Router-CIM 2012
Automation Suite

Installation Guide



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1. Product Overview

The main purpose of Router-CIM is to provide a single CAD/CAM solution for both single part machining and automated manufacturing of quantities of parts. Router-CIM offers both nested-based manufacturing technology, used to automatically produce NC code for parts that are produced or imported into the AutoCAD environment, as well as any other single part that can be parametrically defined, or produced as a drawing or dxf file. Parametric macros that are defined using Router-CIM's Parametric Macro Builder can be automatically sized and either nested or cut singly from different materials. You can pick dxf and AutoCAD dwg files and associate a material to them and Router-CIM will do the rest, automatically.

A job file is created that contains records. Each record contains the macro, drawing, or dxf file name, size, quantity, material, and other variables. Each part is analyzed, and a layer-to-knowledge association automatically makes tool paths. The part and tool paths are serialized and stored in the nesting database, if necessary. Once all parts are cut or cut and nested, sorted NC code is made, the nests are printed with cut time, and a label file is made.

For new users of Router-CIM, there are a few concepts which need to be understood in order to use the product efficiently. These are:

- A basic understanding of the Microsoft Windows® environment, and file handling with programs such as Windows Explorer.
- A working knowledge of the AutoCAD environment, how to create and name layers, and assign geometry to those layers.
- Some knowledge of the types of tools and cutting conditions and materials you are likely to use on your parts.
- A solid understanding of Router-CIM's Parametric Macro Builder and how to create a macro. This takes practice and is best done on paper first!
- A solid understanding of the four variable types; Global, Dynamic, Tagged and Local, and how to use them on individual parts or assemblies of parts. You should also know how to incorporate the variables into formulas to define parts or part features.
- Know the difference between the different file types Router-CIM uses, such as dwg, dxf and scn.
- Know how to create a job from scratch using Router-CIM.
- Contents of the Router-CIM folder.

2. System Requirements

Minimum System Requirements:

Operating System:

Windows XP Professional SP2 or greater
Windows Vista, 32 or 64 bit.
Windows 7, 32 or 64 bit.

Browser: Internet Explorer 8.0 or greater
Processor: Intel or AMD Dual Core 2.0Ghz or higher
RAM: 4Gb or greater for Windows 7 and 64 bit machines
Video: Minimum 1024x768 with True Color
Hard Disk: At least 750Mb free for installation
Mouse, DVD-Rom Drive
One Parallel or two USB ports for security device.
AutoCAD or Cam Companion 2010-2012
User needs local admin privileges to install this software.

Note on Hardware Locks

The Router-CIM 2007-2012 Hardware Locks are different than the 2004, 2005, and 2006 Hardware Locks. If you are upgrading from a version prior to 2007, you will receive a new Hardware Lock with the 2012 software and will have to return the old Hardware Lock through a traceable carrier. Lost locks are the customer's responsibility so insure your shipment for full software value. If you fail to return the old lock, you will be invoiced for the full purchase price of the software. If you have Router-CIM 2007, the hardware locks are compatible and no switch is necessary.

If you are using parallel port hardware locks instead of USB hardware locks, it is not suggested to have a printer, ZIP disk, scanner or any other device connected to the same port as your AutoNest hardware lock. Certain devices may cause hardware lock failure, which will render the software useless until the lock is replaced. Other printing conflicts may occur while printing through the same port as the hardware lock. It may be necessary to have a second parallel port dedicated specifically to the hardware lock.

3. Installation Overview

These installation notes assume that AutoCAD 2010 or higher is installed and functioning properly.

The Router-CIM program is installed in the following manner:

Insert the Router-CIM Installation DVD and it will start automatically. If it does not start automatically, pick Start > Run then pick or type D:\setup.exe (where D: is the DVD ROM drive letter).

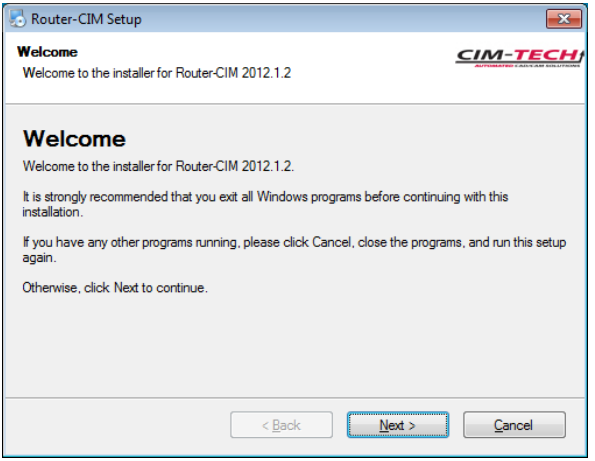
The Router-CIM serial number will determine the installation options. If Nesting was purchased, it will be installed automatically.

The install will search for Router-CIM files in the default location. If your version of Router-CIM was installed to a drive other than C, you can re-direct the setup process to locate the folder in the proper drive by clicking on Browse and then selecting the correct drive location.

The install procedure searches for AutoCAD on your hard drive, and uses this location to build icons to run the Router-CIM program.

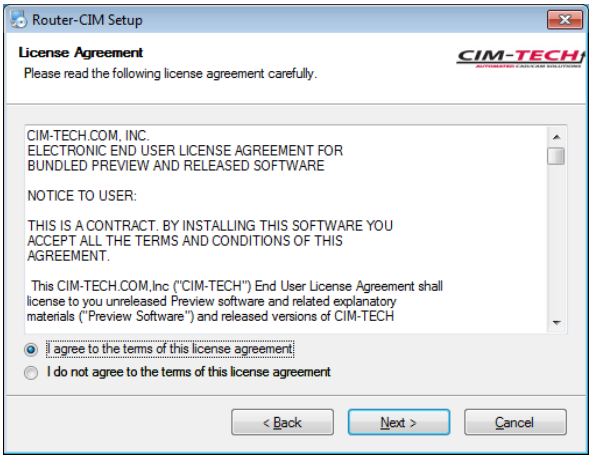
4. Installation Details

When the installation program starts, the following screen will appear:

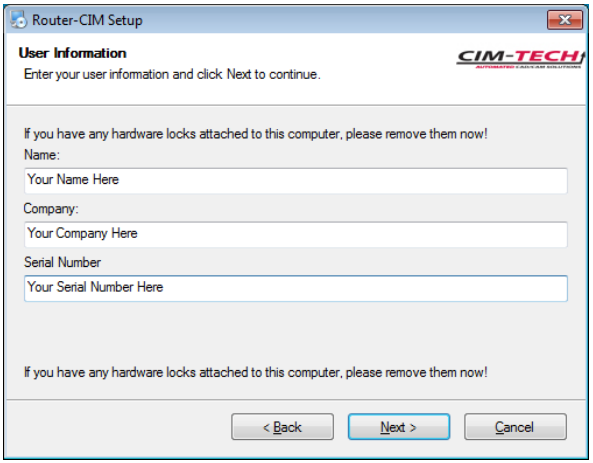


From here, all of the default selections have been made for you. We recommend that you leave the defaults, as it will be simpler for you later if technical support is needed and you need to know the locations of the Router-CIM files.

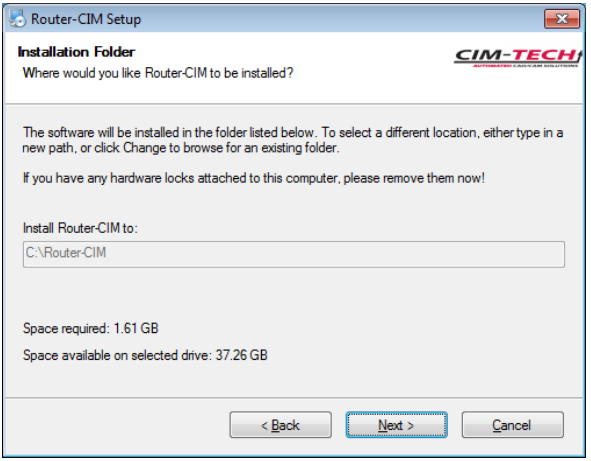
Select Next to continue.



This is the license agreement for Router-CIM. Be sure you read the agreement. Selecting 'I do not agree' will allow you to exit the program without installing it to your computer. Selecting Back will return you to the previous window. Select 'I agree to the terms' and Next to continue.

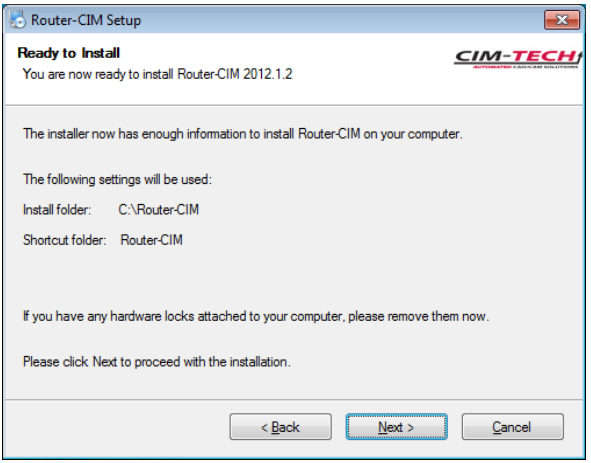


Enter your name, your company name, and the serial number that is supplied to you with the software. Select Next to continue.

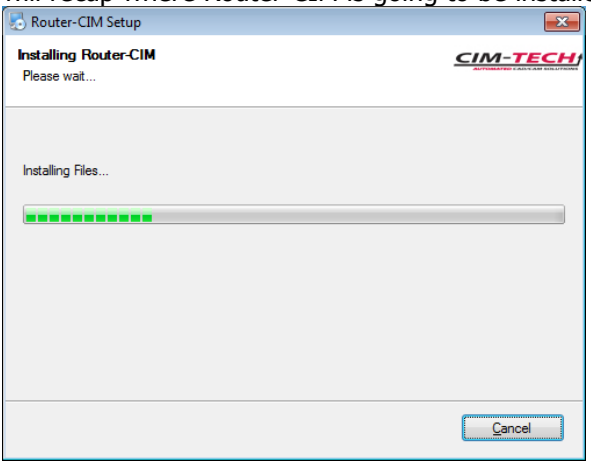


Router-CIM will specify the location for installation. You may select Next to continue, or either Back to go to the previous window or Cancel to exit from the install.

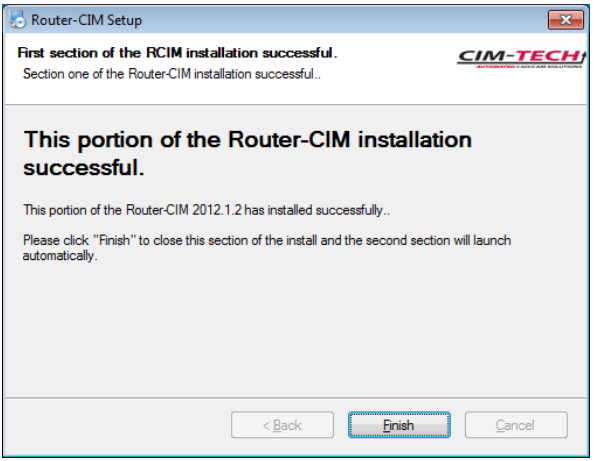
You should remove any hardware locks that have been plugged into the computer.



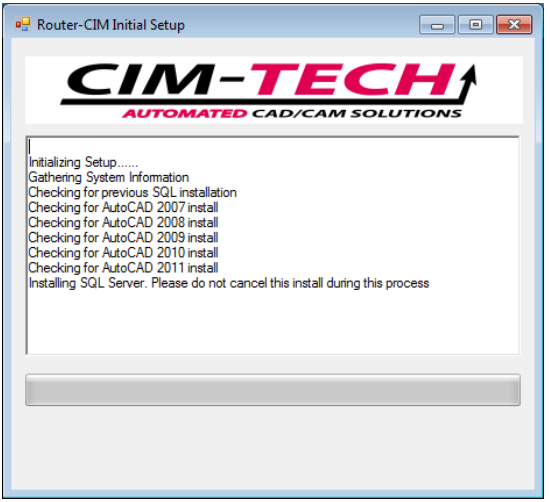
This screen will recap where Router-CIM is going to be installed to.



The installer will start copying files to the necessary locations in this section of the install. As soon as this is finished you will see the following screen:

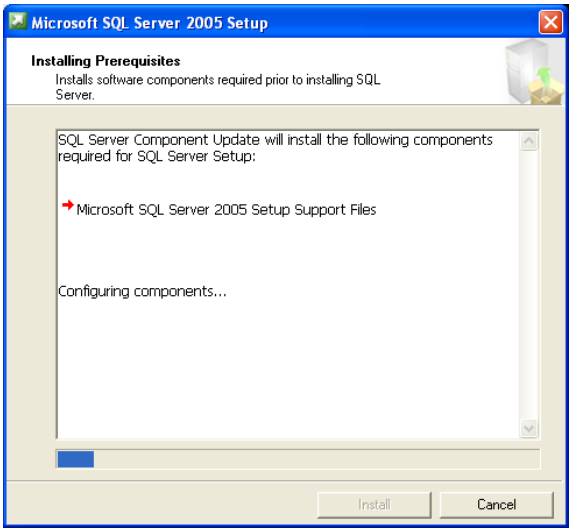


Click on Finish to start the next section of the installation.



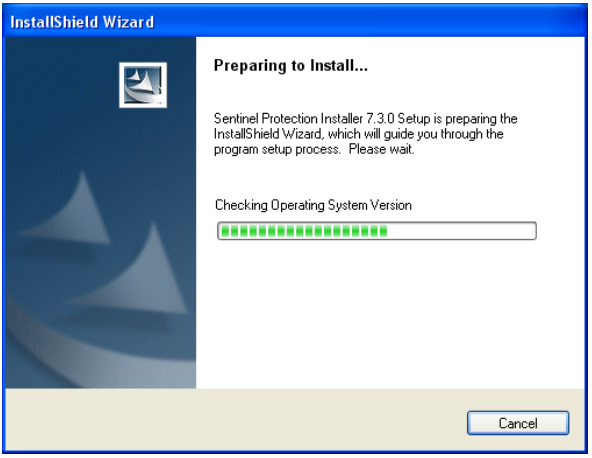
This is the second section of the installation. The install will extract some more files and then check your computer for versions of AutoCAD, SQL Server and Microsoft .NET Framework versions.

This section may take a while, please be patient and allow the installer to finish.

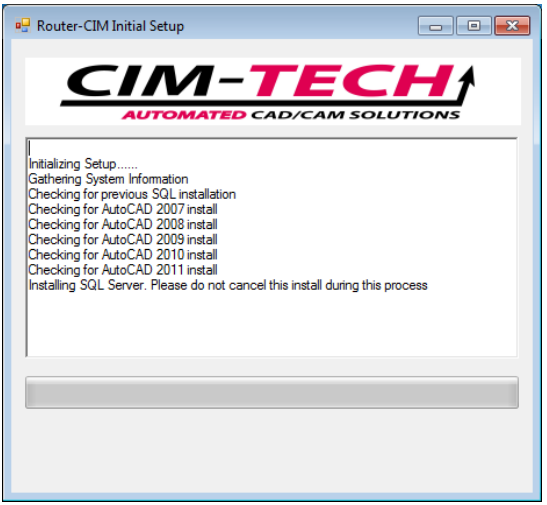


The next screen to appear will be the .NET Framework. If the proper version of the .NET Framework is not detected, then it will install.

There is no visible progress meter during this install, so just leave the window open and do not cancel the installation. The next step will appear when this is finished.



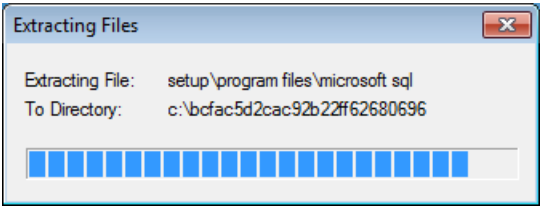
The Sentinel Protection Installer will run next to install the hardware lock drivers. This is usually pretty quick and you may see some windows open with a black background while this is installing.



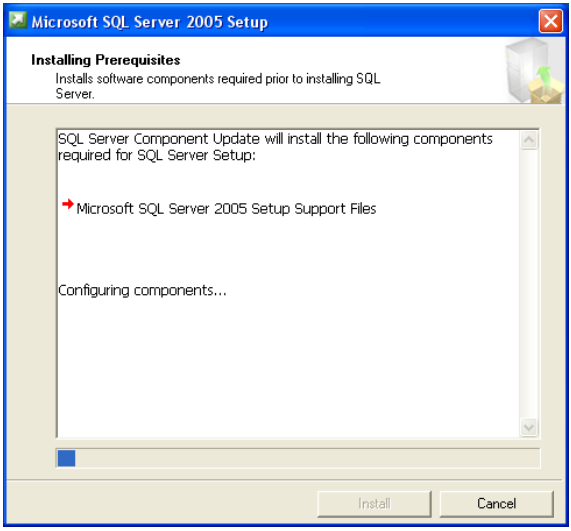
During the Sentinel install, the Router-CIM Progress screen will look like the one above.

After the Sentinel Protection Server is finished installing, the next section of the install is the SQL Server Express install.

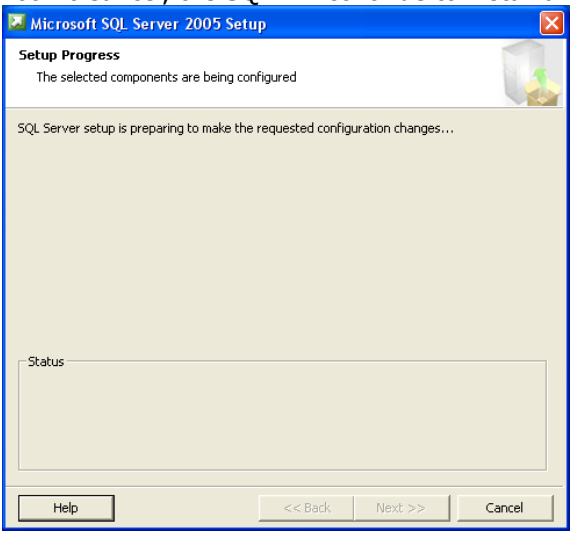
During this install, you will likely see a small progress bar like this:



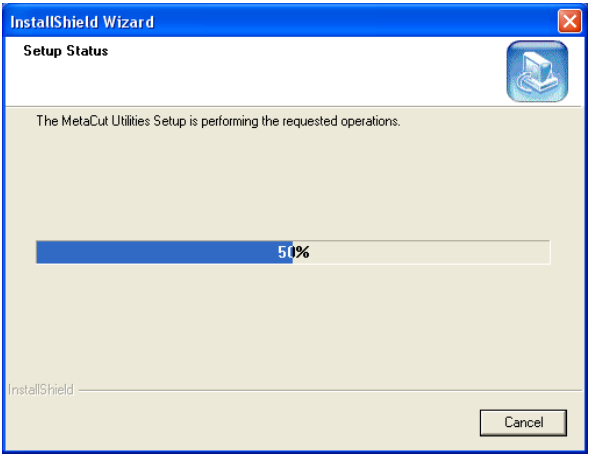
The progress will continue until the SQL Server is installed and configured.



During the configuration of the SQL Server, the window above will appear. Do not hit Cancel, the SQL will continue to install and configure.



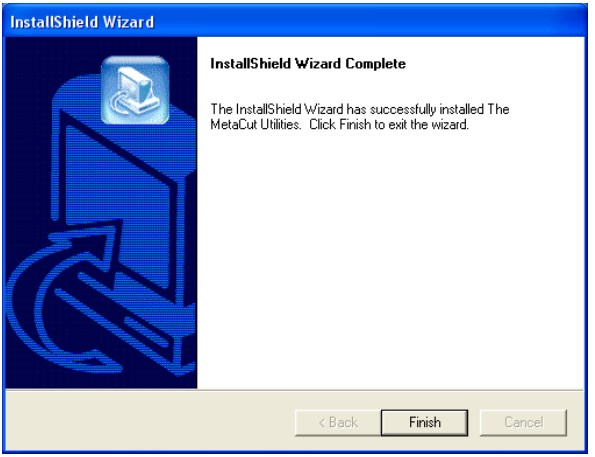
The SQL Server install screen will change slightly as it finishes its configuration.



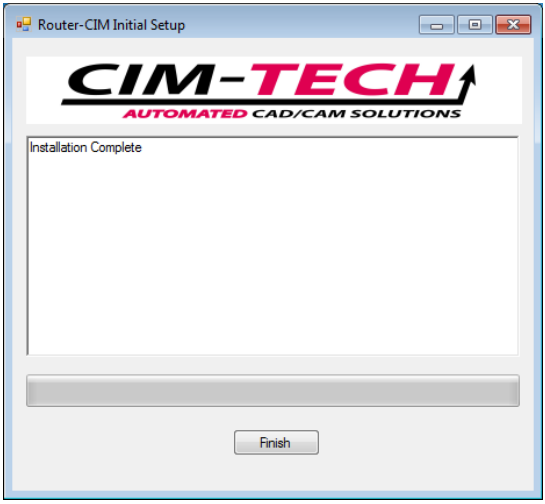
Tool Path Verification Software Install / Re-Install.

If the Tool Path Verification software (MCU) was purchased, the above screen will appear during the install.

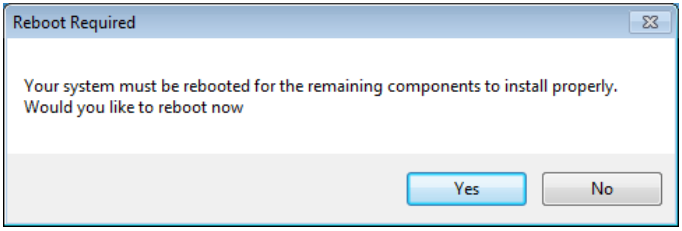
Once MCU is done installing, the following screen will appear.



Select Finish to continue.



Once the rest of the Automation components are installed, the installation is finished. You will see a message requesting you to Reboot your computer. The installation is not finished until you reboot your computer.



After the Reboot is finished, plug the hardware lock into the computer. There is either a parallel port lock (25 pin device) or a USB lock for a USB port.

5. Critical Issues



After Router-CIM is properly installed and configured for use, all pertinent folders should be backed up. A simple method is by copying them and placing them in a new folder. The proper way would be to burn a CD, or backup to tape or another easy-to-restore method.

CIM-Tech will store a backup of your system if you burn it to a CD and mail it to us. We will archive that as an off-site backup in case you lose your own. This is NOT a substitute for your own backup, as you will likely make changes and edits on a more regular basis than the backup that is shipped to us.

CD burners and tape backups are all valid ways to back these folders up. Copying the files to a network drive is another alternative.

A note on CD burners: Each file that is backed up in this fashion may become read-only. This means you can only look at the documents without altering or editing them. It will be necessary to change the properties of the files back from
read-only after the folder is copied. The method of doing this varies depending on your operating system.

The folders to backup are as follows:
1. C:\Router-CIM
2. C:\Rcim_work
3. C:\Anest
4. C:\Automation_code

(where C: is assumed to be the installation drive)

CIM-Tech is NOT responsible for your loss of productivity or data! If you do not backup your system completely and you lose data without a backup, your only option is to re-install the software and start over.

6. Post Processor Installation

Custom Post Processors
If your machine requires a custom post processor, you will receive either an email with a link to the post or a separate Custom Application CD containing the appropriate post processor as well as an installation program. It should start automatically when inserted into the CD drive; if it does not, browse the CD and click on setup.exe.

Follow the on-screen instructions for any last minute information.

It is more likely that you will receive an email with a link to the post processor from the CIM-Tech FTP site. Download the file to your computer and then double-click on it to run the install program.

7. Avery Label Pro and Design Pro

The Router-CIM CD includes Avery Label Pro and Avery Design Pro. Browse the CD to find the Avery folder, and run the setup.exe program inside the folder to install.

Router-CIM has built-in links to the Avery software. When a job is finished, the folder containing the NC code includes a Router-CIM.lpd and Router-CIM.zdp file. Double-click that file to open Avery and view the labels. Use Print Preview to see each one.

8. Adobe Acrobat Reader

The Router-CIM CD includes Adobe Acrobat Reader, in case you do not already have it installed. Adobe Acrobat Reader allows you to read and print the pdf files that make up the manual and help guides. Acrobat Reader updates are available at www.adobe.com.

9. Router-CIM Updates

The Router-CIM CD installs a complete version of Router-CIM. There are, however, updates made to the product on a regular basis.

Please visit http://www.cim-tech.com for updates to Router-CIM. Typically there will be a regular version update as well as a beta of the next changes we are making to the product. Select Download Updates from the main screen.

Please update your Router-CIM install as soon as the regular install is complete!

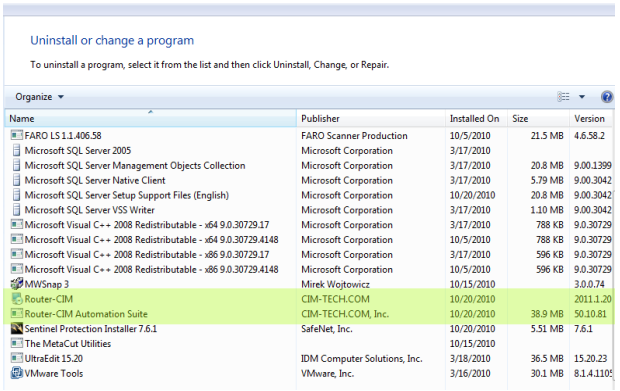
Visit http://www.cim-tech.com for regular updates and information relating to the Router-CIM software.

10. Uninstalling Router-CIM

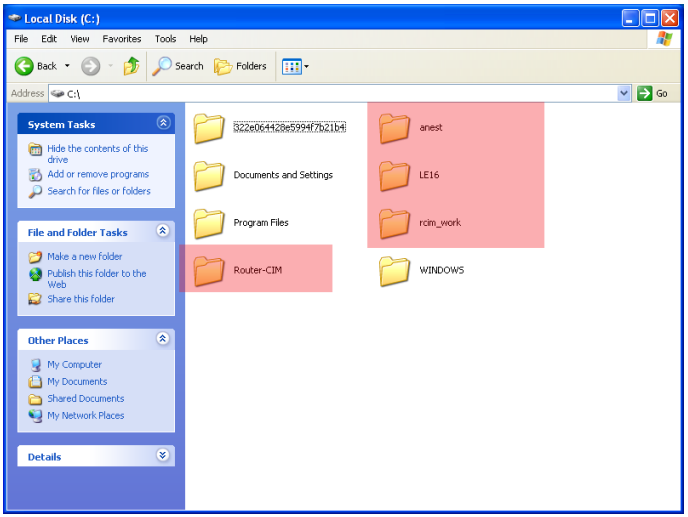
In order to uninstall Router-CIM, you should use the Add/Remove programs application in Windows.
You will see two entries in this section. You should remove the Router-CIM Automation Suite 2012 entry first. Then when that is complete, you can select the Router-CIM entry and remove that.

If you are not re-installing on the current machine, you can also remove the Sentinel Protection Installer 7.x.x.

Note that if you have other software that uses a Sentinel hardware lock, you should not remove the Sentinel Protection Installer program.



Once Router-CIM is uninstalled, you may remove the folders that remain on the C: drive that uninstall did not remove. Any folders which contain files that have been added or modified after the install will not be removed. The folders that can be removed are shown below:





The information presented was correct at the time of release. CIM-TECH.COM, Inc. reserves the right to change or modify the manual and its information shown, described or depicted without prior notice.

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