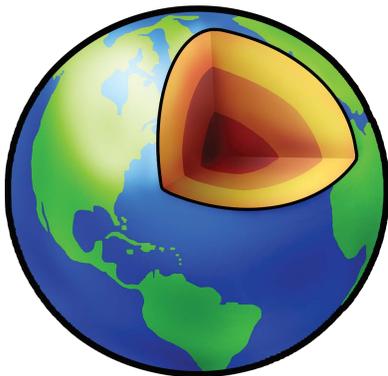


C Tech Installation Help Version 2021.12



Earth
Volumetric
Studio™



EnterVol
for ArcGIS™

TOC

C Tech Software Installation Help	1
Installation and Licensing Overview	3
Hardware & Operating System Requirements	4
Operating System & IT Requirements	4
EVS Presentation and Demo License Installation	6
EVS Fixed License Client Installation	9
C Tech Universal License Server Installation	12
Required Uninstalls of C Tech’s Legacy Servers	14
C Tech License Manager (CTLM)	17
C Tech License Manager (CTLM)	21
CTLM User Info & Server Configuration	25
CTLM Local & Remote Dongle (key) License Management	27
CTLM Local & Remote Software License Management	33
CTLM License Troubleshooting	38
EVS Floating or Enterprise License Client Installation	40
Requesting EnterVol Licenses	44
Client Installation for EnterVol Concurrent or Enterprise Licenses	49

C Tech Software Installation Help

C Tech’s Earth Volumetric Studio is the world’s leading three-dimensional volumetric Earth Science software system developed to address the needs of all Earth science disciplines. This help system covers the installation of our major products.

For more information visit ctech.com

- **Installing C Tech Software**

- [Installation Overview](#)
- [Hardware & OS Requirements](#)
- [EVS Presentation and Demo License Installation](#)
- [EVS Fixed License Client Installation](#)
- [C Tech Universal License Server Installation](#)
 - [Required Uninstalls of C Tech’s Legacy Servers](#)
- [C Tech License Manager](#)
 - [CTLM User Info & Server Configuration](#)
 - [CTLM Local & Remote Dongle \(key\) License Management](#)
 - [CTLM Local & Remote Software License Management](#)
 - [CTLM License Troubleshooting](#)
- [EVS Floating or Enterprise License Client Installation](#)

- [Requesting EnterVol Licenses](#)
- [Client Installation for EnterVol Concurrent or Enterprise Licenses](#)

Installation and Licensing Overview

C Tech provides various licensing options depending on the needs of its customers. These options will allow users to either license their C Tech products directly on their workstation, or concurrently via a network server which can serve multiple customers in an organization. Licenses for Earth Volumetric Studio (EVS) are provided by a C Tech USB License Dongle which is physically connected either to the workstation running the software, or to a machine on a network running the C Tech licensing server. Licenses for other products, such as C Tech EnterVol for ArcGIS tools, require an activation process which locks the license to the workstation's hardware.

C Tech provides two applications for managing and administering licenses. The first, the C Tech License Manager, is used to configure licensing options for C Tech products, get current licensing status, as well as install or update licenses. The second application, the C Tech Universal License Server, is used to serve Floating or Enterprise licenses either locally or over a network to one or more users. The C Tech License Manager can be used to manage the C Tech Universal License Server in cases where a user does not have direct access to the network machine hosting the server.

Note that the C Tech License Manager comes bundled with the C Tech Universal License Server, as well as the Earth Volumetric Studio installer. EnterVol installations as of version 21.12 will come bundled with the C Tech Universal License Server as well as the C Tech License Manager.

Hardware & Operating System Requirements

Earth Volumetric Studio (EVS) has very few specific hardware requirements and has been designed to run on a wide range of PC hardware. The software will run on virtually any Windows 10 64 bit computer.

The following table gives **Recommended** and **Ideal** system configurations. Of these requirements, CPU speed, number of cores, memory speed have the greatest impact on calculation time, while graphics resolution and number monitors affects the appearance and usability the greatest. All system hardware must meet 64 bit - Windows 7 or higher hardware requirements.

Hardware Item	Recommended Configuration	Ideal Configuration
Operating System	Windows 11 64 bit : Windows 10 is acceptable	Windows 11 Professional - 64 bit
CPU	current generation Intel chipset	High end Intel® chip or AMD chip
RAM	32 Gb - 2,400 Mhz or higher	64+ Gb - DDR4 - 3,000 Mhz or higher Note: memory speed is particularly important Budget 32 Gb per 100 million nodes of model size
Hard Disk	800 Mb installation 5+ Gb free	800 Mb installation & 250+ Gb free
Graphics Card	ATI or NVIDIA Gaming cards	High end NVIDIA GeForce card
Graphics Resolution	1920 x 1080 or 4k monitor	4k Dual Monitors
Monitor	19 inch color	Single 65-85" 4k monitor or Dual monitors of 24 to 48+ inches 4K
e-mail & internet access	Required for software downloads and technical support	Required for software downloads and technical support

For additional information on memory requirements and performance please see the [Performance Benchmarks](#) page.

Operating System & IT Requirements

EVS is compatible with 64 bit versions of Windows 10 or 11.

Please download and install all critical updates from: <https://windowsupdate.microsoft.com>

Recommended & Required Corporate IT Settings

Setting or Issue	Recommended Configuration	Required Configuration
TCP/IP Ports		Open Ports 9346, 9347 & 9348
Anti-Virus & Anti-Malware	White list (protect) the following files and folder: <ul style="list-style-type: none">• C Tech File formats: .evs, .evsp, .4dm, .ctupdate• All C Tech install folders and EVS projects folders	

EVS Presentation and Demo License Installation

Earth Volumetric Studio is available only as download from <https://client.ctech.com/>

Each user should install:

- Earth Volumetric Studio: Version 2021.12.2 (or the latest version available)
- Earth Volumetric Studio Sample Projects: Version 2021.12 (or the latest version available)

Installation requires Administrator rights. Run each executable and follow the instructions to set your preferred install folder and options.

With all license types, the first step of client setup (after EVS software installation) is to set up the proper license type in the *C Tech License Manager*. The *C Tech License Manager* has many additional functions [discussed in this topic](#).

Below are the correct options for a Presentation and Demo License. Be sure to set your User and Organization name correctly, as this will be important in order to receive technical support in the future.

 **C Tech License Manager** - x

User Information

Name: Organization:

Email:

Select License Type:  **Earth Volumetric Studio™**

Select License Type:  **EnterVol**

Servers Configuration

Version 2021.12.2 Copyright © 2021 - [C Tech Development Corporation](#)

When you click OK on the window above, it will open the last C Tech License Manager window shown below. In this window we request your permission to send automated error reports to C Tech should you encounter a problem while using the software. Allowing Reporting (especially Full Reporting) will allow us to provide you with a higher level of Technical Support should you encounter an unexpected problem.

Privacy Selection

Allow Full Reporting

Full Reporting will report detailed crash and error reports to C Tech Development Corporation and allow C Tech to provide the best assistance and support. Information provided is used exclusively by C Tech to help provide technical support and improve the product.

These reports will contain your name, email, and company as provided in the previous screen to allow us to associate a specific software crash to you and your machine.

Allow Anonymous Reporting

Detailed error reports are transmitted to C Tech after a crash, which may contain information about your system (Operating System, hardware specifications, machine name, amount of RAM, and similar) as well information relating to the crash you encountered, and could potentially include file names.

No data or application files are ever shared with C Tech Development Corporation.

Prevent All Reporting

In addition, anonymous usage statistics are reported, such as the number of times you run the software, feature usage statistics, etc.



Cancel

Ok

Once the *C Tech License Manager* (shown above) is closed, it will not reopen unless you run it explicitly. Each time you start Earth Volumetric Studio, the options you have set above will apply.

EVS Fixed License Client Installation

Earth Volumetric Studio is available only as download from <https://client.ctech.com/>

Each user should install:

- Earth Volumetric Studio: Version 2021.12.2 (or the latest version available)
- Earth Volumetric Studio Sample Projects: Version 2021.12 (or the latest version available)

Installation requires Administrator rights. Run each executable and follow the instructions to set your preferred install folder and options.

With all license types, the first step of client setup (after EVS software installation) is to set up the proper license type in the *C Tech License Manager*. The *C Tech License Manager* has many additional functions [discussed in this topic](#).

Below are the correct options for a Fixed (USB Dongle) License. Be sure to set your User and Organization name correctly, as this will be important in order to receive technical support in the future.

 **C Tech License Manager** - x

User Information

Name: Organization:

Email:

Select License Type:  **Earth Volumetric Studio™**

Select License Type:  **EnterVol**

Servers Configuration

Version 2021.12.2 Copyright © 2021 - [C Tech Development Corporation](#)

When you click OK on the window above, it will open the last C Tech License Manager window shown below. In this window we request your permission to send automated error reports to C Tech should you encounter a problem

while using the software. Allowing Reporting (especially Full Reporting) will allow us to provide you with a higher level of Technical Support should you encounter an unexpected problem.

C Tech Development Corporation - Privacy Preferences

Privacy Selection

Allow Full Reporting

Full Reporting will report detailed crash and error reports to C Tech Development Corporation and allow C Tech to provide the best assistance and support. Information provided is used exclusively by C Tech to help provide technical support and improve the product.

These reports will contain your name, email, and company as provided in the previous screen to allow us to associate a specific software crash to you and your machine.

Allow Anonymous Reporting

Detailed error reports are transmitted to C Tech after a crash, which may contain information about your system (Operating System, hardware specifications, machine name, amount of RAM, and similar) as well information relating to the crash you encountered, and could potentially include file names.

No data or application files are ever shared with C Tech Development Corporation.

Prevent All Reporting

In addition, anonymous usage statistics are reported, such as the number of times you run the software, feature usage statistics, etc.

Cancel Ok

Version 2021.12 Copyright © 2021 - C Tech Development Corporation

Once the *C Tech License Manager* (shown above) is closed, it will not reopen unless you run it explicitly. Each time you start Earth Volumetric Studio, the options you have set above will apply.

C Tech Universal License Server Installation

C Tech employs a single license server which supports the following products:

- Earth Volumetric Studio (EVS) Enterprise Licenses
- Earth Volumetric Studio Floating Licenses
- EnterVol Enterprise Licenses
- EnterVol Floating Licenses
- EnterVol Fixed Licenses

Note:

- EVS Fixed licenses do not require installation of the C Tech Universal License Server.
- License management is performed using the [C Tech License Manager](#).
- **A reboot will likely be required.**

**Installation of the C Tech Universal License Server will also install the C Tech License Manager.
Installation of EVS and/or EnterVol will also install the C Tech License Manager.**

Before proceeding:

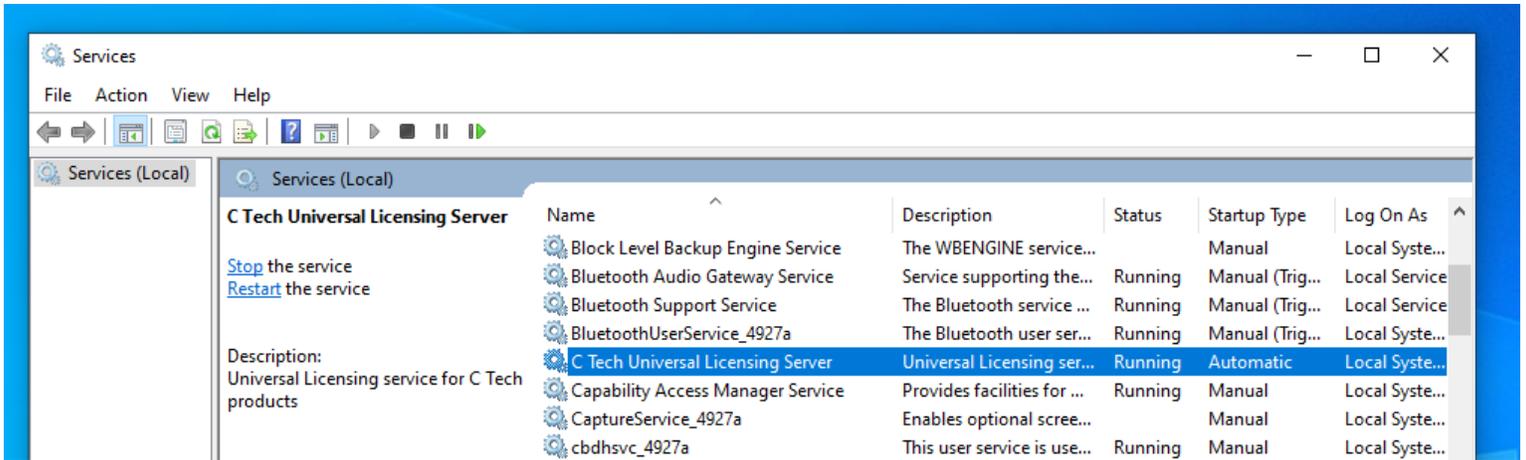
The minimum versions supported are Windows 8 x64 and Windows Server 2012 x64.

Installation requires Administrator rights.

A system reboot may be required to complete the installation

- You must make sure that communication on TCP/IP Ports that we use are not blocked.
 - Port 9348 is used by Earth Volumetric Studio 2020 and future releases
 - Port 9346 is used by older Earth Volumetric Studio & MVS releases
 - Port 9347 is used by EnterVol components and EnterVol Suite
 - These ports are not user configurable; they are hard coded.
- If you are an existing user, please ensure that you have uninstalled all pre-2020 versions of C Tech license servers, otherwise you will be forced to exit the installation. Please refer to the following section for more information. Required Uninstalls of C Tech's Legacy Servers

If these criteria are met, please proceed with the installation. After finishing the installation, you can verify that the C Tech Universal License Server was correctly installed and running with Windows Services Program;



You should also verify that the C Tech License Manager can establish communication with the licensing server

User Information

Name: Organization:

Email:

Select License:

Select License Information:

```

C Tech Server Information
Version: 2021.10.3 V2 Released on 10/15/2021
Started on: 10/15/2021 5:48:40 PM
Machine: reedsmachine
Windows Version: Microsoft Windows 10 Pro 10.0.19042 SP 0.0
Ports: EVS 9348 | EnterVol 9347 | MVS Legacy 9346
System Identifier: AAAA-BBBB-CCCC-DDDD-EEEE-FFFF

License Summary
Active License:
Floating Hardware License Dongle 1/1
  
```

Servers:

Buttons: Add, Query Server, Load Remote Update File, Enter Remote Update String, Remove, Copy to Clipboard, Save Logs, View Logs, OK

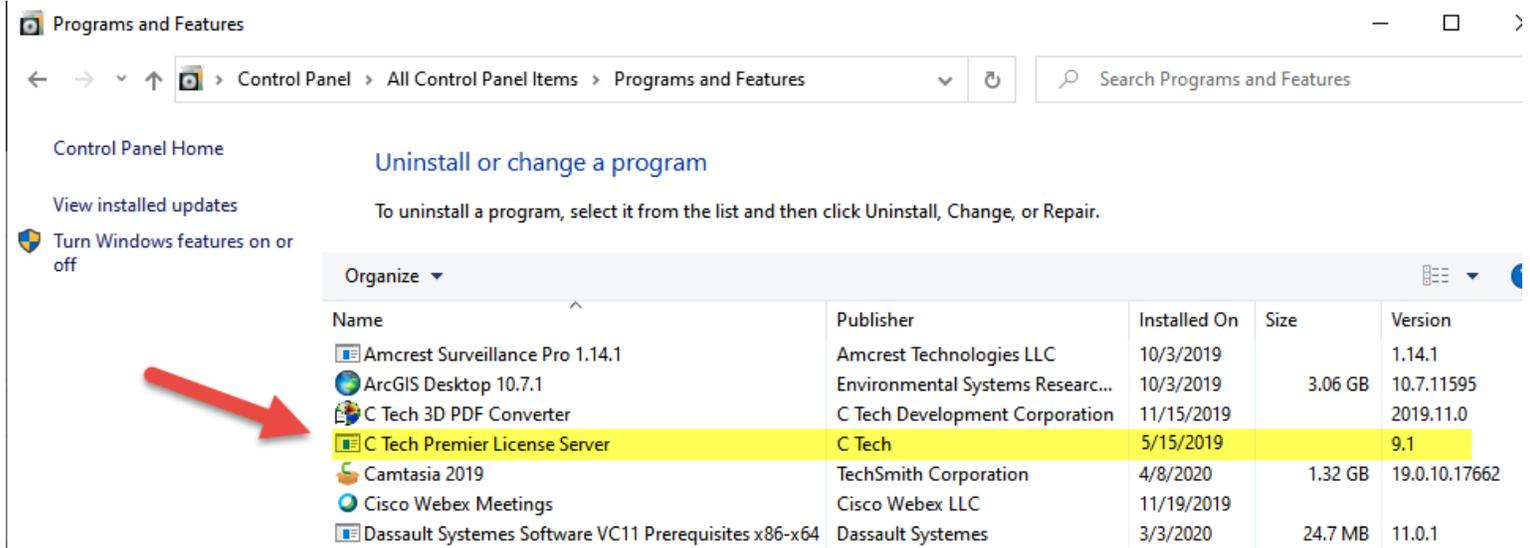
For more information on how to Query the licensing server, please see [CTLM Local & Remote Dongle \(key\) License Management](#)

NOW YOU MUST INSTALL THE CLIENT SOFTWARE

Required Uninstalls of C Tech's Legacy Servers

In Control Panel – Programs and Features, there are three legacy C Tech servers which you will need to Uninstall if they exist. These are:

1) C Tech Premier License Server



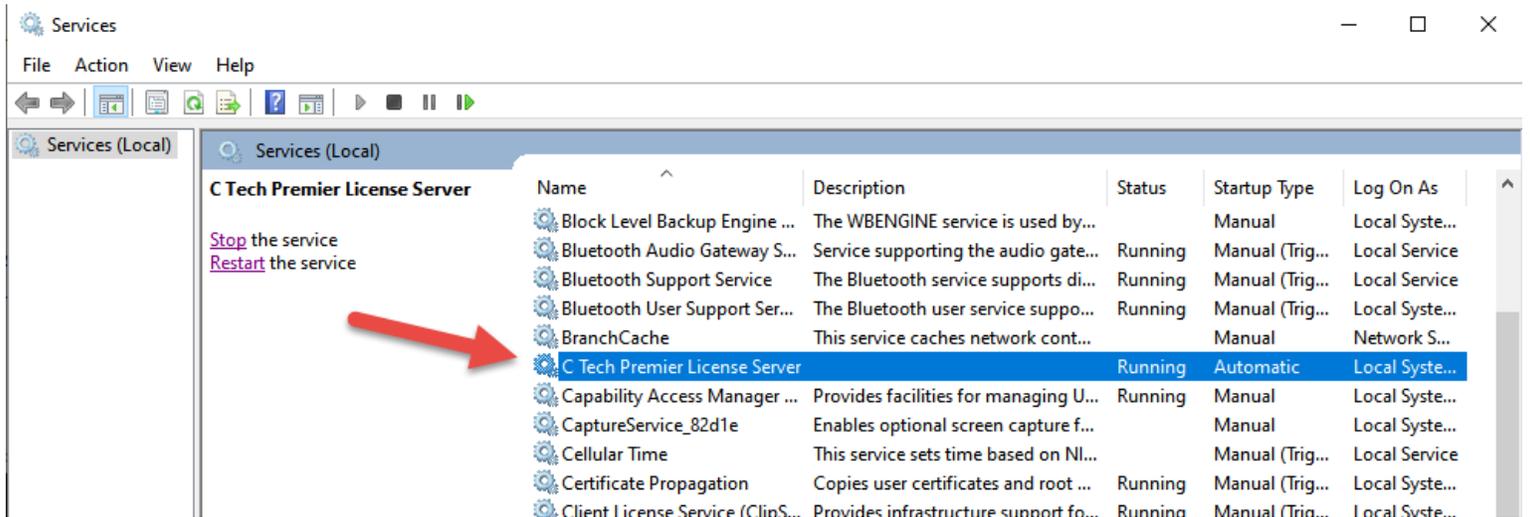
Programs and Features

Control Panel > All Control Panel Items > Programs and Features

Uninstall or change a program

To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.

Name	Publisher	Installed On	Size	Version
Amcrest Surveillance Pro 1.14.1	Amcrest Technologies LLC	10/3/2019		1.14.1
ArcGIS Desktop 10.7.1	Environmental Systems Resear...	10/3/2019	3.06 GB	10.7.11595
C Tech 3D PDF Converter	C Tech Development Corporation	11/15/2019		2019.11.0
C Tech Premier License Server	C Tech	5/15/2019		9.1
Camtasia 2019	TechSmith Corporation	4/8/2020	1.32 GB	19.0.10.17662
Cisco Webex Meetings	Cisco Webex LLC	11/19/2019		
Dassault Systemes Software VC11 Prerequisites x86-x64	Dassault Systemes	3/3/2020	24.7 MB	11.0.1



Services

File Action View Help

Services (Local)

C Tech Premier License Server

Stop the service
Restart the service

Name	Description	Status	Startup Type	Log On As
Block Level Backup Engine ...	The WBENGINE service is used by...		Manual	Local Syste...
Bluetooth Audio Gateway S...	Service supporting the audio gate...	Running	Manual (Trig...	Local Service
Bluetooth Support Service	The Bluetooth service supports di...	Running	Manual (Trig...	Local Service
Bluetooth User Support Ser...	The Bluetooth user service suppo...	Running	Manual (Trig...	Local Syste...
BranchCache	This service caches network cont...		Manual	Network S...
C Tech Premier License Server		Running	Automatic	Local Syste...
Capability Access Manager ...	Provides facilities for managing U...	Running	Manual	Local Syste...
CaptureService_82d1e	Enables optional screen capture f...		Manual	Local Syste...
Cellular Time	This service sets time based on NI...		Manual (Trig...	Local Service
Certificate Propagation	Copies user certificates and root ...	Running	Manual (Trig...	Local Syste...
Client License Service (ClnS...	Provides infrastructure support fo...	Runninn	Manual (Trin...	Local Syste...

2) C Tech License Server (EVS / MVS Floating License Server)

Programs and Features

Control Panel > All Control Panel Items > Programs and Features

Search Programs and Features

Control Panel Home

Uninstall or change a program

To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.

Organize Uninstall Change Repair

Name	Publisher	Installed On	Size	Version
Adobe Premiere Pro 2019	Adobe Systems Incorporated	10/3/2019	3.24 GB	13.1.5
Adobe Premiere Pro 2020	Adobe Systems Incorporated	2/26/2020	3.05 GB	14.0.3
Amcrest Surveillance Pro 1.14.1	Amcrest Technologies LLC	10/3/2019	1.14.1	
ArcGIS Desktop 10.7.1	Environmental Systems Researc...	10/3/2019	3.06 GB	10.7.11595
C Tech 3D PDF Converter	C Tech Development Corporation	11/15/2019	2019.11.0	
C Tech Floating License Server	C Tech	11/15/2019	10.4 MB	9.2.0
Camtasia 2019	TechSmith Corporation	4/8/2020	1.32 GB	19.0.10.17662
Cisco Webex Meetings	Cisco Webex LLC	11/19/2019		
Dassault Systemes Software VC11 Prerequisites x86-x64	Dassault Systemes	3/3/2020	24.7 MB	11.0.1

Services

File Action View Help

Services (Local)

Services (Local)

C Tech License Server

Stop the service
Restart the service

Name	Description	Status	Startup Type	Log On As
Bluetooth Audio Gateway S...	Service supporting the audio gate...	Running	Manual (Trig...	Local Service
Bluetooth Support Service	The Bluetooth service supports di...	Running	Manual (Trig...	Local Service
Bluetooth User Support Ser...	The Bluetooth user service suppo...	Running	Manual (Trig...	Local Syste...
BranchCache	This service caches network cont...		Manual	Network S...
C Tech License Server		Running	Automatic	Local Syste...
Capability Access Manager ...	Provides facilities for managing U...	Running	Manual	Local Syste...
CaptureService_82d1e	Enables optional screen capture f...		Manual	Local Syste...
Cellular Time	This service sets time based on NI...		Manual (Trig...	Local Service

3) EnterVol License Server

Programs and Features

Control Panel > All Control Panel Items > Programs and Features

Search Programs and Features

Control Panel Home

View installed updates

Turn Windows features on or off

Uninstall or change a program

To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.

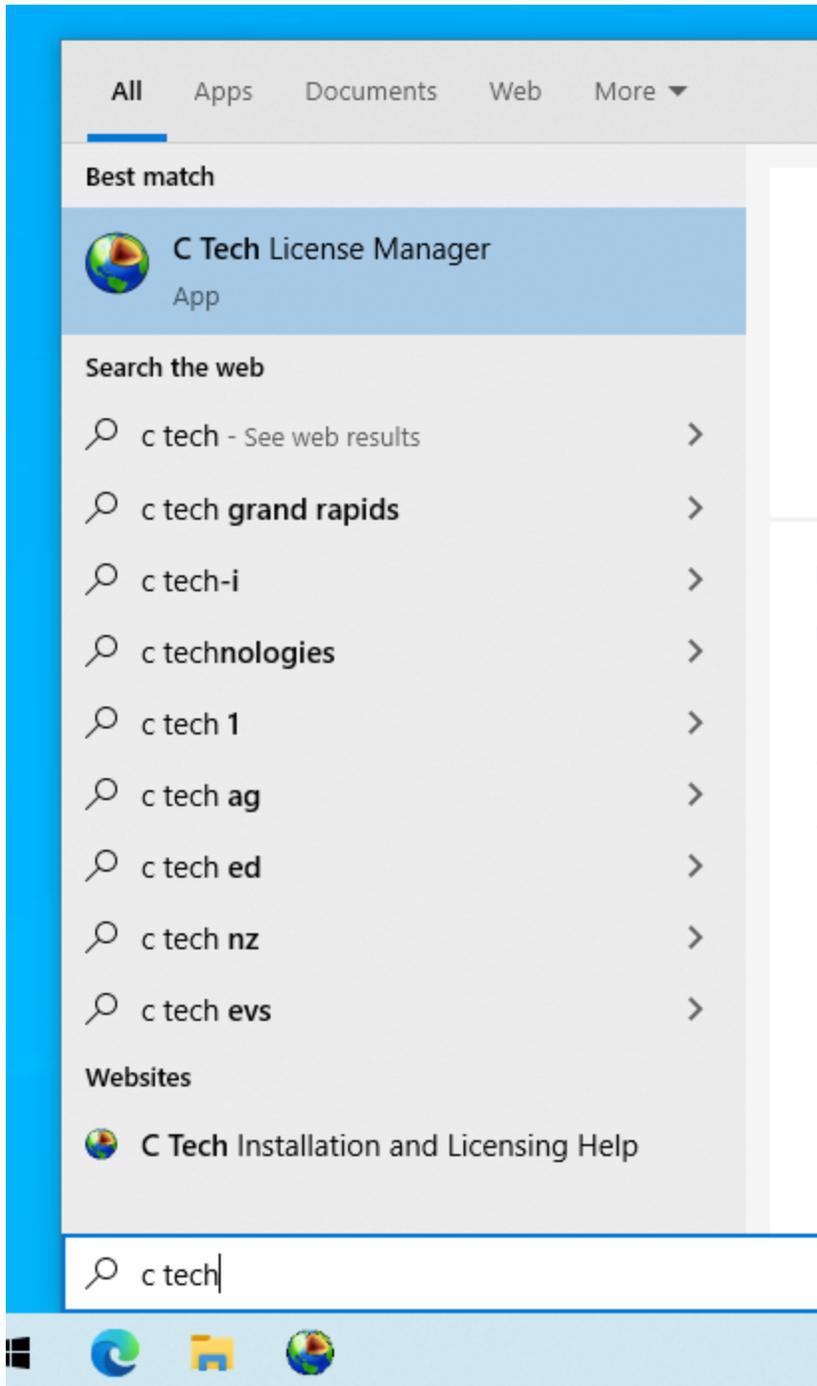
Name	Publisher	Installed On	Size	Version
Earth Volumetric Studio Preview Handlers	C Tech Development Corporation	11/13/2019	4.33 MB	19.10
Earth Volumetric Studio Projects 2019.10	C Tech Development Corporation	10/18/2019	766 MB	19.10.0
EnterVol	C Tech	4/8/2020		19.4.0.0
EnterVol License Server	C Tech	4/24/2020		1.7.0
EPSON ET-4550 Series Printer Uninstall	SEIKO EPSON Corporation	10/3/2019		
Epson ET-4550 User's Guide version 1.0		7/29/2019	1.40 MB	1.0
Epson Event Manager	Seiko Epson Corporation	7/29/2019	46.2 MB	3.10.0085
Epson E-Web Print	SEIKO EPSON CORPORATION	7/29/2019	9.22 MB	1.23.0000

Since these are all Windows Services, they cannot be automatically installed by our new C Tech Universal License Server and therefore must be uninstalled manually. The C Tech Universal License Server will not allow you to proceed with installation if any of the above three programs are installed.

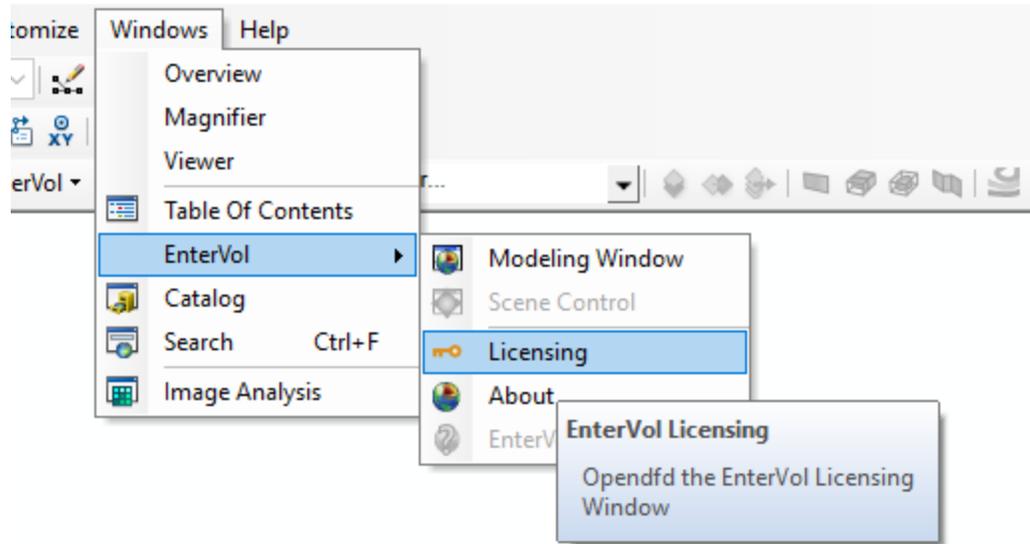
C Tech License Manager (CTLM)

The C Tech License Manager comes bundled with most C Tech Products to facilitate license configuration and management. A standalone installer can also be downloaded from C Tech Development Corporation: Downloads.

To launch, simply search for the C Tech License Manager entry in the Window's Start Menu



If you are using the C Tech License Manager to configure an EnterVol for ArcGIS license, you can additionally launch the License Manager from within EnterVol's menus in ArcGIS (ArcScene).



Once opened, you will see two different Tabs. The main section found under the "License Configuration" tab, lets the user provide their information, configure their product's license, and configure any remote concurrent servers providing licenses. The second tab, "Local License Management" allows for verifying the status of local licenses as well as applying new software licenses and updates files (.ctupdate).

The screenshot shows the "C Tech License Manager" application window with the "License Configuration" tab selected. The window title bar includes a globe icon and the text "C Tech License Manager".

At the top, there are two tabs: "License Configuration" (active) and "Local License Management".

User Information

Name: Organization:
Email:

Select License Type: Earth Volumetric Studio™

Select License Type: EnterVol

Servers Configuration

Name/IP: ▲ ▼

Version 2021.12.2 Copyright © 2021 - C Tech Development Corporation



License Configuration

Local License Management

License Summary

Multiple Licenses Summary

Merged License:

Customer: C Tech Development Corporation

Next Expiring License: 9/21/2022

Earliest Maintenance Date: 9/21/2022

Enabled License Options:

Allow Virtual Machines

License Seats:

EarthVolumetricStudio (4)

PdfCreator (None)

EnterVolForArcGis (1)

EnterVolTools (1)

EnterVolGeology (1)

EnterVolGeoStats (1)

License Providers:

EnterVol/EVS Software License File:

C:\Program Files\C Tech Development Corporation\EnterVol\Software\License\EnterVolSoftwareLicenseFile.txt

Load .ctupdate File

Refresh License Summary

Save Dongle Diagnostics

System Identifier

47DD-910E-C1DB-5910-8DBD-AC83

Copy to Clipboard

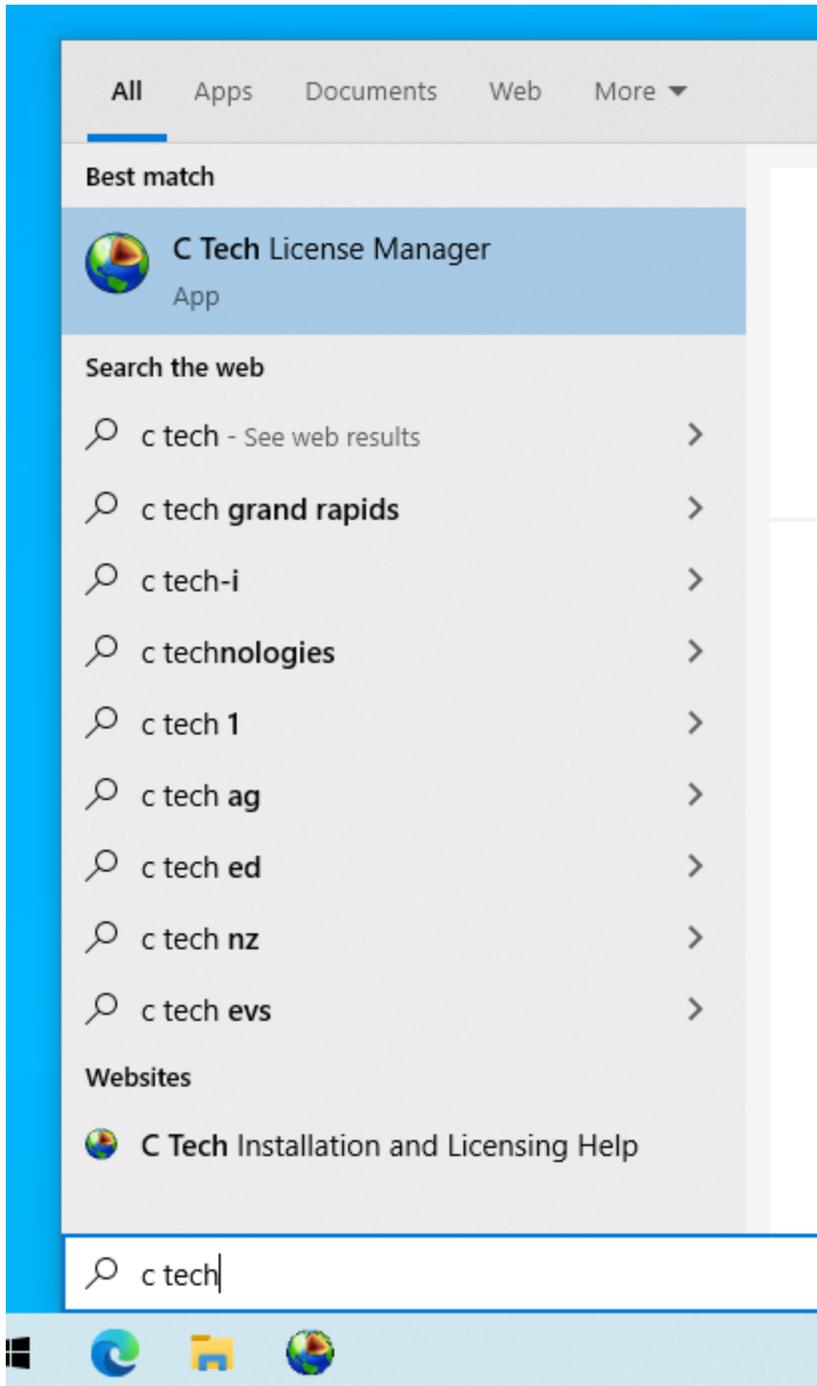
Cancel

Ok

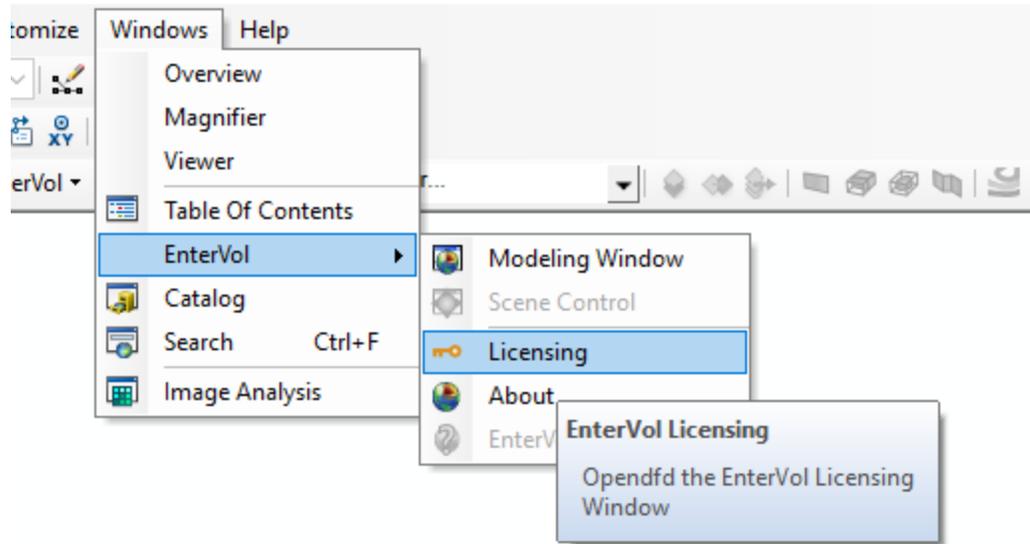
C Tech License Manager (CTLM)

The C Tech License Manager comes bundled with most C Tech Products to facilitate license configuration and management. A standalone installer can also be downloaded from C Tech Development Corporation: Downloads.

To launch, simply search for the C Tech License Manager entry in the Window's Start Menu



If you are using the C Tech License Manager to configure an EnterVol for ArcGIS license, you can additionally launch the License Manager from within EnterVol's menus in ArcGIS (ArcScene).



Once opened, you will see two different Tabs. The main section found under the "License Configuration" tab, lets the user provide their information, configure their product's license, and configure any remote concurrent servers providing licenses. The second tab, "Local License Management" allows for verifying the status of local licenses as well as applying new software licenses and updates files (.ctupdate).

C Tech License Manager

License Configuration | Local License Management

User Information

Name: Organization:

Email:

Select License Type: Earth Volumetric Studio™

Select License Type: EnterVol

Servers Configuration

Name/IP: ▲ ▼

Version 2021.12.2 Copyright © 2021 - C Tech Development Corporation



License Configuration

Local License Management

License Summary

Multiple Licenses Summary

Merged License:

Customer: C Tech Development Corporation
Next Expiring License: 9/21/2022
Earliest Maintenance Date: 9/21/2022

Enabled License Options:

Allow Virtual Machines

License Seats:

EarthVolumetricStudio (4)
PdfCreator (None)
EnterVolForArcGis (1)
EnterVolTools (1)
EnterVolGeology (1)
EnterVolGeoStats (1)

License Providers:

EnterVol/EVS Software License File:

Load .ctupdate File

Refresh License Summary

Save Dongle Diagnostics

System Identifier

47DD-910E-C1DB-5910-8DBD-AC83

Copy to Clipboard

Cancel

Ok

CTLM User Info & Server Configuration

License Configuration - User Information

Please enter the following;

- For Name please enter the user name if on a client computer. If the license installation is on a server, please provide the name of the IT Administrator.
- Organization name should be your company such as: ACME Geology, Inc.
- Please use an official email such as: john-smith@acmegeo.com

License Configuration > Configuring License Types for either Earth Volumetric Studio or EnterVol for ArcGIS

Here you must select the appropriate license type for the product you have purchased. Choosing Floating or Enterprise licenses for EVS or EnterVol will activate the Servers Configuration section

The screenshot shows two sections for selecting license types. The first section is for Earth Volumetric Studio, with a header 'Select License Type: Earth Volumetric Studio™'. Below it are four buttons: 'EVS Presentation or Demo License' (highlighted in blue), 'Fixed License', 'Floating License (Network Concurrent)', and 'Enterprise License'. The second section is for EnterVol, with a header 'Select License Type: EnterVol'. Below it are three buttons: 'Fixed License' (highlighted in blue), 'Floating License (Network Concurrent)', and 'Enterprise License'.

License Configuration > Configuring License Servers

Note if you are using either EVS Demo or Fixed licenses, skip this step.

Server Configuration

If you have a remote license server installed and know the Server IP address or Hostname of the server, you can use the Servers Configuration section to specify the Name/IP for customers with Enterprise or Floating licenses. Also note that multiple servers can be configured to provide redundant licensing service should one or more primary servers go down.

The screenshot shows the 'Servers Configuration' section. At the top, there are five buttons: 'Add', 'Query Server', 'Load Remote Update File', 'Enter Remote Update String', and 'Remove'. Below these buttons is a text input field labeled 'Name/IP:' containing the text 'localhost'. To the right of the input field are two small arrow buttons, one pointing up and one pointing down.

There are several buttons here which provide important functionality. These are:

- *Add*: Allow you to add IP number or Hostname for your license server(s)
- *Remove*: Allow you to add IP number or Hostname for your license server(s)
- *Query Server*: Provides a quick way to find the status and/or confirm communication with the server.
 - Query will give you status of all Licenses on the remote server.
 - This also provides information about the remote system, including the System Identifier which is used for software licenses..
- *Load Remote Update File*: If C Tech sends you a file with a .ctupdate extension intended to be installed on a remote server, use this option to apply the file.
- *Enter Remote Update String*: Same as Load Remote Update File but with a special format in cases where special handling is needed.

CTLM Local & Remote Dongle (key) License Management

C Tech License File Updates provide a way to install and update licenses on both local and remote machines. The main functions of C Tech License File Updates include upgrading and/or updating C Tech USB License Dongles used by Earth Volumetric Studio licenses as well as installing C Tech Software Licenses for EnterVol for ArcGIS.

When no Enterprise Add-Ons are being added or dropped, a single update file can support the updating of your company's entire set of USB Dongles. Otherwise, we will provide individual update files for each dongle (key). C Tech will send you a .ctupdate file through email (or other means if required) which you can use to apply the update or install a software license for products that support it. Please be sure to save this file to a location on the same machine as the C Tech License Manager installation, as you will need to load this file in the following steps.



C Tech License Manager



License Configuration

Local License Management

License Summary

CartoConnectStudio (None)

PdfCreator (None)

EnterVolForArcGis (None)

EnterVolTools (None)

EnterVolGeology (None)

EnterVolGeoStats (None)

Fixed Hardware License Dongle 956/1

Maintenance paid through 10/26/2024

License expires on 11/9/2023

Options: Command Line Automation

EVS Seats: 1

Providers Status [Code KL1SP1]:

Local System Information

Version: 2021.12.2

User: CopseyReed

Machine: DESKTOP-K7CEFO2

Windows Version: Microsoft Windows 10 Pro 10.0.19043 SP 0.0

System Identifier: 7E17-0C74-8246-4660-05D8-81D6

Load .ctupdate File

Refresh License Summary

Save Dongle Diagnostics

System Identifier

7E17-0C74-8246-4660-05D8-81D6

Copy to Clipboard

Cancel

Ok

Version 2021.12.2

Copyright © 2021 - C Tech Development Corporation

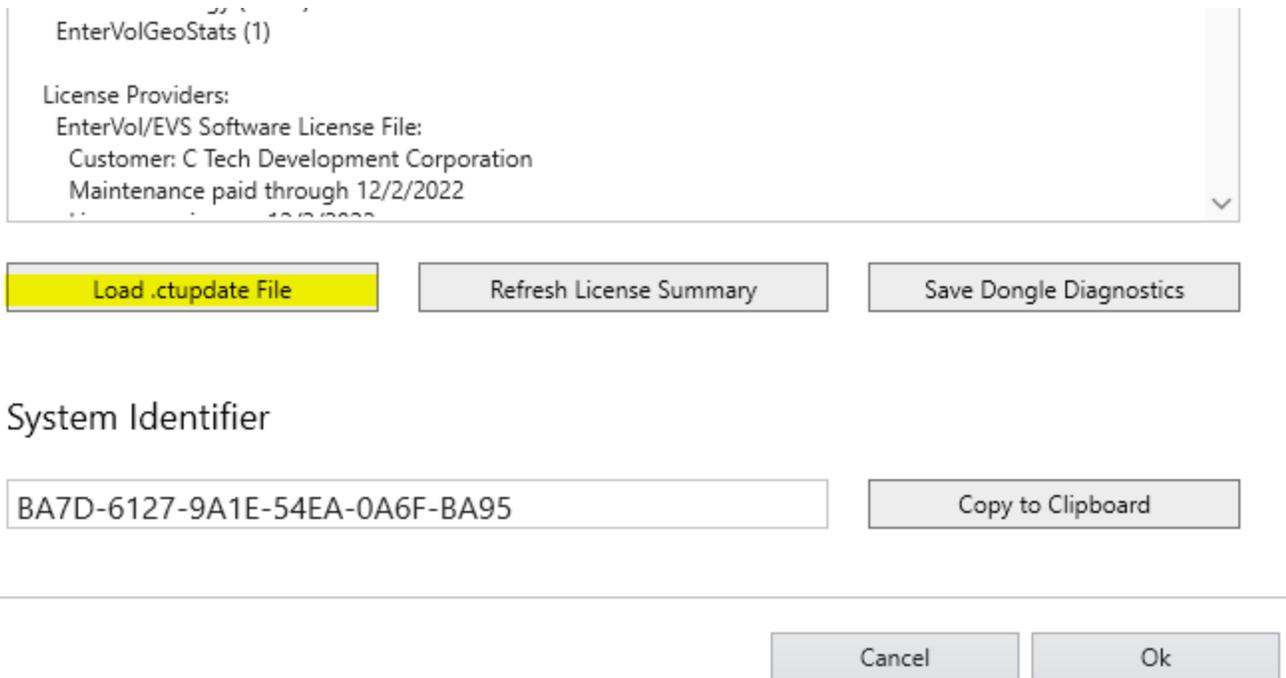
The Local License Management tab provides several important functions;

- Load .ctupdate File: Allows you to load and apply a C Tech License Update File (.ctupdate) to Update or Upgrade existing license dongles (keys).
- License Summary: Provides a summary of licenses installed on the local machine
- Also shows information related to all licenses associated with C Tech USB Dongles.
- Save Dongle Diagnostics: In cases where the dongle needs troubleshooting, this will prompt you to select a destination folder and will then generate a file containing diagnostics of all installed C Tech USB Dongles. If requested by C Tech support, please include all generated files as attachments for subsequent support emails.

Local Updates

For both license updates and license installations, if they are to be performed on the local workstation, then select the "Local License Management" tab in the C Tech License Manager, and click on the "Load .ctupdate File" button.

NOTE: If your C Tech License Manager does not match the images in this topic, you are likely running an old version and need to install the latest version.



You will be prompted to select the .ctupdate file emailed to you. Select the .ctupdate and the license manager will report the result of the local update and also show the status of the updated licenses in the Licenses Summary area.

Remote Updates

For both license updates and license installations, if they are to be performed on a remote server, then select the "License Configuration" tab in the C Tech License Manager, which should already be selected on first launch. Ensure that you have configured a server by clicking on the "Add" button and then entering the Name or IP of the server. See License Configuration > Configuring License Servers for more information. Then you may click on the "Load Remote Update File" button.

Fixed License

(Network Concurrent)

Enterprise License

Servers Configuration

Add

Query Server

Load Remote Update File

Enter Remote Update String

Remove

Name/IP: localhost

Cancel

Ok

Version 2021.10.2

Copyright © 2021 - C Tech Development Corporation

You will be prompted to select the .ctupdate from the computer's file system. Select the .ctupdate file emailed to you. After a brief moment, the license manager will report the result of the remote update. To view the status of the server, you may now click on the "Query Server" on the same row as the previous button.

User Information

Name:

Organization:

Email:

Select L

C Tech License Server Query

C Tech Server Information
Version: 2021.10.3 V2 Released on 10/15/2021
Started on: 10/15/2021 5:48:40 PM
Machine: reedsmachine
Windows Version: Microsoft Windows 10 Pro 10.0.19042 SP 0.0
Ports: EVS 9348 | EnterVol 9347 | MVS Legacy 9346
System Identifier: AAAA-BBBB-CCCC-DDDD-EEEE-FFFF

License Summary
Active License:
Floating Hardware License Dongle 1/1
M... .. 10/15/2021

Select L

Servers

Name/IP:

Privacy Selection

C Tech Development Corporation - Privacy Preferences

Privacy Selection

Allow Full Reporting

Full Reporting will report detailed crash and error reports to C Tech Development Corporation and allow C Tech to provide the best assistance and support. Information provided is used exclusively by C Tech to help provide technical support and improve the product.

These reports will contain your name, email, and company as provided in the previous screen to allow us to associate a specific software crash to you and your machine.

Allow Anonymous Reporting

Detailed error reports are transmitted to C Tech after a crash, which may contain information about your system (Operating System, hardware specifications, machine name, amount of RAM, and similar) as well information relating to the crash you encountered, and could potentially include file names.

No data or application files are ever shared with C Tech Development Corporation.

Prevent All Reporting

In addition, anonymous usage statistics are reported, such as the number of times you run the software, feature usage statistics, etc.

Cancel Ok

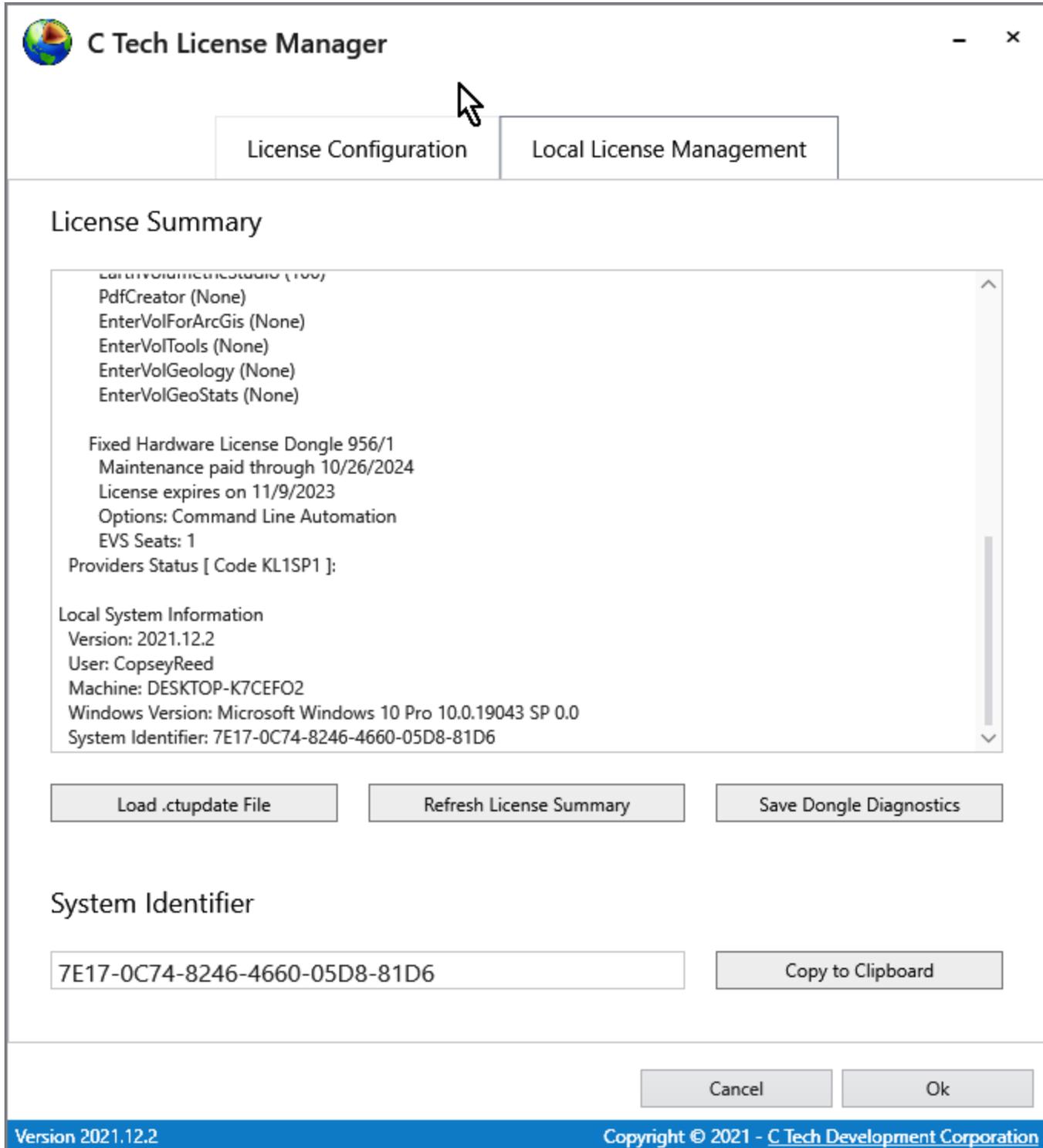
Version 2021.12 Copyright © 2021 - C Tech Development Corporation

After the previously mentioned fields have been configured, you may press the Ok button at the bottom right, this will take you to the Privacy Selection window. You may choose between "Allow Full Reporting", "Allow Anonymous Reporting", and "Prevent All Reporting". Please read the provided descriptions for each option in the Privacy Selection window for more information.

It is highly recommended to "Allow Full Reporting" since this can provide C Tech with information which may be crucial in debugging possible software errors or crashes.

CTLM Local & Remote Software License Management

C Tech License File Updates provide a way to install and update licenses on both local and remote machines. The main functions of C Tech License File Updates include upgrading and/or updating C Tech Software Licenses for EnterVol for ArcGIS.



The screenshot shows the C Tech License Manager application window. The title bar reads "C Tech License Manager" with a globe icon on the left and standard window controls on the right. Two tabs are visible: "License Configuration" and "Local License Management", with the latter being the active tab. A mouse cursor is positioned over the "Local License Management" tab. The main content area is titled "License Summary" and contains a scrollable list of license information. Below the list are three buttons: "Load .ctupdate File", "Refresh License Summary", and "Save Dongle Diagnostics". At the bottom of the main area is a "System Identifier" section with a text box containing the identifier "7E17-0C74-8246-4660-05D8-81D6" and a "Copy to Clipboard" button. At the very bottom of the window are "Cancel" and "Ok" buttons. A blue footer bar at the bottom of the image contains the text "Version 2021.12.2" on the left and "Copyright © 2021 - C Tech Development Corporation" on the right.

C Tech License Manager

License Configuration | Local License Management

License Summary

- EnterVolForArcStudio (None)
- PdfCreator (None)
- EnterVolForArcGis (None)
- EnterVolTools (None)
- EnterVolGeology (None)
- EnterVolGeoStats (None)

Fixed Hardware License Dongle 956/1
Maintenance paid through 10/26/2024
License expires on 11/9/2023
Options: Command Line Automation
EVS Seats: 1
Providers Status [Code KL1SP1]:

Local System Information
Version: 2021.12.2
User: CopseyReed
Machine: DESKTOP-K7CEFO2
Windows Version: Microsoft Windows 10 Pro 10.0.19043 SP 0.0
System Identifier: 7E17-0C74-8246-4660-05D8-81D6

Load .ctupdate File | Refresh License Summary | Save Dongle Diagnostics

System Identifier

7E17-0C74-8246-4660-05D8-81D6 | Copy to Clipboard

Cancel | Ok

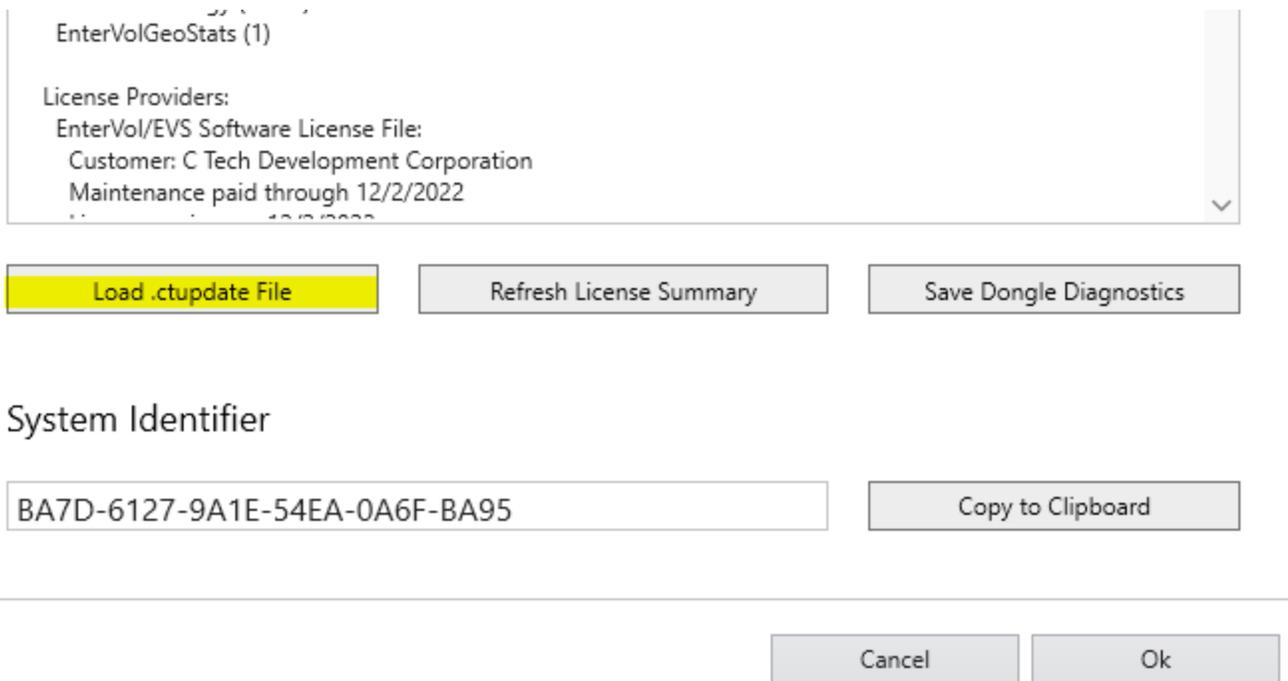
Version 2021.12.2 | Copyright © 2021 - C Tech Development Corporation

The Local License Management tab provides several important functions;

- Load .ctupdate File: Allows you to apply a C Tech License Update File (.ctupdate) to install a new software license for supporting products or update existing licenses.
- License Summary: Provides a summary of licenses installed on the local machine, as well as (local) system information such as the System Identifier used by software based (vs dongle) licenses. Also shows information related to the license providers, whether they come from C Tech USB Dongles or from C Tech Software Licensing.
- System Identifier: Unique Identifier that is unique to the local system. This is used for C Tech Software Licenses. Please refer to the following section for more info Local Installation
- Save Dongle Diagnostics: In cases where the dongle needs troubleshooting, this will prompt you to select a destination folder and will then generate a file containing diagnostics of all installed C Tech USB Dongles. If requested by C Tech support, please include all generated files as attachments for subsequent support emails.

Local Updates

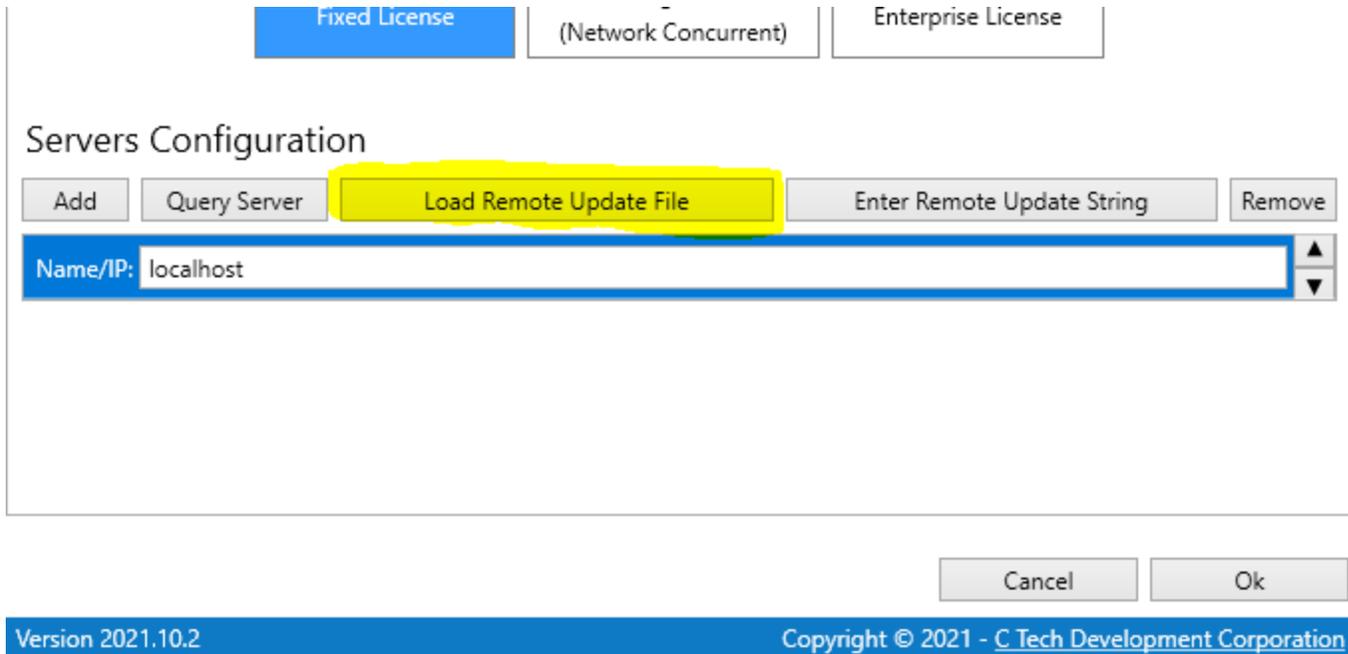
For both license updates and license installations, if they are to be performed on the local workstation, then select the "Local License Management" tab in the C Tech License Manager, and click on the "Load .ctupdate File" button. NOTE: If your C Tech License Manager does not match the images in this topic, you are likely running an old version and need to install the latest version.



You will be prompted to select the .ctupdate file emailed to you. Select the .ctupdate and the license manager will report the result of the local update and also show the status of the updated licenses in the Licenses Summary area.

Remote Updates

For both license updates and license installations, if they are to be performed on a remote server, then select the "License Configuration" tab in the C Tech License Manager, which should already be selected on first launch. Ensure that you have configured a server by clicking on the "Add" button and then entering the Name or IP of the server. See License Configuration > Configuring License Servers for more information. Then you may click on the "Load Remote Update File" button.



You will be prompted to select the .ctupdate from the computer's file system. Select the .ctupdate file emailed to you. After a brief moment, the license manager will report the result of the remote update. To view the status of the server, you may now click on the "Query Server" on the same row as the previous button.

User Information

Name:

Organization:

Email: X

Select L

C Tech License Server Query

C Tech Server Information
Version: 2021.10.3 V2 Released on 10/15/2021
Started on: 10/15/2021 5:48:40 PM
Machine: reedsmachine
Windows Version: Microsoft Windows 10 Pro 10.0.19042 SP 0.0
Ports: EVS 9348 | EnterVol 9347 | MVS Legacy 9346
System Identifier: AAAA-BBBB-CCCC-DDDD-EEEE-FFFF

License Summary
Active License:
Floating Hardware License Dongle 1/1
M... .. 10/15/2021

Select L

Servers

Name/IP: ▲ ▼

Privacy Selection

C Tech Development Corporation - Privacy Preferences

Privacy Selection

Allow Full Reporting

Full Reporting will report detailed crash and error reports to C Tech Development Corporation and allow C Tech to provide the best assistance and support. Information provided is used exclusively by C Tech to help provide technical support and improve the product.

These reports will contain your name, email, and company as provided in the previous screen to allow us to associate a specific software crash to you and your machine.

Allow Anonymous Reporting

Detailed error reports are transmitted to C Tech after a crash, which may contain information about your system (Operating System, hardware specifications, machine name, amount of RAM, and similar) as well information relating to the crash you encountered, and could potentially include file names.

No data or application files are ever shared with C Tech Development Corporation.

Prevent All Reporting

In addition, anonymous usage statistics are reported, such as the number of times you run the software, feature usage statistics, etc.

Cancel Ok

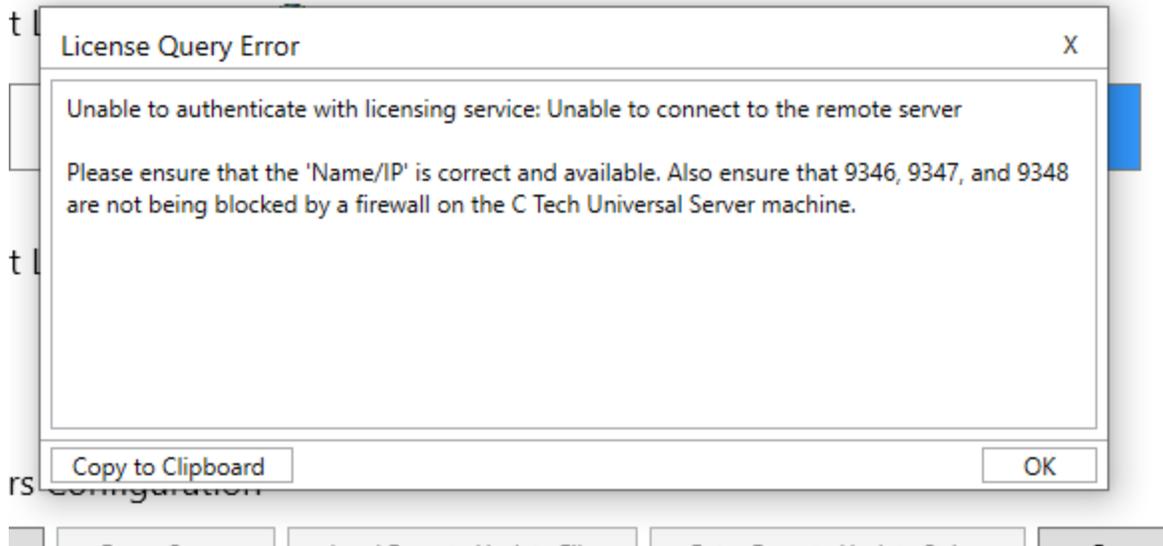
Version 2021.12 Copyright © 2021 - C Tech Development Corporation

After the previously mentioned fields have been configured, you may press the Ok button at the bottom right, this will take you to the Privacy Selection window. You may choose between "Allow Full Reporting", "Allow Anonymous Reporting", and "Prevent All Reporting". Please read the provided descriptions for each option in the Privacy Selection window for more information.

It is highly recommended to "Allow Full Reporting" since this can provide C Tech with information which may be crucial in debugging possible software errors or crashes.

CTLM License Troubleshooting

1) Unable to authenticate with licensing service



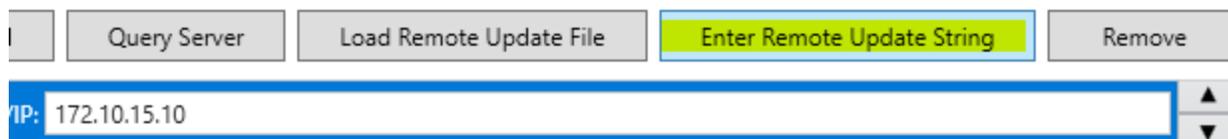
First ensure that the Name/IP that was provided in the Server Configuration is correct and accessible on your network. When running into this issue, the next most likely cause is that the required inbound TCP ports for the C Tech Universal License Server have not been configured to allow inbound network traffic. Please ensure that the ports 9346, 9347, and 9348 are open and allow TCP network traffic on the machine where the C Tech Universal License Server is installed.

2) C Tech License Update File is corrupted

Please go back to the original email from C Tech which contains the update to verify that the files are the same. Sometimes email attachments may become corrupted by anti-virus or anti-malware tools. Please white list (protect) the file extension .ctupdate from being modified by any anti-virus or anti-malware tool.

When this remains an issue, the C Tech License Update may be provided in the form of an ASCII string which you can then use the "Enter Remote Update String" button in the C Tech License Manager to install a license or apply an update.

ers Configuration



3) The dongle (key) you are trying to update may not have been included in the update.

Please refer to the invoice from C Tech for a list of supported keys. If your dongle is not listed, it was not included in the update.

4) C Tech USB License Dongles are returning an error when attempting to do a local license update

For security reasons, the license dongles will sometimes not work when the machine is accessed via Remote Desktop Connection, as direct hardware access can be prevented by remote access software. In this case, use the alternate Server Configuration buttons to interact with the Name/IP set to "localhost". This will apply updates to the local hardware.

EVS Floating or Enterprise License Client Installation

Earth Volumetric Studio is available only as download from <https://client.ctech.com/>

Each user requires:

- Installation of Earth Volumetric Studio: Version 2021.12.2 (or the latest version available)
- Installation of Earth Volumetric Studio Sample Projects: Version 2021.12 (or the latest version available)
- Hostname or IP Access of the computer running the C Tech Universal License Server (with C Tech's USB key attached).
 - **THIS REPLACES "localhost" IN THE IMAGES BELOW unless you are installing a Floating or Enterprise license on your local computer (includes laptops), in which case the C Tech Universal License Server must be installed locally and configured as shown below.**

Installation requires Administrator rights. Run each executable and follow the instructions to set your preferred install folder and options.

With all license types, the first step of client setup (after EVS software installation) is to set up the proper license type in the *C Tech License Manager*. The *C Tech License Manager* has many additional functions [discussed in this topic](#).

Below are the correct options for a Floating (USB Dongle) License.

Note: You need to enter Name, email and Organization of the User (if on a client computer) or the IT Administrator if on a server.

For Floating Licenses



C Tech License Manager



License Configuration

Local License Management

User Information

Name:

Organization:

Email:

Select License Type:  Earth Volumetric Studio™

EVS Presentation
or Demo License

Fixed License

Floating License
(Network Concurrent)

Enterprise License

Select License Type:  EnterVol

Fixed License

Floating License
(Network Concurrent)

Enterprise License

Servers Configuration

Add

Query Server

Load Remote Update File

Enter Remote Update String

Remove

Name/IP:



Cancel

Ok

Version 2021.12.2

Copyright © 2021 - C Tech Development Corporation

For Enterprise Licenses

 **C Tech License Manager** - ×

User Information

Name: Organization:

Email:

Select License Type:  **Earth Volumetric Studio™**

Select License Type:  **EnterVol**

Servers Configuration

Name/IP: ▲ ▼

Version 2021.12.2 Copyright © 2021 - [C Tech Development Corporation](#)

When you click OK on the window above, it will open the last C Tech License Manager window shown below. In this window we request your permission to send automated error reports to C Tech should you encounter a problem

while using the software. Allowing Reporting (especially Full Reporting) will allow us to provide you with a higher level of Technical Support should you encounter an unexpected problem.

C Tech Development Corporation - Privacy Preferences

Privacy Selection

Allow Full Reporting

Full Reporting will report detailed crash and error reports to C Tech Development Corporation and allow C Tech to provide the best assistance and support. Information provided is used exclusively by C Tech to help provide technical support and improve the product.

These reports will contain your name, email, and company as provided in the previous screen to allow us to associate a specific software crash to you and your machine.

Allow Anonymous Reporting

Detailed error reports are transmitted to C Tech after a crash, which may contain information about your system (Operating System, hardware specifications, machine name, amount of RAM, and similar) as well information relating to the crash you encountered, and could potentially include file names.

No data or application files are ever shared with C Tech Development Corporation.

Prevent All Reporting

In addition, anonymous usage statistics are reported, such as the number of times you run the software, feature usage statistics, etc.

Cancel Ok

Version 2021.12 Copyright © 2021 - C Tech Development Corporation

Once the *C Tech License Manager* (shown above) is closed, it will not reopen unless you run it explicitly. Each time you start Earth Volumetric Studio, the options you have set above will apply.

Requesting EnterVol Licenses

EnterVol for ArcGIS uses the C Tech Software License installed with a C Tech Universal License Server to provide licensing to its users. Unlike the C Tech USB License Dongle for Earth Volumetric Studio, the EnterVol license is locked to the machine's hardware where the license server is installed. Please note:

- Fixed Licenses use a locally installed C Tech Universal License Server and the "System Identifier" we require is on your local computer.
- Concurrent and Enterprise Licenses use a remotely installed C Tech Universal License Server and the "System Identifier" we require corresponds to the server.

You will need to provide a "System Identifier" as well as additional information in order to receive a license file for a license that has been purchased and paid for. To obtain the "System Identifier", please use the following instructions depending on where you have the licensing server configured.

Local Installation

Select the "Local License Management" tab in the C Tech License Manager. There you will see at the bottom the System Identifier section. For your convenience you can click on the "Copy to Clipboard" button.

Remote Installation (On a different machine over the network)

From the "License Configuration" tab in the C Tech License Manager, ensure that a Server is [properly configured](#) .

When the connection to the server was successful, you will see the following window when you click the "Query Server" button.

User Information

Name: Organization:

Email:

Select License Servers

The screenshot shows a window titled "C Tech License Manager - Query License localhost". The window contains the following text:

```
C Tech License Server Query

C Tech Server Information
Version: 2021.10.3 V2 Released on 10/15/2021
Started on: 10/15/2021 5:48:40 PM
Machine: reedsmachine
Windows Version: Microsoft Windows 10 Pro 10.0.19042 SP 0.0
Ports: EVS 9348 | EnterVol 9347 | MVS Legacy 9346
System Identifier: AAAA-BBBB-CCCC-DDDD-EEEE-FFFF

License Summary
Active License:
Floating Hardware License Dongle 1/1
10/15/2021 5:48:40 PM
```

Buttons at the bottom of the window: Copy to Clipboard, Save Logs, View Logs, OK.

Buttons at the bottom of the main application: Add, Query Server, Load Remote Update File, Enter Remote Update String, Remove.

Name/IP: localhost

For Fixed, Concurrent and Enterprise License Customers, the licensing procedure is below.

EnterVol Client-Server installations use the [C Tech Universal License Server](#) just as EVS does, but the license is locked to the server CPU, not to the USB dongle (key).

To request a license that has been purchased and paid for, you must do the following:

- Run the [C Tech License Manager](#)
 - This can be done on the server or any EVS Client computer
 - When this is done on a computer that is not the server, you must complete the Servers Configuration first.
 - Click the Query Server button
 - In the "Update License on This System" Window, you will see the "System Identifier".
 - Select the System Identifier (string) and Copy (Ctrl-C)

User Information

Name: Organization:

Email:

Select L

Select L

Servers

C Tech License Manager - Query License localhost

C Tech License Server Query

C Tech Server Information
Version: 2021.10.3 V2 Released on 10/15/2021
Started on: 10/15/2021 5:48:40 PM
Machine: reedsmachine
Windows Version: Microsoft Windows 10 Pro 10.0.19042 SP 0.0
Ports: EVS 9348 | EnterVol 9347 | MVS Legacy 9346
System Identifier: AAAA-BBBB-CCCC-DDDD-EEEE-FFFF

License Summary
Active License:
Floating Hardware License Dongle 1/1

Buttons: Copy to Clipboard, Save Logs, View Logs, OK

Add Remove

Name/IP:

- For Fixed Licenses, run C Tech License Manager on the computer to be licensed and you will see:



License Configuration

Local License Management

License Summary

EarthVolumeTools (100)
PdfCreator (None)
EnterVolForArcGis (None)
EnterVolTools (None) I
EnterVolGeology (None)
EnterVolGeoStats (None)

Fixed Hardware License Dongle 956/1
Maintenance paid through 10/26/2024
License expires on 11/9/2023
Options: Command Line Automation
EVS Seats: 1
Providers Status [Code KL1SP1]:

Local System Information
Version: 2021.12.2
User: CopseyReed
Machine: DESKTOP-K7CEFO2
Windows Version: Microsoft Windows 10 Pro 10.0.19043 SP 0.0
System Identifier: 7E17-0C74-8246-4660-05D8-81D6

Load .ctupdate File

Refresh License Summary

Save Dongle Diagnostics

System Identifier

7E17-0C74-8246-4660-05D8-81D6

Copy to Clipboard



Cancel

Ok

- Click on "Copy to Clipboard"

Note: Your System Identifier will be unique to your computer.

Then send that string to sales@ctech.com along with the required information below:

System Identifier: 7E17-0C74-8246-4660-05D8-81D6

Company: ABC Consultants, Inc.

User: Ms. Jane Doe

E-Mail: j.doe@abc-cons-inc.com

Phone: 505-555-1212

C Tech's Invoice number for your order (this is to ensure that you receive the proper licenses)

Upon verification of the information you provide, C Tech will generate a license file which will be sent to the e-mail address provided above.

Once you receive our .ctupdate file, you will perform the update using the [C Tech License Manager](#) and the instructions which will accompany the file.

Client Installation for EnterVol Concurrent or Enterprise Licenses

This topic applies to EnterVol for ArcGIS 10.8.

EnterVol is available only as download from <https://client.ctech.com/>

Each user requires:

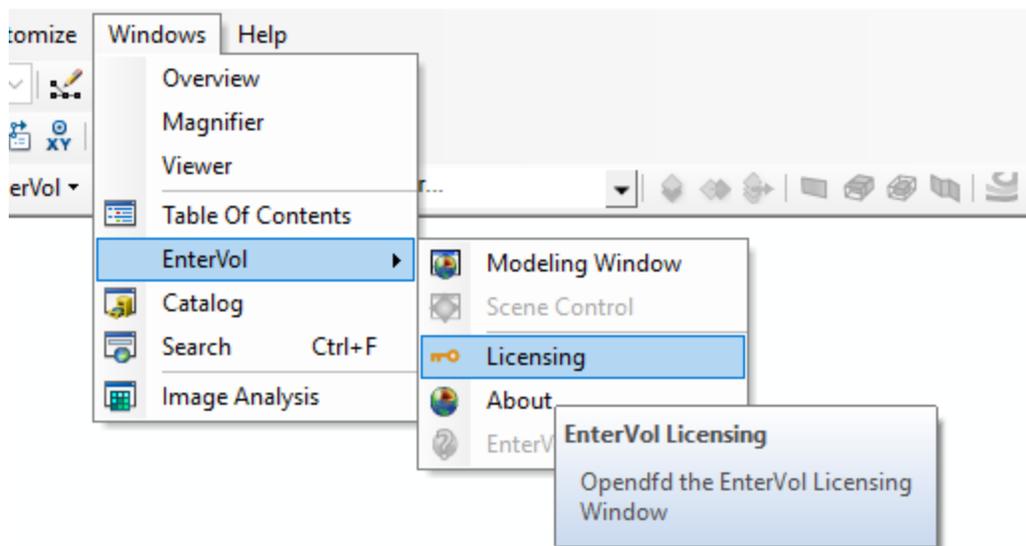
- Installation of EnterVol for ArcGIS 10.x (or the latest version available)
- Hostname or IP Access of the computer running the C Tech Universal License Server

Installation requires Administrator rights. Run each executable and follow the instructions to set your preferred install folder and options.

With all license types, the first step of client setup (after EVS software installation) is to set up the proper license type in the *C Tech License Manager*. The *C Tech License Manager* has many additional functions [discussed in this topic](#).

If your organization has purchased EnterVol concurrent licenses and properly installed and configured the C Tech Universal License Server locally or on your network, you can follow the simple steps below to configure a client installation for a concurrent license.

Launch the C Tech License Manager by clicking on the Licensing Option in the EnterVol menu entry under Windows -> EnterVol -> Licensing



If your client computer can connect to a valid server, your licensing window should show something like the above.