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1 SOFTWARE DOWNLOAD AND OS SUPPORT

[Download Software using this link](#)

After extracting the attached RMS9.7_CLS2022_License_Server.zip file you will have four folders: -

CLS License Manager Installation

Key Drivers

RMS 9.7

TeamViewer Client

SUPPORTED OPERATING SYSTEMS

Server (License Host):

- Win10 x64
- Server 2008 x64*, Server 2012 x64, Server 2016 x64, Server 2019 x64

Client (Surfcam Workstation):

- Win10 x64

SUPPORTED SURFCAM VERSIONS

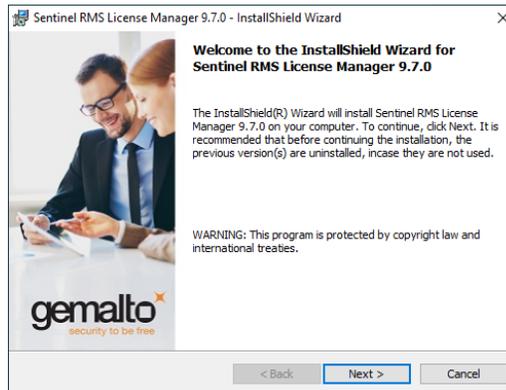
- Surfcam 2014 or newer

2 SERVER -- LICENSE SERVER SETUP

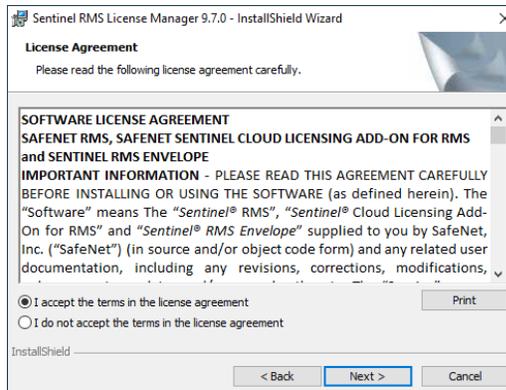
We recommend you uninstall any previous versions of Sentinel RMS before installing version 9.7

2.1 INSTALL THE NETWORK LICENSE MANAGER

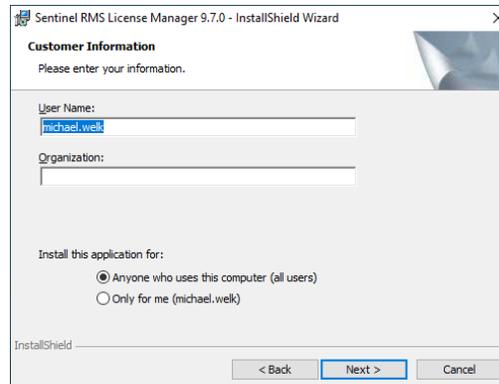
1. Run the Setup.exe from the RMS 9.7 folder.
2. Select the **Next** to continue.



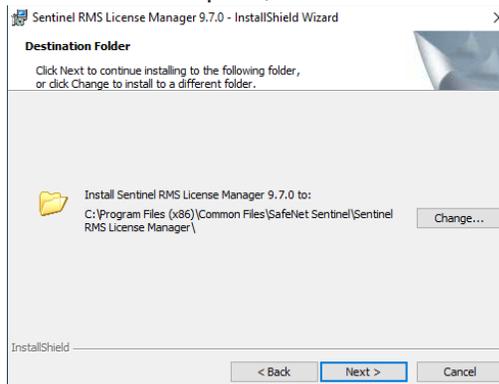
3. Accept the License Agreement and select **Next** to continue.



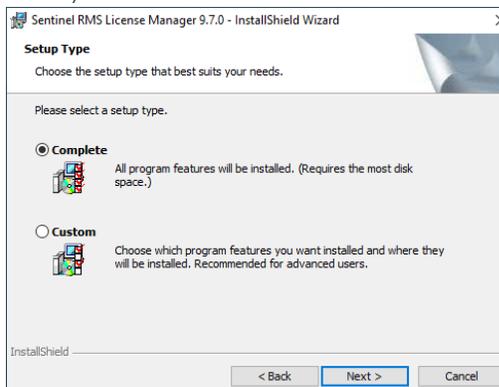
4. Enter your contact information and select **Next** to continue.



5. Recommend using the default installation path, select **Next** to continue.



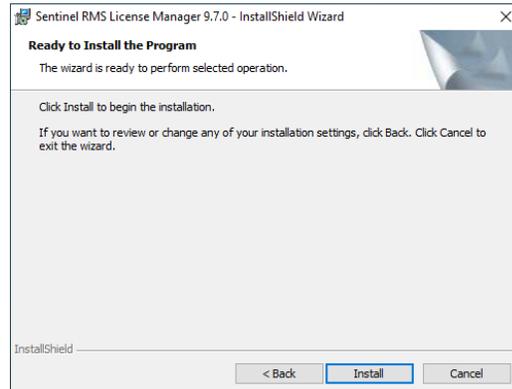
6. Recommend a Complete install, select **Next** to continue.



7. Make sure the Check Box is checked for Windows Firewall and select **Next** to continue.



8. Select **Install** to continue.



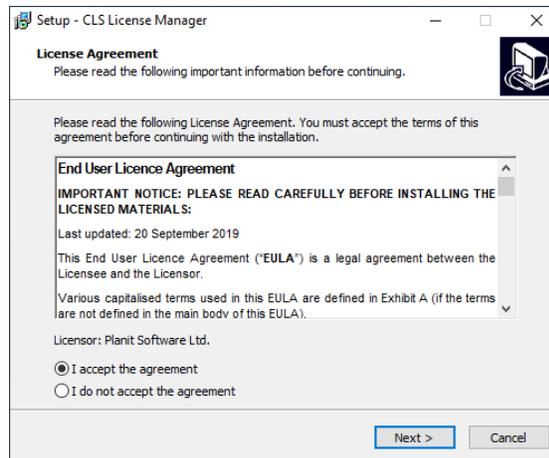
9. Installation is complete, select **Finish**.



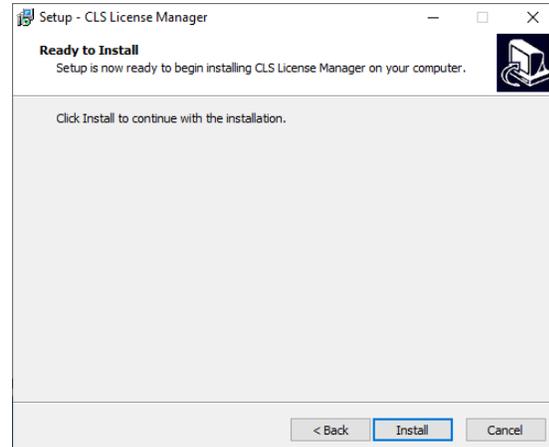
2.2 INSTALL THE CLS LICENSE MANAGER

The CLS License Manager makes it easier to install license files on the Server. Once the license is installed you can update it from the Client's CLS Manager.

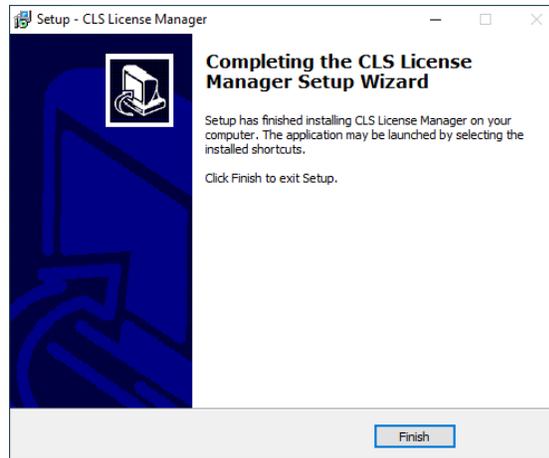
1. Run the SetupVeroClisLicenseManager.exe from the CLS License Manager Installation folder.
2. Accept the License Agreement and select **Next** to continue.



3. Select **Install** to continue.



4. Installation is complete, select **Finish** to continue.



2.3 INSTALL THE COMPUTER ID KEY & DRIVERS (ONLY FOR KEYED LICENSES)

1. Run the Sentinel System Driver Installer 7.5.9.exe from the Key Drivers folder.
2. Place the USB Network Key on the USB port of the License Server.

Not required for Keyless license.

Virtual Machines & Servers require a USB Computer ID Key.

See Troubleshooting Tips for [Hyper V](#) and [VM Ware](#)



2.4 FINDING THE LOCKCODE

1. Run C:\Program Files\Vero Software\Vero CLS License Manager\Cls\GenerateLockCode.exe.
2. If your Network License is setup for Keyless, the Lockcode will start with 14-.



The screenshot shows the 'Generate Lock Code' dialog box with the following fields and options:

- Hostname: T110
- Locking Method: Keyless
- Lock code: 14-*1R9Q47RYNHTJBJ3
- Recovery code: 1010-*1MSVZHKQRAHHNJJN
- Lock to Security Key
- OK button

3. If your Network License is setup for Keyed, Check the “Lock to Security Key” box and the Lockcode will start with 80-.



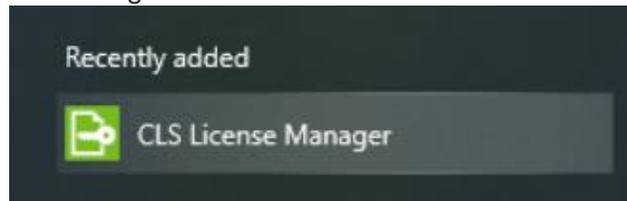
The screenshot shows the 'Generate Lock Code' dialog box with the following fields and options:

- Hostname: T110
- Locking Method: Security Key -1
- Lock code: 80-*194845CG39SQCBC
- Recovery code: (empty)
- Lock to Security Key
- OK button

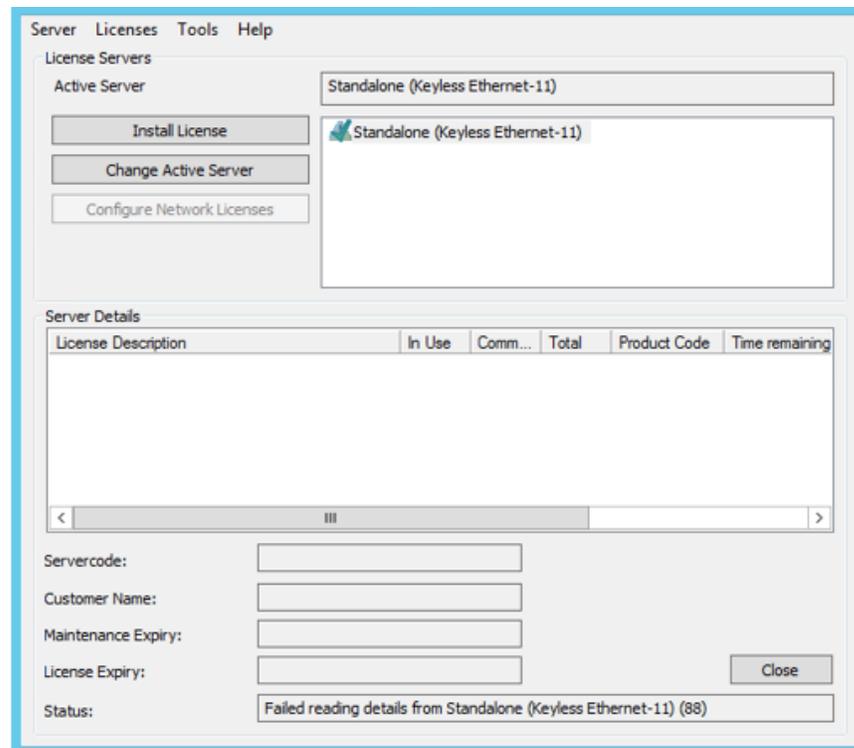
4. If you do not have a Physical *.CLSN file please Save the appropriate Lockcode by using the  icon and send the file to Support and they will generate a license file that you will install in a later step.

2.5 CONFIGURE THE LICENSE SERVER

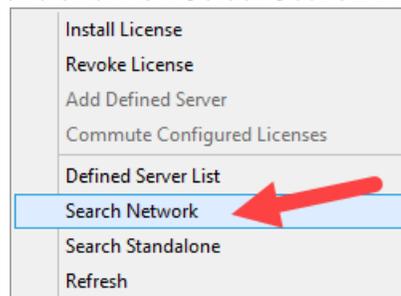
1. Launch the CLS License Manager from the Start Menu.



2. You may see multiple Standalone (Keyless *) Servers but none of these will be used for the Network License.

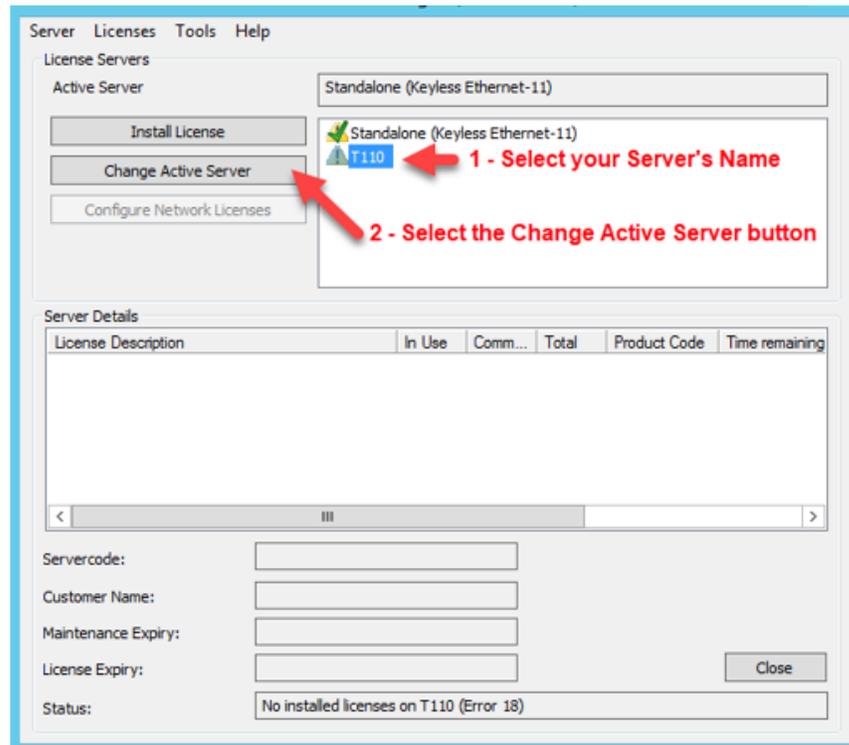


3. Select **Server** from the Top Menu and then Select **Search Network**.

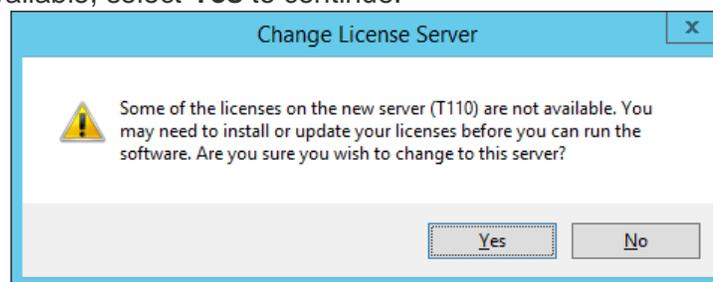


- The CLS Manager will scan the Network and should return the name of your Server. Highlight the Server and select **Change Active Server**.

Example: T110

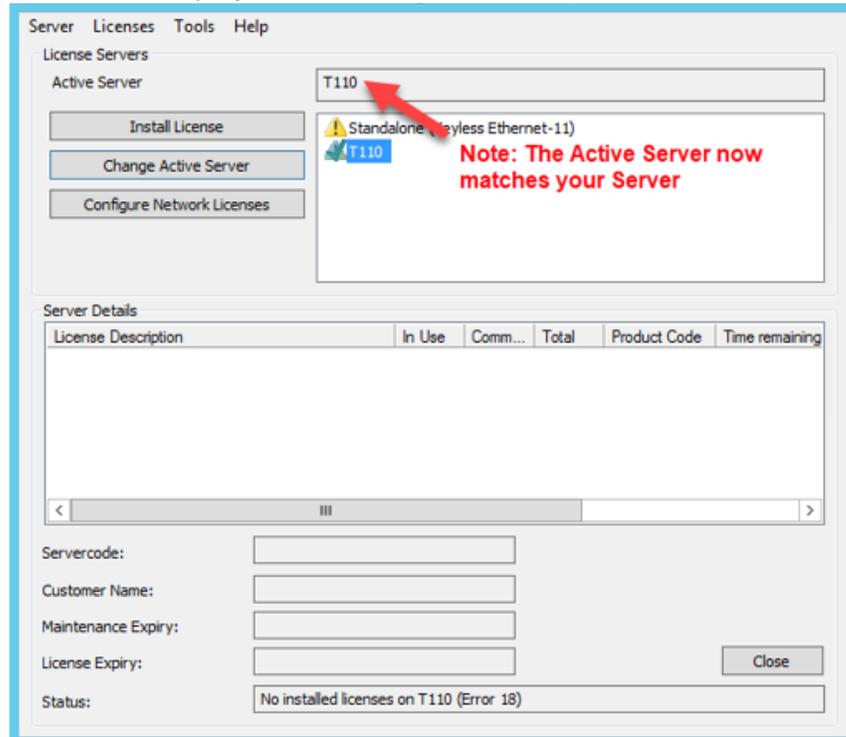


- A warning dialog box will appear stating that you need to install the license file before your licenses will be available, select **Yes** to continue.



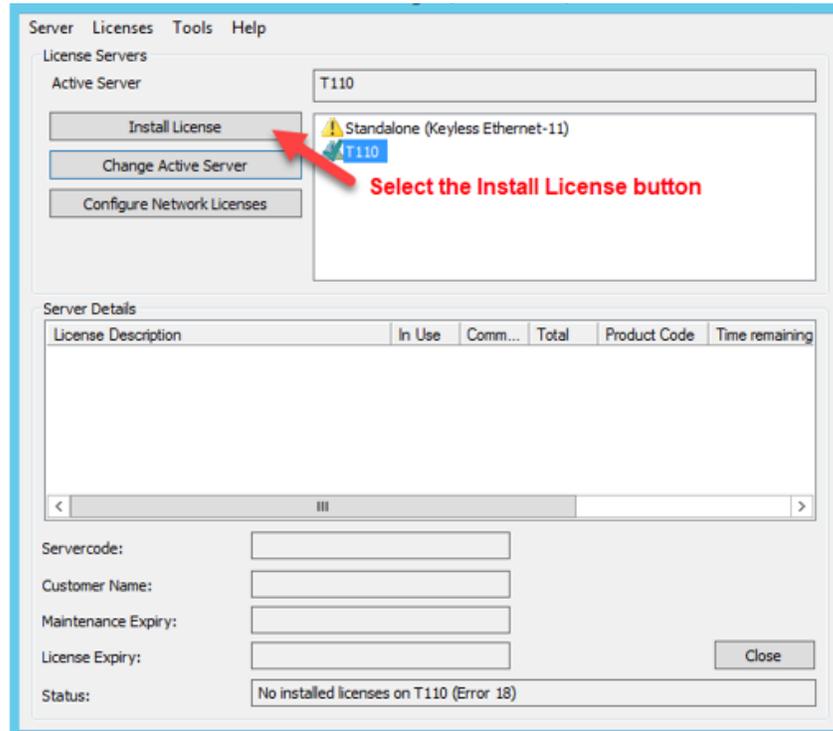
- Your Server Name should now have a Green Checkmark and the Active Server line at the top should display your Server Name.

The Yellow ! Icon is also displayed because there is no license file installed.

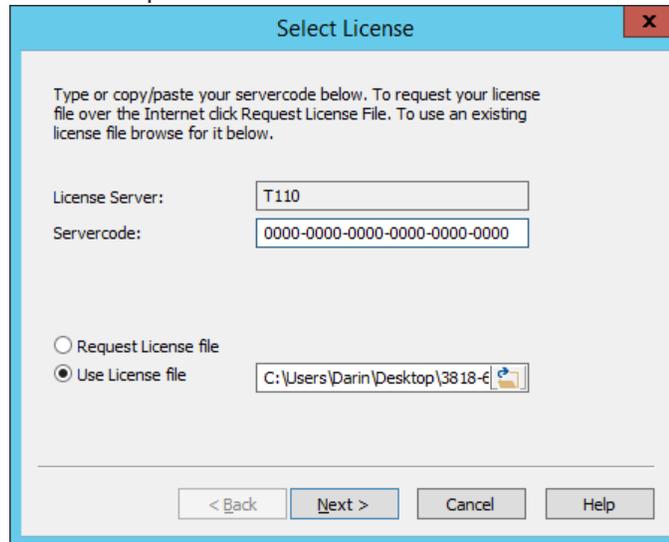


2.6 INSTALLING THE NETWORK LICENSE FILE USING THE SUPPLIED .CLSN FILE

1. Select the **Install License** button.



2. Select the "Use License File" option and Select the **Next** to continue.



Select License

Type or copy/paste your servercode below. To request your license file over the Internet click Request License File. To use an existing license file browse for it below.

License Server: T110

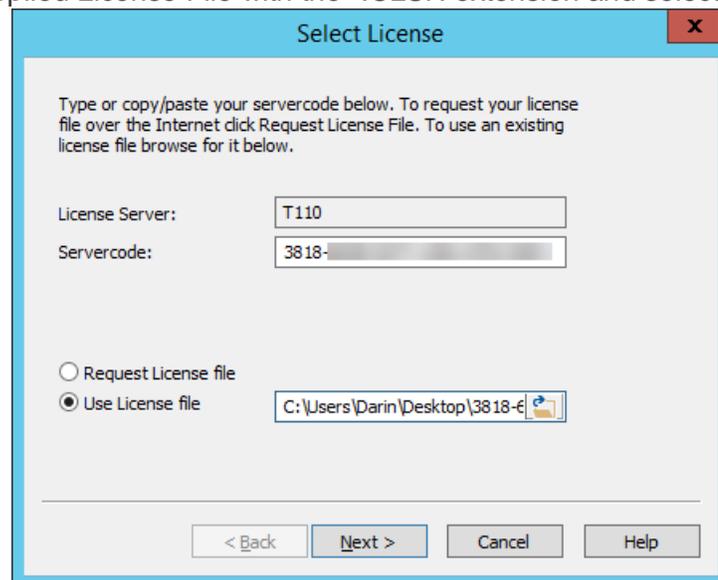
Servercode: 0000-0000-0000-0000-0000-0000

Request License file

Use License file C:\Users\Darin\Desktop\3818-€

< Back Next > Cancel Help

3. Browse to the supplied License File with the *.CLSN extension and select **Next** to continue.



Select License

Type or copy/paste your servercode below. To request your license file over the Internet click Request License File. To use an existing license file browse for it below.

License Server: T110

Servercode: 3818-

Request License file

Use License file C:\Users\Darin\Desktop\3818-€

< Back Next > Cancel Help

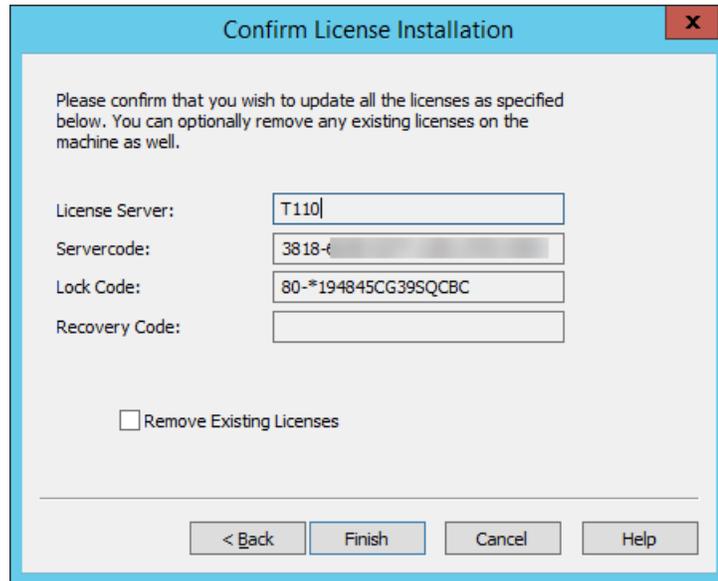
4. A Lockcode should appear that matches what appears in the CLS License Manager, select **Finish** to continue.

Your Lockcode will have a Prefixed based upon these licensing methods: -

14 - KEYLESS licensed to the internal hardware of the Server.

80 - USB SIM (green color)

100 - USB SIM (black color)



Confirm License Installation

Please confirm that you wish to update all the licenses as specified below. You can optionally remove any existing licenses on the machine as well.

License Server:

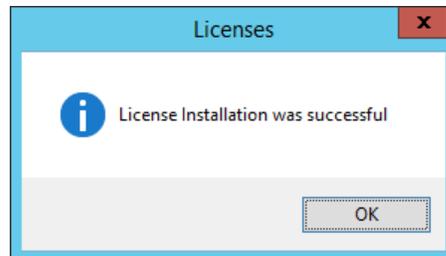
Servercode:

Lock Code:

Recovery Code:

Remove Existing Licenses

< Back Finish Cancel Help

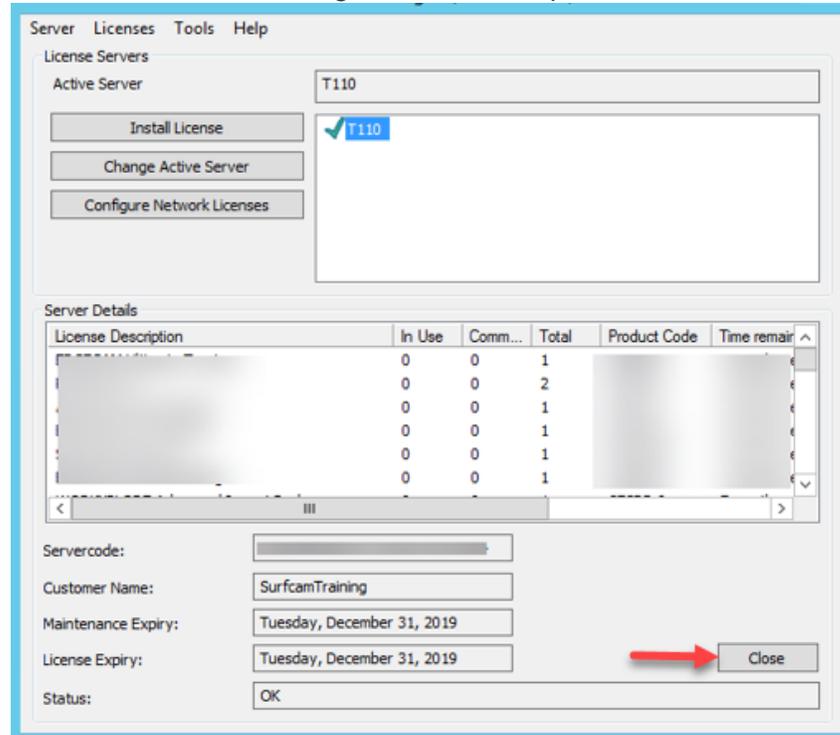


Licenses

i License Installation was successful

OK

5. The License Server and License Manager are now setup. You can select **Close**.



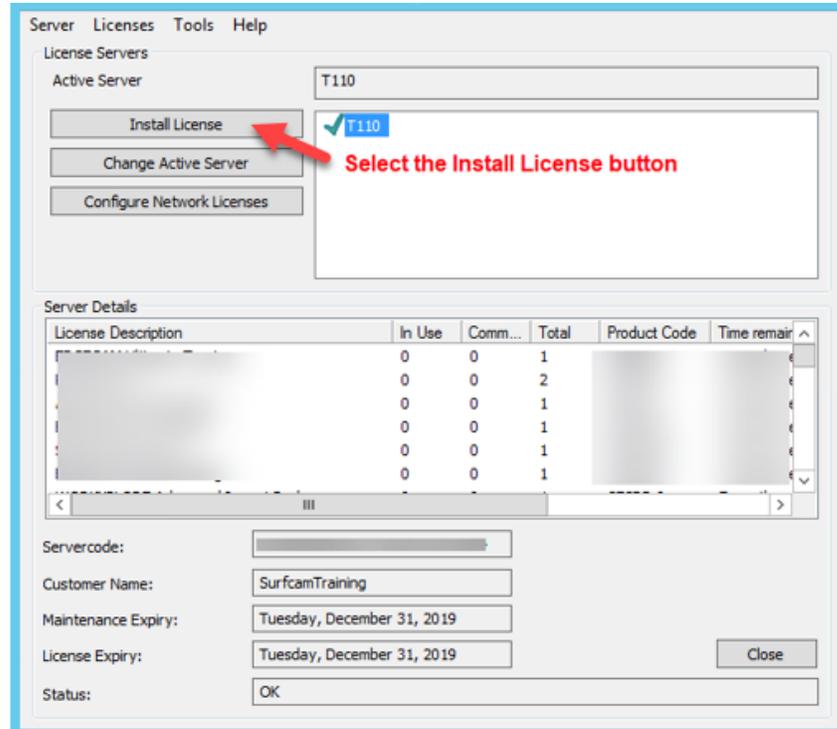
6. You have completed the Server portion of the Network License setup.

2.7 UPDATING THE NETWORK LICENSE FILE

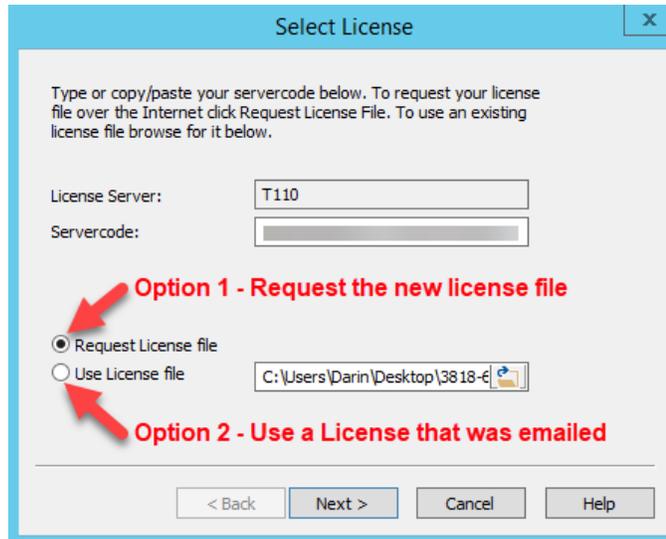
Due to License changes (upgrades and maintenance renewals) you may need to update your License to get access to the additional functionality.

This can also be done from the Client's License Manager.

1. Select the Install License button.



2. Select Option 1 (Request License File) or Option 2 (Use License File) then Select the Next button to continue.



Select License

Type or copy/paste your servercode below. To request your license file over the Internet click Request License File. To use an existing license file browse for it below.

License Server: T110

Servercode:

Request License file

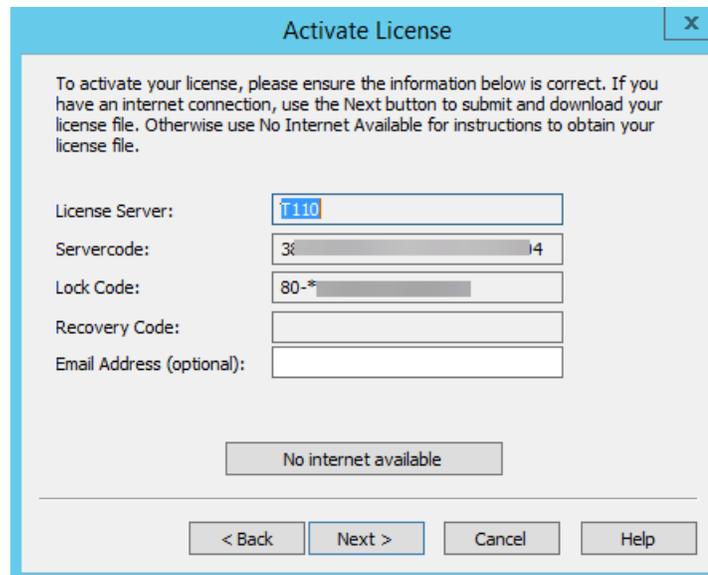
Use License file C:\Users\Darin\Desktop\3818-6

Option 1 - Request the new license file

Option 2 - Use a License that was emailed

< Back Next > Cancel Help

3. Select the Next button to continue.
4. You can enter your Email address if you want a copy of the License File sent to your Email for backup purposes.



Activate License

To activate your license, please ensure the information below is correct. If you have an internet connection, use the Next button to submit and download your license file. Otherwise use No Internet Available for instructions to obtain your license file.

License Server: T110

Servercode: 3

Lock Code: 80-*

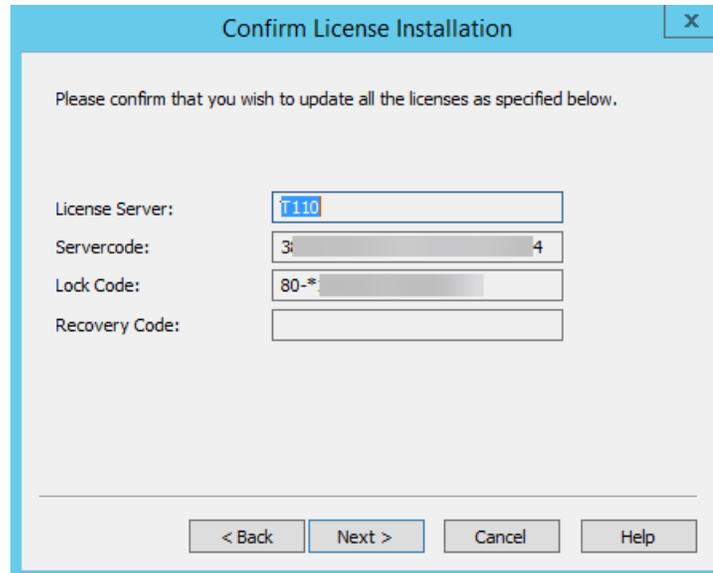
Recovery Code:

Email Address (optional):

No internet available

< Back Next > Cancel Help

5. Select the Next button to confirm the License installation.



Confirm License Installation

Please confirm that you wish to update all the licenses as specified below.

License Server: T110

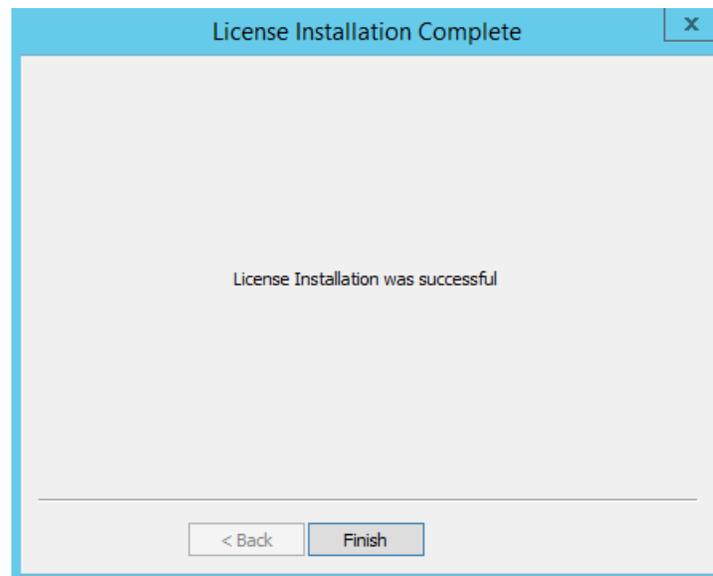
Servercode: 3 4

Lock Code: 80-*

Recovery Code:

< Back Next > Cancel Help

6. Confirmation that the License has been installed, select the Finish button to return to the License Manager.

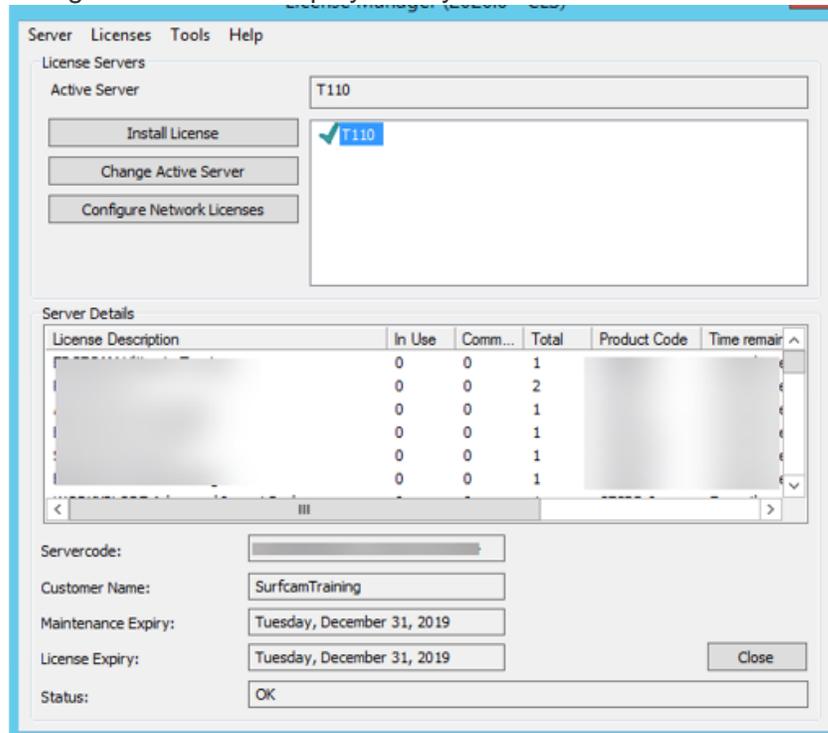


License Installation Complete

License Installation was successful

< Back Finish

7. The License Manager should now display all of your Licenses.

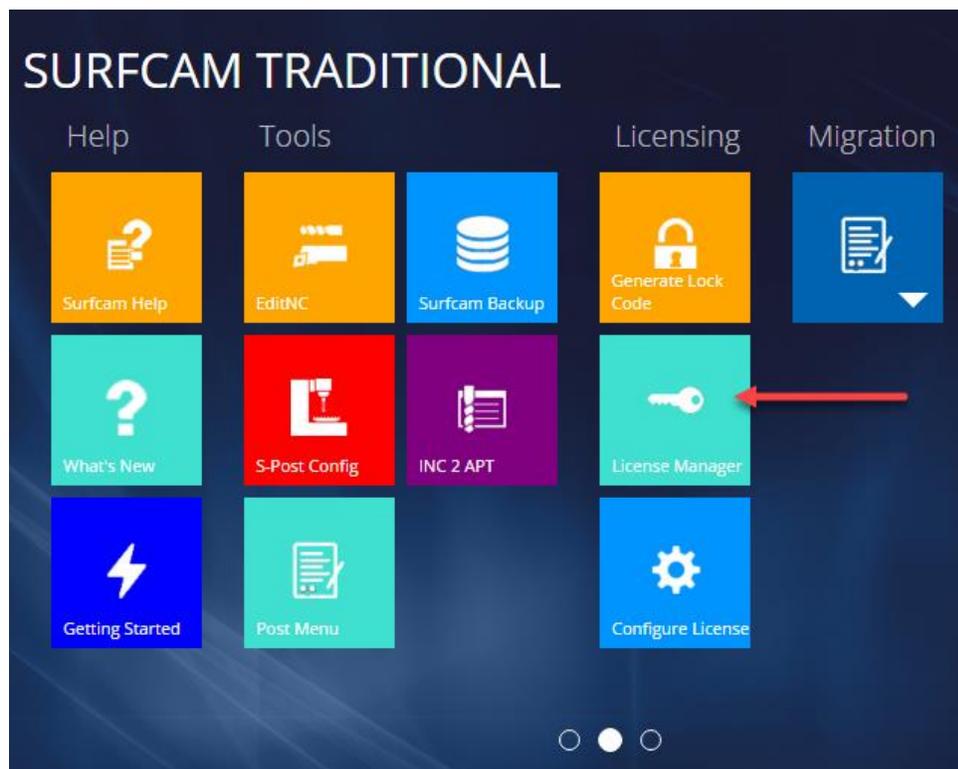


8. You have completed the Server portion of the Network License setup, select the Close button.

3 CLIENT -- LICENSE SETUP

3.1 CONFIGURE THE LICENSE MANAGER

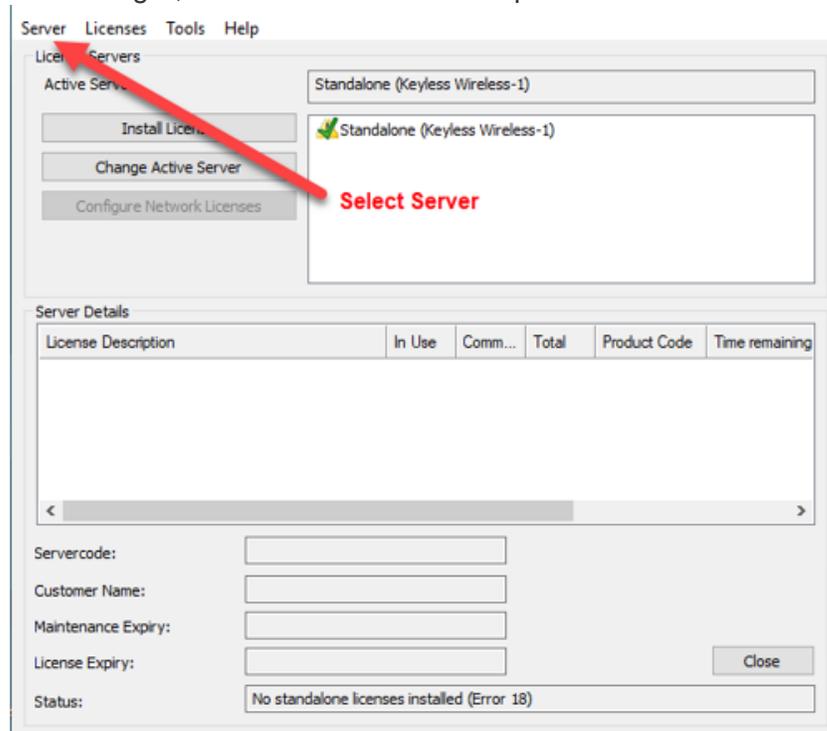
1. Select the Surfcam Traditional Launcher Icon on your desktop.



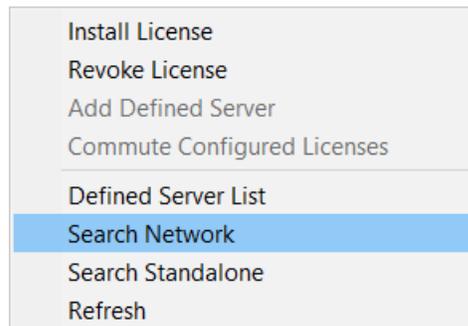
2. Select the **License Manager** icon.



3. From the License Manager, select **Server** from the top menu.

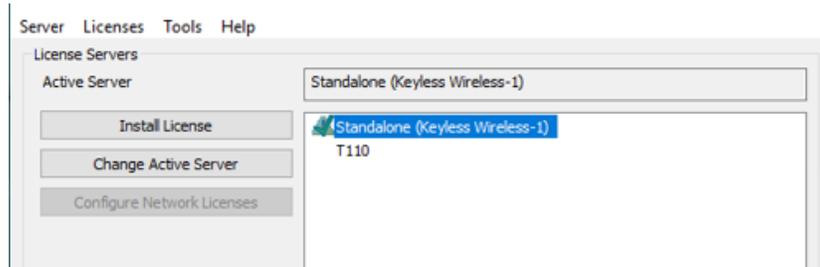


4. Select "Search Network".

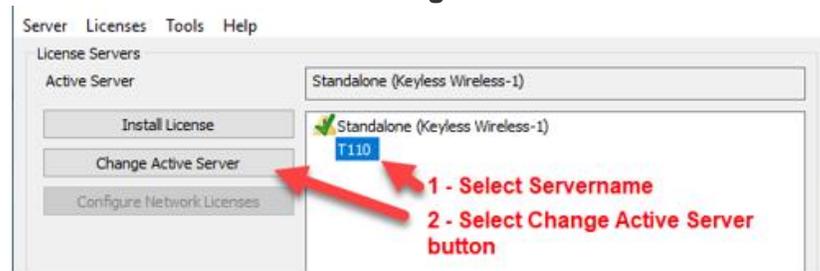


- The License Manager will query the Network for available License Servers. Your Server name should appear in the list.

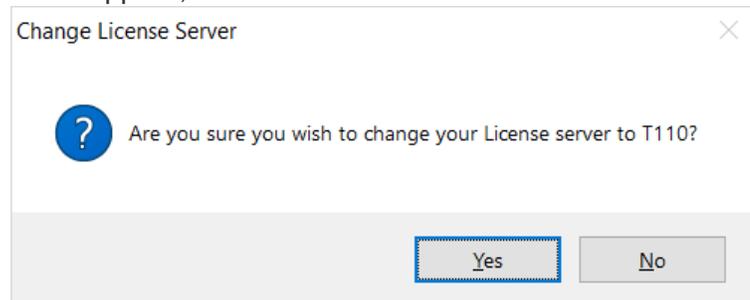
Example: T110



- Select the Server name and then select "**Change Active Server**".



- This dialog box should appear, select Yes to confirm and continue.



8. A Green checkmark should now appear next to your Server and the Active Server is now your Server.

Server Licenses Tools Help

License Servers

Active Server: T110

Install License

Change Active Server

Configure Network Licenses

⚠ Standalone (Keyless Wireless-1)
 ✓ T110

Server Details

License Description	In Use	Comm...	Total	Product Code	Time remain ^
	0	0	1		
	0	0	2		
	0	0	1		
	0	0	1		
	0	0	1		
	0	0	1		

Servercode:

Customer Name:

Maintenance Expiry:

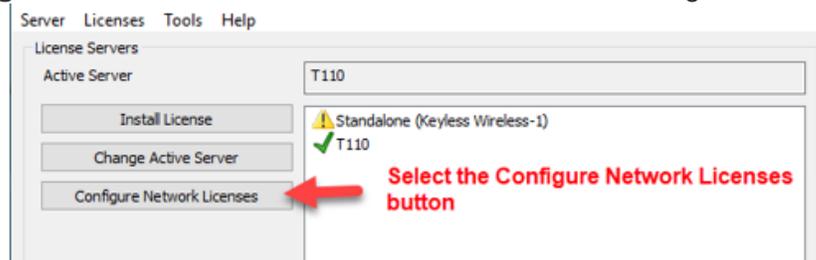
License Expiry:

Status:

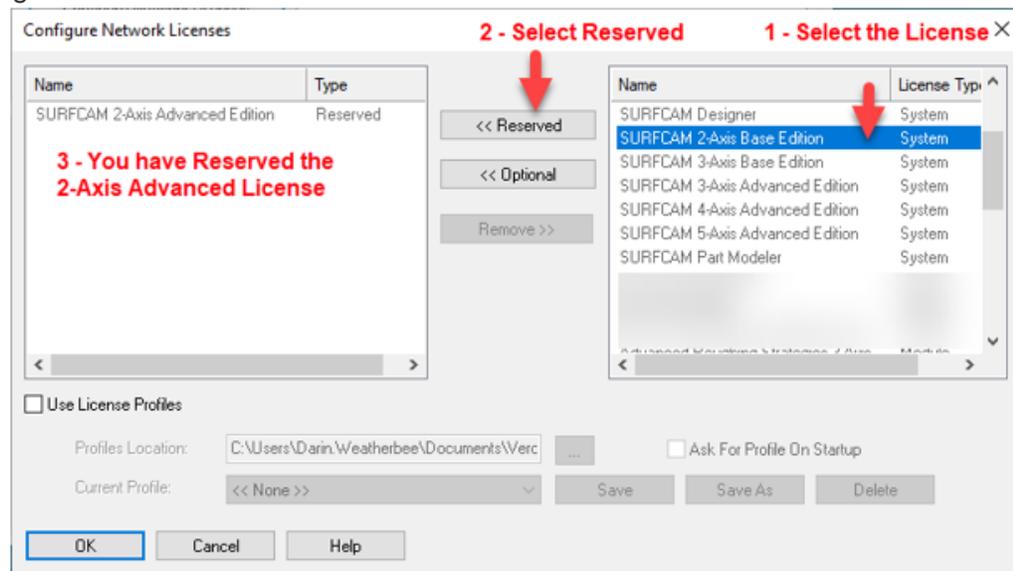
Close

3.2 RESERVE A LICENSE

1. Select "**Configure Network Licenses**" button in the License Manager.



2. The Configure Network License menu will appear, you Reserve your licenses by moving them from Right to Left and select "**OK**".

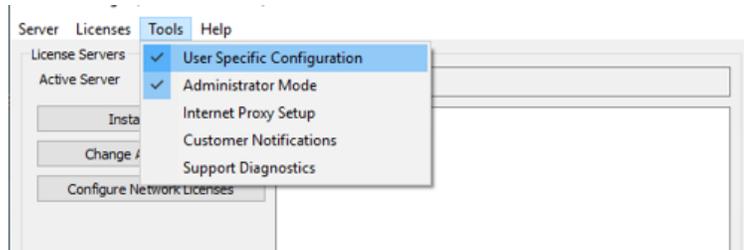


3. You can now close the License Manager by selecting **Close**.
4. You are now ready to use SURFCAM.

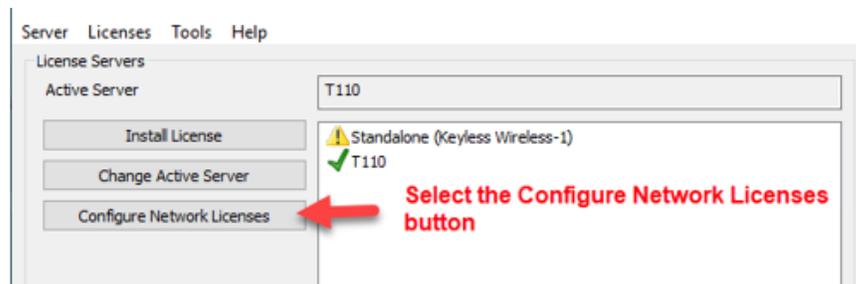
3.3 USER SPECIFIC CONFIGURATION

For computers where users login using separate user accounts allows you to configure a default configuration for all users.

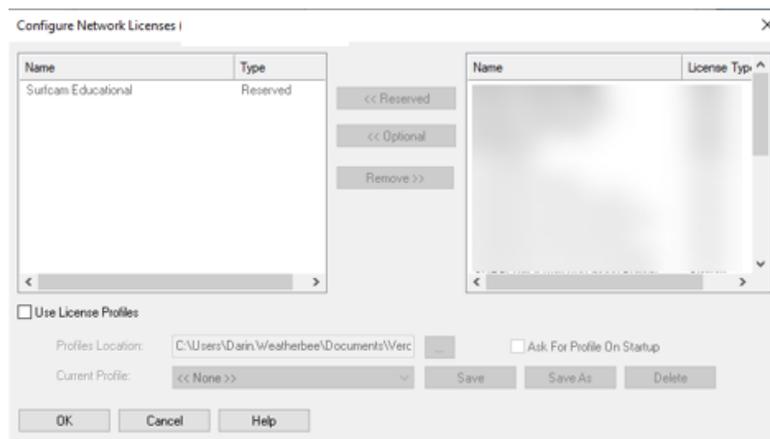
Checked – If checked each User account on the Client PC will need to Configure Network License.



Unchecked – If unchecked each User account on the Client PC will use the Reservation preconfigured at the Server. This is common with Educational Licenses where each student has a unique login but the license configuration is standard for all students.



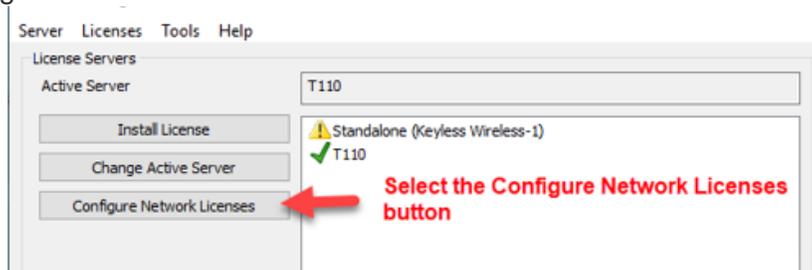
Select the Configure Network License to set the Default License for all Users.



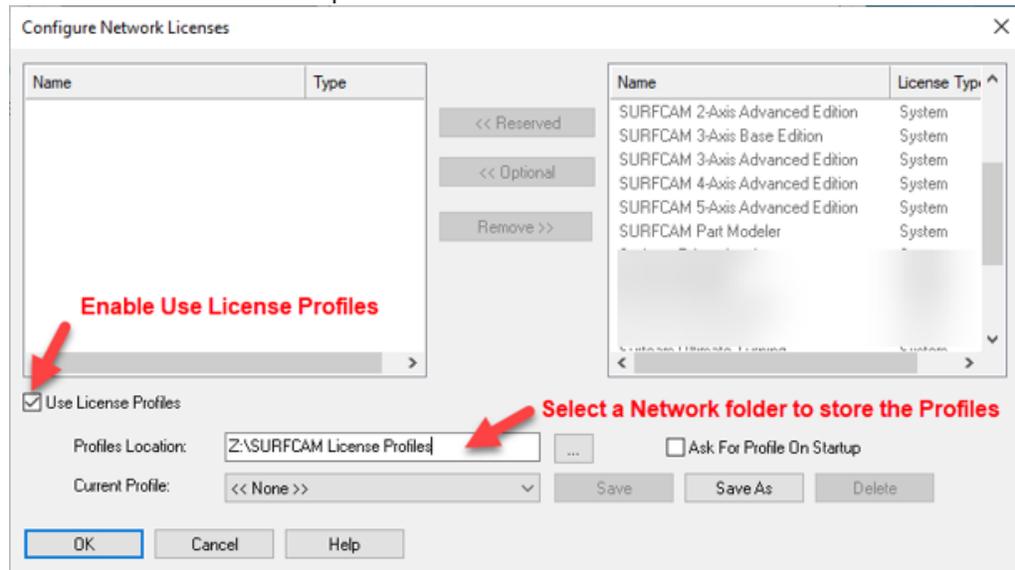
3.4 CREATING LICENSE PROFILES (OPTIONAL)

If you have different Product Levels and various Options, you can create preconfigured Profiles to make it easier to pick your License Configuration prior to use.

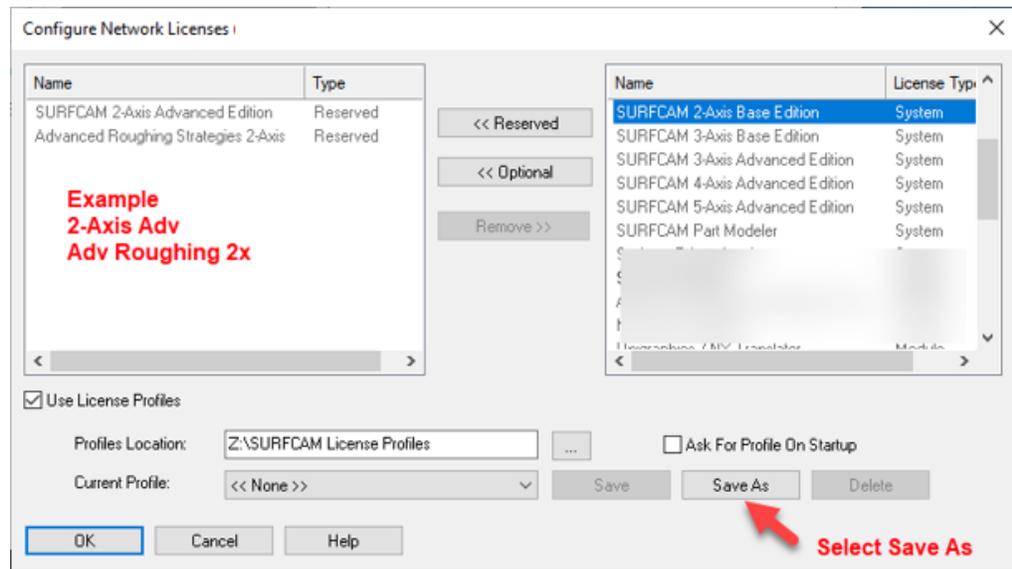
1. Select the Configure Network License button.



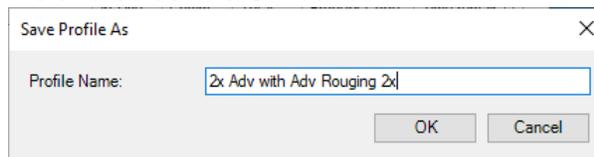
2. Enable the Use License Profiles option and select a Network folder for to store the Profiles.



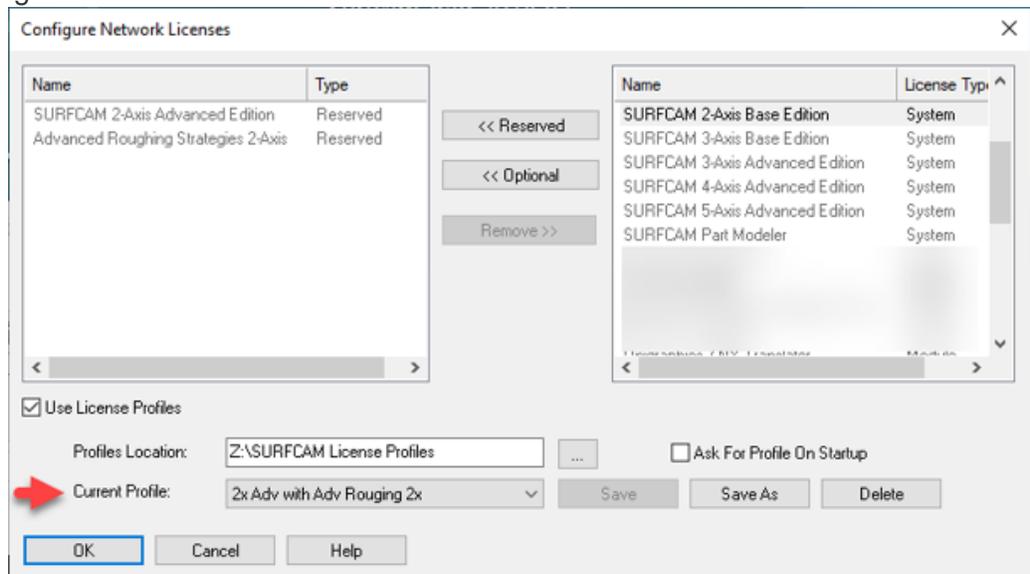
3. Create preconfigured Profiles by moving the Product and Option from Right to Left and select Save As button.



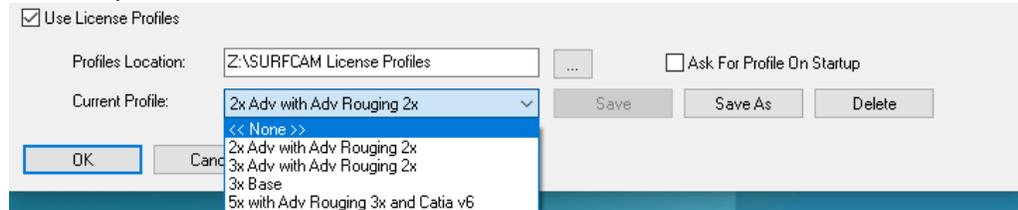
4. Assign a user-friendly name and select the OK button.



5. The Current Profile is now set to the 2x Adv with Adv Rouging 2x, select the OK button to close the Configure Network License menu.



6. Repeat these steps to create other Profiles, below shows four different Profiles.



7. The License Profiles folder will show your Profile files.

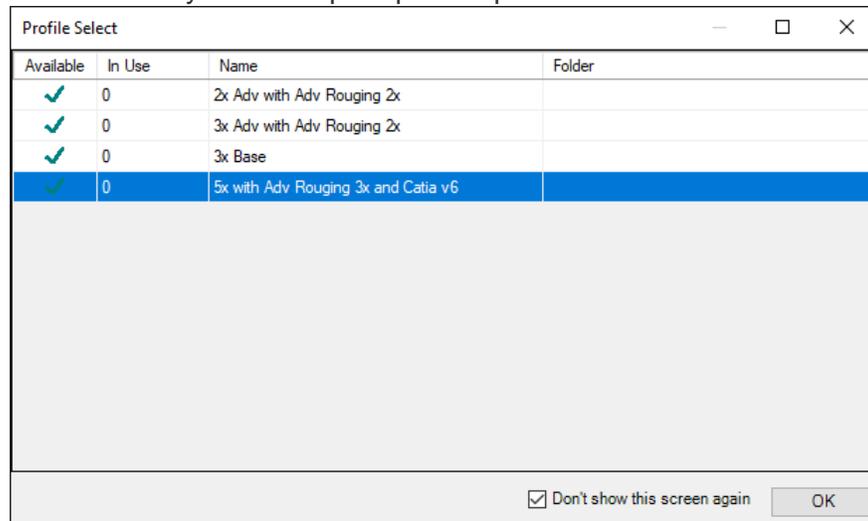
Name	Date modified	Type	Size
2x Adv with Adv Rouging 2x.xml	5/31/2019 11:38 AM	XML Document	1 KB
3x Adv with Adv Rouging 2x.xml	5/31/2019 12:10 PM	XML Document	1 KB
3x Base.xml	5/31/2019 12:10 PM	XML Document	1 KB
5x with Adv Rouging 3x and Catia v6.x...	5/31/2019 12:12 PM	XML Document	1 KB

3.5 USING LICENSE PROFILES (OPTIONAL)

- After you have configured the Profiles you can have Surfcam Prompt you to select a Profile when Surfcam is launched.
 NOTE – Running multiple Surfcam sessions and selecting different Profiles will cause you to checkout additional licenses.
- Create a batch file on your desktop and copy\paste the text below into the file.

```
"C:\Program Files\Hexagon\SURFCAM 2022.0\cls\licenses.exe" ProfileSelect
START "" "C:\Program Files\Hexagon\SURFCAM 2022.0\surfcam.exe"
EXIT /B n
```

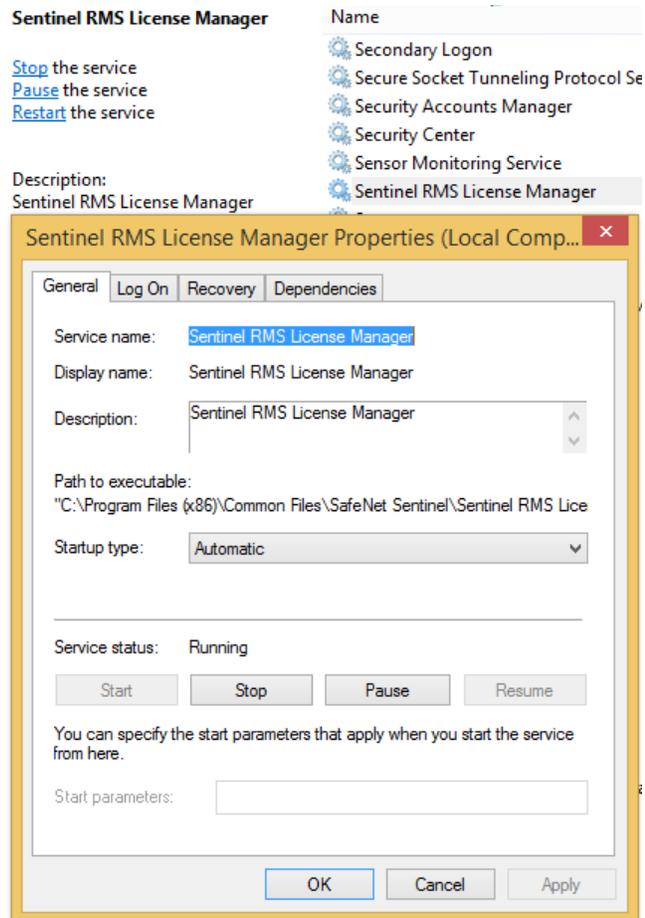
- When you run the batch file you will be prompted to pick a Profile.



4 TROUBLESHOOTING

4.1 LICENSE MANAGER SERVICE

The Service is named Sentinel RMS License Manager



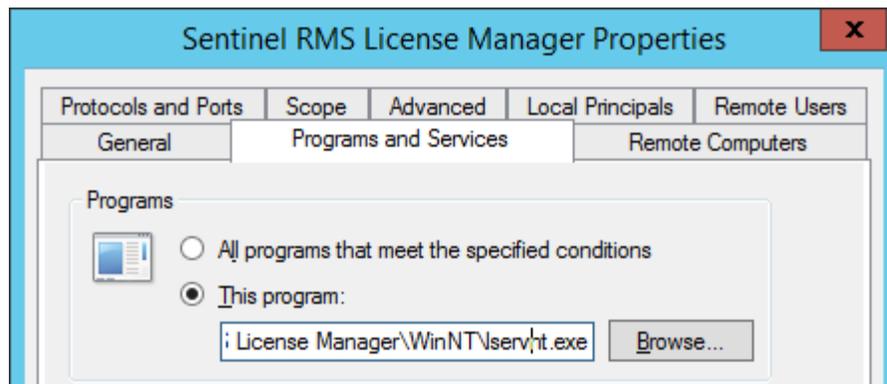
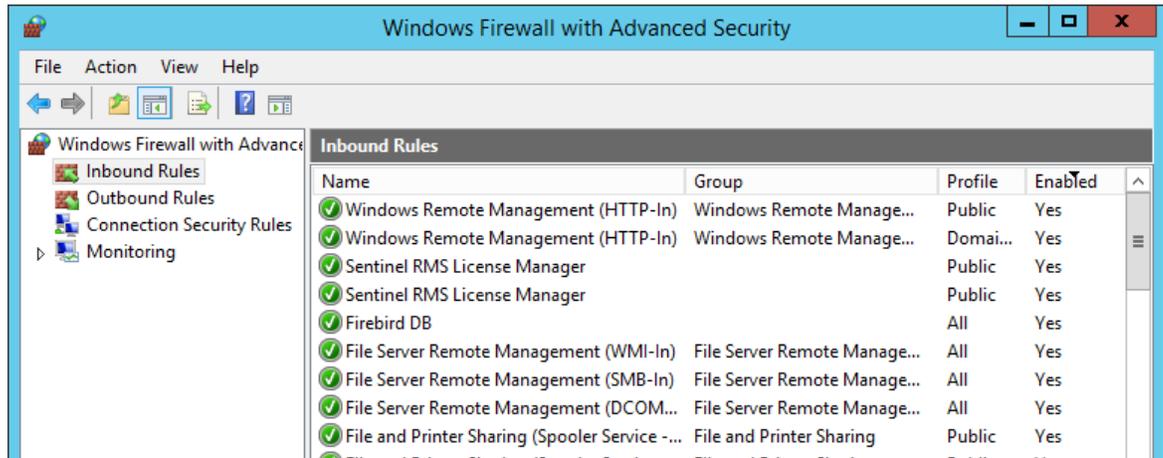
4.2 NETWORK LICENSE FILE LOCATION

By default the License Manager installs the license file into to the same folder as the service executable.

The license files is named "lservrc" and is stored in the C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager\WinNT\ folder.

4.3 WINDOWS FIREWALL'S SETTINGS ON SERVER

Windows Firewall Settings



4.4 3RD PARTY FIREWALL'S SETTINGS

If you are using a 3rd party Firewall you will need to allow this executable
 C:\Program Files (x86)\Common Files\SafeNet Sentinel\Sentinel RMS License
 Manager\WinNT\servnt.exe. or UPD Port 5093.

4.5 RDP TO PHYSICAL OR VIRTUAL SERVER NOT SEEING THE KEY

License Manager 2018 R2 and newer supports Remote Desktop if you are an 80 USB Key The 100 USB Keys are not supported via Remote Desktop but will work if logged in via the Console.

License Managers prior to 2018 R2 had issues with the Session 0 Isolation issue.

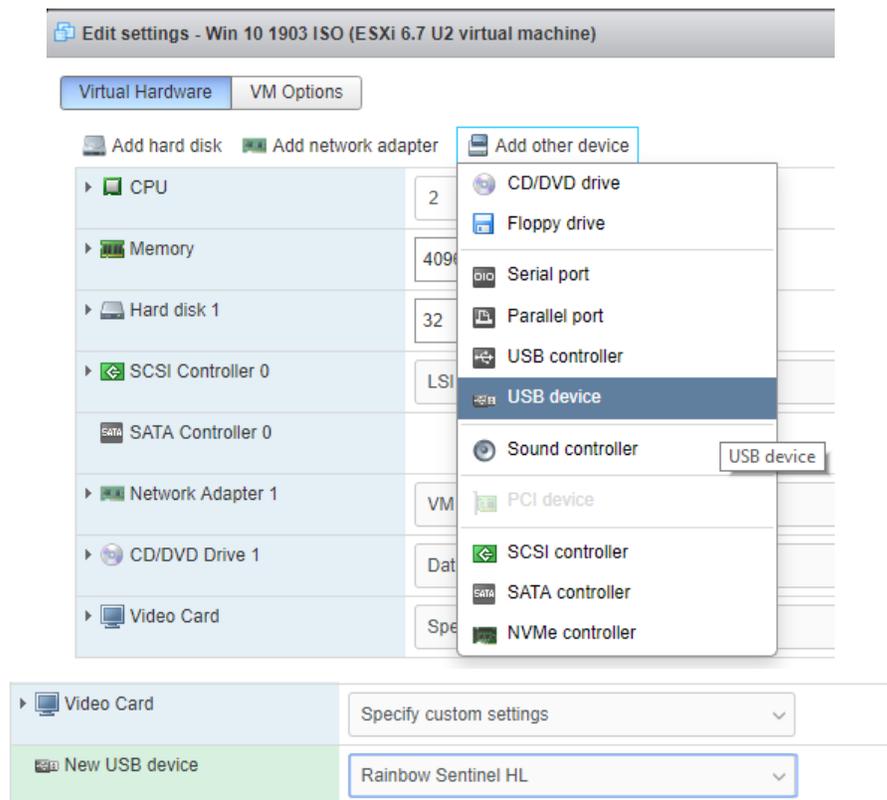
<https://techcommunity.microsoft.com/t5/ask-the-performance-team/application-compatibility-session-0-isolation/ba-p/372361#>

4.6 HYPER V – VIRTUAL MACHINE NOT SEEING THE KEY

Hyper V does not support USB Passthrough for non-disk devices. You need to find an alternative solution such as an Ethernet to USB device to connect your Virtual Machine to the USB Key.

4.7 VMWARE ESXI - VIRTUAL MACHINE NOT SEEING THE KEY

You must Edit your Virtual Machine and Add Other Device, USB Device and then select the Rainbow Sentinel HL from New USB Device pulldown. When the Virtual Machine is started it will recognize this device as a SafeNet USB Super Pro \ Ultra Pro if the Drivers are installed.



4.8 ERROR 25 ON CLIENT LICENSE MANAGER

Cause: The Network License Server is still running RMS v8,

Resolution: Install RMS 9.7 on the Network License Server.

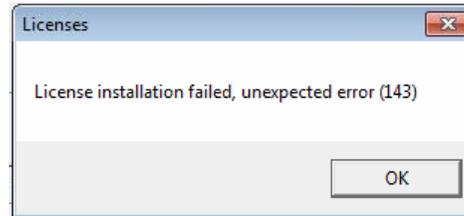
4.9 ERROR 88 ON CLIENT LICENSE MANAGER

Cause: Surfcam software is installed on a Server Operating System while trying to use a Keyless Standalone license while connecting via Remote Desktop.

Resolution: Install License from the Console not RDP.

4.10 ERROR 143 ON SERVER

License installation failed, unexpected error (143)



Cause: An Environment Variable that still exists from an older version of the License Manager or another License Manager is installed on the same Server.

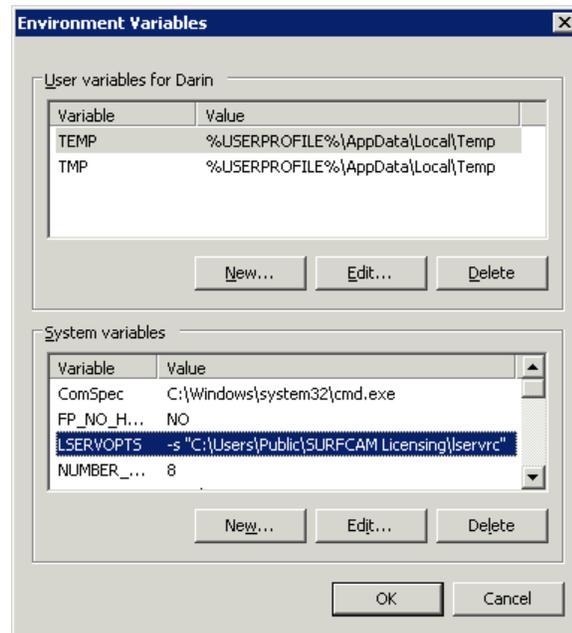
Resolution: Double check if any other Sentinel based license servers are running on the same server. Remove the System Variable for LSERVOPTS.

Cause2: The Folder C:\ProgramData\Vero Software does not have proper permissions.

Resolution2: The Folder C:\ProgramData\Vero Software needs to have Modify permissions at the User level.

Cause3: The Folder C:\Program Files(x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager does not have proper permissions.

Resolution3: The Folder C:\Program Files(x86)\Common Files\SafeNet Sentinel\Sentinel RMS License Manager needs to have Modify permissions at the User level.



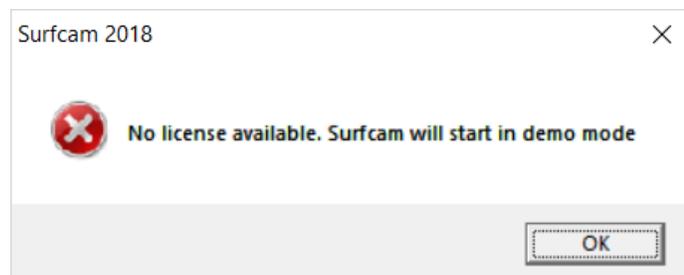
4.11 ERROR 5 ON CLIENT LICENSE MANAGER

Cause: Client is unable to locate the Network License Manager.

Resolution: Make sure the you have installed RMS 9.7 on the Server. [See License Server Setup](#) Or the Server's Firewall ON and not configured properly. [See Firewall Section](#)

Or in very rare instances the computer name is no longer valid for reasons out of our control, use Defined Server List to enter the IP address of server computer.

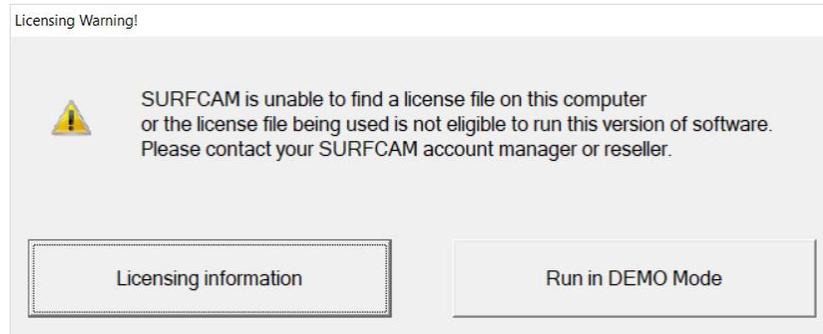
4.12 ERROR: NO LICENSE AVAILABLE. SURFCAM WILL START IN DEMO MODE



Cause: The maximum number of licenses as been reached

Resolution: Close one of the of open SURFCAM sessions.

4.13 LICENSE WARNING! LICENSE INFO AND DEMO MODE BUTTONS



Resolution: You do not have any licenses reserved see [Client Setup](#).