

Overview

A VERICUT software installation is typical of any other software installation on your computer. You simply follow the onscreen instructions for the software components you wish to install and where you want them installed on your PC. The software can be installed on as many PC's as you like. The number of licenses available determine how many of the copies can be run simultaneously. VERICUT and its features are managed through the license manager. This document applies to VERICUT Verification and VERICUT Drilling and Fastening (VDAF)

Considerations before Installation

VERICUT installation is very simple but you need to know a few things prior to installing your software. Some of the menu options you'll see during the installation require you to know what VERICUT products you purchased so you know what to select during the installation process. If you are planning on installing the license server please note that you must have administrator privileges to perform the license server configuration. You must also have administrator privileges to install the Microsoft redistributable run-time libraries if necessary. It's also possible that the windows security settings on your PC will require administrative privileges to install the base software also. Check with your IT administrator about your security settings prior to attempting installation.

Take a look at the pc requirements and the licenser server configuration before installing the software. (click on the links below)

PC requirements

License Server

Terminology

Client Computer — The computer that runs the VERICUT software.

License Server Computer — The computer running the license server program. It may also run the VERICUT client software concurrently

License Server Program — The program providing licenses for VERICUT. VERICUT requires a license, so the License Server Program must be running for VERICUT to operate. VERICUT uses the Sentinel RMS license server program from <u>SafeNet</u>. The license server program and VERICUT communicate using TCP/IP network protocol. Only one Sentinel RMS license server program may run on a computer.

Installation from a DVD

Insert the DVD into the Drive and follow the onscreen instructions.

Installing from A downloaded Zip file

You can request a download of the VERICUT installation files from the CGTech website.

http://www.cgtech.com/vericut_support/request-software-update

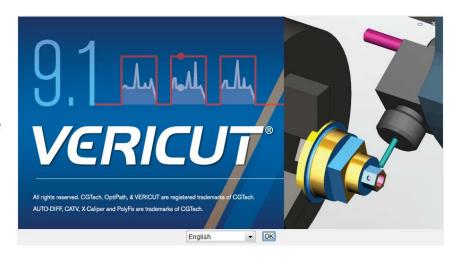
Once you downloaded the zip file you'll need to unzip it to a temporary folder. While unzipping the file you'll be prompted for a password. This password will be in the email that was sent to you for the download link.

From the temporary folder where you unzipped your installation, double click (or right click, open) on the setup.exe. Next, follow the on-screen instructions

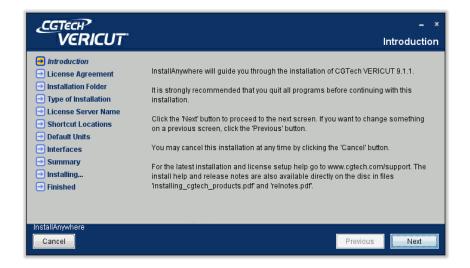
Basic VERICUT Product Installation

Insert the DVD or run the setup.exe from the folder containing the downloaded installer.

Select the desired language from the dropdown list at the bottom and click on the OK button.



The Introduction page will be displayed. Click the "Next" button to continue.

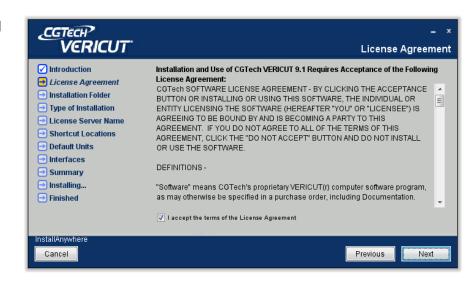


The license agreement page will then be displayed.

Read the license agreement.

If you agree, select the "I accept the terms and conditions"

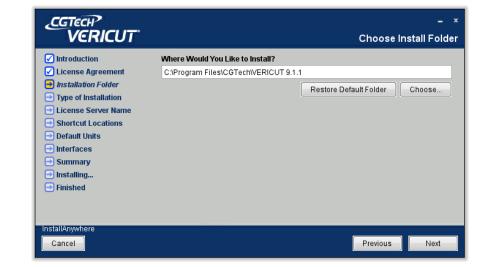
Click the "Next" button to continue.



The folder location will then be displayed.

Accept the default location or browse for a different location.

When you're satisfied with the location, click the "Next" button to continue



Choose your installation options.

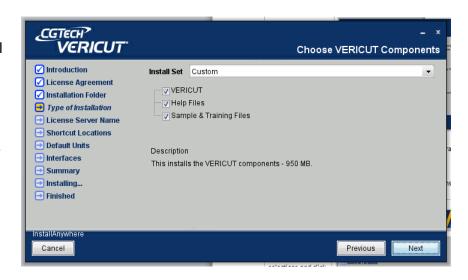


Full installs the product, license server, help, samples and training files. This is the recommended setting.

Partial installs the product, license server and help files.

Custom allows you individually to choose which items get installed.

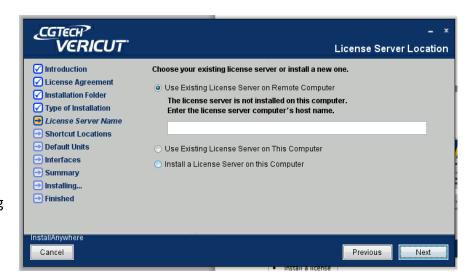
If you've chosen the Custom option the next screen will allow you to select which components of the product to install. Make your selections and click the "Next" button to continue.



Choose which license server to access.

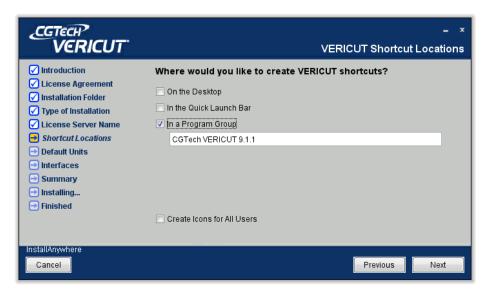
- Use Existing License server on Remote Computer.
- The Use Existing License server on this
- Install a license server on this computer. (NOTE: installing new license server requires administrative privileges)

Click the "Next" button to continue.



Shortcut Locations

Choose where you want you shorts to be located. On the Desktop, in your Quick Launch bar or in a program group in your start menu. You may select as many of these option as you want.



NOTE: It is recommended that you always keep the program group as a selection. The group in the start menu will contain several utilities that you may wish to access later on.

Click the "Next" button to continue

VERICUT Product Shortcuts

Select which product(s) you which to install and create shortcuts for.

Make sure you know which products you purchased prior to making your selection.

Click the "Next" button to continue.

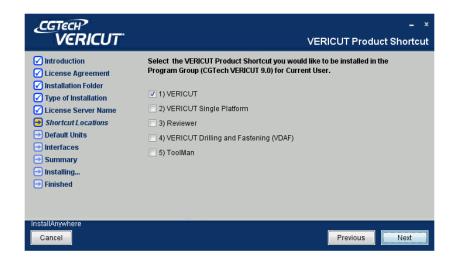
Defaults Units

Choose the default units to use when opening VERICUT.

During normal VERICUT operation, the units can also be selected when starting a new project.

Once a unit has been selected it's saved with the project file.

Click the "Next" button to continue.





Select which Help Documentation you would prefer: Online or Local.

Click the "Next" button to continue

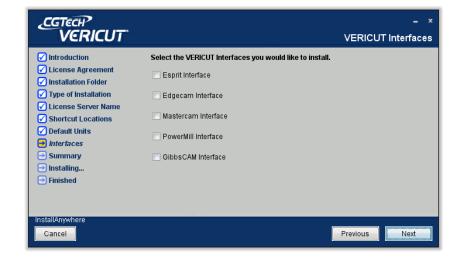


Select Additional interfaces.

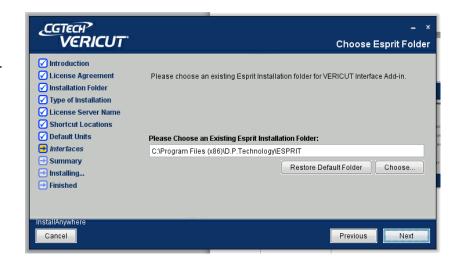
If you purchased additional interfaces in the list, select them to have them installed.

NOTE: there may be more options available than this image depicts.

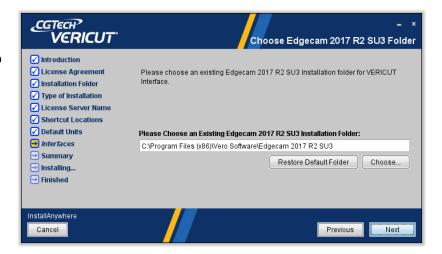
Click the "Next" button to continue



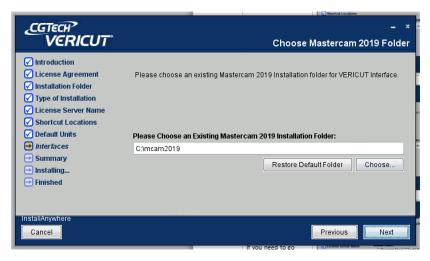
If you selected the Esprit interface you will be prompted for the location of the Esprit installation. If it's not the default installation listed then click on the "Choose" button to locate the Esprit installation.



If you selected the EdgeCam interface you'll be prompted to select the installation directory.



If you selected the Mastercam interface you'll be prompted to select the installation directory.



The Summary page will then be displayed.

Review your choices. If you need to go back and make any changes click on the "Previous" button to return to the topic that needs a correction.

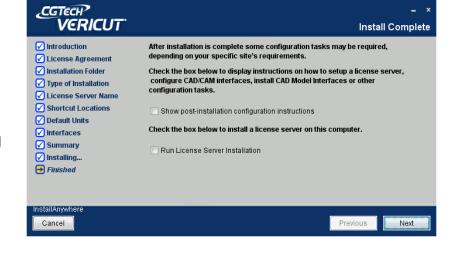
Clicking the "Install" button will begin the installation process.

The installation progress screen will be displayed during the installation.





Once the installation is completed a window will be displayed asking if you would like to view the postinstallation instructions. This will launch your browser and provide a link to take you to the CGTech website to the on-line postinstallation instructions.

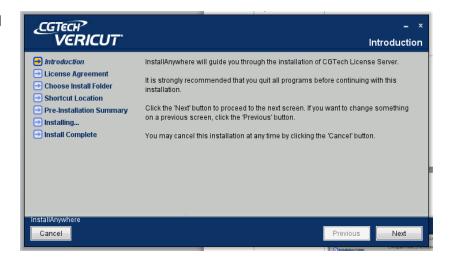


If you wish to install a license server on this PC then check the box and click next.

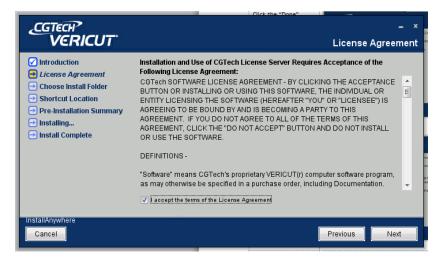
Click the "Done" button to exit the Installer.



If you opted to install the license server, click next to continue.



Click on the accept button and then click next to continue



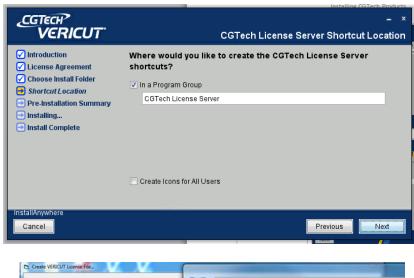
Choose a new location or click next to accept the default location to continue.

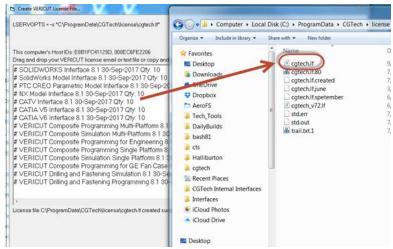


Check the program group option (recommended) to create a program group in the start menu.

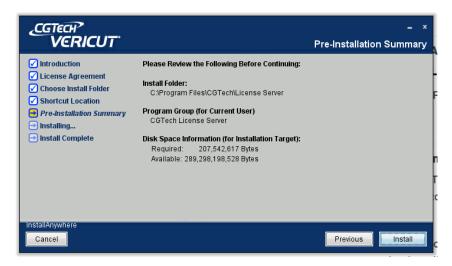
This group contains additional utilities for configuring the license server as shown on the next page.

This picture shows the additional utilities available when available using the program group option.





The pre-installation page is now displayed. Examine the install options selected. If necessary, click the previous button to go back and change any options otherwise click next to continue the installation. Click Done when the installation is completed.



Basic License Server Configuration

NOTES FOR EXISTING USERS

As of the VERICUT 9.1 release, the license file manager from the VERICUT 9.1 installation must be installed (Sentinel version 9.1). Prior versions of the Sentinel License Server are not compatible with the new license file format.

In addition, those running the Sentinel License Server on a Virtual Machine must specifically request a Virtual Machine Enabled license file from CGTech. Attempting to run a VM disabled license from a Virtual Machine will result in error.

This set of instructions assumes that you have a standard Windows network configuration with TCP/IP. You must have administrative privileges in order to install the license server or the Microsoft redistributables.

Before you can install and configure the license manager service you must first obtain a license file email from CGTech. If you're a new user of VERICUT you can go to the CGTech website to request your license file. Before going to the website to request your license, you need to be prepared to provide your 6 digit company ID, your Host Name (name of the server or PC running the license manager) and the Host ID (the 12 digit MAC address of the server or PC running the license manager).

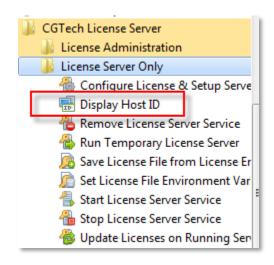
If you don't know your 6 digit company ID you can contact you CGTech Sales engineer or the technical support department

You can locate your host name by opening control panel and selecting System. The host name is the Computer name.

You can determine your Host ID by running the HOST ID utility from the start menu. This will display a command window with 1 or more 12 digit Ethernet addresses. Choose an address from the list.

Example:

Ethernet 1: 0001CF45A789



Ethernet 2: 2001BC23B123

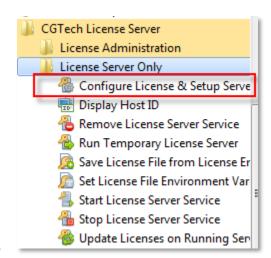
Once you have this information you can go to the CGTech website and complete the license request form. The form will be sent to the email address you specified on the form.

http://www.cgtech.com/vericut_support/request-license

Once you have your license file email available, proceed with the following steps.

Go to the start menu and select the VERICUT license folder that was created during the installation process

Next, select the license server only folder and then select Configure License and Setup Server. This utility performs the following tasks.



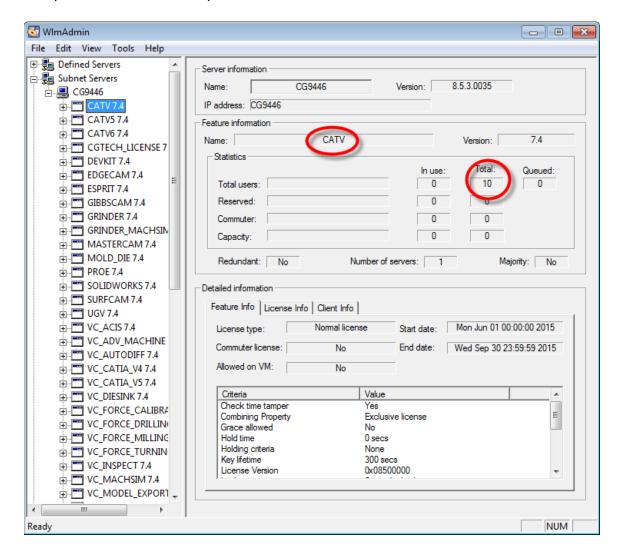
- 1. Creates a license file from your license email
- 2. Sets the LSERVOPS environment variable to point to your new license file location.
- 3. Stops the existing server if one exists
- 4. Removes the existing license server service.
- 5. Installs the new license server service.
- 6. Updates the new license server service with the new license file features.

If you get any errors during this process please go to the trouble shooting section.

If no errors are generated then run the Sentinel LM License Administrator (wlmadmin.exe) from the start menu, VERICUT Installation, License Administration.



When the license administrator launches, expand out the subnet servers (+) and then expand out the computer name. You should see all you license features appear. Selecting the license feature in the list will display the name of the feature and how many license of the feature you have available.



At this point the client PC's should be able to run VERICUT. If VERICUT fails to launch, take note of the error message and go to the trouble shooting section of this guide.

Choose an Installation Configuration

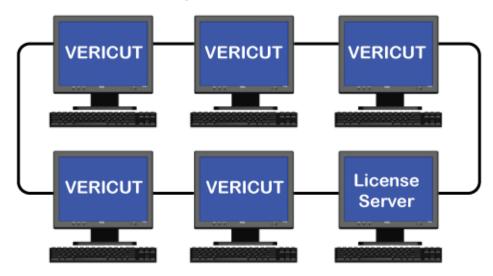
There are several different ways to configure your VERICUT software installation. The following are common configurations: a simple single computer or stand-alone installation and multiple-computer installations.

Standalone Configuration



Both the License Server and the VERICUT software run on the same computer





License server running on a different PC on the network

(NOTE: The license server computer may also run the VERICUT application)

(Back to Things to Consider Before Installation)

VERICUT System Requirements

Version 9.1.1

When considering system requirements you need to consider all the tasks it will be performing. For the purposes of discussion, we'll only reference 64 bit CPU's and operating systems. VERICUT Version 9.1.1 supports only 64 bit CPU's and operating systems.

Considerations:

- 1) What is the physical size of the part you will simulate?
- 2) What other software applications are running while VERICUT is running?
- 3) What requirements do the other applications have (both memory and graphics)?

VERICUT performance is primarily affected by the simulation tolerances used and the speed of the CPU's. The faster the CPU speed, the faster your programs will run. The length of part programs being simulated does not affect VERICUT speed.

The link below takes you to the Intel site where you can review the current CPU's available and read up on some of the latest CPU technology.

http://www.intel.com/content/www/us/en/processor-comparison/compare-intel-processors.html?select=desktop

IMPORTANT! *Always* check the latest system requirements, available at <u>VERICUT</u> <u>System Requirements webpage.</u>

NOTE: Requirements have changed – review carefully

Windows 64 bit Requirements

OS	Windows 7 or 10 64-bit Professional
Processor	Intel i7 or Xeon
Memory	16 GB or higher at minimum, 32 GB is recommended

Video	AMD Radeon RX with 2 GB GPU RAM or higher NVIDIA GeForce with 2 GB GPU RAM or higher
Monitor	1920 x 1080 (or higher) resolution, dual monitor
Storage	Solid State Drive (SSD) with at least 50 GB free, 75 GB is recommended
Pointing Device	Three buttons with mouse-wheel (3Dconnexion Space Mouse supported)

Basic Troubleshooting

Errors Running Vericut

"Error No License Server Found"

Cause - The license server is not running.

Solution – Start the license server utility. Make sure the license server is installed NOTE: loading or stopping/starting the license server requires administrative privileges.

Cause - The server name is incorrect

Solution – From the start menu, CGTech program group, license administration, run the "Specify License Server Computer" utility. This will allow you to edit the LSHOST variable with the correct server name or IP address.

"License server found but invalid version number"

Cause – Typically this is caused by an older license file being

Solution – Ensure that the license file being used is for 9.1.1.

Check the Iservops environment variable to be sure that it points to the correct location for the 9.1.1 license file. Either edit the LSERVOPS variable or move the license file to the correct location.

NOTE: editing the LSERVOPS variable requires administrative privileges.

"Unable To Access Shared Library"

Cause - Missing the Microsoft redistributables.

Solution – run the vcredist_* executables from the redist folder of your VERICUT installation or from the redistributables folder of your VERICUT Installation DVD or folder.

NOTE: running these files requires administrative privileges.

"Error Loading ACIS Libraries"

Cause - Model interfaces not installed

Solution – Run the Model Interfaces Executable from the DVD or the installation folder. (model interfaces v73.exe)

Cause - Missing the Microsoft redistributables.

Solution – run the vcredist_* executables from the redist folder of your VERICUT installation or from the redistributables folder of your VERICUT Installation DVD or folder

NOTE: running these files requires administrative privileges.

"License server found but features not present"

Cause – Firewall or anti-virus is blocking communication between the license server and the client running VERICUT.

Solution – Open up the firewall / anti-virus utility and add exceptions for port 5093 as well as Iservnt.exe.

Errors Installing the Sentinel License Server

"Cannot Communicate with License server"

Cause - Missing the Microsoft redistributables.

Solution – run the vcredist_* executables from the redist folder of your VERICUT installation or from the redistributables folder of your VERICUT Installation DVD or folder.

NOTE: running these files requires administrative privileges.

"Sentinel RMS Development Kit: Error[150] The specified lock code is invalid Cause – MAC address in license file does not match MAC address on the server

Solution – Move the license server to the correct computer or request a new license file with the correct MAC address. To request a new license file you must fill out a license transfer request online at:

http://www.cgtech.com/vericut_support/request-license/transfer-request/

Error license file cgtech. If does not exist

Cause – The update batch file cannot locate the cgtech.lf license file.

Solution – Make sure the cgtech. If was created in the license folder of your VERICUT installation. Ensure that you have write permissions for this folder.

Other Installation Types

Install VERICUT License Server Only

It may be desirable to install only the license server program on the license server computer. To do this, run the "license_server_install.exe" from the DVD or download folder.

Using Silent Install

Silent Mode

Silent mode enables an installer to run without any user interaction on Windows platforms. If you choose to run this option, there will be no console or GUI output during installation. Silent mode supports the setting of a target directory, shortcuts directory, and Components/Features via either command-line arguments or a properties file. Silent mode is supported in both the installer and uninstaller runtime environments. InstallAnywhere and end-user-defined variables may be set through command-line parameters and/or a properties file.

An installer properties file or a command-line parameter may trigger silent mode.

Installer Properties File

An installer properties file is an ASCII text file that defines certain parameters for your installation. This may be useful if you have a complex project that you are installing both internally and externally. Your internal end-users do not need to see panels such as the **License Agreement** panel. The properties file is an ideal way to turn panels on or off depending on your specific needs. In addition, the properties file can define the type of installation you want to run, such as console or silent.

NOTE: Please make sure that your properties file ends in .properties, not .txt.

Tip: If the install properties file is in the same directory as your installer, it will be invoked automatically. However, if it is in a different directory or a different name, you may use the following command line option to direct it to the relative path:

C:\\ <path to the installer> -f <path to the properties file>

Command Line Parameter

To call the properties file from the command line, type the following command:

install.exe -f roperties file>

You may use the direct or the relative path to the properties file.

InstallAnywhere variables may be incorporated in these values, and they will be resolved at install time.

NOTES:

- 1. File separators should be denoted by the "\\".
- 2. Values may ignore case.
- 3. Silent mode will override action panel values.
- 4. In any mode on Windows systems, installers and uninstallers will always display the very last "Cleaning-up" dialog box, as well as the "Preparing to install" panel.

VERICUT Properties File Variables

An example of an *install.properties* file with all parameters is as follows

```
#INSTALLER GUI? Silent, Console, GUI
#-----
INSTALLER UI=Silent
#Choose Install Folder
#-----
USER INSTALL DIR=C:\\Program Files\\CGTech\\VERICUT 9.1.1
#Choose Type of Installation
#-----
CHOSEN FEATURE LIST=VERICUT, Help, Samples
CHOSEN_INSTALL_FEATURE_LIST=VERICUT,Help,Samples
CHOSEN INSTALL SET=Full
#License Server Location
#-----
LICENSE SERVER EXISTS REMOTE=1
LICENSE SERVER EXISTS REMOTE HOSTNAME=LicenseServer
LICENSE SERVER EXISTS LOCAL=0
LICENSE SERVER INSTALL LOCAL=0
#VERICUT Shortcut Locations
#-----
USER INPUT DESKTOP FLAG=1
USER INPUT QUICK LAUNCH FLAG=1
USER INPUT PROGRAM GROUP FLAG=1
USER INPUT PROGRAM GROUP NAME=CGTech VERICUT 9.1.1
USER INPUT ALL USERS FLAG=0
```

```
#VERICUT Product Shortcut
#-----
# "1) VERICUT"
DEFAULT BASE LIC VAR 1=1
# "2) VERICUT Single Platform"
DEFAULT_BASE_LIC_VAR_2=1
# "3) Reviewer"
DEFAULT BASE LIC VAR 3=1
# "4) VERICUT Drilling and Fastening (VDAF)"
DEFAULT BASE LIC VAR 4=1
# "5) ToolMan"
DEFAULT_BASE_LIC_VAR_5=1
#VERICUT Default Units
#-----
DEFAULT UNITS VAR=\"1) Inch\",\"\"
DEFAULT UNITS VAR 1=1) Inch
DEFAULT UNITS VAR 2=
#VERICUT Interfaces
#-----
#Install Complete
#-----
```

The above sample will install an Inch version of VERICUT and create shortcuts for VERICUT, SP, Reviewer and ToolMan.

Below is a list of possible variable:

```
#INSTALLER GUI? Silent, Console, GUI
#-----
INSTALLER_UI=Silent

#Choose Install Folder
#------
USER INSTALL DIR=C:\\Program Files\\CGTech\\VERICUT 9.1.1
```

```
#Choose Type of Installation
#-----
CHOSEN FEATURE LIST=VERICUT, Help, Samples
CHOSEN INSTALL FEATURE LIST=VERICUT, Help, Samples
CHOSEN INSTALL SET=Full
#License Server Location
#-----
LICENSE SERVER EXISTS REMOTE=1
LICENSE_SERVER_EXISTS_REMOTE_HOSTNAME=LicenseServer
LICENSE SERVER EXISTS LOCAL=0
LICENSE SERVER INSTALL LOCAL=0
#VERICUT Shortcut Locations
#-----
USER INPUT DESKTOP FLAG=1
USER INPUT QUICK LAUNCH FLAG=1
USER INPUT PROGRAM GROUP FLAG=1
USER INPUT PROGRAM GROUP NAME=CGTech VERICUT 9.1.1
USER INPUT ALL USERS FLAG=0
#VERICUT Product Shortcut
#-----
# "1) VERICUT"
DEFAULT BASE LIC VAR 1=1
# "2) VERICUT Single Platform"
DEFAULT BASE LIC VAR 2=1
# "3) Reviewer"
DEFAULT BASE LIC VAR 3=1
# "4) VERICUT Drilling and Fastening (VDAF)"
DEFAULT BASE LIC VAR 4=1
# "5) ToolMan"
DEFAULT BASE LIC VAR 5=1
#VERICUT Default Units
#-----
DEFAULT_UNITS_VAR=\"1) Inch\",\"\"
DEFAULT UNITS VAR 1=1) Inch
DEFAULT UNITS VAR 2=
```

```
#VERICUT Interfaces
#-----
SPATIAL INSTALL=1
ESPRIT INTERFACE INSTALL=1
EDGECAM INTERFACE INSTALL=1
EDGECAM_2017_R2_SU3_SELECTED=1
EDGECAM 2017 R2 SU1 SELECTED=1
EDGECAM 2017 R1 SELECTED=1
EDGECAM 2016 R2 SELECTED=1
EDGECAM 2016 R1 SU1 SELECTED=1
EDGECAM 2015 R2 SELECTED=1
EDGECAM 2015 R1 SELECTED=1
EDGECAM 2014 R2 SU2 SELECTED=1
EDGECAM 2014 R1 SELECTED=1
EDGECAM_2013_R2_SELECTED=1
EDGECAM 2013 R1 SELECTED=1
MASTERCAM INTERFACE INSTALL=1
MASTERCAM 2018 SELECTED=1
MASTERCAM_2017_SELECTED=1
MASTERCAM X9 SELECTED=1
MASTERCAM X8 SELECTED=1
MASTERCAM X7 SELECTED=1
MASTERCAM X6 SELECTED=1
#Choose Esprit Folder
ESPRIT INSTALL DIR=C:\\Program Files\\D.P.Technology\\ESPRIT
#Choose Edgecam 2013 R1 Folder
EDGECAM 2013 R1 INSTALL DIR= C:\\Program Files\\Planit\\Edgecam 2013 R1
#Choose Edgecam 2013 R2 Folder
#-----
EDGECAM 2013 R2 INSTALL DIR= C:\\Program Files\\Planit\\Edgecam 2013 R2
#Choose Edgecam 2014 R1 Folder
#-----
EDGECAM 2014 R1 INSTALL DIR= C:\\Program Files \\Planit\\Edgecam 2014
R1
```

```
#Choose Edgecam 2014 R2 SU2 Folder
#-----
EDGECAM 2014 R2 SU2 INSTALL DIR= C:\\Program Files\\Planit\\Edgecam
2014 R2 SU2
#Choose Edgecam 2015 R1 Folder
EDGECAM 2015 R1 INSTALL DIR= C:\\Program Files\\Planit\\Edgecam 2015 R1
#Choose Edgecam 2015 R2 Folder
#-----
EDGECAM 2015 R2 INSTALL DIR=C:\\Program Files\\Vero Software\\Edgecam
2015 R2
#Choose Edgecam 2016 R1 SU1 Folder
#-----
EDGECAM 2016 R1 SU1 INSTALL DIR=C:\\Program Files\\Vero
Software\\Edgecam 2016 R1 SU1
#Choose Edgecam 2016 R2 Folder
EDGECAM 2016 R2 INSTALL DIR=C:\\Program Files\\Vero Software\\Edgecam
2016 R2
#Choose Edgecam 2017 R1 Folder
#-----
EDGECAM 2017 R1 INSTALL DIR=C:\\Program Files\\Vero Software\\Edgecam
2017 R1
#Choose Edgecam 2017 R2 SU1 Folder
EDGECAM 2017 R2 SU1 INSTALL DIR=C:\\Program Files\\Vero
Software\\Edgecam 2017 R2 SU1
#Choose Edgecam 2017 R2 SU3 Folder
#-----
EDGECAM 2017 R2 SU3 INSTALL DIR=C:\\Program Files\\Vero
Software\\Edgecam 2017 R2 SU3
#Choose Mastercam 2018 Folder
MASTERCAM 2018 PATH=C:\\Program Files\\Mcam\\mcam2018
```

```
#Choose Mastercam 2017 Folder
#-----
MASTERCAM 2017 PATH=C:\\Program Files\\Mcam\\mcam2017
#Choose Mastercam X9 Folder
#-----
MASTERCAM X9 PATH=C:\\Program Files\\Mcam\\mcamx9
#Choose Mastercam X8 Folder
MASTERCAM X8 PATH=C:\\Program Files\\Mcam\\mcamx8
#Choose Mastercam X7 Folder
#-----
MASTERCAM_X7_PATH=C:\\Program Files\\Mcam\\mcamx7
#Choose Mastercam X6 Folder
#-----
MASTERCAM X6 PATH=C:\\Program Files\\Mcam\\mcamx6
#Install Complete
#-----
USER SHOW INSTALL NOTES=0
RUN LICENSE SERVER INSTALL=0
```

VERICUT Command Descriptions

Specify Silent Install

INSTALLER_UI=Silent
Use to specify that Silent install is to be used.

Choose Installation Folder

USER_INSTALL_DIR=insert destination path here
Use to specify the path to the VERICUT installation folder.

Example:

USER INSTALL DIR=C:\\Program Files \\CGTech\\VERICUT 9.1.1

Choose Type of Installation

CHOSEN_INSTALL_SET=option

Use to specify which features are to be installed. Select one of the following options.

Full – VERICUT Product, Help, Sample and Training files will be installed. Partial – VERICUT Product and Help files will be installed.

If either of the above options (Full or Partial) is used, no other commands are needed to specify the features to be installed.

Example:

CHOSEN_INSTALL_SET=Full

Custom – Use this feature to select a "custom" group of features to be installed. Use the CHOSEN_INSTALL_FEATURE_LIST command, defined below, to specify the features that are to be installed.

CHOSEN_INSTALL_FEATURE_LIST=feature list

Use to specify the "custom" list of features to be used for the CHOSEN_INSTALL_SET=Custom command described above. Choose one or more of the following:

VERICUT – The VERICUT Product will be installed.

Help Files – The Help files will be installed.

Sample and Training Files – The Sample and Training files will be installed.

Example:

The following commands will install the VERICUT Product and the Sample and Training files.

CHOSEN_INSTALL_SET=Custom
CHOSEN_INSTALL_FEATURE_LIST=VERICUT, Sample and Training Files

License Server Location

You can only use one of the following options: LICENSE_SERVER_EXISTS_REMOTE, LICENSE_SERVER_EXISTS_LOCAL, or LICENSE_SERVER_INSTALL_LOCAL.

LICENSE SERVER EXISTS REMOTE=value

Use a value of 1 to use an existing license server on a remote computer. A value of 0 indicates that this option is not to be used. If the option is not specified, it defaults to 0. Use the LICENSE_SERVER_EXISTS_REMOTE_HOSTNAME command, described below, to specify the host name of the remote license server computer.

LICENSE SERVER EXISTS REMOTE HOSTNAME=host name

Used with the LICENSE_SERVER_EXISTS_REMOTE command described above. This command is used to specify the license server computer's host name.

Example:

LICENSE_SERVER_EXISTS_REMOTE=1
LICENSE SERVER EXISTS REMOTE HOSTNAME=LicenseServer

LICENSE SERVER EXISTS LOCAL=value

Use a value of 1 to use an existing license server on this computer. A value of 0 indicates that this option is not to be used. If the option is not specified, it defaults to 0.

LICENSE_SERVER_INSTALL_LOCAL=value

Use a value of 1 to install a License Server on this computer. A value of 0 indicates that this option is not to be used. If the option is not specified, it defaults to 0.

The license server installation starts after the VERICUT installation finishes. Have your license email for this computer and version available.

NOTE: The use of this option requires that you are an "Administrator" user.

VERICUT Shortcut Locations

USER INPUT DESKTOP FLAG=value

The USER_INPUT_DESKTOP_FLAG variable is used for adding icons to the Desktop. A value of 0 does not add any icons to the Desktop. A value of 1 adds icons to the Desktop. If the option is not specified, it defaults to 0.

USER INPUT QUICK LAUNCH FLAG=value

The USER_INPUT_QUICK_LAUNCH_FLAG variable is used for adding icons to the Quick Launch taskbar. A value of 0 does not add any icons to the Quick Launch taskbar. A value of 1 adds icons to the Quick Launch taskbar. If the option is not specified, it defaults to 0.

USER INPUT PROGRAM GROUP FLAG=value

The USER_INPUT_PROGRAM_GROUP_FLAG variable is used for adding icons and menus to the Programs Menu. A value of 0 does not add any icons or menus to the Programs Menu. A value of 1 adds icons and menus to the Programs Menu. If the option is not specified, it defaults to 0.

USER_INPUT_PROGRAM_GROUP_NAME=name of program group
The USER_INPUT_PROGRAM_GROUP_NAME variable indicates the name of the
Program Group that is to be added to the Start > All Programs menu. If the option is not

specified, it defaults to "CGTech VERICUT x.x.x", where x.x.x is the current VERICUT version number.

USER_INPUT_ALL_USERS_FLAG=value

The USER_INPUT_ALL_USERS_FLAG variable indicates if any icons added by the previous three options are added for all users of the computer or only the current user. A value of 0 adds icons for the current user only. A value of 1 adds icons for all users. If the option is not specified, it defaults to 0.

NOTE: The use of this option requires that you are an "Administrator" user.

VERICUT Product Shortcut

Use to specify the VERICUT Product Shortcut(s) that you would like to be installed in the Program Group (CGTech VERICUT 9.1.1) for the current user.

DEFAULT_BASE_LIC_VAR=string series

- "1) VERICUT"
- "2) VERICUT Single Platform"
- "3) Reviewer"
- "4) VERICUT Drilling and Fastening (VDAF)"
- "5) ToolMan

Example: VERICUT only

DEFAULT BASE LIC VAR =\"1) VERICUT\",\",\",\",\"

VERICUT Default Units

DEFAULT UNITS VAR=string series

- "1) Inch"
- "2) Millimeter"

Example: Inch

DEFAULT UNITS VAR=\"1) Inch\",\"\"

VERICUT Interfaces

SPATIAL INSTALL=value

Used to specify if the Spatial software used for the Model Interface option gets installed. A value of 0 does not install the Spatial software. A value of 1 installs the Spatial software. If the option is not specified, it defaults to 0.

ESPRIT INTERFACE INSTALL= value

Used to specify whether, or not, the Esprit-to-VERICUT Interface gets installed. A value of 0 does not install the Esprit-to-VERICUT Interface. A value of 1 installs the Esprit-to-VERICUT Interface. If the option is not specified, it defaults to 0.

ESPRIT_INSTALL_DIR=path
Use to specify the path of an existing Esprit installation folder.
Typically C:\Program Files (x86)\D.P.Technology\ESPRIT

Example:

The following pair of commands is required to install the Esprit-to-VERICUT Interface

ESPRIT INTERFACE INSTALL=1

ESPRIT_INSTALL_DIR= C:\Program Files (x86)\D.P.Technology\ESPRIT

EDGECAM INTERFACE INSTALL=value

Used to specify whether, or not, the Edgecam-to-VERICUT Interface gets installed. A value of 0 does not install the Edgecam-to-VERICUT Interface. A value of 1 installs the Edgecam-to-VERICUT Interface. If the option is not specified, it defaults to 0.

EDGECAM 2013 R1 SELECTED=value

Use to specify if the EDGECAM 2013 R1 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2013 R2 INSTALL DIR=path

Use to specify the path of the EDGECAM 2013 R1 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam_2013 R1

EDGECAM 2013 R2 SELECTED=value

Use to specify if the EDGECAM 2013 R2 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2013 R2 INSTALL DIR=path

Use to specify the path of the EDGECAM 2013 R2 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam 2013 R2

EDGECAM 2014 R1 SELECTED=value

Use to specify if the EDGECAM 2014 R1 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM_2014_R1_INSTALL_DIR=path

Use to specify the path of the EDGECAM 2014 R1 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam 2014 R1

EDGECAM 2014 R2 SU2 SELECTED=value

Use to specify if the EDGECAM 2014 R2 SU2 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2014 R2 SU2 INSTALL DIR=path

Use to specify the path of the EDGECAM 2014 R2 SU2 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam_2014 R2 SU2

EDGECAM 2015 R1 SELECTED=value

Use to specify if the EDGECAM 2015 R1 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2015 R1 INSTALL DIR=path

Use to specify the path of the EDGECAM 2015 R1 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam_2015 R1

EDGECAM 2015 R2 SELECTED=value

Use to specify if the EDGECAM 2015 R2 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2015 R2 INSTALL DIR=path

Use to specify the path of the EDGECAM 2015 R2 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam 2015 R2

EDGECAM 2016 R1 SU1 SELECTED= value (0 or 1)

Use to specify if the EDGECAM 2016 R1 SU1 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2016 R1 SU1 INSTALL DIR=path

Use to specify the path of the EDGECAM 2016 R1 SU1 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam 2016 R1 SU1

EDGECAM 2016 R2 SELECTED=value

Use to specify if the EDGECAM 2016 R2 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

EDGECAM 2016 R2 INSTALL DIR=path

Use to specify the path of the EDGECAM 2016 R2 Installation.

Typically C:\\Program Files (x86)\\Planit\\Edgecam_2016 R2

Example:

The following three commands are required to install the Edgecam-to-VERICUT Interface. This example is for installing the Edgecam-to-VERICUT Interface for Edgecam 2016 R2 but is representative of the commands needed for all Edgecam versions.

EDGECAM_INTERFACE_INSTALL=1
EDGECAM_2016_R2_SELECTED=1
EDGECAM_2016_R2_INSTALL_DIR=C:\\Program Files (x86)\\Planit\\Edgecam 2016 R2

MASTERCAM X6 SELECTED= value

Use to specify if the Mastercam_X6 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

MASTERCAM_X6_PATH = path
Use to specify the path of the Mastercam X6 Installation.
Typically C:\\mcamx6\

MASTERCAM X7 SELECTED=value

Use to specify if the Mastercam_X7 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

$MASTERCAM_X7_PATH = path$

Use to specify the path of the Mastercam X7 Installation.

Typically C:\\mcamx7\

MASTERCAM X8 SELECTED=value

Use to specify if the Mastercam_X8 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

MASTERCAM X8 PATH = path

Use to specify the path of the Mastercam X8 Installation.

Typically C:\\mcamx8\

MASTERCAM X9 SELECTED=value

Use to specify if the Mastercam_X9 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

MASTERCAM_X9_PATH = path
Use to specify the path of the Mastercam X9 Installation.
Typically C:\\mcamx9\

MASTERCAM 2017 SELECTED=value

Use to specify if the Mastercam_2017 interface is to be installed. A value of 0 does not install the interface. A value of 1 installs the interface. If the option is not specified, it defaults to 0.

MASTERCAM_2017_PATH = path
Use to specify the path of the Mastercam 2017 Installation.
Typically C:\\mcam2017\

Example:

The following pair of commands is required to install the Mastercam-to-VERICUT Interface. This example is for installing the Mastercam-to-VERICUT Interface for Mastercam 2017 but is representative of the commands needed for all Mastercam versions.

MASTERCAM_2017_SELECTED=1
MASTERCAM_2017_PATH = C:\\mcam2017\

Install Complete

USER SHOW INSTALL NOTES=value

Use to specify whether or not to show the post-installation configuration instructions. This feature displays instructions on how to setup a license server, configure CAD/CAM Interfaces, install CAD Model Interfaces or other configuration tasks. A value of 0 does not display the post-installation instructions. A value of 1 displays the post-installation instructions. If the option is not specified, it defaults to 0.

RUN_LICENSE_SERVER_INSTALL=value

Use to specify whether or not to run the license server installer. A value of 0 does not run the license server installer. A value of 1 runs the license server installer. If the option is not specified, it defaults to 0.

VERICUT Reviewer Command Descriptions

Specify Silent Install

INSTALLER_UI=Silent
Use to specify that Silent install is to be used.

Choose Installation Folder

USER_INSTALL_DIR=destination path
Use to specify the path to the VERICUT installation folder.

Example:

USER INSTALL DIR=C:\\Program Files \\CGTech\\VERICUT 9.1.1

Choose Reviewer Platform

Use to specify the VERICUT Reviewer Windows platform that you would like to be installed.

VERICUT_PLATFORMS=string series

Choose one of the following options.

Windows 32-bit Windows 64-bit

Examples:

VERICUT_PLATFORMS=\"Windows 32-bit\",\"\" VERICUT_PLATFORMS=\"\",\"Windows 64-bit\"

VERICUT Reviewer Shortcut Locations

Use to specify where you would like to create VERICUT Reviewer 9.1.1 shortcut(s)

USER INPUT DESKTOP FLAG=value

Use to put a VERICUT Reviewer icon on the Desktop. A value of 0 does not put a VERICUT Reviewer icon on the Desktop. A value of 1 puts a VERICUT Reviewer icon on the Desktop. If the option is not specified, it defaults to 0.

USER INPUT QUICK LAUNCH FLAG=value

Use to put a VERICUT Reviewer icon in the Quick Launch Bar. A value of 0 does not put a VERICUT Reviewer icon in the Quick Launch Bar. A value of 1 puts a VERICUT Reviewer icon in the Quick Launch Bar. If the option is not specified, it defaults to 0.

USER_INPUT_PROGRAM_GROUP_FLAG=value

Use to put a VERICUT Reviewer shortcut in a Program Group. A value of 0 does not put a VERICUT Reviewer shortcut in a Program Group. A value of 1 puts a VERICUT Reviewer shortcut in a Program Group. If the option is not specified, it defaults to 0. This command is used with the USER_INPUT_PROGRAM_GROUP_NAME command described below.

USER_INPUT_PROGRAM_GROUP_NAME=program group name
Use to specify the name of the Program Group that you want a VERICUT Reviewer
shortcut put in. This command is used with the USER_INPUT_PROGRAM_GROUP_FLAG
command described above.

USER INPUT ALL USERS FLAG=value

Use to specify that specified icons/shortcuts are to be added for all users of this computer.

Examples:

The following command puts a VERICUT Reviewer icon the desktop.

USER INPUT DESKTOP FLAG=1

The following pair of commands puts a VERICUT Reviewer shortcut in "CGTech VERICUT Reviewer 9.1.1" program group.

USER_INPUT_PROGRAM_GROUP_FLAG=1
USER_INPUT_PROGRAM_GROUP_NAME = CGTech VERICUT Reviewer 9.1.1

Stand-alone Tool Manager Command Descriptions

Specify Silent Install

INSTALLER_UI=Silent
Use to specify that Silent install is to be used.

Choose Installation Folder

USER_INSTALL_DIR= destination path
Use to specify the path to the Stand-alone Tool Manager installation folder.

Example:

USER INSTALL DIR=C:\\Program Files \\CGTech\\ToolMan 9.1.1

License Server Location

You can only use one of the following options: LICENSE_SERVER_EXISTS_REMOTE or LICENSE SERVER EXISTS LOCAL.

LICENSE SERVER EXISTS REMOTE=value

Use a value of 1 to use an existing license server on a remote computer. A value of 0 indicates that this option is not to be used. If the option is not specified, it defaults to 0. Use the LICENSE_SERVER_EXISTS_REMOTE_HOSTNAME command, described below, to specify the host name of the remote license server computer.

LICENSE_SERVER_EXISTS_REMOTE_HOSTNAME=host name

Used with the LICENSE_SERVER_EXISTS_REMOTE command described above. This command is used to specify the remote license server computer's host name.

Example:

LICENSE_SERVER_EXISTS_REMOTE=1
LICENSE_SERVER_EXISTS_REMOTE_HOSTNAME=LicenseServer

LICENSE_SERVER_EXISTS_LOCAL=value

Use a value of 1 to use an existing license server on this computer. A value of 0 indicates that this option is not to be used. If the option is not specified, it defaults to 0.

ToolMan Shortcut Locations

Use to specify where you would like to create ToolMan icons/shortcuts

USER INPUT DESKTOP FLAG=value

Use to put a ToolMan icon on the Desktop. A value of 0 does not put a ToolMan icon on the Desktop. A value of 1 puts a ToolMan icon on the Desktop. If the option is not specified, it defaults to 0.

USER INPUT QUICK LAUNCH FLAG=value

Use to put a ToolMan icon in the Quick Launch Bar. A value of 0 does not put a ToolMan icon in the Quick Launch Bar. A value of 1 puts a ToolMan icon in the Quick Launch Bar. If the option is not specified, it defaults to 0.

USER INPUT PROGRAM GROUP FLAG=value

Use to put a ToolMan shortcut in a Program Group. A value of 0 does not put a ToolMan shortcut in a Program Group. A value of 1 puts a ToolMan shortcut in a Program Group. If the option is not specified, it defaults to 0. This command is used with the USER INPUT PROGRAM_GROUP_NAME command described below.

USER_INPUT_PROGRAM_GROUP_NAME=program group name
Use to specify the name of the Program Group that you want a VERICUT Reviewer shortcut put in. This command is used with the USER_INPUT_PROGRAM_GROUP_FLAG command described above.

USER INPUT ALL USERS FLAG=value

Use to specify that specified icons/shortcuts are to be added for all users of this computer.

Examples:

The following command puts a VERICUT Reviewer icon the desktop.

USER INPUT DESKTOP FLAG=1

The following pair of commands puts a VERICUT Reviewer shortcut in "CGTech VERICUT Reviewer 9.1.1" program group.

USER_INPUT_PROGRAM_GROUP_FLAG=1
USER_INPUT_PROGRAM_GROUP_NAME = CGTech ToolMan 9.1.1

VERICUT Interfaces

SPATIAL_INSTALL=value

Used to specify if the Spatial software used for the Model Interface option gets installed. A value of 0 does not install the Spatial software. A value of 1 installs the Spatial software. If the option is not specified, it defaults to 0.

Redundant License Server Setup

If you plan to configure redundant license servers you should have identified the three (3) required license server computers, provided their Host ID's to CGTech, and received a license email containing the special license keys for redundant license servers. You should also have specified the three license servers (in the order, leader:follower1:follower2) during the VERICUT installation.

A redundant license server configuration requires a special license configured for three (3) license servers. Earlier installation instructions explained how to request the license. Redundant license server configuration should only be done by experienced system administrators with networking experience.

NOTE: Each redundant server must have a static IP address. Dynamic IP addresses cause poor performance or failure.

Follow the steps below to setup a Windows redundant license server configuration. These steps must be done by an "Administrator" user. The steps assume you have received the license email from CGTech.

1. Save License File from License Email.

(requires privileges to write to the VERICUT installation folders)

Select Start > All Programs > CGTech license Server > License Server Only > Save License File from License Email.

When the Create VERICUT License File screen displays, drag and drop the VERICUT license email from Microsoft Outlook, or Outlook Express, into the Create VERICUT License File screen. If you use another email program or cannot access the license email from the license server computer, save the license email as a "Text Only" or plain text file, then drag and drop the saved file into the Create VERICUT License File screen. You can also Copy/Paste the email contents into the Create VERICUT License File screen.

The Create VERICUT License File screen's text area displays all the added license keys, followed by the message:

"License file C:\cgtech60x\windows\license\cgtech.lf created successfully". Close the Create VERICUT License File screen after the license file has been created.

2. Determine the IP address of each of the 3 license servers.

These will be used in the redundant license file configuration in the following steps.

Use WRIfTool.exe (eg. C:\Program Files\CGTech\License Server folder of your VERICUT installation) to create the redundant license file.

Run ...\windows\license\WrlfTool.exe.

In the WRIfTool panel select File -> New.

Press the **Add Server** button (in the upper half of the window).

In **Add Server to Pool** panel, enter the Hostname and IP Address (or IPX Address) for the "leader" license server computer, and then press **OK**.

Press the **Add Server** button two more times to add the Host Names and IP addresses for each of the two "follower" license server computers. All three redundant server host names and IP addresses should now appear in the **Redundant Servers** list.

Press the **Add License** button (in the lower half of the window).

In the Add Redundant License panel, select "Read License(s) from file".

Press **Browse** and navigate to, and select, the **cgtech.If** file you saved in step 1C above. Press **Open**, and then press **OK**.

The **Edit License** panel opens, showing the first VERICUT license key in the **License Code** field on the right side of the panel, and the number of available licenses displayed in the **Number of Tokens** field (lower left in the panel).

On the right side of the panel the 3 license server host names appear in the **Server** column. Check the **Include** checkboxes for all 3.

Enter the value from **Number of Tokens** (lower left) in the **Num Tokens** column to the right of the first or "leader" server. This assigns all tokens for the displayed license key to the leader license server. Make sure that the **Num Tokens** values, for the two "follower" servers, is set to zero.

Select **Next License** >> at the bottom of the panel to display the information for the next VERICUT feature. Repeat the previous step to assign all tokens for this license key to the leader license server.

Repeat for each license key.

Press **Done** at the bottom of the panel after the last license key is completed.

Select File->Save As and save the redundant license file as "cgtech.If" in the

.../windows/license folder of the leader license server's VERICUT installation.

4. Copy the redundant license to the other license servers.

Copy the file **cgtech.lf** into the **.../windows/license** folder of the VERICUT installation on each of the other two license server computers.

5. Start the License Servers.

CGTech *strongly* recommends you configure the license server program to automatically start when you start your computer.

NOTES:

- The license server computer requires TCP/IP network protocol installed on the network adaptor. See the section, <u>Check Windows Network Configuration</u> for more information.
- 2. The following steps must be done by an Administrator user.
- 3. If you are installing on a computer running Windows 7 Pro you will need to do the following before continuing with the Configure License & Setup Server steps.
 - Go to Control Panel > User Accounts > Change User Account Control settings (aka UAC).
 - Change it from **Default** to **Never notify**

The **Never Notify** setting is to be used when using a program not certified for Windows 7 because it does not support **User Account Control** (like Sentinel or VERICUT).

6. On the "leader" license server computer:

Select **Start > All Programs > CGTech License Server > License Server Only > Start License Server Service**. This will automatically remove any existing service and add and start the service from the current folder.

- A. Select Start > All Programs > CGTech License Server > License Server Only > Set License File Environment Variable.
- B. Modify the system environment variable **LSERVOPTS** created in the previous step.
- C. The following is one way to do it:
 - a. Find the "My Computer" icon, right-mouse click on it, and select **Properties**.
 - b. In the System Properties panel, select the **Advanced tab**. Press the **Environment Variables** button located near the bottom of the panel.
 - c. In the **Environment Variables** panel, scroll the lower **System Variables** list, select **LSERVOPTS**, and press the **Edit** button.
 - d. In the **Edit System Variable** panel change the **Variable Value** by replacing the "-s" with "-rlf"
 - e. Press **OK** in the **Edit System Variable** panel, and all remaining panels.
 - D. Restart the computer.
 - E. Repeats steps A through D for the two follower computers.

NOTES:

- 1. Be sure to start the 3 redundant license server computers in the same order specified when the redundant license file was created. Starting them out-of-order could cause problems designating the "leader" computer and assigning tokens. You should wait 1 or 2 minutes between starting each license server computer to make sure that it is fully started and ready to communicate with the next one. There is no "maximum" time limit between starting the license server computers.
- 2. When starting a redundant license server, the error message "Iservrc not found" may display. This message can be ignored.

7. Verify the license servers started.

All 3 redundant license servers should now be running and should be configured to automatically start. You can confirm that the server program is running using the Sentinel License Administrator program.

Select Start > All Programs > CGTech License Server > License Utilities> Sentinel License Administrator (WlmAdmin). You should see all 3 license server computers' host names appear under the **Defined Servers** list under the 'tree' displayed on the left side of the window.

If they do not display you may need to add them using **Edit > Defined Server List** in the **WImAdmin** panel. In a few seconds your VERICUT licenses should appear under the server computer's name (you may have to expand it).

The redundant license server computers are now configured to automatically start the license server program, the VERICUT license keys exist in ...\windows\license\cgtech.lf, and the license server programs are configured to read VERICUT license keys from the file.

NOTE: During VERICUT installation you should have specified the 3 license servers when prompted for the license server name. If you did not enter the three license server host names during installation, you can modify the name by selecting Start > All Programs > CGTech VERICUT x.x > License Administration > Specify License Server Computer. When the Notepad editor opens, change the line "set LSHOST=..." to be:

set LSHOST=hostname1:hostname2:hostname3

Where "hostname1", etc. are the names of your 3 redundant license servers. The names **MUST** be specified in the same order used when the redundant license file was created. The three hostnames are separated by colons (:).

8. Save the file and exit Notepad.

NOTE: For more detailed information about setting up a redundant license server configuration, see the <u>Sentinel RMS License Manager System Administrator's Guide</u>.

If errors occur, visit the <u>VERICUT Users' Forum</u> or contact CGTech technical support via our <u>website</u>, just click on the support link.

Detailed VERICUT Configuration Tasks

Windows Start Menu License Administration Choices

The following describe the different Windows "Start Menu" choices under Start > All Programs > CGTech VERICUT 9.1.1 > License Administration. Some of these choices only display information and some require a Windows administrative user in order to make changes to system settings.

License Utilities

"License Utilities" choices are intended to help setup licensing or diagnose license problems on either the license server computer or the VERICUT client computer.

Display Local License Servers

View all Sentinel RMS license servers on this subnet. This choice uses the Sentinel RMS **Iswhere** utility to display all Sentinel RMS license servers that can be communicated with. It uses Sentinel RMS's 'broadcast' feature to contact and collect information about various Sentinel RMS license servers on the same subnet as the current computer. It reports on any Sentinel RMS license servers, which may or may not have VERICUT licenses. For more information about advanced license server configuration options, see the

Sentinel - <u>Sentinel RMS License Manager System Administrator's Guide</u>.

Display Network Information

Check IP and Ethernet addresses of network devices on this computer. This choice uses the Windows' command IPCONFIG /ALL to display important network information, especially TCP/IP configuration information. This can be used to determine if the TCP/IP configuration is valid (i.e. displays a valid IP address of the current computer). It also shows if multiple network devices are present, and their status.

Sentinel RMS License Administrator (WImAdmin)

View licenses and status of running Sentinel RMS license servers using the Sentinel RMS Windows' license utility **WImAdmin**. **WImAdmin** is configured with the VERICUT license

server identified during installation as a "**Defined Server**" in **WImAdmin**'s defined server list. For more information about the **WImAdmin** utility see the <u>Sentinel RMS License</u> <u>Manager System Administrator's Guide</u>.

Specify License Server Computer

(requires privileges to write to the VERICUT installation folders)

Direct VERICUT to get its licenses from a different license server computer. The choice opens the VERICUT configuration file, **cgtenv.bat** in Windows' Notepad text editor. Comments in the file identify the LSHOST environment variable and how to change it to specify a different VERICUT license server computer's host name. For more information about the **LSHOST** environment variable see the

Sentinel RMS License Manager System Administrator's Guide.

License Server Only

"License Server Only" choices are only intended to be used on the license server computer, to help setup licensing or diagnose license problems.

Configure License & Setup Server

NOTES:

- 1. Requires administrative privileges
- If you are installing on a computer running Windows 7 Pro you will need to do the following before continuing with the Configure License & Setup Server steps.
 - Go to Control Panel > User Accounts > Change User Account Control settings (aka UAC).
 - Change it from **Default** to **Never notify**

The **Never Notify** setting is to be used when using a program not certified for Windows 7 because it does not support **User Account Control** (like Sentinel or VERICUT).

This is typically the only selection used when setting-up a Windows license server. It does the following:

 Opens the Create License program and instructs the administrator to drag/drop the VERICUT license email into the screen. This creates the 'cgtech.lf' license file in the license folder.

- 2. Sets the system environment variable **LSERVOPTS** to point to the license file just created.
- Removes any previous Sentinel RMS license server service, then adds and starts the license server service from the current installation folder. When the server starts (via the service) it looks for the license file defined in LSERVOPTS, and adds the license keys.

Display Host ID

Display the Ethernet address of all enabled network adapters on this computer. The user selects one of these displayed Ethernet addresses as the HOST ID used to lock the license server to this computer. The program that displays the Ethernet addresses uses the exact same logic as the license server program. When a license is added to the license server program, it is compared against enabled network adapters. If the network adaptor encrypted in the license key does not match any of the enabled network adaptors, the key is not added to the license server.

Remove License Server Service

(requires administrative privileges)

Stops the license server and removes the license server service on this computer. You can use **Start License Server Service** to restart a license server that is installed as a service.

Run Temporary License Server

(requires administrative privileges)

Starts a temporary license server from the current user's login. You may use this choice to temporarily start the license server program, such as for testing or if it is not possible to add a service. The license server is temporary because it is terminated when the user logs-out of the current session. Use **Configure License & Setup Server** for a permanent installation of the server via Windows Services.

Save License File from License Email

(requires privileges to write to the VERICUT installation folders)

Creates the VERICUT license file from a license email or text file containing the license keys. This choice opens a utility program that reads the license keys in the CGTech license email and creates the **cgtech.lf** license file in the local installation's 'license' folder. The utility program reads the license email via:

- 1. Drag/drop the email directly from Microsoft Outlook or Outlook Express.
- 2. Drag/drop a saved email message file (.msg or .eml).

- Copy/paste the email's text. For example you can select all the text (typically Edit > Select All in your email program), then paste it into the Create License panel with the right-mouse menu > Paste menu button.
- 4. Drag/drop a plain text file saved from the license email.

The **Create License** panel's text area displays all the added license keys, followed by the message "License file C:\cgtech82\windows\license\cgtech.If created successfully". The license server program reads the **cgtech.If** license file when it starts, and adds valid license keys to the running license server.

Set License File Environment Variable

NOTES:

- 1. Requires administrative privileges
- 2. If you are installing on a Windows 7 Pro computer you will need to do the following before continuing with the Configure License & Setup Server steps.
 - Go to Control Panel > User Accounts > Change User Account Control settings (aka UAC).
 - Change it from **Default** to **Never notify**

The **Never Notify** setting is to be used when using a program not certified for Windows 7 because it does not support **User Account Control** (like Sentinel or VERICUT).

Sets the **LSERVOPTS** system environment variable, used by the license server to find the **cgtech.lf** license file when the Windows service starts the license server. This setting is only used by the license server started as a Windows service. For more information about **LSERVOPTS** and its options see the

Sentinel RMS License Manager System Administrator's Guide.

NOTE: A restart is required after the environment variable is changed.

Start License Server Service

(requires administrative privileges)

Stops and removes any existing license server service, then installs and starts the license server service from the current installation. This choice is only effective when using a license server service.

Stop License Server Service

(requires administrative privileges)

Stops a running license server service on this computer. The service is not removed, only stopped.

Update Licenses on Running Server

(requires administrative privileges if used on a license server service)

Causes the running license server to re-read the license file. The server must be running when this selection is used. This selection uses the Sentinel RMS **Islic** program to remove the current licenses, then re-reads the license keys in the **cgtech.If** license file and adds them to the running license server. For more information about the **Islic** program see the <u>Sentinel RMS License Manager System Administrator's Guide</u>.

Alternate Method to Determine Your Windows License Server Computer's HOST ID

If you do not have access to the VERICUT DVD you can display the HOST ID as follows:

- Open a Command Prompt window (also called a DOS window)
- Type in the window: **Ipconfig /all**

The value shown to the right of "Physical Address" is typically the HOST ID. Valid IDs are 12 characters and contain only the characters 0-9 and A-F. If your computer has multiple network adapters, the license server program compares the address encrypted in the license keys with enabled network adapters. If a network adapter address matching the encrypted key address is found then the license is added to the server.

The following Physical Addresses are not valid, and indicate something is wrong with the TCP/IP network protocol configuration for the Ethernet device, or indicates the card is not enabled or available:

00000000000

204c4f4f5020

ffffffff

fffffffffff

NOTE: The license server delivered with this version of VERICUT only requires the device to be enabled. It no longer requires it to be connected or have an active network transport such as IPX/SPX.

See the section on <u>Check Windows Network Configuration</u> if you are having trouble getting a valid Physical Address.

Check Windows Network Configuration

In any VERICUT installation there is a computer that functions as the license server computer. There are also one or more client computers that run VERICUT and communicate with the license server computer to get licenses. In a stand-alone configuration the license server computer and the VERICUT client computer are one-in-the-same, but the same network communication requirements apply. The following checks ensure that the license server computer and the VERICUT client computer(s) can communicate, and that the VERICUT client computers can successfully run VERICUT.

Checks for both the License Server Computer and VERICUT Client Computers

1. Check the network hardware.

Ensure that you have a network adapter installed and enabled on the license server computer. You can use the Windows Device Manager (available under the Control Panel's System icon) to see if you have an installed network adapter. The VERICUT license keys are encrypted to match the physical address of an enabled network adapter. When the license server program initially starts it finds enabled network adapters and compares each license key with the physical address of the adapter(s). If a match is found the license key is added to the license server.

2. Check the network software.

VERICUT and the license server program use TCP/IP network protocol to communicate with each other, even when running VERICUT on a single stand-alone computer (where both VERICUT and the license server program run on the same computer). TCP/IP network protocol must be installed on the enabled network adapter that matches the Host ID encrypted in your VERICUT license.

If you need to add TCP/IP protocol and your computer is on a company network you should consult with your network administrator. If you are on a computer with no network connection and you need help on how to add TCP/IP protocol, see the section, <u>Basic Windows Network Configurations</u>.

Checks for the License Server Computer

1. Serving licenses to other client computers.

In addition to having a network adapter and TCP/IP network protocol installed, the license server computer must have a valid IP address in order to serve licenses to other computers. A static IP address should be used. If a dynamic IP address is assigned using a DHCP server, then VERICUT license check-out on client computers may be slow and/or inconsistent. Static IP addresses are required for all license server computers in a redundant server configuration.

Use the **ipconfig** command to verify there is an enabled network adapter with TCP/IP protocol installed and that it is properly configured to be the license server computer. Type the following command in a command prompt window (also called a 'DOS' window):

ipconfig /all

The **ipconfig** command returns information about your computer's network configuration. Only a few items are important for your VERICUT installation. If your computer is connected to a network and TCP/IP protocol is installed and configured correctly, the following lines should have values in order for the license server program to provide licenses to VERICUT on another computer:

Host Name : mycomputer

Physical Address. : 00-0B-AB-77-34-64

IP Address. : 199.1.1.123

Subnet Mask : 255.255.255.0

2. No network connection, stand-alone configuration.

If your computer is not connected to a network, or your computer is sometimes disconnected from a network when you want to use VERICUT (thus it is a standalone configuration with VERICUT and the license server program running on the same computer), then at a minimum you must have an enabled network adaptor.

When disconnected from a network, **ipconfig** may not display an IP address. This does not cause a problem for VERICUT or the license server program because the IP loopback address (127.0.0.1) is used automatically. A Host Name is required, but the default name, "localhost" is sufficient.

The following values should be displayed by **ipconfig** for a stand-alone configuration:

Host Name : mycomputer (or localhost)

Physical Address. : 00-0B-AB-77-34-64

Checks for VERICUT Client Computers

1. Set the optimum color display for VERICUT

True or high color display provides optimum VERICUT performance. Desktop color display is changed by opening the **Display** icon in the **Control Panel**, or by right-click > **Properties** on the desktop.

NOTE: The following checks are not necessary for a stand-alone configuration where VERICUT and the license server program run on the same computer.

2. Check the VERICUT client computer's network software configuration.

In addition to having a network device and TCP/IP network protocol installed, the device must have a valid IP address (either statically assigned, automatically created, or dynamically provided by a DHCP server).

Use the **ipconfig** command to verify that there is an active network device with the TCP/IP protocol installed and that it is properly configured with a host name and IP address. Open a command prompt window (also called a 'DOS' window) and type:

ipconfig /all

The **ipconfig** command returns information about your computer's network configuration. Only a few items are important for your VERICUT installation. If your computer is connected to a network, and TCP/IP protocol is installed and configured correctly, the following lines must have values in order for VERICUT to work correctly:

Host Name : mycomputer

Physical Address. : 00-0B-AB-77-34-64

IP Address. : 199.1.1.123

Subnet Mask : 255.255.255.0

3. Verify client and license server computers can communicate with each other.

Both client and license server computers must have host names and valid IP addresses. The mechanism for assigning host names and IP addresses varies with the network configuration. See your site's network administrator if you are not familiar with how your network is configured.

The easiest way to verify communication between computers is to "ping" each one from the other. Open a command prompt window and type:

ping COMPUTER1

(where 'COMPUTER1' is the host name of the computer you need to communicate with)

If the computers can communicate you should see something like:

Pinging COMPUTER1 [199.1.1.123] with 32 bytes of data:

```
Reply from 199.1.1.123: bytes=32 time=48ms TTL=127
```

Reply from 199.1.1.123: bytes=32 time=46ms TTL=127

Reply from 199.1.1.123: bytes=32 time=43ms TTL=127

Reply from 199.1.1.123: bytes=32 time=41ms TTL=127

Ping statistics for 199.1.1.123:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 41ms, Maximum = 48ms, Average = 44ms

You should ping the client from the license server computer and the license server computer from the client since both computers must know about each other for proper communication. If the ping test fails contact your site's network administrator to correct the problem.

In some network configurations there may be a router, gateway or other network device that acts like a firewall between the client and license server computer. In this case, the ping test will succeed but licensing will fail since the router or firewall must be configured to allow TCP/IP to pass UDP packets through port 5093. For this and other complex network configurations contact your site's network administrator and see the Sentinel RMS License Manager System Administrator's Guide., for more information about configuring the Sentinel RMS license server and clients

Basic Windows Network Configurations

Use the appropriate section below to properly configure your network device for VERICUT on Windows computers.

To check for network software on Windows XP Professional:

When using the Start Menu,

- 1. Taskbar: Start > Control Panel > Network Connections
- 2. Double click on the **Device** icon.
- 3. Select Support tab.

Installed software must include "Internet Protocol TCP/IP".

When using "classic" Start Menu,

- 1. Taskbar: Start > Settings > Network Connections
- 2. Double click on the **Device** icon.
- 3. Select Support tab

Installed software must include "Internet Protocol TCP/IP".

Configuring VERICUT to Read an NX Part File

An NX part file can be opened directly in VERICUT. The following describe the environment variables that need to be set.

The following environment variables need to be set in VERICUT's environment:

UGII BASE DIR

UGII_BASE_DIR is setup by an NX installation in the system environment space and typically points to the place where NX is installed, for example C:/Program Files/UGS/NX 6.0/.

UGII_ROOT_DIR

UGII_ROOT_DIR is setup by an NX installation in the system environment space and typically points to the location of the NX executable files, for example C:/Program Files/UGS/NX 6.0/UGII/.

Also, **UGII_ROOT_DIR** must be set in the execution path (the "path" environment variable).

Additional requirements:

- 1. NX6, NX7, NX7.5, NX8, NX8.5 or NX9 must be installed on the computer that is running VERICUT.
- 2. An NX license must be available.

Other VERICUT Configuration Tasks

Following are configuration tasks that may need to be done depending on the CGTech products you are using.

• To configure CAD/CAM Interface modules, go to one of the following:

CATIA V5-to-VERICUT Interface for CATIA version 5

CATIAV6-to-Vericut Interface for CATIA/DELMIA V6

CATIA V5-to-VERICUT Drilling and Fastening Interface (CAT2VDAF)

CAMWorks to VERICUT Interface

EdgeCAM-to-VERICUT Interface

ESPRIT-to-VERICUT Interface

GibbsCam-to-VERICUT Interface (GibbsV)

Mastercam-to-VERICUT Interface (MCAMV)

NX-to-VERICUT Interface (NXV)

NX-to-VERICUT Drilling and Fastening Interface (NX2VDAF)

Pro/E-to-VERICUT Interface (PROEV)

SURFCAM to VERICUT Interface

- To install the CAD Model Interface modules, go to <u>Installing the Model Interface</u> Modules.
- To enable VERICUT to read NX files directly, go to <u>Configuring VERICUT to Read</u> an NX Part File
- To configure the VERICUT TDM Interface, go to VERICUT TDM Systems Interface.

Following are other configuration tasks that may need to be done, depending on your site's requirements.

- Windows Start Menu License Administration Choices
- Determine Your License Server's Host ID
- Check Network Configuration
- Change License Servers
- Update an Existing License
- Stop and Remove a License Server
- Starting a Temporary License Server

- Uninstall an old version of VERICUT
- Download and Install the Latest Point Release for Windows
- Installing Microsoft C++ redistributable run-time libraries for XP64
- Configure Redundant License Servers on Windows

Move Windows License Server

It is sometimes desirable (or necessary), due to hardware upgrades or network changes, to move your VERICUT license server to a different license server computer. To move the license server in an existing installation, do the following:

- 1. Request a license for the new license server computer using CGTech's on-line license Transfer Request form.
 - (Once you receive the license email containing your new license keys, continue with the following steps.)
- 2. Stop and Remove the Windows License Server.
- 3. Follow the VERICUT <u>Installation Steps</u> to install VERICUT on the new license server computer.
- 4. <u>Modify VERICUT client computer installations</u> to use the newly installed license server computer.

Do step 4 for each VERICUT or VERICUT Composite Software installation in your network.

Modify VERICUT on Windows to Use a Different License Server Computer

To change an existing VERICUT Windows installation to access VERICUT licenses on a different license server computer:

- 1. Select Start > All Programs > CGTech VERICUT 9.1.1 > Utilities > Specify License Server Computer (opens the file in Notepad)
- 2. Change the line:

set LHOST=server1

- 3. Replace "server1" (or the name of your old license server computer) with the host name of the new license server computer.
- 4. Save the file cgtenv.bat.

Update a License on Windows License Server

These instructions assume you have received a new license from CGTech via email. If you have not, and you need to request a new license, see Determine the HOST ID and Request a License. To update your VERICUT license on a Windows license server, do the following (on the license server computer):

- 4. Create the license file from the license email or saved text file.
 - A. Select Start > All Programs > CGTech License Server > License Server Only > Save License File from License Email.
 - B. Drag and drop the VERICUT license email from Microsoft Outlook, or Outlook Express, into the Create License File panel. If you use another email program, or cannot access the license email from the license server computer, then save the license email as a "Text Only" or plain text file and drag/drop the saved file into the Create License File panel.
 - C. Close the **Create License File** panel after the "success" message displays.
- 5. Update the licenses on the running license server.

Select Start > All Programs > CGTech License Server > License Server Only > Update Licenses on Running Server. Do not attempt to do this action unless you know your license server is running. If you are not sure, you can verify that the server is running using Start > All Programs CGTech License Server > License Utilities > Display Local License Servers. Your server's Host Name should appear in the resulting panel.

If errors occur, visit the <u>VERICUT Users' Forum</u> or contact CGTech technical support via our <u>website</u>, just click on the support link.

Stop and Remove a Windows License Server

Only one license server can run on the license server computer. The license server from the newest installed version should be used. The old license server should be stopped and removed before configuring and starting the new license server.

Stop and remove a Windows license server service

NOTE: The following must be done by an Administrator user.

Start > All Programs > CGTech License Server > License Server Only > Remove License Server Service

Stop and remove a temporary license server process

Right-mouse click on the SentinelLM task in the windows task bar, and choose Close.

Remove any mechanism which might have been configured to automatically start the temporary server. For example, you may need to remove a shortcut to the temporary server startup batch file from the Start > All Programs > Startup folder.

If errors occur, visit the <u>VERICUT Users' Forum</u> or contact CGTech technical support via our <u>website</u>, just click on the support link.

Starting a Temporary Windows License Server

The following describes how to start a temporary license server. But, it is *strongly* recommended that you configure the license server program to automatically start using Windows services. If for some reason you cannot configure the license server service, then it can be temporarily started.

To start a temporary license server select:

Start > All Programs > CGTech License Server > License Server Only > Run Temporary License Server.

You could add a Windows shortcut to your desktop to make access to this procedure easier.

This Start menu item could also be added to the Windows Startup folder so that it automatically starts when you log-in.

NOTES:

- 1. A temporary license server can only be started by an Administrator user.
- 2. The temporary license server process is owned by the specific user that starts it. When that user logs-out, the license server program terminates.
- 3. Starting a temporary license server stops the Windows license server service if it is running.

If errors occur, visit the <u>VERICUT Users' Forum</u> or contact CGTech technical support via our <u>website</u>, just click on the support link.

Uninstall an Old Version of VERICUT

Uninstalling is recommended when a VERICUT software version is no longer needed, or when disk space is limited. Use the appropriate procedure below to remove a version of VERICUT software from your computer.

To remove VERICUT software from a Windows computer:

- Remove the license server service by selecting Start > All Programs > CGTech
 License Server > License Server Only > Remove License Server Service. Do this
 BEFORE uninstalling!
- Unistall VERICUT by selecting Start > Programs > CGTech VERICUT x.x > Utilities > Uninstall VERICUT x.x (where "x.x" is the version of VERICUT to be uninstalled) and follow the prompts of the "uninstall" program. You can also start the "uninstall" program using the UninstallVERICUT.exe, located in the UninstallerData folder of your VERICUT software installation.

NOTE: There may be program folder/files that are not removed by uninstalling. These were created after VERICUT was installed and will have to be removed manually.

During the uninstall process the following dialog may appear. You **do not** have to do a system restart and may just press the "continue" button to proceed.



Download and Install the Latest Point Release for Windows

VERICUT point releases for Windows are available on the CGTech web site. The following steps will guide you through downloading and installing a VERICUT point release (we'll use 9.1.1 as an example below):

Download Instructions:

The VERICUT 9.1.1 Windows version (Windows 7, 64 bit) is available for download from our web site. Follow this link to open the on-line form to begin the download process:

http://www.cgtech.com/vericut_support/request-software-update/

To download the file, you will need your Company ID and the access code from the "VERICUT 9.1.1 is available for download" email that was sent to all customers on maintenance. If you are not currently on maintenance, contact your CGTech representative.

Starting the Installation:

After downloading the zipped installer, unzip it to a temporary folder. The zip file is password protected. The password was also included in the "VERICUT 9.1.1 is available for download" email.

Once the files are unzipped, double-click on **install.exe** to begin the installation.

Return to "Other Configuration Tasks"

ΧP

Install Microsoft redistributable C++ Run-Time Libraries

VERICUT on Win7 64 may require installation of the correct version of Microsoft's C++ run-time libraries. You may also need to install the correct version of Microsoft's C++ run-time libraries if you are installing the Model Interface Modules. The following describes the 64 bit version of the libraries.

Installation:

Double-click on the installer to install. There are no prompts during installation and no confirmation of completion. You must have Administrator privileges to do the install.

Configuring CAD/CAM to VERICUT Interfaces

Choose the interface you want to configure from the following:

3DEXPERIENCE-to-VERICUT Interface (CATV6 3dx)

3DEXPERIENCE-to-VERICUT Interface (CATV6 3dxml)

CAMWorks-to-VERICUT Interface (CWV)

CATIA V5-to-VERICUT Interface (CATV5)

CATIA V5-to-VDAF Interface (CAT2VDAF)

Creo Parametric-to-VERICUT Interface (PROEV)

Edgecam-to-VERICUT Interface (ECV)

ESPRIT-to-VERICUT Interface (ESV)

GibbsCAM-to-VERICUT Interface (GibbsV)

Mastercam-to-VERICUT Interface (McamV)

PowerMill-to-VERICUT Interface (PMV)

Siemens NX-to-VERICUT Interface (NXV)

Siemens NX-to-VDAF Interface (NX2VDAF)

SURFCAM-to-VERICUT Interface (SCV)

NOTE: If using the interface with VERICUT Single Platform you'll need to add an environment variable so that the interface will launch the correct version of VERICUT.

3DEXPERIENCE-to-VERICUT Interface (CATV6 3dx)

VERICUT offers two 3DEXPERIENCE interfaces: **CATV6_3dx** and **CATV6_3dxml**. **CATV6_3dx**, the Interface reads all Fixture, Stock, Design and 3D tool representations form 3DEXPERIENCE manufacturing process.

Prerequisites

CATV6_3dx is a licensed software program that provides a 3DEXPERIENCE to VERICUT data transfer connection. The interface is an executable that is designed to work with 3DEXPERIENCE.

3DEXPERIENCE Versions supported:

3DEXPERIENCE R2017x FP1918 (internal level 6.419.22.0) and later 3DEXPERIENCE R2018x FD08 FP1912 (internal level 6.420.10.0) and later 3DEXPERIENCE R2019x FD02 FP1914 (internal level 6.421.5.0) and later 3DEXPERIENCE R2020x Hotfix 0.3 (Internal build level 6.422.0.0) and later 3DEXPERIENCE R2021x Hotfix 0.6 (Internal build level 6.432.0.0) and later

CGTech Licensing:

CATIA V6 Interface

Dassault Systems Licensing:

NC Machine Code Validation Specialist (NMV)

Minimum VERICUT Version required:

VERICUT 7.2

Minimum VERICUT License Version required:

2 n

Versions of 3DEXPERIENCE tested with CATV6_3dx:

3DEXPERIENCE R2013x - R2021x

Installation - Configuration

For the 3DEXPERIENCE (CATV6_3dx) Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\CATV6_3dx and can be accessed by C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\catv6 3dx version.bat

Environment variables

To enable the 3DEXPERIENCE Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and CATV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	CATV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\CATV6_3dx\CatvFrench.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface. **CATV_LANGUAGE** If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German, Italian, Portuguese, Chinese, and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

No configuration required

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

3DEXPERIENCE-to-VERICUT Interface (CATV6_3dxml)

VERICUT offers two 3DEXPERIENCE interfaces: **CATV6_3dx** and **CATV6_3dxml**. **CATV6_3dxml** reads all Fixture, Stock and Design models from the 3dxml file and some tool information.

Prerequisites

CATV6_3dxml is a licensed software program that provides a 3DEXPERIENCE to VERICUT data transfer connection. The interface is an executable that is designed to work with 3DEXPERIENCE.

3DEXPERIENCE Versions supported:

3DEXPERIENCE 2017x (or later)

CGTech Licensing:

CATIA V6 Interface

Minimum VERICUT Version required:

VERICUT 7.2

Minimum VERICUT License Version required:

8.0

Versions of 3DEXPERIENCE tested with CATV6_3dxml:

3DEXPERIENCE R2013x - R2021x

Installation - Configuration

For the 3DEXPERIENCE (CATV6_3dxml) Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\CATV6_3dxml and can be accessed by C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\catv6_3dxml_version.bat

Environment variables

To enable the 3DEXPERIENCE Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and CATV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	CATV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\CATV6_3dx\CatvFrench.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

CATV_LANGUAGE If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French and German and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

No configuration required

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

CAMWorks-to-VERICUT Interface (CWV)

Prerequisites

CWV is a licensed software program that provides a CAMWorks to VERICUT data transfer connection. The interface is a SolidWorks macro that is designed to work on top of CAMWorks, which already is an add-in working inside SolidWorks CAD software system.

Although, the macro is called from SolidWorks, it will not be used if the CAMWorks addin is not loaded into SolidWorks.

SolidWorks / CAMWorks Versions supported:

SolidWorks 2017 (or later) / CAMWorks 2017 (or later)

CGTech Licensing:

Solidworks Interface

Minimum VERICUT Version required:

VERICUT 7.2

Minimum VERICUT License Version required:

8.0

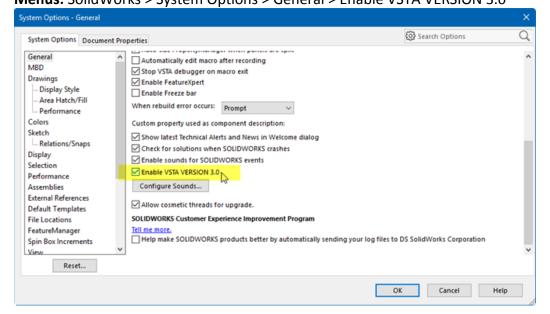
Versions of SolidWorks/CAMWorks tested with CWV:

SolidWorks 2016/CAMWorks 2016 - 2020/2020

Installation - Configuration

For the CAMWorks Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\camworks and can be accessed directly from SolidWorks.

Note: You will need to ensure that **Enable VSTA VERSION 3.0** is checked **Menus:** SolidWorks > System Options > General > Enable VSTA VERSION 3.0



Environment variables

To enable the CAMWorks Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

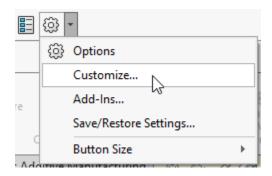
Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

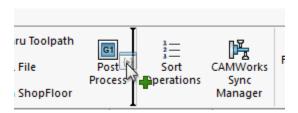
A shortcut button or icon can be added to the CAMWorks menu to access the 'VERICUT_Interface.dll' as shown in the picture below.

Steps to configure the icon:

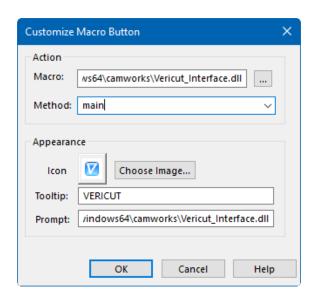
 From the SolidWorks toolbar, select the pull-down next to **Options** icon and select **Customize...**



- Select Commands tab; Categories: Macro
- Drag and drop New Macro Button onto the CAMWorks Toolbar

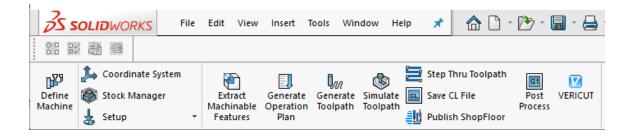


- Specify the location of the VERICUT_Interface.dll
- Method: enter main



NOTE: For an **Icon** you can select C:\Program Files\CGTech\VERICUT 9.1.1\windows64\solidworks\VERICUTAddin.bmp

• Select **OK**



Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

CATIA V5-to-VERICUT Interface (CATV5)

Prerequisites

CATV5 is a licensed software program that provides a CATIA V5 to VERICUT data transfer connection. The interface is an executable that is designed to work with CATIA V5.

CATIA V5 Versions supported:

CATIA V5 R18 (or later)

CGTech Licensing:

CATIA V5 Interface

Minimum VERICUT Version required:

VERICUT 8.0

Minimum VERICUT License Version required:

8.0

Versions of CATIA V5 tested with CATV5:

CATIA V5 (R18) - CATIA V5-6R2019 (R29)

Installation - Configuration

For the CATV5 Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\catv5 and can be accessed directly from CATIA V5 or C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\catv5.bat

Environment variables

To enable the CATIA V5 Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and CGTECH_CATV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	CGTECH_CATV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\catv5\CATVFrench.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface. **CGTECH_CATV_LANGUAGE** If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

If you wish to have an icon () on a CATIA V5 toolbar, the two icon files must be placed where CATIA V5 expects to find them. The paths depend on where you have CATIA V5 installed, but typically you will find a "small" and "normal" folder under "C:\ Program Files\Dassault Systemes\Bxx\win_b64\resources\graphic\icons". Place the two versions of the CATV5 icon, both called "I_CATV.bmp", in the appropriate folders.

Adding the CATV5 icon (to a CATIA V5 toolbar is a multi-step process;

- 1. Get CATIA V5 running.
- 2. Make the "Advanced Machining" workbench active, either by accessing an existing CATProcess file, or by initializing a new one. One or more of the Manufacturing toolbars are likely to be suitable locations for the CATV5 icon.
- 3. Pick "Tools" > "Macro" > "Macros" from CATIA V5's menus.
- 4. In the "Macros" dialog, pick "Macro Libraries".
- 5. In the "Macro Libraries" dialog, set the "Library Type" to "Directories".
- 6. Pick "Add existing library ..." and select the folder containing the CATV.CATScript file (for example "C:\Program Files\CGTech\VERICUT x.x.x\Windows\catv5").
- 7. "Close" the "Macro Libraries" dialog.
- 8. "Close" the "Macros" dialog.
- 9. Pick "Tools" > "Customize ..." from CATIA V5's menus.
- 10. In the "Customize" dialog, bring the "Commands" tab to the front.
- 11. Select "Macros" from the left-hand list of "Categories".
- 12. Pick "CATV.CATScript" from the right-hand list of "Commands".
- 13. Click on the "Show Properties ..." button.
- 14. Pick the "..." button to the right of the "Icon:" label.
- 15. In the "Icon Browser" dialog you need to step through the pages of icons until you find the one for **CATV5** (). The icons are presented in alphabetic order of their names, which you can see by allowing the mouse cursor to sit over an icon for a brief period. The **CATV5** icon () will probably be on the twelfth page. Pick it and "Close" the "Icon Browser".
- 16. Back on the "Customize" dialog, position the mouse cursor over the name of the macro, CATV.CATScript, in the right-hand list, depress the left mouse button, and drag the cursor to the toolbar where you want the icon to appear. It's counter-intuitive, but you drag the macro name, not the icon! Repeat this step if you want the icon to appear on more than one toolbar.
- 17. "Close" the "Customize" dialog.

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable vc_redist.x64.exe Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

CATIA V5-to-VDAF Interface (CAT2VDAF)

Prerequisites

CAT2VDAF is a licensed software program that provides a CATIA V5 to VDAF data transfer connection. The interface is an executable that is designed to work with CATIA V5.

CATIA V5 Versions supported:

CATIA V5 R18 (or later)

CGTech Licensing:

CATIA V5 Interface

Minimum VERICUT Version required:

VDAF 8.0

Minimum VERICUT License Version required:

8.0

Versions of CATIA V5 tested with CAT2VDAF:

CATIA V5 (R21) - CATIA V5-6R2019 (R29)

Installation - Configuration

For the CAT2VDAF Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\CATV5_2VDAF and can be accessed directly from CATIA V5 or C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\catv5_2vdaf.bat

Environment variables

To enable the CATIA V5 Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

If you wish to have an icon () on a CATIA V5 toolbar, the two icon files must be placed where CATIA V5 expects to find them. The paths depend on where you have CATIA V5 installed, but typically you will find a "small" and "normal" folder under "C:\ Program Files\Dassault Systemes\Bxx\win_b64\resources\graphic\icons". Place the two versions of the CAT2VDAF icon, both called "I_CATV.bmp", in the appropriate folders. Adding the CAT2VDAF icon () to a CATIA V5 toolbar is a multi-step process:

- 1. Get CATIA V5 running.
- 2. Make the "Advanced Machining" workbench active, either by accessing an existing CATProcess file, or by initializing a new one. One or more of the Manufacturing toolbars are likely to be suitable locations for the CAT2VDAF icon.
- 3. Pick "Tools" > "Macro" > "Macros" from CATIA V5's menus.
- 4. In the "Macros" dialog, pick "Macro Libraries".
- 5. In the "Macro Libraries" dialog, set the "Library Type" to "Directories".
- 6. Pick "Add existing library ..." and select the folder containing the CATV.CATScript file (for example "C:\Program Files\CGTech\VERICUT x.x.x\Windows\catv5").
- 7. "Close" the "Macro Libraries" dialog.
- 8. "Close" the "Macros" dialog.
- 9. Pick "Tools" > "Customize ..." from CATIA V5's menus.
- 10. In the "Customize" dialog, bring the "Commands" tab to the front.
- 11. Select "Macros" from the left-hand list of "Categories".
- 12. Pick "CATV.CATScript" from the right-hand list of "Commands".
- 13. Click on the "Show Properties ..." button.
- 14. Pick the "..." button to the right of the "Icon:" label.
- 15. In the "Icon Browser" dialog you need to step through the pages of icons until you find the one for **CAT2VDAF** (☑). The icons are presented in alphabetic order of their names, which you can see by allowing the mouse cursor to sit over an icon for a brief period. The **CAT2VDAF** icon (☑) will probably be on the twelfth page. Pick it and "Close" the "Icon Browser".
- 16. Back on the "Customize" dialog, position the mouse cursor over the name of the macro, CATV.CATScript, in the right-hand list, depress the left mouse button, and drag the cursor to the toolbar where you want the icon to appear. It's counter-intuitive, but you drag the macro name, not

the icon! Repeat this step if you want the icon to appear on more than one toolbar.

17. "Close" the "Customize" dialog.

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Creo Parametric-to-VERICUT Interface (PROEV)

Prerequisites

PROEV is a licensed software program that provides a Creo to VERICUT data transfer connection. The interface is designed to work with Creo Parametric.

Creo Parametric Versions supported:

PTC Creo Parametric 3.0 (or later)

CGTech Licensing:

PTC Creo Parametric Interface

Minimum VERICUT Version required:

VERICUT 7.2

Minimum VERICUT License Version required:

8.0

Versions of PTC Creo tested with PROEV:

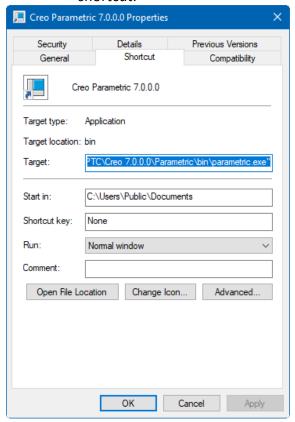
PTC CREO Elements Pro 5 - PTC Creo Parametric 7.0

Installation - Configuration

The CGTech software installation procedure places the files required by **PROEV** in a subfolder. If you elected to install the software in the default folder "C:\Program Files\CGTech\VERICUT x.x.x\windows64\proev

Steps

• Copy the protk.dat file to the "start in" directory per the properties of the shortcut.



At startup, Creo Parametric will look for the registry file, protk.dat, to get location information about the other files used by the Creo-to-VERICUT Interface. Creo Parametric will look for the **protk.dat** file first in the "start in" directory, then it will look in "<Creo>/<MACHINE>/text" and finally it will look in "<Creo>/text."

The protk.dat file contains the following information: name cgtproev

startup dll

end

exec_file <full path, including the file name, where the cgtproev.dll is located> text_dir <full directory path to the directory, where the proev.txt file is located> revision Wildfire

• Edit the protk.dat file to point to the locations of the cgtproev.dll and the proev.txt file.

The protk.dat file specifies the location of the cgtproev.dll file and the proev.txt file. Edit exec_file line so that it points to the \proev\Creoxx\cgtproev.dll of your VERICUT installation. Edit text_dir line so that it points to the \proev\Creoxx\text directory of your VERICUT installation.

The protk.dat file should look similar to the following after editing:
name cgtproev
startup dll
exec_file C:\Program Files\CGTech\VERICUT
x.x.x\windows64\proev\Creoxx\cgtproev.dll
text_dir C:\Program Files\CGTech\VERICUT x.x.x\windows64\proev\Creoxx\text
revision Wildfire
end

Environment variables

To enable the Creo Parametric Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and PROEV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	PROEV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\proev\Creoxx\ProevFrench.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface. **PROEV_LANGUAGE** If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German, Italian, Portuguese, Chinese and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

The proev.txt file contains the resource text for the VERICUT option which shows up in Pro/ENGINEER under the "Applications" menu. The VERICUT option is the entry point for launching the Creo-to-VERICUT Interface.

Steps

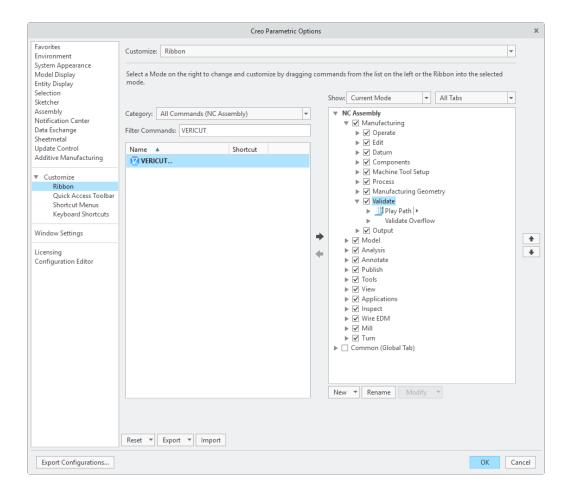
Select Customize Quick Access Toolbar > More Commands...



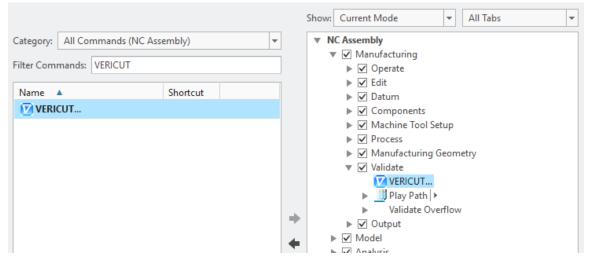
Customize: Ribbon

Category: All Commands
 Filter Commands: VERICUT

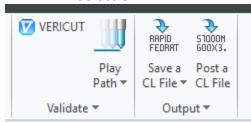
• Menu Validate



Use arrow to add VERICUT to the desired location



Select OK



Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Edgecam-to-VERICUT Interface (ECV)

Prerequisites

ECV is a licensed software program that provides an Edgecam to VERICUT data transfer connection. The interface is a plugin which is designed to work with Edgecam.

Edgecam Versions supported:

Edgecam 2018 (or later)

CGTech Licensing:

Edgecam Interface

Minimum VERICUT Version required:

VERICUT 7.4

Minimum VERICUT License Version required:

8.0

Versions of Edgecam tested with ECV:

Edgecam 2012 R2 - 2021.0

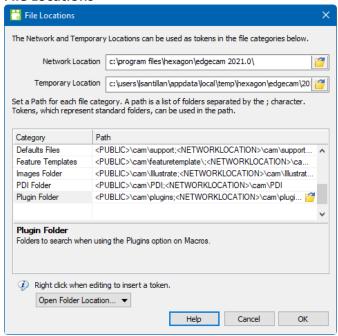
Installation - Configuration

To automatically install the Edgecam to VERICUT interface (ECV), insert the VERICUT installation DVD or navigate to the root folder of the downloaded VERICUT installer. Next, run the edgecam_interface_install.exe and follow the on-screen instructions.



Manual installation

NOTE: Before installing the Edgecam Interface files, review where your Edgecam installation expects the **Plugin**. To do this, use Edgecam **Launcher** ► **Settings** menu ► **File Locations**



Use this dialog to set the paths for various categories of EDGECAM related files. postprocessors, ToolStore data, strategy files, job reports etc are read from and written to these locations. You can set multiple locations for a category, including Network Location and <USER>.

By writing files to the user area instead of Program Files, users without administrator rights can write data (such as postprocessors and ToolStore data) to that location. Each user has his own folder/file set making it more difficult to accidentally overwrite another user's data.

The default settings closely follow Microsoft recommendations for file and folder settings. By default, all user created files are written to the user area, replicating the installation folder structure.

Copy the Edgecam Interface files to your Edgecam installation folder (as shown in the below table).

Copy from C:\Program Files\CGTech\VERICUT x.x.x\windows64\edgecam\version **Copy to** C:\Program Files\Hexagon\EDGECAM version

File	Edgecam Folder	Description
VericutEng.dll	cam\plugins\	Library for engine
VericutGui.dll	cam\plugins\	Library for GUI
VericutPlugin.dll	cam\plugins\	Plugin library for Edgecam
Vericut.local	cam\plugins\	Language strings
Vericut.pdi	cam\PDI\Src\	Edgecam Dialogs
Vericut.dfn	language\	Edgecam Commands

 $\textbf{Copy from: } C:\Program Files\CGTech\VERICUT x.x.x\windows64\edgecam\\textit{version}\) icons \\ \textbf{Copy to}$

NOTE Languages available for ECV:

Czech

German

English

French

Italian

Dutch

Portuguese

Nederland

Chinese

Japanese

Environment variables

To enable the Edgecam Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH SINGLE PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

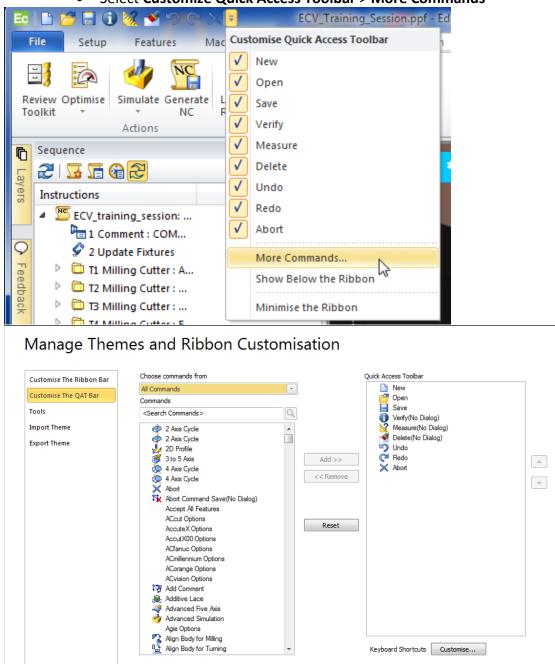
CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

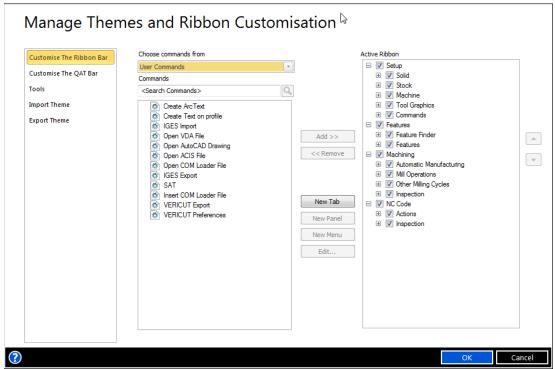
To add an icon to the Toolbar

If you wish to have an icon (on an Edgecam toolbar.

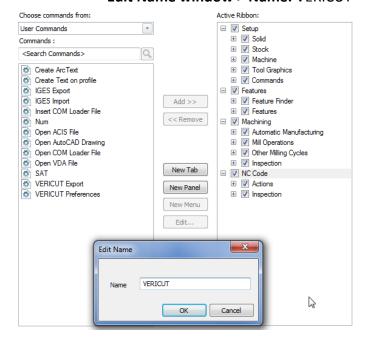
• Select Customize Quick Access Toolbar > More Commands



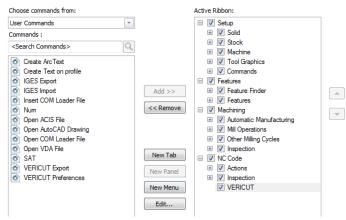
- Select Customize The Ribbon...
- Select Choose commands from: > User Commands



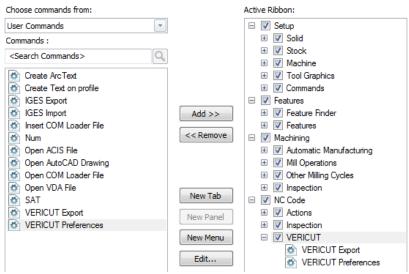
- Select Active Ribbon > NC Code >
- Select New Panel
- Edit Name window > Name: VERICUT



Select OK



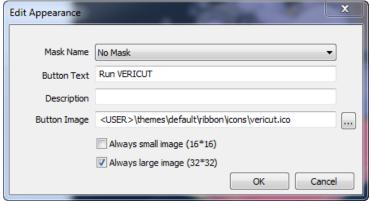
- Select VERICUT Export from the Commands column
- Select Add to move it to the Active Ribbon column
- Do the same for VERICUT Preferences



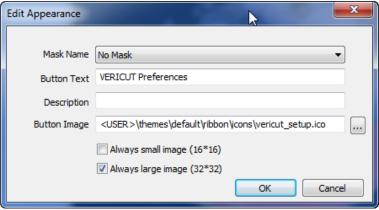
• Select OK



- Select **VERICUT Export**, right mouse pick **Edit Appearance**
- Button Text: Run VERICUT
- Button Image: Browse
 C:\Users\username\Documents\Hexagon\EDGECAM\version\Themes\Default\ribbon\vericut.ico
- Check Always large image (32*32)



- Select **OK**
- Set up image for VERICUT Preferences



Select OK



Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

ESPRIT-to-VERICUT Interface (ESV)

Prerequisites

ESV is a licensed software program that provides an ESPRIT to VERICUT data transfer connection. The interface is an executable that is designed to work with ESPRIT.

Esprit Versions supported:

Esprit V18.1.6 (or later)

CGTech Licensing:

Esprit Interface

Minimum VERICUT Version required:

VERICUT 7.1

Minimum VERICUT License Version required:

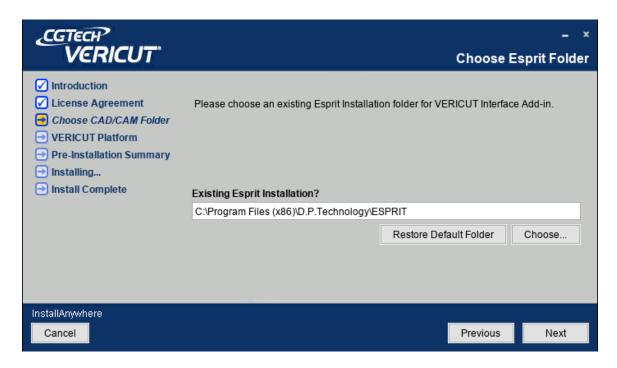
8.0

Versions of Esprit tested with ESV:

Esprit V18.1.6 - V19.19.191

Installation - Configuration

To automatically install the Esprit to VERICUT interface (ESV), insert the VERICUT installation DVD or navigate to the root folder of the downloaded VERICUT installer. Next, run the esprit interface install.exe and follow the on-screen instructions.



Manual installation

The following section describes how to install the ESPRIT-to-VERICUT Interface without using the installer. ESPRIT requires that Add-Ins write values to the registry, because of this, you must have administrator privileges to run these scripts.

First, create a directory named **VericutAddin** in your ESPRIT AddIns folder. If you have ESPRIT installed in the default location, the folder you will need to create will be at C:\Program Files (x86)\D.P.Technology\ESPRIT\AddIns\VericutAddin.

Next, copy all the provided source files into your **VericutAddin** directory. **Copy from** C:\Program Files\CGTech\VERICUT x.x.x\windows64\esprit **Copy to** C:\Program Files (x86)\D.P.Technology\ESPRIT\AddIns\VericutAddin

Register the interface

Next, you will need to register your files with the Windows registry and with ESPRIT so that it will be able to find the Add-In when starting up.

You will need to double-click the file **register-vericut-addin-64.reg**. After double-clicking the file, you will be asked to confirm if you want to add an entry to the registry. Select yes and you should receive a confirmation message that the value was added successfully to the registry.

NOTE: You must have Administrator privileges run register-vericut-addin-64.reg.

Environment variables

To enable the Esprit Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and CGTECH_ESPV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	CGTECH_ESPV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\Esprit\french\EspritRes.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

CGTECH_ESPV_LANGUAGE If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German, Italian, Chinese, Portuguese, and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

No configuration is required

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

GibbsCAM-to-VERICUT Interface (GibbsV)

Prerequisites

GibbsV is a licensed software program that provides a GibbsCAM to VERICUT data transfer connection. The interface is an executable that is designed to work with GibbsCAM.

GibbsCAM Versions supported:

GibbsCAM 2014 (or later)

CGTech Licensing:

GibbsCAM Interface

Minimum VERICUT Version required:

VERICUT 7.3

Minimum VERICUT License Version required:

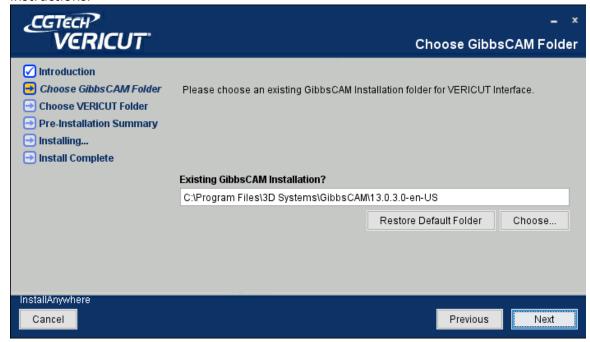
8.0

Versions of GibbsCAM tested with GibbsV:

GibbsCAM V9.5.2 - V13.0.3

Installation - Configuration

To automatically install the GibbsCAM to VERICUT interface (GibbsV), insert the VERICUT installation DVD or navigate to the root folder of the downloaded VERICUT installer. Next, run the gibbscam_interface_install.exe and follow the on-screen instructions.



Manual installation

The following section describes how to install the GibbsCAM-to-VERICUT Interface without using the installer. The GibbsV-to-VERICUT Interface is distributed as two files; GibbsV.dll (the code)

Gibbsv[language].local (localization file)

Copy from C:\Program Files\CGTech\VERICUT x.x.x\windows64\GibbsV\version\GibbsV.dll

Copy to C:\Program Files\3D Systems\GibbsCAM\version\PlugIns\GibbsV.dll

Environment variables

To enable the GibbsCAM Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM and GIBBSV_LANGUAGE are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	GIBBSV_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\GibbsV\version\GibbsvJapanese.local

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

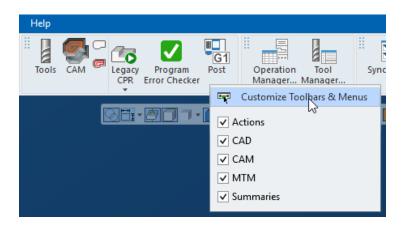
CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface. **GIBBSV_LANGUAGE** If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German, Italian, Chinese, and Japanese are supplied.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

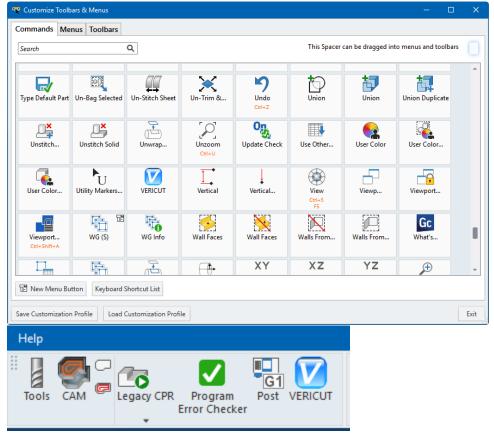
To add an icon to the Toolbar

If you wish to have an icon (V) to the GibbsCAM toolbar...

• From the GibbsCAM Toolbar, right click and select Customize Toolbar & Menus



 Select the VERICUT command, then drag and drop it onto the GibbsCAM Toolbar.



Close the Customize Toolbar & Menus window

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable vc_redist.x64.exe Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Mastercam-to-VERICUT Interface (McamV)

Prerequisites

MCAMV is a licensed software program that provides a Mastercam to VERICUT data transfer connection. The interface is a C-Hook that is designed to work with Mastercam.

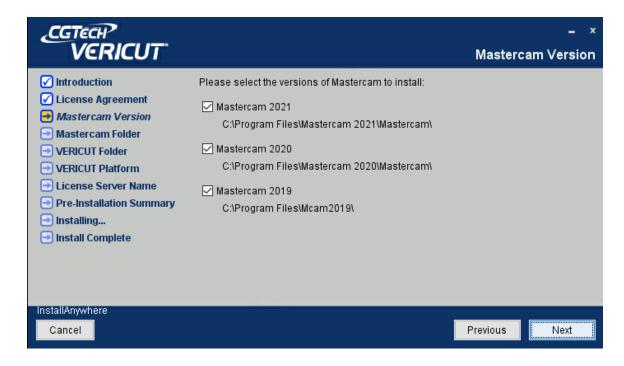
Mastercam Versions supported: Mastercam 2018 (or later)

CGTech Licensing: Mastercam Interface

Minimum VERICUT Version required:
VERICUT 8.0
Minimum VERICUT License Version required:
8.0
Versions of Mastercam tested with MCAMV:
Mastercam X6 – 2021

Installation - Configuration

To automatically install the Mastercam to VERICUT interface (McamV), insert the VERICUT installation DVD or navigate to the root folder of the downloaded VERICUT installer. Next, run the mastercam_interface_install.exe and follow the on-screen instructions.



Manual installation

The following section describes how to install the Mastercam-to-VERICUT Interface without using the installer. This VERICUT C-Hook is for Mastercam xxxx. It is distributed as seven files located in the C:\Program Files\cgtech\VERICUT x.x.x\windows64\mcamv\Xv\ directory of the VERICUT installation. The x.x.x represents the VERICUT release number.

VERICUT.dll (the code)

VericutSupport.dll (supporting code)

VericutSupport1.dll (supporting code)

SetStock.dll (gets the parameters for a Lathe Stock from Mastercam source code)

VERICUT.ft (used to map an Icon into the Mastercam menu interface)

GetXFormDependents.dll (supporting code)

mcRes.local (language translation)

NOTE: Languages supported by McamV:

German

English

French

Portuguese

Chinese

Japanese

The five .dll files and the .ft file should be placed in Mastercam's "chooks" folder and the file mcRes.local should be placed in the Mastercam installation folder.

Copy from C:\Program Files\CGTech\VERICUT x.x.x\windows64\mcamv*version* **Copy to** C:\Program Files\Mastercam *version*\Mastercam\chooks

VERICUT.dll
VericutSupport.dll
VericutSupport1.dll
SetStock.dll
VERICUT.ft
GetXFormDependents.dll

Copy from C:\Program Files\CGTech\VERICUT x.x.x\windows64\mcamv*version* **Copy to** C:\Program Files\Mastercam *version*\Mastercam\

mcRes.local

Environment variables

To enable the Mastercam Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

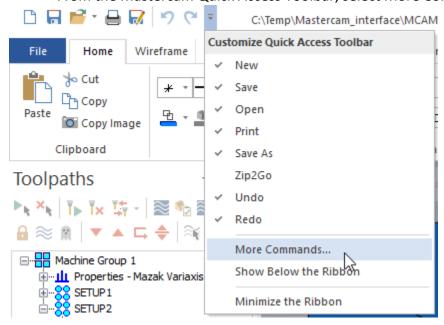
CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

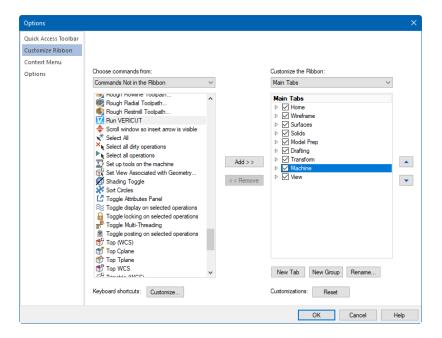
To add an icon to the Toolbar

If you wish to have an icon (on a Mastercam toolbar...

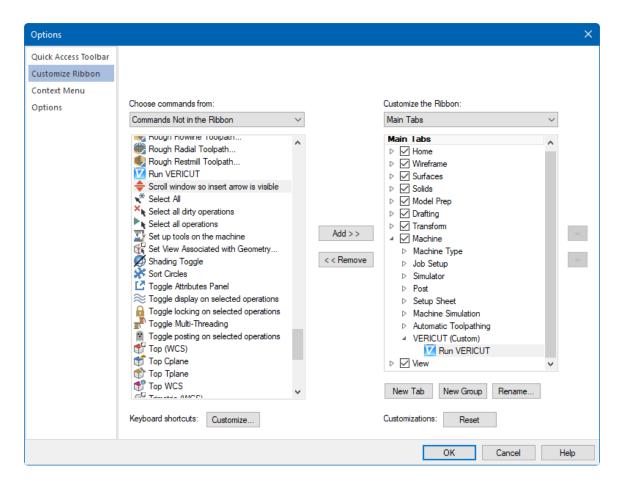
• From the Mastercam Quick Access Toolbar, select More Commands



Select Customize Ribbon



- Add a New Group to the Machine tab
- Rename to VERICUT and
- Add the Run VERICUT Icon





Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

PowerMill-to-VERICUT Interface (PMV)

Prerequisites

PMV is a licensed software program that provides a PowerMill to VERICUT data transfer connection. The interface is a Plug-In which is designed to work with PowerMill and Autodesk licensing levels: Regular, Premium or Ultimate

PowerMill Versions supported:

PowerMill 2020 (or later)

CGTech Licensing:

PowerMill Interface

Minimum VERICUT Version required:

VERICUT 8.2

Minimum VERICUT License Version required:

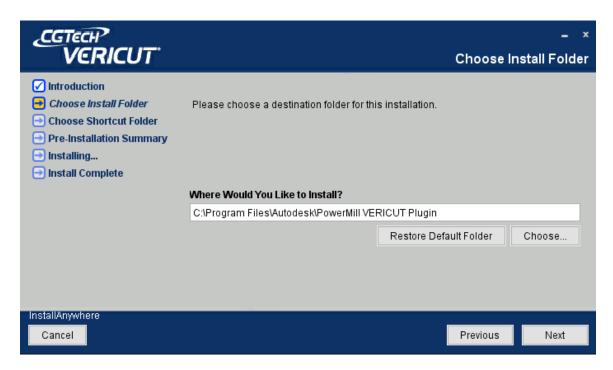
8.2

Versions of PowerMill tested with PMV:

PowerMill 2020 - 2021

Installation - Configuration

To automatically install the PowerMill to VERICUT interface (PMV), insert the VERICUT installation DVD or navigate to the root folder of the downloaded VERICUT installer. Next, run the powermill interface install.exe and follow the on-screen instructions.



Manual installation

The powermill_interface_install.exe installs and configures the below requirements. The following section describes how to install the PowerMill-to-VERICUT Interface without using the installer. PowerMill is distributed as ten files and requires that Plug-Ins write values to the registry, because of this, you must have administrator privileges to run this script.

Copy Plug-In files

CviView.dll

CviViewModel.dll

PluginFramework.dll

PowerMill.dll

VericutEng.dll

VericutPlugin.dll

vericut.ico

vericut setup.ico

PowerMill.local

register-pmv.bat

Create to a directory next to the PowerMill installation path.

Copy from C:\Program Files\CGTech\VERICUT x.x.x\windows64\PowerMill\2020

Copy to C:\Program Files\Autodesk\PowerMill VERICUT Plugin

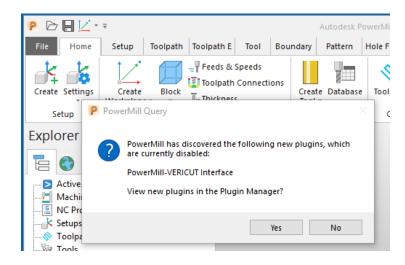
Register the interface

Next, you will need to register your files with the Windows registry and with PowerMill so that it will be able to find the Plug-In when starting up.

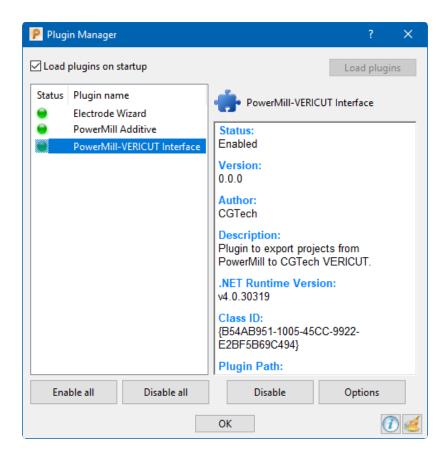
You will need to double-click the file **register-pmv.bat**. After double-clicking the file, you will be asked to confirm if you want to add an entry to the registry. Select yes and you should receive a confirmation message that the value was added successfully to the registry.

NOTE: You must have Administrator privileges run register-pmv.bat

Enable the Interface



Click **File** tab > **Options** > **Manage Installed Plugins** to display the **Plugin Manager** dialog where you can manage the plugins that are installed on your PC. Select the **PowerMill-VERICUT Interface** and pick **Enable**



Environment variables

To enable the PowerMill Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\.

Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

Note: the **powermill_interface_install.exe** should configure the VERICUT Interface icons on the PowerMill toolbar.

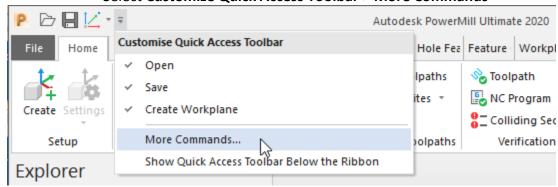
Reference:

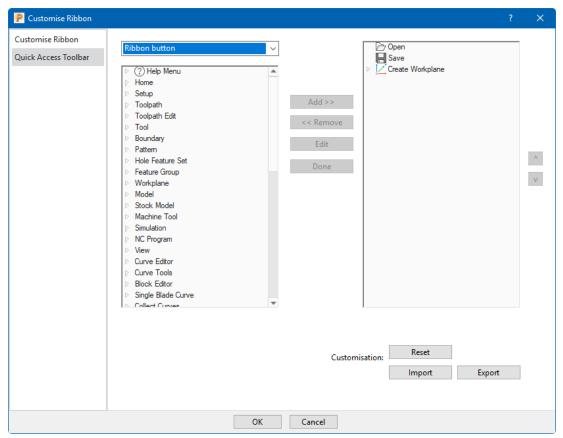
C:\Users\user name\AppData\Local\Autodesk\PowerMill\ribbon customisation.xml

Manual steps to configure toolbar:

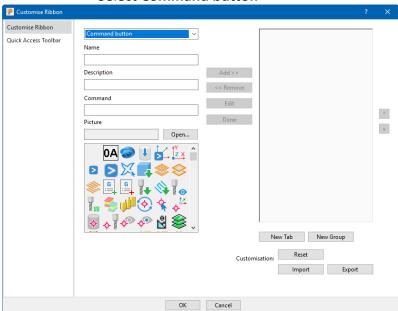
If you wish to have an icon () on the PowerMill toolbar.

• Select Customize Quick Access Toolbar > More Commands

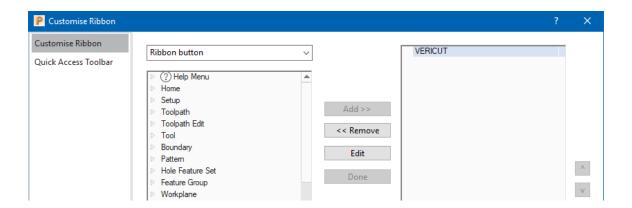




- Select Customize Ribbon
- Select Command button



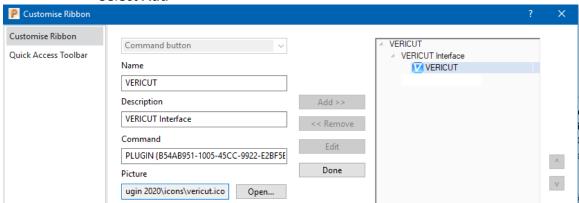
- Select New Tab
- Select Edit > Name: VERICUT
- Select Done



- Select New Group
- Select Edit > Name: VERICUT Interface
- Select Done

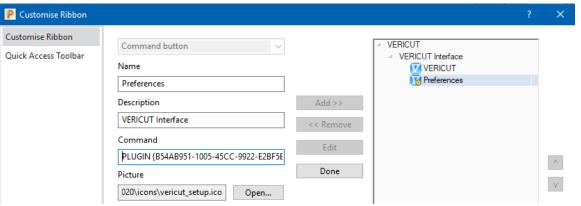


- Add 2 Commands to the group
- Name: Export Projects
- **Description**: VERICUT Interface
- Command: PLUGIN {B54AB951-1005-45CC-9922-E2BF5B69C494} export project
- Picture: select Open and browse C:\Program Files\Autodesk\PowerMill VERICUT Plugin 2020\icons\vericut.ico
- Select Add



- Name: Preferences
- **Description**: VERICUT Interface
- Command: PLUGIN {B54AB951-1005-45CC-9922-E2BF5B69C494} edit preferences

- Picture: select Open and browse C:\Program Files\Autodesk\PowerMill
 VERICUT Plugin 2020\icons\vericut setup.ico
- Select Add

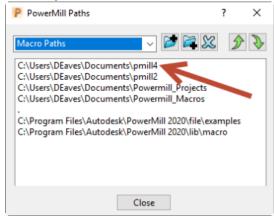


Select OK

Optionally, you could add the VERICUT Interface launch commands to a right click menu in PowerMill.

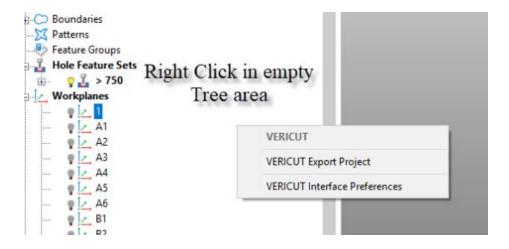
- Unzip the supplied Right click menu configuration file
- Add customized path to point to the folder

File>>Options>>Customized Paths>>Macro Paths



Right Click in empty tree area





Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Siemens NX-to-VERICUT Interface (NXV)

Prerequisites

NXV is a licensed software program that provides a Siemens NX to VERICUT data transfer

Siemens NX Versions supported:

Siemens NX 11 (or later)

CGTech Licensing:

NX Interface

Minimum VERICUT Version required:

VERICUT 8.0

Minimum VERICUT License Version required:

8.0

Versions of Siemens NX tested with NXV:

Siemens NX 8 - CR 1919

Installation - Configuration

For the Siemens NX Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\nx\version and can be accessed by C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\nx(version).bat

Environment variables

To enable the Siemens NX Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH SINGLE PLATFORM and UGII VENDOR DIR are optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	UGII_VENDOR_DIR	C:\Program Files\CGTech\VERICUT x.x.x\windows64\nx\NXxx\french

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

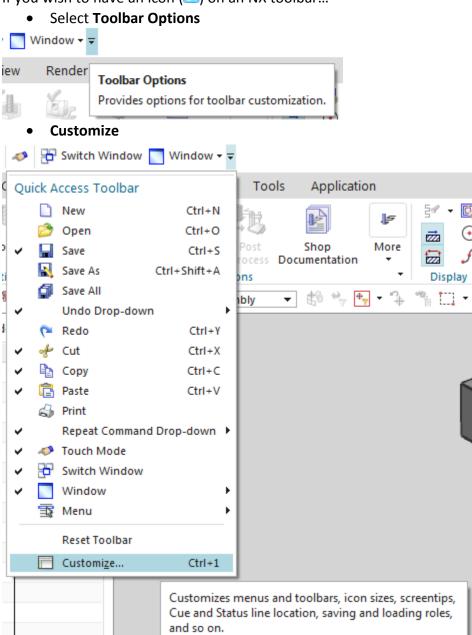
CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

UGII_VENDOR_DIR If you want the interface to use something other than US English, the variable can specify a file of localized text. Versions for French, German, Chinese, Czech, and Japanese are supplied.

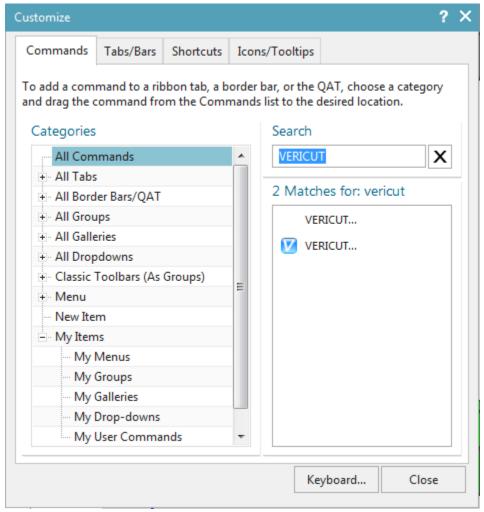
Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

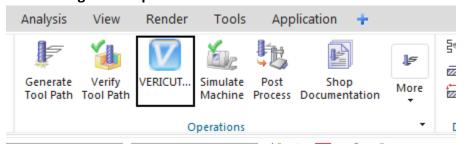
If you wish to have an icon (<a>If) on an NX toolbar...



• Search for VERICUT



• **Drag** and **Drop** command to desired location



Select Close

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Siemens NX-to-VDAF Interface (NX2VDAF)

Prerequisites

NX2VDAF is a licensed software program that provides a Siemens NX to VDAF data transfer

NX Versions supported:

Siemens NX 11 (or later)

CGTech Licensing:

NX Interface

Minimum VERICUT Version required:

VDAF 7.4

Minimum VERICUT License Version required:

2 C

Versions of Siemens NX tested with NX2VDAF:

Siemens NX 8 – CR 1911

Installation - Configuration

For the Siemens NX Interface, no user configuration is required. The interface installation files are located at C:\Program Files\CGTech\VERICUT x.x.x\windows64\nx2vdaf\version and can be accessed by C:\Program Files\CGTech\VERICUT x.x.x\windows64\commands\nx(version) _2vdaf.bat

Environment variables

To enable the Siemens NX Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM is optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

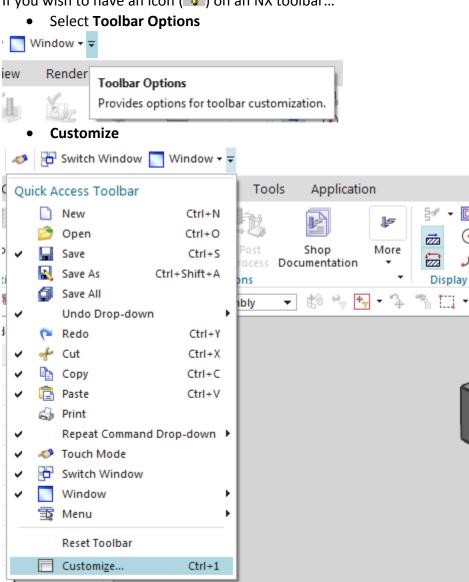
LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface.

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

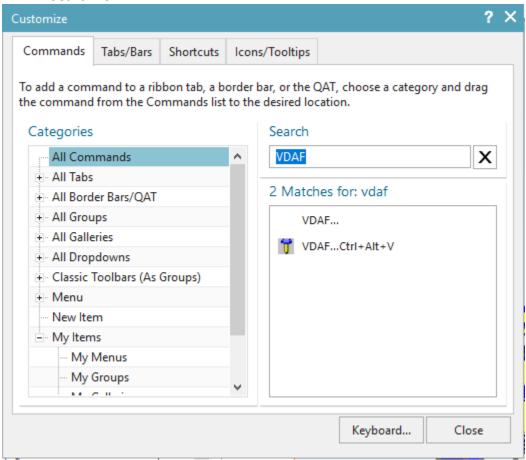
If you wish to have an icon () on an NX toolbar...



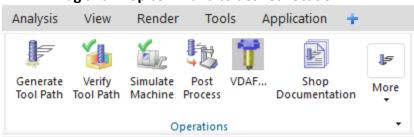
and so on.

Customizes menus and toolbars, icon sizes, screentips, Cue and Status line location, saving and loading roles,

• Search for VDAF



• Drag and Drop command to desired location



Select Close

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

SURFCAM-to-VERICUT Interface (SCV)

Prerequisites

SCV is a licensed software program that provides a SURFCAM to VERICUT data transfer connection. The interface is an executable that is designed to work with SURFCAM.

SURFCAM Versions supported:

SURFCAM V6 (or later)

CGTech Licensing:

Surfcam Interface

Minimum VERICUT Version required:

VERICUT 7.2

Minimum VERICUT License Version required:

8.0

Versions of Surfcam tested with SCV:

SURFCAM **V6 – 2020.0**

Installation - Configuration

The following section describes how to install the SURFCAM-to-VERICUT Interface. SCV is distributed as three files located in the C:\Program Files\cgtech\VERICUT x.x.x\windows64\surfcam directory of the VERICUT installation.

Vericut_Interface.dll (the code)
StyleSheet.xsl (supporting code)
SurfcamRes.local (language translation)

NOTE Languages supported by SCV:

• Save the file.

English French Portuguese Chinese Japanese Italian
 Copy from C:\Program Files\cgtech\VERICUT x.x.x\windows64\surfcam Copy to C:\Users\Public\Surfcam\Surfcamxx\UserApps\VERICUT
Note: You will have to create <i>UserApps</i> and <i>VERICUT</i> directories manually.
• Edit the 'SURFCAM.INI' file in order for Surfcam to get the location of addin dll. SURFCAM.INI file can be found at "C:\Users\Public\Surfcam\Surfcamx.x\Config" location. Please, right click and open the file in an editor. You will have to look for 'Specify Plug-Ins option' section. And make the following changes into it.
;Specify Plug-Ins option UserApplications=1 UserApp1=C:\Users\Public\Surfcam\Surfcamx.x\UserApps\VERICUT\Vericut_Interface.c

Environment variables

To enable the SURFCAM Interface to find the necessary VERICUT files, you also need to define three environment variables, CGTECH_INSTALL, CGTECH_PRODUCTS and LSHOST. CGTECH_SINGLE_PLATFORM, CGTECH_SURFCAM_LANGUAGE and are CGTECH_SURFCAM_LOCALE optional.

No.	Environment Variable	Example
1	CGTECH_INSTALL	C:\Program Files\CGTech\VERICUT x.x.x
2	CGTECH_PRODUCTS	C:\Program Files\CGTech\VERICUT x.x.x\windows64
3	LSHOST	localhost
4	CGTECH_SINGLE_PLATFORM	YES
5	CGTECH_SURFCAM_LANGUAGE	C:\Program Files\CGTech\VERICUT x.x.x\windows64\surfcam\french
6	CGTECH_SURFCAM_LOCALE	french

CGTECH_INSTALL is set to the VERICUT installation folder. In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\. Defining a value explicitly for the CGTECH_INSTALL environment variable is optional. It can be derived from the CGTECH_PRODUCTS environment variable value.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: "windows64". In the above table, x.x.x represents the VERICUT release number. For a typical VERICUT 9.1.1 installation this variable is set to C:\Program Files\CGTech\VERICUT 9.1.1\windows64.

LSHOST is set to the name of the license server computer.

CGTECH_SINGLE_PLATFORM=YES If you are using VERICUT single Platform then an additional environment variable needs to be defined for the interface. **CGTECH_SURFCAM_LANGUAGE** If you want the interface to use something other than US English, the variable can specify path of the local file. Versions for French, Chinese, Italian, Portuguese, and Japanese are supplied. **CGTECH_SURFCAM_LOCALE** is used to define name of the language; which user prefers to display on the interface

Use the Microsoft Windows Control Panel > System Properties > Advanced tab > Environment Variables feature to define these environment variables. See Microsoft Windows Help for more information.

To add an icon to the Toolbar

No configuration is required

Microsoft Redistributables

The interface may require the Install of Windows C++ run-time libraries (Microsoft Redistributables). The Microsoft Redistributable **vc_redist.x64.exe** Installer is also available for download at: https://support.microsoft.com/en-ca/help/2977003/the-latest-supported-visual-c-downloads

Configuring the Teamcenter Interface (TCI)

This section documents the necessary steps make to the Teamcenter Interface to work in your environment. There are several configuration steps that need to be completed and several software versions that must be met. These instructions apply only when connecting VERICUT with Teamcenter.

Software Prerequisites

The Teamcenter Interface has several software version requirements.

- Siemens software prerequisites:
 - o NX version 10 or higher
 - o Teamcenter version 10 or higher
 - MRL (Manufacturing Resource Library) version3.1.5 or higher, if MRL is being used
 - o SFC (ShopFloor Connect) version 2017.4 or higher
- VERICUT software prerequisites:
 - o VERICUT 9.1.1 or higher
 - NXV Interface
 - o Teamcenter Interface

License Prerequisites

The Teamcenter Interface requires an additional software license from Siemens to work:

• (TCM55072) Siemens 3rd party CAM access to Teamcenter MRL license

Configuration

- SFC (ShopFloor Connection) Configuration
 - Contact technical support for help in configuring SFC to work with the Teamcenter Integration
 - This process must be done in order for the interface to work properly.
- Local Computer Configuration
 - Ensure the correct environment variables are set for the current version of NX that is being used.

Variable	Value
UGII_BASE_DIR	C:\Program Files\Siemens\NX 10.0\
UGII_ROOT_DIRC	:\Program Files\Siemens\NX 10.0\UGII

o These variables should be set correctly from the installation of NX

- VERICUT Configuration
 - Ensure the following variables are set correctly in the vericut.bat and toolman.bat files

Variable	Value
CGTECH_TC_WORKPLACE	Used to set Teamcenter workplace.
	Expected value - vericut
CGTECH_TC_NXP_TYPE	Defines Teamcenter item type for NX Projects
	Expected value - MENCMachining
CGTECH_TC_TOOL_TYPE	Defines Teamcenter item type for NX Tools
	Expected value - MENCTool

NOTE: A workplace named 'vericut' should be defined when SFC is configured. If a different workplace name is used during the configuration that name should be used for this variable. If different item types are used in Teamcenter for NX CAM projects and cutting tool assemblies, those item names need to be entered as values for the above variables.

Configuring the VERICUT TDM Systems Interface

VERICUT connects to the TDM Systems tool management database using a Dynamic Link Library (DLL) supplied by TDM Systems. It is mandatory to use the DLL supplied with your specific TDM installation since the DLL is both specific to the TDM version and to the Oracle database version.

Copy the **TDMAPI.dll** from your TDM installation into the ...\windows\vericut folder of your VERICUT installation (for example, C:\Program Files\cgtech\x.x.x\windows\vericut, where x.x.x is the VERICUT release number, for example 9.1.1). An optional VERICUT license from CGTech is required in order for VERICUT to access tool data that resides in the TDM Oracle database. Once the license and DLL are in place VERICUT's TDM Systems Interface can then be invoked from the **Tool Manager** > **File** menu.

Creation of VERICUT tool information in the TDM database requires custom configuration services from TDM Systems, and an optional license from TDM Systems to enable creation of tool data for VERICUT.

The TDM configuration and installation instructions are part of the TDM install documents provided by TDM Systems.

Return to "Other Configuration Tasks"

Configuring the WinTool Interface

VERICUT has the ability to easily use 3D tooling generated from the WinTool tool data management system. WinTool is an independent tool database management system.

WinTool generates a .tls file for use in VERICUT's Tool Manager. This .tls file can be generated independently from VERICUT or from launching the WT-Tool Export executable (for example "C:\Program Files (x86)\WinTool\WT-VERICUT-Interface\WT-ToolExport.exe") via the WinTool icon from Tool Manager's Import ribbon.

The WinTool icon in VERICUT's Tool Manager is inactive, by default. Installation of the WinTool tool data management software is a requirement in order to use the WinTool icon within Tool Manager. The icon will automatically become active if WinTool software is installed and one of the following criteria are met. These criteria are checked in the following order:

- 'CGTECH_WINTOOL' environment variable (should be defined during WinTool installation)
- .exe file path is set in VERICUT Tool Manager's Preference dialog under CAD Tool Import Executables section
- Windows registry (should be defined during WinTool installation)

The WinTool configuration and installation instructions are part of the WinTool install documents by WinTool AG. For further details on the WinTool WT-ToolExport interface see the **WT-VERICUT-Interface-Manual-E.pdf** (for example: C:\Program Files (x86)\WinTool\WT-VERICUT-Interface\Docs\WT-VERICUT-Interface-Manual-E.pdf) or contact WinTool.

Configuring the Zoller Interface

The ZOLLER Interface to VERICUT allows for configuration for different options depending on the users needs and setup with ZOLLER TMS.

Prioritization/Control of Graphics

The ZOLLER Interface can be configured to control the priority and limitation of graphics to be read from the ZOLLER TMS database. This configuration is optional and ONLY for situations where the user needs to prioritize the order of graphics to be read into VERICUT's Tool Manager that does not follow the default order of graphics.

By default the ZOLLER Interface will look for and read the following graphic file formats for each tool type from the ZOLLER TMS database.

For milling/drilling (spinning) tools:

- 1. SVG Contour (similar to a DXF)
- (If SVG Contour does not exist) .STEP/.stp file located in 'GraphicFile'

For turning tools:

1. .STEP/.stp file located in 'GraphicFile'

The ZOLLER database has the option to contain up to 10 types of graphics files for each tool assembly to read 3D graphics models from. These nine graphics are displayed in the ZOLLER TMS software as shown below in the ZOLLER window.



- 1. Main Graphics
- 2. Assembly
- 3. Webcam
- 4. CAM 3D
- 5. Scan 3D
- 6. CAD 3D
- 7. Free
- 8. Free2
- 9. CAZ

The SVG Contour is the 10th graphics file option within ZOLLER TMS. It is a 2D format, similar to a DXF file. It is not displayed in the above ZOLLER TMS dialog nor is it configurable with the environment variables listed below.

If the SVG Contour file is desired, within the ZOLLER Database Access window, uncheck the box next in the STEP column. This will first look for the SVG Contour file for that specific tool assembly.

If the user needs to prioritize or limit the order of graphics being read in for tool assemblies through the ZOLLER Interface set the following environment variables in the vericut.bat and toolman.bat files:

```
For milling/drilling (spinning) tools - CGTECH_ZOLLER_MILL_TOOL_ORDER For turning tools - CGTECH_ZOLLER_LATHE_TOOL_ORDER
```

Examples: (copy and paste these lines into the .bat files then adjust the values accordingly)

```
set CGTECH_ZOLLER_MILL_TOOL_ORDER=CAM_3D,CAD_3D
set CGTECH_ZOLLER_LATHE_TOOL_ORDER=CAD_3D,CAM_3D,Free_1
```

Edit the vericut.bat and toolman.bat files in a text editor. It is strongly recommended to make copies of all files described below prior to the edits and changes. The original files can be used for comparison in case there is an issue.

The order in which the items appear in the list is the order in which the items will be checked. If a GraphicFile name is not listed next to the environment variable it will not be read.

Color Settings for Graphics

STEP models within ZOLLER TMS should be defined with the correct ISO color standards in order for the interface to correctly recognize CUT, NOCUT, NOCUT NOSPIN components correctly.

The following are the ISO color standards:

```
CUT = RGB Value 205 | 205 | 205

NOCUT = RGB Value 128 | 128 | 128

NOCUT NOSPIN = 141 | 141 | 141
```

If a user needs to adjust the ZOLLER Interface to color changes that were made in their ZOLLER TMS, this can be done by adding the following environment variables to the vericut.bat and toolman.bat files. There are individual color settings for the CAD and CAM files:

CAD

```
set CGTECH_ZOLLER_CAD_CUT
set CGTECH_ZOLLER_CAD_NOCUT
set CGTECH_ZOLLER_CAD_SHAFT
set CGTECH_ZOLLER_CAD_NOCUT_NOSPIN
```

Installing the Model Interface Modules

The Model Interface modules (CATIA V4 Model Interface, CATIA V5 Model Interface, STEP Model Interface, and ACIS Model Interface) enable VERICUT to both read and, when combined with Model Export, write the designated model file formats. These modules do not require a CAD/CAM system be available for VERICUT to read or write any of the formats. The modules are available for both Windows 32 bit, and Windows 64 bit platforms. Each module is licensed separately.

Model interfaces are installed from a separate installer executable (not part of the VERICUT installer). The Model Interface installer is available for download from CGTech's website, and it is also distributed on the VERICUT 9.1.1 DVD. To download the model interface installer appropriate for your current VERICUT installation:

- 1. Click on the appropriate link below to start the download of the model interface installer for your VERICUT version:
 - http://www.cgtech.com/products/latest-release/vericut-download/model-interfaces
- 2. Unzip the model_interfaces_vx.x.x.zip file (where x.x.x is the VERICUT release number) to extract the installer executable to a folder.

To start the installation:

Double-click on installer executable (either the downloaded installer executable from step 2 above, or the installer executable on the VERICUT 9.1.1 DVD) to display the Installer window. Follow the instructions in the Installer to complete the installation process. Make sure to select the correct VERICUT installation folder, for example C:\Program Files\cgtech\VERICUT 9.1.1

NOTES:

- 1. You may need to have the latest Microsoft Windows updates installed (as of August 14, 2009) for the CAD Model Interfaces to work correctly.
- If you get the following error message "Error loading ACIS libraries!", or no error
 message at all try installing the Microsoft redistributable C++ run-time libraries.
 See the <u>Install Microsoft redistributable C++ Run-Time Libraries</u> topic above for
 additional information. You must have Administrator privileges to do the install.

VERICUT's CAD Model Interface modules should now be available if you are licensed to use them.

If errors occur, visit the <u>VERICUT Users' Forum</u> or contact CGTech technical support via our <u>website</u>, just click on the support link.

Return to "Other Configuration Tasks"

Commuter Tool

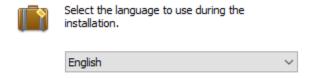
The "CGTech Commuter Tool" is a utility to check out\in (borrow) licenses. A commuter license allows users to borrow a license from their license server to continue to use VERICUT while away from their own network. Or when they need or forced to work offline.

Commuter licenses can be borrowed for a max of 14 days, and it will be subtracted from number of licenses that are available on the license server.

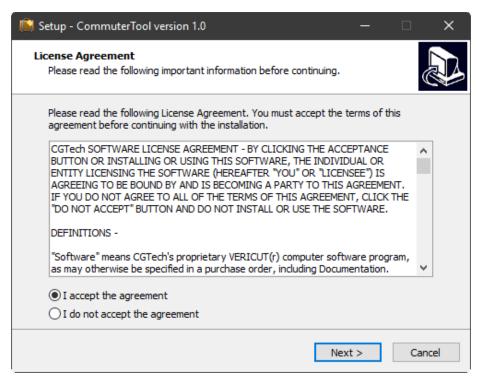
Commuter licenses can be checked back in any time before the borrow expiration time. Expired borrowed license will be automatically checked into the license server.

Installation

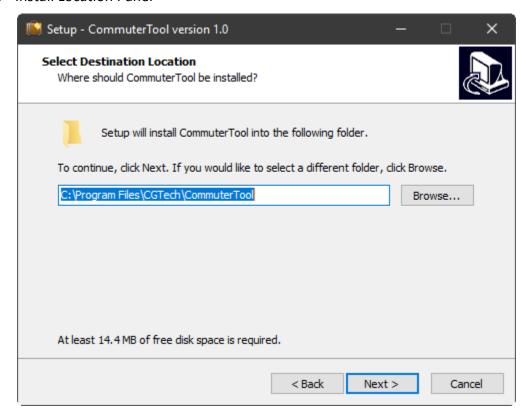
- 1. Run commuter tool install.exe
- 2. Step through install (NOTE: Administrator rights are required.)
 - a. Select language



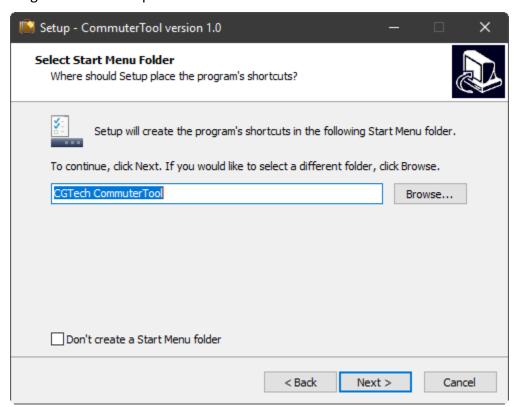
b. License Panel



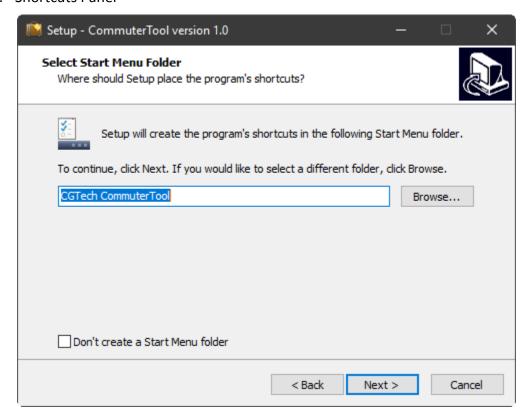
c. Install Location Panel



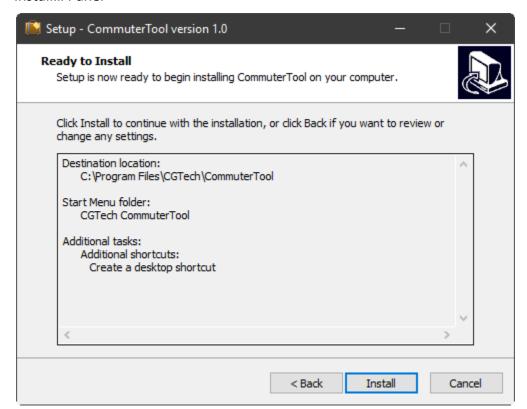
d. Program Menu Group Panel



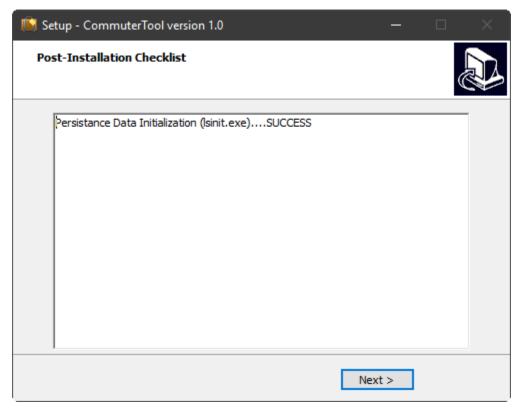
e. Shortcuts Panel



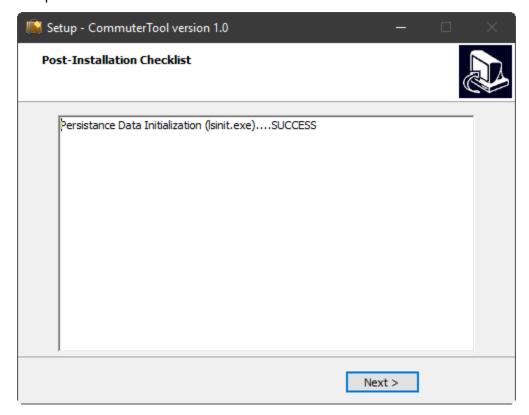
f. Install... Panel



g. Post-install (Isinit.exe check) Panel

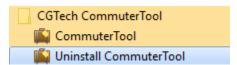


h. Complete Panel



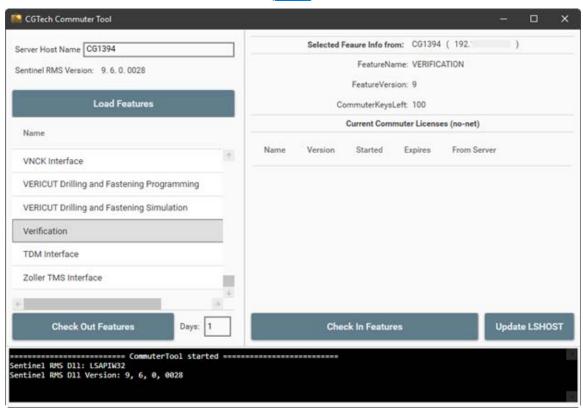
CGTech Commuter Tool

Run commuter tool from start window



or from Desktop icon





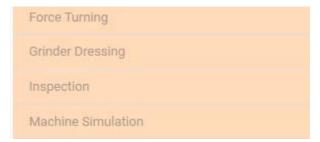
Server Host Name

Specify the server host name or the IP address.

Load Feature

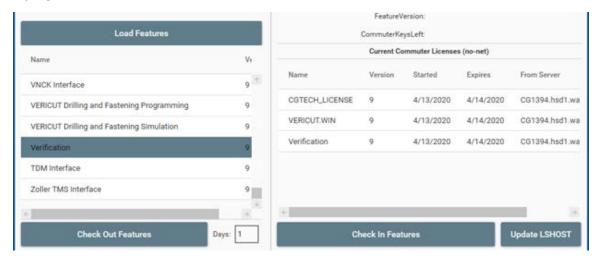
Loads the license keys that are allowed to be commuted.

License keys that are not allowed to be commuted will gray out.



Checking Out Features

This bottom checks out all the different license keys that a user selected Enter the Host Name.



Days

Specifies the number of days a license can be selected, minimum 1 maximum of 14.

Update LSHOST

This will update [VERICUT Install Directory]\windows64\commands\cgtenv.bat file to include the line: "set LSFORCEHOST=no-net"

NOTE: Once a commuter license is checked out it will be unavailable on network License Server for the remainder of the days that it was checked out for or until it is manually checked back in to the network License Server.

Checking In Features

Allows user to manually check in borrowed unexpired licenses.

[VERICUT Install Directory]\windows64\commands\cgtenv.bat file will be reverted back to its original state if all CGTech commuter licenses have been checked back into the server.

NOTE: If borrowed license Expired user will have to manually edit [VERICUT Install Directory]\windows64\commands\cgtenv.bat file or use the Specify License Sever Computer from the CGTECH VERICUT Utility xx menu in Windows Start menu

