Software for Opto-Mechanical Modeling

Installation Guide

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INSTALLATION

Impact on Existing Installations of RayViz

- The current release of RayViz will overwrite previous installations of RayViz. Only one version of RayViz may be active in SolidWorks.

SolidWorks Requirements

SolidWorks must first be installed on the computer that RayViz will be installed. Version 2020 of RayViz is compatible with:

- SolidWorks 2013 or later

System Requirements

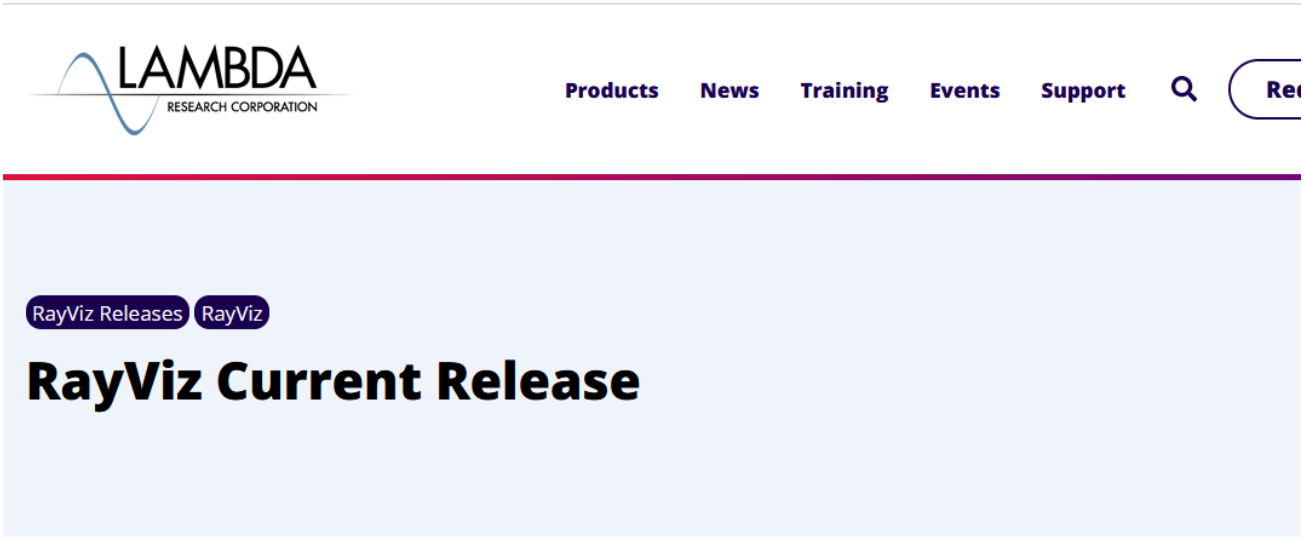
The system requirements for the RayViz need to account for both SolidWorks and TracePro if both programs are going to be run on the same machine. Consult the SolidWorks documentation for its requirements. TracePro has the following requirements. If both programs are going to be run on the same computer your system should exceed the higher of the recommendations.

Operating System	Windows 10 (64-bit) Windows 11 (64-bit)
Minimum RAM	2 GB
Recommended Operating System	Windows 10 (64-bit)

Software Download

RayViz and additional support programs, examples, and documentation are available from the Lambda Research Corporation website.

- Go to http://lambdares.com/support/rayviz-current-release/

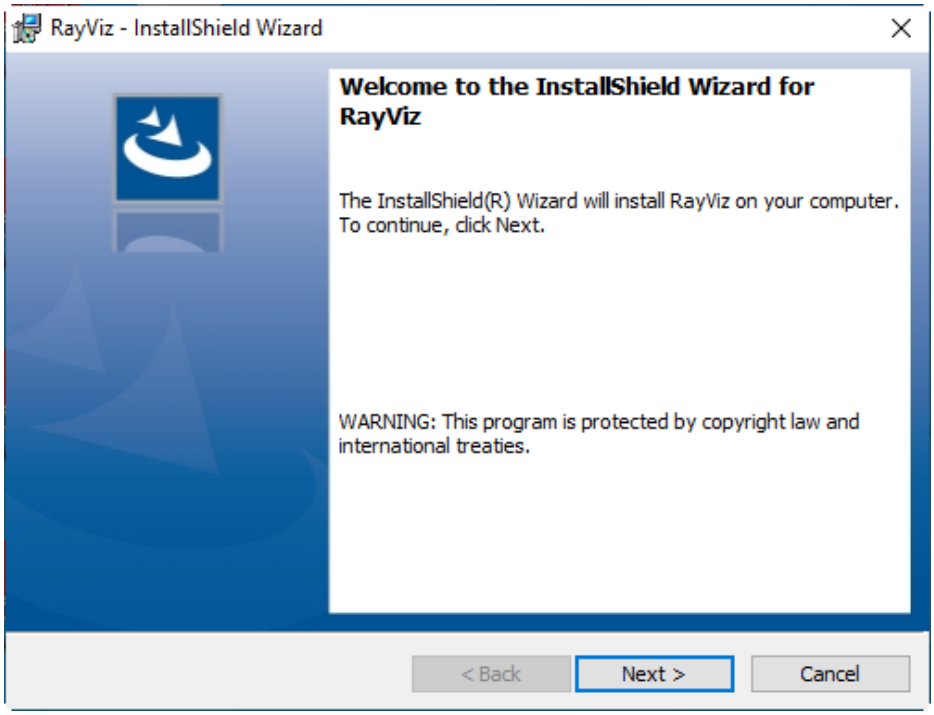


- Save the RayViz Installer.exe file to a convenient location on your computer. Double-click on the RayViz Installer.exe file to begin the installation.
- Network Licenses only – download and install LambdaNetworkLicenseServerInstaller on the computer that will be acting as the RayViz License Server.

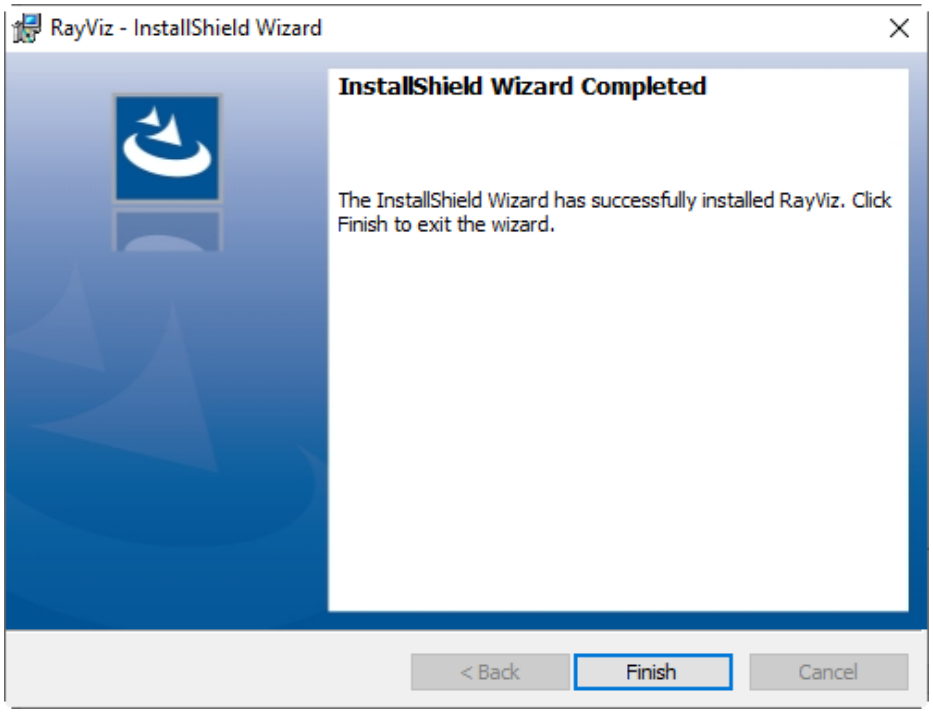
The RayViz software is also available on USB Flash Drive by request.

RayViz Installation

- Prior to installing RayViz, exit any active sessions of SolidWorks.
- Double-click on the RayViz Installer.exe file.



- Follow the steps of the RayViz Installation Wizard.

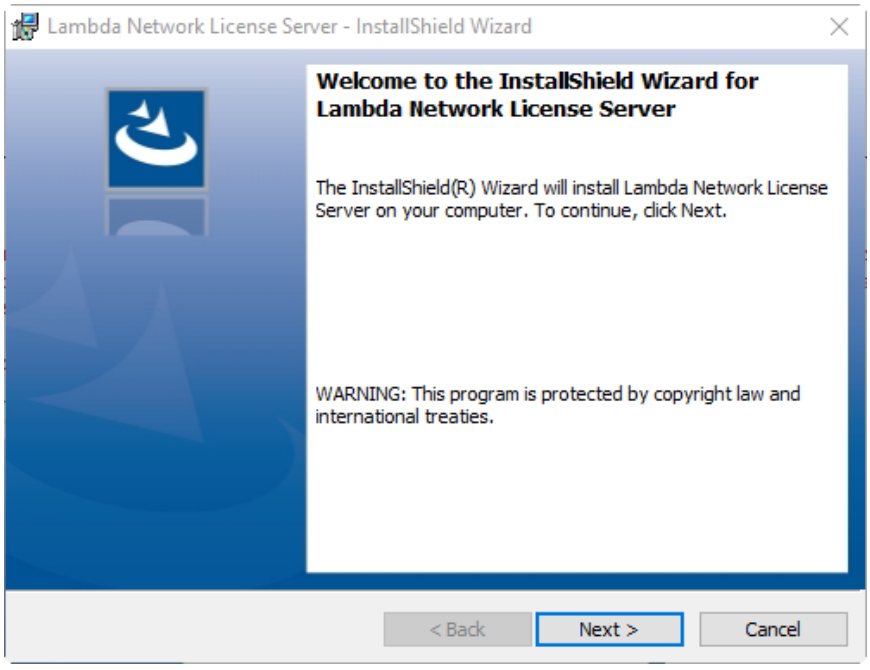


- Click **Finish** to complete the installation.

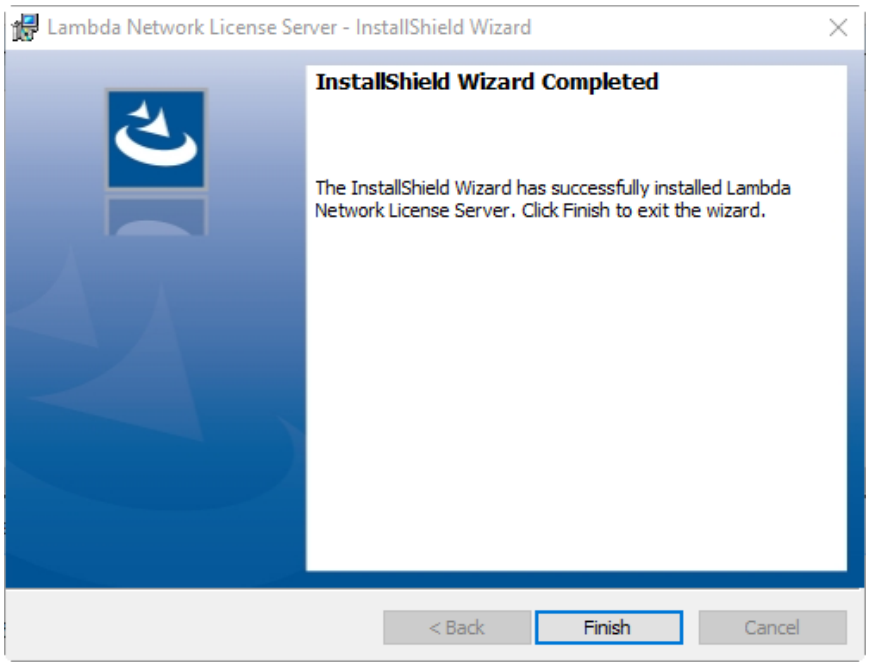
Lambda Network License Server Installation

There are two items of software that need to be installed on the computer that will be acting as the RayViz License Server for a network license, the CodeMeter Control Center and the License Troubleshooter. These two items are packaged into one installer.

- Double-click on the LambdaNetworkLicenseServerInstaller.exe file …



- Follow the steps of the Lambda Network License Server Installation Wizard.



- Click **Finish** to complete the installation.

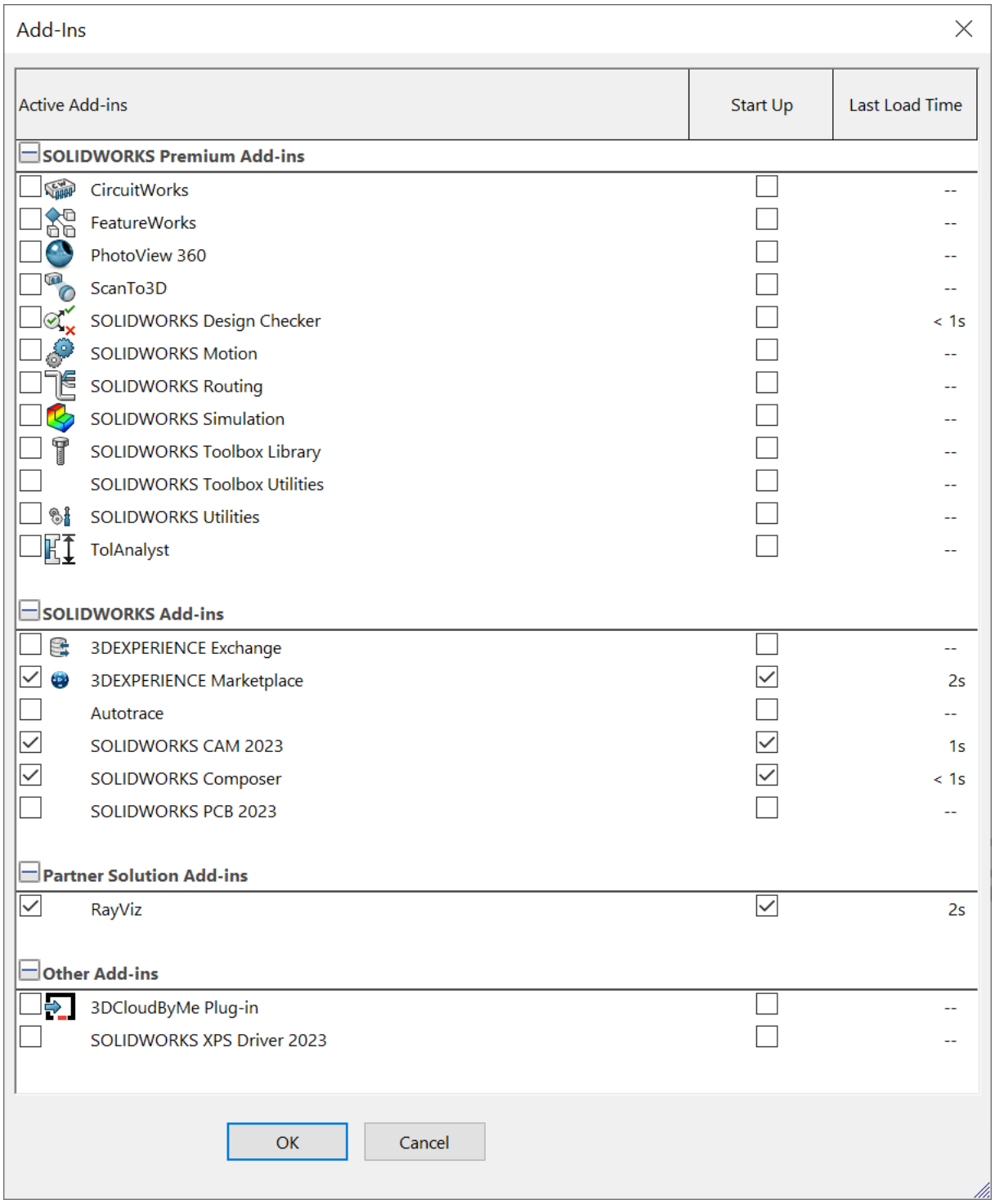
Launching RayViz

To launch RayViz, start SolidWorks.

The default condition is that the RayViz add-in will be loaded when SolidWorks starts.

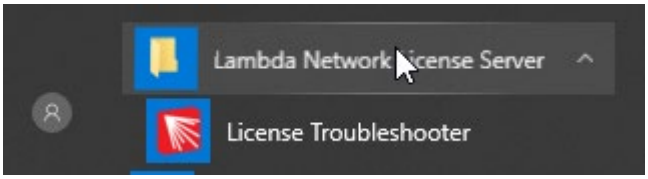
If RayViz finds an available license the program will run.

The RayViz Add-In can be turned ON or OFF by selecting Tools/Add-Ins in SolidWorks and checking the boxes for Active and Start Up.

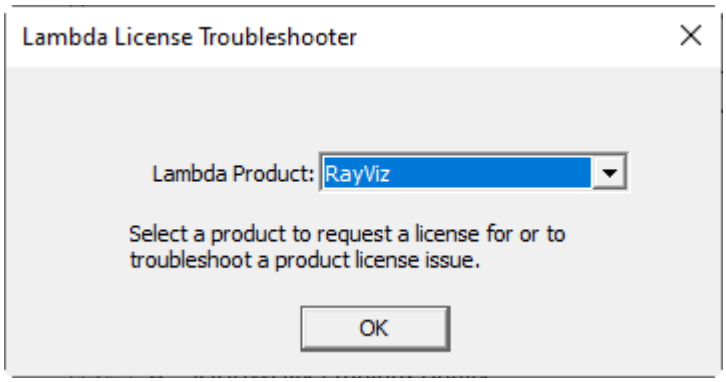

Add-Ins
Active Add-ins
Start Up
Last Load Time
SOLIDWORKS Premium Add-ins
CircuitWorks --
FeatureWorks --
PhotoView 360 --
ScanTo3D --
SOLIDWORKS Design Checker < 1s
SOLIDWORKS Motion --
SOLIDWORKS Routing --
SOLIDWORKS Simulation --
SOLIDWORKS Toolbox Library --
SOLIDWORKS Toolbox Utilities --
SOLIDWORKS Utilities --
TolAnalyst --
SOLIDWORKS Add-ins
3DEXPERIENCE Exchange --
3DEXPERIENCE Marketplace 2s
Autotrace --
SOLIDWORKS CAM 2023 1s
SOLIDWORKS Composer < 1s
SOLIDWORKS PCB 2023 --
Partner Solution Add-ins
RayViz 2s
Other Add-ins
3DCloudByMe Plug-in --
SOLIDWORKS XPS Driver 2023 --
OK
Cancel

Launching the License Troubleshooter from a Network License Server

To launch the License Troubleshooter, select the icon from the Windows Start menu.



The Lambda License Troubleshooter dialog will appear.



Select RayViz and click OK to launch the RayViz License Troubleshooter.

LICENSING

License Options

There are three decisions to make when purchasing a RayViz license:

- Single-computer vs. Network
- USB License vs. Soft License
- Multiple Product License vs. Separate License

Single-computer vs. Network

Single-computer license

- Allows one user to run multiple instances of RayViz on one computer
- The license services and utilities are included in the installation of RayViz

Network license

- Allows several users on a single Local Area Network (LAN), or with remote access to that network, to share licenses of RayViz
- One computer on the network acts as the RayViz License Server – RayViz can be, but does not need to be, installed in the License Server – the license services and utilities must be installed on the License Server if the application is not installed
- RayViz must be installed on each user's computer

USB License vs. Soft License

USB License

- License information is contained within the USB dongle
- Physical USB dongle must be connected to the computer
- Portable - can be transferred to another computer

Soft License

- License is linked to unique hardware and software identifiers of the computer
- No physical USB dongle to connect
- Not portable - will only work on the specific hardware/software configuration for which it was generated

Special considerations for Soft Licenses:

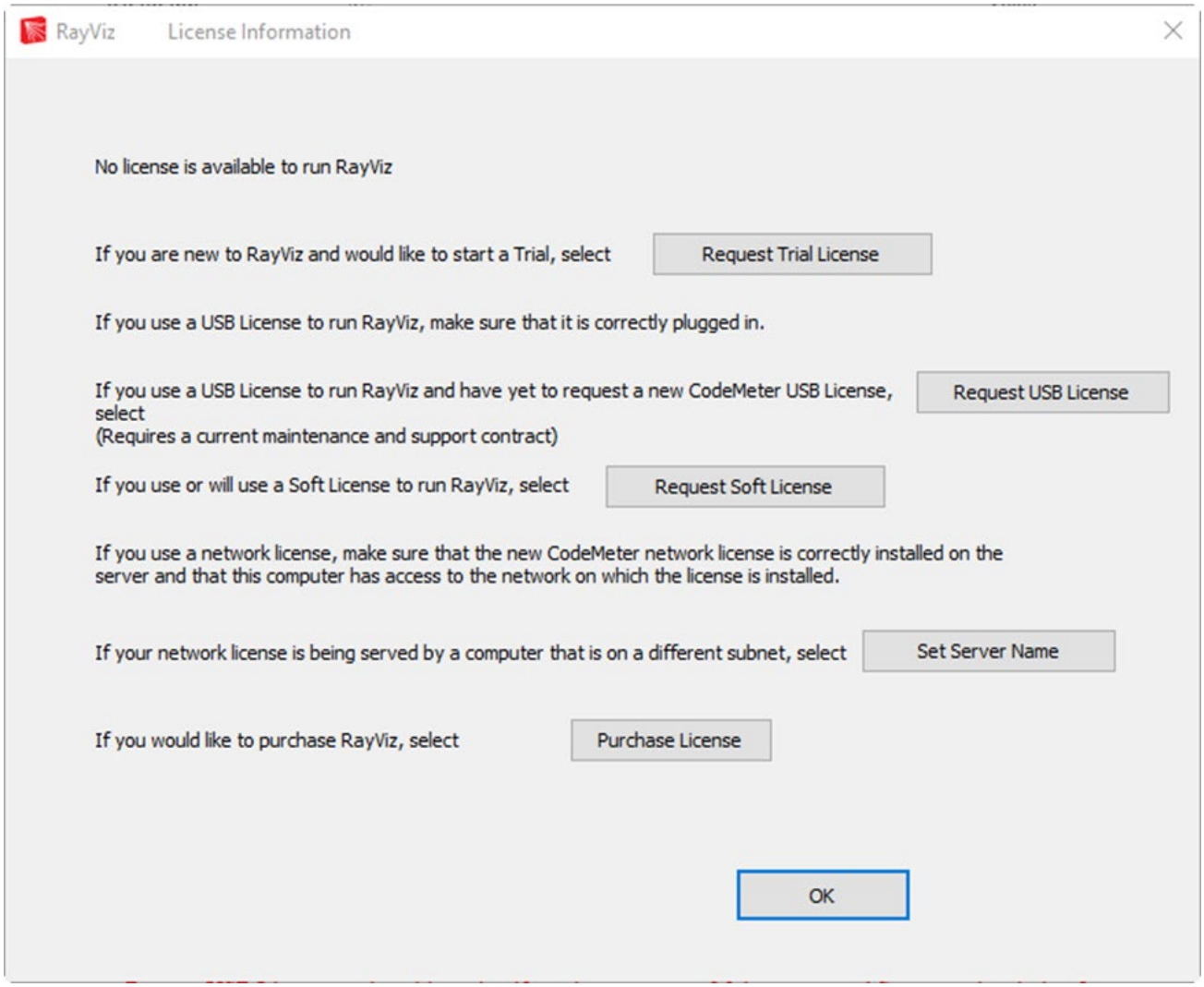
- Moving the License – the process for moving a Soft License to a new computer is to first remove the existing license, then to obtain a new license
- System Restore – If a System Restore is performed, this will deactivate the license
- Virtual License Servers – if a virtual license server is moved to a different physical server, this will deactivate the license

Multiple Product License vs. Separate License

- Multiple Product License (TracePro/OSLO/RayViz) - advantage is that there is only one license to maintain
- Separate License – advantage is that single-computer licenses can be run on different computers

Requesting a New License

When SolidWorks is launched with RayViz is installed, (or when the RayViz License Troubleshooter is launched on a Network License Server) and no valid license is detected, the RayViz License Troubleshooter dialog will open.



- Request Trial License - select this option to send a CodeMeter context file to sales@lambdares.com
- Request USB License - select this option if you have a current Maintenance and Support subscription for TracePro Bridge and would like to receive your RayViz CodeMeter USB dongle to run RayVix 7.8.0 and later.
- Request Soft License - select this option to send a CodeMeter context file to license@lambdares.com
- Set Server Name – select this option to specify a server for a network license (searches entire subnet by default)
- Purchase License - select this option to send an e-mail to sales@lambdares.com to request information about purchasing a license for RayViz

ALL – Please include your name and organization in the e-mail

NOTE – For customers that do not have an e-mail client installed or actively setup, the automatic e-mail and file attachment feature will not succeed. The context file named “RayViz32767-xxxxxxxxx.WibuCmRaC” is also saved to your Desktop so you can send it to us.

Activate License

Upon receipt of a CodeMeter Update file, save the file, then double-click on the file to activate the license.

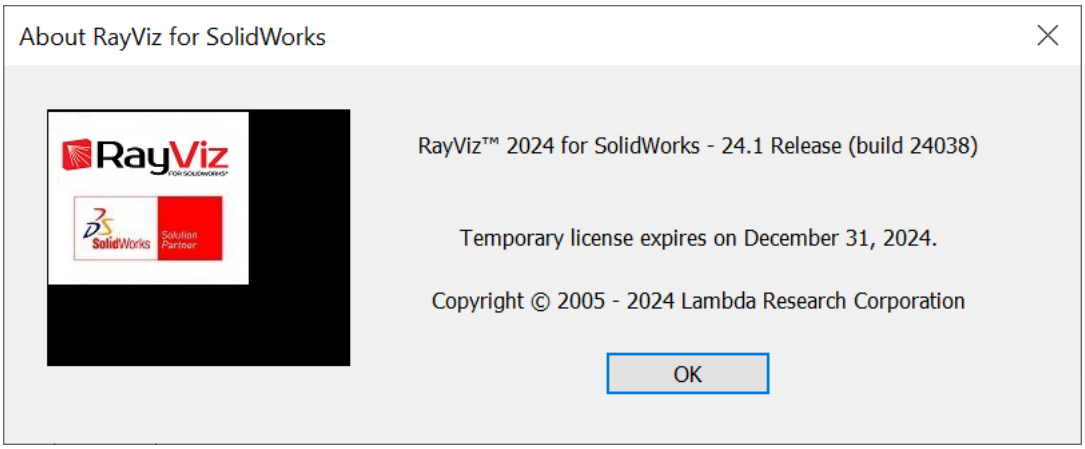
SOFTWARE UPDATES AND MAINTENANCE TASKS

About RayViz for SolidWorks

To view the About RayViz for SolidWorks window, select Tools / RayViz / About RayViz from the SolidWorks menu.

The About RayViz for SolidWorks window displays the following information:

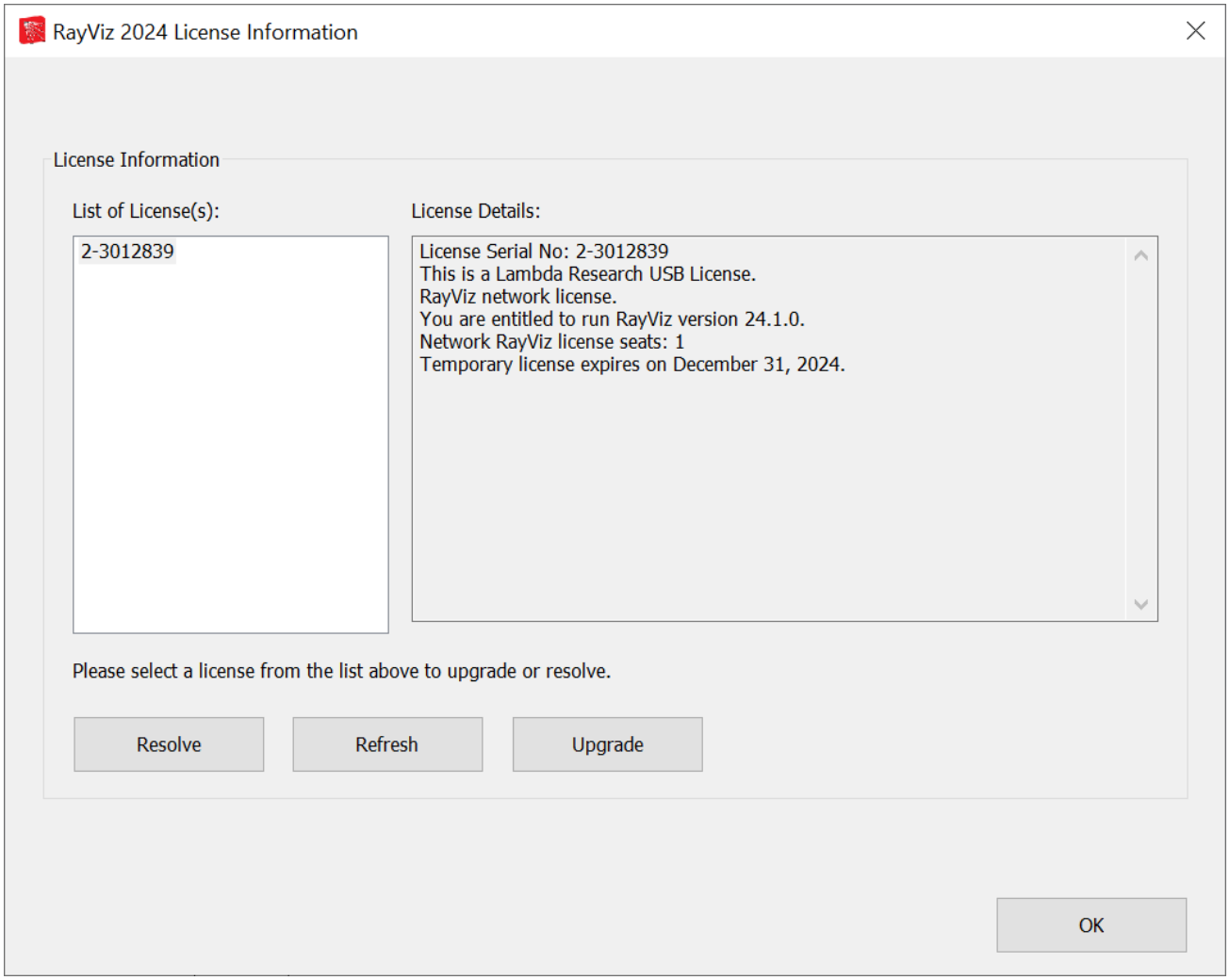
- RayViz for SolidWorks Release
- Permanent License OR Days Remaining on Temporary License



RayViz License Information

To open the RayViz License Information dialog, select Tools / RayViz / License from the SolidWorks menu.

Select an item in the List of License(s) to view the information about that license. An example of the License Information screen is shown below.



Resolve

- select this option to troubleshoot a licensing issue

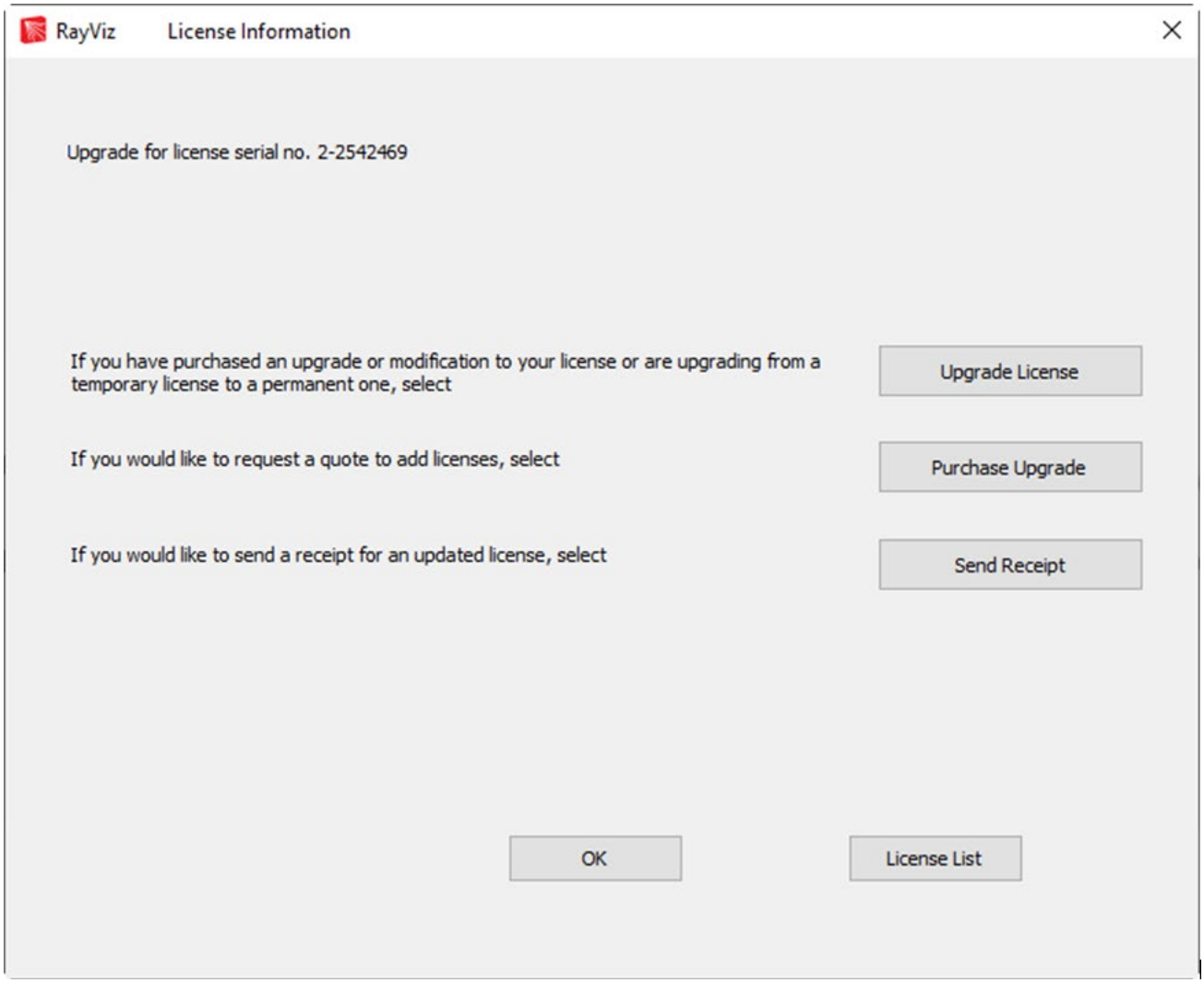
Refresh

- select this option to refresh the license information after connecting/disconnecting USB dongles or network connections

Upgrade

- select the license in the List of License(s), then select this option to open another page of options related to making changes to the existing license

After selecting Upgrade, three options are available:



Upgrade License

- select this option to upgrade the current RayViz license (add time to a temporary license, etc) – this option sends an e-mail to license@lambdares.com with a context file taken from an existing license

Purchase Upgrade

- select this option to upgrade the current RayViz license (add time to a temporary license, etc) – this option sends an e-mail to sales@lambdares.com with a context file taken from an existing license

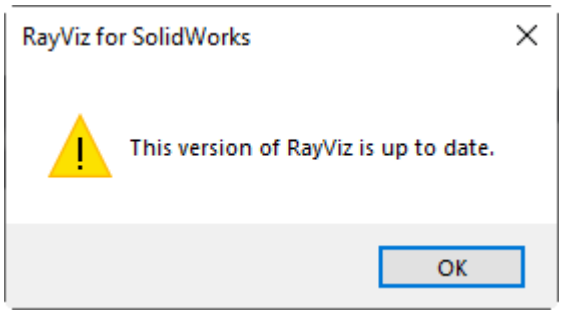
Send Receipt

- select this option to send verification that a license update has been activated (most commonly used for a soft license exchange) – this option sends an e-mail to license@lambdares.com with a context file taken from an existing license

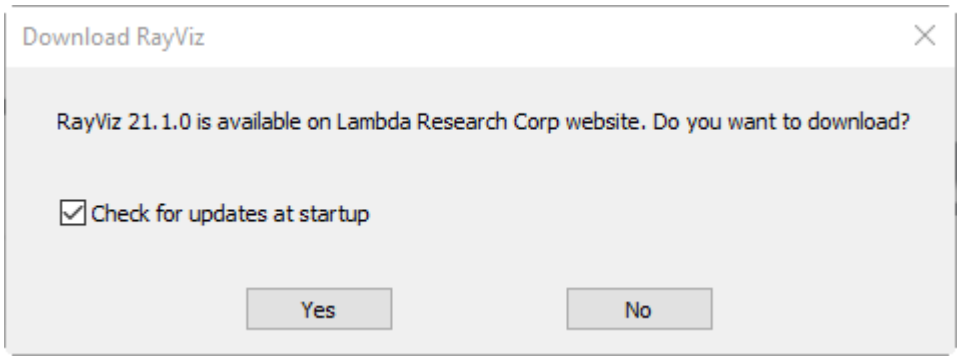
Check for Updates

Select Tools / RayViz / Check for Updates from the SolidWorks menu.

If the latest release is already installed, the following message will be displayed:

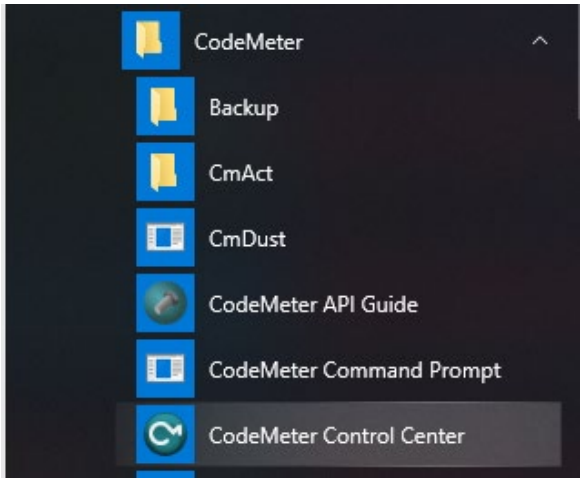


If the latest release is not already installed, a message will be displayed. An example of this message is shown below.

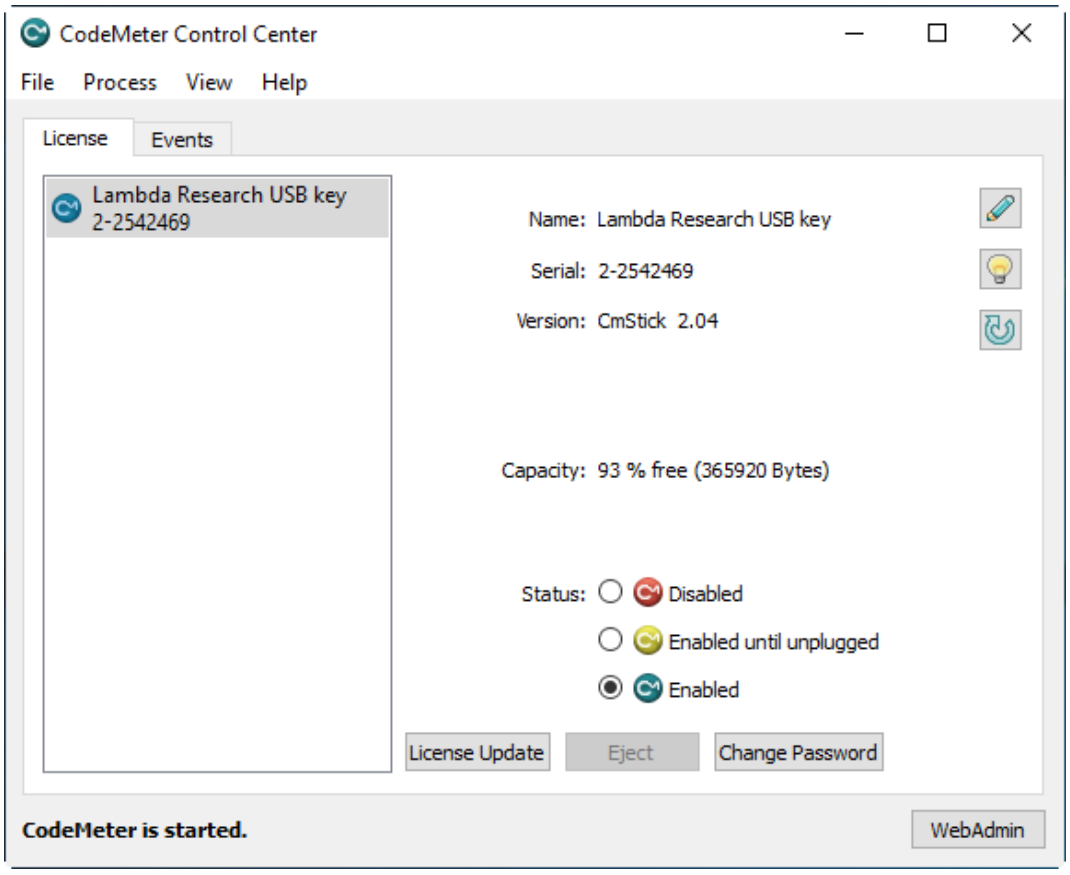


Monitoring Network License Usage

The CodeMeter licensing used by RayViz has an interface to obtain the status of a network license.
From the Windows Start Menu, select Programs / CodeMeter / CodeMeter Control Center.

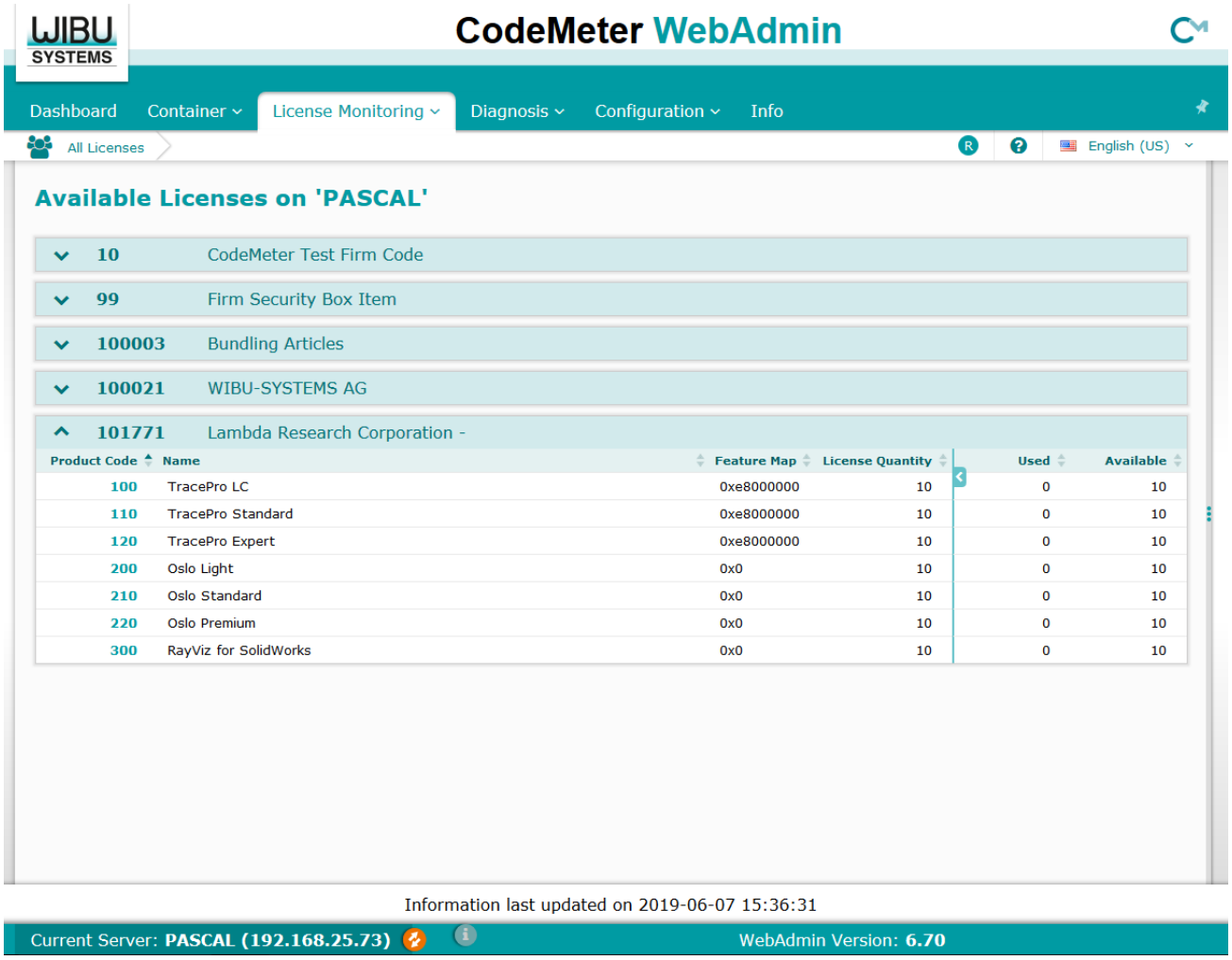


This launches the CodeMeter Control Center.



Select the Web Admin button (lower-right).

This will launch CodeMeter WebAdmin in your web browser.
Select the License Monitoring tab.



Please note that the default Current Server is localhost, so the License Monitoring screen will only display licenses hosted on the local computer.

To view licenses from a different server, double-click on “Current Server: localhost” (bottom of window) select another server from the network, then click Apply.

This example is showing a Network License on the server named Pascal, with 10 licenses available for several items of Lambda Research software.

Transferring RayViz to a New Computer

When RayViz is installed on a new computer, there are 3 items that need to be transferred from the old computer, (1) the license, (2) the Properties Database, and (3) the initialization files:

License

The transfer of the license is dependent on the license type

- Single Computer USB License – disconnect the USB dongle from the old computer and connect it to the new computer
- Single Computer Soft Licenses – since the soft license is bound to the hardware of the computer, the old soft license will need to be removed and a new soft license issued.
    - From the old computer, follow the steps to Upgrade an Existing License per Page 11 (the "upgrade" will be the removal of the license)
    - From the new computer, follow the steps to Request a New License per Page 8.
- Network USB License or Soft License
    - If the network license was served from another computer on the network, there is no action at this time.
    - If the network license was served from this computer, follow the steps in the next section for Transferring the TracePro Network License to a New License Server.

Properties Database

The default name of the TracePro Properties database is TracePro.db, and its default location is

C:\Users\<USERNAME>\AppData\Roaming\LambdaResearch Corporation\RayViz

If the filename or location were modified, select Tools/RayViz/Database in Solidworks on the old computer to obtain the filename and filepath.

Move the TracePro Properties database to the same location on the new computer. A new Properties Database may have been placed in the same location on the new Computer by the RayViz Installation, if so, replace this file with the database from the old computer.

Initialization File

There is a file that is read by RayViz at each launch that includes preference selections and license information, RayViz.ini. The location of this file is:

C:\Users\<USERNAME>\AppData\Roaming\LambdaResearch Corporation\RayViz

Move RayViz.ini to the same location on the new computer. New .ini files may have been placed in the same location on the new computer by the RayViz Installation, if so, replace these files with the .ini files from the old computer.

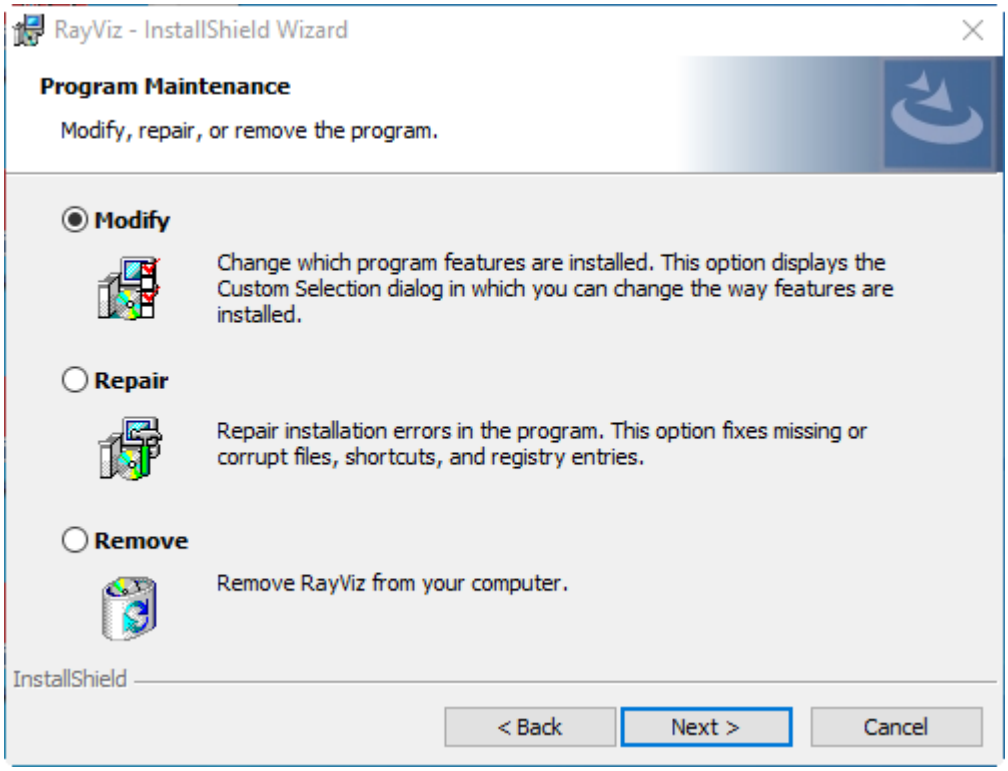
Transferring the RayViz Network License to a New License Server

The transfer of the license is dependent on the license type

- Network USB License
    - Perform the Lambda Network License Server Installation per Page 4.
    - disconnect the USB dongle from the old computer and connect it to the new computer
- Network Soft License – since the soft license is bound to the hardware of the license server, the old soft license will need to be removed and a new soft license issued.
    - From the old license server, follow the steps to Upgrade an Existing License per Page 11 (the “upgrade” will be the removal of the license)
    - On the new license server, perform the Lambda Network License Server Installation per Page 4.
    - From the new computer, follow the steps to Request a New License per Page 8.

Modify, Repair, or Remove the Program

- In order to Modify, Repair, or Remove RayViz, initiate the RayViz installation by double-clicking RayViz…Installer.exe.
- Click **Next** to continue.
- If RayViz detects that the same release has already been installed, the following screen will appear:



- Choose **Modify** to open the Select Feature dialog box to choose which installation components to install or uninstall at this time.
- Choose **Repair** to automatically run a Maintenance routine to reinstall any corrupted files from a prior installation.
- Choose **Remove** to uninstall the program.

QUICKSTART GUIDES

Quickstart Guide 1 – Single-computer / Soft License

- Software Download per Page 2
- RayViz Installation per Page 3
- Launching RayViz per Page 5
- Requesting a New License per Page 8
- Activate License per Page 8

Quickstart Guide 2 – Single-computer / USB License

- Software Download per Page 2
- RayViz Installation per Page 3
- Connect the USB dongle
- Launching RayViz per Page 5

Quickstart Guide 3 – Network / Soft License

Network License Server

- Lambda Network License Server Installation per Page 4
- Requesting a New License per Page 8
- Activate License per Page 8

Each RayViz User:

- Software Download per Page 2
- RayViz Installation per Page 3
- Launching RayViz per Page 5

Quickstart Guide 4 – Network / USB License

Network License Server

- Lambda Network License Server Installation per Page 4
- Connect the USB dongle

Each RayViz User:

- Software Download per Page 2
- RayViz Installation per Page 3
- Launching RayViz per Page 5

TROUBLESHOOTING GUIDE – INSTALLATION AND LICENSING

Installation Troubleshooting

There are several files that need to be installed in order for the RayViz Installation to be successful:

- Windows Installer files

If the RayViz Installation fails with a message about any of these file types, please perform a Windows Update. From the Windows Start Menu, select Control Panel/Windows Update, and select the button to Check for Updates. Install the recommended updates, reboot, then try installing RayViz again.

License Troubleshooting

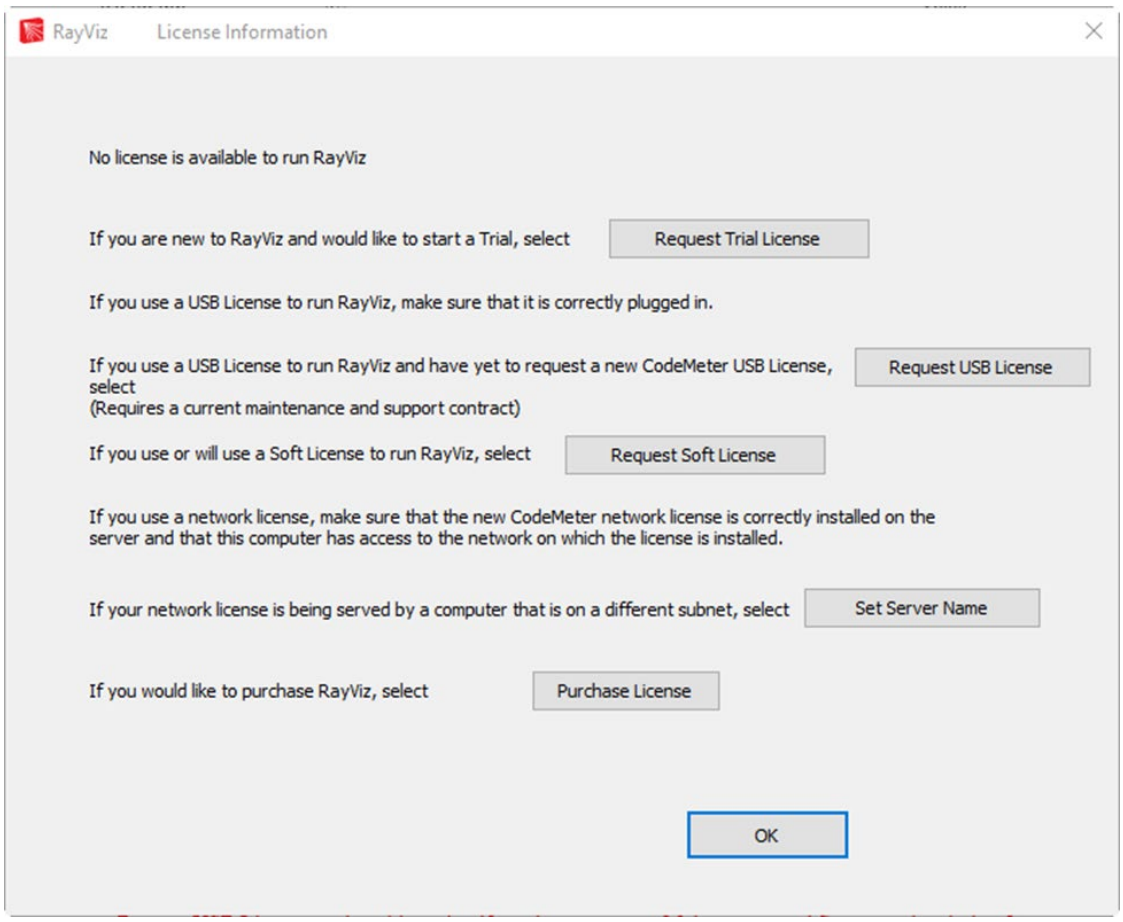
No license is located

When RayViz is launched (or when the RayViz License Troubleshooter is launched on a Network License Server) and no valid license is detected, the RayViz License Troubleshooter dialog will open.

- Request Trial License
  - select this option to send a CodeMeter context file to license@lambdares.com
  - upon receipt of a CodeMeter Update file from license@lambdares.com, save the file, double-click on the file to activate the license, then launch RayViz
- Request USB License
  - select this option if you have a current Maintenance and Support subscription for RayViz and would like to receive your RayViz CodeMeter USB dongle to run RayViz 7.8.0 and later.
  - upon receipt of the CodeMeter USB dongle, connect the dongle, then launch RayViz
- Request Soft License
  - select this option to send a CodeMeter context file to license@lambdares.com
  - upon receipt of a CodeMeter Update file from license@lambdares.com, save the file, double-click on the file to activate the license, then launch RayViz
- Set Server Name – see separate section below
- Purchase License
  - select this option to send an e-mail to sales@lambdares.com to request information about purchasing a licenses for RayViz.

A license has been located, but fails

If a license is located, but it fails to launch RayViz, the RayViz License Troubleshooter will open.



Select an item in the List of License(s) then select Resolve to start the troubleshooting process.

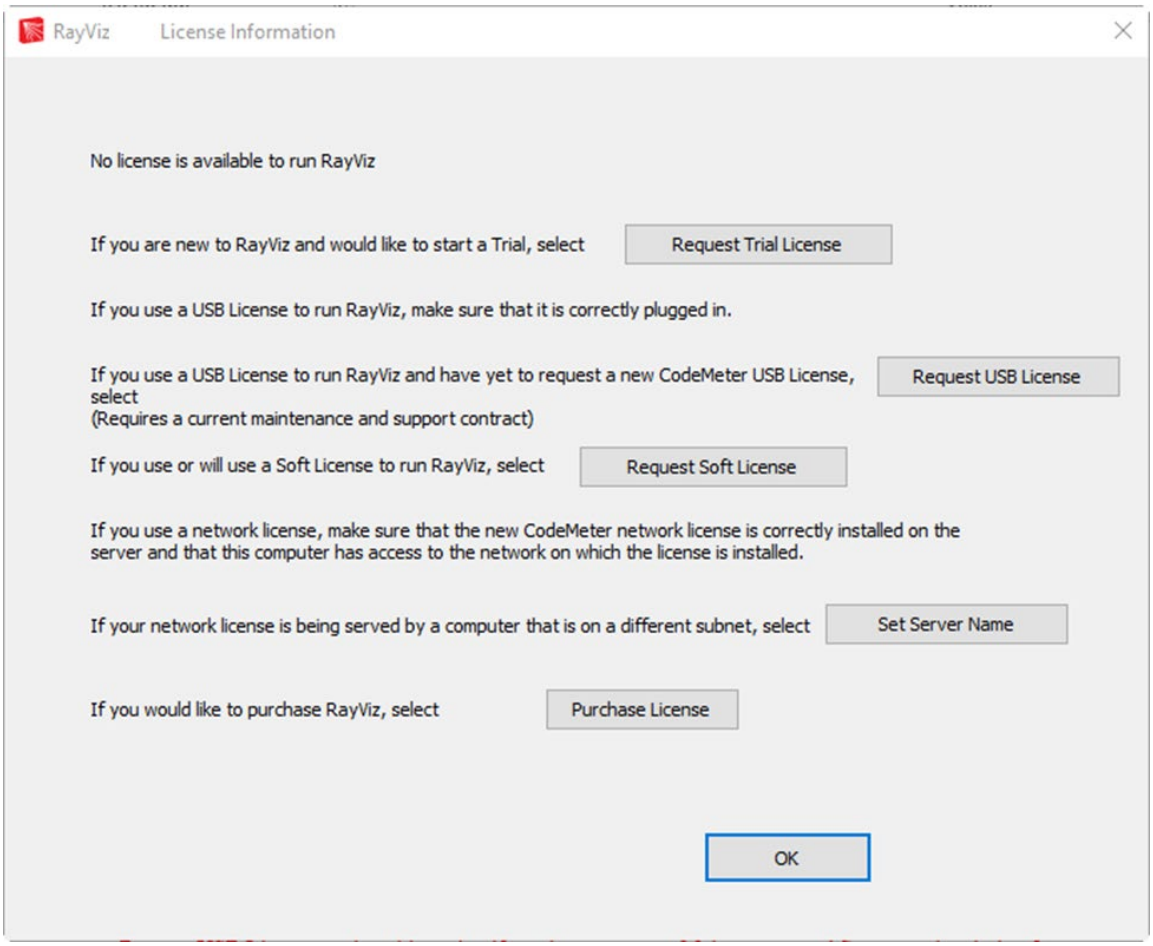
Possible Causes of License Issues

This is a list of some possible causes of license issues:

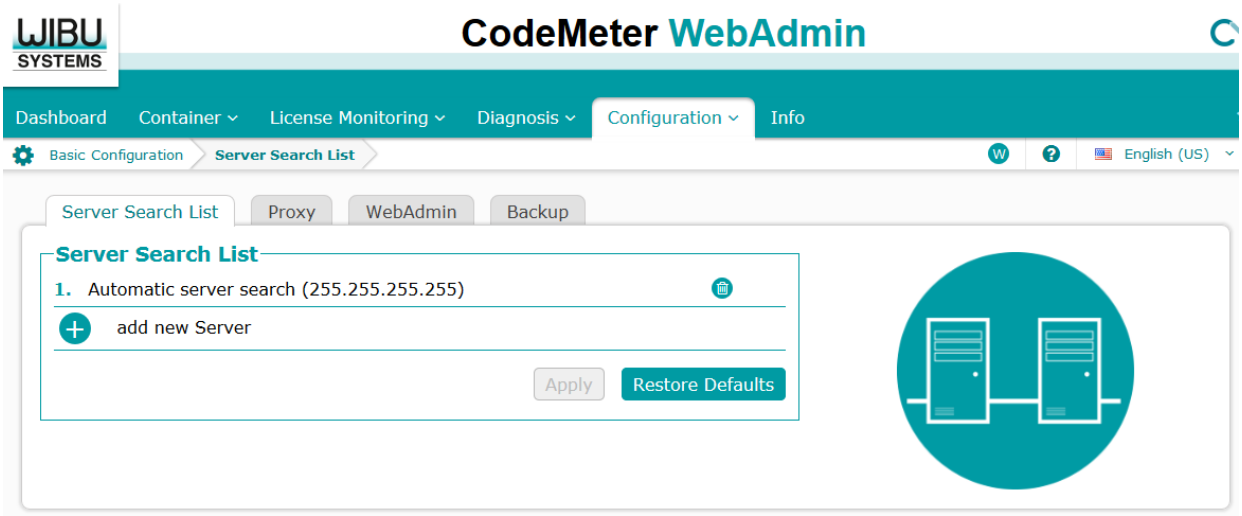
- Codemeter Drivers are failing/not installed
- License does not support the Software Release that was launched
- USB Port Failure
- USB Dongle Failure
- License Programming Error
- Network License(s) are already in use
- No Network Connection to Server
- Network License Server is on a different Subnet than the client
- Conflict with another Codemeter License
- A temporary license has expired
- Clock Tampering

Set Server Name

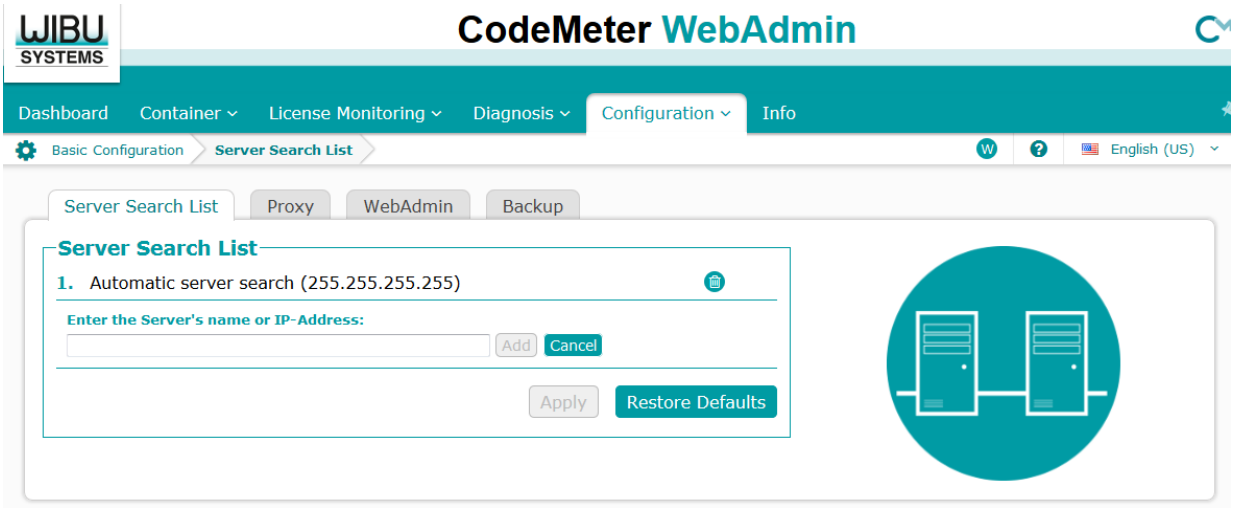
RayViz will automatically detect a network license if the license server and the client are on the same subnet. If the client is not on the same subnet, the RayViz License Information dialog will open.



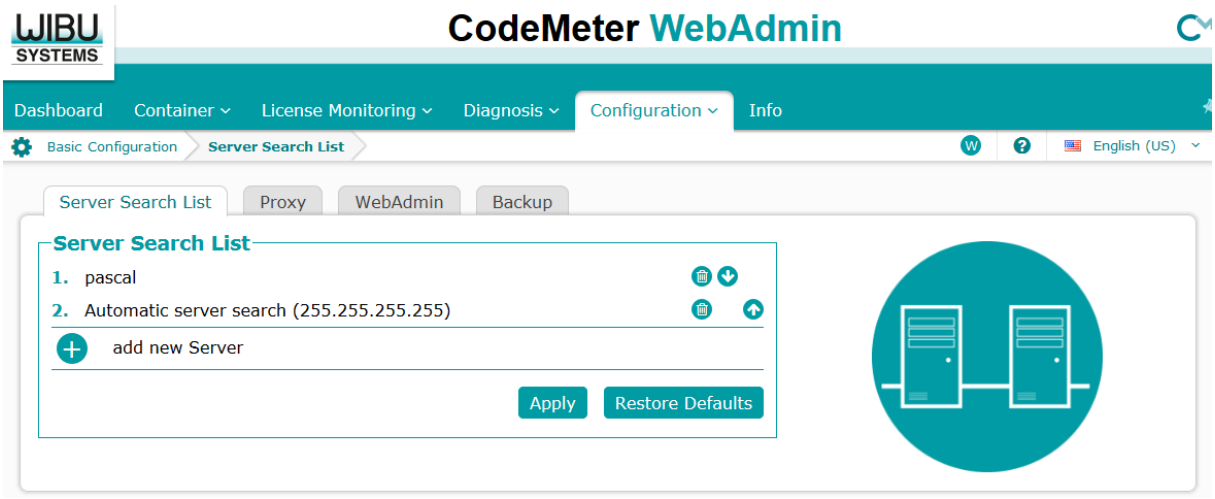
Select Set Server Name, and CodeMeter WebAdmin will open in your web browser:



Select Add New Server



Enter the Server Name or IP Address, then click OK.

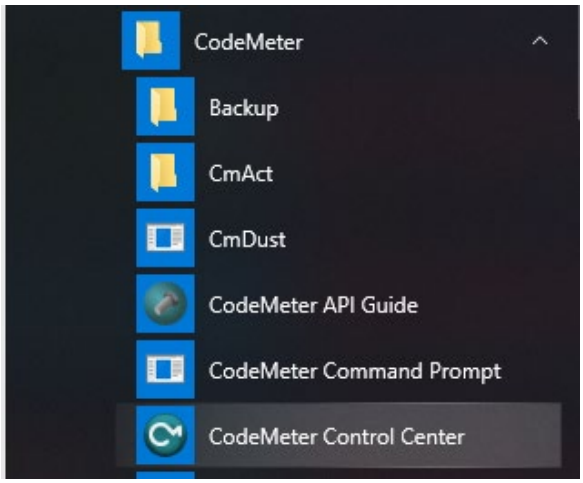


Click Apply. Now, when RayViz is launched, it will search for a license based on this Server Search List.

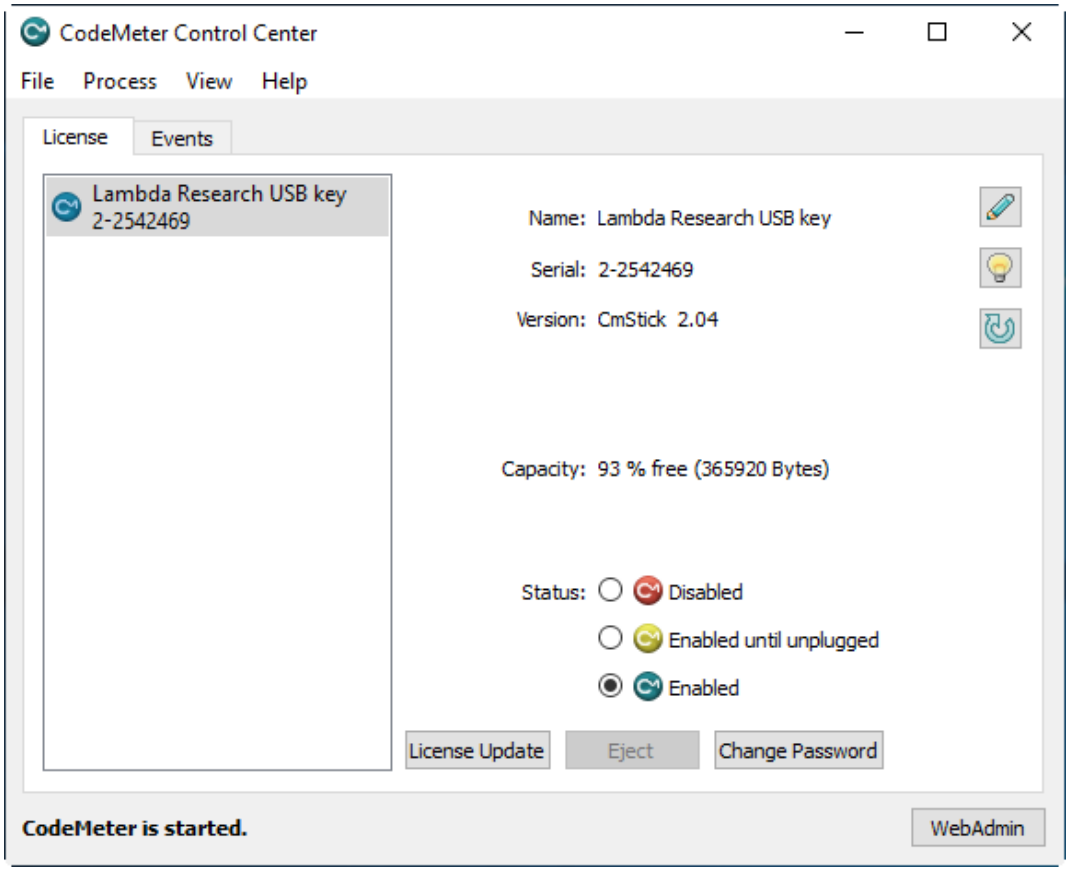
Double-click to Activate license fails

On occasion, the attempt to double-click on the license file to activate or update a license will fail due to a file association error, Windows cannot determine what application should be run to handle the license file.

The license module in RayViz is CodeMeter from Wibu Systems. Codemeter is installed with RayViz, and has a separate User Interface. From the Windows Start Menu, select Programs / CodeMeter / CodeMeter Control Center.



Drag and Drop the license file into the CodeMeter Control Center dialog to activate the license.



APPENDIX A – IMAGE OF CODEMETER USB DONGLE

There are numerous markings on the CodeMeter dongle. The Serial Number is of the format x-xxxxxxx, and is visible when the side labeled “CodeMeter “ is up.