TracePro

Software for Optical Design and Analysis

Installation Guide

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INSTALLATION

Impact on Existing Installations of TracePro

- The current release of TracePro will overwrite previous installations of TracePro.

System Requirements

Operating System	Windows 10 (64-bit)
	Windows 11 (64-bit)
Minimum RAM	2 GB
Recommended Operating System	Windows 10 64-bit
Recommended Processor	recent 64-bit processor with as many cores as possible for best results and fastest raytracing
Recommended RAM	as much as possible
Recommended Storage	Solid State Drives may improve TracePro performance in instances where TracePro is reading/writing to the hard drive
Disk space required for installation	800 MB

Software Download

TracePro® and additional support programs, examples, and documentation are available from the Lambda Research Corporation website.
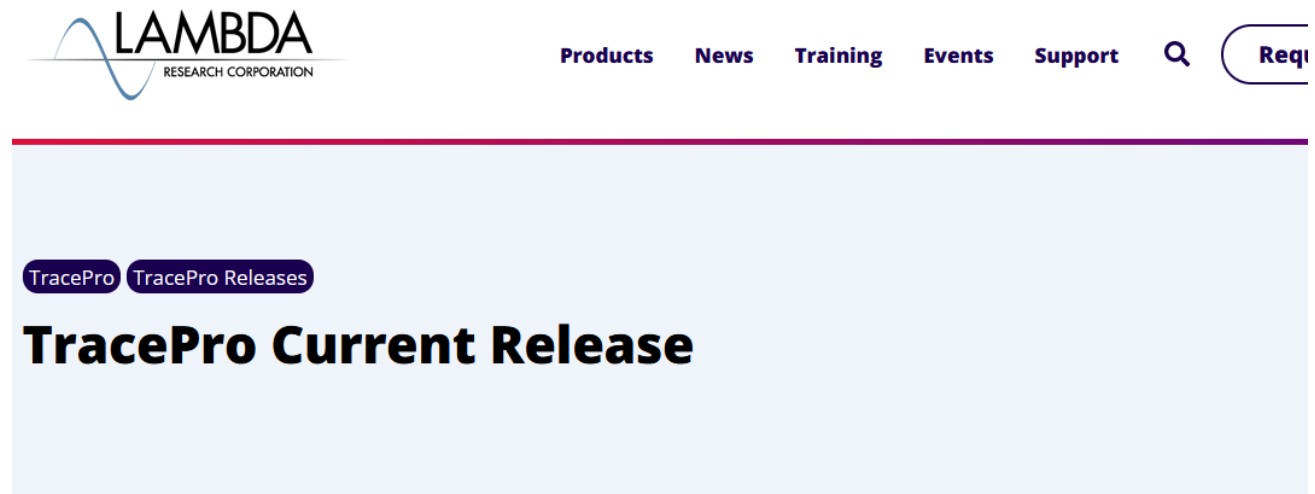
- https://lambdares.com/support-posts/tracepro-current-release

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

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

TracePro Installaton

- Double-click on the TracePro Installer.exe file.
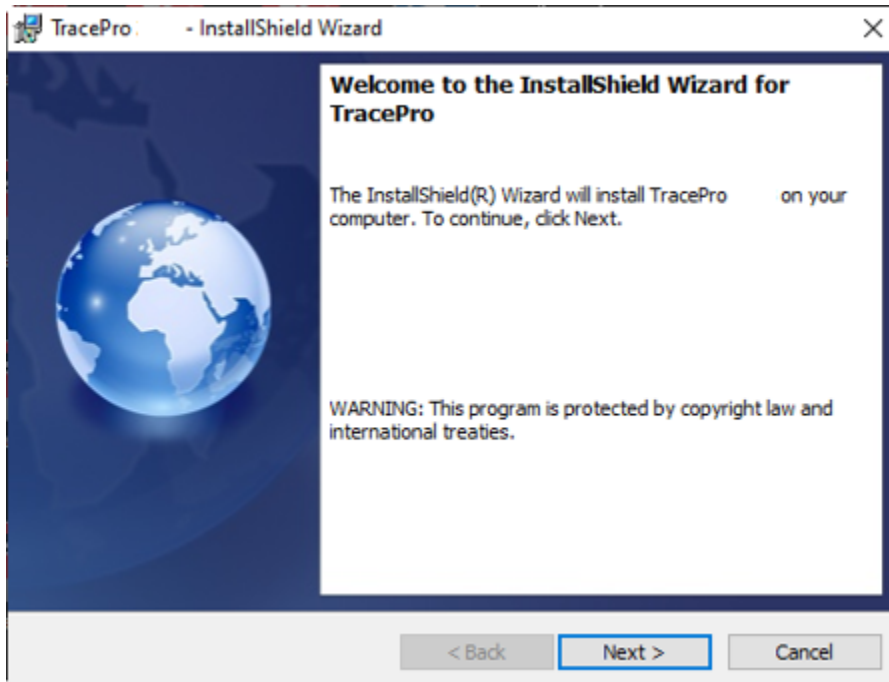
- Follow the steps of the TracePro Installation Wizard.
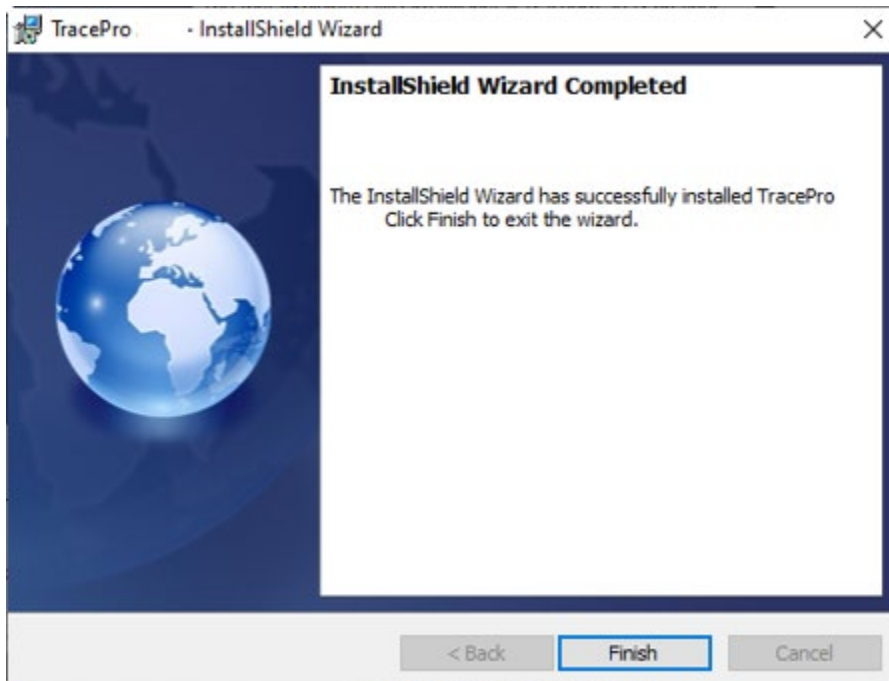
- Click **Finish** to complete the installation.

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 TracePro 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 …
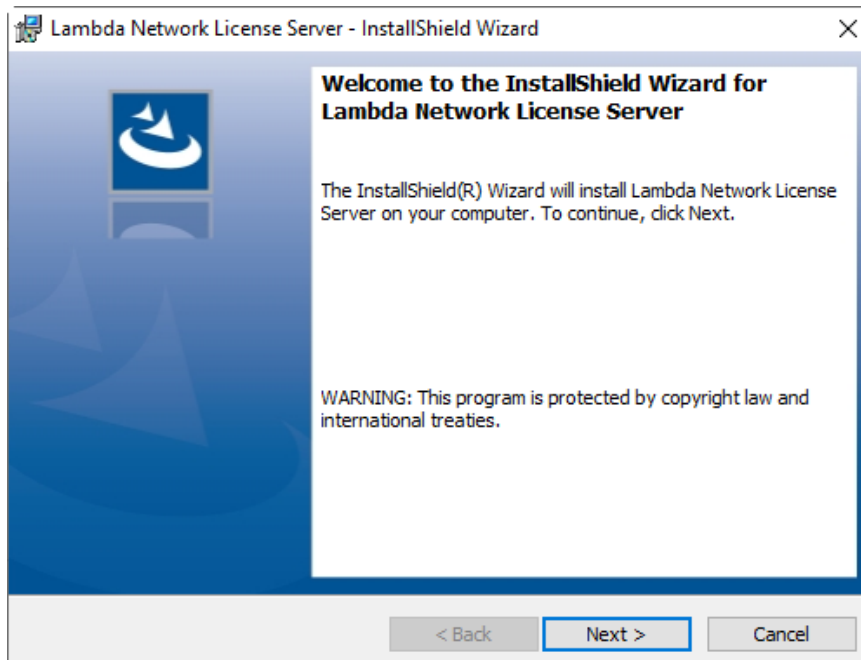
- Follow the steps of the Lambda Network License Server Installation Wizard.
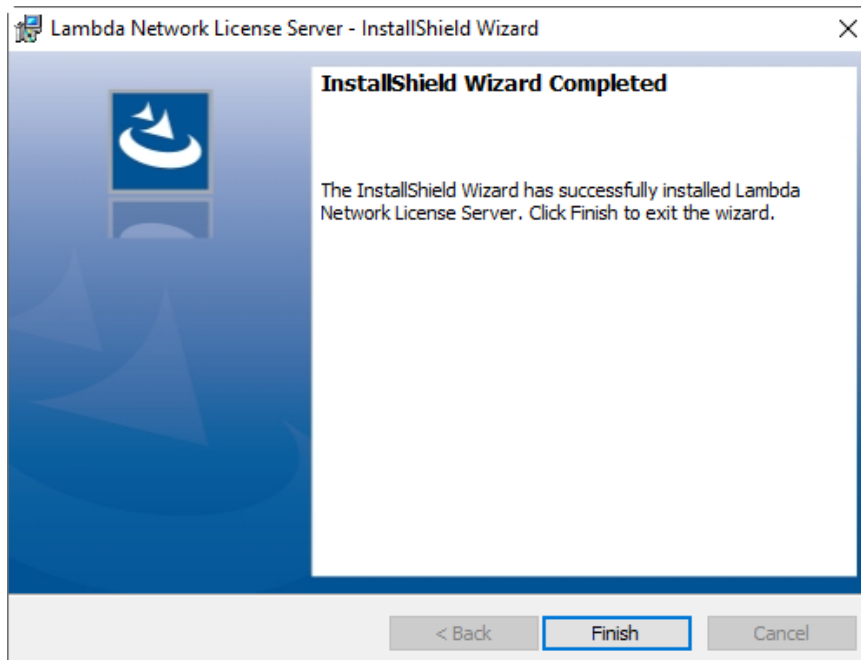
- Click **Finish** to complete the installation.

Launching TracePro and the License Troubleshooter

From a computer with TracePro installed

To launch TracePro or the License Troubleshooter, select the icon from the Windows Start menu.
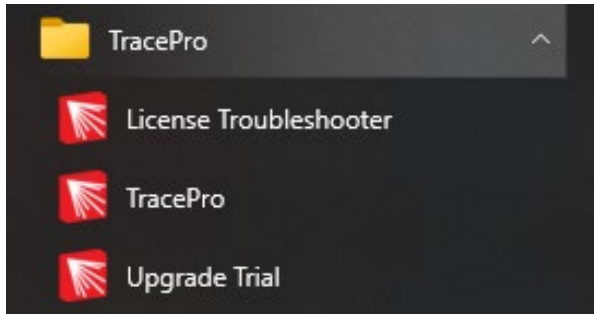
If TracePro finds an available license, the program will launch.

From a Network License Server

To launch the License Troubleshooter, select the icon from the Windows Start menu.
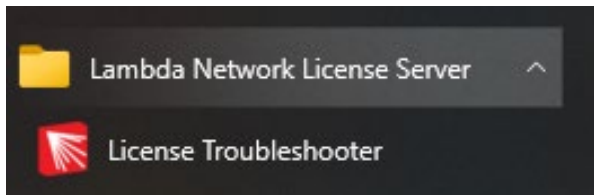
The Lambda License Troubleshooter dialog will appear.
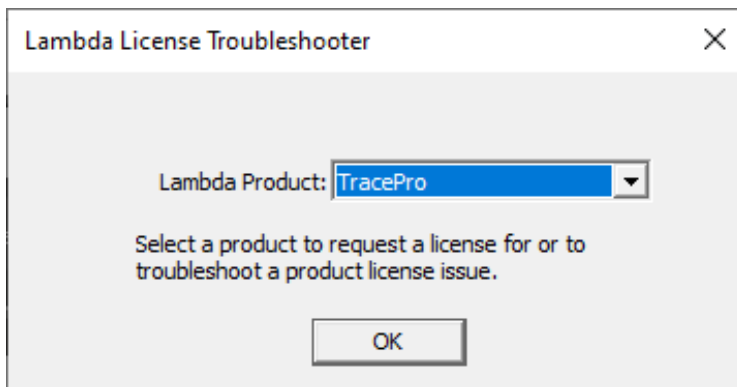
Select TracePro and click OK to launch the TracePro License Troubleshooter.

Option to Select the TracePro Edition

If the TracePro license includes more than one Edition of TracePro (Expert, Standard, LC), selecting Help|License and checking the "Prompt edition" box will cause TracePro to bring up a dialog box each time TracePro is launched to allow the user to select the edition that will run in this TracePro session:
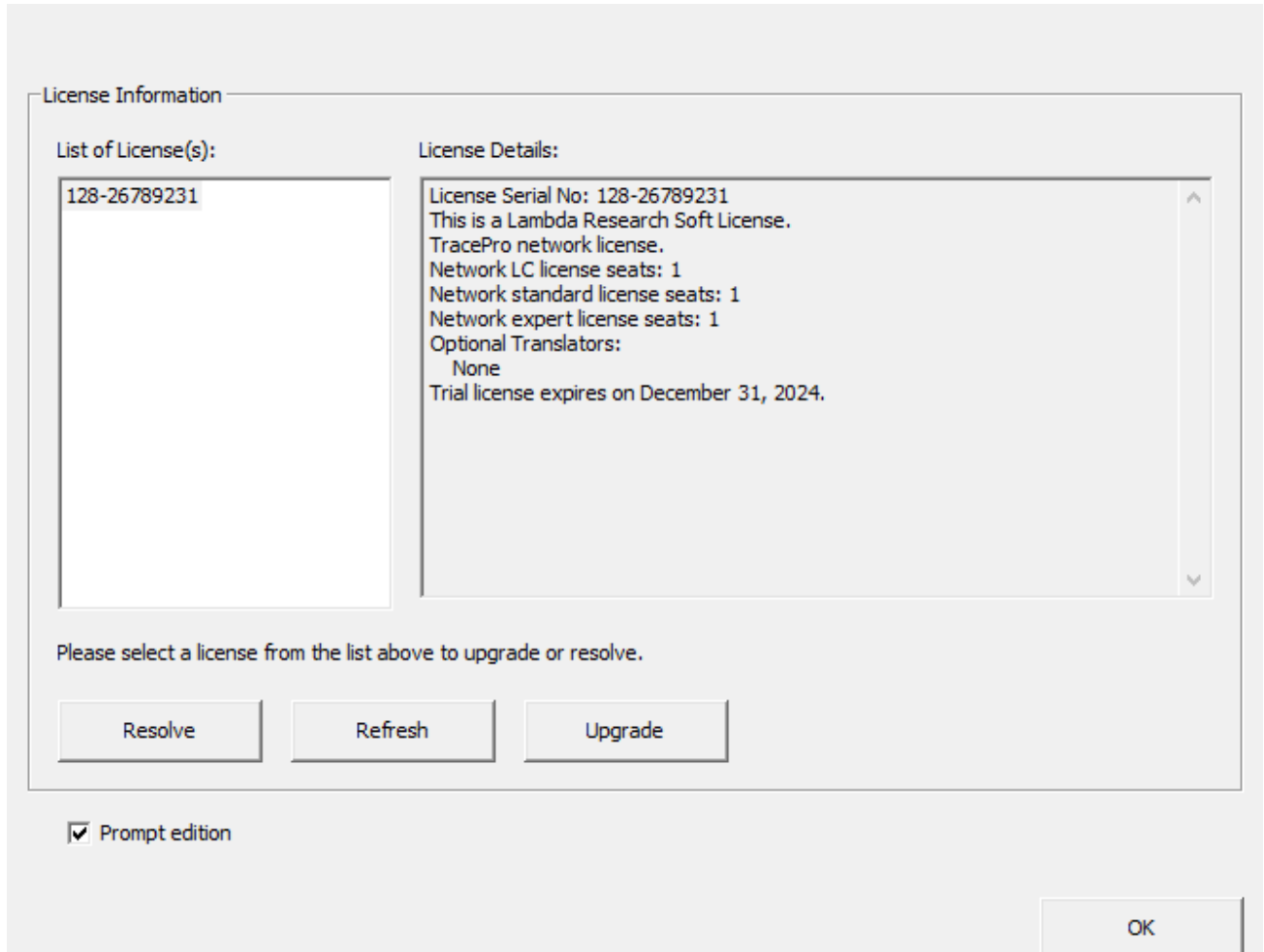
The Select TracePro Edition box will allow the user to select from the list of editions for which there is a valid license:
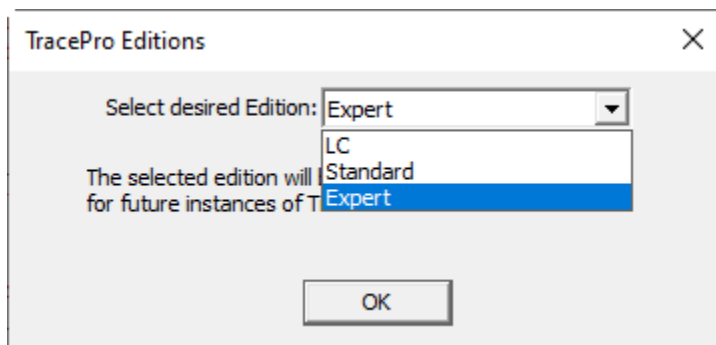
Click OK to begin the TracePro session

LICENSING

License Options

There are three decisions to make when purchasing a TracePro 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 TracePro on one computer
- The license services and utilities are included in the installation of TracePro

Network license
- Allows several users on a single Local Area Network (LAN), or with remote access to that network, to share licenses of TracePro
- One computer on the network acts as the TracePro License Server – TracePro 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
- TracePro 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 TracePro is launched (or when the TracePro License Troubleshooter is launched on a Network License Server) and no valid license is detected, the TracePro License Troubleshooter dialog will open.

- Request Trial License - select this option to send a CodeMeter context file to sales@lambdares.com
- Request Soft License - select this option to send a CodeMeter context file to license@lambdares.com
- Request Educational 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 (see Page 25 for details)
- Purchase License - select this option to send an e-mail to sales@lambdares.com to request information about purchasing a licenses for TracePro

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 "TracePro32767-xxxxxxxxx.WibuCmRaC" is also saved to your Desktop so you can send it to us.

Activate License

Upon receipt of a CodeMeter Update file from license@lambdares.com, save the file to the desktop, then double-click on the file to activate the license.

SOFTWARE UPDATES AND MAINTENANCE TASKS

About TracePro

To view the About TracePro window, select Help | About TracePro from the TracePro menu.

The About TracePro window displays the following information:
- TracePro Release
- Permanent License OR Days Remaining on Temporary License
- An example of the About TracePro window is shown below
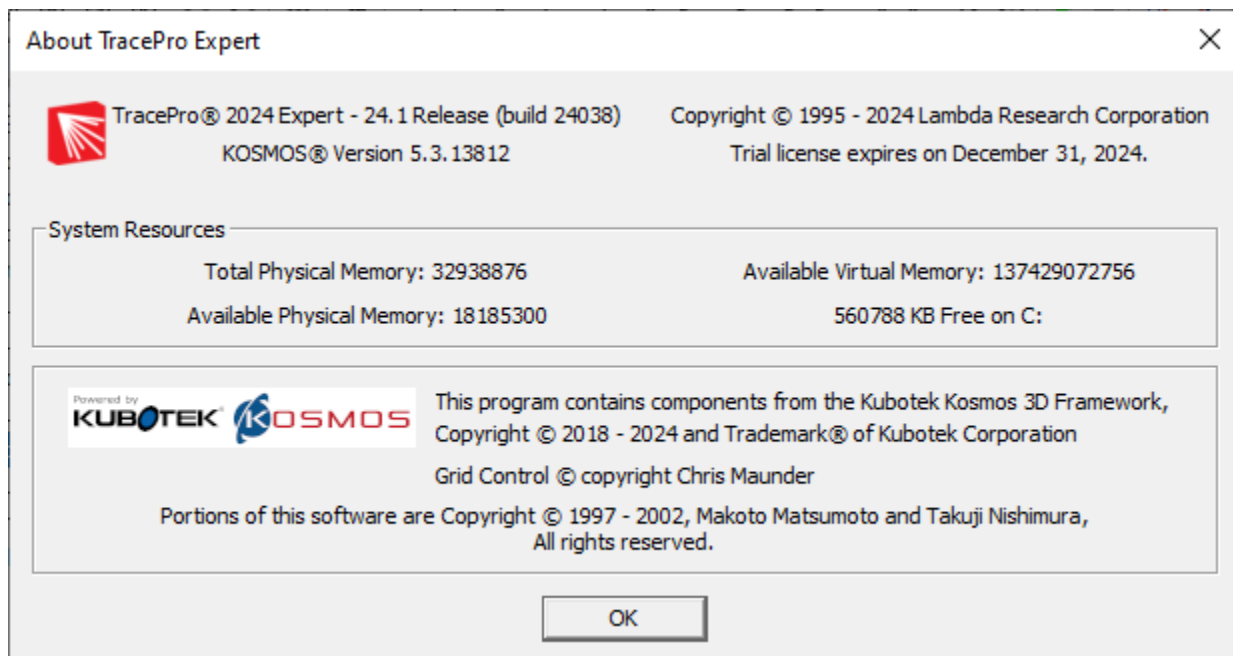
TracePro License Information

To view the TracePro License Information dialog, select Help | License from the TracePro menu, then select an item in the List of License(s). An example of the License Information window is shown below.
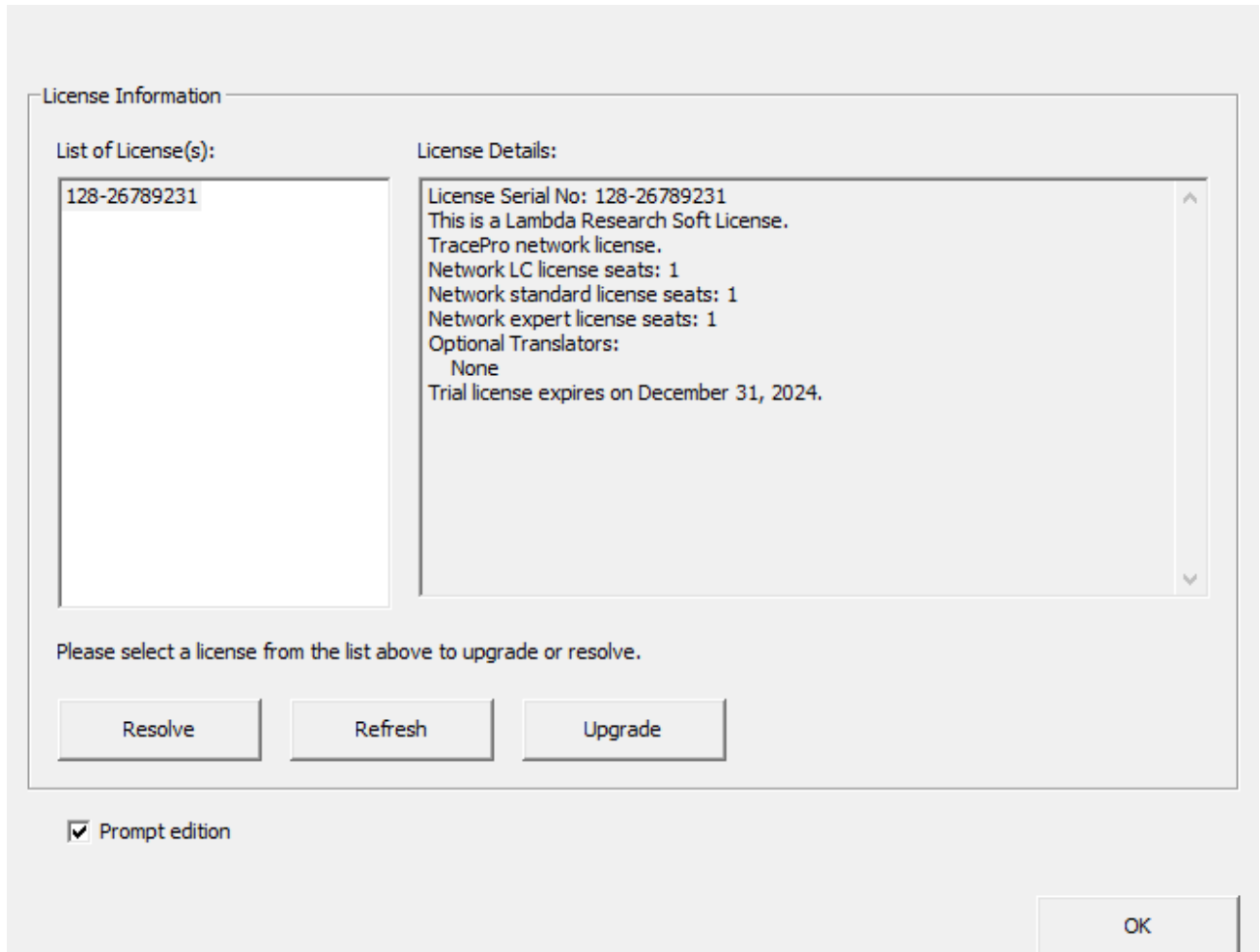
Resolve
- select this option to troubleshoot a licensing issue

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

Upgrade for license serial no. 128-26789231

If you have purchased an upgrade or modification to your license or are upgrading from a temporary license to a permanent one, select

Upgrade License

If you would like to request a quote to upgrade the TracePro Edition, add licenses or add translators to this license, select

Purchase Upgrade

If you would like to send a receipt for an updated license, select

Send Receipt

OK   **License List**

Upgrade License

- select this option to upgrade the current TracePro license (change the TracePro Edition, add an optional CAD translator, 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 TracePro license (change the TracePro Edition, add an optional CAD translator, 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

Upgrade Trial
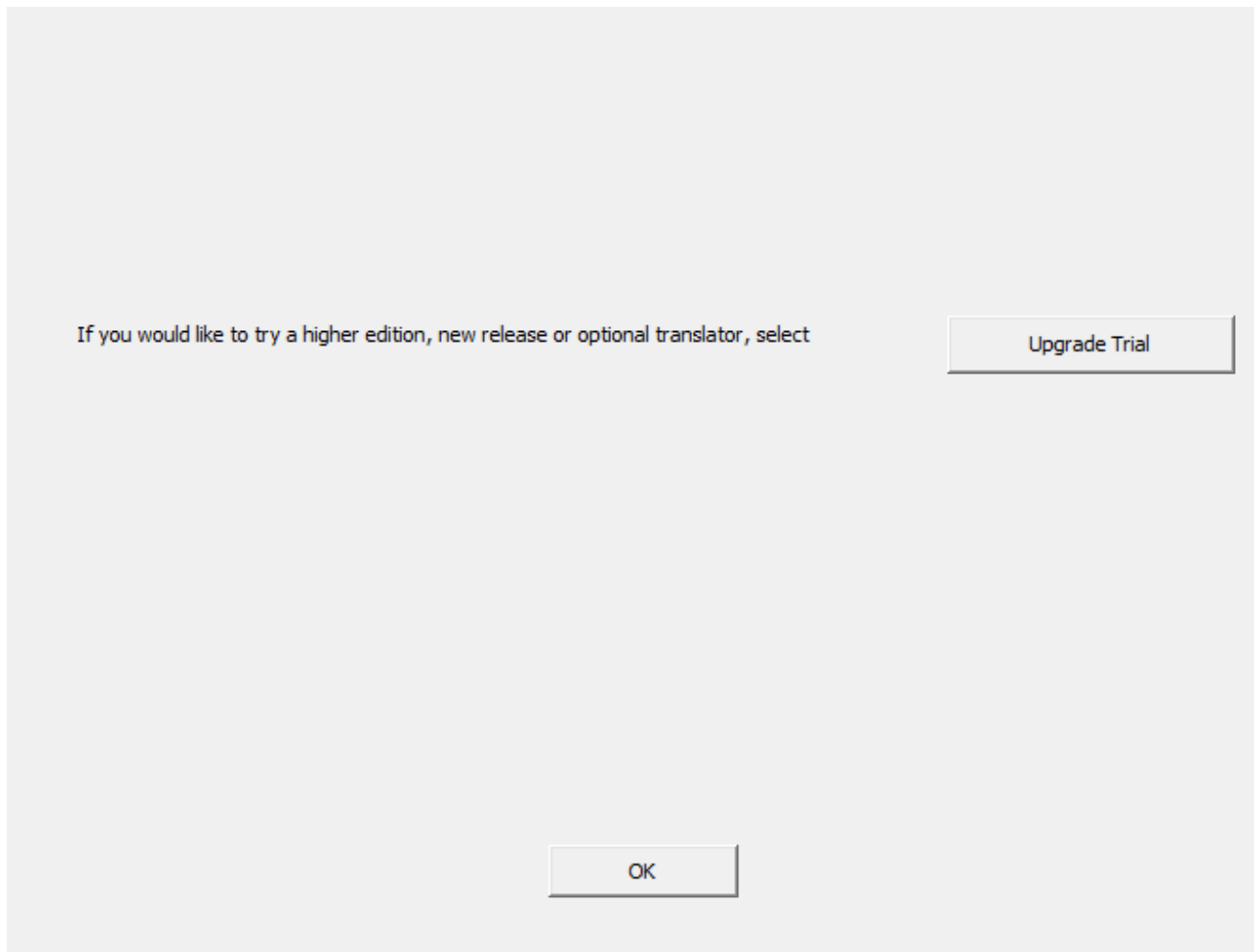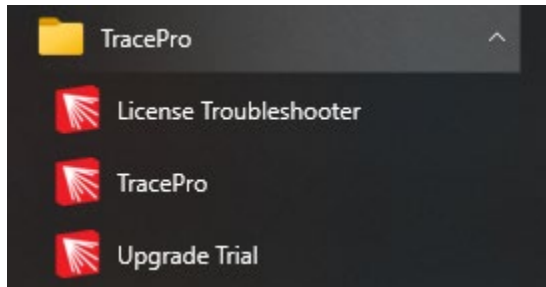
To request a trial license for the purpose of evaluating a possible upgrade (change the TracePro Edition, add an optional CAD translator, etc) to the purchased TracePro license, select Help | Upgrade Trial from the TracePro menu or the Windows Start Menu,:

Selecting the Upgrade Trial button initiates an e-mail to sales@lambdares.com with a CodeMeter context file attached.

Please note that the Upgrade Trial license will run concurrently with the existing TracePro license.

Check for Updates

From the Help Menu, select Check for Updates.

If the latest release is already installed, the following message will be displayed:
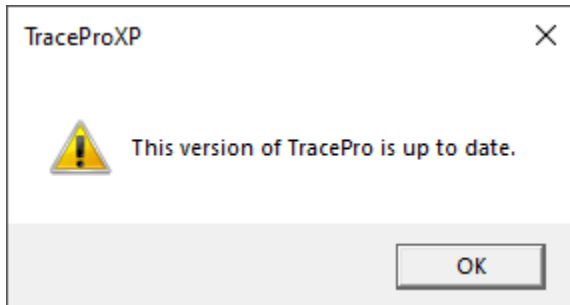
If the latest release is not already installed, a message will be displayed. An example of this message is shown below.
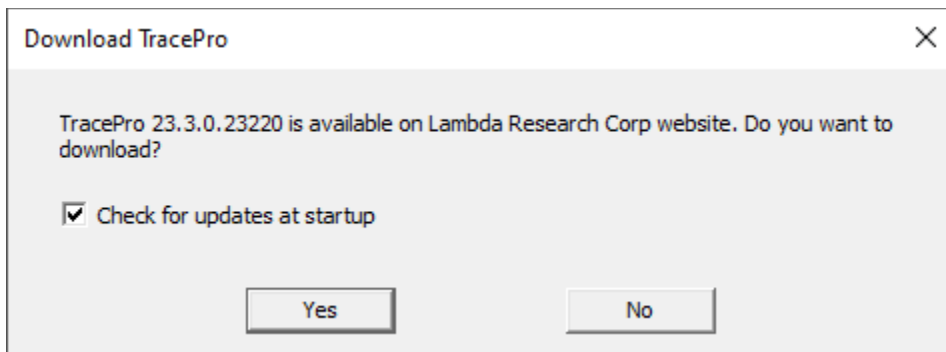
Selecting "Yes" will automatically start the process of downloading the latest installer and installing the software.

Monitoring Network License Usage

The CodeMeter licensing used by TracePro has an interface to obtain the status of a network license. From the Windows Start Menu, select CodeMeter | CodeMeter Control Center.
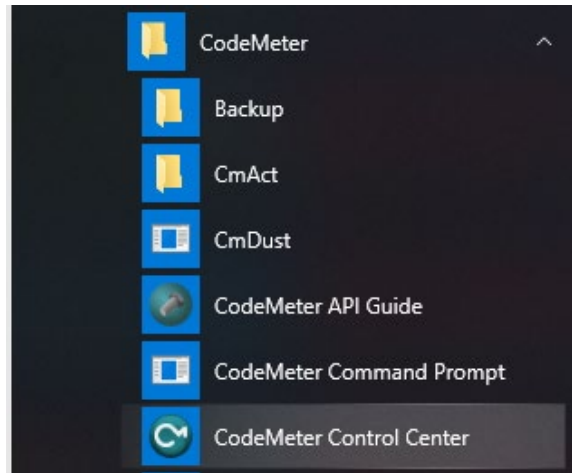
This launches the CodeMeter Control Center.

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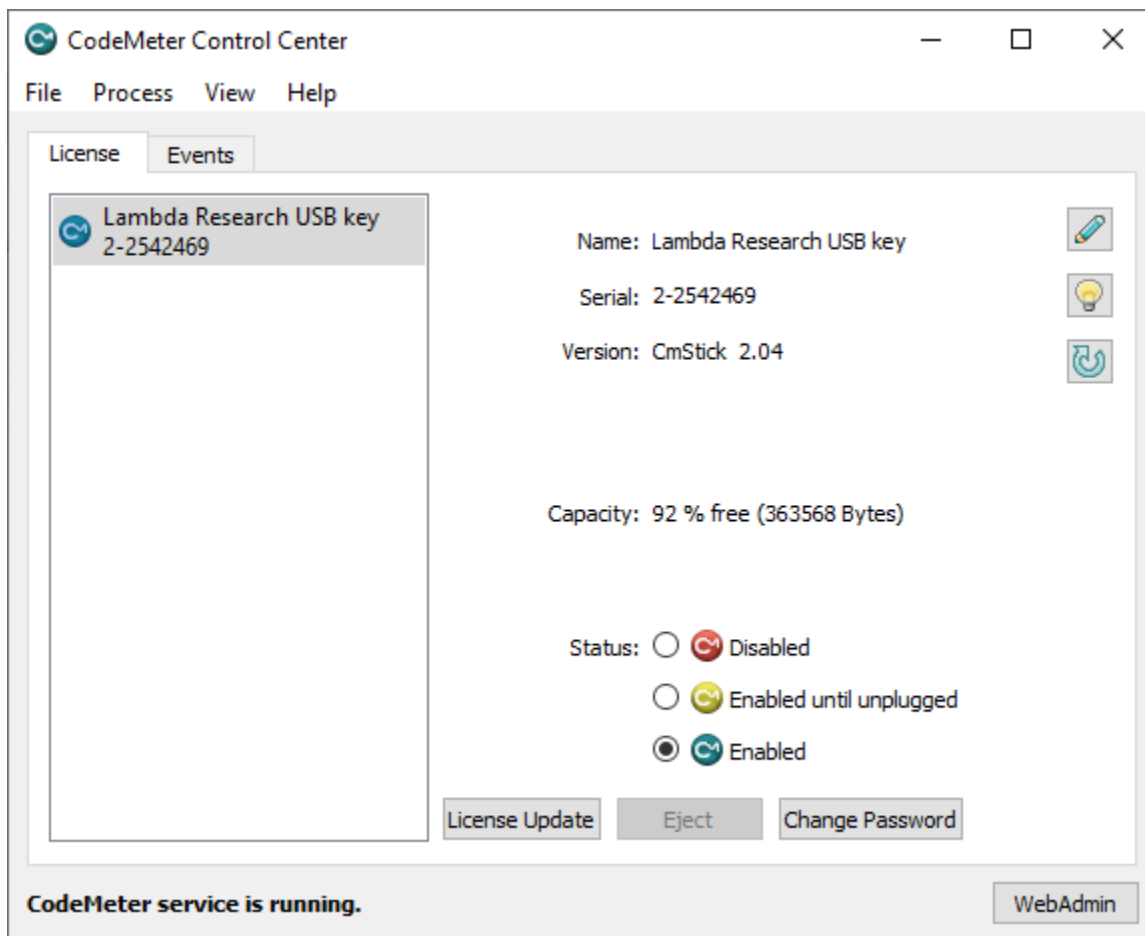
 To view licenses from a different server, double-click on "Current Server: localhost" (bottom of window) select another server from the network, then click Apply.

This example is showing a Network License on the server named CVS-02, with 10 licenses available for several items of Lambda Research software.

Transferring TracePro to a New Computer

When TracePro 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.

    o From the old computer, follow the steps to Upgrade an Existing License per Pages 11-12 (the "upgrade" will be the removal of the license)

    o From the new computer, follow the steps to Request a New License per Page 9.

- Network USB License or Soft License

    o If the network license was served from another computer on the network, there is no action at this time.

    o 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\TracePro

If the filename or location were modified, select View/Options in TracePro 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 TracePro Installation, if so, replace this file with the database from the old computer.

Initialization Files

There are two files that are read by TracePro at each launch that include preference selections and license information, tracepro.ini and tpdefs.ini. The location of these file is:

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

Move tracepro.ini and tpdefs.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 TracePro Installation, if so, replace these files with the .ini files from the old computer.

Transferring the TracePro Network License to a New License Server

The transfer of the license is dependent on the license type

- Network USB License
    - o Perform the Lambda Network License Server Installation per Page 5.
    - o 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.
    - o From the old license server, follow the steps to Upgrade an Existing License per Pages 11-12 (the "upgrade" will be the removal of the license)
    - o On the new license server, perform the Lambda Network License Server Installation per Page 5.
    - o From the new computer, follow the steps to Request a New License per Page 9.

Modify, Repair, or Remove the Program

- In order to Modify, Repair, or Remove TracePro, initiate the TracePro installation by double-clicking TraceProInstaller.exe.
- Click **Next** to continue.
- If TracePro detects that the same release has already been installed, a screen similar to this will appear:
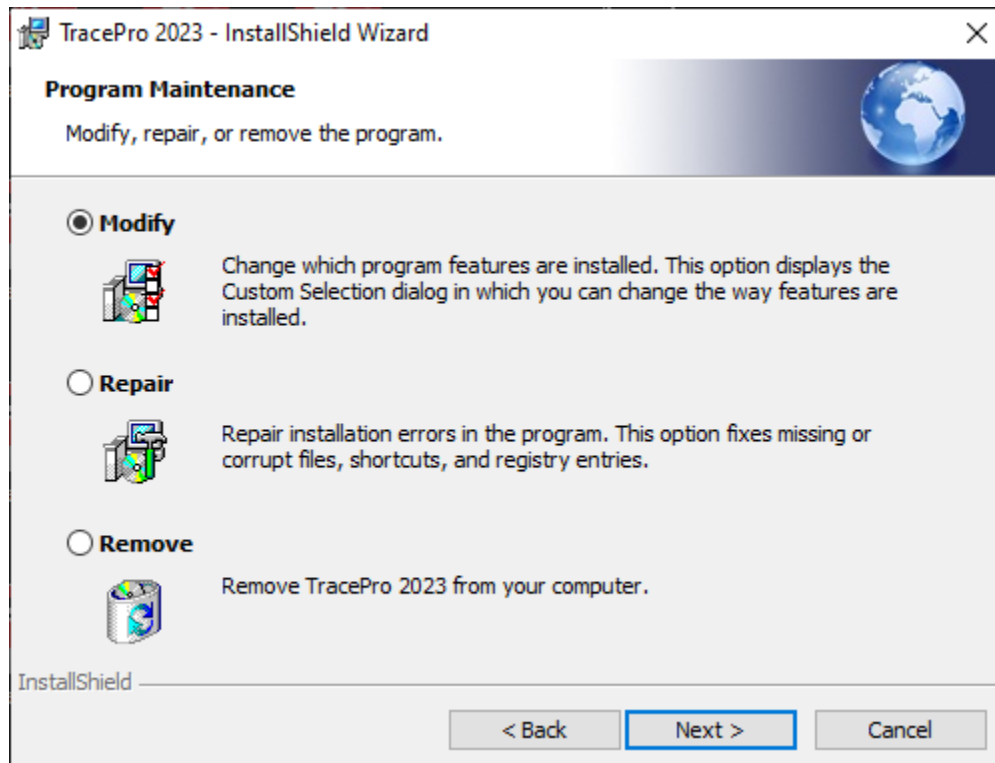
- Choose **Modify** to open the Select Feature dialog box to choose which installation components to install or uninstall at this time.
- Choose **Repair** to automatically run a Maintenance routine to reinstall any corrupted files from a prior installation.
- Choose **Remove** to uninstall the program.

TROUBLESHOOTING GUIDE – INSTALLATION AND LICENSING

Installation Troubleshooting

There are several files that need to be installed in order for the TracePro Installation to be successful:
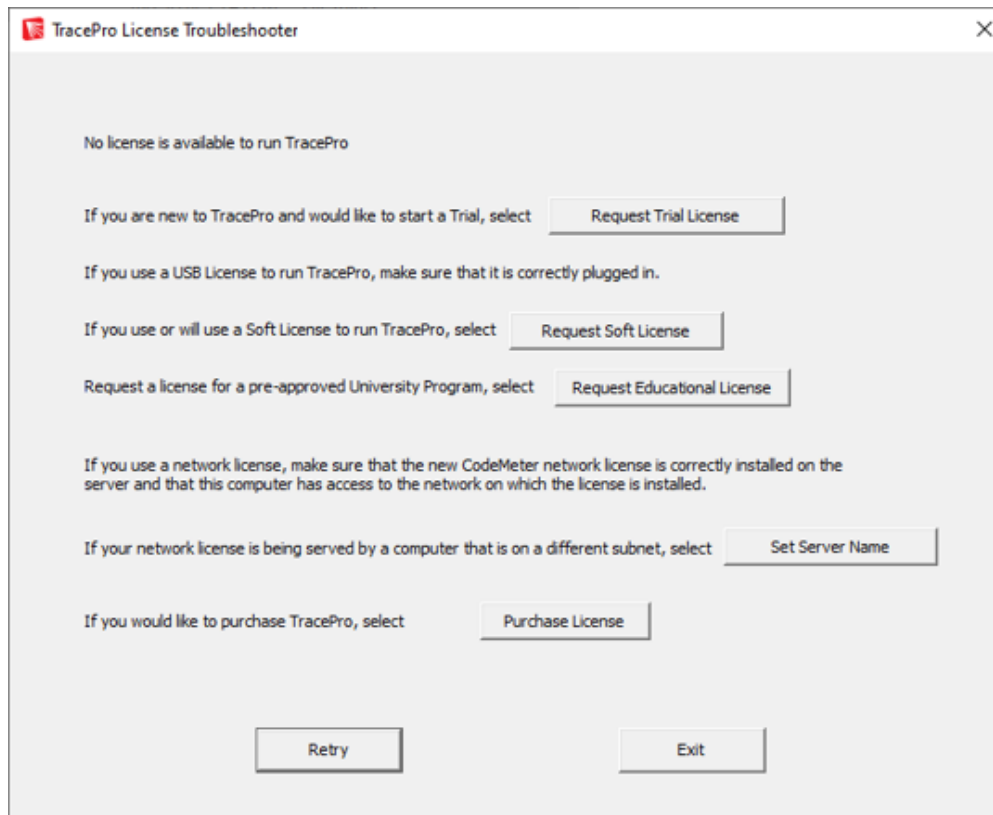
- Windows Installer files
- DirectX files
- SlimDX files
- .NET Framework files

If TracePro 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 TracePro again.

License Troubleshooting

No license is located

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

- Request Trial License - select this option to send a CodeMeter context file to sales@lambdares.com
- Request Soft License - select this option to send a CodeMeter context file to license@lambdares.com
- Request Educational 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 (see Page 25 for details)
- Purchase License - select this option to send an e-mail to sales@lambdares.com to request information about purchasing a licenses for TracePro

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 "TracePro32767-xxxxxxxxx.WibuCmRaC" is also saved to your Desktop so you can send it to us.

A license has been located, but fails

If a license is located, but it fails to launch TracePro, the TracePro License Troubleshooter will open.
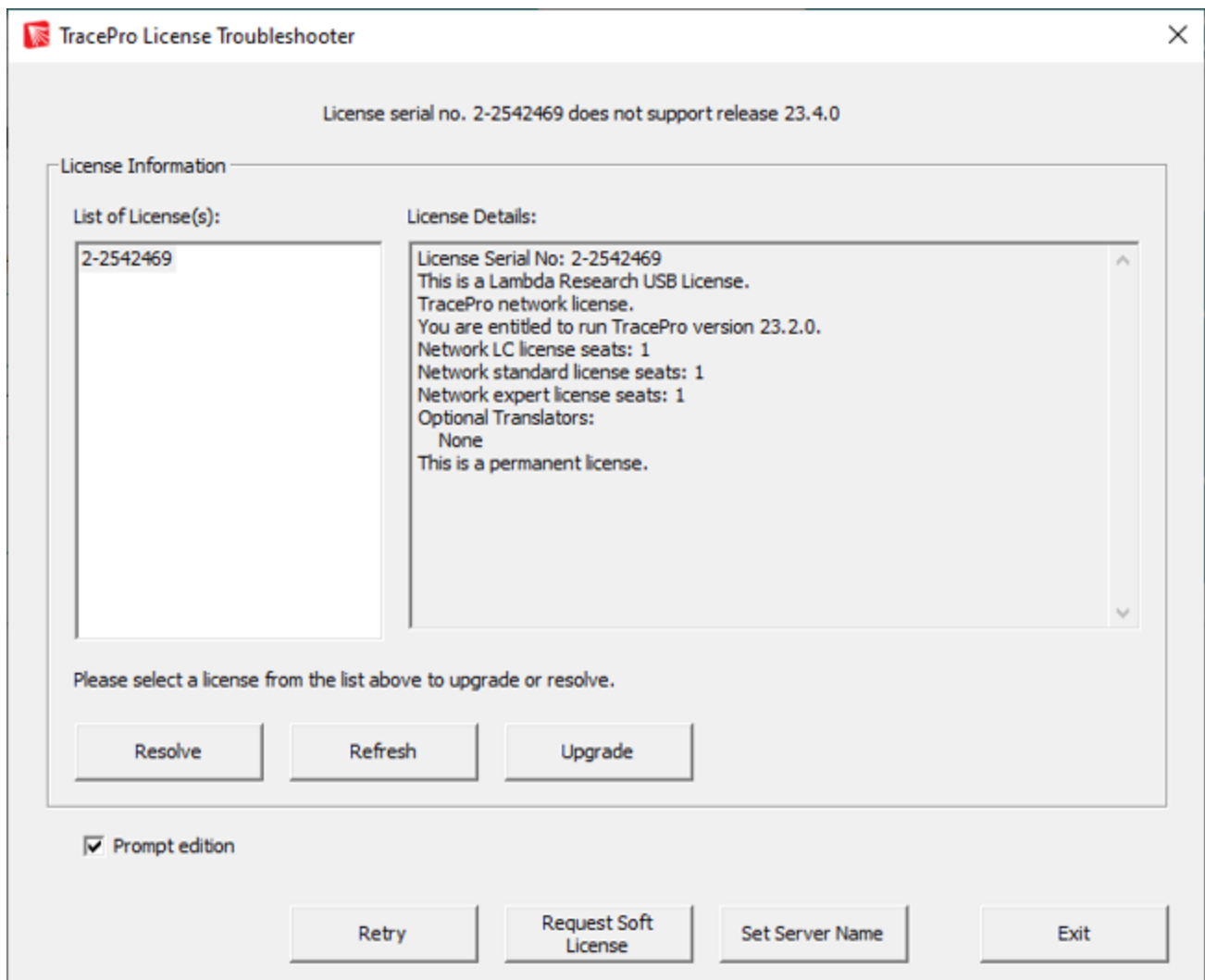
Select an item in the List of License(s) then select Resolve to start the troubleshooting process.

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
- Unlicensed Edition of TracePro selected
- Conflict with another Codemeter License
- A temporary license has expired
- Clock Tampering

Activation is invalid (soft license)

If a soft license has become deactivated, and TracePro is launched, the License Troubleshooter will open and the License Details will display "Activation is invalid" or "deactivated by Lambda Research Corporation".
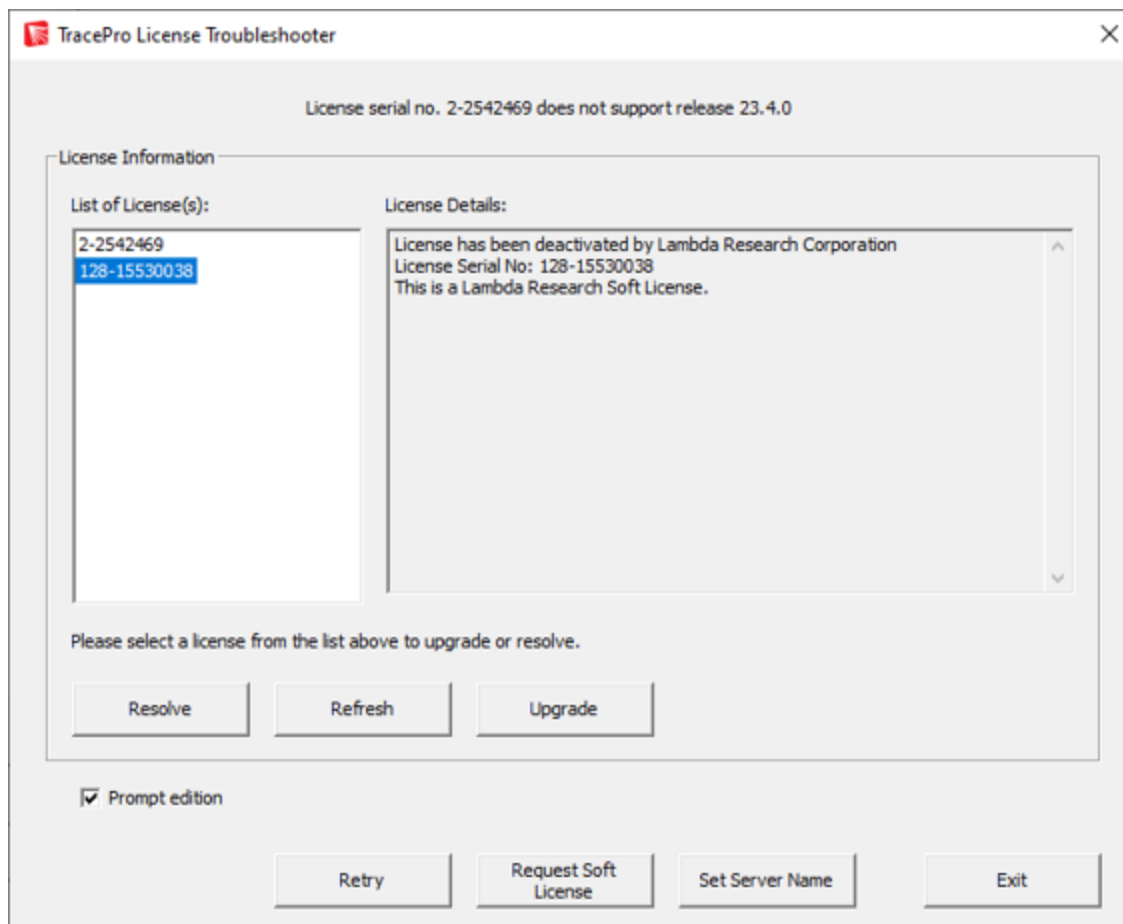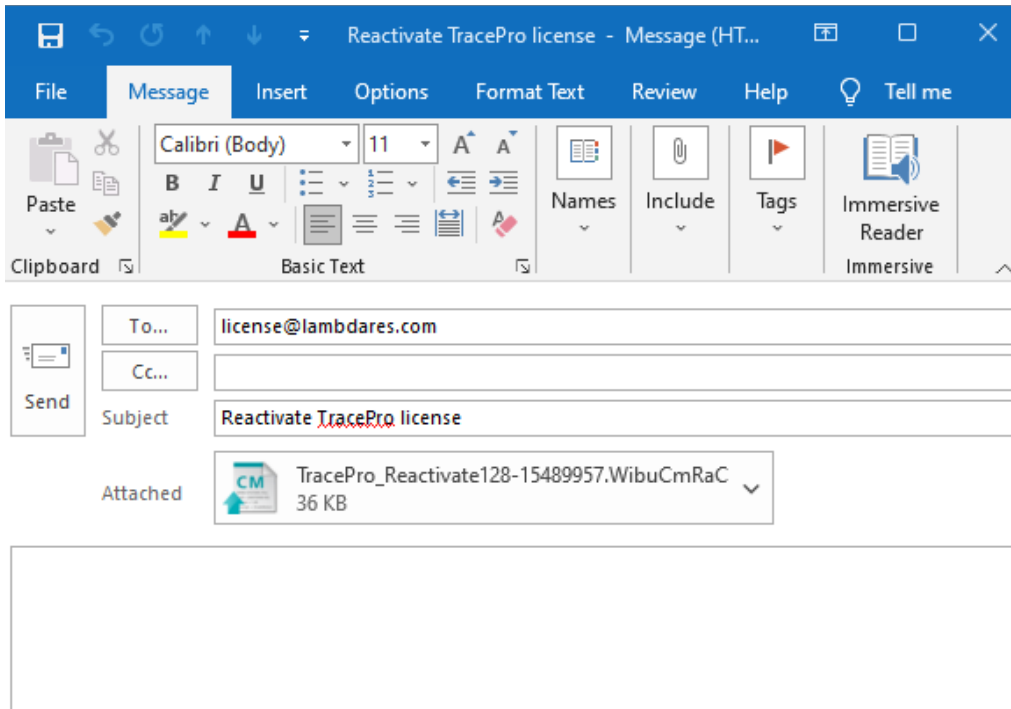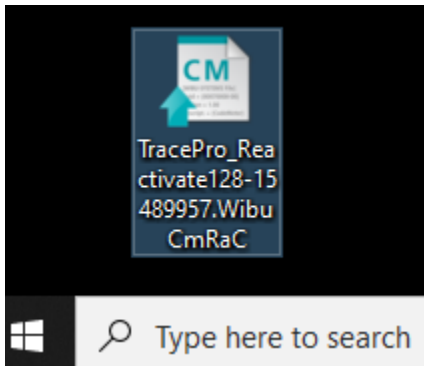

Select Resolve.
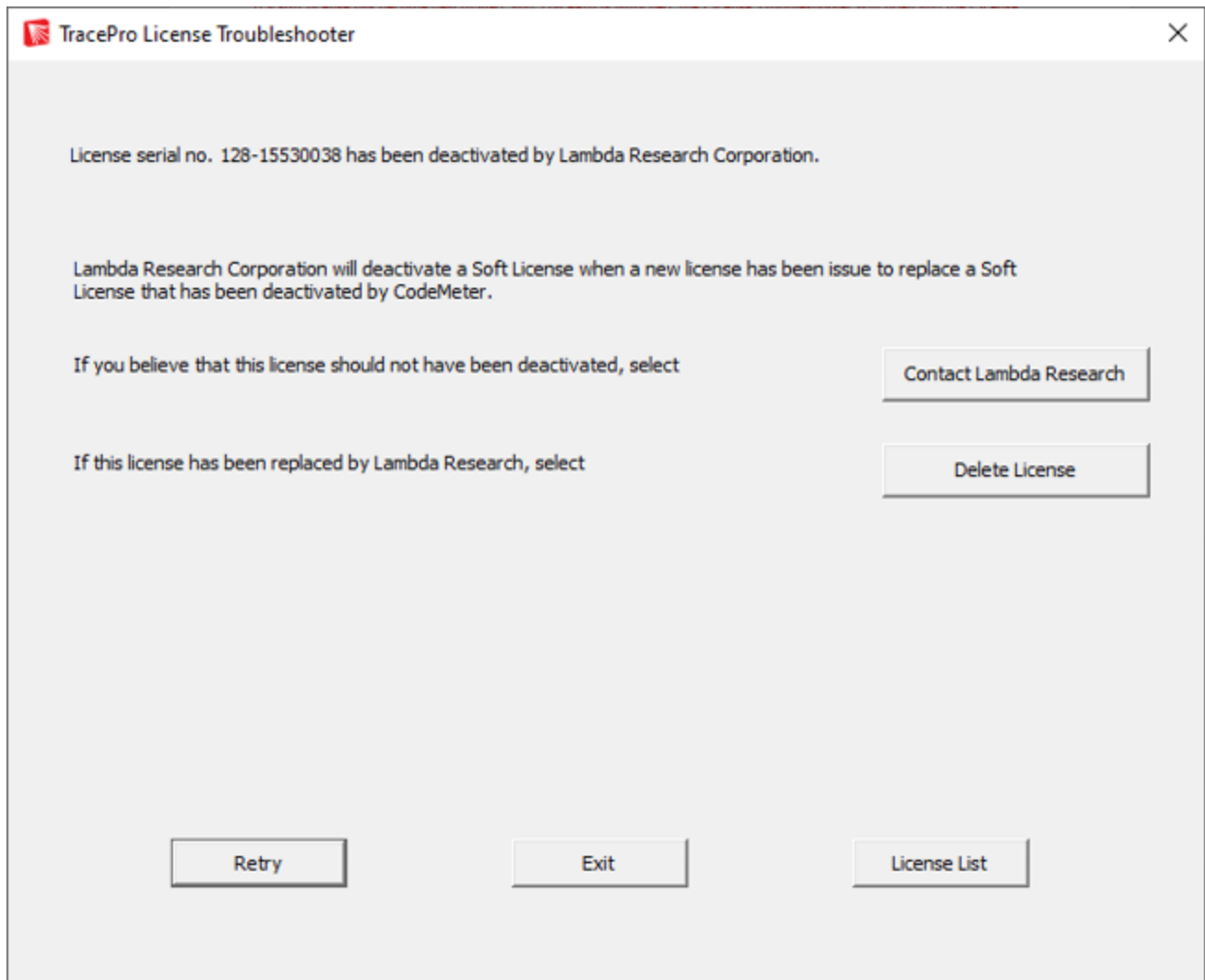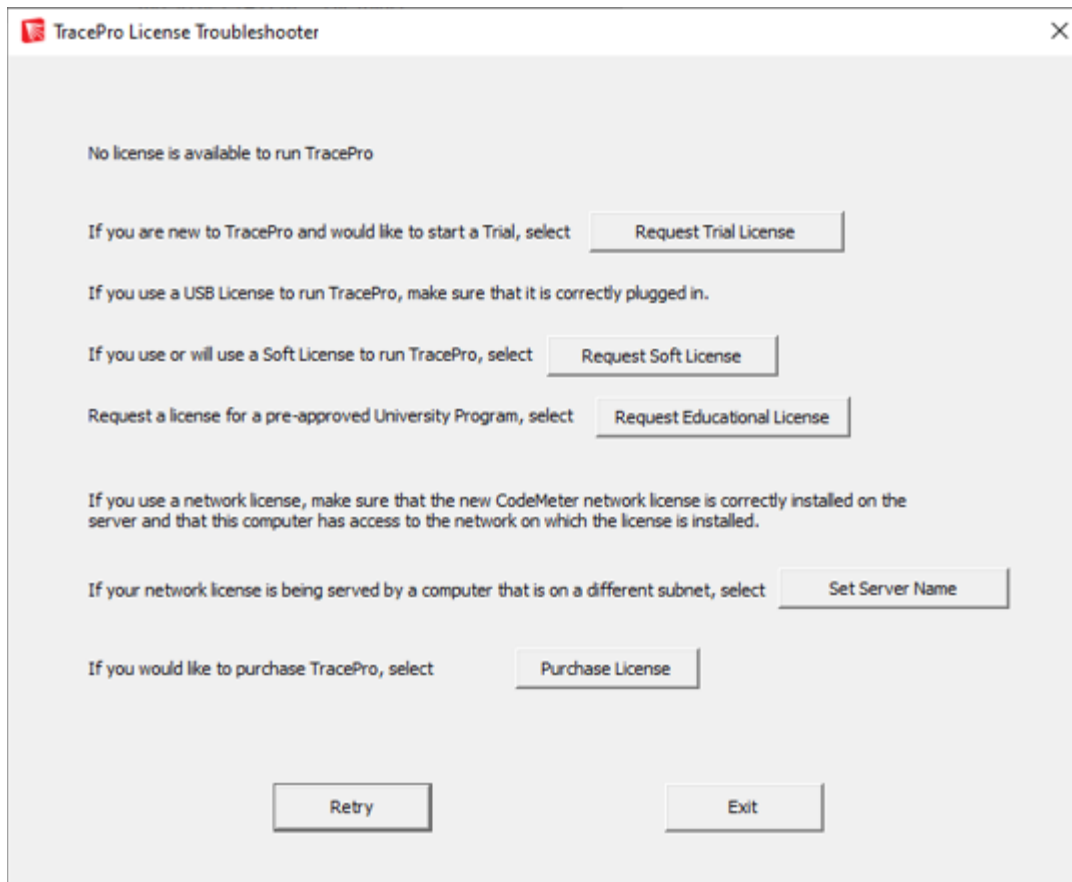

Select Reactivate License.

This initiates an e-mail with a "Reactivate" license context file attached
(provided the licensing software detects the e-mail client)

The "Reactivate" license context file is also saved to the desktop

Please note that "Reactivate" can only be selected once. If TracePro is launched again it will behave as if there is no license.
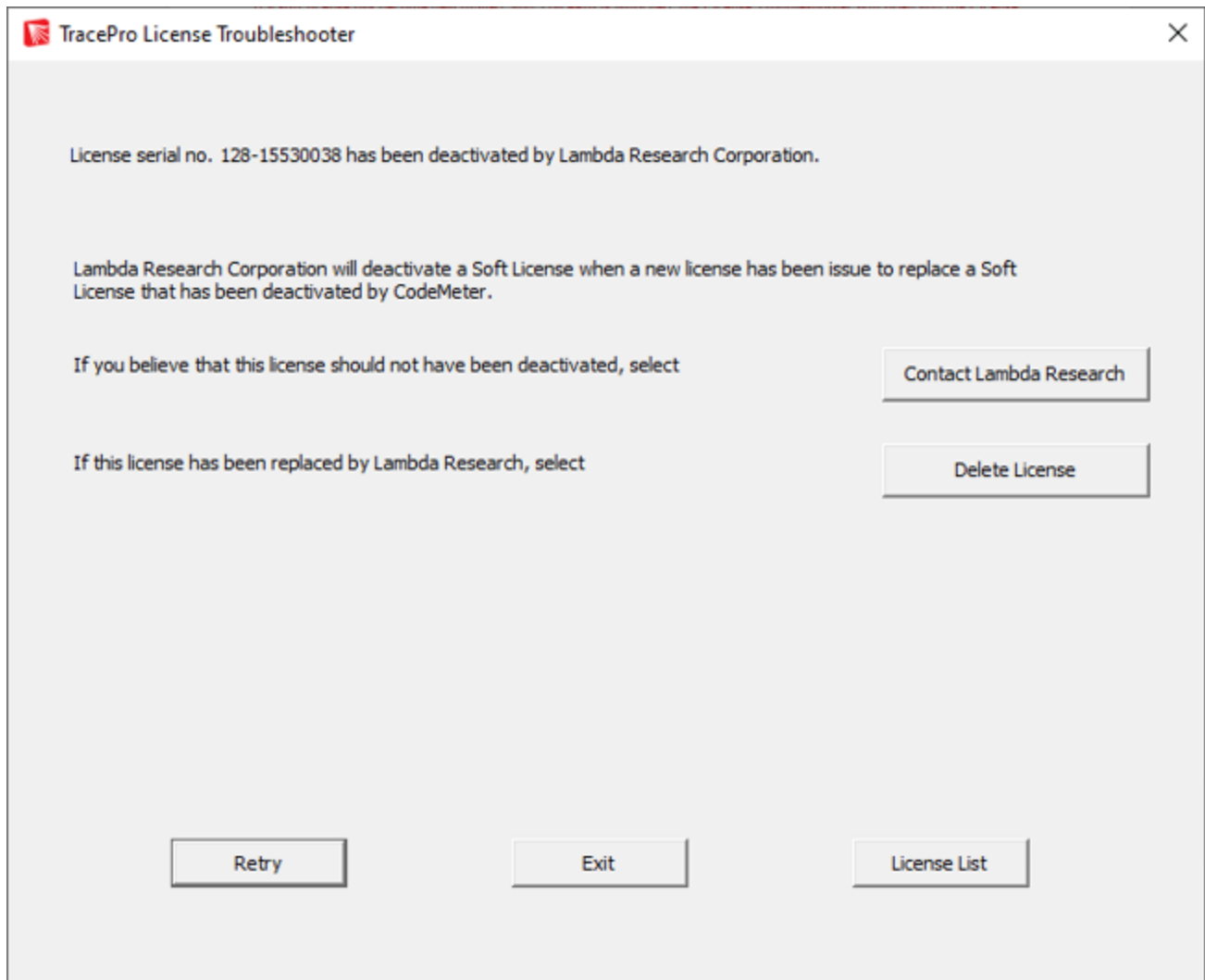
The "Reactivate" license context file saved to the desktop can be sent to license@lambdares.com

License deactivated by Lambda Research (soft license)

If a soft license has become deactivated, and TracePro is launched, the License Troubleshooter will open.
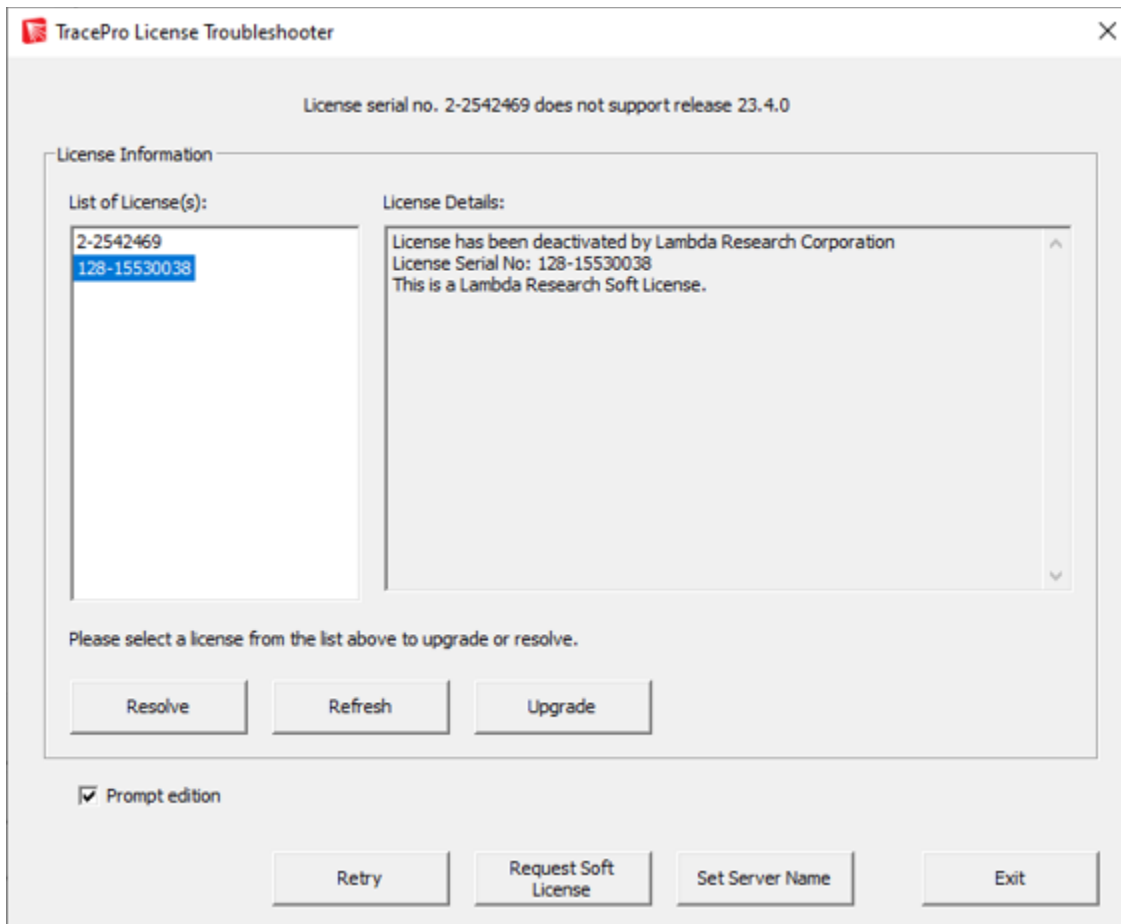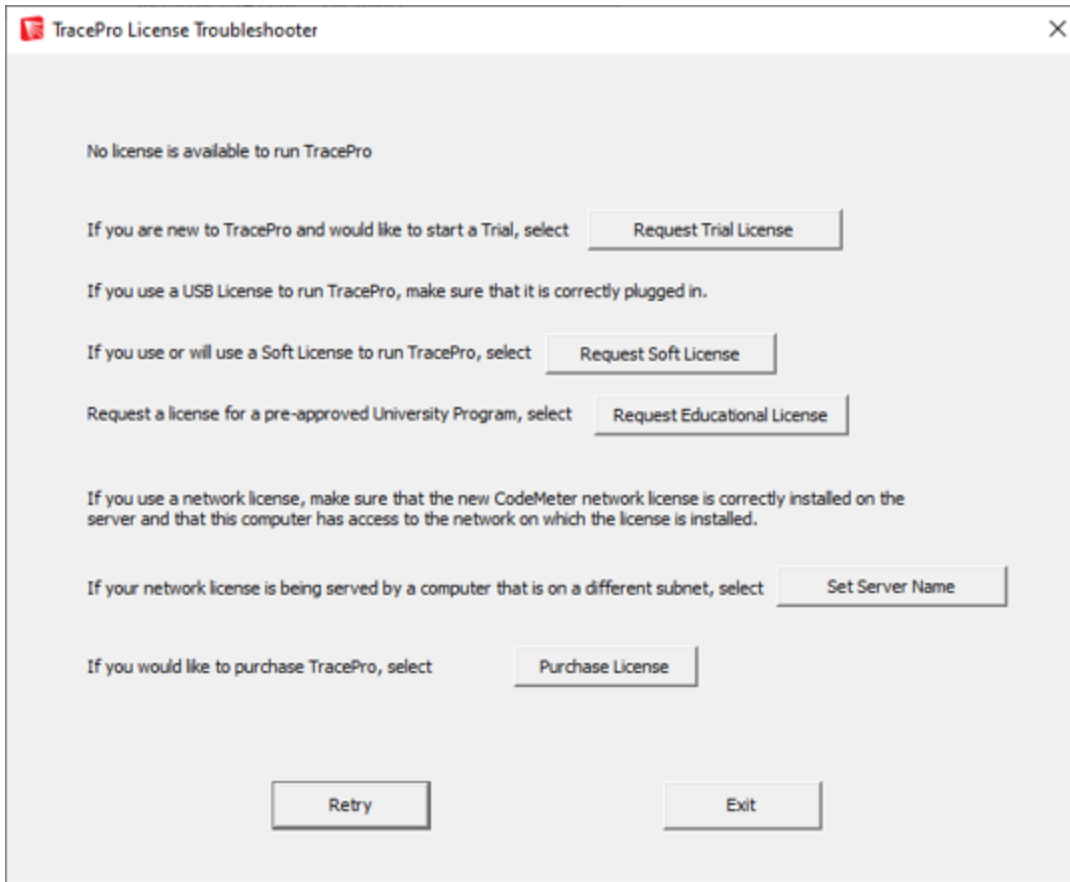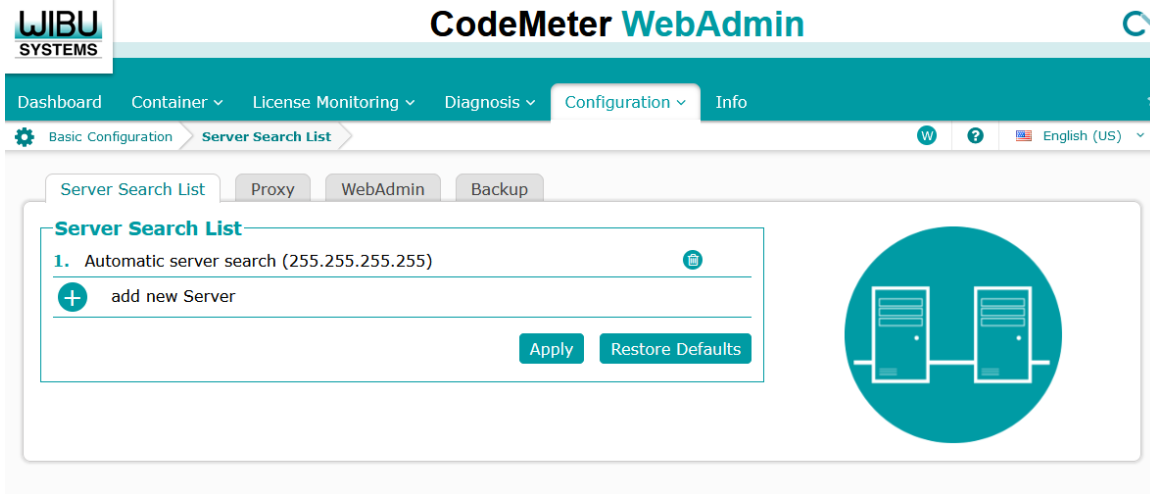
Select Resolve.

Select Contact Lambda Research or Delete License.

Set Server Name

TracePro 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 TracePro License Troubleshooter will open.
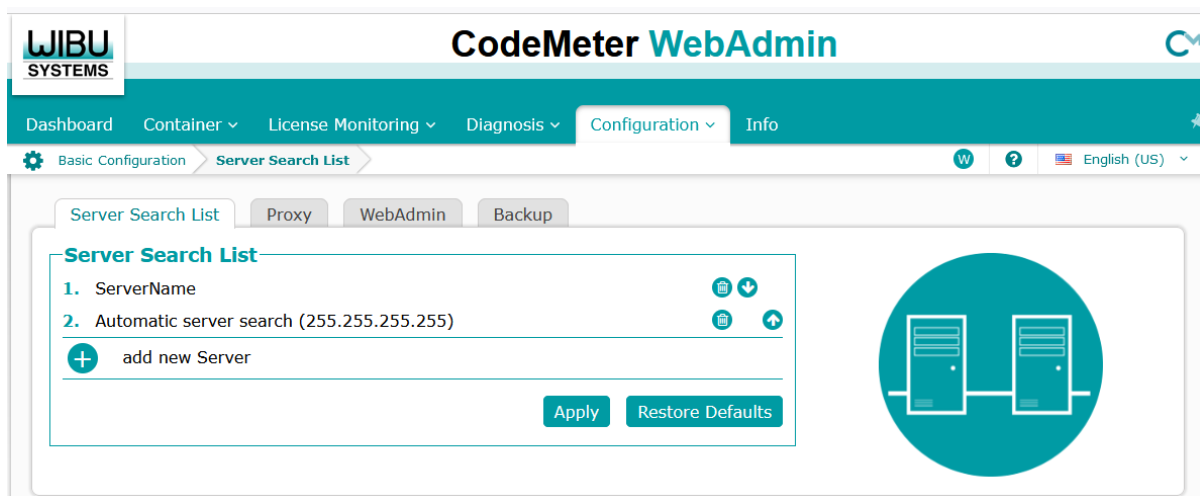
Select Set Server Name, and CodeMeter WebAdmin will open in your web browser:

Select + Add New Server
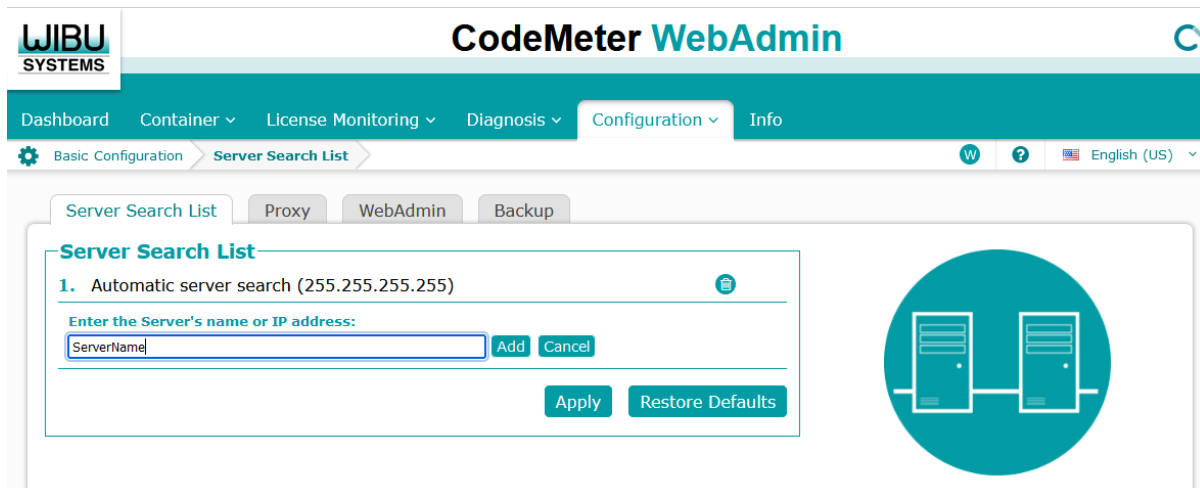
Enter the Server Name or IP Address, then click Add.

Click Apply. Now, when TracePro 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 TracePro is CodeMeter from Wibu Systems. Codemeter is installed with TracePro, and has a separate User Interface. From the Windows Start Menu, select Programs / CodeMeter / CodeMeter Control Center.
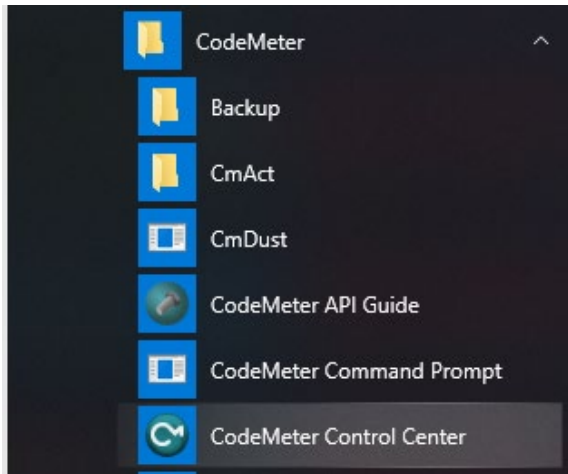
Drag and Drop the license file into the CodeMeter Control Center dialog to activate the license.
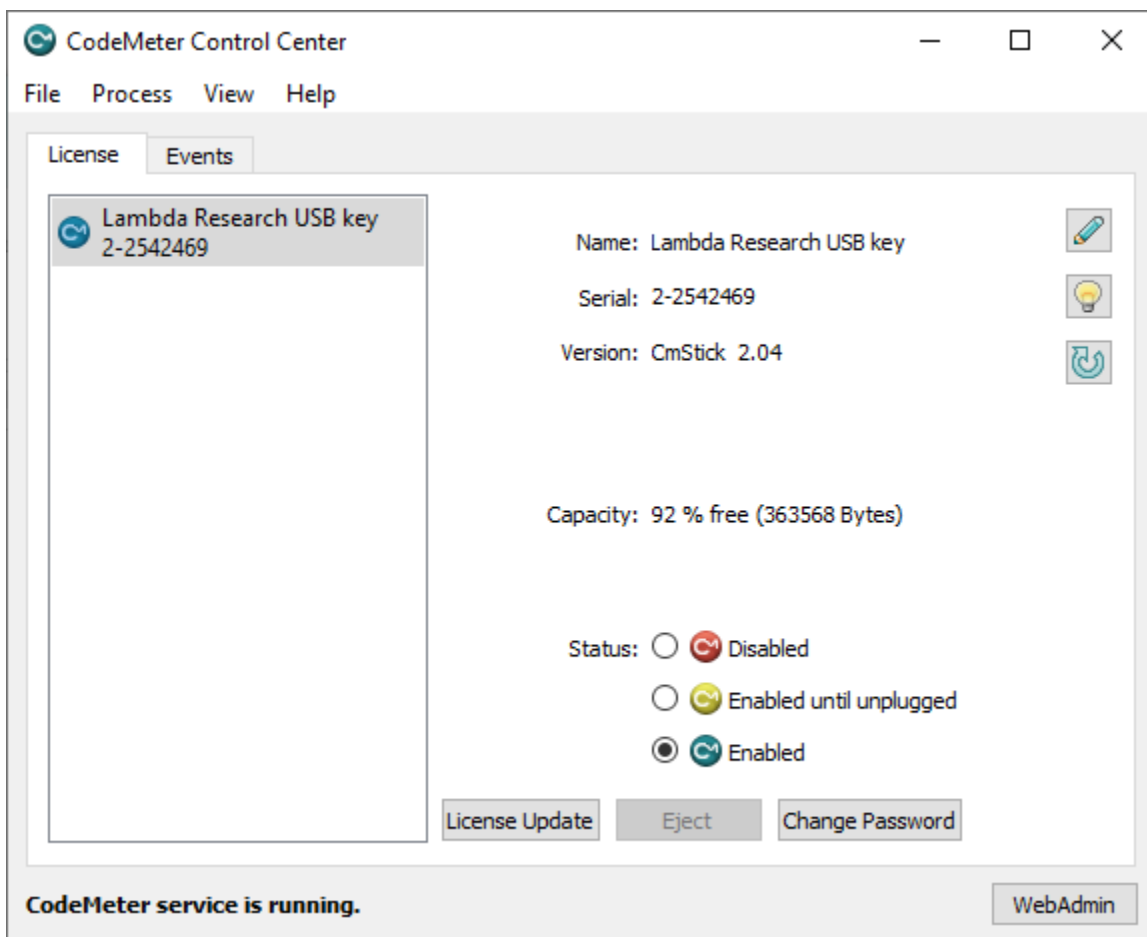
APPENDIX A – IMAGE OF CODEMETER USB DONGLE

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.