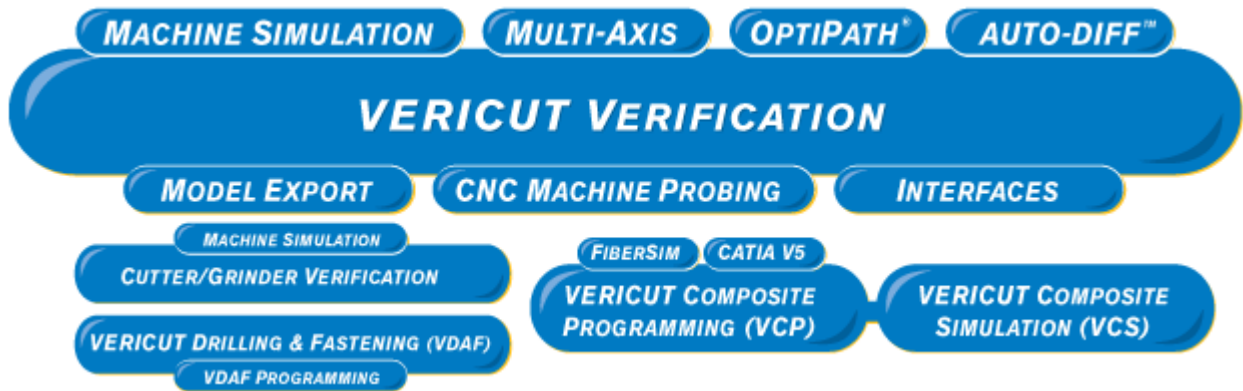


Installing CGTech Products



VERICUT Software Installation

Introduction to Installing VERICUT Software

The term "VERICUT", used the following installation instruction sections, unless specifically stated otherwise, refers to both VERICUT Verification and VERICUT Composite software. Installing and configuring VERICUT is simple, typically requiring only a few minutes for most installations.

Overview

A VERICUT software installation involves adding the VERICUT product files to your computer and setting-up licensing.

Files are added to your computer with a typical "wizard" installation process, where you run an installer program which prompts you through various options in a sequence of screens, and ultimately adds the VERICUT software product files to your computer.

VERICUT is a licensed program, meaning that it requires authorization from another software program (the license server) before it can run. When the VERICUT software starts, it communicates with the license server program, gets authorization to continue, and then displays the VERICUT software on your computer, ready to use.

Terminology

It is important you understand 3 terms frequently used throughout the installation instructions.

License Server Program — The program providing licenses for VERICUT. VERICUT requires a license, thus the License Server Program must be running for VERICUT to operate. VERICUT uses the Sentinel RMS license server program from [SafeNet](#). The license server program and VERICUT communicate using network protocols. Only one Sentinel RMS license server program may run on a computer.

License Server Computer — The computer running the license server program. It may be the same computer running VERICUT, such as in a simple single computer installation. For this type of installation the License Server Computer must be a Windows computer.

The License Server Computer may only be a computer supplying licenses to other computers running VERICUT in your company's network. In this case the License Server computer can be either a Windows computer or a UNIX computer.

Client Computer — The computer that runs the VERICUT software. Client Computers can only be Windows computers.

Where you decide to put VERICUT product files depends on whether you have a simple single computer installation, or multiple networked computers. However, the **License Server Computer** and **License Server Program** are configured exactly the same for any type of installation, from a simple single computer to multiple networked computers with Windows **Client Computers** on a wide area network.

NOTE: The VERICUT Verification software and VERICUT Composite Software is only supported on Windows **Client computers**.

You do not need to request a license for a major release (such as 6.0, 6.2, 7.0, 7.1 etc) if you are currently running VERICUT software and are current on software maintenance. CGTech automatically emails updated license keys to existing customers with current software maintenance when a new VERICUT software major version is shipped. CGTech emails license keys to your company's primary VERICUT contact shortly before shipping VERICUT CDs.

You also do not need to request a license if you have already received one specific for this major version and are installing a point release, such as 7.0.1.

You must request a license for a new installation, to add new modules to an existing installation, to change license server computers, or to update to a new major version after renewing expired maintenance. If this is a new installation or if you are changing to a new license server computer, you need to tell CGTech the HOST ID of the license server computer. The HOST ID of your license server computer is determined during the installation steps below.

Installation Steps

Following are the sequence of steps required to successfully install VERICUT Verification software. Click on each link below for details on each step. At the bottom of each detail page is a link to the next step.

Install VERICUT Verification

NOTES:

1. For best results follow the outline below in sequence. Each subsequent step relies on completion and/or information from the previous one.
2. If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.
1. Choose your [installation configuration](#).
2. Check [VERICUT System Requirements](#) and make sure that your system meets them.
3. If this is a new installation or you do not already have a VERICUT 7.1 license, [determine your license server computer HOST ID and request a VERICUT license](#).
4. Install VERICUT on a stand-alone or License Server Computer: [Windows](#)
5. Configure and start the license server: [Windows](#) or [UNIX](#).
6. Test VERICUT to verify correct operation and licensing on the License Server Computer: [Windows](#)
7. If you have other computers that will access the same license server, configure and test VERICUT client computers, [Windows](#)
8. Your VERICUT installation is now complete.

Other Installation Types

The following are other installation types that may be used for your unique requirements.

- [Install VERICUT License Server Only](#)
- [Use Silent Install](#)

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](#)
 - [EdgeCAM-to-VERICUT Interface](#)
 - [ESPRIT-to-VERICUT Interface](#)
 - [GibbsCam-to-VERICUT Interface \(GibbsV\)](#)
 - [Mastercam-to-VERICUT Interface \(MCAMV\)](#)
 - [NX-to-VERICUT Interface \(NXV\)](#)
 - [Pro/E-to-VERICUT Interface \(PROEV\)](#)
- To install the CAD Model Interface modules, go to [Installing the Model Interface Modules](#).
- To enable VERICUT to read NX files directly, go to [Configuring VERICUT to Read 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, [Windows](#) or [UNIX](#)
- Check Network Configuration, [Windows](#) or [UNIX](#)
- [Mount a UNIX CD](#)
- Change License Servers, [Windows](#) or [UNIX](#)
- Update an Existing License, [Windows](#) or [UNIX](#)
- Stop and Remove a License Server, [Windows](#) or [UNIX](#)
- Starting a Temporary License Server, [Windows](#) or [UNIX](#)
- [Uninstall an old version of VERICUT](#)
- [Download and Install the Latest Point Release for Windows](#)
- [Running VERICUT 5.2 or 5.3 with the current VERICUT License Server](#)
- [Installing Microsoft C++ redistributable run-time libraries for XP64](#)
- Configure Redundant License Servers on [Windows](#) or [UNIX](#).

Other Installation Types

The following are other installation types that may be used for your unique requirements.

- [Install VERICUT License Server Only](#)
- [Use Silent Install](#)

Other VERICUT Configuration Tasks

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

- To install the CAD Model Interface modules, go to [Installing the Model Interface Modules](#).
- [Windows Start Menu License Administration Choices](#)
- Determine Your License Server's Host ID, [Windows](#) or [UNIX](#)
- Check Network Configuration, [Windows](#) or [UNIX](#)
- [Mount a UNIX CD](#)
- Change License Servers, [Windows](#) or [UNIX](#)
- Update an Existing License, [Windows](#) or [UNIX](#)
- Stop and Remove a License Server, [Windows](#) or [UNIX](#)
- Starting a Temporary License Server, [Windows](#) or [UNIX](#)
- [Uninstall an old version of VERICUT software](#)
- [Installing Microsoft C++ redistributable run-time libraries for XP64 or Vista64](#)
- Configure Redundant License Servers on [Windows](#) or [UNIX](#).

1. Choose an Installation Configuration

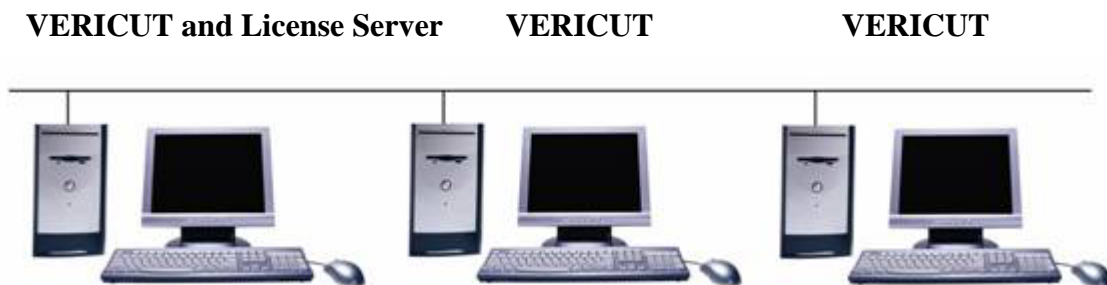
There are several different ways to configure your VERICUT software installation. Following are three common configurations: a simple single computer or stand-alone installation and two different multiple-computer installations.

Single Computer Installation



- VERICUT software is installed on this computer's local disk.
- The license server program is running on this computer.
- The license server program only supplies licenses to the VERICUT software running on this computer.
- Windows computers can only be used for this type of installation.

Multiple Computer Installation



- VERICUT software is installed on each computer's local disk.
- The license server program is running on one of the computers if all computers are Windows computers.

NOTE: If the license server program is running on a UNIX computer, VERICUT will not be installed on the License Server Computer.

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- The license server program supplies licenses to the VERICUT software running on multiple computers on the network.

Multiple Computer Network Installation

VERICUT and License Server (accesses VERICUT on a network mounted disk)



- The VERICUT software is installed on one computer's disk. The disk is mounted or mapped on all computers using the same path.
- The license server program is running on one of the computers.
- The license server program supplies licenses to the VERICUT software running on multiple computers on the network.

NOTE: If the license server program is running on a UNIX computer, VERICUT will not be installed on the License Server Computer.

There is always a license server computer in all three types of installations. The license server computer can be any computer on the network capable of running the license server program. The license server is installed and configured in exactly the same way regardless of the type of installation. The only difference between these installations is the client computer configuration.

In the case of the "**Single Stand-alone Computer**" installation, the license server program and the VERICUT software both run on the same computer. The client computer and the license server computer are the same computer. However, it is important to note that the VERICUT software and the license server program must still communicate with each other using network protocols, even though they are on the same physical computer.

The "**Multiple Computer Installation**" consists of one computer configured the same as the single stand-alone computer described above, but with additional VERICUT software installations on other computers on the network, the **Client Computers**. These client computers do not run the license server program, but rather communicate with the license server computer and request licenses from the license server program over the network. The communication protocol is TCP/IP.

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Finally, the "**Multiple Computer Network Installation**" is similar to the single stand-alone configuration in that there is only one copy of the VERICUT software installed. In this case the VERICUT software is installed on a disk that is network mounted or mapped on one or more client computers. Generally the license server computer is the computer with the disk physically attached, but this is not necessary. The client computers do not have the VERICUT software installed on a local disk. Instead they access the VERICUT software on a network mounted or mapped disk. The disk where the VERICUT software is installed must be mounted or mapped to exactly same path on all the computers by the site's system administrator.

Thus if the VERICUT software is installed on H:\CGTECH in a Windows environment, then all computers must map the disk with the same letter and path.

The **Multiple Computer Network Installation** is the simplest installation to maintain for a medium to large corporate network environment since there is only one license server computer and one installation of the VERICUT software shared by all users. However it does require some custom configuration on each client computer (adding a start menu or desktop shortcut) in order to give users on the client computers easy access to the VERICUT software. This work is generally done by the systems administrator.

Next installation task: Check [System Requirements](#)

Return to VERICUT [Installation Steps](#).

2. Check VERICUT System Requirements

Version 7.2

IMPORTANT! Always check the latest system requirements, available at [VERICUT 7.2 's Requirements webpage](#).

NOTE: Requirements have changed – review carefully

General Requirements

- Two or three button mouse
 - Three button mouse with mouse-wheel is recommended due to new dynamic view controls
- Network interface card
- Graphics device capable of displaying at least 16K colors
- OpenGL compatible graphics accelerators can be used in a machine simulation view and for dynamic rotate/pan/zoom in a workpiece view. Due to the large amount of graphics memory required to display the cut stock, graphics memory of 512MB minimum is recommended, and 1GB or more is preferred.
- Physical Memory: 1GB minimum is recommended, 2 GB is preferred. For simulations that require more memory, Windows 7 64-bit or XP 64 bit operating system allows access to memory beyond 32 bit Windows' 2 GB application limit.

Windows 32 and Windows 64 bit Requirements

Disk Space	1 GB (full installation including Library, Samples, and Help files, and Java Run-Time)
Temporary Disk Space	1 GB required during installation, in addition to the permanent Disk Space above.
Page File	2-times available physical memory recommended
Windows Operating System	VERICUT works on Windows 7 32/64, Windows Vista 32/64, and Windows XP 32/64. <i>VERICUT 7.2 is not supported on Windows 2000, Windows 98, Windows ME and Windows NT operating systems. Click here for more information.</i>

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	<p>Java Run Time Environment 1.6.0_07 (included in the VERICUT installation)</p> <p>Windows Script 5.3 or later is required for the CATIA V5 Interface</p> <p>TCP/IP Network Protocol installed on the network device</p> <p>VERICUT on Windows 7 64, Windows Vista64/XP64 may require installation of Windows C++ run-time libraries. An administrative user must do the installation. The run-time library installer is included on the VERICUT CD and in the downloadable zip file of the VERICUT installation. The installer file name is vcredist_x64.exe. Double-click on the file to run the installer.</p> <p>The library installer is also available for download at: http://download.vericut.net/downloads/redistributables.zip</p> <p>VERICUT 7 uses different run-time libraries than earlier versions.</p> <p>The different versions of run-time libraries can be installed together on the same computer if you need to run earlier versions concurrently.</p>
Physical Memory	<p>1 GB minimum is recommended, 2 GB is preferred. For simulations that require more memory, Windows 7 64, Windows 7 64-bit, or XP 64-bit operating systems allows access to memory beyond 32 bit Windows' 2 GB application limit.</p>
Processor	<p>Intel Pentium or 100% Pentium-compatible Processor.</p> <p>2 ghz or faster is recommended.</p> <p>Multiple processors improve performance, especially when running other large programs concurrently with VERICUT.</p>

UNIX Requirements

VERICUT's license server is supported on Sun Sparc/Solaris, Hewlett-Packard PA-RISC/HP-UX and IBM RS6000/AIX, and can serve licenses to Windows computers running VERICUT software.

UNIX minimum operating system versions for VERICUT's license server are:

HP	HP-UX 11.11
IBM	AIX 5.2
Sun	Solaris 10 (SPARC processors only)

To install the license server program only choose "**Custom**" on the **Type of Installation** install screen. Then on the **Choose VERICUT Components install window**, check only the "**License**" choice.

Next installation task:

If this is a new installation or you do not already have a VERICUT 7.0 license, [determine your license server computer HOST ID and request a VERICUT license](#).

Otherwise, continue on:

Install VERICUT: [Windows](#)

Return to VERICUT [Installation Steps](#).

3. Determine Your Host ID and Request a License

License overview

VERICUT software is licensed by a **license server program**, running on the **license server computer**. Any computer capable of running VERICUT software can be used as the **license server computer**. When the license server program starts it reads encrypted license keys from a file and compares them with the HOST ID of the computer it is running on. If the encrypted keys match the HOST ID, the license keys are added to the license server. Once the license server is fully up and available it contains a pool of VERICUT software licenses. When the VERICUT software runs it obtains licenses from the license server.

NOTE: If this is a new installation or you are changing license server computers you must first **Determine the HOST ID** of the new license server computer, then request license keys via CGTech's website (see below).

Determining the HOST ID of the license server computer

Windows

1. Insert the VERICUT CD into the license server computer's CD-ROM drive.
2. Cancel from the install screen (if it appears).
3. Double-click on the 'hostinfo.bat' file located in the CD's top level directory.

A command prompt window should appear displaying the host name of the computer you are on and the address of all enabled Ethernet devices. Your HOST ID is the Ethernet address displayed in the window. If more than one address is shown choose the one most likely to be always enabled. If no Ethernet address is displayed, enable a network adaptor and try again.

If you do not have access to the VERICUT CD, see [Alternate Method to Determine Your Windows License Server Computer's HOST ID](#).

UNIX

1. Insert the CD into the license server computer's CD-ROM drive.
2. [Mount](#) the CD (if your computer does not automatically mount it).
3. Change directories to the CD-ROM mount directory (e.g. cd /cdrom).
4. Type ./hostinfo.ux to run the program that determines the HOST ID.
5. The HOST ID is the "ID Prom" value returned from the command. Valid HOST IDs are eight characters containing only 0-9 and A-F.

If you do not have access to the VERICUT CD, see [Alternate Method to Determine Your UNIX License Server Computer's HOST ID](#).

Request a VERICUT license

Once you have determined your license server computer's HOST ID, go to the [License Request](#) page on CGTech's website (this link requires an internet connection).

If you are updating the license on your existing license server computer, and your company contact information has not changed, you can use the "**License Quick Form**" link on the license request page.

If you are requesting a license for this computer for the first time, for either a new VERICUT installation or to transfer a license from one computer to another, use the "**License Request Form**" link. You can also use this form to change your company or contact information.

Copy and paste your HOST ID onto the web form to avoid typing errors.

Special Information for Redundant License Server installations

CGTech provides a special license for **Redundant License Servers**. This type of license is typically only used by sites with a large number of VERICUT licenses and users, often residing in different time zones and locations. Use of redundant license servers increases the complexity of the VERICUT installation and requires significant network administration and configuration experience to support and maintain.

A redundant license server configuration requires three (3) HOST ID's from three separate networked computers. Determine the HOST ID's on the 3 license server

To request a redundant license, click on the "**REDUNDANT LICENSE**" link at the top of the "**License Request Form**" web page. The link takes you to the "**Redundant License Request Form**". Enter the 3 HOST ID's on the form.

More information about setting-up a redundant license server is provided in the [Redundant License Server Setup](#) section in this guide.

Next installation task:

Install VERICUT, [Windows](#)

Return to VERICUT [Installation Steps](#)

4. Install VERICUT software on a Windows Stand-alone or License Server Computer

Follow the steps below to install VERICUT software on the Windows (Win7, Win7 64, Vista, Vista64, XP, XP64) computer that will run the license server program. This is the computer with the network adapter HOST ID (Ethernet address) used to create the VERICUT licenses.

NOTE: CGTech recommends you install software as "Administrator," but it is not required.

Some hints on where to install VERICUT

- Your type of VERICUT installation ([Stand-alone, Multiple Computer, or Multiple Computer Network](#)) determines where you should install VERICUT. In both Stand-alone and Multiple Computer types of installations VERICUT is installed on the local disk of each computer that will run VERICUT. In the Multiple Computer Network installation VERICUT is installed once on a network-accessible disk.
- For any Multiple Computer or Network installation, make sure that the computer you choose as the license server computer can be communicated with by all the VERICUT client computers, and vice-versa.
- It is possible to install the license server only, for those configurations where it is not desirable to install VERICUT on the license server computer. See [Install VERICUT License Server Only](#)
- For security purposes we *strongly advise against* running the license server on the same computer that acts as an internet firewall for a local network.

Updating an existing VERICUT installation

If you are **updating** an existing VERICUT installation, **DO NOT** install a new version of VERICUT in the same folder as the existing installation. Always choose a new or empty folder for a VERICUT installation.

DO NOT remove the existing VERICUT software from the license server computer without first [Stopping and Removing the Windows License Server](#). Carefully read and follow the information in the "Next installation task" (link at the bottom of this page) regarding configuring and starting the license server.

Windows Win7 64, Vista 64 and XP 64 Installation Tips

1. It is **not** necessary to install the standard (32 bit) Windows version of VERICUT.
2. You must install the Windows redistributable C++ runtime libraries. See [System Requirements](#) for more information and how to get the installer files.

VERICUT Installation

1. Insert the CD and run the Windows installation program.

If your computer does not automatically start the installation program, double-click on or run the "install.exe" program from the CD.

2. Follow the installation "Wizard".

VERICUT uses a typical "Wizard" type installation where you step through a series of screens to configure your installation. The last choice, prior to the "Finish" screen, begins the installation.

Overview of the installation steps:

- Choose the installation language, then **OK**.
- Read through the Introduction screen, then **Next**.
- Accept the License Agreement then **Next**.
- Specify the folder path where VERICUT will be installed, then **Next**.
- Choose the type of installation. Choose Full (Full is recommended), Partial, Minimal or Custom, then **Next**.
- Select the VERICUT platforms to install. Choose Windows (32 bit) or Windows 64 bit, depending on your operating system.
- Read through the VERICUT Platform Setup screen, then **Next**.
- Select desktop icon and start menu button to add to the installing user's profile. Choose VERICUT, or VERICUT Limited, or Cutter Grinder, or Mold and Die, then **Next**.
- Enter the license server host name (assumes the installing computer's host name, but can be changed), then **Next**.
- Select default units, then **Next**.
- Install VERICUT by pressing the **Install** button.
- When the software install is complete, a screen will display enabling you choose whether or not to display the post-installation configuration instructions, then **Next**. You must have an Internet Browser to display the post-installation configuration instructions.
- Finally press the **Done** button to quit the installer.

Special Information for Redundant License Server configurations

A redundant license server configuration uses three (3) license server computers. One of the license server computers is designated the "leader", the other two are "followers". The redundant license servers are configured in the next step. However, during installation you must enter the license server host name. If you are using redundant license servers you must enter all three host names in the installation screen's text field, in the following format:

hostname1:hostname2:hostname3

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Where "**hostname1**" is the actual host name of the leader (or main) redundant server, and "**hostname2**" and "**hostname3**" are the names of the follower servers.

Next installation task: [Configure and Start the Windows License Server](#)

Return to VERICUT [Installation Steps](#).

5. Configure and Start the License Server

Choose one of the following:

Create the License File and Start the License Server on a Windows Computer – See below.

[Create the License File and Start the License Server on a UNIX Computer](#)

Create the License File and Start the License Server on a Windows Computer

The license server computer runs the license server program. This program must be running on a computer that is network-accessible by VERICUT client computers. Valid VERICUT licenses must be available on the license server in order for The VERICUT software to operate.

VERICUT licensing is specific to each major version of VERICUT (6.2, 7.0, 7.1, etc.). Licensing from earlier major versions will not allow newer versions to run. Point releases, such as 7.0.1, are licensed by the major version. For example, VERICUT 7.0.1 only works with a 7.0 (or higher) license.

The following steps assume that you have a license email from CGTech for this major VERICUT version, and you are ready to configure the license server and apply your license. If you have not requested a license from CGTech, go back to the [Introduction](#) for information about how to request a license.

The license email contains instructions on how to create a license file. Those instructions are repeated here as well. Follow the instructions carefully and **DO NOT ALTER ANY** of the content of the license email. Doing so may invalidate the license file and result in errors when running VERICUT.

VERICUT uses the Sentinel RMS license server program from [SafeNet](#) . The Sentinel RMS license server is a full featured software licensing tool used by several software companies to license their application programs. Sentinel RMS contains optional features not mentioned in this brief discussion of basic license server configuration. For more information about advanced license server configuration options, see the [Sentinel RMS License Manager System Administrator's Guide](#).

Update installation (when a previous version of VERICUT is installed on the license server computer)

If you plan to run multiple VERICUT versions from one license server, configure and use the license server from the latest (newest) version. Be sure to stop the current license server and remove its service, if applicable. See [Stop and Remove a CGTech License Server](#)

If you are running VERICUT Verification version 5.2 or 5.3 from this license server, see the section, [Running VERICUT 5.2 or 5.3 with a newer VERICUT License](#).

Redundant license servers

If you are using a special redundant license server configuration, go to the [Windows Redundant License Server Setup](#) section. **DO NOT CONTINUE** with the rest of this page if you are configuring redundant license servers.

Configure the license server to automatically start as a Windows service (recommended)

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

1. Select Start > All Programs > CGTech VERICUT 7.2 > License Server Only > Configure License & Setup Server.
2. In the command prompt window read the informational messages then press any key to continue.
3. 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.
4. Close the Create VERICUT License File screen after the license file has been created.
5. Continue reading messages displayed in the command prompt screen, press any key to continue.
6. When the command prompt window closes, the license server should be configured for use and you can proceed to the next step.

Verify that the license server started

The license server program should now be running on your computer 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 VERICUT 7.2 > License Administration > SentinelLM License Administrator (Wladmin)**. You should see your license server computer's host name appear under the **Defined Servers** list under the "tree" displayed on the left side of the window. Expand the name to see the VERICUT licenses available.

The VERICUT license server computer is now configured to automatically start the license server program, the VERICUT license keys exist in ...\\windows\\license\\cgtch.if, and the license server program is configured to read VERICUT license keys from the file when it starts.

You should now be able to run VERICUT on the license server computer using licenses provided by the license server.

NOTE: If for some reason you cannot configure the license server service to start automatically as described above, and then see [Starting a Temporary License Server](#).

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Next installation task:

[Test VERICUT on the Windows License Server](#)

Return to VERICUT [Installation Steps](#).

Create the License File and Start the License Server on a UNIX Computer

The license server computer runs the license server program. This program must be running on a computer that is network-accessible by VERICUT client computers. Valid VERICUT licenses must be available on the license server in order for VERICUT to operate.

VERICUT licensing is specific to each major version of VERICUT (5.4, 6.0, 6.1, etc.). Licensing from earlier major versions will not allow newer versions to run. Point releases, such as 6.1.1, are licensed by the major version. For example, VERICUT 6.1.1 only works with a 6.1 (or higher) license.

The following steps assume that you have a license email from CGTech for this major VERICUT version, and you are ready to configure the license server and apply your license. If you have not requested a license from CGTech, go back to the [Introduction](#) for information about how to request a license.

The license email contains instructions on how to create a license file. Those instructions are repeated here as well. Follow the instructions carefully and **DO NOT ALTER ANY** of the content of the license email. Doing so may invalidate the license file and result in errors when running VERICUT.

VERICUT uses the Sentinel RMS license server program from [SafeNet](#). The Sentinel RMS license server is a full-featured software licensing tool used by several software companies to license their application programs. Sentinel RMS contains optional features not mentioned in this brief discussion of a basic license server configuration. For more information about advanced license server configuration options see the [Sentinel RMS License Manager System Administrator's Guide](#).

Update installation (when a previous version of VERICUT is installed on the license server computer)

If you plan to run multiple VERICUT versions from one license server, configure and use the license server from the latest (newest) version. Be sure to stop the current license server and remove its service, if applicable. See [Stop and Remove a CGTech License Server](#)

If you are running VERICUT 5.2 or 5.3 from this license server, see the section, [Running VERICUT Verification version 5.2 or 5.3 with a newer VERICUT License](#).

Redundant license server configuration

If you are using a special redundant license server configuration, go to the [UNIX Redundant License Server Setup](#) section. **DO NOT CONTINUE** with the rest of the steps on this page.

License server configuration, startup and licensing

NOTE: The following must be done logged-in as the computer's 'root' user. Do not 'set user' (su) to root as this does not always correctly execute the root account's login process.

1. Configure and start the License Server.

CGTech recommends you configure the license server program to automatically start when you start your license server computer. The method for doing this depends on your particular UNIX platform and how your system's administrator prefers to manage the computer's startup process. Most UNIX systems use their own graphical system management utility program, such as SAM for HPUX or SMIT for IBM RS6000/AIX, to configure the computer's startup processes.

NOTE FOR UPDATE INSTALLATIONS: Before beginning the license server configuration, be sure to [stop the existing VERICUT license server](#) running on the license server computer. If you have automated the license server startup, remove it from your system's startup configuration using your systems' management utility program. Only one Sentinel RMS license server program may run on a computer.

The VERICUT installation includes a UNIX script that launches the license server program. The script file name is "**start_server**" and is located in the '*platform/license*' directory of your VERICUT installation, where platform is: hp, solaris, or rs. Add this script to the license server computer's startup processes using your platform's system management utility. If your platform's system management utility gives you a choice, add the license server startup after the network services startup.

Reboot the computer after adding the license server program to your system's startup process to verify that it starts correctly upon reboot. If it is not possible to reboot your license server computer now, start the license server program manually using your platform's system management utility.

If it is not possible to start the license server using your system's utilities, in order to complete the licensing process, the 'root' user can manually start the license server program by executing the **start_server** script from a command or terminal shell. However, the server process will be owned by the 'root' user and will terminate when the 'root' user logs-out. Manually starting the license server program in this way is not recommended as a permanent configuration.

Ignore the following warnings if they appear, we will add the license file in the next steps:

Warning: Could not open file "/usr/cgtech70/solaris/license/cgtech.lf"

No applications licensed.

2. Verify the license server started.

The license server program should now be running on your computer and should be configured to automatically start. A utility is provided to detect the license server

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program. The program is called **lswhere** and is located in the *'platform/license'* directory of your VERICUT installation. Execute the **lswhere** program from a command or terminal shell to determine if the license server program is running. For example, if your license server computer is a Sun computer running the SOLARIS operating system, and VERICUT is installed in the **/usr/cgtech60** directory, then type the following command:

```
/usr/cgtech60/solaris/license/lswhere
```

If the license server is running you should see the following information displayed by the **lswhere** utility:

```
Sentinel RMS 8.0.5 Search Tool For License Servers
```

```
Copyright (C) 2006 SafeNet, Inc.
```

```
Server Address   : 199.1.1.123
```

```
Server Name     : mycomputer
```

(in this example the server computer's host name is *'mycomputer'* and its IP address is 199.1.1.123)

3. Copy the license keys from the CGTech license email to a text file.

- A. Open the license email you received from CGTech.
- B. Copy the license keys from the license email. DO NOT copy the entire email text. Start with the line that begins '# Company: ', and select all lines down to and including the line '# End of license '.
- C. Paste the lines into a plain text editor such as vi. Do not use a word processing-type editor like Microsoft Word.
- D. Save the text as a plain text file. Name the file and save it in a directory so that you can easily find it later. For example, save the file as 'vericut60_license_keys.txt' in your default login directory. This file is not used once the license keys are added to the license server in the next step. CGTech recommends you keep the file for archive purposes.

NOTE: When pasting into the plain text editor make sure that the long license key lines are not automatically truncated or split into separate lines.

4. Add the license keys to the license server and license file using **lslic**.

Add the license keys to the running license server and save them in the license file. In a UNIX command or terminal shell execute the **lslic** utility program from the 'platform/license' directory in your VERICUT installation. Continuing with our example from above, the command would look like:

```
/usr/cgtech60/solaris/license/lslic -F  
/users/mylogin/vericut60_license_keys.txt
```

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Where `/usr/cgtech60` is the VERICUT installation folder on a Sun SOLARIS platform. The license keys are loaded from the file saved in step 3D above. The `-F` option adds the keys to the license server from the specified file, and saves them in '`cgtech.lf`' located in the '`platform/license`' directory in your VERICUT installation.

5. Verify the license keys were successfully added to the server.

In a UNIX command or terminal shell execute the 'lsmon' utility program from the 'platform/license' directory in your VERICUT installation. Continuing with our example from above, the command would look like:

```
/usr/cgtech60/solaris/license/lsmon mycomputer
```

Where 'mycomputer' is the host name of the license server computer. If the license keys were correctly applied you should see something like the following information displayed by the lsmon utility:

```
Sentinel RMS 8.0.5 Application Monitor  
Copyright (C) 2006 SafeNet, Inc.
```

```
[Contacting Sentinel RMS server on host "mycomputer"]
```

```
License type           : "Normal License."  
Commuter License Allowed : NO  
Feature name          : "VERICUT.SUN"  
Feature version       : "7.0"  
Max concurrent user(s) : Unlimited.  
Unreserved Tokens in use: 0  
Available unreserved  : Unlimited.  
Reserved Tokens in use : 0  
Available reserved    : 0  
Soft limit on users   : Unlimited.  
  
License start date    : Mon Mar 15 00:00:00 2004  
Expiration date       : License has no expiration.  
Application-server locking : Server-locked license.  
Additive/exclusive    : Exclusive license (overrides additive licenses).  
Held licenses         : Allowed, hold time set by application.
```


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Token lifetime (heartbeat) : 300 secs (5 min(s))

-
-
-

(each license key should be displayed)

The VERICUT license server computer is now configured to automatically start the license server program, the VERICUT license keys exist in `../platform/license/cgtech.lf`, and the license server program is configured to read VERICUT license keys from the file.

You should now be able to run VERICUT on the license server computer using licenses provided by the license server.

If errors occur, visit the [VERICUT Users'Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Next installation task:


[Configure and Test VERICUT on client computers](#)

Return to VERICUT [Installation Steps](#).

6. Test VERICUT Software for Correct Operation and Licensing on the License Server Computer

NOTE: The VERICUT Simulation software is not supported on UNIX computers. If you are using a UNIX computer for the license server computer, skip the following and continue on to [Configure and Test VERICUT on client computers](#).

Run VERICUT using the icon added to your desktop, or by clicking Taskbar: **Start > Programs > CGTech VERICUT x.x > VERICUT x.x** (where "x.x" is the installed version).

After the VERICUT window opens, press the green "**Play to End**" button  (located in the lower right corner of the VERICUT window). A short simulation will run.

If you do not have a "Machine Simulation" license, a notice displays. After pressing **OK** in the notice dialogue, the workpiece will be cut but the machine will not move- this is normal, since no Machine Simulation license is available.

You can check that you are running the expected VERICUT version by selecting **Help > About VERICUT**. Available licenses are displayed by selecting **Help > License ...**

When finished, select **File > Exit** (located in the menu bar in the upper left corner of the VERICUT window) to close the VERICUT window.

Congratulations!

You are finished installing VERICUT on your license server computer.

Continue on to the next step if you have other computers that will run VERICUT and get their licenses from the license server computer you just finished installing.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Next installation task: [Configure and Test VERICUT on client computers](#)

Return to VERICUT [Installation Steps](#).

7. Configure and Test VERICUT on Windows Client Computers

Once VERICUT is installed on the license server computer, and the license server is running, you can setup VERICUT on each Windows client computer. In order to receive licenses from the license server computer the client and license server computers must communicate with each other over the network. Verification of client/server communication was covered in previous instructions. See the section, [Check Windows Network Configuration](#) for more information.

Follow the steps below to configure client computers to run VERICUT and receive licenses from the license server. Steps differ depending on the type of network configuration:

Multiple Computer installation — VERICUT is installed on the local disk of each computer (client and license server) that will run VERICUT.

Multiple Computer Network installation — VERICUT is installed on a network mapped disk. VERICUT is not locally installed on the client computer. The client computer accesses VERICUT from the mapped disk.

NOTE: Do not create a license file or start the license server program on the client computer. The license server computer was configured in previous installation instructions.

To configure client computers in a Multiple Computer installation:

[Install VERICUT](#) on a local disk on each client computer. While stepping through the installation wizard you will see a screen containing the name of the license server computer. By default the license server computer name is set to the host name of the installing computer (in this case a client computer that does not run the license server program).

Change the **License Server** host name to the name of the VERICUT license server computer (where you installed VERICUT and setup the license server previously).

To configure client computers in a Multiple Computer Network installation:


NOTE: From previous steps, VERICUT should currently be installed on a network-accessible disk. This was done during installation and configuration of the license server computer.

1. Map the disk containing VERICUT to each client computer using the same drive letter and folder path as the license server computer.

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2. Copy the file "Shortcut to VERICUT x.x" from the "windows\commands" directory of your VERICUT installation to the desktop of each client computer. Rename the shortcut as desired.
3. Optionally, copy the entire CGTech VERICUT x.x Start Menu folder from the license server computer Start Menu to each client computer's Start Menu.

Test your Windows client installation:

1. Run VERICUT using the icon added to the client computers desktop (or other desktop or Start Menu shortcut you created).
2. After the VERICUT window opens, press the green "Play to End" button  (located in the lower right corner of the VERICUT window). A short simulation will run.
3. If your licensing does not include the "Machine Simulation" option, a notice displays. After pressing OK in the notice dialogue, the workpiece will be cut but the machine will not move- this is normal, since no Machine Simulation license is available.
4. You can also check that you are running the correct VERICUT version and the proper licenses are available by selecting Help > About VERICUT.
5. When finished, select File > Exit (located in the menu bar in the upper left corner of the VERICUT window) to close the VERICUT window.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Your VERICUT Windows installation is now complete.

If you need to configure one of the CAM Interface modules, go to one of the following:

[Configuring the CATIA V5-to-VERICUT Interface for CATIA version 5](#)

[Configuring the EdgeCAM-to-VERICUT Interface](#)

[Configuring the ESPRIT-to-VERICUT Interface](#)

[Configuring the GibbsCam-to-VERICUT Interface \(GibbsV\)](#)

[Configuring the Mastercam-to-VERICUT Interface \(MCAMV\)](#)

[Configuring the NX-to-VERICUT Interface \(NXV\)](#)

[Configuring the Pro/E-to-VERICUT Interface \(PROEV\)](#)

If you need to install the CAD Model Interface modules, go to [Installing the Model Interface Modules](#).

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If you need to install the VERICUT TDM Interface, go to [Installing the VERICUT TDM Systems Interface](#).

Return to VERICUT [Installation Steps](#).

Other Installation Types

Install VERICUT License Server Only

It may be desirable to install only the license server program on the license server computer.

Select to install only the license server program by choosing "**Custom**" on the **Type of Installation** install screen. Then on the **Choose VERICUT Components** install window, check only the "**License**" choice. Continue with the installation as directed. This choice only applies to a Multiple Computer or Multiple Computer Network installation. When installing the VERICUT License Server only, the License Server computer can be either a Windows Computer or a UNIX computer.

Return to VERICUT [Installation Steps](#).

Using Silent Install

Silent Mode

Silent mode, which enables an installer to run without any user interaction, is fully supported on all UNIX platforms. A near-silent mode is possible on Windows. 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 <properties 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 "\$/\$" InstallAnywhere variable, or be escaped.
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 for a silent Partial VERICUT Millimeter windows installation should contain the following:

```
INSTALLER_UI=Silent
USER_INSTALL_DIR=C:/$/cgtech7.1.1
CHOSEN_INSTALL_SET=Partial
VERICUT_PLATFORMS="Windows 32-bit", ""
LICENSE_SERVER_HOSTNAME="LicenseServer"
DEFAULT_BASE_LIC_VAR="1) VERICUT"
DEFAULT_UNITS_VAR="", "2) Millimeter"
USER_INPUT_DESKTOP_FLAG=1
USER_INPUT_QUICK_LAUNCH_FLAG=1
USER_INPUT_PROGRAM_GROUP_FLAG=1
USER_INPUT_ALL_USERS_FLAG=1
USER_INPUT_PROGRAM_GROUP_NAME=CGTech VERICUT 7.1.1
```

An example of an **install.properties** file for a silent Full VERICUT Inch windows installation should contain the following:

```
INSTALLER_UI=Silent
USER_INSTALL_DIR=C:/$/cgtech71
CHOSEN_INSTALL_SET=Full
VERICUT_PLATFORMS="Windows 64-bit", ""
LICENSE_SERVER_HOSTNAME="LicenseServer"
```


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```
DEFAULT_BASE_LIC_VAR="1) VERICUT"  
DEFAULT_UNITS_VAR= "1) Inch", ""  
USER_INPUT_DESKTOP_FLAG=1  
USER_INPUT_QUICK_LAUNCH_FLAG=1  
USER_INPUT_PROGRAM_GROUP_FLAG=1  
USER_INPUT_ALL_USERS_FLAG=1  
USER_INPUT_PROGRAM_GROUP_NAME=CGTech VERICUT 7.1.1  
DEFAULT_UNITS_VAR= "1) Inch", ""
```

NOTES:

1. To install Windows 32 bit platform only:
VERICUT_PLATFORMS="Windows 32-bit", ""
2. To install Windows 64 bit platform only:
VERICUT_PLATFORMS="", "Windows 64-bit"
3. To install both the Windows 32 bit & 64 bit platforms:
VERICUT_PLATFORMS="Windows 32-bit", " Windows 64-bit"
4. Installing on UNIX Platforms:
VERICUT_PLATFORMS="HP - HP-UX", "RS - IBM AIX", "Solaris - Sun Solaris"
5. The following new properties were added in VERICUT 7.1.1 for Silent Installer:
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

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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_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 (**NOTE:** this option requires Administrative privileges). If the option is not specified, it defaults to 0.

`USER_INPUT_PROGRAM_GROUP_NAME=CGTech VERICUT 7.1.1`

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.

Return to VERICUT [Installation Steps](#).

Redundant License Server Setup

Choose one of the following:

Configure Redundant License Servers on Windows Computers – See below.

[Configure Redundant License Servers on UNIX Computers](#)

Configure Redundant License Servers on Windows Computers

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)

- A. Select Start > All Programs > CGTech VERICUT 7.0.x > License Server Only > Save License File from License Email.
- B. 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.

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- C. The Create VERICUT License File screen's text area displays all the added license keys, followed by the message:
- D. "License file C:\cgttech60x\windows\license\cgttech.lf created successfully".
- E. 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.

3. Use **WRlfTool.exe** (located in the \windows\license\ folder of your VERICUT installation) to create the redundant license file.

- A. Run ... \windows\license\WrlfTool.exe.
- B. In the **WRlfTool** panel select **File -> New**.
- C. Press the **Add Server** button (in the upper half of the window).
- D. 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**.
- E. 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.
- F. Press the **Add License** button (in the lower half of the window).
- G. In the Add Redundant License panel, select "Read License(s) from file".
- H. Press **Browse** and navigate to, and select, the **cgttech.lf** file you saved in step 1C above. Press **Open**, and then press **OK**.
- I. 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).
- J. 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.
- K. 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.
- L. 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.
- M. Repeat for each license key.
- N. Press **Done** at the bottom of the panel after the last license key is completed.
- O. Select **File->Save As** and save the redundant license file as "**cgttech.lf**" 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:

1. The license server computer requires TCP/IP network protocol installed on the network adaptor. See the section, [Check Windows Network Configuration](#) 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 VERICUT 7.2 > 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 VERICUT 7.2 > 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.

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- 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 "lsvrvc 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 VERICUT 7.0 > 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 **WlmAdmin** 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\cgttech.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
```

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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 Chapter 3 in the [Sentinel RMS License Manager System Administrator's Guide](#). A pdf version of this document is available directly on the VERICUT CD in the file SLM71sys.pdf.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Next installation task:

[Test VERICUT on the Windows License Server](#)

Return to VERICUT [Installation Steps](#).

Configure Redundant License Servers on UNIX Computers

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 UNIX redundant license server configuration. These steps must be done by a "root" user. The steps assume you have received the license email from CGTech.

1. Save the license email to a text file.

- A. Open the license email you received from CGTech.
- B. Copy the license keys from the license email. **DO NOT** copy the entire email text. Start with the line that begins '# Company: ', and select all lines down to and including the line '# End of license '.
- C. Paste the lines into a plain text editor such as vi. Do not use a word processing-type editor like Microsoft Word.
- D. Save the text as a plain text file. Name the file and save it in a directory so that you can easily find it later. For example, save the file as `/users/mylogin/vericut60_redundant.txt` in your default login directory. This file is not used once the license keys are added to the license server in the next step. CGTech recommends you keep the file for archive purposes.

NOTE: When pasting into the plain text editor make sure that the long license key lines are not automatically truncated or split into separate lines.

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.

3. Use the "rlftool" program (located in the ../platform/license/ folder of your VERICUT installation) to create the redundant license file.

- A. Run `../platform/license/rlftool` in a command or terminal shell.
- B. Using the `rlftool` menus, enter the host name and IP address for the "leader" and "follower" license server computers.

[RLFTOOL MAIN MENU]

Select 1...3: 2 (Add/Delete Server)

[SERVER MENU]

Select 1...3: 1 (Add New Server)

Enter server name: host name

Enter IP(IPX) address of server: IP address

Do you want to add this server?(Y/n): y

(repeat SERVER MENU choices to add the server name and IP address for the second license server computer)

(repeat SERVER MENU choices to add the host name and IP address for the third license server computer)

Select 1...3: 3 (Back to Main Menu).

- C. In the `rlftool` menus, add licenses from the file saved in step 1 above.

[RLFTOOL MAIN MENU]

Select Option (1..12): 7 (Add License)

[ADD LICENSE MENU]

Select Option (1..3): 1 (Pick Licenses from file)

Enter File Name: (enter the path and file name of the file you created in step 1)

Identify and distribute license tokens

After you enter the file name above, information related to the first license key in the file will display. Follow the prompts to assign all the license "tokens" to the "leader" license server computer.

Repeat for each of the license keys in the file.

When finished, enter 3 (Back to Main Menu).

D. Save the redundant license file and exit.

[RLFTOOL MAIN MENU]

Select Option (1..12): 12 (Exit and Save)

The **rlftool** program automatically saves the redundant license file as "**lservrlf**" in your current working directory.

4. Copy the redundant license file to all 3 license server's VERICUT installations.

Copy the file **lservrlf** to **.../platform/license/cgtech.lf** for all 3 redundant license server's VERICUT installations.

5. Modify the start_server script to use a redundant license.

Edit the script file "**.../platform/license/start_server**" in the leader license server's VERICUT installation, where *platform* is: hp, solaris, or rs. Change the following line by replacing the "-s" option with "-rlf".

```
$CGTECH_PRODUCTS/license/lserv -rlf  
$CGTECH_PRODUCTS/license/cgtech.lf
```

6. Configure and Start the "leader" License Server.

CGTech *strongly* recommends you configure the license server program to automatically start when you start your license server computer. The method for doing this depends on your particular UNIX platform and how your system's administrator prefers to manage the computer's startup process. Most UNIX systems use their own graphical system management utility program, such as SAM for HPUX or SMIT for IBM RS6000/AIX, to configure the computer's startup processes.

NOTE FOR UPDATE INSTALLATIONS:

Before beginning the license server configuration, be sure to [stop the existing VERICUT license server](#) running on the license server computer. If you have automated the license server startup, remove it from your system's startup configuration using your systems' management utility program. Only one Sentinel RMS license server program may run on a computer.

Add the **start_server** script to the license server computer's startup processes using your platform's system management utility. If your platform's system management utility gives you a choice, add the license server startup after the network services startup.

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Reboot the leader license server computer after adding the license server program to your system's startup process to verify that it starts correctly upon reboot. If it is not possible to reboot your license server computer now, start the license server program manually using your platform's system management utility.

7. Configure and Start the Remaining 2 "follower" License Servers

Configure and start the license server on the remaining 2 "follower" license servers, as you did for the "leader" license server in the steps 5 and 6.

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 "lservrc not found" may display. This message can be ignored.

8. Verify the license servers started.

All 3 redundant license servers should now be running and should be configured to automatically start. A utility program is provided to detect the license server, called **lswhere**, and is located in the *platform/license* directory of your VERICUT installation. Execute the **lswhere** program from a command or terminal shell to determine if the license server program is running. For example, if your license server computer is a Sun computer running the SOLARIS operating system, and VERICUT is installed in the */usr/cgtech60* directory, then type the following command:

```
/usr/cgtech60/solaris/license/lswhere
```

If the license server is running you should see the following information displayed by the **lswhere** utility:

Sentinel RMS Development Kit 8.0.5.0 Search Tool For License Servers Copyright
(C) 2006 SafeNet, Inc.

```
Server Address   : 199.1.1.123
```

```
Server Name     : mycomputer
```

(in this example the server computer's host name is 'mycomputer' and its IP address is 199.1.1.123)

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All 3 redundant servers should display.

The redundant license server computers are now configured to automatically start the license server program.

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 names by editing the file `.../platform/commands/cgtenv` in each VERICUT installation. Change the line

LSHOST= *hostname1:hostname2:hostname3*; export LSHOST

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 (:).

9. Save the file.

NOTE: For more detailed information about setting up a redundant license server configuration, see Chapter 3 in the [Sentinel RMS License Manager System Administrator's Guide](#). A pdf version of this document is available directly on the VERICUT CD in the file SLM71sys.pdf.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Next installation task:

[Test VERICUT on a UNIX license server computer](#)

Return to VERICUT [Installation Steps](#).

Other VERICUT Configuration Tasks

Windows Start Menu License Administration Choices

The following describe the different Windows "Start Menu" choices under **Start > All Programs > CGTech VERICUT 7.0 > 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 **lswhere** 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 RMS License Manager System Administrator's Guide](#).

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 (WlmAdmin)

View licenses and status of running Sentinel RMS license servers using the Sentinel RMS Windows' license utility **WlmAdmin**. **WlmAdmin** is configured with the VERICUT license server identified during installation as a "**Defined Server**" in **WlmAdmin**'s defined server list. For more information about the **WlmAdmin** utility see the [Sentinel RMS License Manager System Administrator's Guide](#).

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
2. 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:

1. Opens the **Create License** program and instructs the administrator to drag/drop the VERICUT license email into the screen. This creates the '**cgtech.If**' license file in the license folder.
2. Sets the system environment variable **LSERVOPTS** to point to the license file just created.
3. 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).
3. 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.

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The **Create License** panel's text area displays all the added license keys, followed by the message "License file C:\cgttech70\windows\license\cgttech.lf created successfully". The license server program reads the **cgttech.lf** 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 **cgttech.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**

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program to remove the current licenses, then re-reads the license keys in the **cgtech.lf** license file and adds them to the running license server. For more information about the **lslic** program see the [Sentinel RMS License Manager System Administrator's Guide](#).

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

If you do not have access to the VERICUT CD 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:

000000000000

204c4f4f5020

ffffff

ffffffffffff

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 [Check Windows Network Configuration](#) if you are having trouble getting a valid Physical Address.

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

If you do not have access to the VERICUT CD, one of the following commands will display the HOST ID on each of the different UNIX platforms.

HP: /usr/bin/uname -i convert the decimal number that is returned to a hex number

RS: /usr/sbin/hostid returns a nine or ten character number, remove the first 2 characters

(a zero is added to the front of a 9 character Prom ID for the license file)

Solaris: /usr/ucb/hostid use the number as displayed

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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, [Basic Windows Network Configurations](#).

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 stand-alone 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)

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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. A pdf version of this document is available directly on the VERICUT CD in the file SLM71sys.pdf.

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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".

Check UNIX 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. 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.

Verify the 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, but most UNIX systems use the /etc/hosts file to specify host names and IP addresses on a network. 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. In a UNIX terminal shell type:

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ping COMPUTER1

(where 'computer1' is the host name of the computer you want to communicate with)

If the ping command is not found, you can try **/usr/sbin/ping**.

Different UNIX systems produce different results from the ping command. If the computers can communicate you will see something simple like:

COMPUTER1 is alive

Or, you may see a stream of data 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

.

.

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.

If you do not have a network or system administrator, and you have access to the 'root' login, you can modify the **/etc/hosts** file in order to establish communication between the license server computer and the client computers. See the section, [UNIX hosts File](#) for basic hosts file configuration instructions.

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 computers. 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.

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UNIX Hosts File

For server/client communication each computer must have an entry the other computer's "hosts" file. The lack of an entry in the **hosts** file is the most common reason the "ping" command fails to communicate.

The **hosts** file is typically configured using the computer's management utility program, such as SAM on HPUX or SMIT on IBM RS6000. However, if these programs are unavailable, and the network configuration is simple (ie does not use other network services), it is possible to edit each computer's **hosts** file, typically located in **/etc/hosts**.

NOTE: This file can only be modified by a "root" user.

Edit the **/etc/hosts** file

On the license server computer, open the **/etc/hosts** file in a plain text editor, such as vi.

If the host name of the client computer(s) do not exist, add a line for each client. The **hosts** file is a simple plain text file with each line consisting of a computer's IP address and host name, as follows:

```
127.0.0.1    localhost
199.1.2.100  computer1
199.1.2.101  computer2
```

Edit the **/etc/hosts** file for each client computer, adding a line for the license server computer.

NOTE: If you do not know the IP address of the license server computer, you can use the ping command while logged-in on the license server computer. In a terminal or command shell, type:

```
ping mycomputer
```

Where 'mycomputer' is the name of the license server computer.

If **ping** is not in your execution path, you can try **/usr/sbin/ping**. If the **ping** command does not display the IP address of the license server computer, try **ping** with the **-s** option.

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, but most UNIX system use the **/etc/hosts** file to specify host names and IP

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addresses on a network. 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. In a UNIX terminal shell type:

ping COMPUTER1

(where 'computer1' is the host name of the computer you want to communicate with)

If the ping command is not found, you can try **/usr/sbin/ping**.

Different UNIX systems produce different results from the **ping** command. If the computers can communicate you will see something simple like:

COMPUTER1 is alive

Or, you may see a stream of data 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=41ms TTL=127

.
.

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.

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. A pdf version of this document is available directly on the VERICUT CD in the file SLM71sys.pdf.

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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. NX 4, 5, or 6 must be installed on the computer that's running VERICUT.
2. 32 bit NX must be run with 32 bit VERICUT or 64 bit NX with 64 bit VERICUT.
3. An NX license must be available.

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Mount a UNIX CD

The CD-ROM drive must be mounted with "read" and "execute" access to run the VERICUT installation program. Some systems, may automatically mount the CD without the proper access and must be dismounted and re-mounted manually

To see if your CD-ROM drive is mounted with proper access:

- Use the "df" command to list mounted file systems. If mounted, the device name will appear under the "Filesystem" heading (beginning with "/dev") and the mount directory will appear under the "Mounted on" heading (e.g. "/cdrom" or "/CDROM").
- If /cdrom has "read" and "execute"— return to the previous installation task.
- If /cdrom does NOT have "read" and "execute — Unmount the incorrectly mounted device using the "umount /CDROM" command.

Mounting UNIX CD-ROM drives with "read" and "execute" access:

In the example mount commands below "/cdrom" represents the mount directory for the CD-ROM drive. Substitute "#" with the SCSI ID of your CD-ROM drive. After mounting, verify the device is mounted via the "df" command, as described above.

Tips:

- Avoid typing errors by cutting and pasting device names.
- If the "mount" command is not in your execution path, try "/etc/mount".

Computer Type	UNIX mount command
HP	See HPUX CD Mounting Instructions below.
IBM	mount -vcdarfs -r /dev/cd0 /cdrom (or use SMIT to mount)
Solaris	Volume Manager should auto-mount the CD. If not, try: mount -r -F hsfs /dev/dsk/c0t#d0s2 /cdrom

HPUX CD Mounting Instructions

VERICUT's CD installation on HPUX requires the CD to be mounted with Rockridge extensions. Use the following commands to mount the VERICUT CD:

1. Make sure the directory containing the PFS utilities (/usr/sbin) is in your execution PATH.
2. Edit (or create) the /etc/pfs_fstab file to contain a line like this:

```
<device> <mount_dir> pfs-rrip xlat=rrip 0 0
```

Where:

<device> is the path to your CD-ROM drive (e.g. /dev/dsk/c1t2d0)

<mount_dir> is the path to an *existing* directory where the CD-ROM will be mounted (e.g. /rr_cdrom)

3. Type the following in a command shell:

```
# nohup pfs_mountd &  
# nohup pfsd 4 &
```

NOTE: To permanently enable Rockridge these daemons can be started from an rc script.

4. Mount the drive with the command:

```
pfs_mount <device> | <mount_dir>
```

You can now continue with the VERICUT installation. When you are finished with the install you can unmount the CD with:

```
pfs_umount <device> | <mount_dir>
```

Additional information on mounting a CD with Rockridge extension on HPUX can be found at <http://www.faqs.org/faqs/hp/hpux-faq/section-87.html>.

Return to VERICUT [Installation Steps](#).

Move Your License Server to Another Computer

Choose one of the following:

Move Windows License Server – See below.

[Move UNIX License Server](#)

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 Verification [Installation Steps](#) to install VERICUT on the new license server computer.
4. Follow the VERICUT [Installation Steps](#) to install VERICUT on the new license server computer.
5. [Modify VERICUT client computer installations](#) to use the newly installed license server computer.

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

Return to VERICUT [Installation Steps](#).

Move UNIX License Server

It is sometimes desirable or necessary to move your VERICUT license server to a different license server computer, due to hardware upgrades or network changes. To change license servers 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 UNIX License Server](#).
3. Follow the [Installation Steps](#) to install VERICUT on the new license server computer.
4. [Modify VERICUT client computer installations](#) to use the newly installed license server computer.
5. Do step 4 for each VERICUT or VERICUT Composite Software installation in your network.

Return to VERICUT [Installation Steps](#).

Modify VERICUT to Use a Different License Server Computer

Choose one of the following:

Modify VERICUT on Windows to Use a Different License Server Computer – See below.

[Modify VERICUT on UNIX to Use a Different License Server Computer](#)

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 x.x > License 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**.

Return to VERICUT [Installation Steps](#).

Update an Existing License

Choose one of the following:

Update a License on Windows License Server – See below.

[Update a License on UNIX License Server](#)

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):

1. Create the license file from the license email or saved text file.

- A. Select **Start > All Programs > CGTech VERICUT 7.0 > 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.

2. Update the licenses on the running license server.

Select **Start > All Programs > CGTech VERICUT 7.0 > 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 VERICUT 7.0 > License Utilities > Display Local License Servers**. Your server's Host Name should appear in the resulting panel.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

Update a License on UNIX 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 the Request a VERICUT License instructions in the section [Determine the HOST ID and Request a License](#). To update your VERICUT license on a UNIX license server, do the following (on the license server computer):

1. Copy the license keys from the CGTech license email to a text file.

- A. Open the license email you received from CGTech.
- B. Copy the license keys from the license email. DO NOT copy the entire email text. Start with the line that begins '# Company: ', and select all lines down to and including the line '# End of license '.
- C. Paste the lines into a plain text editor such as vi. Do not use a word processing-type editor like Microsoft Word.
- D. Save the text as a plain text file. Name the file and save it in a directory so that you can easily find it later. For example, save the file as **'vericut70_license_keys.txt'** in your default login directory. This file is not used once the license keys are added to the license server in the next step. CGTech recommends you keep the file for archive purposes.

NOTE: When pasting into the plain text editor make sure that the long license key lines are not automatically truncated or split into separate lines.

2. Add the license keys to the license server and license file using lslic.

Add the license keys to the running license server and save them in the license file. In a UNIX command or terminal shell execute the **'lslic'** utility program from the **'platform/license'** directory in your VERICUT installation. Continuing with our example from above, the command would look like:

```
/usr/cgtech70/solaris/license/lslic -F /users/mylogin/vericut70_license_keys.txt
```

Where **/usr/cgtech70** is the VERICUT installation folder on a Sun SOLARIS platform.

The license keys are loaded from the file saved in step 1D above. The **-F** option adds the keys to the license server from the specified file, and saves them in **'cgtech.lf'** located in the **'platform/license'** directory in your VERICUT installation.

3. Verify the license keys were successfully added to the server.

In a UNIX command or terminal shell execute the **'lsmon'** utility program from the **'platform/license'** directory in your VERICUT installation. Continuing the example from above, the command would look like:

```
/usr/cgtech70/solaris/license/lsmon mycomputer
```

Where **'mycomputer'** is the host name of the license server computer. If the license keys were correctly applied you should see something like the following information displayed by the lsmon utility:

```
Sentinel RMS Development Kit 8.0.5.0 Application Monitor  
Copyright (C) 2006 SafeNet, Inc.
```

```
[Contacting Sentinel RMS server on host "mycomputer"]
```

```
License type           : "Normal License."  
Commuter License Allowed : NO  
Feature name          : "VERICUT.SUN"  
Feature version       : "7.0"  
Max concurrent user(s) : Unlimited.  
Unreserved Tokens in use: 0  
Available unreserved   : Unlimited.  
Reserved Tokens in use : 0  
Available reserved     : 0  
Soft limit on users    : Unlimited.  
  
License start date     : Mon Mar 15 00:00:00 2007  
Expiration date        : License has no expiration.  
Application-server locking : Server-locked license.  
Additive/exclusive     : Exclusive license(overrides additive licenses).  
Held licenses          : Allowed, hold time set by application.  
Token lifetime (heartbeat) : 300 secs (5 min(s))
```

```
.  
.
```

(each license key should be displayed)

Installing CGTech Products

Your VERICUT license is now updated.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

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 VERICUT 7.0 > 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 [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

Stop and remove a UNIX license server

NOTE: The following must be done logged-in as the computer's 'root' user. Do not 'set user' (su) to root as this does not always correctly execute the root account's login process.

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.

As "root", stop the active license server via the "**stop_server**" command file located in the "*platform/license*" directory of your VERICUT software installation, where "*platform*" is one of the following: hp, rs, or solaris.

If the license server was configured to automatically start at system boot-up, use your system management utility to remove the license server startup from your systems boot-up sequence.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

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 VERICUT 7.2 > 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 [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

Starting a Temporary UNIX License Server

NOTE: The following must be done logged-in as the computer's 'root' user. Do not 'set user' (su) to root as this does not always correctly execute the root account's login process.

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 your UNIX system manager's utility. If for some reason you cannot configure the license server to start automatically, then it can be temporarily started.

The VERICUT installation includes a UNIX script that launches the license server program. The script file name is "**start_server**" and is located in the '*platform*/license' directory of your VERICUT installation, where platform is: hp, solaris, or rs.

To start the license server temporarily:

1. Open a command shell.
2. Execute the **start_server** script from a command or terminal shell.

```
.../cgtch72/platform/license/start_server
```

NOTE: The temporary license server process is owned by the "root" user that starts it. When that user logs-out, the license server program terminates.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).

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:

1. Remove the license server service by selecting **Start > All Programs > CGTech VERICUT 7.0 > License Server Only > Remove License Server Service**. Do this **BEFORE** uninstalling!
2. Uninstall 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.

To remove VERICUT software from a UNIX computer:

1. Stop the license server program by executing the **../cgtexx.x/platform/license/stop_server** script in the VERICUT installation being removed. Where "x.x" is the VERICUT version and "platform" is the UNIX platform type. Do this **BEFORE** uninstalling!
2. Change to the directory above where VERICUT was installed. For example, if installed in **"/usr/cgtex60"**, then type: **cd /usr**
3. Remove (delete) the entire tree of directories and files beginning with the CGTech installation directory, for example: **"rm -r cgtex60"**

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.

Return to VERICUT [Installation Steps](#).

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 7.1.6 as an example below):

Download Instructions:

The VERICUT 7.1.6 Windows version (Windows Win7, Win7 64, XP, and XP64) 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/usa/support/software-update/>

To download the file, you will need your Company ID and the access code from the "VERICUT 7.1.6 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 7.1.6 is available for download" email.

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

Return to VERICUT [Installation Steps](#).

Install Microsoft redistributable C++ Run-Time Libraries

VERICUT on Win7 64, Vista 64 and XP 64 will likely 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. To install the 32 bit version of the libraries use the `vc redistrib_x86.exe` installer.

To install the libraries:

Get the `vc redistrib_x64.exe` installer:

The redistributable C++ run-time is available

- On the VERICUT DVD. The file name is `vc redistrib_x64.exe`.
- In the VERICUT installation in
C:\Program Files\cgttech\7.2\redist\vc redistrib_x64.exe,
where "C:\Program Files\cgttech\7.2\" is your installation location.
- Download from CGTech's download site at:
<http://download.cgttech.com/public/redistributables.zip>

Installation:

Double-click on **vc redistrib_x64.exe** to install. There are no prompts during installation and no confirmation of completion. You must have Administrator privileges to do the install.

Return to VERICUT [Installation Steps](#).

Running VERICUT 5.2 or 5.3 with the current VERICUT License Server

VERICUT 5.2 and 5.3 require an environment variable setting to specify the version of the license file.

NOTE: VERICUT 5.2.1 (or higher) is required if you want to use a later version license, such as a 5.3 or 5.4 license.

For example, to run VERICUT 5.2.1 using a later VERICUT license, such as 5.4, the environment variable **CGTECH_LICENSE_VERSION** must be set to the value "5.4". This can be done by modifying the following file:

`\cgtch521\windows\commands\cgtenv.bat` (or the UNIX '`cgtenv`') Either add or modify the following line at the end of the file:

WINDOWS

set CGTECH_LICENSE_VERSION=5.4

UNIX

CGTECH_LICENSE_VERSION=5.4; export CGTECH_LICENSE_VERSION

Return to VERICUT [Installation Steps](#).

Configuring CAD/CAM to VERICUT Interfaces

Choose the interface you want to configure from the following:

[CATIA V5-to-VERICUT Interface for CATIA version 5](#)

[EdgeCAM-to-VERICUT Interface](#)

[ESPRIT-to-VERICUT Interface](#)

[GibbsCam-to-VERICUT Interface \(GibbsV\)](#)

[Mastercam-to-VERICUT Interface \(MCAMV\)](#)

[NX-to-VERICUT Interface \(NXV\)](#)

[Pro/E-to-VERICUT Interface \(PROEV\)](#)

Configuring the CATIA V5-to-VERICUT Interface

Prerequisites

CATV 7.0 requires CATIA V5 (R16 or later) and VERICUT 7.0 (or later). It is only available for the 32bit and 64bit Windows platforms.

It also requires two elements of Windows.

1. "Windows Script" should be version 5.6 or later. The latest version of Windows Script is available from Microsoft's [download site](#). Search for "Windows Script" and pick the latest version offered. Note that there is one download for Windows 2000 and XP, and another for 98, ME and NT.
2. Two dynamic link libraries, FM20.dll and FM20ENU.dll, which are distributed with Microsoft Office. If some portion of Office is installed then FM20.dll and FM20ENU.dll should already be present (in the "Windows\System32" folder or an equivalent) and registered.

Configuration

The CGTech software installation procedure places the files required by CATV in a sub-folder. If you elected to install the software in the default folder "C:\Program Files\cgttech\x.x.x\" (where x.x.x is the VERICUT release number), then for VERICUT 7.14, the CATV folder will be "C:\Program Files\cgttech\7.14\windows\catv5" or "C:\Program Files\cgttech\7.14\windows64\catv5".


One of the files is "CATV.bat", which sets at least two environment variables before invoking the executable "CATV.exe". The first environment variable is **CGTECH_PRODUCTS** and it points to the platform specific folder of the CGTech software. For CATV the platform is either "windows" or "windows64". The second environment variable is **CGTECH_LIBRARY** and it points to the folder containing VERICUT specific files distributed with the product. These include "init.VcProject" and "initm.VcProject" which are used by "CATV.exe" as project and setup templates if no other file is specified by the user. "CATV.bat" is generated during the installation procedure and there should be no need to edit the definition of either of these mandatory environment variables.

The first of the optional environment variables in the batch file is **CGTECH_CATV_LANGUAGE**. If you want CATV's interface to use something other than US English, the variable can specify a file of localized text. Versions for French and German are supplied.


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The second optional environment variable is **CGTECH_CATV_FOLDER**. **CATV** generates a number of files when it communicates the details of a CATIA CATProcess file to **VERICUT**. These include tool libraries, STL or VRML model files, and NC programs in APT or G-Code. Normally **CATV** will offer to place these files in the same folder as the CATProcess file. You can override this behavior interactively, but if you typically want all generated files to be placed in a single (perhaps temporary) folder, you can use this environment variable to specify it.


You can place a shortcut to the **CATV** batch file on your Windows Desktop. If you do so, we suggest that you alter the properties of the shortcut so that it runs in a minimized window. This will avoid having an almost empty command window on screen for the batch process. An alternative is to trigger the batch file from an icon on one or more of CATIA's toolbars. To assist in setting this up, there is a CATIA macro script in the CATV5 folder, called "CATV.CATScript". There are two icon files in sub-folders, "Small\I_CATV.bmp" and "Normal\I_CATV.bmp".

If you wish to have an icon () on a CATIA toolbar, the two icon files must be placed where CATIA expects to find them. The paths depend on where you have CATIA installed, but typically you will find a "small" and "normal" folder under "C:\Program Files\Dassault Systemes\B16\intel_a\resources\graphic\icons". Place the two versions of the **CATV** icon, both called "I_CATV.bmp", in the appropriate folders.

Adding the **CATV** icon () to a CATIA 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 **CATV** icon.
3. Pick "Tools" > "Macro" > "Macros" from CATIA'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\cgttech\7.1.4\windows\catv5").
7. "Close" the "Macro Libraries" dialog.
8. "Close" the "Macros" dialog.
9. Pick "Tools" > "Customize ..." from CATIA'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 **CATV** (). 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

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- brief period. The **CATV** 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.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the CATIA V5-to-VERICUT Interface. For complete details on using the CATIA V5-to-VERICUT Interface, see **CATIA V5-to-VERICUT Interface**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the Edgecam-to-VERICUT Interface

Choose the version you want to configure:

Edgecam-to-VERICUT Interface (Edgecam 10) – See below.

[Edgecam-to-VERICUT Interface \(Edgecam 11, 11.5 & 12\)](#)

[Edgecam-to-VERICUT Interface \(Edgecam 12.5, 2000 R1 & 2009 R2\)](#)

Configuring the Edgecam-to-VERICUT Interface (Edgecam 10)

Six files are required by the VERICUT interface in an existing Edgecam 10.0 system. Four of these files are language dependent and must be copied from the appropriate English, French, or German folder. The distributed files are:

VericutPDI.exe

VericutSetPDI.exe

VericutPDI.dfn (language dependent)

VericutPDI.pdi (language dependent)

VericutSetPDI.pdi (language dependent)

VericutPDI.lan (language dependent)

These files are located in the \cgtch\x.x.x\windows\edgecam or \cgtch\x.x.x\windows64\edgecam folder of your VERICUT installation. The x.x.x represents the VERICUT version number. For VERICUT 7.1.4 the x.x.x would be 7.1.4.

Assuming EdgeCAM is installed at C:\Program Files\Edgecam , move the following files to the EdgeCAM folders indicated.

C: \Program Files\Edgecam\Cam\pdi\Menu-Run\VericutPDI.exe (Vericut interface PDI executable)

C: \Program Files\Edgecam\Cam\pdi\Menu-Run\ VericutSetPDI.exe (Reset PDI executable)

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C:\Program Files\Edgecam\Cam\pdi\src\VericutPDI.pdi (Vericut interface dialog definition)

C:\Program Files\Edgecam\Cam\pdi\src\ VericutSetPDI.pdi (Vericut Reset dialog definition)

C:\Program Files\Edgecam\Language\VericutPDI.dfn (Drop down menu definition)

C:\Program Files\Edgecam\Language\VericutPDI.lan – Language specific file

Edgecam checks file dates of "dfn" and "pdi" each time it executes and updates the master menu file when new files are detected. The file date for the VericutPDI.dfn, VericutPDI.pdi, and VericutSetPDI.pdi files must be newer than the last time Edgecam updated its master menu file. After moving the above files to their proper locations, use a text editor to force the VericutPDI.dfn, VericutPDI.pdi, and VericutSetPDI.pdi file dates to a current value. You only need to do this once before starting Edgecam.

The folder path where VERICUT is installed must be defined in an environment variable for the Edgecam interface PDI to spawn the VERICUT process.

For example

```
CGTECH_INSTALL=C:\Program Files\cgttech\x.x.x\
```

Where *x.x.x* is the VERICUT release number. For VERICUT 7.1.4 the environment variable would be set to `CGTECH_INSTALL=C:\Program Files\cgttech\7.1.4\`.

The following is included to enable you to create a .bat file that, when executed, copies the necessary VERICUT-to-EdgecamInterface files from the VERICUT installation to the correct Edgecam locations and renames the Edgeknl.mnu to be Edgeknl.old thus forcing Edgecam to recompile its menus.

Creating the Edgecam_Inst.bat file:

1. Copy the lines shown below to a text file.
2. Edit the file locations in the top of the .bat file as necessary
3. Save the text file as Edgecam_Inst.bat
4. Copy the Edgecam_Inst.bat file to the VERICUT \commands\ directory

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@echo on

rem Following line references the installation folder for VERICUT, change as required.

set CGTECH_INSTALL=C:\Program Files\cgttech\x.x.x\

rem Where x.x.x is the VERICUT version number.

rem Where EdgeCAM is installed, change as required

set EDGECAM_INSTALL="C:\Program Files\EdgeCAMV10"

Copy %CGTECH_INSTALL%\windows\edgecam*.exe

%EDGECAM_INSTALL%\Cam\PD\Menu-Run

Copy %CGTECH_INSTALL%\windows\edgecam\English\vericutpdi.lan

%EDGECAM_INSTALL%\Language

Copy %CGTECH_INSTALL%\windows\edgecam\English\VericutPDI.dfn

%EDGECAM_INSTALL%\Language

Copy %CGTECH_INSTALL%\windows\edgecam\English\VericutPDI.pdi

%EDGECAM_INSTALL%\Cam\PD\Src

Copy %CGTECH_INSTALL%\windows\edgecam\English\VericutPDI.dfn

%EDGECAM_INSTALL%\Cam\PD\Src

Rem Next line forces EdgeCAM to rebuild its menu file

Ren %EDGECAM_INSTALL%\Language\EdgeKrnl.mnu EdgeKrnl.old

pause

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the Edgcam-to-VERICUT Interface. For complete details on using the Edgcam-to-VERICUT Interface, see **Edgcam-to-VERICUT Interface**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the Edgcam-to-VERICUT Interface (Edgcam 11, 11.5 & 12)

Seven files are required for the VERICUT interface in an existing Edgcam system. Four of these files are language dependent and must be copied from the appropriate English, French, or German folder.

The distributed files are:

- VericutPDI.exe
- VericutSetPDI.exe
- VericutPDI.dfn (language dependent)
- VericutPDI.pdi (language dependent)
- VericutSetPDI.pdi (language dependent)
- VericutPDI.lan (language dependent)
- Vericut.commands

These files are located in the `\cgtch\x.x.x\windows\edgcam` or `\cgtch\x.x.x\windows64\edgcam` folder of your VERICUT installation. The *x.x.x* represents the VERICUT version number. For VERICUT 7.1.4 the *x.x.x* would be 7.1.4.

Assuming Edgcam is installed at `C:\Program Files\Edgcam`, move the following files to the Edgcam folders indicated.

`C:\Program Files\Edgcam\Cam\pdi\Menu-Run\VericutPDI.exe` (Vericut interface PDI executable)

`C:\Program Files\Edgcam\Cam\pdi\Menu-Run\ VericutSetPDI.exe` (Reset PDI executable)

`C:\Program Files\Edgcam\Cam\pdi\src\VericutPDI.pdi` (Vericut interface dialog definition)

`C:\Program Files\Edgcam\Cam\pdi\src\ VericutSetPDI.pdi` (Vericut Reset dialog definition)

`C:\Program Files\Edgcam\Cam\Support\ Vericut.commands`

`C:\Program Files\Edgcam\Language\VericutPDI.dfn` (Drop down menu definition)

`C:\Program Files\Edgcam\Language\VericutPDI.lan` – Language specific file

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Edgecam checks file dates of "dfn" and "pdi" each time it executes and updates the master menu file when new files are detected. The file date for the VericutPDI.dfn, VericutPDI.pdi, and VericutSetPDI.pdi files must be newer than the last time EdgeCAM updated its master menu file. After moving the above files to their proper locations, use a text editor to force the VericutPDI.dfn, VericutPDI.pdi, and VericutSetPDI.pdi file dates to a current value. You only need to do this once before starting EdgeCAM.

The folder path where VERICUT is installed must be defined in an environment variable for the Edgecam interface PDI to spawn the VERICUT process.

For example:

```
CGTECH_INSTALL=C:\Program Files\cgttech\x.x.x\
```

Where *x.x.x* is the VERICUT release number. For VERICUT 7.1.4 the environment variable would be set to `CGTECH_INSTALL=C:\Program Files\cgttech\7.1.4\`.

The following is included to enable you to create a .bat file that, when executed, copies the necessary VERICUT-to-Edgecam Interface files from the VERICUT installation to the correct Edgecam locations and renames the Edgekrnl.mnu to be Edgekrnl.old thus forcing Edgecam to recompile its menus.

Creating the Edgecam_Inst.bat file:

1. Copy the lines shown below to a text file.
2. Edit the file locations in the top of the .bat file as necessary
3. Save the text file as Edgecam_Inst.bat
4. Copy the Edgecam_Inst.bat file to the VERICUT \commands\ directory

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The lines shown below need to be copied to the Edgecam_Inst.bat file (watch line wrap):

```
@echo on

rem Following line references installation folder for VERICUT

set CGTECH_INSTALL=C:\Program Files\cgttech\x.x.x\
rem Where x.x.x is the VERICUT version number.

rem Where EdgeCAM is installed

set EDGECAM_INSTALL="C:Program FilesEdgeCAM"

Copy %CGTECH_INSTALL%windowsedgecam*.exe
%EDGECAM_INSTALL%CamPDIMenu-Run

Copy %CGTECH_INSTALL%windowsedgecamEnglishvericutpdi.lan
%EDGECAM_INSTALL%Language

Copy %CGTECH_INSTALL%windowsedgecamEnglishVericutPDI.dfn
%EDGECAM_INSTALL%Language

Copy %CGTECH_INSTALL%windowsedgecamEnglishVericutPDI.pdi
%EDGECAM_INSTALL%CamPDISrc

Copy %CGTECH_INSTALL%windowsedgecamEnglishVericutPDI.dfn
%EDGECAM_INSTALL%CamPDISrc

Ren %EDGECAM_INSTALL%LanguageEdgeKrnl.mnu EdgeKrnl.old

pause
```

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the Edgecam-to-VERICUT Interface. For complete details on using the Edgecam-to-VERICUT Interface, see **Edgecam-to-VERICUT Interface**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the Edgecam-to-VERICUT Interface (Edgecam 12.5, 2009 R1, 2009 R2 & 2011)

Five files are required for the VERICUT interface in an existing Edgecam system. Four of these files are language dependent and must be copied from the appropriate English, French, or German folder.

The distributed files are:

VericutPDI.exe	
VericutPDI.dfn	(language dependent)
VericutPDI.pdi	(language dependent)
VericutPDI.lan	(language dependent)
Vericut.commands	

These files are located in the `\cgtch\x.x.x\windows\edgecam` or `\cgtch\x.x.x\windows64\edgecam` folder of your VERICUT installation. The *x.x.x* represents the VERICUT version number. For VERICUT 7.1.4 the *x.x.x* would be 7.1.4.

Assuming Edgecam is installed at `C:\Program Files\Edgecam`, copy the following files to the Edgecam folders indicated.

`C:\Program Files\Edgecam\Cam\pdi\Menu-Run\VericutPDI.exe` (Vericut interface PDI executable)

`C:\Program Files\Edgecam\Cam\pdi\src\VericutPDI.pdi` (Vericut interface dialog definition)

`C:\Program Files\Edgecam\Cam\Support\ Vericut.commands`

`C:\Program Files\Edgecam\Language\VericutPDI.dfn` (Drop down menu definition)

`C:\Program Files\Edgecam\Language\VericutPDI.lan` – Language specific file

Edgecam checks file dates of "dfn" and "pdi" each time it executes and updates the master menu file when new files are detected. The file date for the VericutPDI.dfn and VericutPDI.pdi files must be newer than the last time Edgecam updated its master menu file. After moving the above files to their proper locations, use a text editor to force the VericutPDI.dfn and VericutPDI.pdi file dates to a current value. You only need to do this once before starting Edgecam.

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To enable the Edgecam interface PDI to spawn the VERICUT process, you also need to define three environment variables, **CGTECH_INSTALL**, **CGTECH_PRODUCTS** and **LSHOST**.

For example;

Environment Variable Name	Variable Value
CGTECH_INSTALL	C:\Program Files\cgttech\x.x.x
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows or C:\Program Files\cgttech\x.x.x\windows64
LSHOST	<i>server_name</i>


CGTECH_INSTALL is set to the top level folder where VERICUT is installed. In the above table, *x.x.x* represents the VERICUT release number. For VERICUT 7.1.4 the environment variable would be set to C:\Program Files\cgttech\7.1.4.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: either "windows" or "windows64". For a typical VERICUT 7.1.4 installation this variable is set to C:\Program Files\cgttech\7.1.4\windows or C:\Program Files\cgttech\7.1.4\windows64.

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

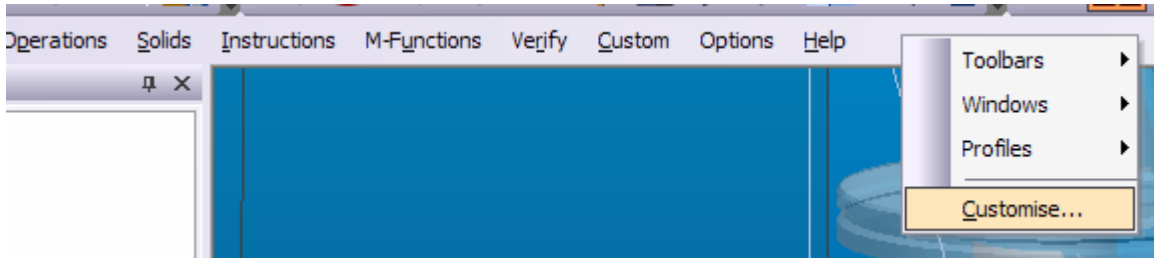
Use the Microsoft Windows **Control Panel > System Properties: Advanced tab, Environment Variables** feature to define these environment variables. See Microsoft Windows Help for more information.

To add an Edgecam-to-VERICUT menu option to the Edgecam main menu bar, complete the following:

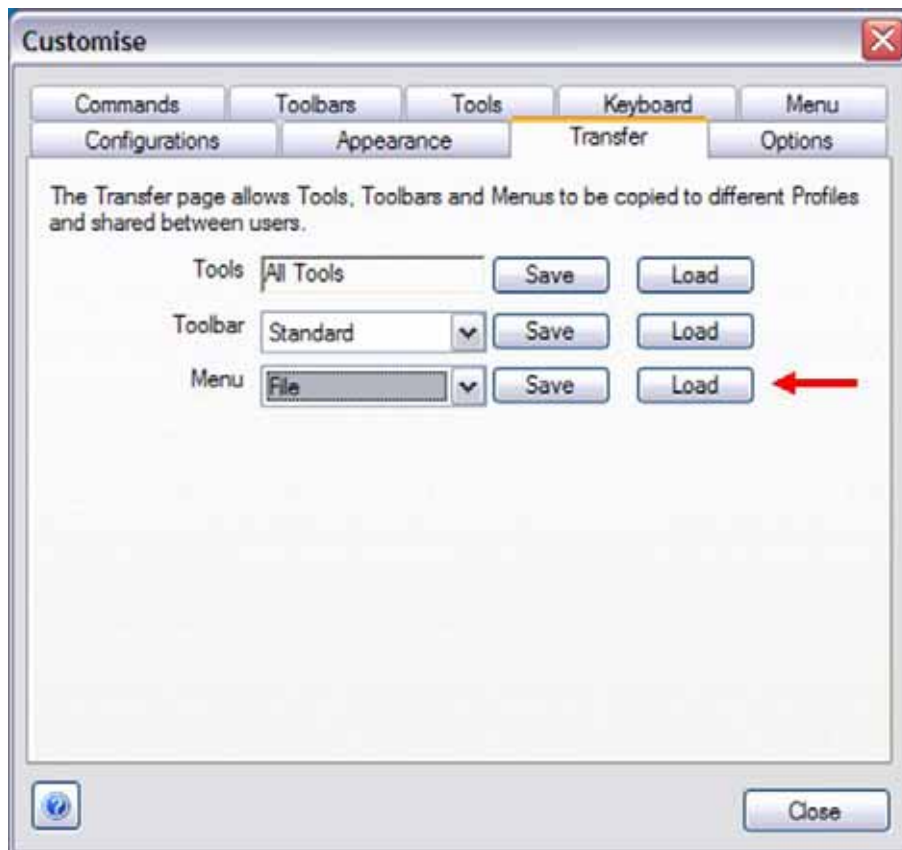
1. Start Edgecam
2. Open an Edgecam part with an existing machining sequence.
3. In the Edgecam main menu bar select **Options > Manufacture**, or click on the  (**Switch to Manufacture Mode**) icon to switch to manufacturing mode.

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- Once in Manufacturing mode, right click on the menu bar and choose **Customise** from the pull-down list.

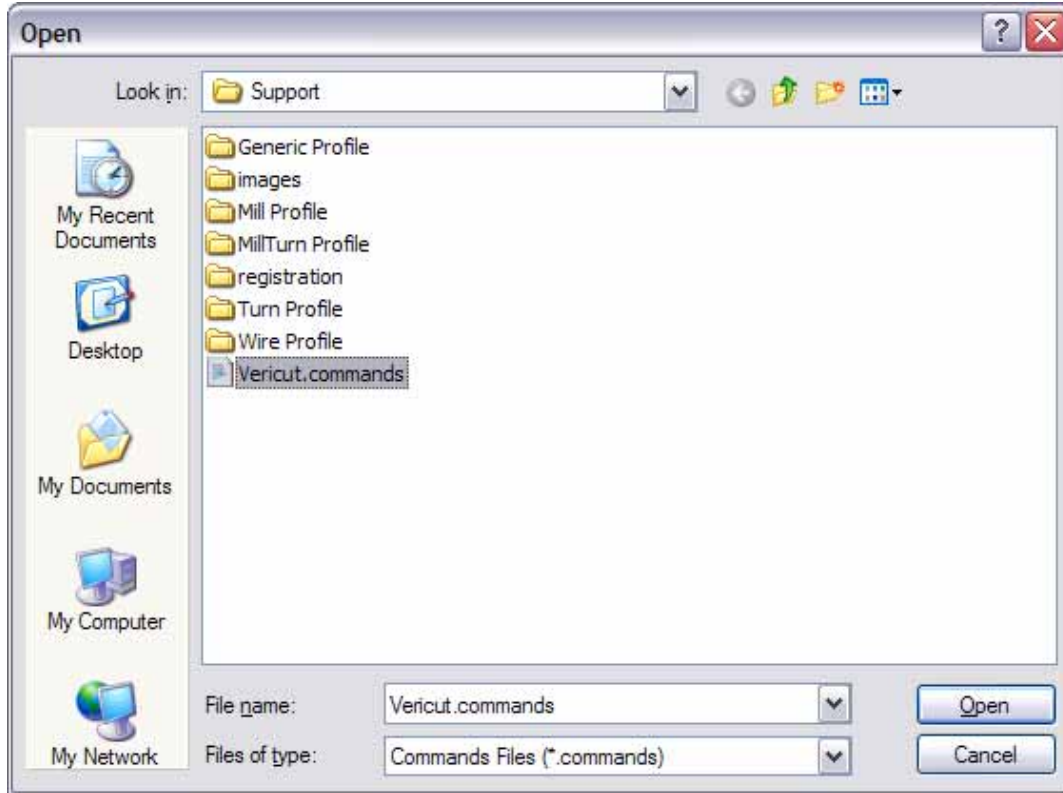


- Select the **Transfer** tab and click on the Menu option, **Load** button.



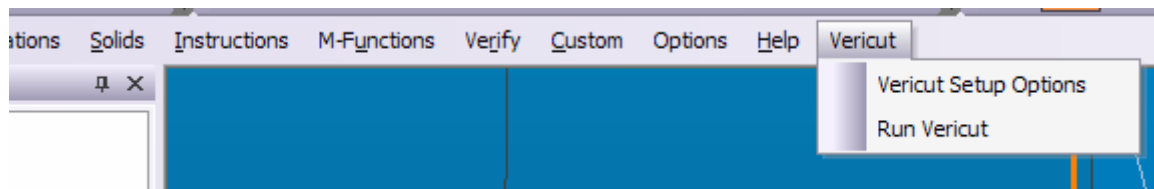
Installing CGTech Products

The following window should display.



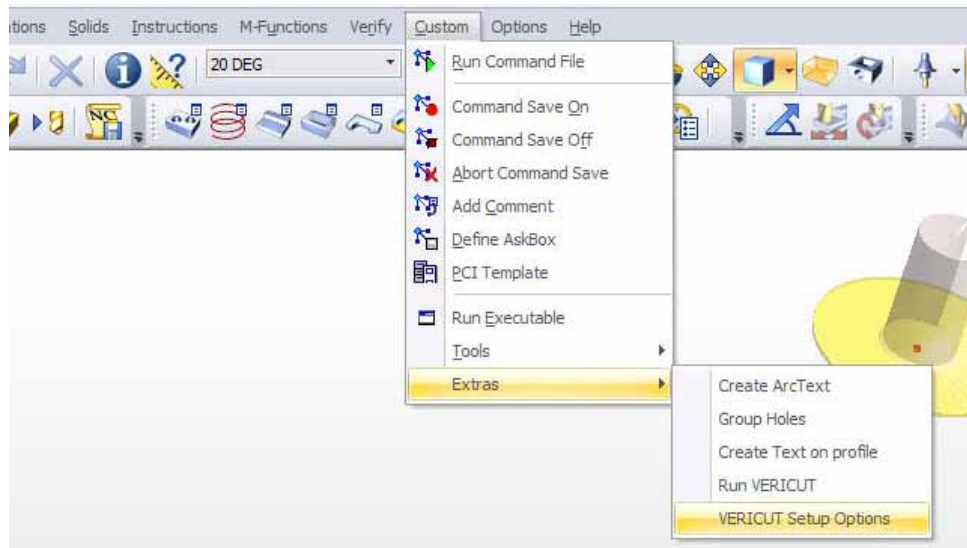
6. Select Vericut.commands, then **Open**. The **Vericut** menu and pull-down option list should now be added to the Edgecam main menu bar as shown below.

Pre-Edgecam 2011 versions



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Edgecam 2011



If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the Edgecam-to-VERICUT Interface. For complete details on using the Edgecam-to-VERICUT Interface, see **Edgecam-to-VERICUT Interface**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the ESPRIT-to-VERICUT Interface

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 may need 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. For reference, here is the list of files you should copy:

- blank.bat
- cgtech_esprit.dll
- extensibility.dll
- Interop.Esprit.dll
- Interop.EspritComBase.dll
- register-dll.bat
- register-vericut-addin-32.reg
- register-vericut-addin-64.reg
- unregister-dll.bat
- VericutAddin.dll
- VericutAddin.tlb

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 need to determine if your operating system is 32-bit or 64-bit. You can easily check this by going to the Start menu, Right-clicking on the "My Computer" entry, and selecting Properties. This should show you the name of your operating system. If there is a **64** or **64-bit** or **x64** or **x86-64**, this means that your operating system is 64-bit and you will need to double-click the file **register-with-esprit-64.reg**. If you don't see anything indicating 64-bit, you're operating system is 32-bit and you will need to double-click the file **register-with-esprit-32.reg**. After double-clicking the appropriate 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.

The other file you need to run is **register-dll.bat**. You will first need to edit this file to point to your specific ESPRIT AddIns folder. To edit, you must right-click and select Edit, choosing Notepad to edit it with if prompted. By default, the folder specified is the default install location for ESPRIT. **Even if you have ESPRIT installed in the default location, it is **strongly recommended** to double-check that the folder specified in**

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register-dll.bat is the same folder where you copied the files previously. If you need to edit the install location, only change text on the line highlighted in red below:

```
C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\RegAsm.exe "C:\Program Files (x86)\D.P.Technology\ESPRIT\Addins\VericutAddin\VericutAddin.dll" /codebase /tlb
```

For example, if you have ESPRIT installed under **T:\Applications\cad_cam**, the line in your file would look like this:

```
C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\RegAsm.exe "T:\Applications\cad_cam\D.P.Technology\ESPRIT\Addins\VericutAddin\VericutAddin.dll" /codebase /tlb
```

Also keep in mind that all the above text should be on the same line. It's only split onto multiple lines in Word. When you're done editing, save and close the file, then double-click to run it. You should see a console window with the text from the file in it. This will tell you if there were any problems running the script.

If everything was successful, you should be able to open ESPRIT and see that the ESPRIT-to-VERICUT Interface been loaded as an Add-In. There should also be a menu entry under Tools => VERICUT.

Environment Variables

In order to use the ESPRIT-to-VERICUT interface, you also need to define four environment variables, **CGTECH_INSTALL**, **CGTECH_PRODUCTS**, **LSHOST** and **CGTECH_LANGUAGE**.

For example;

Environment Variable Name	Variable Value
CGTECH_INSTALL	C:\Program Files\cgttech\x.x.x
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows or C:\Program Files\cgttech\x.x.x\windows64
LSHOST	<i>server_name</i>

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CGTECH_LANGUAGE	C:\Program Files\cgttech\x.x.x\windows\Esprit\language or C:\Program Files\cgttech\x.x.x\windows64\Esprit\language
-----------------	--

CGTECH_INSTALL is set to the top level folder where VERICUT is installed. In the above table, *x.x.x* represents the VERICUT release number. For VERICUT 7.1.4 the environment variable would be set to C:\Program Files\cgttech\7.1.4.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: either "windows" or "windows64". For a typical VERICUT 7.1.4 installation this variable is set to C:\Program Files\cgttech\7.1.4\windows or C:\Program Files\cgttech\7.1.4\windows64.

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

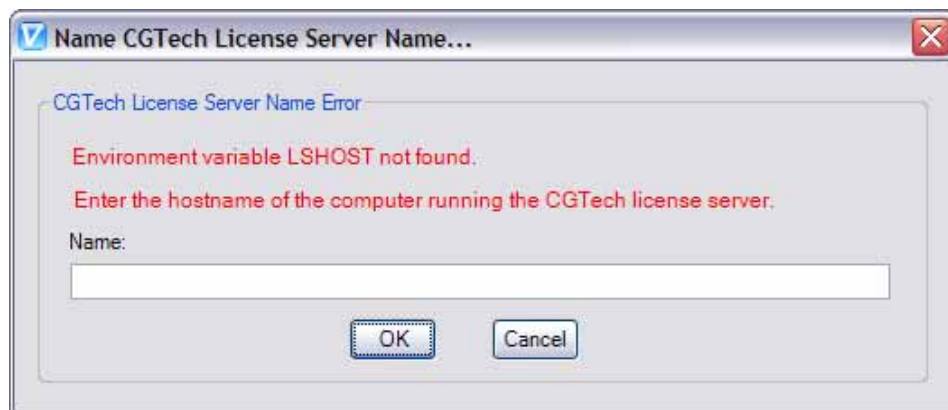
CGTECH_LANGUAGE is used to specify the *\path* to the folder containing the Esprit-to-VERICUT Interface language file (EspritRes.local) that you want to use.

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

License

At the time that the ESPRIT-to-VERICUT Interface is launched for the first time, it tries to connect with license server. License server name can be specified by environmental variables **LSHOST** or **LSFORCEHOST**.

If neither of these two environment variables is defined, the window shown below will display, enabling you to specify the license server name manually. The Name specified will be saved for future use, so that you only have to define the license server name once.



Language

At the time that the “VericutAddin.dll” is loaded with ESPRIT CAM system, the ESPRIT-to-VERICUT Interface looks for **CGTECH_LANGUAGE** environment variable. If it is defined, the interface loads the “EspritRes.local” file found at that location.

If the **CGTECH_LANGUAGE** environment variable is not set, then the ESPRIT-to-VERICUT Interface looks for the **CGTECH_LOCALE** environment variable to get the location of the language file.


If the **CGTECH_LOCALE** environment variable is not defined, the ESPRIT-to-VERICUT Interface will look for the “EspritRes.local” file in the folder where “VericutAddin.dll” is located, in a subfolder named the same as the language that you want to use.

If the location of the language file is not found in any of these places, English will be used as the application language. Also, if the “EspritRes.local” file for specified language is not found, English will be used as the application language.

VERICUT Installation Directory

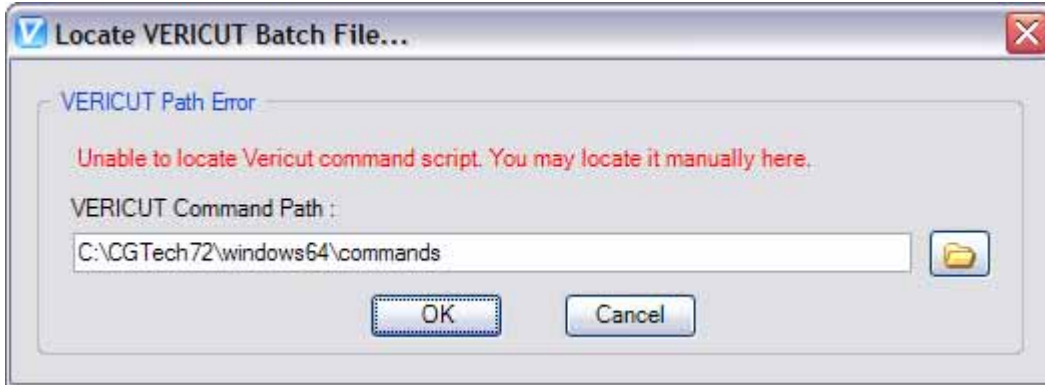
The ESPRIT-to-VERICUT Interface needs to know where VERICUT is installed and whether it is a windows or windows64 version. Use the **CGTECH_PRODUCTS** environment variable to provide this information. For example, set **CGTECH_PRODUCTS** to “C:\Program Files\cgttech\7.2\windows”.

Use the **CGTECH_INSTALL** environment variable to specify the location of the VERICUT installation. For example, set **CGTECH_INSTALL** to “C:\Program Files\cgttech\7.2”.

Initially the ESPRIT-to-VERICUT Interface will look for the environment variable **CGTECH_PRODUCTS**. If it is defined, then execution continues, otherwise the following window displays, enabling you to specify the location of the “commands” folder of your VERICUT installation. Enter the *\path* to the “commands” folder of your VERICUT installation in the **VERICUT Command Path:** text field or use the  (**Browse**) icon to display a directory selection window and use it to specify the *\path* to the “commands” folder.

For example, “C:\Program Files\cgttech\7.2\windows64\commands”.

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Based on the path that you provide, the value for `CGTECH_PRODUCTS` is determined. You only need to specify the path the first time that the ESPRIT-to-VERICUT Interface is used. The value of `CGTECH_PRODUCTS` will be saved for future use.

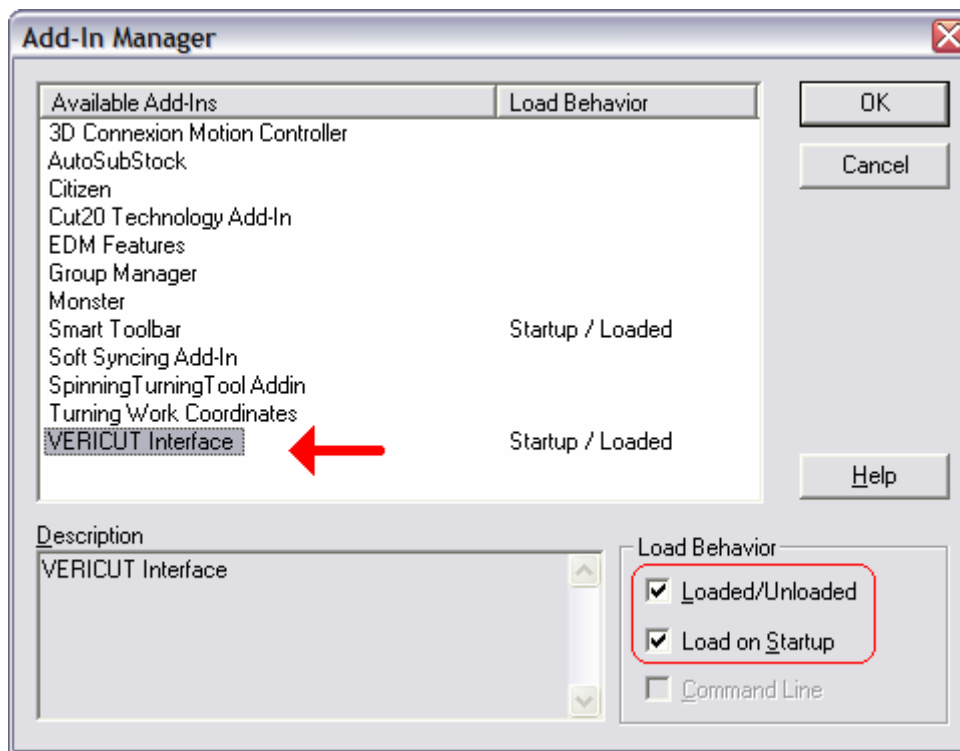
The location of the VERICUT installation will be retrieved from the `CGTECH_INSTALL` environment variable, if defined, or will be determined from the value of `CGTECH_PRODUCTS`.

If either of these variables remains undefined, the ESPRIT-to-VERICUT Interface will not load up.

Troubleshooting

If the ESPRIT-to-VERICUT Interface does display in the **Tools** menu in ESPRIT, it needs to be reloaded. This issue can be resolved by following the steps below:

- Select 'Tools =>Add-In'. It will bring up the Add-In manager in ESPRIT.
- Click on the VERICUT Interface entry, and check both boxes under 'Load Behavior'.



If there is no entry for the VERICUT Interface in the available add-ins list, there is most likely a problem with registering the Interface.

Return to VERICUT [Installation Steps](#).

Configuring the GibbsCam-to-VERICUT Interface (GibbsV)

NOTE: The GibbsCam-to-VERICUT Interface (GibbsV) requires at least Gibbs 2010 V9.5.2.2.

The GibbsCam-to-VERICUT Interface is distributed as two files;

GibbsV.dll (the code)

Gibbsv[*language*].local (localization file)

Supported localization files:

GibbsvEnglish.local

GibbsvFrench.local

GibbsvSpanish.local

GibbsvJapanese.local

GibbsvChinese.local

GibbsvKorean.local

GibbsvItalian.local

GibbsvGerman.local

GibbsvSwedish.local

For a typical VERICUT installation, these files are located in the C:\Program Files\CGTech\7.2\windows\GibbsV\ or C:\Program Files\CGTech\7.2\windows64\GibbsV\ folder. *x.x.x* represents the VERICUT release number. For VERICUT 7.1.6 the *x.x.x* would be 7.1.6.

The GibbsV.dll file should be placed in the GibbsCAM plugins directory (for example, C:\Program Files\Gibbs\GibbsCAM\8.0.19_NLO\plugins\).

The localization file should be left in the \GibbsV\ directory of your VERICUT installation directory.

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The GibbsCAM-to-VERICUT Interface must have the following two environment variables set before using.

Environment Variable Name	Variable Value
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows \windows or C:\Program Files\cgttech\x.x.x\windows \windows64
LSHOST	<i>server_name</i>

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: either "windows" or "windows64". In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation this variable is set to C:\Program Files\cgttech\7.2\windows or C:\Program Files\cgttech\7.2\windows64.

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

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.

Accessing the GibbsCAM to VERICUT Interface

To start the GibbsCAM to VERICUT Interface from within GibbsCAM, click **Plug-Ins** in the GibbsCam main menu, then select VERICUT from the pull-down list.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the GibbsCAM-to-VERICUT Interface. For complete details on using the GibbsCAM-to-VERICUT Interface, see **GibbsCAM-to-VERICUT Interface (GibbsV)**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the Mastercam-to-VERICUT Interface

Configuring the Mastercam-to-VERICUT Interface (MCAMV - Version X4, X5 and X6)

Using Mastercam's terminology, the interface between MastercamX ν (where ν is the Mastercam version number) and VERICUT is a Net-Hook. It can be invoked while running Mastercam, transfers internal Mastercam data to files recognized by VERICUT, and fires up VERICUT ready to perform verification of the NC programs. You can opt to verify Mastercam's Intermediate NC data (NCI) or the G-code files produced by Mastercam's post-processors.

NOTE: MCAMV requires the installation of the Microsoft C++ run time environment. This is not distributed automatically by Microsoft. A copy of the installer is on the VERICUT CD, or at:

<http://download.vericut.net/downloads/redistributables.zip>

Administrator privileges are required to install this.

You do not need this if you have Microsoft Visual Studio C++ 2005 installed (not likely for most VERICUT users).

Configuration

The VERICUT C-Hook is for Mastercam X ν . It is distributed as four files located in the C:\Program Files\cgttech\x.x.x\windows\mcamv\X ν \ or C:\Program Files\cgttech\x.x.x\windows64\mcamv\X ν \ directory of your VERICUT installation. The x.x.x represents the VERICUT release number. For VERICUT 7.1.4 the x.x.x would be 7.1.4. The ν represents the Mastercam version number. For Mastercam X5, ν would be 5.

NOTE: Please be aware that with MCAMV X6 there are now 32bit and 64bit specific versions. Make sure you use the correct version.

A 32 bit MasterCAM X6 requires a 32 bit MCAMV Interface dll

A 64 bit MasterCAM X6 requires a 64 bit MCAMV Interface dll

They are NOT interchangeable.

VERICUT.dll (the code)

VericutSupport.dll (supporting code)

mcRes.local (language translation)

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

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The two .dll files and the .ft file should be placed in Mastercam's "chooks" folder, which is one level down from the Mastercam installation folder (for example C:\McamX\chooks). The file mcRes.local should be placed in the Mastercam installation folder.

To enable the C-Hook to find VERICUT, you also need to define three environment variables, **CGTECH_INSTALL**, **CGTECH_PRODUCTS** and **LSHOST**.

For example;

Environment Variable Name	Variable Value
CGTECH_INSTALL	C:\Program Files\cgttech\x.x.x
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows or C:\Program Files\cgttech\x.x.x\windows64
LSHOST	<i>server_name</i>

CGTECH_INSTALL is set to the top level folder where VERICUT is installed. In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation the environment variable would be set to C:\Program Files\cgttech\7.2.

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: either "windows" or "windows64". For a typical VERICUT 7.2 installation this variable is set to C:\Program Files\cgttech\7.2\windows or C:\Program Files\cgttech\7.2\windows64.

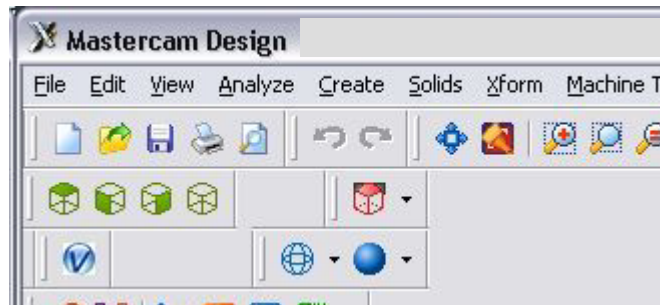
LSHOST is set to the name of the license server computer.

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.

Access

To trigger the Net-Hook while in Mastercam, hold down the **Alt** key and click the **C** key (referred to as **Alt-C**). Alternatively, you could select **Settings > Run User Application**. You will see a file selection dialog offering all the installed C-Hooks. Pick **VERICUT.dll** and click on the **Open** button.

Setting up a VERICUT icon in Mastercam X4, X5 and X6 user interface



In Mastercam main window, select **Settings > Customize**

1. In Customize window, change **Category** to NET Hook
2. Select the VERICUT icon in the "**Commands**" area, and drag and drop it onto the toolbar in the Mastercam main window
3. In the Customize window, in the Toolbars list, right click on "New Toolbar" and select **Rename Toolbar**, rename it to something like Run VERICUT, then Enter.
4. Select the Diskette (Save As) icon, save as *filename.mtb* , OK
5. Click on the checkmark (OK) button to close the Customize window.

In Mastercam main window, select **Settings > Configuration**

1. In the System Configuration window, under Topics, select **Start / Exit**.
2. Under Startup Settings, point **Toolbars** to the *filename.mtb* file that you created above. Either enter the */path/filename* in the text field or click on the File Cabinet icon (Select) and use the window that displays to select the file.
3. Click on the checkmark (OK) button to close the System Configuration window.
4. If prompted: "Save Settings to Configuration File?", Yes.

See Mastercam Help for additional information.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the Mastercam-to-VERICUT Interface. For complete details on using the Mastercam-to-VERICUT Interface, see **Mastercam-to-VERICUT Interface (MCAMV)**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Configuring the NX-to-VERICUT Interface (NXV)

This section documents supported versions of NX, and the procedure for configuring the NX-to-VERICUT Interface (NXV). These instructions apply only when VERICUT will be run via NXV. If VERICUT will only be run outside of NX, then ignore this section.

NX version support

NXV can be operated on Windows computers with NX versions NX5, NX6, NX7, NX7.5 and NX8.

VERICUT Interfaces for old Unigraphics versions (V16, V17, V18, NX, NX2, NX3, and NX4) are no longer distributed with the VERICUT installation. You can copy the old interface files forward from a previous installation, or contact VERICUT technical support for the older Unigraphics interface files.

Upward compatibility of the old interfaces is not tested with this release and not guaranteed. However nothing is intentionally changed to prevent them from continuing to work.

Configuration

Follow the general procedure below to configure NXV. Integrating NXV into your standard UG startup may require "root" or administrator permissions - see your system administrator for assistance.

NOTE: The following NX products, `ufunc_execute` (`P2_ufunc_execute` for NX2, product name "UG/Open API Execute") and the `grip_execute` (product name "UG/Open Grip Execute") are required for NXV.

Assuming NX is installed, install VERICUT (includes the NXV software) per the VERICUT installation instructions.

Windows

1. Locate the NXV batch file for your version of NX

Look in VERICUT's 'commands' folder (C:\Program Files\cgtch*x.x.x**platform*\commands\ directory of your VERICUT installation. The *x.x.x* represents the VERICUT release number. For VERICUT 7.2 the *x.x.x* would be 7.2. The *platform* represents windows, or windows64) for the batch file named **ugv_nxV.bat** (where *V* represents the NX version, i.e. `ugv_nx2.bat`, `ugv_nx3.bat`, etc). The batch file sets the environment for NXV, then runs NX using `%UGII_ROOT_DIR%\UGII.BAT`.

NOTE: If you need a batch file for a newer/higher version of NX use the highest nxV.bat available in the folder. The interfaces are usually upward compatible with newer versions of NX.

2. Create a desktop shortcut to the batch file

Create a desktop shortcut that points to the NXV batch file found in step 1. Set the shortcut's start-in property to a folder where the user has write permission.

You can optionally copy the batch file to a folder where you have write permission and run it directly from there.

NOTE: The NXV batch file will NOT work correctly from its location in the VERICUT's 'commands' folder because users usually do not have write permissions there. You must either create a desktop shortcut with a start-in path where you have write permissions, or copy the batch file to a directory where you have permission to write files.

NOTE FOR NX SYSTEM ADMINISTRATORS: To integrate the NXV interface into your normal NX startup process, copy the environment settings from **NX_{xx}.bat** into your normal NX startup process. Do not copy the line that runs NX.

Start NX with NXV.

After completing the previous steps and assuming VERICUT is licensed and operational, run NX using the batch file short cut. If NX does not start, **DO NOT CONTINUE** - see your system administrator for assistance.

Depending on the version of NX, NXV is accessed differently. See the help on using NXV in the *Converters and CAD/CAM Interfaces* section, in the *CGTech Help Library*, for details.

Configuring NXV to start VERICUT with a custom Project file

If no Project Template is specified in the NXV interface dialog, NXV initializes VERICUT with the following project from VERICUT's Library folder:

- **ug_init.VcProject** (inch NX session)
- **ug_initm.VcProject** (millimeter NX session)

The interface adds models, NX program(s), and tools from the current session, then runs VERICUT.

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You can change VERICUT's default settings by modifying **ug_init.Vc Project** (or **ug_initm.VcProject**). We recommend you save a backup copy of these files before modifying them. The files are located in the "library" folder in your VERICUT installation.

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the NX-to-VERICUT Interface. For complete details on using the NX-to-VERICUT Interface, see **NX-to-VERICUT Interface (NXV)**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the CGTech Help Library.

Return to VERICUT [Installation Steps](#).

Setting up NXV to work with Teamcenter

Overview

Teamcenter (formerly IMAN and UG Manager) is a Product Lifecycle Management (PLM) application that manages NX data files. When using the NX-to-VERICUT Interface (NXV), it is necessary to modify the NX Teamcenter environment in order for NXV to operate correctly.

NXV uses Teamcenter functions for reading data and writing files when running within Teamcenter. For example:

- If Teamcenter is not used, NXV asks NX to write VERICUT model files to the path specified in the NXV interface.
- If Teamcenter is used, NXV asks Teamcenter to ask NX to write model files. Teamcenter then places the files in a "temporary" Teamcenter folder.

NXV detects when it is running within Teamcenter and uses Teamcenter data management functions when requesting and writing data.

All VERICUT files for the current session are placed by Teamcenter in the "temporary" Teamcenter folder for the current checked-out project. At the end of the NX session, Teamcenter prompts the user to check the files in.

VERICUT files are considered, "meta-data" by Teamcenter. "meta data" is data with unknown content, but the files are controlled by Teamcenter.

Implementing NXV in a Teamcenter installation

NOTE: The following example shows modifying a Teamcenter windows batch file for NX2 on Windows, but the concept is the same for later NX versions, or when using a perl or UNIX script to start Teamcenter.

The Teamcenter startup batch file (in this example, START_UGMANAGER.BAT) sets the environment for starting NX2 with Teamcenter on Windows. The Teamcenter startup batch file must be modified to call the modified NXV batch file (nx2.bat, nx3.bat, etc, depending on your version of NX) from VERICUT's **commands** folder.

1. Modify 4 lines in NXV's startup batch file.

Add rem at the beginning of the following lines in the nxv.bat file. Where v is the NX version number.

```
rem setlocal
```

```
rem set CGTECH_INSTALL=C:\Program Files\cgttech\7.1.2
```

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```
rem "%UGII_ROOT_DIR%\UGII.BAT" %argstr%
```

```
rem endlocal
```

See the red text in the example modified nx7_5.bat file below.

2. Call the NXV batch file (as modified in step 1) from the Teamcenter startup script. The call must be inserted above the command that launches NX. Calling the NXV batch file sets the environment for NXV and VERICUT from the Teamcenter startup script. This edit is usually done by the Teamcenter site administrator.

Example lines to add to a Teamcenter startup batch file that uses Windows batch file syntax:

```
set CGTECH_INSTALL=C:\cgtech70  
call "%CGTECH_INSTALL%\windows\commands\NX2"
```

NOTE: The above example is for a Windows batch file. The syntax is different for a perl or UNIX Teamcenter startup script, however the concept is the same.

3. The Teamcenter site administrator needs to configure Teamcenter to recognize VERICUT files as "meta-data". An entry must be made for each extension (.VcProject .mch, .ctl, .tls, .opti, .swp, .sor, .vct, etc?) These files will be managed by Teamcenter.

NOTE: Two temporary files are created by NXV, but do not need to be managed by Teamcenter. They have extension .opts and .vctemp.

Sample edited nx7.5.bat file

(the four edited lines are highlighted **red**)

```
@echo off
```

```
rem setlocal
```

```
rem set CGTECH_INSTALL=C:\Program Files\cgtech\7.2
```

```
rem CGTech, Copyright, All Rights Reserved
```

```
rem CGTech environment
```

```
set CGTECH_PRODUCTS=%CGTECH_INSTALL%\windows
```

```
call "%CGTECH_PRODUCTS%\commands\cgtenv"
```

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```
rem set CGTECH_IGNORELAST=TRUE

set CGTECH_CLASSES=%CGTECH_INSTALL%\classes
if "%CGTECH_LIBRARY%" == "" set
CGTECH_LIBRARY=%CGTECH_INSTALL%\library\
if "%CGTECH_LICENSE%" == "" set
CGTECH_LICENSE=%CGTECH_PRODUCTS%\license
if "%TEMP%" == "" set TEMP=C:\TEMP
if "%TMP%" == "" set TMP=C:\TEMP
if "%CGTECH_LOCALE%" == "" set CGTECH_LOCALE=english
set CGTECH_LANGUAGE=%CGTECH_CLASSES%\%CGTECH_LOCALE%
set CGTECH_HELP=%CGTECH_INSTALL%\hhhelp
set CGTECH_SAMPLES=%CGTECH_INSTALL%\samples\
set CGTECH_TRAINING=%CGTECH_INSTALL%\training\
set CGTECH_DEFAULT_UNITS=INCH
set CGTECH_RGB_TXT=%CGTECH_PRODUCTS%\vericut\rgbhues.txt
if "%CGTECH_JRE%" == "" set CGTECH_JRE=%CGTECH_PRODUCTS%\jre

set
path=%CGTECH_PRODUCTS%\vericut;%CGTECH_PRODUCTS%\license;%PATH%

set waitopt=
set argstr=
if test%1==test goto cgtchkend
if %1==BATCH set waitopt=/wait
if %1==batch set waitopt=/wait
if %1==BATCHP set waitopt=/wait
if %1==batchp set waitopt=/wait
set argstr=%1
shift
:cgtgetarg
if test%1==test goto cgtchkend
if %1==BATCH set waitopt=/wait
if %1==batch set waitopt=/wait
if %1==BATCHP set waitopt=/wait
if %1==batchp set waitopt=/wait
set argstr=%argstr% %1
shift
goto cgtgetarg
:cgtchkend

if "%OS%" == "Windows_NT" set start_cmd=start "VERICUT" %waitopt%
if "%OS%" == "" set start_cmd=start %waitopt%

set UGII_VENDOR_DIR=%CGTECH_PRODUCTS%\nx\nx7.5
rem "%UGII_ROOT_DIR%\UGII.BAT" %argstr%

:end_cgtech

rem endlocal
```

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If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the NX-to-VERICUT Interface. For complete details on using the NX-to-VERICUT Interface, see **NX-to-VERICUT Interface (NXV)**, in the CAD/CAM Interfaces section of Converters and CAD/CAM Interfaces, located in the *CGTech Help Library*.

Return to VERICUT [Installation Steps](#).

Starting NXV when starting NX from Start > All Programs > Siemens NX x.x > NX x.x

Follow the following steps to enable using the NX-to-VERICUT Interface (NXV) when starting NX from Start > All Programs > Siemens NX x.x > NX x.x, where X.X is the NX version number.

The CGTech software installation procedure places the files required by **NXV** in a sub-folder. If you elected to install the software in the default folder "C:\Program Files\cgttech\x.x.x" (where x.x.x is the VERICUT release number), then for VERICUT 7.2, the **NXV** folder will be "C:\Program Files\cgttech\7.2\windows\nx" or "C:\Program Files\cgttech\7.2\windows64\nx".

Copy the files in:

C:\Program Files\cgttech\7.2\windows\nx\NXx.x\application\ or
C:\Program Files\cgttech\7.2\windows64\nx\NXx.x\application\

where X.X is the NX version number.

to:

C:\Program Files\UGS\NX x.x\UGALLIANCE\vendor\application\,
where X.X is the NX version number.

Copy the files in:

C:\Program Files\cgttech\7.2\windows\nx\NXx.x\startup\ or
C:\Program Files\cgttech\7.2\windows64\nx\NXx.x\startup\

to:

C:\Program Files\UGS\NX x.x\UGALLIANCE\vendor \startup\,
where X.X is the NX version number.

Edit the file:

C:\Program Files\UGS\NX x.x\UGII\ugii_env.dat
where X.X is the NX version number.

Remove the "#" from variable

```
#UGII_VENDOR_DIR=${UGALLIANCE_DIR}vendor
```

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so that it now looks like

```
UGII_VENDOR_DIR=${UGALLIANCE_DIR}vendor
```

To enable NX to find VERICUT, you also need to define two environment variables, **CGTECH_PRODUCTS** and **CGTECH_INSTALL**.

For example;

Environment Variable Name	Variable Value
CGTECH_INSTALL	C:\Program Files\cgttech\x.x.x\
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows\ or C:\Program Files\cgttech\x.x.x\windows64\

CGTECH_INSTALL is set to the top level folder where VERICUT is installed. In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation the environment variable would be set to C:\Program Files\cgttech\7.2

CGTECH_PRODUCTS is set to the folder for the specific operating system of the computer running VERICUT: either "windows" or "windows64". In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation this variable is set to C:\Program Files\cgttech\7.2\windows \windows or C:\Program Files\cgttech\7.2\windows \windows64.

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.

Configuring the Pro/E-to-VERICUT Interface (PROEV)

NOTE: The Pro/E-to-VERICUT Interface (PROEV) requires at least Pro/E Wildfire 4.

Installation

The Pro/E-to-VERICUT Interface is distributed as twenty files located in the

C:\Program Files\cgttech\x.x.x\windows\proev\WFyy\ or the

C:\Program Files\cgttech\x.x.x\windows64\proev\WFyy\ directory of your VERICUT installation. The *x.x.x* represents the VERICUT release number, for example 7.1.6. The *yy* represents the PTC version number, for example 40 for Wildfire 4.0 or 50 for CREO Elements/Pro 5.0.

The following files are located in the \proev\WFyy\ directory of your VERICUT installation.

- cgtproev.dll (application dll)
- ProevChinese.local (localization file)
- ProevEnglish.local (localization file)
- ProevFrench.local (localization file)
- ProevGerman.local (localization file)
- ProevItalian.local (localization file)
- ProevJapanese.local (localization file)
- protk.dat (registry file)

The following file is located in the \proev\WFyy\text\ directory of your VERICUT installation.

- proev.txt (resource file)

The following files are located in the \proev\WFyy\text\resource\ directory of your VERICUT installation.

- cl_cancel.bif
- proev_db_design_page.res
- proev_db_file_page.res
- proev_db_fixture_page.res
- proev_db_main_page.res
- proev_db_ops_page.res
- proev_db_options_page.res
- proev_db_process_page.res
- proev_db_settings_page.res
- proev_db_stock_page.res
- Vericut16.gif

1. **Create a directory C:\PROEV**
2. **Copy the protk.dat file to the C:\PROEV directory:**

At startup, Pro/ENGINEER will look for the registry file, protk.dat, to get location information about the other files used by the Pro/E-to-VERICUT Interface.

The protk.dat file contains the following information:

```
name cgtproev
startup dll
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
end
```

3. **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 so that it points to the \proev\WFyy\cgtproev.dll of your VERICUT installation. Edit text_dir so that it points to the \proev\WFyy\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\cgttech\x.x.x\windows\proev\WFyy\cgtproev.dll
text_dir C:\Program Files\cgttech\x.x.x\windows\proev\WFyy\text
revision Wildfire
end
```

where *x.x.x* is the VERICUT version number and *yy* is the Pro/E Wildfire version number. \windows\ could be \windows64\ depending on whether you are running a 32 bit or 64 bit computer.

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 Pro/E-to-VERICUT Interface.

The proev.txt file contains the following information:

```
PROEV_VERICUT_BUTTON_LABEL
VERICUT...
```

```
PROEV_VERICUT_BUTTON_HELP
Invoke the VERICUT Interface
```

4. Set the following environment variables.

To enable Pro/ENGINEER to find the PROEV language file and other necessary VERICUT files, you also need to define four environment variables, **PROEV_LANGUAGE**, **CGTECH_PRODUCTS**, **LSHOST** and **CGTECH_LIBRARY**.

For example;

Environment Variable Name	Variable Value
PROEV_LANGUAGE	C:\Program Files\cgttech\x.x.x\windows\proev\WFyy\ Proev[<i>language</i>].local or C:\Program Files\cgttech\x.x.x\windows64\proev\WFyy\ Proev[<i>language</i>].local
CGTECH_PRODUCTS	C:\Program Files\cgttech\x.x.x\windows or C:\Program Files\cgttech\x.x.x\windows64
LSHOST	<i>server_name</i>
CGTECH_LIBRARY	C:\Program Files\cgttech\x.x.x\library

In the above examples, *x.x.x* is the VERICUT release number and *yy* is the WildFire version number

PROEV_LANGUAGE is used to specify the path/filename of the PROEV language file (Proev[*language*].local) that you want to use.

CGTECH_PRODUCTS is used to specify the folder, for the specific operating system, of the VERICUT installation: either "windows" or "windows64". In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation this variable is set to C:\Program Files\cgttech\7.2\windows or C:\Program Files\cgttech\7.2\windows64.

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

CGTECH_LIBRARY is used to specify the folder, where VERICUT library machine and control files are located. In the above table, *x.x.x* represents the VERICUT release number. For a typical VERICUT 7.2 installation this variable is set

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to C:\Program Files\cgttech\7.2\library. This enables PROEV to find machine and control files referenced in the template file.

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.

5. Create a shortcut to start Pro/E.

For Pro/E Wildfire 4:

Create a shortcut for “C:\Program Files\proeWildfire 4.0\bin\proe.exe” and change the shortcut property ‘Start In:’ to “C:\PROEV”.

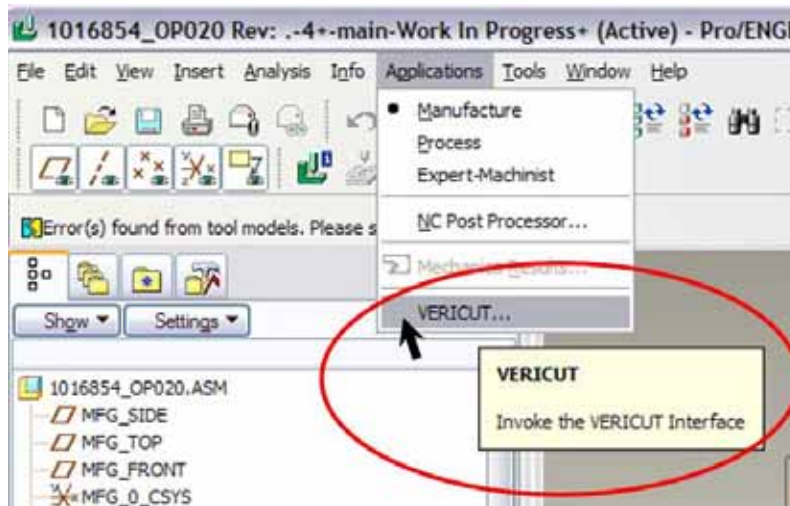
For Pro/E Creo Elements Pro 5.0:

Create a shortcut for “C:\Program Files\PTC\Creo Elements\Pro5.0\bin\proe.exe” and change the shortcut property ‘Start In:’ to “C:\PROEV”.

Now you can run PROEV by launching Pro/E with this shortcut.

Accessing the Pro/E-to-VERICUT Interface

To start the Pro/E-to-VERICUT Interface from within Pro/ENGINEER, click on **Applications** in the Pro/ENGINEERING main menu, then select **VERICUT** from the pull-down list as shown in the picture below. Holding the cursor over the VERICUT option will display the tip shown in the yellow text box below.



If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

You should now be ready to start using the Pro/E-to-VERICUT Interface. For complete details on using the Pro/E-to-VERICUT Interface, see **Pro/E-to-VERICUT Interface**

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(PROEV), in the CAD/CAM Interfaces section of *Converters and CAD/CAM Interfaces*, located in the CGTech Help Library.

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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\cgtch\7.2\windows\vericut, where *x.x.x* is the VERICUT release number, for example 7.2). 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 VERICUT [Installation Steps](#).

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 7.2 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://download.vericut.net/downloads/model_interfaces_v711.zip

http://download.vericut.net/downloads/model_interfaces_v712.zip

http://download.vericut.net/downloads/model_interfaces_v714.zip

http://download.vericut.net/downloads/model_interfaces_v715.zip

http://download.vericut.net/downloads/model_interfaces_v716.zip

http://download.vericut.net/downloads/model_interfaces_v72.zip

2. Unzip the model_interfaces_vx.x.x.zip file (where x.x.x is the VERICUT release number) to extract the install.exe.

To start the installation:

1. Double-click on install.exe 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\cgttech\7.1.6, C:\Program Files\cgttech\7.2, etc.

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.
2. If you get the following error message "**Error loading ACIS libraries!**", try installing the Microsoft redistributable C++ run-time libraries. See the [Install Microsoft redistributable C++ Run-Time Libraries](#) topic above for additional information. You must have Administrator privileges to do the install.

Installing CGTech Products

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

If errors occur, visit the [VERICUT Users' Forum](#) or contact CGTech technical support via our [website](#), just click on the support link.

Return to VERICUT [Installation Steps](#).