



# **2016-2017 (V16-V17)**

## **Installation Guide**

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## Overview

Hello and welcome to the Installation and Licensing guide for Civil Survey Solutions.

There are two main **License Types**:

- **Standalone (including Evaluation, Rental, Home Use and Student)**, and
- **Network**

*Note: For both Standalone and Network License Types, the Software must be installed on each client workstation.*

### Licensing Notes:

- Civil Survey Solutions licensing for Civil Site Design (Advanced Road Design) is cross platform (e.g. ARD V17 for Civil 3D 2017, ARD V17 for Civil 3D 2015, etc will reference the same license)
- Typically, the Civil Survey Solutions License Year (eg: 2017) aligns with the most recent Autodesk platform the application has been created for (eg: AutoCAD Civil 3D 2017)
- A Network license will activate for the current platform (eg: Civil 3D 2016) plus the 3 previous platforms (eg: Civil 3D 2014, 2013 and 2012). For Network licenses, your **Serial Key** (also known as your License Key) will activate one or more licenses.

### About Obtaining a License

When you purchase a Civil Survey Solutions product such Advanced Road Design or Stringer Topo, you will be issued with a **Serial Key** – this is a unique identification of your product purchase. A valid Serial Key is required in order to authorise your software and obtain a License.

The processes for obtaining and authenticating your license will be covered in the Standalone or Network installation guides, below.

## Minimum System Specifications

Typically, meeting the minimum specifications for the CAD product will meet all system requirements for the software.

### 32 Bit (x86) Computers

- Windows® 8 Standard, Enterprise, or Professional edition, Windows® 7 Enterprise, Ultimate, Professional, or Home Premium edition operating system
- For Windows 8 and Windows 7: Intel® Pentium® 4 or AMD Athlon™ dual-core processor, 3.0 GHz or higher with SSE2 technology
- For Windows XP: Pentium 4 or Athlon dual-core processor, 1.6 GHz or higher with SSE2 technology
- 2 GB RAM (4 GB recommended)
- 500Mb free disk space for installation
- 1280 x 1024 display resolution with true colour (1600 x 1200 recommended)

### 64 Bit (x64) Computers

- Windows® 8 Professional edition or Windows 7® (recommended) Enterprise, Ultimate, or Professional edition operating system
- Minimum Intel® Pentium® 4 or AMD Athlon® 64 processor
- 4 GB RAM minimum (8 GB recommended)
- 500Mb disk space for installation
- 1,280 x 1,024 true colour video display adapter (1,600 x 1,200 with true colour recommended; multiple monitors are supported)

## Preparing for Installation and Licensing

- Do I need local Admin access during installation?
  - It is strongly recommended during installation and licensing.
  - No, however you would need to open full read/write access to a number of directories and sub-directories – if you would like to pursue this option please [Submit a Support Request](#)
- What permissions do I need to run the software and license?
  - Please see the following for full details:  
[http://support.civilsurveysolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/86/1/system-requirements---css-products](http://support.civilsurveysolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/86/1/system-requirements---css-products)
- Is my machine x64 or x86?  
[http://support.civilsurveysolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/54/1/is-my-system-64-bit-or-32-bit](http://support.civilsurveysolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/54/1/is-my-system-64-bit-or-32-bit)
- Network or standalone?
  - Check the information/email you received with your serial key – It is located on the back of the case for physical media or detailed in an email to you.
    - No serial?
      - [Submit a Support Request](#)
      - Call the Civil Survey Solutions Subscription co-ordinator on 1300 254 004 (Australia only) or email [subscriptions@civilsurveysolutions.com.au](mailto:subscriptions@civilsurveysolutions.com.au)
    - Unsure if Network or Standalone
      - Contact Civil Survey Solutions Subscription co-ordinator on 1300 254 004 (Australia only) or email [subscriptions@civilsurveysolutions.com.au](mailto:subscriptions@civilsurveysolutions.com.au)
      - Try the serial key as a standalone: it will license if it is a Standalone, otherwise it will inform you that the number is for a Network.
- Is this the latest version of the Software?
  - You can download the latest Software updates at:  
<http://www.civilsurveysolutions.com.au/support-main/subscription.html>
- What happens if I encounter any problems?
  - [Please see the troubleshooting guide at the end of the document](#) – this will also detail the best process for getting in contact with us

## Standalone Installation

For standalone licensing, the license file is locked to the machine it is installed on. The standalone license system is installed with the software.

Standalone, Rental, Evaluation, Home-Use and Student licenses all fall under the banner of Standalone.

Licenses are stored in a file with the '.lic' extension. They are stored in the following locations with:

- Windows 8 & Windows 7: C:\ProgramData\CSS\ARD 2016\License
- Windows 8 & Windows 7: C:\ProgramData\CSS\Stringer 2016\License
- Windows 8 & Windows 7: C:\ProgramData\CSS\Site Leveller 2016\License

## Standalone Installation Process

There are two parts to the installation:

- Step 1.** Installing the Software
- Step 2.** Activating the License

### Step 1 - Software Installation

Software Installation is available from the following sources:

- Download  
Using your **Serial Key** for access, you can download from the following link:  
<http://www.subscription.civilsurveysolutions.com.au/>
  - Physical Media (normally supplied upon request or for new customers)  
The installation media sent to you will open an installation page, which includes a link to install the software
1. Ensure your CAD application is closed. Run the **Software Installation** – during the installation process you may change the default installation path if you wish. This installs both the software and the license manager on the computer. *Note: This has no impact on where or how the licensing is managed.*
  2. After installation of the Software, start your platform CAD application and note that additional menus/toolbars/ribbons are installed for your installed Civil Survey Solutions software.  
*Note: Running any ARD, Stringer Topo or Site Leveller command (except Stringer Settings) will trigger the license activation form.*

## Step 2 – Licensing and Activation

Installations of Civil Survey Solutions Software such as Advanced Road Design (ARD) and Stringer Topo (STR) are activated from inside the CAD environment (known as Online License Activation).

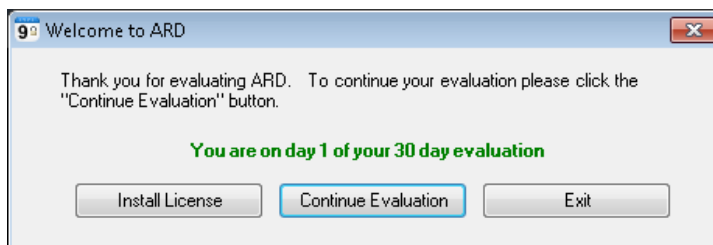
*Special Note: You will need to have an internet connection to complete online licensing activation. If you can't obtain an internet connection, please see the **Off Line License Activation** section (below).*

Should you encounter any errors during installation or licensing, please use this link for licensing support:

[http://support.civilsurveysolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution](http://support.civilsurveysolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution)

### Online License Activation

1. To begin the activation process, run any of the Civil Survey Solutions software commands.  
The following screen appears:



Below are the license activation methods for **Evaluation** and **Standalone** (inc. home use and student) customers.

#### For Evaluation of the Software

2. To begin your free evaluation period of 30 days, please click **Continue Evaluation**.  
License activation will occur in the background via the internet and you will be issued with a 30 day Evaluation license.

Notes:

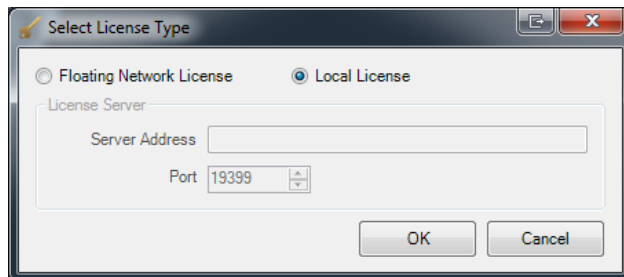
*Evaluation license activation does not require an internet connection*

*Once the 30 day Evaluation Period has expired, you will be required to **Install License** to continue using the Civil Survey Solutions Software.*

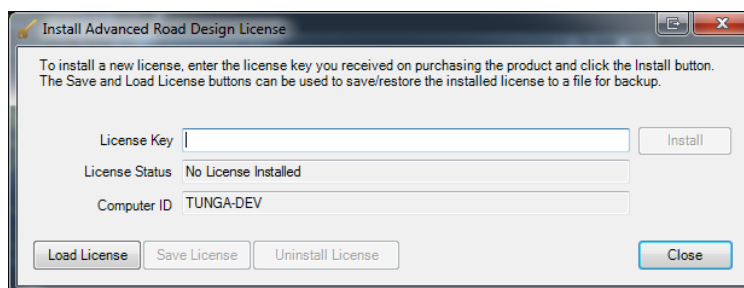


### For Standalone/Home Use/Student License Activation

2. To activate your Standalone License, click the **Install license** button. The following form will display:



3. Make sure **Local License** is selected and click **OK**. The following form will display:



4. Enter your **Serial Key** (License Key) and click the **Install** button.  
This will activate your license automatically using our online activation service.  
Once finished, the **License Status** will change to **License Installed**.  
Your software is now licensed.
5. Close the screen and run any ARD or STR command.

Special Note: If you receive the error message 'Unable to connect to Authentication Server' when you attempt to license please proceed to the **Standalone Off-Line License Activation** section.

**Congratulations, you have successfully installed and licensed your Civil Survey Solutions product!**

## Standalone Off-Line License Activation

This is normally only required if sufficient internet connectivity/access cannot be obtained for the computer on which the software is installed. There are 3 steps in this process:

### Step 1. Attempt Activation and Save the License File

Firstly, follow the normal steps for activation as detailed above (Steps 2 to 4 in the **Online License Activation** section). This will generate a license file locally on your machine and prompt you to save.

1. Select **Save License** and save it to a location that you have write access to

### Step 2. License Authentication from a Remote Computer

In this step, you activate your serial keys online, and create your license files manually. This can be done on any computer with internet access (does not need to be done from the computer you are installing the software on).

1. Go to the web license activation service:  
[http://civilsurveysolutions.com.au/index.php?option=com\\_content&view=article&id=558&Itemid=134](http://civilsurveysolutions.com.au/index.php?option=com_content&view=article&id=558&Itemid=134)
2. Click on the button **Choose File** and choose the license file you generated in **1. Attempt activation and Save the License File**.
3. Click on **Authenticate** and save the authenticated license file to a location that you have write access to. *Note: do not save directly to the license file location*

### Step 3. Save the License and Activate

Now that you have an authenticated license file, the last step is to save it to your computer and activate.

1. Ensure that your CAD program is closed
2. Rename the authenticated license file to **CSSStandalone.lic**
3. Save this file to the license file location:
  - Windows 8 & Windows 7:
  - C:\ProgramData\CSS\ARD 20xx\License, for Advanced Road Design
  - C:\ProgramData\CSS\Stringer 20xx\License, for Stringer Topo on Civil 3D 20xx
  - C:\ProgramData\CSS\Stringer CAD 20xx\License, for Stringer Topo on AutoCAD or BricsCAD
  - C:\ProgramData\CSS\Site Leveller 20xx\License, for Site Leveller
  - C:\ProgramData\CSS\<Civil Survey Solutions Software Name> 20xx\License, where <Civil Survey Solutions Software Name> is the name of the software installed

The 20xx represents the year version of the licensing.

- For Civil Site Design the folder is aligned with the version (eg: **V17** would place licensing in the folder **ARD 2017**)
- For Stringer Topo the folder matches the platform upon which it operates (eg: **Stringer Topo 2017** for Civil 3D would place licensing in the folder **Stringer 2017**)

- 4.** Restart your CAD package and run any command from the Civil Survey Solutions product you have just installed.

## Network Installation

Network licenses are stored centrally on a license server and are administered by the **Civil Survey Solutions Network License Manager**. The Network License Manager will hold and distribute licenses to client machines across your network.

The Network License manager is included on the installation disc, can be downloaded from the Civil Survey Solutions Subscription Centre, or can be downloaded from here:

<http://www.civilsurveysolutions.com.au/downloads/licensing/CSSInfralutionNetworkLicenseManager1.1.exe>

The Civil Survey Solutions Network License Manager employs the **Infralution License Management System**. *Note: This is separate software to the Autodesk Network License Manager.*

Educational and Commercial Network licenses fall under the banner of Network.

Licenses are stored in a file with the '.lic' extension on the network server, in the following location:

- Network:  
C:\Program Files (x86)\CSS\Infralution

## Network Installation Process

There are 4 parts to a Network installation of the software:

- Step 1.** Install the Civil Survey Solutions Network License Manager on the server computer
- Step 2.** Activate the License/s on the server computer
- Step 3.** License Verification to confirm license status
- Step 4.** Install the Software on each client workstation and link to the Network License Manager on the server computer

Floating network licenses are controlled by the Civil Survey Solutions Network License Manager application. It is important to setup and activate the license/s on the server before performing the client installations.

## Before you Start – Firewall Configuration

The Infralution Network License Manager uses port **19398 for Advanced Road Design, 19399 for Stringer Topo and 19397 for Site Leveller**, for communication across the network. This port must be open in order for licensing to be established and maintained.

*Note: If you do not have this port open, you will not receive any error message to this effect – the client workstation will simply revert back to ask for you to license.*

**Call to Action:** Ensure that port **19397, 19398 and 19399** is allowed through your firewall. If you are unsure how to do this please contact your network systems administrator.

## Step 1 – Install the Network License Manager

1. Please install the Civil Survey Solutions Network License Manager onto your Licensing Server.

*Note: The Network License Manager Installer is available from the following sources:*

- *Physical Media*

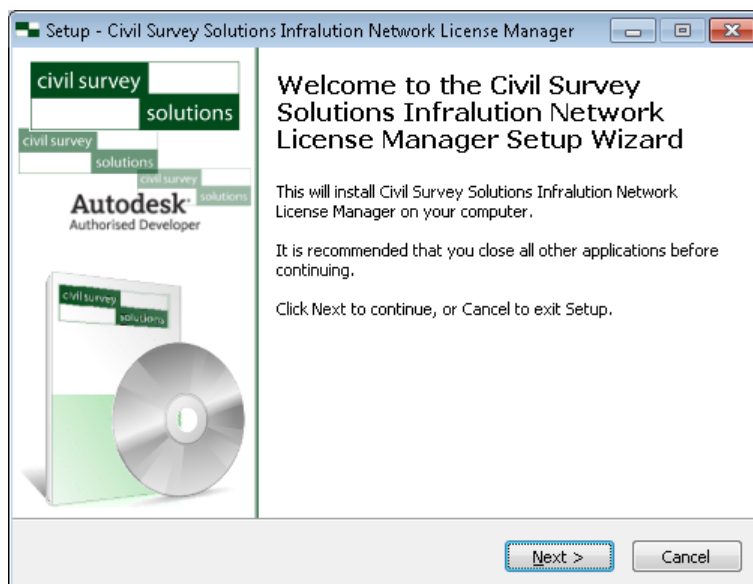
*The installation media sent to you will open an installation page, which includes a link to install the Network License Manager*

- *Download*

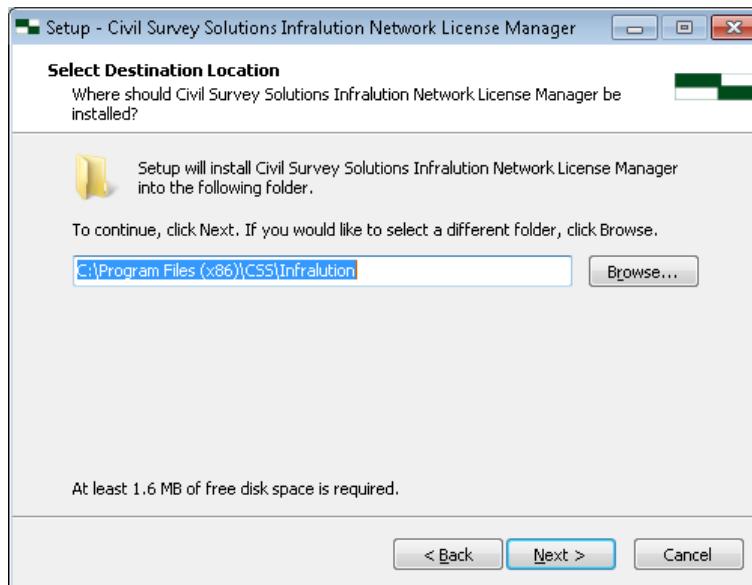
*You can download the Network License Manager from the following link:*

<http://www.civilsurveysolutions.com.au/downloads/licensing/CSSInfralutionNetworkLicenseManager1.1.exe>

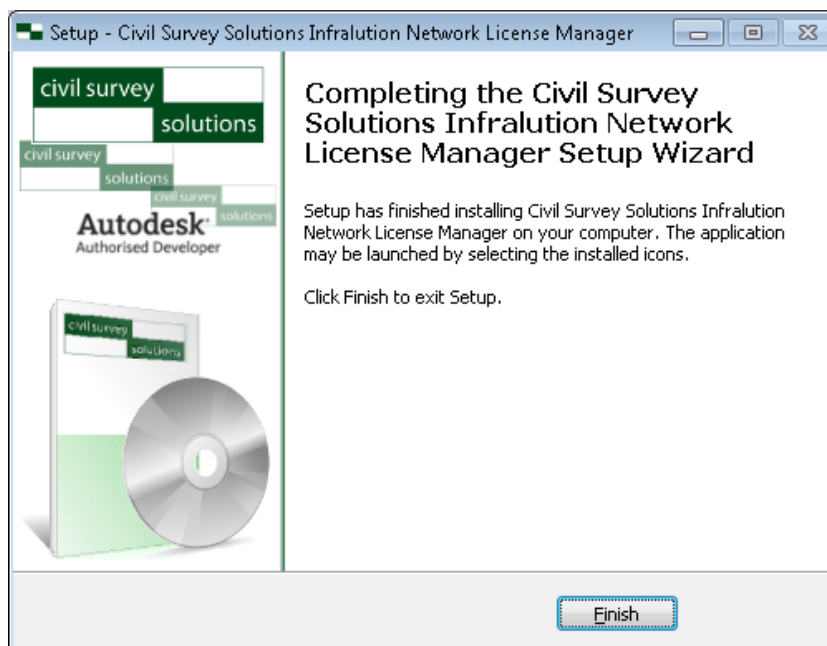
2. Upon starting the installation process, the following is displayed:



3. Click Next to continue the installation.



4. Accept the default installation location and click **Next**.



5. A confirmation dialog will display once the installation is complete. Click **Finish**.

## Step 2 – License Activation on the Server

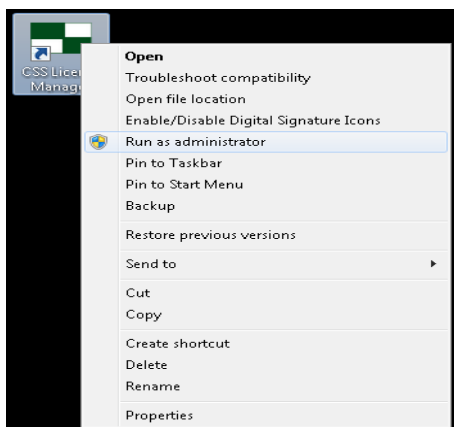
Now that the Network License Manager has been installed onto your server, it is time to activate your license(s).

**Special Note:** You will need to have an internet connection to complete online licensing activation. If you can't obtain an internet connection for the machine that you've installed the software on and require an off line license activation, please see the Network Off Line License Activation below.

The **Civil Survey Solutions Infralution Network License Manager** is managed via a small utility program that has a shortcut placed onto the desktop during installation. The shortcut will be called **CSS License Manager**.

1. Right click the **CSS License Manager** desktop shortcut and click **Run as administrator**

**Special Note:** Please do not skip this step as it is critical to successful licensing activation.



The following form will display:

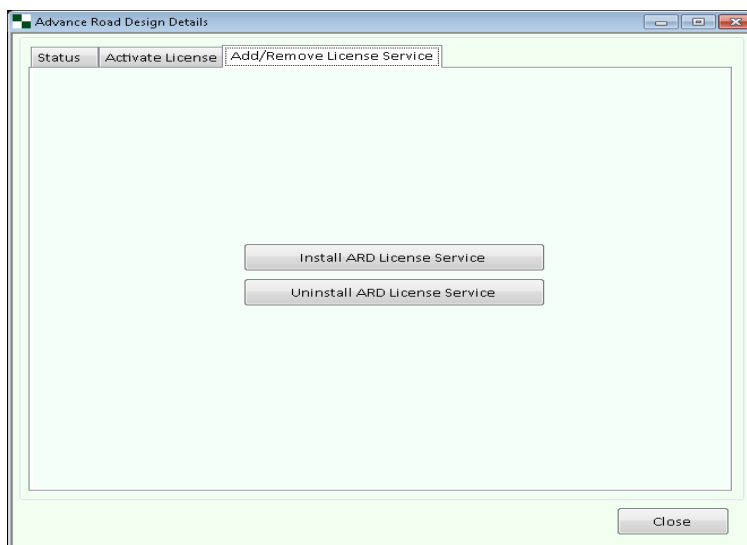


2. In the **CSS Network License Manager** form that displays, click the product you wish to installs button.

A multi tabbed form will display. These three tabs allow you to create a license service , activate and manage your licenses:

- **Status:** Allows you to check the status of your licenses – how many are available and number in use
- **Activate License:** Used to activate your licenses and add them to your license pool
- **Add/Remove License Service:** Creates the license service, which is required for administering the licenses. This supports license activation and ongoing license management

First, you must create a **License Service** for your Civil Survey Solutions product.

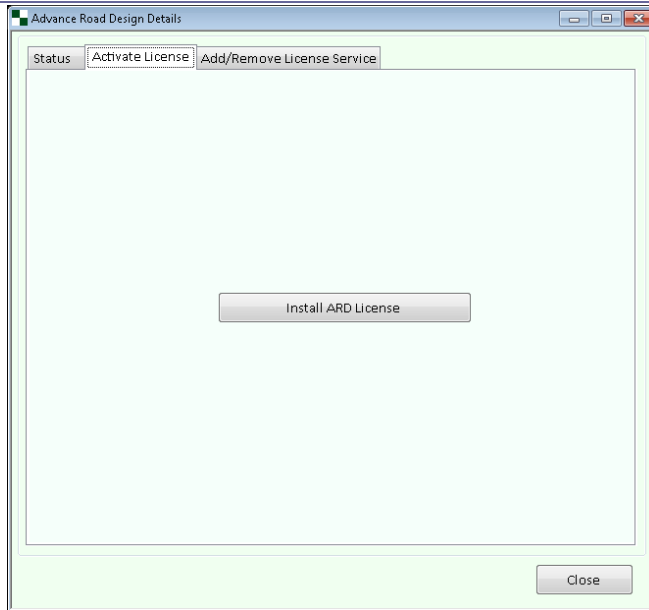


3. Click on the **Add/Remove License Service** Tab.
4. Click the **Install xxx License Service** button.

The Civil Survey Solutions product License Service is now created. Next step is to activate your license/s.

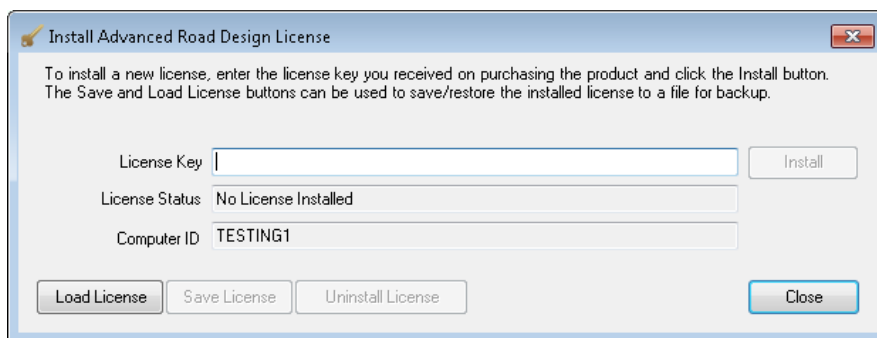
5. Click on the **Activate License** Tab.



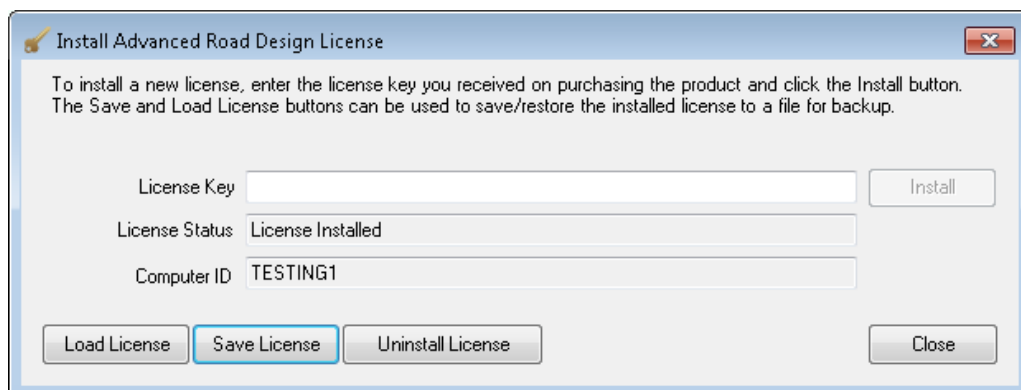


6. Click the **Install xxx License** button.

The following form will display. In here, you input your **Serial Key** (License Key).



7. Enter your **Serial Key** (License key) then click the **Install** button



This will activate your license/s using our online activation service. Once finished, the **License Status** will change to **License Installed**.

Please proceed to **Step 3 - License Verification**.

## Network Off-Line License Activation

These steps are normally only required if internet connection cannot be achieved using the **Network Online License Activation** steps above. The error message 'Unable to connect to Authentication Server' displays when you attempt to license when the below license activation method is required.

### Step 1. Attempt Activation and Save the License File

Firstly, follow the normal steps for network online license activation as detailed above (Steps 6 and 7 in the **Network Online License Activation** section). This will generate a license file locally on your machine and prompt you to save. *Note: you will also see an error message 'Unable to connect to Authentication Server' – close this message.*

1. Select **Save License** and save it to a location that you have write access to

### Step 2. License Authentication from a Remote Computer

In this step, you activate your serial keys online, and create your license files manually. This can be done on any computer with internet access (does not need to be done from the computer you are installing the software on).

1. Go to:  
[http://civilsurveysolutions.com.au/index.php?option=com\\_content&view=article&id=558&Itemid=134](http://civilsurveysolutions.com.au/index.php?option=com_content&view=article&id=558&Itemid=134)
2. Click on the button **Choose File** and choose the license file you generated in **1. Attempt activation and Save the License File**.
3. Click on **Authenticate** and save the authenticated license file to a location that you have write access to. *Note: you cannot save directly to the license file location as access will be denied – it must be done via the license activation form.*

### Step 3. Save the License and Activate

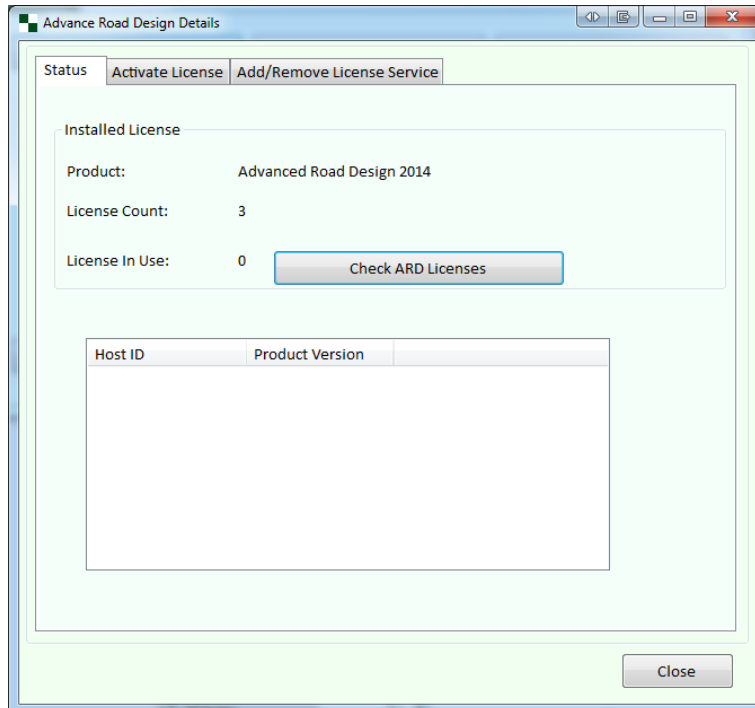
Now that you have an authenticated license file, the last step is to save it to your computer and activate.

1. Ensure that your CAD program is closed
2. Rename the file to **ARD.lic for Advanced Road Design, STR.lic for Stringer Topo and SL.lic for Site Leveller**.
3. Save the file to the license file location:
  - C:\Program Files (x86)\CSS\Infralution

License activation is complete. Please proceed to **Step 3 – License Verification**.

## Step 3 - License Verification

1. Verify the license/s is/are installed correctly from the **Status Tab**.



This will display how many licenses are available, how many licenses are in use and which users are currently using Advanced Road Design.

2. Click on the **Check xxx Licenses** button to update the license status report.

Once you confirm that the license server is up and running with available license/s, it's time to install on the client workstations.

### Need Support?

Should you encounter any errors during installation or licensing, please use the following link for support:

[http://support.civilsurveyolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution](http://support.civilsurveyolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution)

## Step 4 – Client Workstation Installation and Licensing

*Please Note: The Software Installation process on the client workstation is the same for both Standalone and Network license types.*

### Client Workstation Software Installation

**Software Installation** is available from the following sources:

- Download

Using your **Serial Key** for access, you can download from the following link:

<http://www.civilsurveysolutions.com.au/support-main/subscription.html>

### Before you Start – Firewall Configuration

The Infralution Network License Manager uses port **19397, 19398 and 19399** for communication across the network. This port must be open in order for licensing to be established and maintained.

*Note: If you do not have this port open, you will not receive any error message to this effect – the client workstation will simply revert back to ask for you to license.*

**Call to Action:** Ensure that port **19397, 19398 and 19399** is allowed through your firewall. If you are unsure how to do this please contact your network systems administrator.

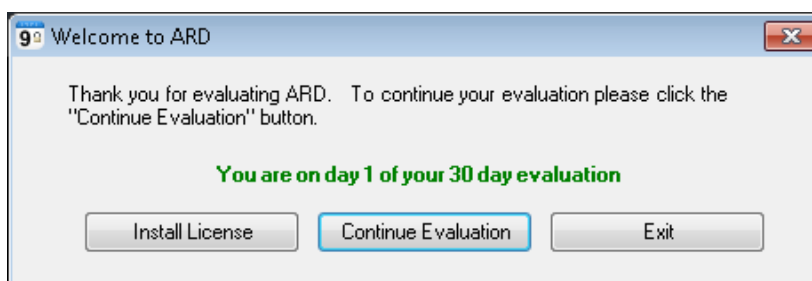
### Configure Client Workstation for Network Licensing

*License activation is set on each workstation when the software is run.*

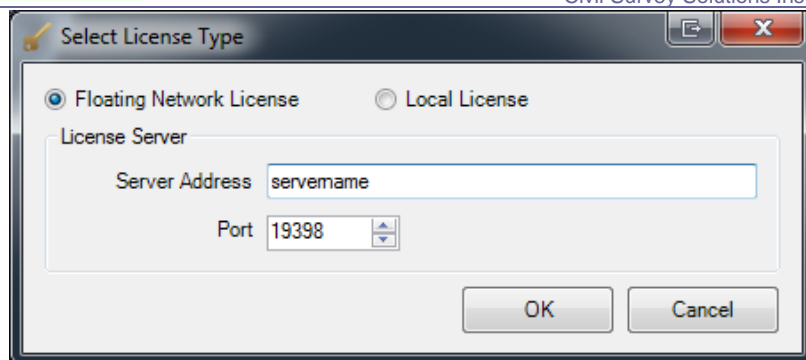
--- Deployment options are available as part of the software installation – please see **Appendix 1** ---

1. Ensure your CAD package is not running. Start the **Software Installation**.
2. After installation of the Software, restart your platform CAD application and note that additional menus/toolbars/ribbons are installed for your installed Civil Survey Solutions software.
3. To begin the activation process, please run any Advanced Road Design, Stringer Topo or Site Leveller command

The following screen will appear



4. Click the **Install license** button. The following form will display:



5. Tick on **Floating Network License**
6. Enter the name of your Server in the Server Address field.  
*Note: By default the port should be 19398 for Advanced Road Design, 19399 for Stringer Topo and 19397 for Site Leveller.*
7. Click OK to access the network licenses of Advanced Road Design via the server.

**Congratulations, you have now successfully implemented the network license manager and have activated your license/s!**

## Troubleshooting

1. When I try to activate the license, I get a message that I've exceeded my authorisation limit
  - Please contact us via the support system to request an additional activation:  
<http://support.civilsurveysolutions.com.au>
2. I receive the following error when a workstation is trying to access the license server:  
'Licensing Error: An error occurred while verifying you license: Error: Invalid URI: Invalid port specified...'
  - Confirm that the License Server is running
  - Confirm that the correct Port is open (see below for port details)
  - There is an issue with IPv6 networks. The IPv6 network needs to be disabled for each workstation. See **Appendix 2** (below) for details on how to do this
3. I received an error while activating my license, what now?
  - [http://support.civilsurveysolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution](http://support.civilsurveysolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/81/0/license-activation-error-infralution)
4. The network server is showing the licenses are there, but the clients can't reach them
  - Infralution uses TCP ports 19397, 19398 and 19399 to communicate within the LAN environment, please ensure you open these up on your Firewall.
5. I received an error saying unable to connect to Authentication Server:
  - Steps for addressing this are outlined in the above guide under
  - [http://support.civilsurveysolutions.com.au/index.php?/default\\_import/Knowledgebase/Article/View/82/1/unable-to-contact-authentication-server](http://support.civilsurveysolutions.com.au/index.php?/default_import/Knowledgebase/Article/View/82/1/unable-to-contact-authentication-server)
6. Please lodge a ticket online using our Support System if you encounter any problems:
  - <http://support.civilsurveysolutions.com.au>
7. I can't find the software you're asking me to install
  - All software mentioned in this guide is also available to our subscription customers
    - Please log in using your Civil Survey Solutions Subscription Centre login details:
    - <http://www.civilsurveysolutions.com.au/support-main/subscription.html>
8. Please visit the Civil Survey Solutions Subscription Site for the latest updates and downloads
  - Please log in using your ARD serial key
  - <http://www.civilsurveysolutions.com.au/support-main/subscription.html>
9. Behind a proxy Server
  - If you are behind a proxy server and have previously had issues activating your licence with our automatic system, please note that we have made changes this year to improve this system and you should now be able to get a licence.
  - If you have network licences, please update to the latest version of the CSS Network License manager:  
<http://www.civilsurveysolutions.com.au/downloads/licensing/CSSInfralutionNetworkLicenseManager1.1.exe>

## Appendix

### Appendix 1: Software Deployment Options

This is recommended for experienced system administrators.

1. Run the **Software Installation** with the following parameters:
  - /SILENT –server <server name>  
(eg: ARDV1600forC3D2015-Setup.exe/**SILENT –server Server1**  
where **Server1** is the name of the license server)
2. After installation of the Software, start your platform CAD application and note that additional menus/toolbars/ribbons are installed for Advanced Road Design. Run any ARD command – licensing will automatically be administered from the license server.

## Appendix 2 – Disabling IPv6 Networks

- Windows 7 and Vista
  - From the **Start** menu, select **Control Panel**. Make sure you are in the Large or Small icons view (Windows 7), or Classic View (Vista).
  - Open **Network and Sharing Center**.
  - On the left, select **Change adapter settings** (Windows 7) or **Manage network connections** (Vista).
  - Right-click the connection for which you want to disable IPv6, and select **Properties**.
  - Uncheck **Internet Protocol Version 6 (TCP/IPv6)** and click **OK**.
- Windows XP
  - From the **Start** menu, select **Run...**
  - Enter `cmd` .
  - Enter `ipv6 uninstall` .