



# V14 Installation Guide

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## Overview

Hello and welcome to the Installation and Licensing guide for Advanced Road Design V14.

Advanced Road Design has separate **Software Installations** for the following platform products:

- AutoCAD Civil 3D
- AutoCAD (including AutoCAD Map 3D)
- BricsCAD

There are two main **License Types**:

- **Standalone (including Evaluation, 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:

- A Standalone V14 will work with any platform version of Advanced Road Design V14 (e.g. ARD V14 for Civil 3D 2014, ARD V14 for Civil 3D 2013, etc will reference the same license)
- A Network license for ARD V14 will activate for the current platform (eg: Civil 3D 2014) plus the 3 previous platforms (eg: Civil 3D 2013, 2012 and 2011). For Network licenses, your **Serial Number** (also known as your License Key) will activate one or more licenses.

## About Obtaining a License

When you purchase Advanced Road Design, you will be issued with a **Serial Number** – this is a unique identification of your product purchase. A valid Serial Number 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

### 32 Bit (x86) Computers

- Windows® 8 Standard, Enterprise, or Professional edition, Windows® 7 Enterprise, Ultimate, Professional, or Home Premium edition or Windows XP® Professional or Home edition (SP3 or later) 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)
- 6 GB free disk space for installation
- 1,024 x 768 display resolution with true colour (1,600 x 1,050 recommended)

### 64 Bit (x64) Computers

- Windows® 8 Professional edition or Windows 7® (recommended) Enterprise, Ultimate, or Professional edition operating system
- AMD Athlon™ 64 processor with SSE2 technology, AMD Opteron™ processor with SSE2 technology, Intel® Xeon processor with Intel EM64T support and SSE2, or Intel® Pentium® 4 processor with Intel EM64T support and SSE2 technology
- 4 GB RAM minimum (8 GB recommended)
- 12 GB disk space for installation (7 GB for electronic download with at least 2 GB free after 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)
- Are you running a proxy server?
  - No – no action required
  - Yes – do one of the following:
    - Allow port **8087** through to your proxy server. License activation is specifically required through the following addresses:
      - Software Activation:  
<http://civilss.dyndns.org:8087/IWS/AuthenticationService.aspx>
      - Internet Activation  
<http://civilss.dyndns.org:8087/IWS/Authenticatefile.aspx>
    - Use a non-proxy controlled computer to authorise the licenses (eg: use an alternate mobile data network)
- Network or standalone?
  - Check the information/email you received with your serial number – 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 number 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 for ARD at:  
<http://civilsurveysolutions.com.au/support-main/subscriptions/88>
- 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, 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:

- Windows 8 & Windows 7: C:\ProgramData\CSS\ARD 2014\License
- Windows XP: C:\Document & Settings\All User\Application Data\CSS\ARD 2014\License

## Standalone Installation Process

There are two parts to the installation:

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

### Before you Start – Proxy Servers

If you are running a proxy server, you must allow access to port 8087 (or specifically, two URL's) – if you believe you may be running a proxy server, please see **Preparing for Installation and Licensing** for more details). If you receive a timeout when trying to obtain a license, this is an indication that you are being blocked by a proxy server.

## Step 1 - Software Installation

Software Installation is available from the following sources:

- Download
    - Using your **Serial Number** for access, you can download from the following link:  
<http://civilsurveysolutions.com.au/support-main/subscriptions/88>
  - 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 Advanced Road Design.  
*Note: Running any ARD command will trigger the license activation form.*

## Step 2 – Licensing and Activation

Installations of Advanced Road Design (ARD) are activated from inside the CAD environment (known as Online License Activation).

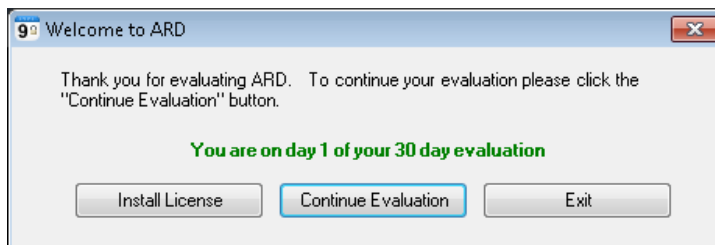
*Special Note: You will need to have an internet connection to complete online licensing activation. If you can't obtain an internet connection, please see the **Off Line License Activation** section (below).*

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 ARD command. 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.

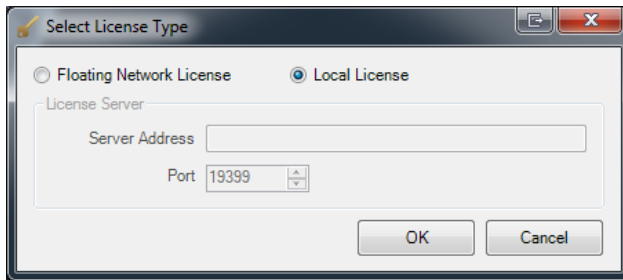
Notes:

*Evaluation license activation does not require an internet connection*

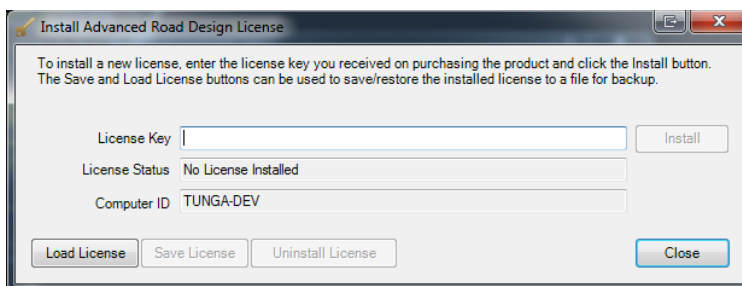
*Once the 30 day Evaluation Period has expired, you will be required to **Install License** to continue using ARD.*

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

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



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



- Enter your **Serial Number** (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.
- Close the screen and run any Advanced Road Design 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 Advanced Road Design!**



## 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 numbers 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 2014\License
  - Windows XP:  
C:\Document & Settings\All User\Application Data\CSS\ARD 2014\License
4. Restart your CAD package and run any Advanced Road Design command.

## 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 ARD Subscription Portal, or can be downloaded from here:

[www.civilsurveysolutions.com.au/downloads/licensing/CSSInfralutionNetworkLicenseManager.exe](http://www.civilsurveysolutions.com.au/downloads/licensing/CSSInfralutionNetworkLicenseManager.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 – Proxy Servers

If you are running a proxy server, you must allow access to port **8087** (or specifically, two URL's) – if you believe you may be running a proxy server, please see **Preparing for Installation and Licensing** for more details). If you receive a timeout when trying to obtain a license, this is an indication that you are being blocked by a proxy server.

## Before you Start – Firewall Configuration

The Infralution Network License Manager uses port **19398** 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 **19398** 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*

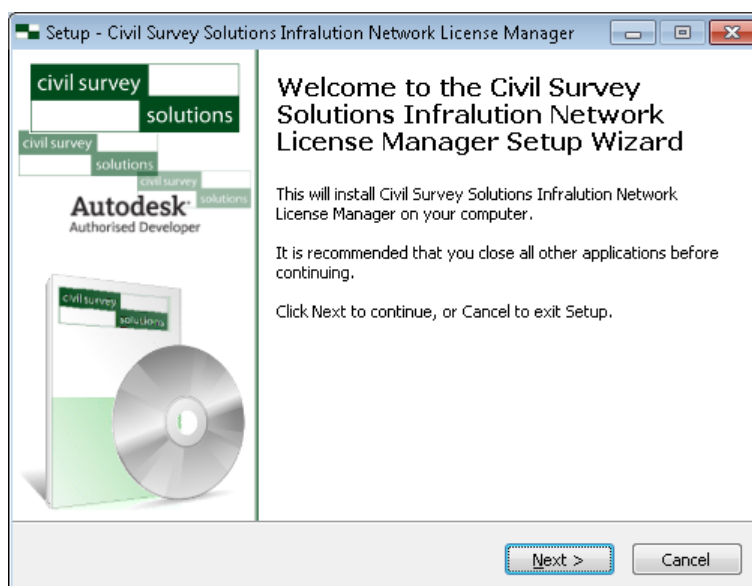
*The installation media sent to you will open an installation page, which includes a link to install the Network License Manager*

- *Download*

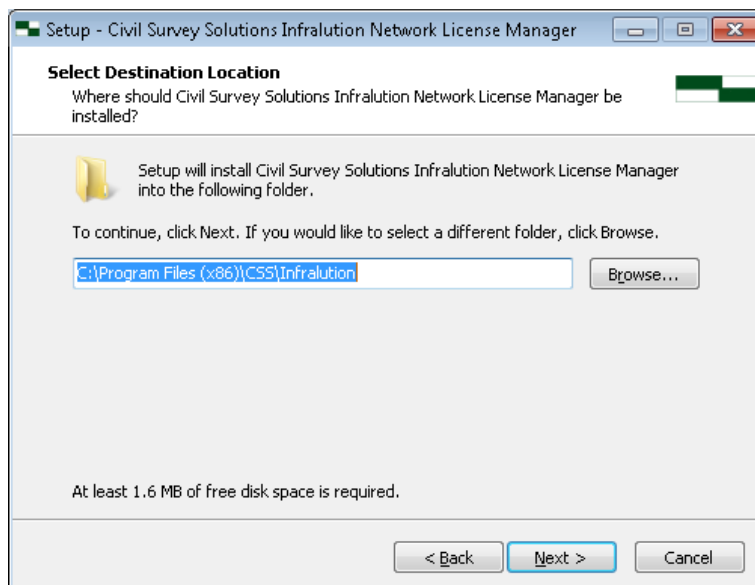
*You can download the Network License Manager from the following link:*

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

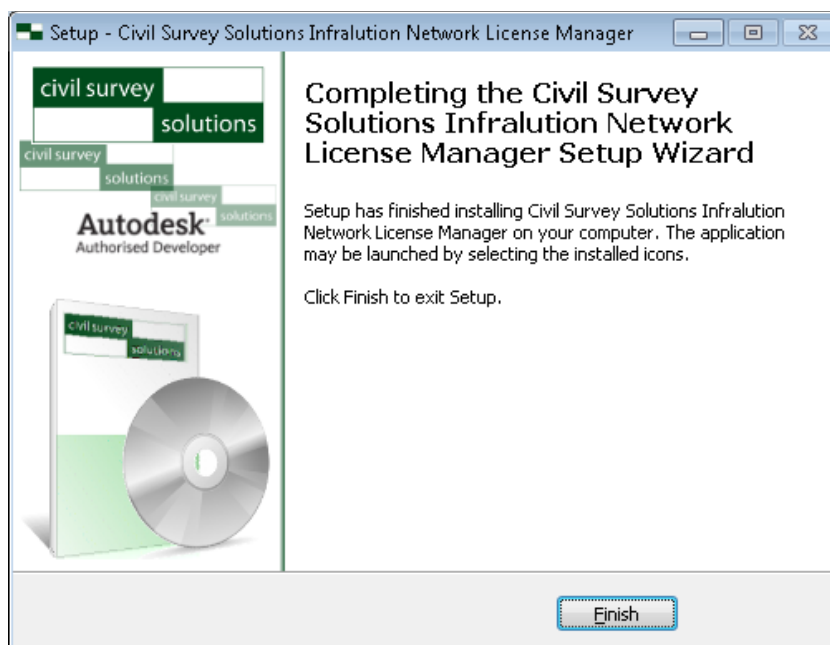
2. Upon starting the installation process, the following is displayed:



- Click Next to continue the installation.



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



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

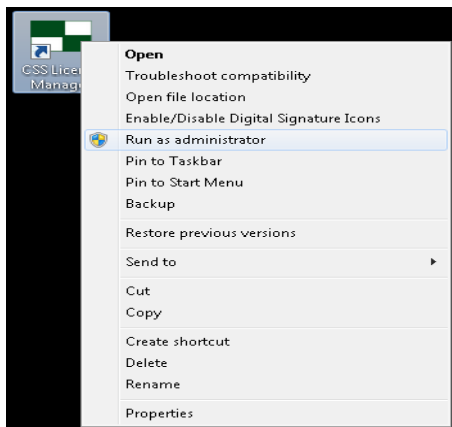
## Step 2 – License Activation on the Server

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

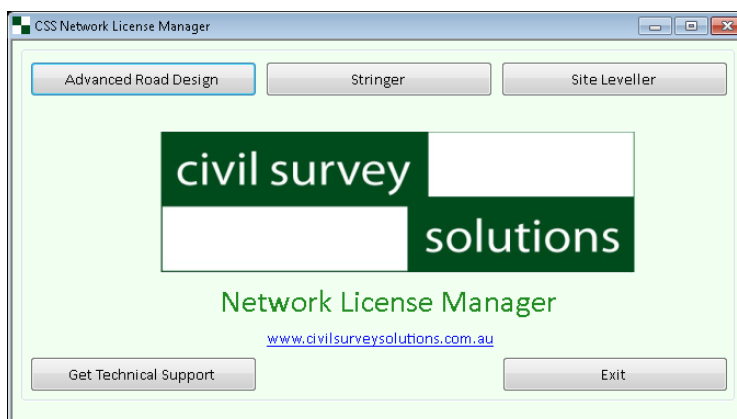
**Special Note:** You will need to have an internet connection to complete online licensing activation. If you can't obtain an internet connection for the machine that you've installed the software on and require an off line license activation, please see the Network Off Line License Activation below.

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**.

- 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:

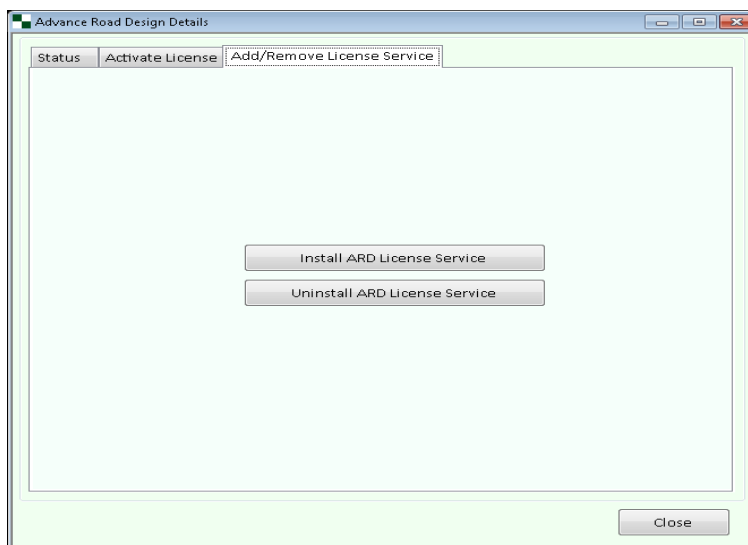


- In the **CSS Network License Manager** form that displays, click the **Advanced Road Design** button.

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

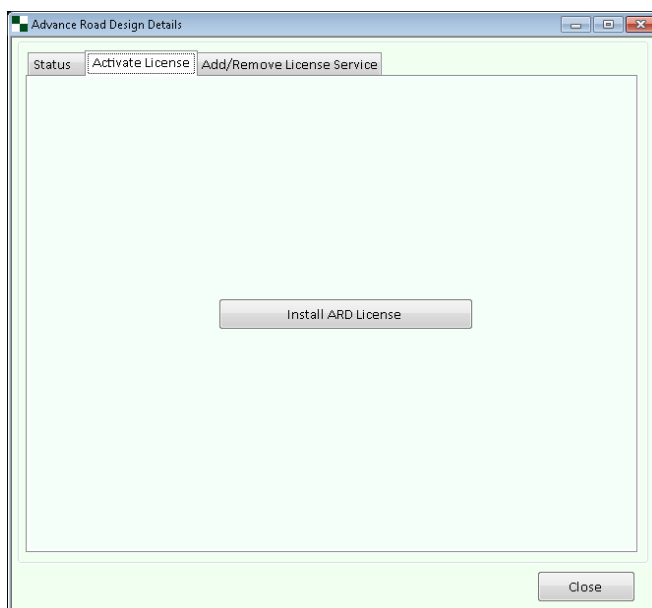
First, you must create a **License Service** for Advanced Road Design.



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

The ARD License Service is now created. Next step is to activate your license/s.

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



- Click the **Install ARD License** button.

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

- Enter your **Serial Number** (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 numbers 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.

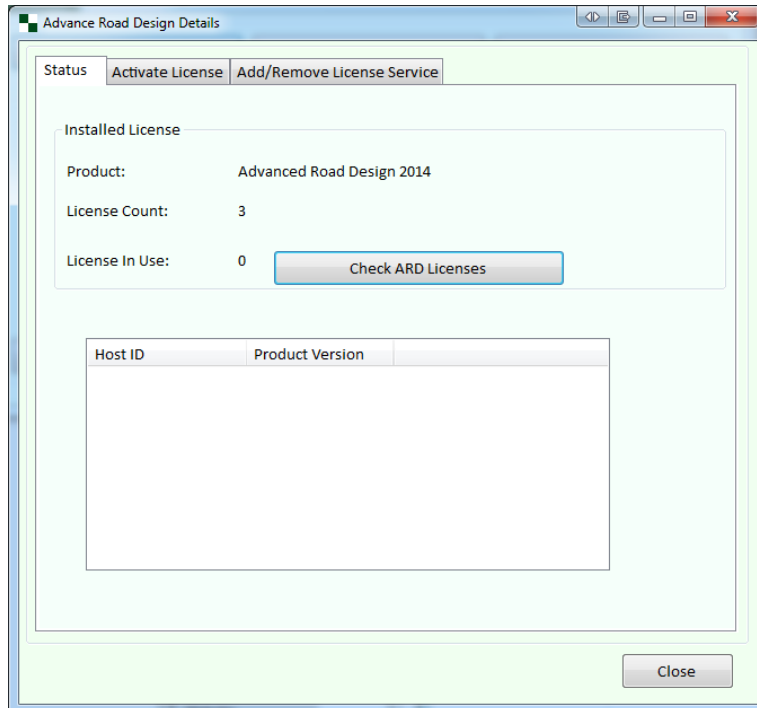
1. Ensure that your CAD program is closed
2. Rename the file to **ARD.lic**
3. Save the file to the license file location:
  - C:\Program Files (x86)\CSS\Infralution

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

2. Click on the **Check ARD 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.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)

## 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:

- Physical Media  
The installation media sent to you will open an installation page, which includes a link to install the software
- Download  
Using your **Serial Number** for access, you can download from the following link:  
<http://civilsurveysolutions.com.au/support-main/subscriptions/88>

### Before you Start – Firewall Configuration

The Infralution Network License Manager uses port **19398** 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 **19398** is allowed through your firewall. If you are unsure how to do this please contact your network systems administrator.

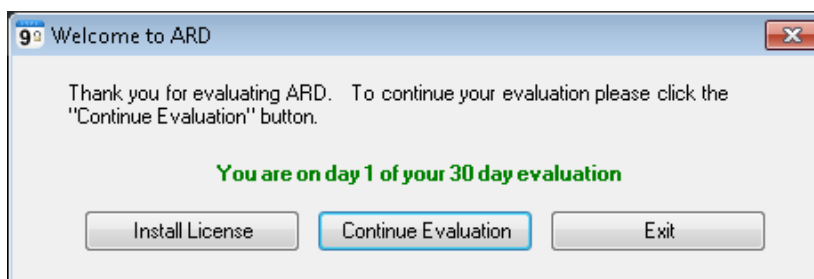
### Configure Client Workstation for Network Licensing

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

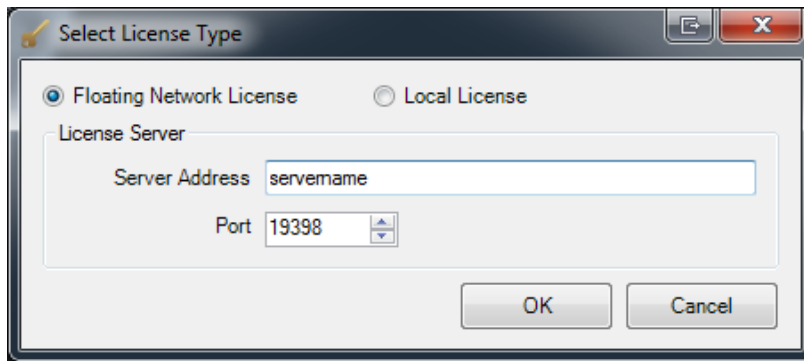
--- Deployment options are available as part of the software installation – please see **Appendix 1** ---

- Ensure your CAD package is not running. Start the **Software Installation**.
- After installation of the Software, restart your platform CAD application and note that additional menus/toolbars/ribbons are installed for Advanced Road Design.
- To begin the activation process, please run any ARD command

The following screen will appear



- 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.*
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 review activation history and 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 your 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 19398, 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 ARD serial key
    - <http://civilsurveysolutions.com.au/support-main/subscriptions/88>
8. Please visit the Civil Survey Solutions Subscription Site for the latest updates and downloads
  - Please log in using your ARD serial key
  - <http://civilsurveysolutions.com.au/support-main/subscriptions/88>

## 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: ARDV1401forC3D2014-Setup\_x64.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` .