Installation Guide

2025
ROUTER-CIM
AUTOMATION SUITE

CNC Software Solutions by CIM-TECH

CONTACT US

877-549-8211

cim-tech.com

CIM-TECH
AUTOMATED CAD/CAM SOLUTIONS

© 2025 CIM-TECH.COM, Inc.

Router-CIM Automation Suite

© 2025 CIM-TECH.COM, Inc.

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Published: January 2025

CIM-TECH.COM, Inc.
7512 Dr. Phillips Blvd.
Suite 50-859
Orlando, FL 32819
United States
www.cim-tech.com

Toll-Free Technical Support:
(877) 549-8211

Table of Contents

System Requirements and Installation 4

1 Product Overview 6

Installation Quick Start 7

2 Critical Issues 8

3 Installation Guide 10

Installing On A Different Computer 23

4 Updates 25

5 Uninstall 26

© 2025 CIM-TECH.COM, Inc.

Router-CIM Automation Suite 2025 Minimum System Requirements

For 64-bit Systems

- Microsoft® Windows® 11 (64-bit) or Microsoft® Windows® 10 (64-bit) version 1809 or above.
- 2.5-2.9 gigahertz (GHz) or greater (Recommended: 3.0+ GHz or greater, 4 or more cores). ARM Processors are not supported.
- 8GB of RAM (32GB or more for 3D Modeling)
- 10GB or more Free disk space for Installation (40GB or more for 3D Modeling). SSD suggested.
- 1920 x 1080 True Color video display adapter 128 MB or greater, Pixel Shader 3.0 or greater, with "Recommended" graphics card (3840 x 2160 (4K) with preferred scaling: 100%, 125%, 150% or 200% on Windows®, 64-bit systems with capable display card)
- Microsoft® Internet Explorer 11.0 (or equivalent) or later web browser with network connection
- 2 GB GPU with 29 GB/s Bandwidth and DirectX 11 compliant (Recommended: 8GB GPU with 106 GB/S Bandwidth and DirectX 12 compliant)
- .NET Framework Version 8 or later
- 1 Available USB port

Supported AutoCAD Versions

Router-CIM 2025 supports the following Autodesk products:
AutoCAD 2025

You should check your hardware against the Autodesk Certified Hardware List to be sure of compatibility with your version of AutoCAD.

© 2025 CIM-TECH.COM, Inc.

Hardware Locks

In addition to the hardware requirements listed above, it is important to note that Router-CIM and AutoNEST require Hardware Locks (often called 'dongles') in order to function. Since there are two Hardware Locks required if you are using the nest software, you should have two USB ports available.

Note on Hardware Locks:
The Router-CIM 2007-2025 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 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 Hardware Lock, you will be invoiced for the full purchase price of the software. If you have Router-CIM 2007 or newer, the Hardware Locks are compatible and no switch is necessary.

Note: Type 1 Hypervisor Appliance Compatibility Warning: Please be aware that neither Router-CIM, Solid-CIM or Radan's Autonest USB hardware locks are compatible with any Type 1 Hypervisor appliance, including, but not limited to, Microsoft Hyper-V, Oracle VM, KVM and Citrix Hypervisor. These products ARE compatible with Type 2 Hypervisor appliances, such as VMWare's VM Workstation.

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 Hardware 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.

© 2025 CIM-TECH.COM, Inc.

Product Overview

The main purpose of Router-CIM Automation Suite is to provide a complete CAD/CAM solution for both single part machining and nested based manufacturing. Router-CIM Automation Suite allows you 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.

For new users of Router-CIM Automation Suite, 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 My Computer, or 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, cutting conditions, and materials you are likely to use on your parts.
- Knowing the difference between the file types Router-CIM Automation Suite uses such as DWG, DXF, and SCN.
- Understanding the Layer to Knowledge association feature in Router-CIM Automation Suite.

If you will be primarily using macros for your part definitions, then a complete understanding of Router-CIM's Parametric Macro Builder and how to create a macro is truly necessary. This takes practice and is best done on paper first! Also you will need to understand the different variable types: Global, Dynamic, Tagged, and Local, and how to use them.

© 2025 CIM-TECH.COM, Inc.

Installation Quick Start

These installation notes assume that AutoCAD 2025 is installed and functioning properly.

Make sure you are logged in with at least Local Administrator privileges on your system.

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

- Unplug any USB hardware locks previously installed.
- Download the Router-CIM installation files according to the included download card with your Router-CIM software package or visit www.cim-tech.com/20RCIM25. The website will include the instructions for downloading the necessary files including the file for starting the installation.
- The Router-CIM serial number will determine the installation options. The serial number is located on the Router-CIM download card included with your Router-CIM software package. If Nesting was purchased, the Router-CIM installation will automatically install the product.
- The Install will place the Router-CIM files in the default locations.
- The install procedure searches for AutoCAD on your hard disk, and uses this location to build icons to run the Router-CIM program.
- Once the install is finished, reboot the computer, plug in the USB hardware locks and you will be able to run the product.
- If any custom post processors are necessary, install them now. The procedure to install the post processors is to simply run the .exe file that contains the post processor, and answer a few default questions during the install.

© 2025 CIM-TECH.COM, Inc.

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 make a CD, external hard drive or another easy to restore method.

CD Recorders, DVD Recorders and External Hard Drives are all valid ways to back these folders up. Typically all of the folders can fit on one CD. After using the system for a while, the backups that Router-CIM stores on your system could mean that more than one CD is necessary.

A Note on CD Recorders: 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 back up are as follows:

1. **C:\Router-CIM**
2. **C:\Rcim_work**
3. **C:\Automation_code**

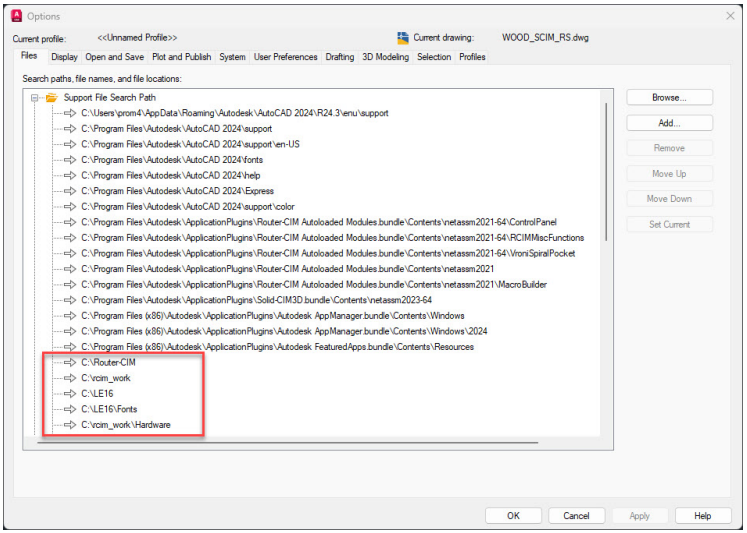
(C: is assumed here to be the installation drive.)

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

© 2025 CIM-TECH.COM, Inc.

Once Router-CIM has been installed, you can verify that the correct AutoCAD Support File Search Paths have been added by opening AutoCAD and typing OPTIONS in the command line.

Under the 'Files' tab, you can verify the five folder locations as highlighted below.



© 2025 CIM-TECH.COM, Inc.

Installation Guide

Notes:
1) Local users will need Administrator privileges to install the software.
2) You should remove any Hardware Locks that have been plugged into the computer.
3) Any Anti-Virus or Malware Software should be disabled temporarily prior to starting the installation. Make sure to enable these when the installation has been completed
4) These installation notes assume that AutoCAD 2025 is installed and functioning properly.

Failure to do these things may result in an incomplete installation causing the program to not function properly.

Note: If you need to install Router-CIM on a different computer and want to transfer your information, please read the 'Installing on a Different Computer' section of the installation manual.

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

Download the Router-CIM installation files according to the included download card with your Router-CIM software package or visit www.cim-tech.com/20RCIM25. The website will include the instructions for downloading the necessary files including the file for starting the installation.

© 2025 CIM-TECH.COM, Inc.

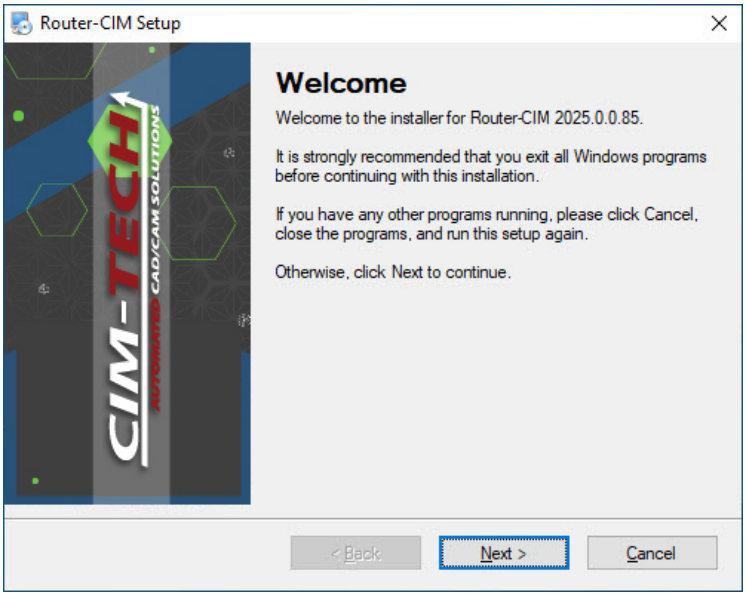
The Router-CIM serial number will determine the installation options. The serial number is located on the Router-CIM download card included with your Router-CIM software package.

The install will search for Router-CIM files in the default location.

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

© 2025 CIM-TECH.COM, Inc.

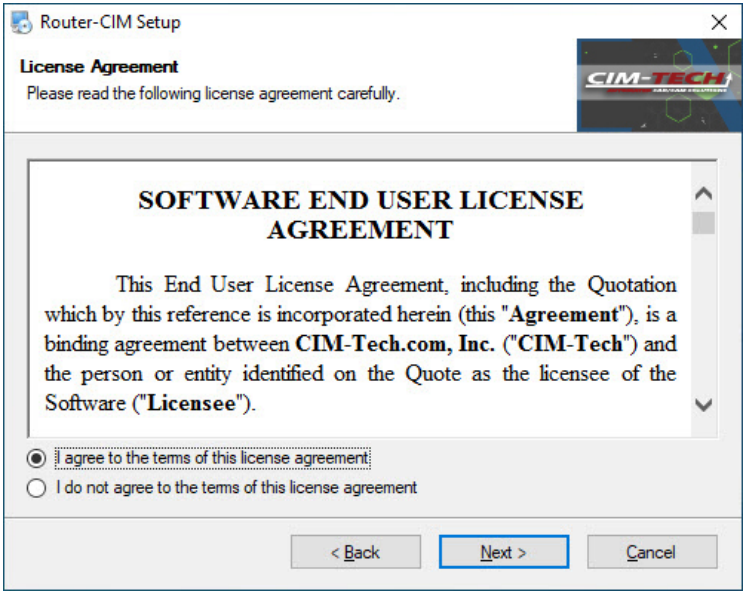
When the installation program starts, the following screen will appear:



From here, all of the default selections have been made for you.

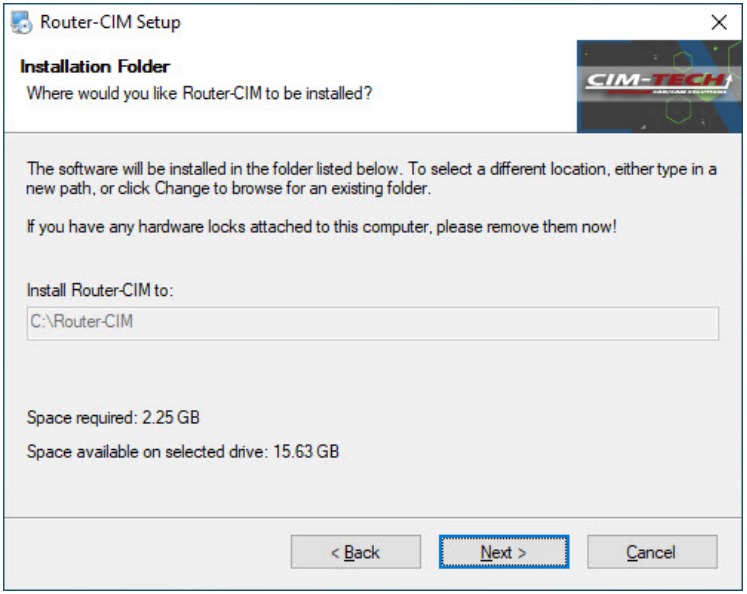
Select '**Next**' to continue, or **'Cancel'** to exit from the installation.

© 2025 CIM-TECH.COM, Inc.



This is the license agreement for Router-CIM. Be sure you read the agreement. Selecting **'I do not agree to the terms of this license agreement'** 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 of this license agreement'** and **'Next'** to continue.

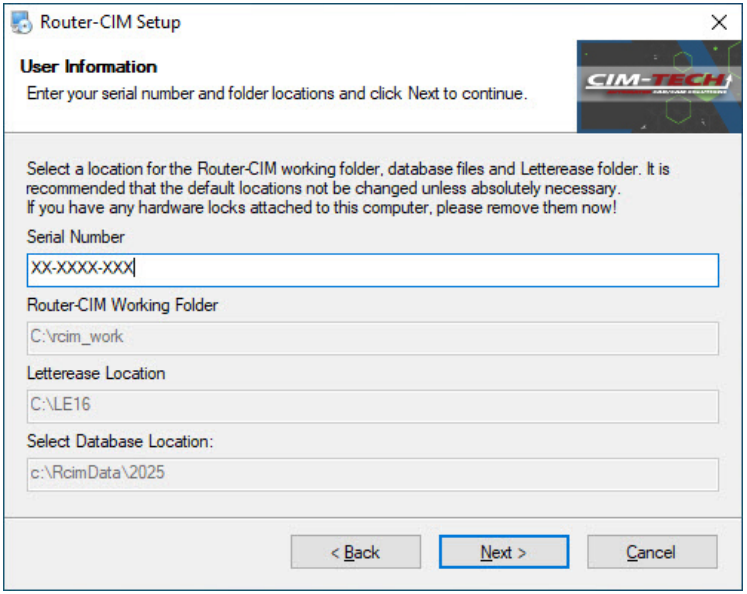
© 2025 CIM-TECH.COM, Inc.



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

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

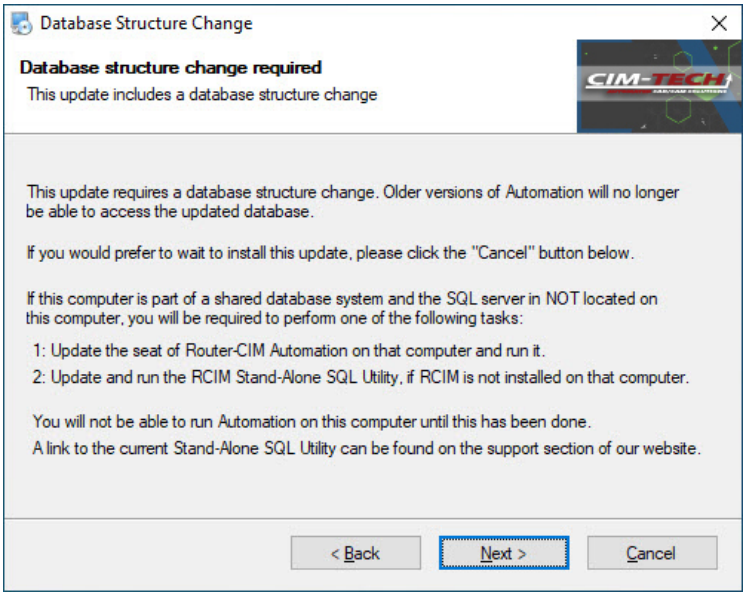
© 2025 CIM-TECH.COM, Inc.



Enter your serial number that is supplied to you with the software. The default database location is on your C: drive in the RcimData folder.

You may select **'Next'** to continue, **'Back'** to go to the previous window, or **'Cancel'** to exit from the installation.

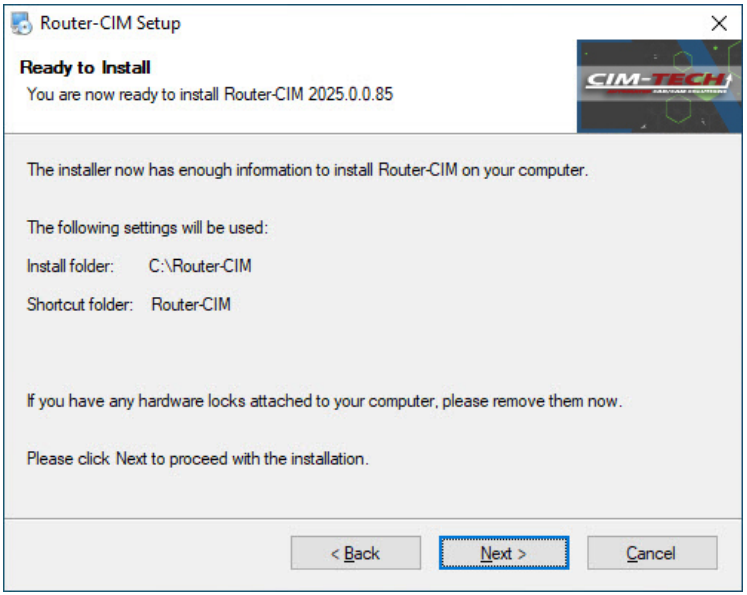
© 2025 CIM-TECH.COM, Inc.



This notification screen will appear informing you that the SQL Database will be updated upon completion of the installation. If you are running a shared database between multiple Router-CIM users, you will need to make sure all users accessing the database are updated to the same version.

You may select **'Next'** to continue, **'Back'** to go to the previous window, or **'Cancel'** to exit from the installation.

© 2025 CIM-TECH.COM, Inc.

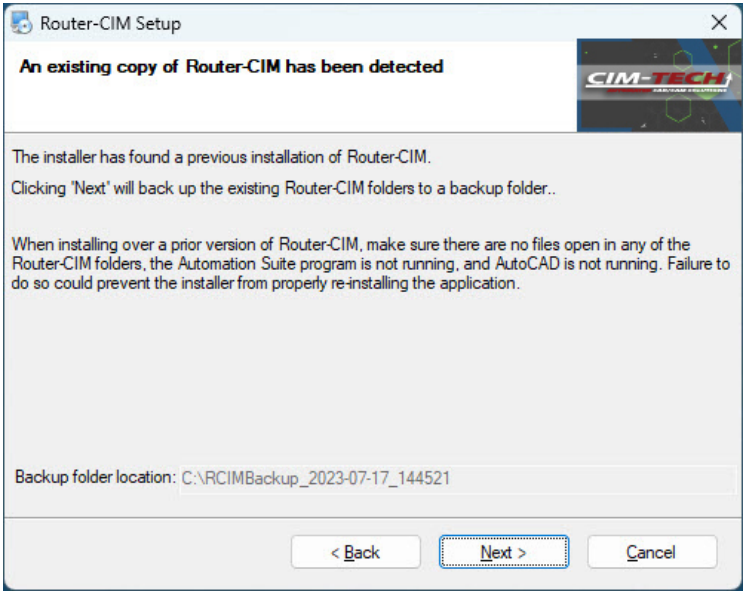


This screen will recap where Router-CIM is going to be installed to.

You may select **'Next'** to continue, **'Back'** to go to the previous window, or **'Cancel'** to exit from the installation.

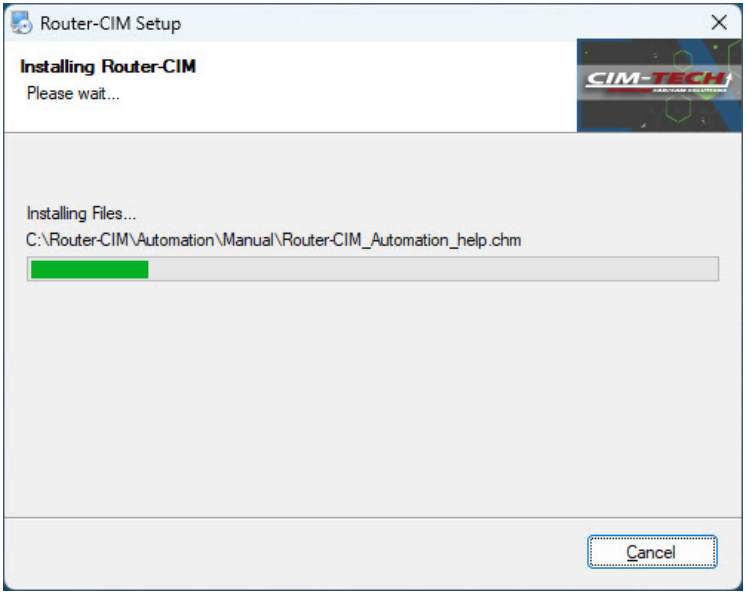
© 2025 CIM-TECH.COM, Inc.

Note: If an existing copy of Router-CIM is found on the computer in which you are installing, you will see this screen:



You may select **'Next'** to continue, **'Back'** to go to the previous window, or **'Cancel'** to exit from the installation.

© 2025 CIM-TECH.COM, Inc.



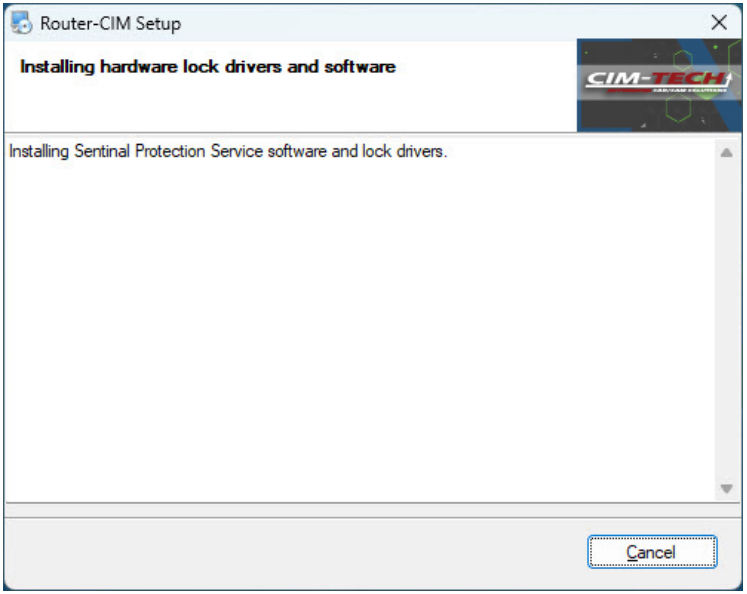
The installer will start copying files to the necessary locations in this section of the install.

The SQL Server 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 step will appear when this is finished.

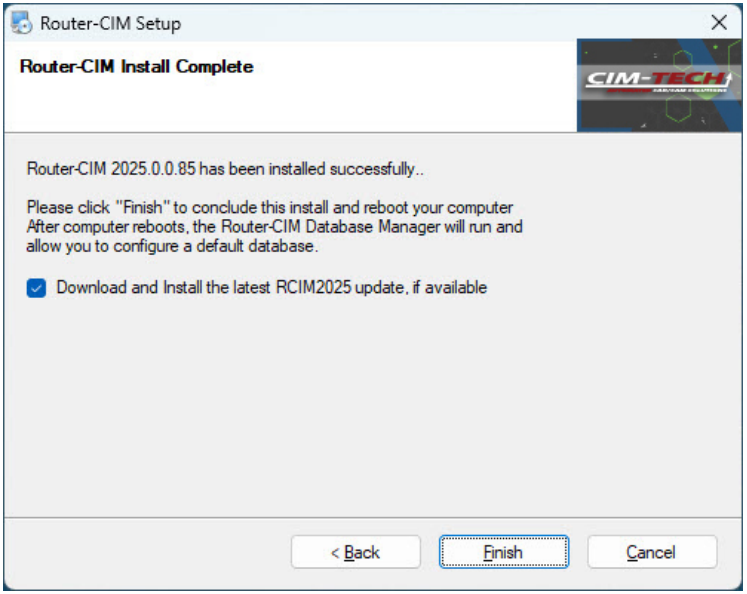
© 2025 CIM-TECH.COM, Inc.



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.

Once that is finished, the install of Router-CIM is completed and the following screen will appear:

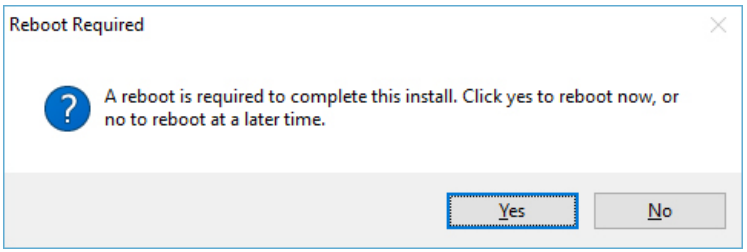
© 2025 CIM-TECH.COM, Inc.



Note: After the Router-CIM Installation, Router-CIM will check to see if an update is released if the option for 'Download and Install the latest RCIM update, if available' is checked.

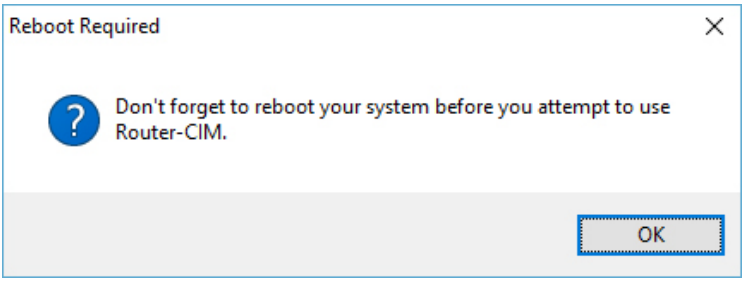
Select **'Finish'**.

You will see a message requesting you to reboot your computer. The installation is not finished until you reboot your computer.



© 2025 CIM-TECH.COM, Inc.

If you select **'No'** at this time, a reminder screen will appear.



Once a reboot has been completed, the installation of Router-CIM is complete. There is a USB lock for a USB port that will need to be plugged in at this time.

© 2025 CIM-TECH.COM, Inc.

Installing On A Different Computer

Note: Follow the procedure for installing Router-CIM described under the 'Installation Guide' section and then proceed with this section.

1) Install your Post Processor(s) from the same setup files you used on the previous system. Or, create a pack and go on the previous system and import it on the new system.

2) Install any optional add-ons such as Advanced Nesting, CutSim, Multi-CIM or Solid-CIM 3D. If you are installing Solid-CIM 3D, be sure to copy your authorization file (rcimauth.key) to C:\Router-CIM. This file would have been emailed to you at the time the lock was authorized. You can also copy it from the C:\Router-CIM folder of a previous install or backup.

3) Knowledge drawings and DOIT files are a simple copy and paste. Their location is set from Router-CIM Automation Suite under File > Settings > System Folders . Find these files on the old system and place them in the same folder structure on the new system. If your files are located on a network that the new computer also has access to, you will not need to move the files.

4) Your materials, job library, and Automation settings are stored in the database.

A) Either click **File > Database Maintenance** or run the **RCIM DB Manager** shortcut to access the database utilities window.
B) From the previous system, use the **'Backup'** button to create a backup of the database(s).
C) Copy the backup file from C:\Router-CIM\Automation\Database\Backups to the same location on the new system.

© 2025 CIM-TECH.COM, Inc.

Note: The backup(s) must be in that folder to be able to restore them.

D) On the new system, use the **'Restore New'** button in the **RCIM DB Manager** to restore the database backup(s).

© 2025 CIM-TECH.COM, Inc.

Updates

The Router-CIM 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. Go to the Support section of the website and select on 'Software Updates'.

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

Note: Router-CIM Automation Suite will also check regularly to see if a new update is available. To ensure that Router-CIM Automation Suite can access the updates, you will need to have a network connection and you will need to make sure that in Router-CIM Automation Suite your 'Settings' under the 'General Settings' tab has 'Check for Available Updates' selected.

© 2025 CIM-TECH.COM, Inc.

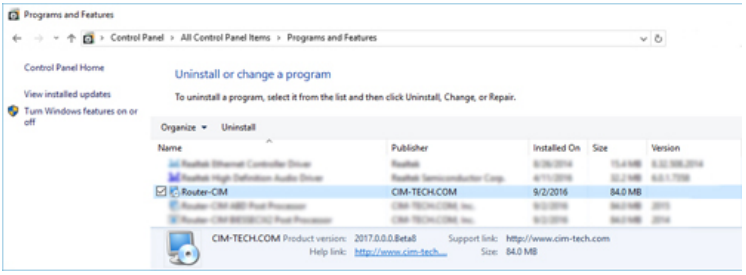
Uninstall Router-CIM

In order to uninstall Router-CIM, you should use the Add/Remove programs application in Windows.

You will see the entry for **Router-CIM** in this section. You should remove the Router-CIM entry.

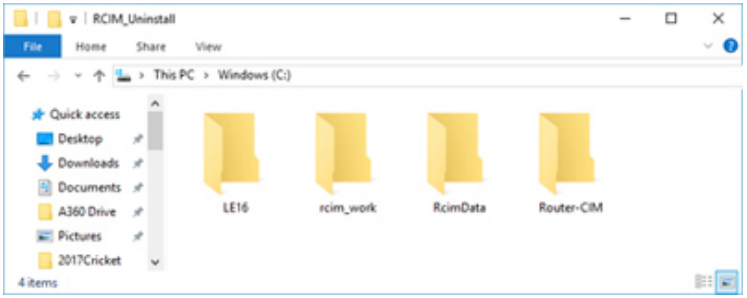
If you are not re-installing on the current machine, you can also remove the Sentinel Protection Installer x.x.x.

Note: If you have other software that uses a Sentinel hardware lock, you should not remove the Sentinel Protection Installer program. x.x.x will be identified by a specific number version dependent on which version was installed.



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:

© 2025 CIM-TECH.COM, Inc.



© 2025 CIM-TECH.COM, Inc.

CIM-TECH

AUTOMATED CAD/CAM SOLUTIONS

CIM-TECH.COM, Inc.
7512 Dr. Phillips Blvd.
Suite 50-859
Orlando, FL 32819
United States
www.cim-tech.com

Toll-Free Technical Support:
(877) 549-8211