensure delivery.
9. The packages will download as a single compressed file, typically named "Terrasolid_Applications.ZIP".
10. The installation folder for each selected application is delivered as a zip file within the single compressed file. This speeds up the download process. You need to unzip the download file first, and then unzip the application folder(s) before being able to run the installation. See the Installing the Products section in this document.


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## Microsoft Windows Based Packages

Note: The packages on this page run on a machine running a Microsoft Windows operating system. These packages do not require any version of MicroStation to be installed.

1. Visit the Terrasolid download page at the following link: https://www.terrasolid.com/ssl/download_software.php

2. Click on an option in the **Stand-alone versions** section.

**Figure 2 - Terrasolid's Microsoft Windows Based Product Selection**

3. Once you select *continue* you will be prompted to enter your contact information, where you will need to enter the appropriate information and a valid e-mail address to which the download link will be sent.
4. Terrasolid will send you a confirmation e-mail with a download link to the provided address.
5. The packages will download as a single compressed file, typically named "Terrasolid_Applications.ZIP".
6. The installation folder for each selected application is delivered as a zip file within the single compressed file. This speeds up the download process. You need to unzip the download file first, and then unzip the application folder(s) before being able to run the installation. See the Installing the Products section in this document.

> Note: It is not necessary to install TerraSlave on a machine running TerraScan as the TerraSlave install is included with the installation of TerraScan.


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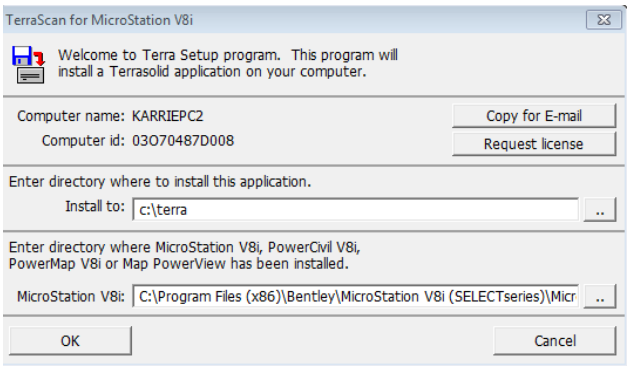
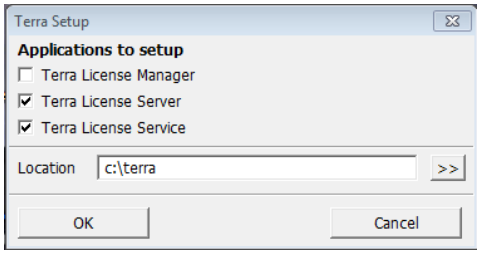
## Installing the Products

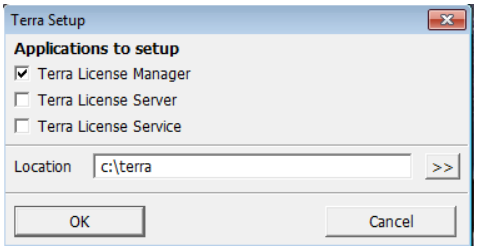
1. After downloading the Terrasolid product(s) that you have purchased, please install the desired product(s) on each workstation that will be using the software by running the "Setup.EXE" located in the extracted product folder. I.e. "\tscan_ce_eng_020_001\setup.exe".

> Note: The default installation folder for all products is for the MicroStation Connect Edition. You will need to provide the appropriate MicroStation or equivalent install folder if installing on another Bentley application.




2. **For pooled licenses** install the Terra License Server, and Terra License Service (if desired) on the designated license server machine, and the Terra License Manager on each one of the client (workstation) machines. 64-bit recommended.




**Terra License Server** and **Terra License Manager** are applications, which are communicating with each other through the **Windows Pipe**. In the system, Terra License Manager is used to load and return the licenses from the license pool. Loading an application does not automatically load the license from the pool folder.

This communication method does not use the Internet, therefore, TCP/IP settings do not have any effect. If you would like to share the licenses through the Internet, please install a VPN, or use fixed Internet connections. For more information about Windows Pipe, please search on the Internet. The pipe is valid if you can open and save files to terra\pool020.

**Terra License Server Service** is a service version of the License Server. It runs in the background without a user interface and does not require a user to be logged into the server machine. When the **Service** is installed, the **Terra License Server** will act merely as a user interface for viewing the status of the license pool and to register the server information. Settings changed in the GUI require a restart of the service to take effect.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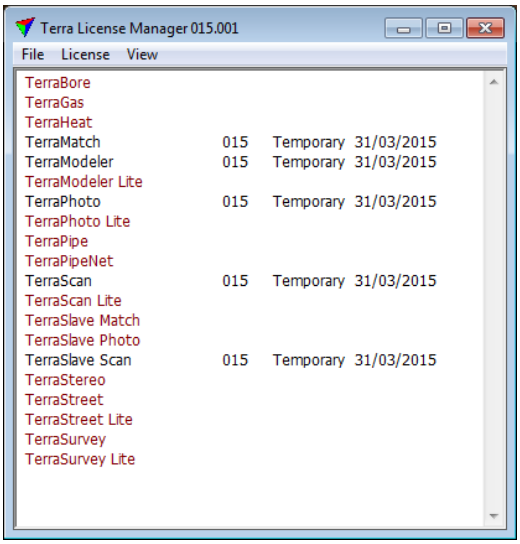
3. **For node-locked licenses** it is not necessary to install the Terra License Server. It is, however, advisable to install the Terra License Manager to monitor the licenses which reside on the machine (Terra License Manager -> View -> Server State).




## Silently Installing the Products

To run setup.exe in automatic mode, use a command line such as:

*setup "c:\terra" "c:\msv8\Program\MicroStation"*

where first parameter is the folder in which to install Terra application and the second parameter is the folder where the MicroStation executable is found.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# Registering Your Terrasolid Products

## Pool/Network Licenses

Network licenses are only available to customers with a valid maintenance agreement for the software and allow for the licenses to be used on different computers. **This is the recommended licensing mode.** Before registering for pooled licenses, the Terra License Server will need to have installed on the machine that is to be used as the Terra License Server.

1. Launch Terra License Server.
2. Select *File->Server Information*.

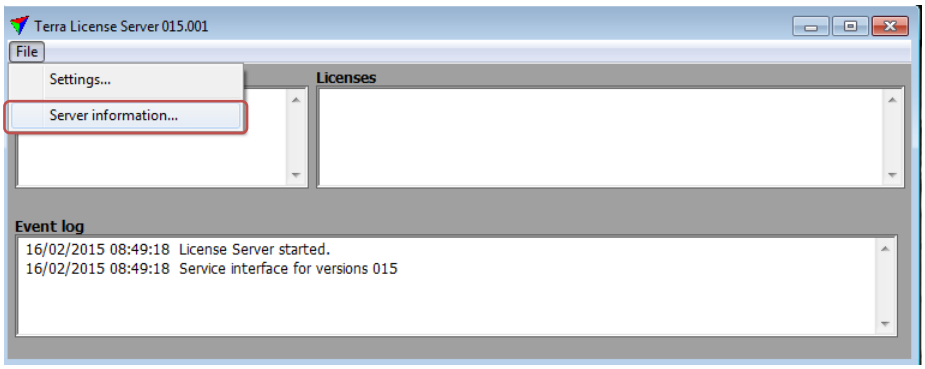
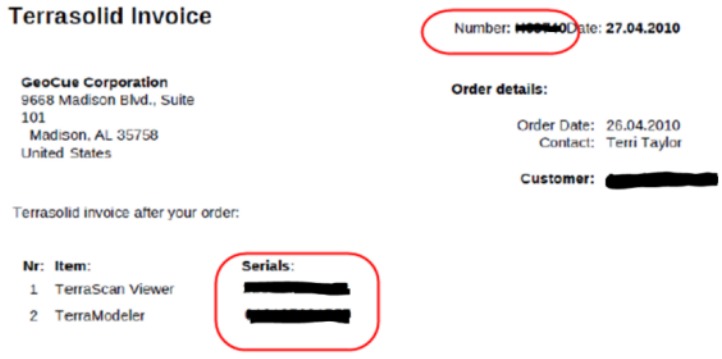



**Figure 3 - Finding the server name and ID**

3. Click “Open Web”
4. Please have a copy of your Terrasolid Invoice with product serial numbers on hand.





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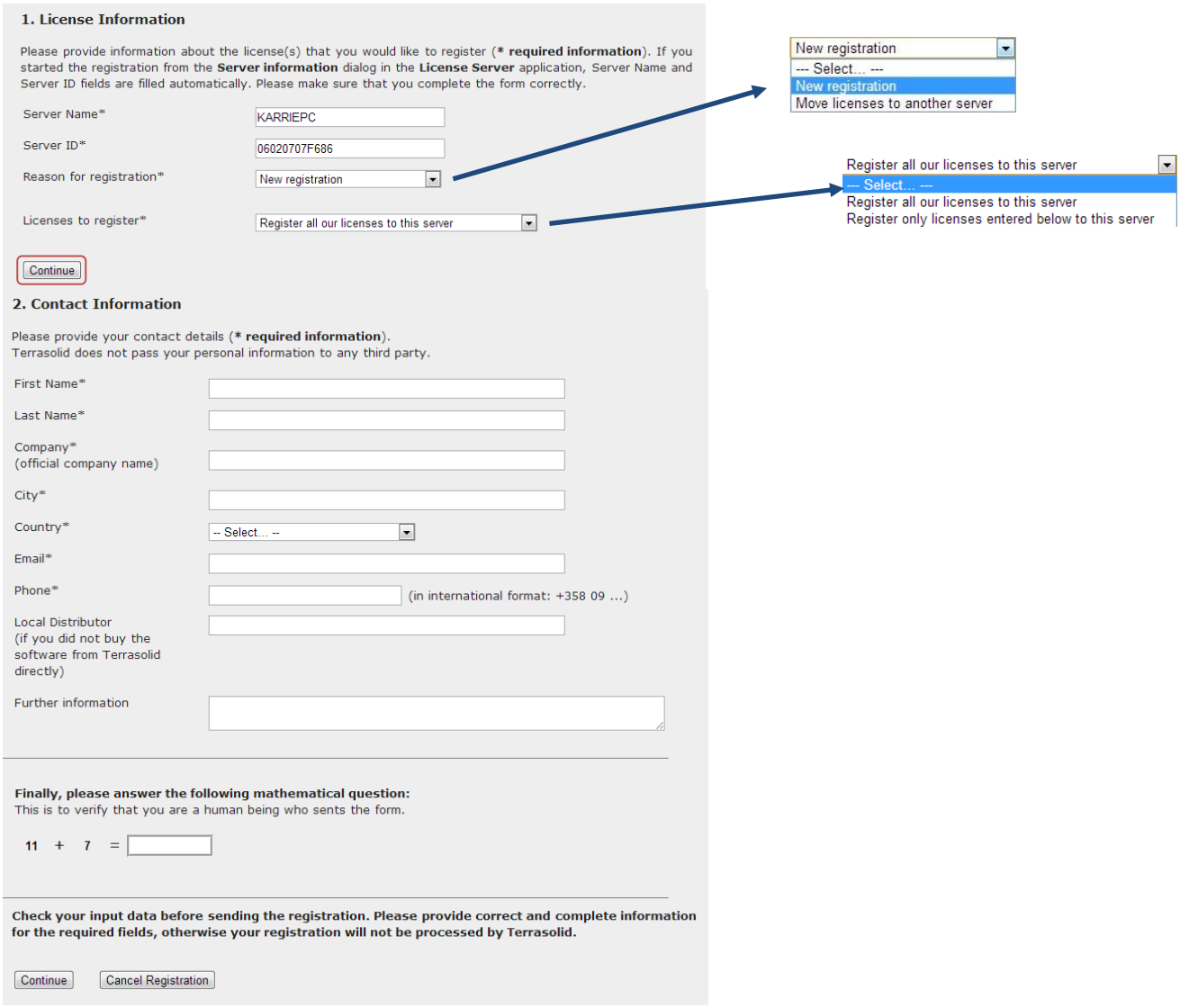


5. Enter the appropriate information to complete your registration.

   a. Enter the Server name and ID as found on the server information page in step 2.
   b. Reason of Registration:
      i. Select *New Registration* if you've purchased for the first time or additional licenses for an existing server.
      ii. Select *Move licenses…* if you are requesting to move licenses from an old server to a new one and agree to delete all licenses from the old server.
   c. Licenses to Register:
      i. *Register all our licenses to this Server* will register all licenses from all offices to the server named herein.
      ii. *Register only those licenses listed below* if only registering some of your company's licenses to this server. If you have numerous licenses and different locations, Terrasolid is flexible and can accept several different servers. Separate the licenses used on each server by listing either their serial numbers, or the Terrasolid invoice number during registration.
   d. In the *Information for Terrasolid* box enter your *Terrasolid Invoice number*.


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6. Terrasolid will send you your licenses directly. Please be sure that you can receive e-mails with ZIP file attachments from Terrasolid Licensing, licensing@terrasolid.com. Please add this address to your exceptions list to ensure receipt of the licenses. If you do not receive your licenses within 48-72 hours of registering, please contact support@geocue.com so that we may assist.
7. To assist with our records please let us know when you receive your permanent licenses.


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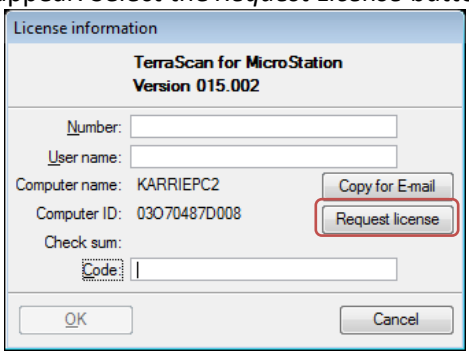
## Node-locked Licenses

Node-locked licenses are targeted to users who always use the licenses on the same machine, or for those evaluating the software. Before registering for node-locked licenses you will need to have the product(s) installed on each machine.

1. Launch MicroStation and load the MDL for one of the Terrasolid products.
2. The following license window will appear. Select the *Request License* button.




3. For customers who have purchased licenses please have a copy of your Terrasolid Invoice with product serial numbers on hand.

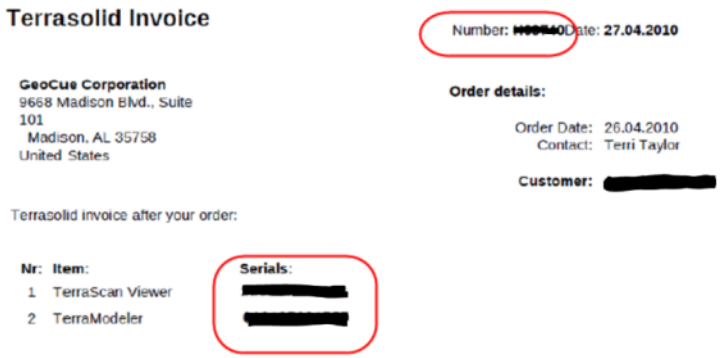



**Figure 4 - Terrasolid Invoice Example**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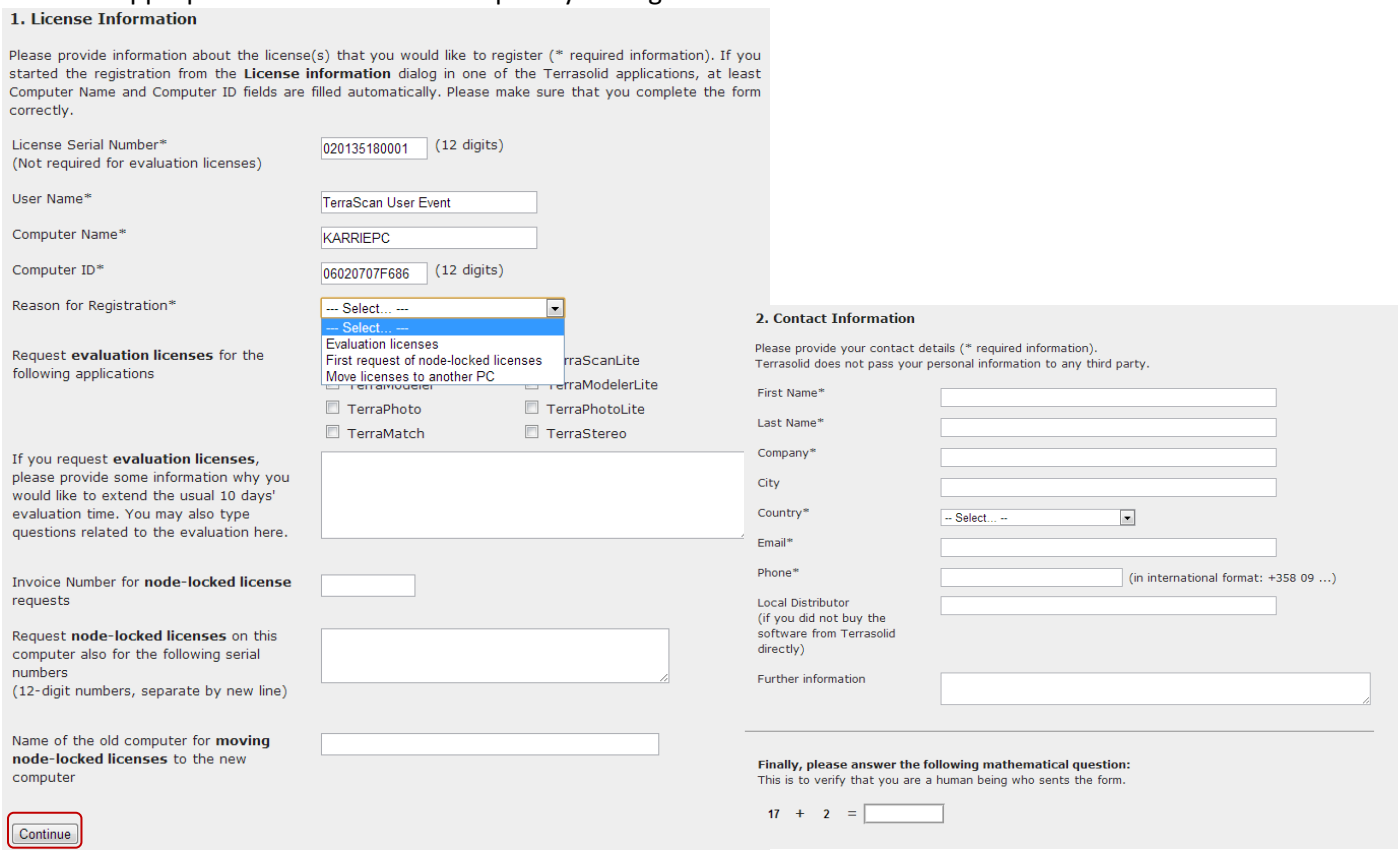
4. Enter the appropriate information to complete your registration.




   a. **For purchased product licenses:**
      i. Select all of the applications you wish to register on this machine;
      ii. In the "Valid Users" information box, enter the *serial numbers* for each of the selected purchased products to register them to the same machine;
      iii. In the *Information for Terrasolid* box enter your *Terrasolid Invoice number*.
   b. **For Evaluation licenses:** Select all of the applications you wish to evaluate on this machine.
5. Terrasolid will send you your licenses directly. Please be sure that you can receive e-mails with ZIP file attachments from Terrasolid Licensing, licensing@terrasolid.com. Please add this address to your exceptions list to ensure receipt of the licenses. If you do not receive your licenses within 48-72 hours of registering, please contact support@geocue.com so that we may assist.
6. To assist with our records please let us know when you receive your permanent licenses.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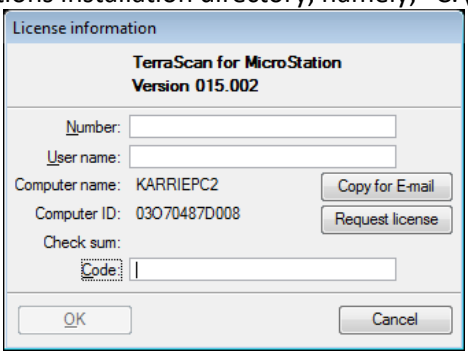
# Setting Up Your Terrasolid Licenses

Once you have received your licenses (*.LIC) you will need to follow the instructions for your license type.

## Node-locked Licenses

1. If license file(s) are provided, save the text files as .lic files in the License folder found in the Terra Applications installation directory, namely, "C:\terra64\license"
2. If only a license document is provided, then for each application, start the application and then copy and paste the license information (User name and Code) from the provided RTF document into the License dialog. Verify the check sum value matches, and then click OK to create a license file (.LIC) in the License folder of the Terra Applications installation directory, namely, "C:\terra64\license".




3. Before using TerraSlave please refer to the **Configuring TerraSlave** section.
4. You are ready to start using your Terrasolid software.

## Pool Licenses

### Terra License Server

1. On the Terra License Server machine extract your licenses (.LIC) into the current license pool folder found under the Terra Applications installation directory, namely, "C:\terra\pool020".
2. Open the Terra License Server GUI:
    a. The licensed products should be listed in the top left-hand pane and the licenses in use listed in the top right-hand pane for the product selected in the left-hand pane.
    b. Configure the Terra License Server by selecting *File->Settings:*
        i. Create an *Access Code*. The access code can be any alphanumeric sequence and is used to ensure that Terra License Managers are talking to the correct Terra License Server.
        ii. Set the *max duration* which is the maximum amount of time a license can be checked out from this Terra License Server by any Terra License Manager.

> Caution: Keep the max duration (check out timeframe) short as licenses checked out are unrecoverable until they expire and recover on their own.

3. Test the system by first checking out the licenses using the Terra License Manager installed on your server machine.

### Client Machines

1. On each client machine, install the Terra License Manager.
2. Open the Terra License Manager.
3. Configure the Terra License Manager by selecting *File->Settings:*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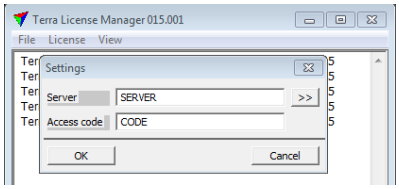
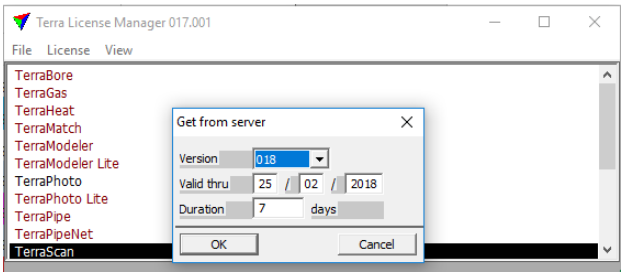
i. Enter the *Terra License Server name* or browse to it. Please note that browsing may take a very long while to generate a list of all the machines on the network, so it is advised not to browse. Enter the *Access Code* as it was entered on the Terra License Server settings.

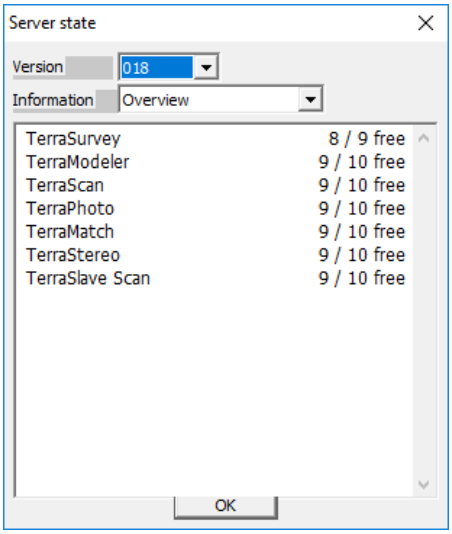



4. To check out a license for a product on the machine:
   ii. Click on each desired license type and then select *License->Get from server:*
      i. Select the License version to match the major version of the installed product.
      ii. Enter the expiration date for the license by either:
         1. Entering the date when the license expires (DD/MM/YYYY) or;
         2. Specifying the license check out duration in number of days.




Note: The max duration specified in the Terra License Server supersedes the duration entered in the Terra License Manager.

b. To check for available licenses on the machine:
   i. Click on each desired license type and then select *View->Server State:*





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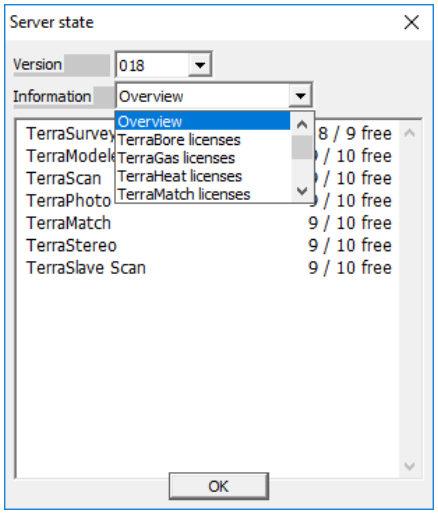
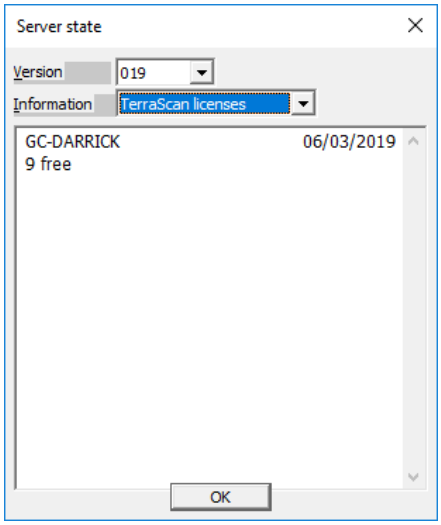
ii. Each License Type can be viewed individually by using the *Information* option to show on which machines they reside and the checkout expiration date (DD/MM/YYYY):





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## Silent Terrasolid License Check Out/In

Automatic or silent check out/in of the various Terrasolid product licenses is now possible. To run interactively as in the past, simply start the Terra License Manager.

To run in silent mode, use the following command line:

Syntax:

*license_manager VVV DD Module[+]*
For example:

Example A:
————————————————
license_manager 020 20 slave
This gets a TerraSlave version 020 license for 20 days.

Example B:
————————————————
license_manager 020 10 scan+model
This gets a TerraScan and a TerraModeler version 020 licenses for 10 days.

Example C:
————————————————
license_manager 020 0 slave
This returns the TerraSlave license to pool.

Parameters:

| Parameter: | Effect: |
|---|---|
| VVV | License version number, example 020 for v020.xxx, 021 for v021.xxx |
| DD | **n** days for license checkout, set n=0 to check the license(s) back into the server pool. |
| Module | scan = TerraScan license<br>model = TerraModeler license<br>match = TerraMatch license<br>photo = TerraPhoto license<br>slave = TerraSlave license<br>survey = TerraSurvey license<br>stereo = TerraStereo license<br><br>Note: Get or return more than one module at the same time by concatenating the modules with '+'. |


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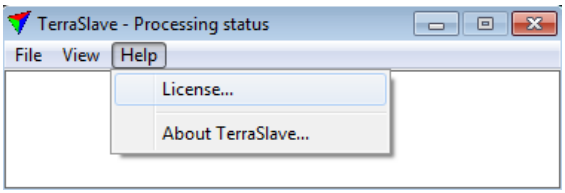
## Configuring TerraSlave

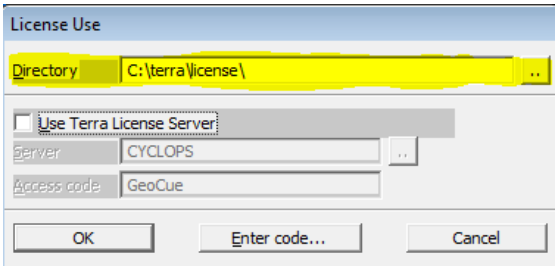
Before using TerraSlave it needs to be configured so that it can find the applicable node-locked licenses or perform an automatic check out/in of floating licenses. Note: Automatic license checkout from the license server is not currently working.

### TerraSlave – Node-locked Licenses

1. Browse to the TSlave installation folder found under the Terra Applications installation directory, namely, "C:\terra64\tslave".
2. Double-click on TSlave.exe to launch the TerraSlave GUI. Note that the GUI will open minimized in the taskbar.
3. Open the Licensing dialog by selecting *Help->Licenses*




4. Directory should be set to the License folder in your Terra installation directory where the node locked licenses were placed, typically "c:\terra64\license". If not, browse to the folder to set it.




5. Select OK.
6. Close the TerraSlave GUI.
7. After closing the TerraSlave GUI a *TSlave.UPF* file is generated in the TSlave installation folder.
8. Repeat for each machine that has a node-locked license or copy the UPF file to the TSlave installation folder on each of those machines.

Note: TerraSlave will utilize a TerraScan license if there are no available TerraSlave licenses.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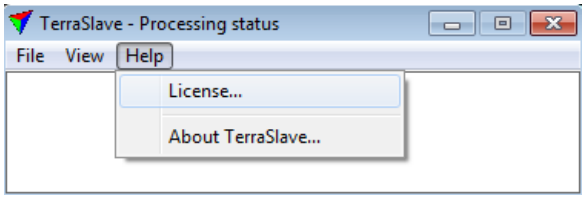
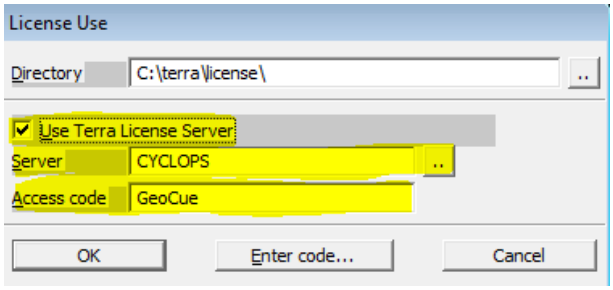
## TerraSlave - Pool Licenses

Note: Automatic license checkout is not currently working so configure as node-locked licenses.

1. On the client machine Browse to the TSlave installation folder found under the Terra Applications installation directory, namely, "C:\terra64\tslave".
2. Double-click on TSlave.exe to launch the TerraSlave GUI. Note that the GUI will open minimized in the taskbar.
3. Open the Licensing dialog by selecting *Help->Licenses*




4. Select the **Use Terra License Server** checkbox.
   a. Enter the *Terra License Server name* or browse to it. Please note that browsing may take a long while to generate a list of all machines on the network.
   b. Enter the *Access Code* for the Terra License Server.




5. Select OK.
6. Close the TerraSlave GUI.
7. After closing the TerraSlave GUI a *TSlave.UPF* file is generated in the TSlave installation folder.
8. Repeat for each client machine or copy the UPF file to the TSlave installation folder on each of those machines.

Note: TerraSlave will utilize a TerraScan license if there are no available TerraSlave licenses.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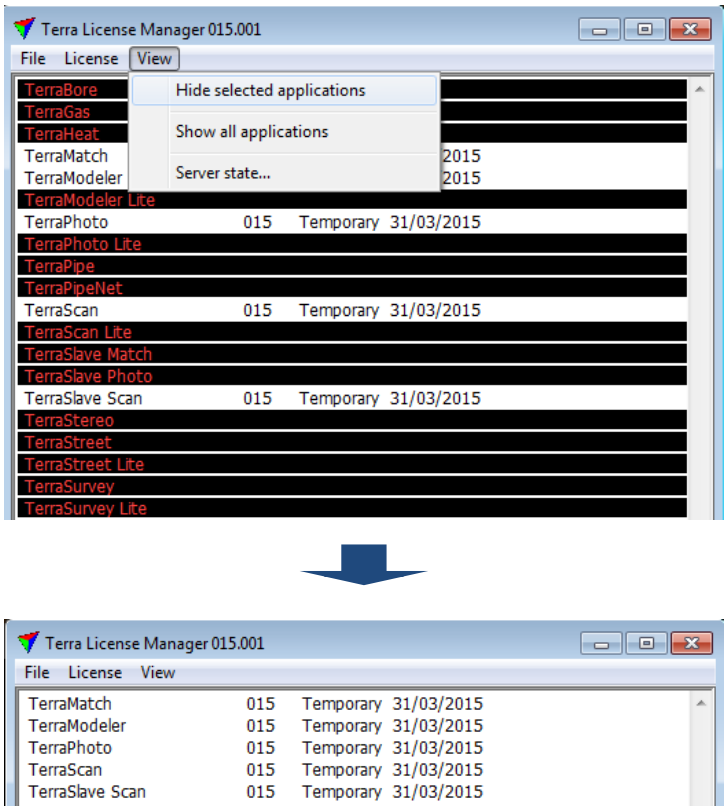
## Personalizing the Configuration

There are several different configurations that can be done with the Terrasolid products to allow more customer personalization. These include:

- Hiding unused applications within the Terra License Manager;
- Sharing Terrasolid configuration files across a network;
- Setting up GeoCue to run TerraSlave using specific configuration files;
- Configuring Terrasolid thread counts.

### Hiding Unused Applications within License Manager

1. Open License Manager
2. Select all products that are not installed on the machine
3. Select View → Hide Selected Applications





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## Sharing Terrasolid Configuration Files between Users

The instructions below are specified for use with the TerraScan product, but can be set-up to be used with any of the Terrasolid products.

1. Using MicroStation, set-up TerraScan with all the projection systems, input and output formats, transformations and any other settings that might be needed for any given project. This information is saved in the Terra Applications folder, namely, "c:\terra64\tscan" in the following files:
    a. Alrepfmt.inf – TerraScan Align Report
    b. Blocknaming.inf – TerraScan block naming formulas
    c. Codes.inf – TerraScan codes
    d. Collection_shapes.inf – TerraScan Collection shapes
    e. color_mixtures.inf – TerraScan Point Color Mixtures
    f. Object_Library.inf – TerraScan object library (requires cell and object_library folders in Terra Applications folder)
    g. Outfmt.inf – TerraScan Output Formats
    h. Projection_Systems.inf – TerraScan Projection Systems
    i. Rail_sections.inf – Rail section templates
    j. Scanner_systems.inf – Scanner System definitions
    k. Section_templates.inf – Section templates
    l. Targets.inf – TerraScan Targets
    m. Tower_functions.inf – Tower Function definitions
    n. Tower_statuses.inf – Tower Status definitions
    o. Tower_types.inf – Tower Type definitions
    p. Trajfmt.inf – TerraScan Trajectory Formats
    q. Trans.inf - TerraScan Transformations
    r. tree_species.inf – TerraScan Tree Species for tree database tools
    s. Tree_types.inf – TerraScan Tree Type definitions
    t. Waveform_profiles.inf – Waveform profile definitions for scanner systems
2. Determine a place on the local network where these files will be placed.
3. Create a folder.
4. Set the permissions for the folder to read only for all users, or full control for one user and read only for the rest of the users.
5. Place the files mentioned above in the folder.
6. On a client machine go to C:\terra64\config and open the TScan.CFG file
7. Modify the TSCAN_SET location to point to the network folder.
    a. It is highly recommended to use a UNC path.
    b. Use forward slashes with three forward slashes at the beginning and two forward slashes for the rest of the address including the double forward slash at the end. For example: "TSCAN_SET=///MyPC//TerraScan_Test//"
8. Place this TScan.CFG file on each client machine that is going to be using the custom configuration files.

Caution: Settings are only loaded when MicroStation is first launched. Terrasolid saves the settings each time the settings dialog is closed.


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Tip: Replace the TScan.CFG and TScan.PTC files in the installation package prior to installing to make it easier to maintain and roll out your custom settings.


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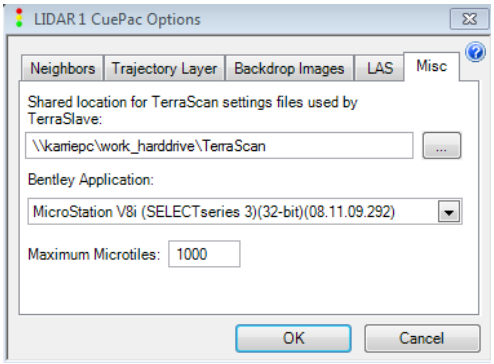
## Using Terrasolid Configuration Files while Running TerraSlave from GeoCue

These instructions are specific only to customers who are using the GeoCue software to run TerraSlave.

1. Using MicroStation set-up TerraScan with all the projection systems, input and output formats, transformations and any other settings that might be needed for any given project. This information is saved in the Terra Applications folder, namely, "c:\terra64\tscan" in the following files:
    a. Alrepfmt.inf – TerraScan Align Report
    b. Blocknaming.inf – TerraScan block naming formulas
    c. Codes.inf – TerraScan codes
    d. Collection_shapes.inf – TerraScan Collection shapes
    e. color_mixtures.inf – TerraScan Point Color Mixtures
    f. Object_Library.inf – TerraScan object library (requires cell and object_library folders in Terra Applications folder)
    g. Outfmt.inf – TerraScan Output Formats
    h. Projection_Systems.inf – TerraScan Projection Systems
    i. Rail_sections.inf – Rail section templates
    j. Scanner_systems.inf – Scanner System definitions
    k. Section_templates.inf – Section templates
    l. Targets.inf – TerraScan Targets
    m. Tower_functions.inf – Tower Function definitions
    n. Tower_statuses.inf – Tower Status definitions
    o. Tower_types.inf – Tower Type definitions
    p. Trajfmt.inf – TerraScan Trajectory Formats
    q. Trans.inf - TerraScan Transformations
    r. tree_species.inf – TerraScan Tree Species for tree database tools
    s. Tree_types.inf – TerraScan Tree Type definitions
    t. Waveform_profiles.inf – Waveform profile definitions for scanner systems
2. Determine a place on the local network where these files will be placed.
3. Create a folder.
4. Set the permissions for the folder to read only for all users, or full control for one user and read only for the rest of the users.
5. Place the files mentioned above in the folder.
6. Open the GeoCue Client.
7. Go to *Setup* → *Options* → *LIDAR 1 CuePac*
    a. On the Misc tab browse to the folder contains the configuration files to be used by TerraSlave when running macros.





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b. Click OK to accept the option


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## Setting the Thread Count

The instructions below are specified for use with the TerraScan product, but can be set-up to be used with any of the Terrasolid products.

1. Open TerraScan Settings
2. Select Operation
3. Under Processor Usage specify the Maximum Threads
    a. By default, this value is 2
    b. Maximum value can be set to 16 for 32-bit applications, and 128 for 64-bit applications.

> Tip: Two threads may be run on each physical core, so recommended to set the Maximum Threads to twice the number of cores as seen in Windows Task Manager, or the same as the number of logical processors.


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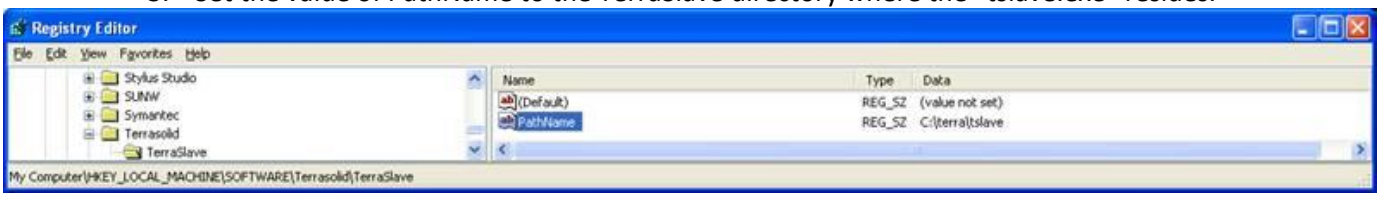
## Configuring TerraSlave for GeoCue when Installed in a Location other than the Default

By default, GeoCue is looking for the TerraSlave executable, TSlave.EXE, in the typical installation folder, "C:\Terra\TSlave", where it is installed by either the TerraScan, or TerraSlave setup. The TSlave executable and user preference, UPF, file both need to be located within this directory. To create the UPF file see the Configuring TerraSlave section of this document.

If TerraScan, or TerraSlave, is installed in a location other than the default then for each machine where this is the case make a registry entry to enable GeoCue to find the TSlave executable when needed:

1. Create the applicable key for your operating system:
    a. 32-bit Operating System: HKLM\SOFTWARE\Terrasolid\TerraSlave
    b. 64-bit Operating System: HKLM\SOFTWARE\Wow6432Node\Terrasolid\TerraSlave
2. Underneath that key, create a PathName string value;
3. Set the value of PathName to the TerraSlave directory where the "tslave.exe" resides.





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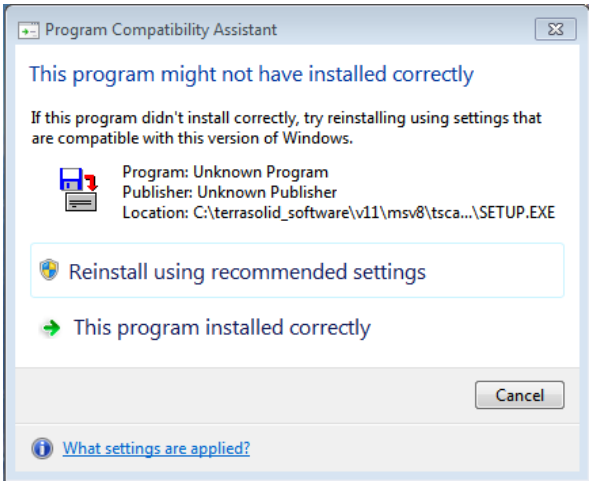
# Troubleshooting

## Installing on Windows 7, Windows Server 2008 or later Operating Systems

Note: It is necessary when installing the Terrasolid products on a machine running the Windows 7, Windows Server 2008 or later operating systems to do so by right-clicking on the setup executable and selecting “Run as Administrator”.

### Program Compatibility Assistant Message

**Symptom:** After the installation is complete a Program Compatibility Assistant message will appear:




**Probable Resolution:** Select the option for “This program installed correctly” or simply select cancel. This is a benign message as long as the program was installed using administrative permissions and under an account with permissions to write to the install folder. If this is the case then the installation completed successfully.

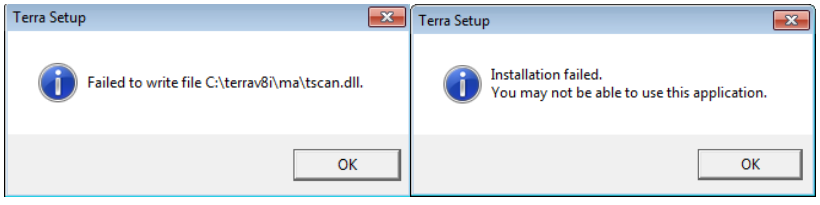
### Terrasolid Package Crashes in MicroStation

**Symptom:** User notices that MDL crashes randomly within MicroStation.

**Probable Resolution:** On Windows 7 and later operating systems it is necessary to install packages using the “Run as Administrator” option. Failing to do so may result in these random product crashes. Try re-installing by right-clicking on the Setup.EXE and selecting “Run as Administrator”.

### DLL Error Message Installing Software

**Symptom:** User receives the following error messages when attempting to install the Terrasolid products.




**Probable Resolution:** MicroStation and/or the product being installed is still open on the machine. Close MicroStation and any open sessions of the product, then retry the installation.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## Unable to Check Out a License

### No Reply from the Server

**Symptom:** User receives a message indicating there was "no reply from the server" when attempting to check-out a license using the Terra License Manager.

**Probable Resolution (Terra License Server GUI):**

Option 1:

Verify that the Terra License Server GUI is open on the server machine.

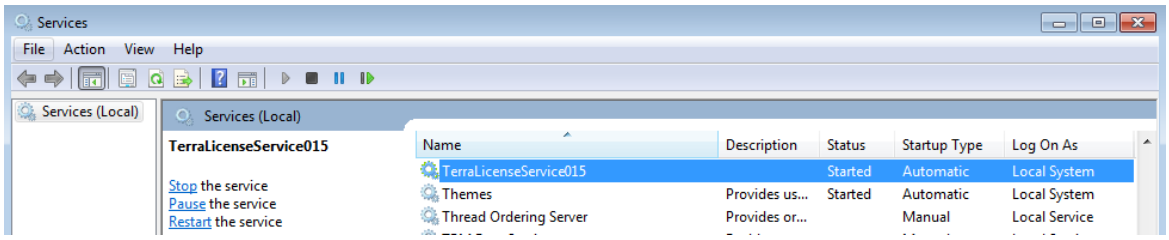
Option 2:

Verify that the information entered in the License Manager under File->Settings is correct. Perhaps there is a typo in the name of the server machine.

**Probable Resolution (Terra License Server Service):**

Option 1:

Verify that the Terra License Server Service, called "TerraLicenseService020" is running on the server machine by opening the local services.




Option 2:

Verify that the information entered in the License Manager under File->Settings is correct. Perhaps there is a typo in the name of the server machine.

Option 3:

The \terra64\pool020\License_server.EXE on the server, and the \terra64\license\license_manager.exe on the client must both be allowed to communicate through any firewalls. Add inbound and outbound exceptions to the firewall for both programs.

Option 4:

The user running the Terra License Manager must have domain level access permissions to the Terra License Server machine.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Option 5:

Ping the server by name from the client. If there is a response, then the machine name may not be resolving correctly for the Terra License Server. Modify the server name in the Terra License Manager to be the IP address of the Terra License Server machine. Then restart the Terra License Server Service, if applicable. If there is no response to the ping, resolve the basic connection issue between the two machines before doing further troubleshooting with the Terrasolid software.

Option 6:

Turn on Network Discovery for the Terra License Server machine, and if necessary, for the client machines as well. Refer to this link for more information from Microsoft on Network Discovery:

http://windows.microsoft.com/en-us/windows/what-is-network-discovery#1TC=windows-7

### Bad Access Code

**Symptom:** User receives a message indicating a "Bad access code" when attempting to check-out a license using the Terra License Manager.

**Probable Resolution:** The message indicates that the client machine is not configured to have the same access code as the server. Verify the access code in Terra License Manager (File->Settings) on the client and in the Terra License Server (File->Settings) on the server. If running the Terra License Server Service be sure to restart the service after making any changes in the GUI.

### No Free License

**Symptom:** User receives a message indicating there is "no free license" when attempting to check-out a license using the Terra License Manager.

**Probable Resolution:** The message indicates that there are no more licenses available to check out from the server.

Option 1:

Users can verify license availability and which machines/users have licenses occupied by opening the Terra License Manager and looking at the server state (View -> Server State) and then selecting the desired package from the dropdown beside Information. The used licenses are subsequently listed in the dialog.

Option 2:

The access code was changed under the Terra License Server GUI and the Terra License Service now needs to be restarted before the program will acknowledge the new access code.


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### No Pool Licenses Available

**Symptom:** User receives a message indicating there are "no pool licenses" when attempting to check-out a license using the Terra License Manager.

**Probable Resolution:** This message indicates that the license server configuration has not been completed or the client machine is experiencing difficulties communicating with the Server.

Option 1:

Generally, this error message results when the Terra License Server Service was installed on the machine, but never started. Go to services on the server machine and start the Terra License Server Service, "TerraLicenseService020". If the service does not appear in the list, make sure it was installed (see Pool Licenses) or ensure that the Terra License Server GUI is open if the desire is not to run the service.

Option 2:

The license (LIC) files for pool licensing must reside within the current version pool folder, for example "terra64\pool020", on the Terra License Server machine and the user requesting the license must have as a minimum read & execute permissions on this folder. A user may browse to the folder to verify access and permissions. Ensure that license files provided by Terrasolid are unzipped into this folder.

### Nothing happens to the current expired or invalid status of a Pool License

**Symptom:** User attempts to renew a license that is currently showing as expired or invalid and receives no new message and yet the expired or invalid status remains.

**Probable Resolution:** This indicates that the current license in the folder is likely a temporary license or one of a different version than what is being checked out. Rename or move those licenses into a subfolder, re-open Terra License Manager and then attempt to check out the license once again.


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### Invalid License

**Symptom:** User receives an error message indicating the licenses that were checked out are invalid. User may not be able to return the license to the license pool.

**Probable Resolution:** This message indicates that there is a problem with the installation of the Terra License Manager.

Option 1:

This error message can result if the Terra License Manager executable was copied from another computer instead of being installed on the machine in question. Install Terra License Manager on the client machine and verify that the licenses are now listed as valid.

Option 2:

This error message can also result if the Terra License Manager software was not installed with full administrative rights on Windows 7 era, and later, operating systems. Re-run the installation executable by right-clicking on "Setup.exe" and selecting the "Run as Administrator" option. After re-installation verify that the licenses are now listed as valid.

## License Window Appears when Loading a Product

**Symptom:** When loading the Terrasolid MDL within MicroStation the license dialog appears and stays on top.

**Probable Resolution:** The license dialog appears when first loading the product if the product does not have a valid license.

Option 1:

Verify that the major version of the product installed on the machine matches the major version of the license. This means that if you are running v020.x software you need to have v020 licenses on the machine.

Option 2:

Verify that the license on the machine is for the same package as what was installed. A “Lite” license cannot be used to run a full version of a product and vice versa.

Option 3:

Products run from the \terra64\ma folder operate using licenses located within the \terra64\license folder. If you have both MSv8 and MSv8i installed on the machine be sure that the licenses are checked out for each version by running the Terra License Manager from within the appropriate license folder, for instance, “\terra\license” or “\terra_v8i\license”, and copying the license to the other one.


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