12d Model
Civil and Surveying Software

Installing and Running 12d View

Version 15 C1j

November 2023

12d Model
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Installing and Running 12d View

This book is the reference manual for installing and running the software product ***12d View.***

First Release Dates of Software and Manual

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Disclaimer

12d View is supplied without any express or implied warranties whatsoever.

No warranty of fitness for a particular purpose is offered.

No liabilities in respect of engineering details and quantities produced by ***12d View*** are accepted.

Every effort has been taken to ensure that the advice given in this manual and the program ***12d View*** is correct, however, no warranty is expressed or implied by **12d Solutions Pty Ltd.**

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1 Preface

1.1 Introduction

12d Model is an object oriented, interactive graphics program that can:

(a) pick-up and process survey data

(b) quickly build terrains

(c) produce concept and detailed design models for road, rail, land development

(d) do 1D rational and dynamic drainage analysis

(e) do 2D water modelling

(f) perform clash detection

(g) set out for construction of designs

(h) do quality check

(i) collect as-constructed data.

That is, ***12d Model*** can be used in all stages of surveying, civil planning and design and construction.

12d View is a freely available program that can view projects created by ***12d Model***.

Plus extra data can also be read in and displayed from files including ***12da/12d XML***, IFC, ADAC XML, DWG/DXF/ DXB, Genio and point clouds.

12d View can also be used to create an empty project, and then read data into the project to examine and display.

The only restriction with ***12d View*** is that nothing can be saved from a ***12d View*** session and the project is left as it was before it was opened in ***12d View.***

This document is for ***Installing and running 12d View***.

1.2 Who Can Run 12d View

12d View can be run by anyone who installs ***12d View.***

12d View 15 is installed from a ***setup.exe*** file which can be downloaded from the internet. See Installing 12d View 15.

2 Installing 12d View 15

These notes are for installing ***12d View 15*** from the ***12d View 15 setup.exe.***

A. Disk Space required for installing ***12d View 15***

Approximately 2 Gigabytes of disc space will be required for the installation to succeed.

Your login must have ***Administrator*** privileges.

B. Using the email with the *nodes.12d15n* file attached to it

The ***12d Model 15 nodes.12d15n*** file will normally be emailed to you.

During the installation of ***12d Model 15*** and ***12d View 15***, an association is created for files ending in ***.12d15n*** so after the installation, opening the ***nodes.12d15n*** will automatically copy it to the required area (normally *C:\12d\15.00*) and rename it to ***nodes.4d***.

If you do not have the ***nodes.12d15n*** attached to an email but instead have it in a folder, clicking on the ***nodes.12d15n*** file after installing ***12d Model 15*** will also automatically copy it to the required area (normally *C:\12d\15.00*) and rename it to ***nodes.4d***. Or if the ***12d Model 15*** icon is clicked on, the **Project Selection** panel will be brought up and clicking on the **Nodes** button will allow the ***nodes.12d15n*** or ***nodes.4d*** file to be selected and then processed.

C. Starting the Installation of *12d View 15*

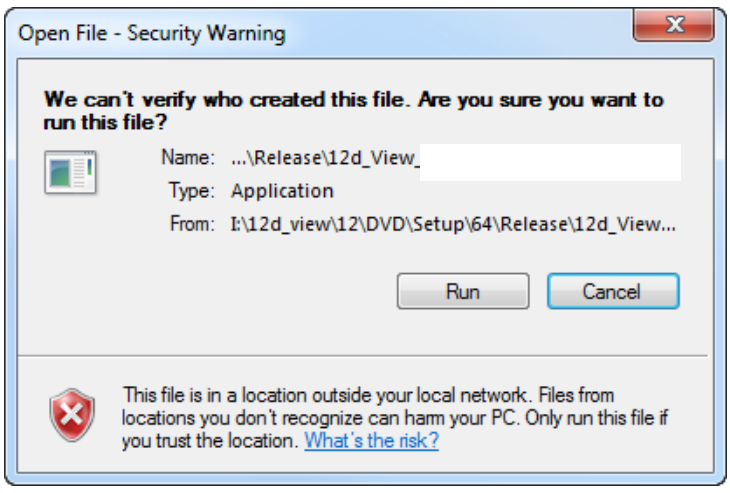
*To download the installer for **12d View**, click on*

https://downloads.12dmodel.com/12d_View/V15/12d_View_15_C1j/12d_View_15_C1j_64_Setup.exe

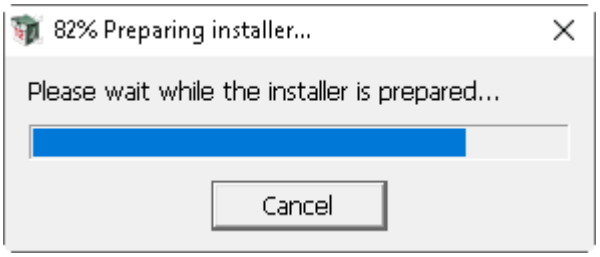
Note: If clicking on the link does not start up your Browser then copy the text of the link into your Browser.

Once the installer is downloaded, double click (or run) the ***12d View 15 Setup.exe*** and the ***12d View Installation*** program automatically begins.

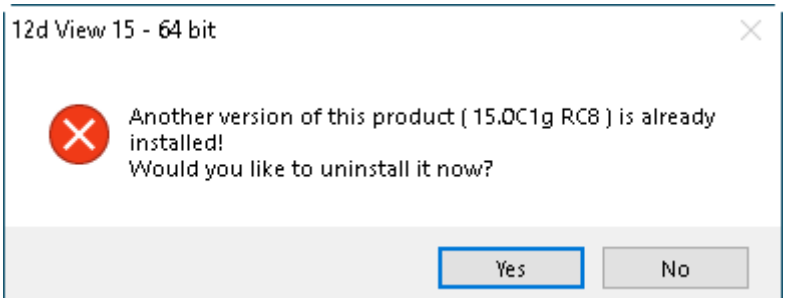
Depending on your permissions for the Windows operating system, you may be asked to allow the Setup *exe* to run. If so, click on ***Run***.



The ***12d View 15*** installation begins.

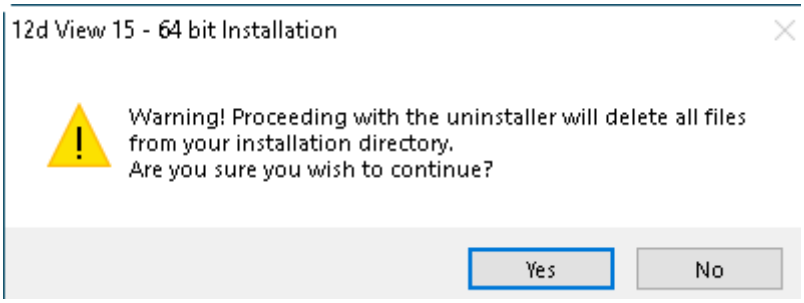


If ***12d View 15*** is already installed on your computer,



Clicking **No** will terminate the installation.

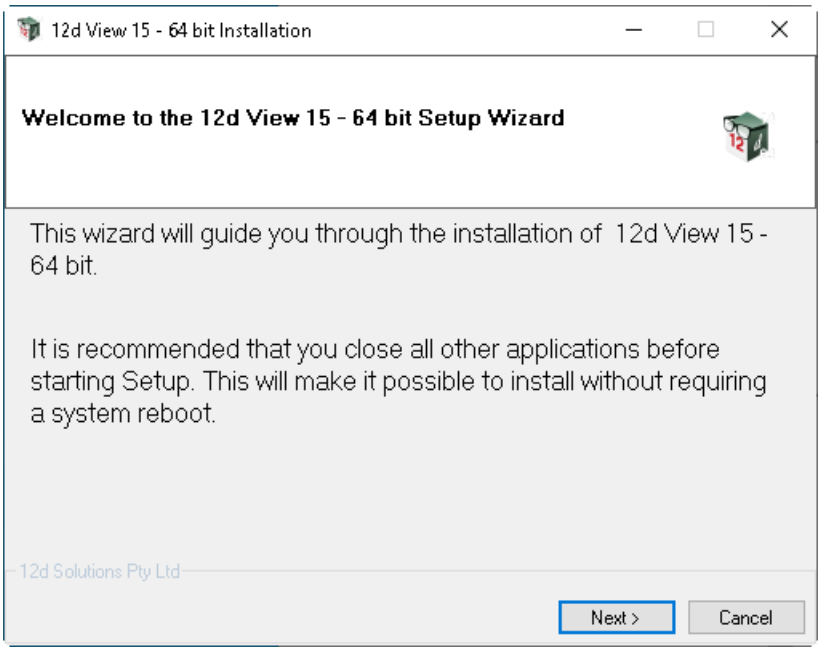
Clicking **Yes** brings up a panel to remind you that the uninstaller will delete all the files from the previous install.



Clicking **No** will terminate the installation.

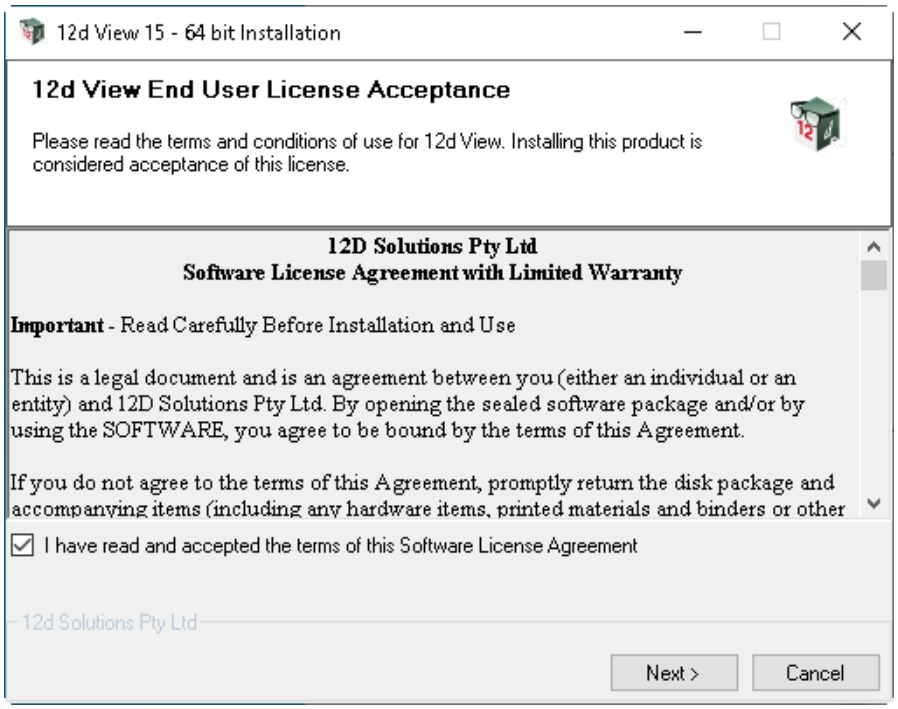
Clicking **Yes** will uninstall the existing version and then bring up the **Welcome** screen for starting the installation of the new version.

Welcome *Welcome message*



Select ***Next*** to continue with the installation

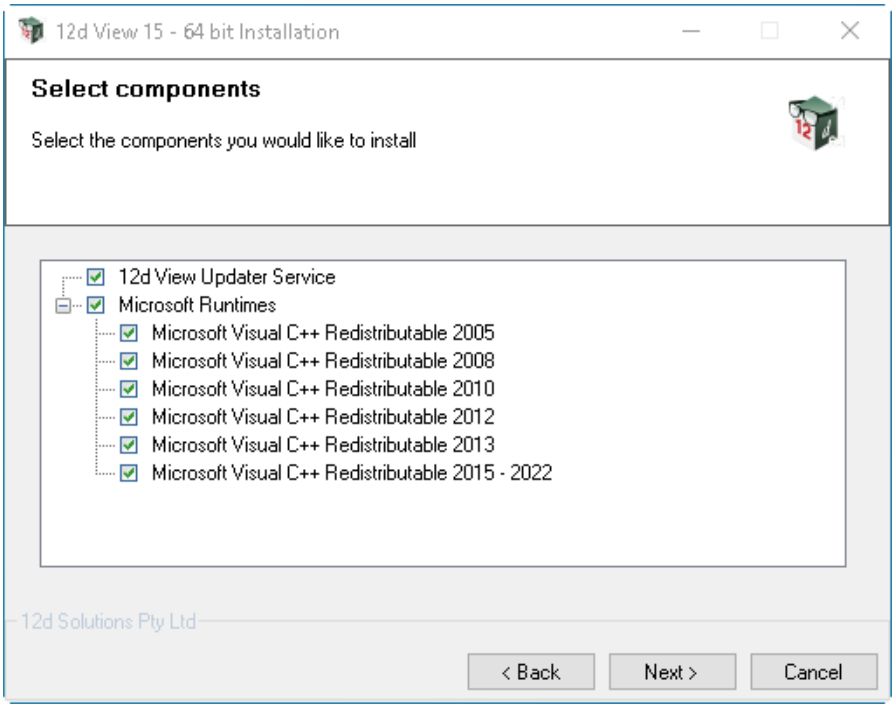
Software License Agreement *12D Solutions license agreement*



If you agree with the License conditions, click on ***I have read and accept the terms of the Software License Agreement.***

Select ***Next*** to continue with the installation

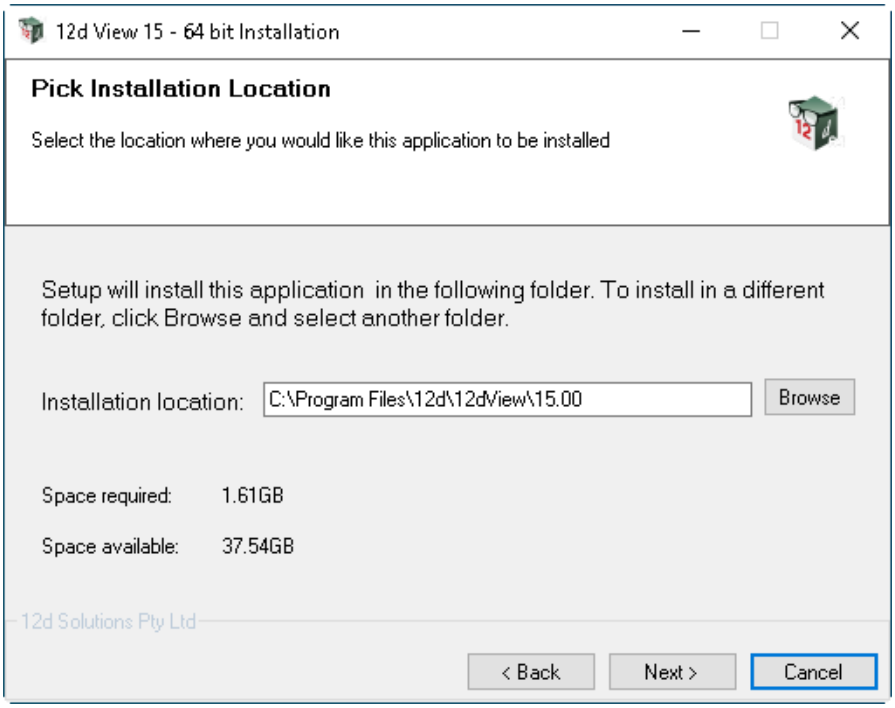
Select components



Unless you know that the various ***Microsoft Visual C++ Redistributables*** are already installed on you computer, continue with the default components:

Select ***Next*** to continue with the installation

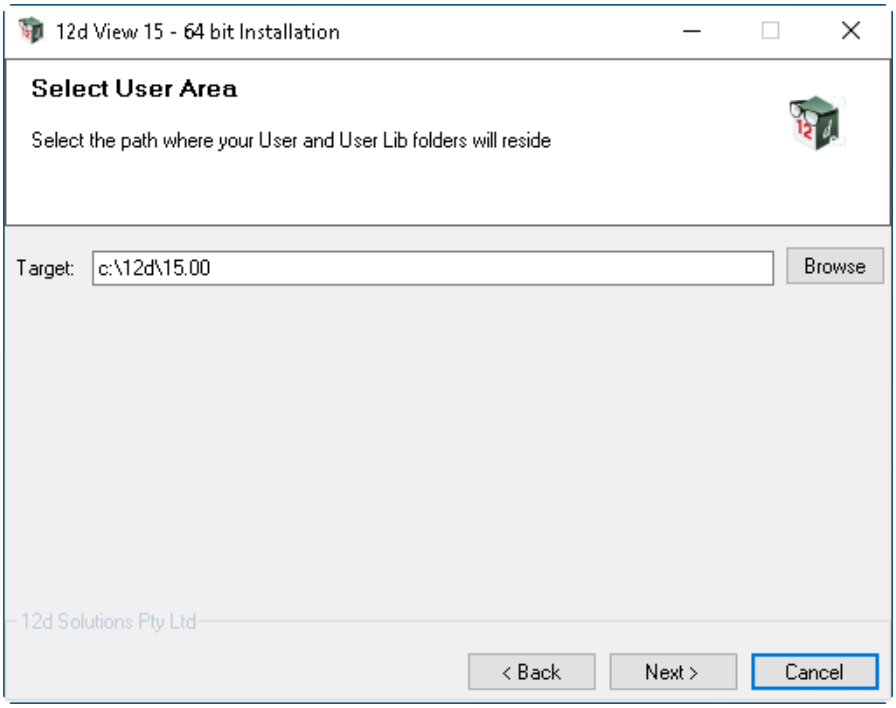
Installation Location



Continue with the default installation folder for the software or click on ***Browse*** to browse to another folder for the installation

Select ***Next*** to continue with the installation

User Area



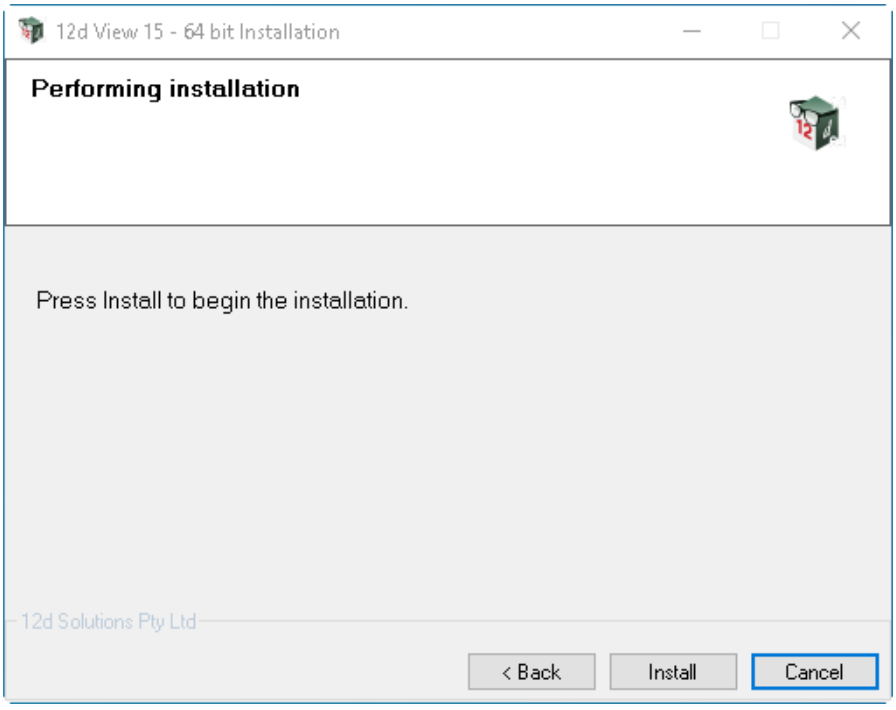
Continue with the default folder for the ***User Area*** for the software:

c:\12d\14.00

or click on ***Browse*** to browse to another folder for the User Area.

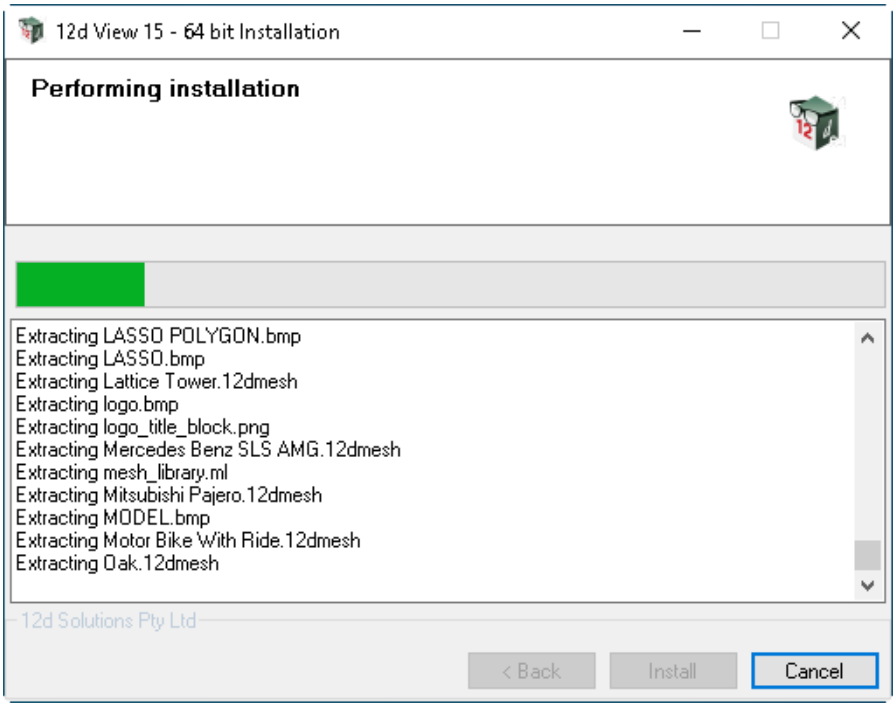
Select ***Next*** to continue with the installation

Ready to Install



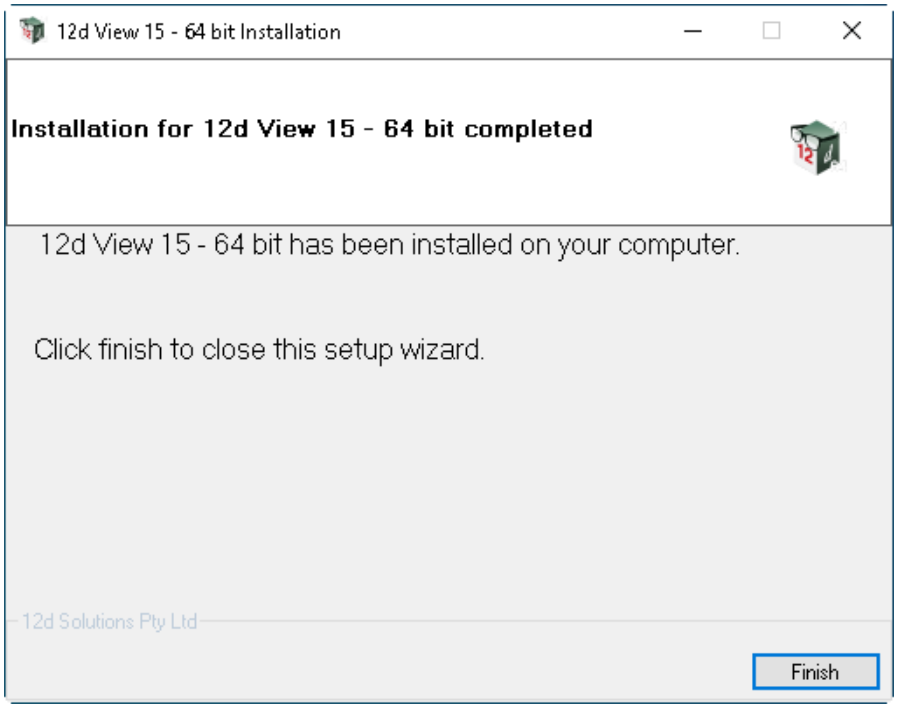
Select ***Install*** to begin the actual installation

The software will be copied and installed onto the computer.



and then come up with the ***Installation Complete*** panel.

Installation Complete



This is the end of installation. Select ***Finish*** to complete the installation

This completes the installation of the ***12d View*** software.

The folders and icons that are created in the installation are given in the sections:

2.1 Folders Created by the Installation

2.2 Icons Created by the Installation

12d View will now be installed on the computer.

The run ***12d View***, you will need access to either

(a) a ***12d Model*** hardware lock (usually a CodeMeter) and associated ***nodes.4d*** file

or

(b) the computer has been registered to run ***12d View***

or if neither of these are found,

(c) ***12d Model*** projects **CAN** still be opened and viewed but the **Client name** at the top of the ***12d View*** screen will be "**Unregistered User of 12d View**" and a **License Expiry Warning** will be displayed each time a project is opened. See 3 Registering 12d View.

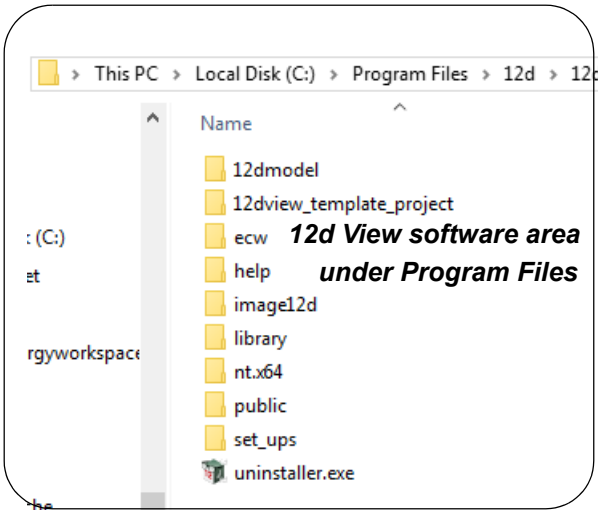
Continue to 2.1 Folders Created by the Installation.

2.1 Folders Created by the Installation

The ***12d View*** installation loads the ***12d View software*** into the folder

C:\Program Files\12d\12dview\15.00

12d View users normally only have ***read*** access to the *Program Files areas*.



If the folder

C:\12d\15.00

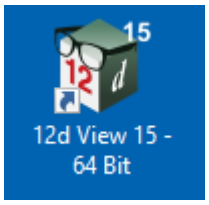
does not exist, the ***12d View*** installation will create it and give read/write access to the folder for the user.

The folder **12d\15.00** is the default folder where, after Registration of ***12d View***, the ***12d View*** authorization file, ***nodes.4d,*** file is installed.

Continue to 2.2 Icons Created by the Installation.

2.2 Icons Created by the Installation

The installation loads the appropriate components and creates the ***12d View 15*** icon



Double clicking on the ***12d View 15*** icon fires up ***12d View*** and attaches to the folder **12d\15.00**.

Continue to 3 Registering 12d View.

3 Registering *12d View*

When ***12d View*** starts up, it comes up in one of three modes:

(a) ***12d View*** is opening a ***12d Model*** project and ***12d View*** has access to the ***12d Model*** dongle and associated ***nodes.4d*** file with a licence for ***12d Model 15***.

For this case, ***12d View*** does not have to be Registered.

The **Client name** from the ***nodes.4d*** file is then used in ***12d View***.

Note: if you are using a network dongle then ***12d View*** does **NOT** take a license from the ***12d*** network dongle.

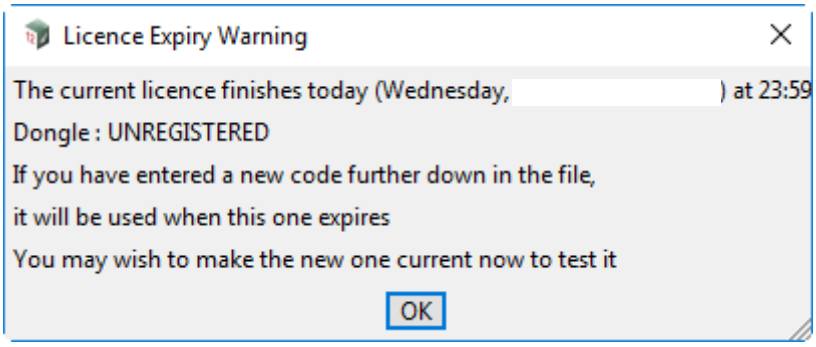
OR

(b) If ***12d View*** does not have access to a ***12d Model*** dongle and associated nodes file, **BUT** ***12d View 15*** has been **Registered** with ***12d Solutions*** for the computer it is running on, then ***12d View*** will start up and use the **Client name** from the **Registration.**

For this case, ***12d View*** is already Registered for that computer.

OR

(c) If ***12d View*** does **NOT** has access to a ***12d Model*** dongle and has **NOT** been **Registered** with ***12d Solutions*** for that computer, then when ***12d View*** opens a project, a **License Expiry Warning** panel comes up,



and the **Client name** at the top of the ***12d View*** screen displays "**Unregistered User of 12d View**"

To continue using ***12d View***, simply click **OK** and ***12d View*** will continue to run for that session.

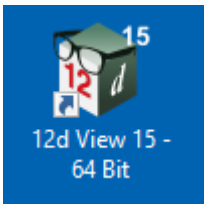
To remove the License Expiry Warning, you need to **register** ***12d View*** with ***12d Solutions*** for the computer that ***12d View*** is being run on.

To register ***12d View***, see 3.1 Registering 12d View.

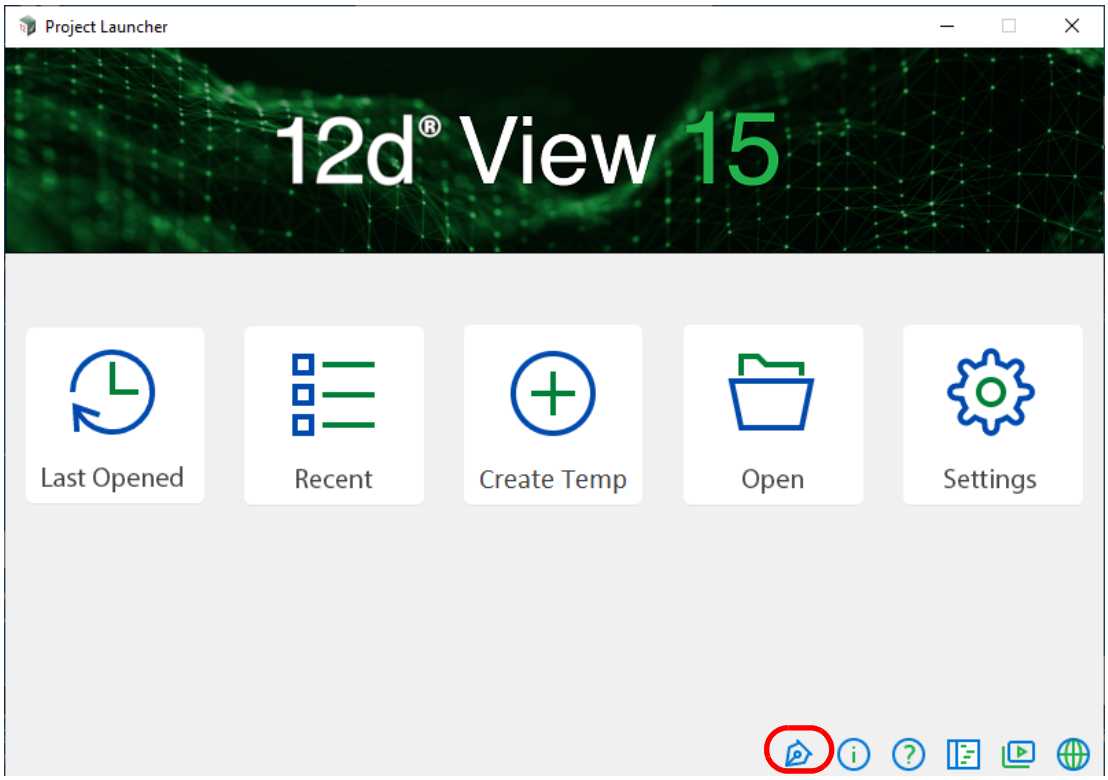
3.1 Registering *12d View*

This section goes through how to Register ***12d View*** from the ***Project Launcher*** that comes up when you first start up ***12d View***.

The installation of ***12d View*** creates the ***12d View*** icon:



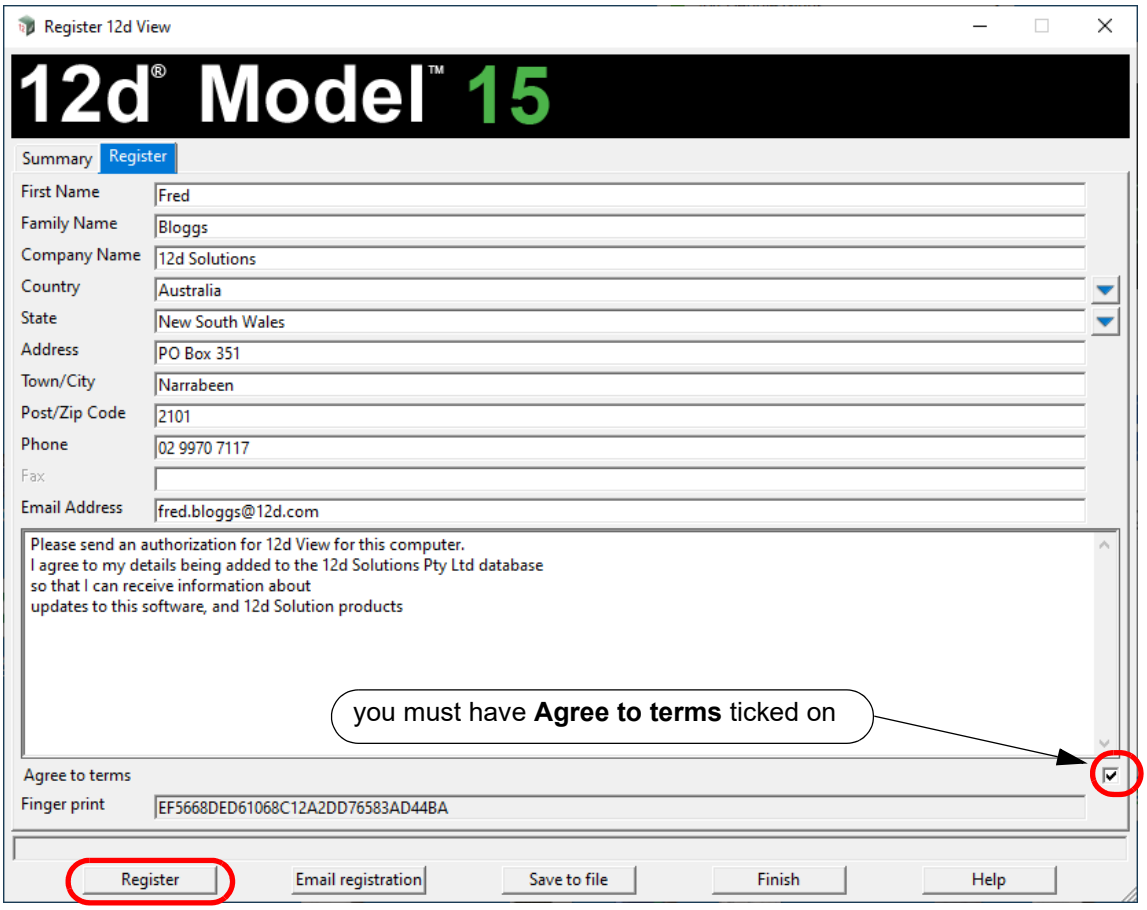
Fire up ***12d View*** by double clicking on the appropriate ***12d View 15*** icon and bring up the **Project Launcher** panel:



To register ***12d View***, click on the **Register** icon to bring up the panel for registering***12d View***. See 3.1.1 12d View Registration Panel for further instructions on how to register of ***12d View.***

3.1.1 12d View Registration Panel

Clicking on either the **Register** icon on the **Project Launcher** displays the **Register 12d View** panel for entering the information required for registering ***12d View*** for the computer you are on.



Fill in the information - all the fields in black type must be filled in - and tick on the **Agree to terms** box.

Once the details are filled in, then

(a) click on the **Register** button to send the information to ***12d Solutions Pty Ltd***

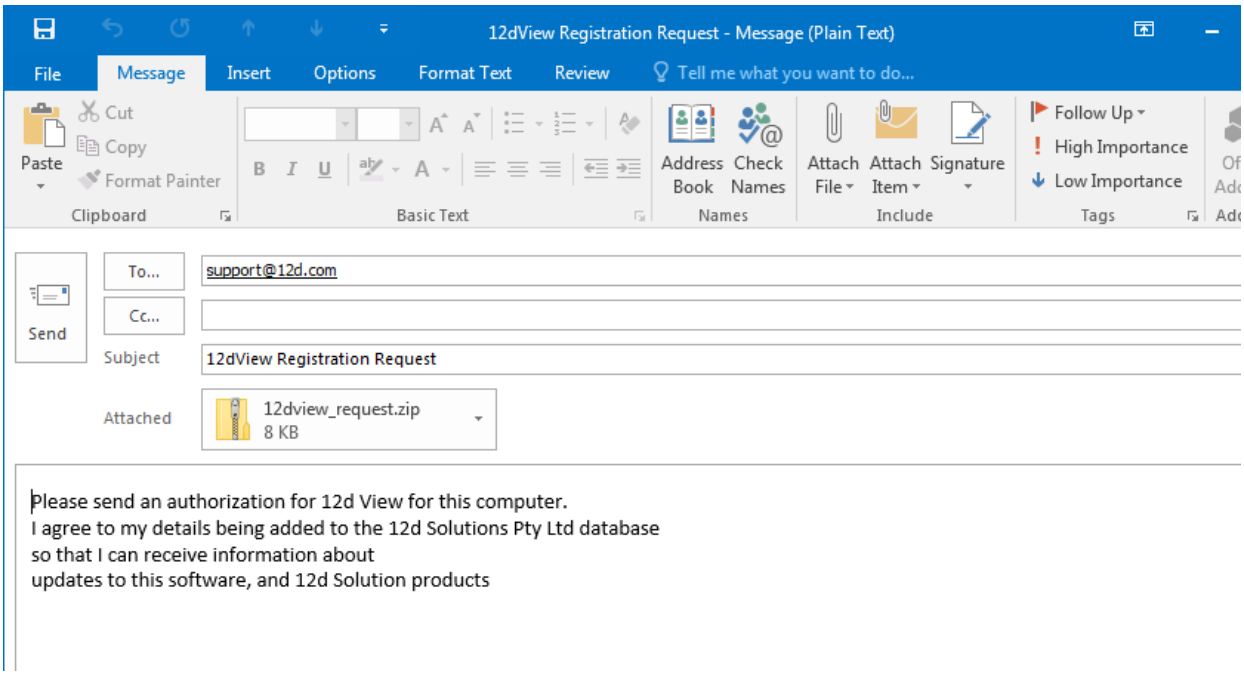
A file called ***12dview_request.zip*** with the registration information is created automatically emailed to 12d Solutions. If it is successfully sent then a **Registration sent** message is written to the message area of the panel.

On receiving your request, ***12d Solutions*** sends an email back to the given email address with an attachment called ***nodes.12d15n***. *See* 3.2 Installing the Nodes.12d15dn file for instructions on completing the registration of ***12d View***.

However you can continue using ***12d View*** without successfully completing the registration.

If for some reason it **fails** to automatically send the message then

click on the **Email registration** button and if an email system is detected (for example, Outlook), an email is constructed with the ***12dview_request.zip*** attached.



Send the email to ***support@12d.com***

On receiving your request, ***12d Solutions*** sends an email back with an attachment called ***nodes.12d15n***. *See* 3.2 Installing the Nodes.12d15dn file for instructions on completing the registration of ***12d View***.

However you can continue using ***12d View*** without successfully completing the registration.

OR if it fails to create an email then

(b) click on the **Save to file** button and a file called ***12dview_request.zip*** with the registration information is created on the desktop, and a message written to the panel message area saying where it is.

In this case, please email the file ***12dview_request.zip*** as an attachment to **support@12d.com**

On receiving your request, ***12d Solutions*** sends an email back with an attachment called ***nodes.12d15n***. *See* 3.2 Installing the Nodes.12d15dn file for instructions on completing the registration of ***12d View***.

However you can continue using ***12d View*** without successfully completing the registration.

In all cases, your registration request is sent to ***12d Solutions*** where it is processed and an email with an attachment called ***nodes.12d15n*** sent to the email address given in the **Register 12d View** form. What to do once you receive the email is described in 3.2 Installing the Nodes.12d15dn file.

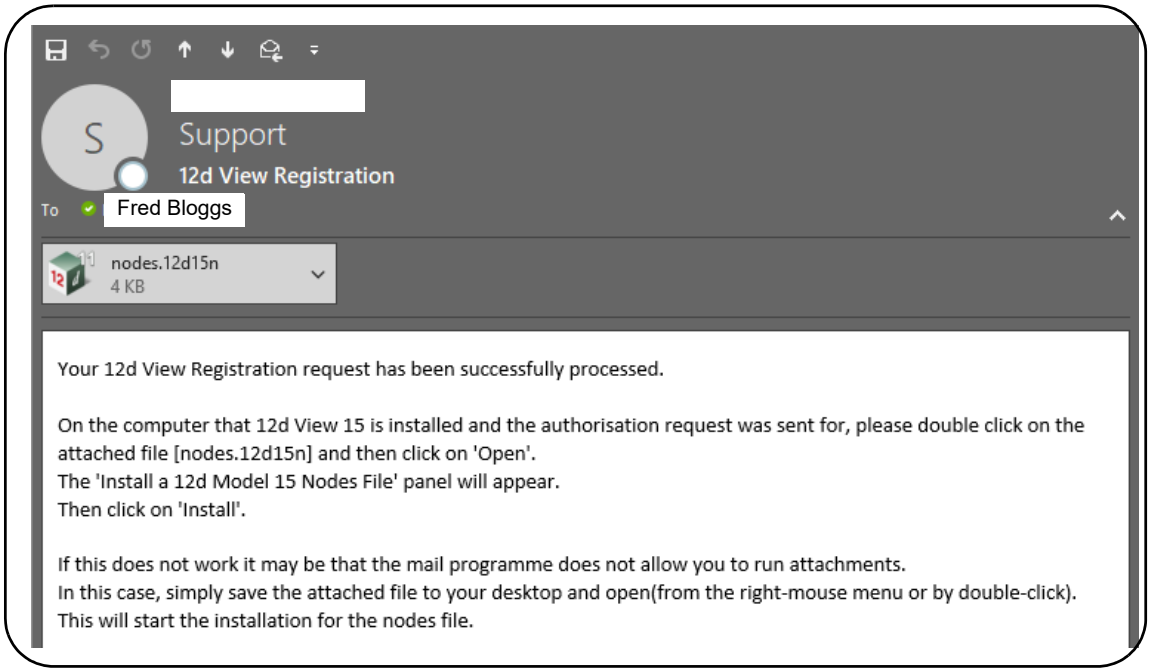
Important Note

The ***12d View*** registration is only for the computer that the ***Registration*** was generated on.

It will not work for any other computer.

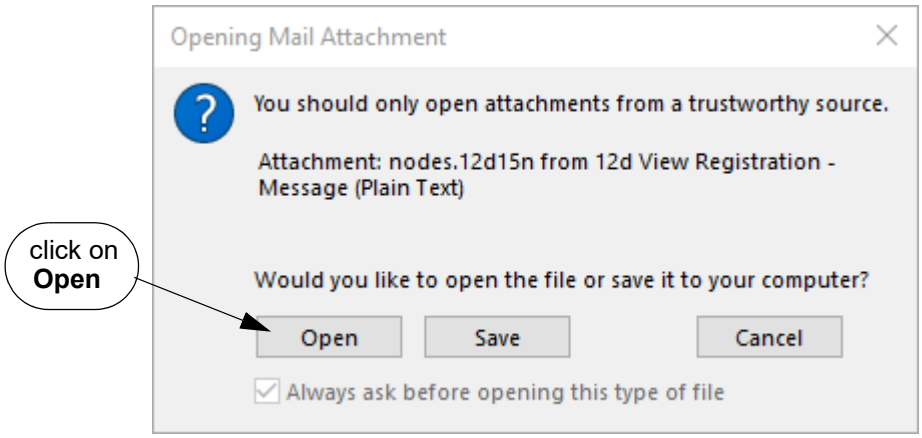
3.2 Installing the *Nodes.12d15dn* file

After your registration request has been received by *12d Solutions* and processed, an email with an attachment called ***nodes.12d15n*** is sent to the email address given in the **Register 12d View** form.



When you installed ***12d View***, a *Windows* file association was set up so that a ***nodes.12d15n*** file is recognised by Windows it fires up the ***Install a 12d Model Nodes file*** program.

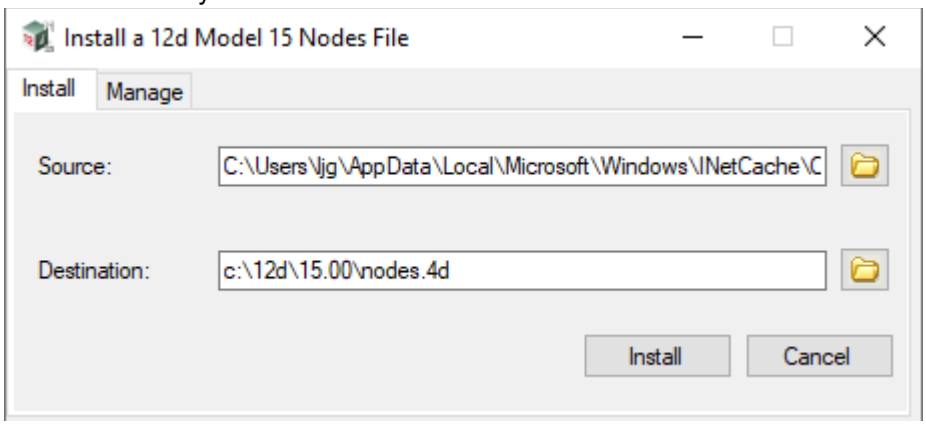
So in the email, double click on the file ***nodes.12d14n*** and the **Opening Mail Attachment** panel comes up.



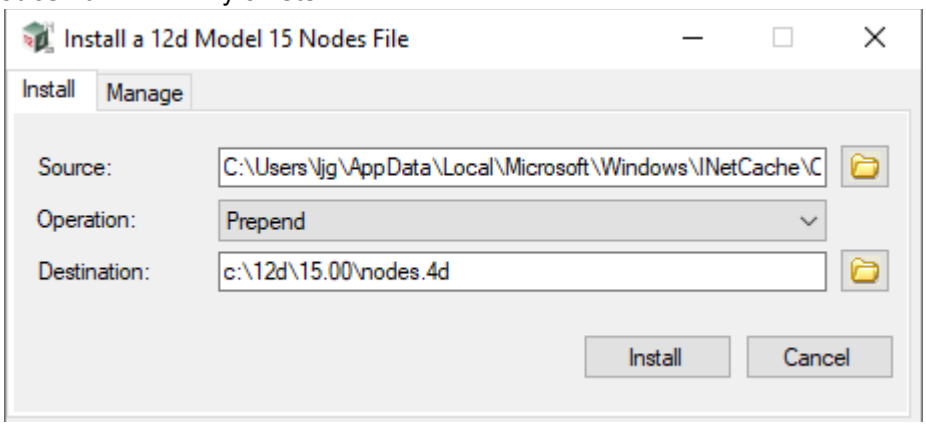
Clicking on ***Open*** and invokes the Windows association and so the **Install a *12d Model* Nodes File** panel appears (this is the same panel as used for ***12d Model***).

When run, the **Install a 12d Model Nodes File** panel option unpacks the ***node.12d145*** file to obtain a ***nodes.4d*** file and then copies the ***nodes.4d*** file to where ***12d View*** will be able to use it.

If **no** ***nodes.4d*** already **exists**:



If a ***nodes.4d*** file already **exists**:



The choices for **Operation** are:

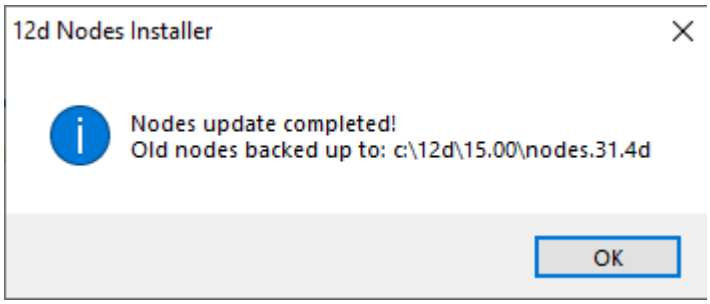
Prepend *- if a* ***nodes.4d*** *file already exists, the information in the* ***nodes.12d14n*** *file is added to the beginning of the existing* ***nodes.4d*** *file. A backup up copy of the existing* ***nodes.4d*** *is created.*

Replace *- if a* ***nodes.4d*** *file already exists, it is replaced by a new nodes.4d file with the information in the* ***nodes.12d14n*** *file in it. A backup up copy of the existing* ***nodes.4d*** *is created.*

Append *- if a* ***nodes.4d*** *file already exists, the information in the* ***nodes.12d14n*** *file is added to the end of the existing nodes file. A backup up copy of the existing* ***nodes.4d*** *is created.*

You would normally select ***Prepend*** and then click **Install**.

The new/updated ***nodes.4d*** file is created in the **Destination** folder (default is ***C:\12d\14.00***) and if a *nodes.4d* file already existed, a backup copy of it is made.



Note - if you don't have the file ***nodes.12d15n*** attached to an email but instead have the file in a folder accessible from your computer, then you can do the following:

If there is a ***nodes.12d15n*** file, double click on that file and the **Install a 12d Model Nodes File** panel should appear and you continue as per the instructions above.

This completes the ***12d View*** registration process and you should now be able to view any ***12d Model 15*** projects and it displays your registered Client name.

If ***12d View*** did ***not*** install correctly and you still have a Client called "**Unregistered User of 12d View",** contact your ***12d Model*** Reseller.

However you can continue using ***12d View*** without successfully completing the registration.

For information on opening and viewing existing ***12d Model 15*** projects using ***12d View***, see 4.1 Starting Up 12d View.

3.3 12d View Not Registering

See

3.3.1 Projects With Their Own Authorisation Path

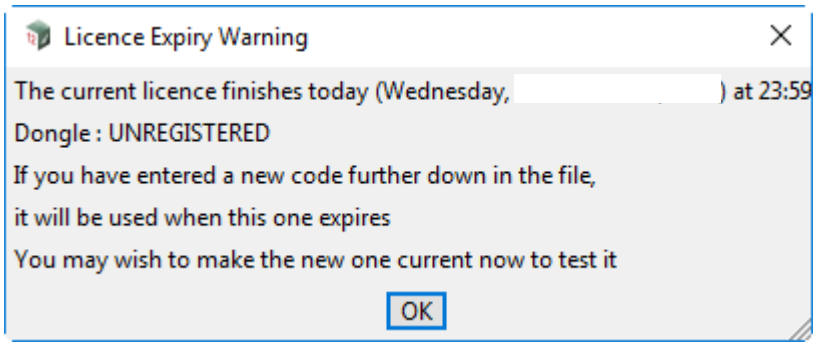
3.3.2 Licence Expiry Warning

3.3.1 Projects With Their Own Authorisation Path

It is possible to set up a project in ***12d Model*** that uses a different path to obtain the authorisation file (nodes.4d) for that project.

If that is the case when ***12d View*** opens such a project there may be no valid authorisation for ***12d Model*** or ***12d View*** authorization in that nodes.4d file.

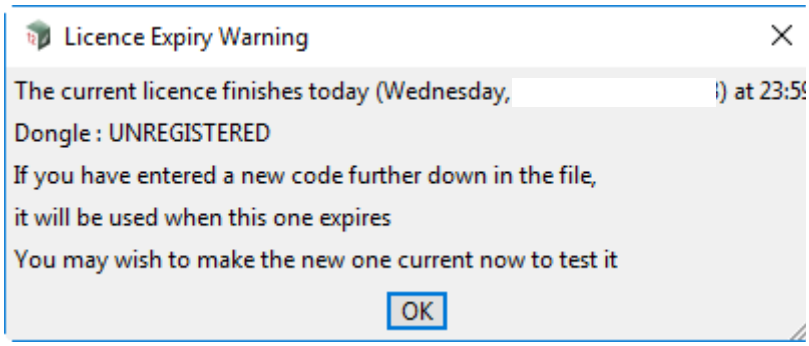
However even though there is no valid registration, you can continue using ***12d View*** but the Client will be "**Unregistered User of 12d View**" and the **License Expiry Warning** panel will appear when you open the project.



3.3.2 Licence Expiry Warning

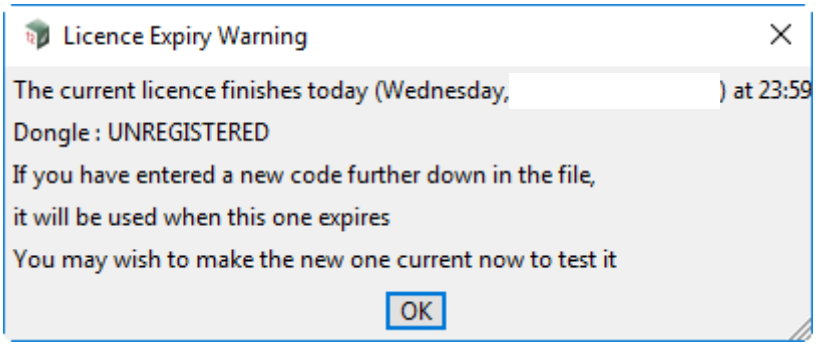
The ***nodes.4d*** file that controls ***12d View***, only validates ***12d View*** to run for a certain period of time.

If when running ***12d View***, the **Licence Expiry Warning** panel appears:



It simply means that the ***nodes.4d*** file needs to be updated which is done by doing another ***12d View Registration***. See 3 Registering 12d View.

However you can continue using ***12d View*** but the Client will be "**Unregistered User of 12d View**" and the **License Expiry Warning** panel will appear when you open projects.



Please contract your ***12d Model Reseller*** if you are having any problems obtaining a new ***12d View*** registration

4 Running 12d View

See

4.1 Starting Up 12d View
4.2 Reading Data into 12d View
4.3 Creating an Empty Project with 12d View
4.4 Exiting 12d View

4.1 Starting Up 12d View

This section contains information about how to start ***12d View***.

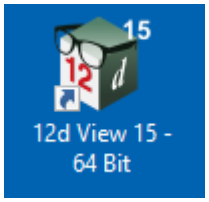
See

4.1.1 12d View Start Up Icon

4.1.2 Project Launcher

4.1.1 12d View Start Up Icon

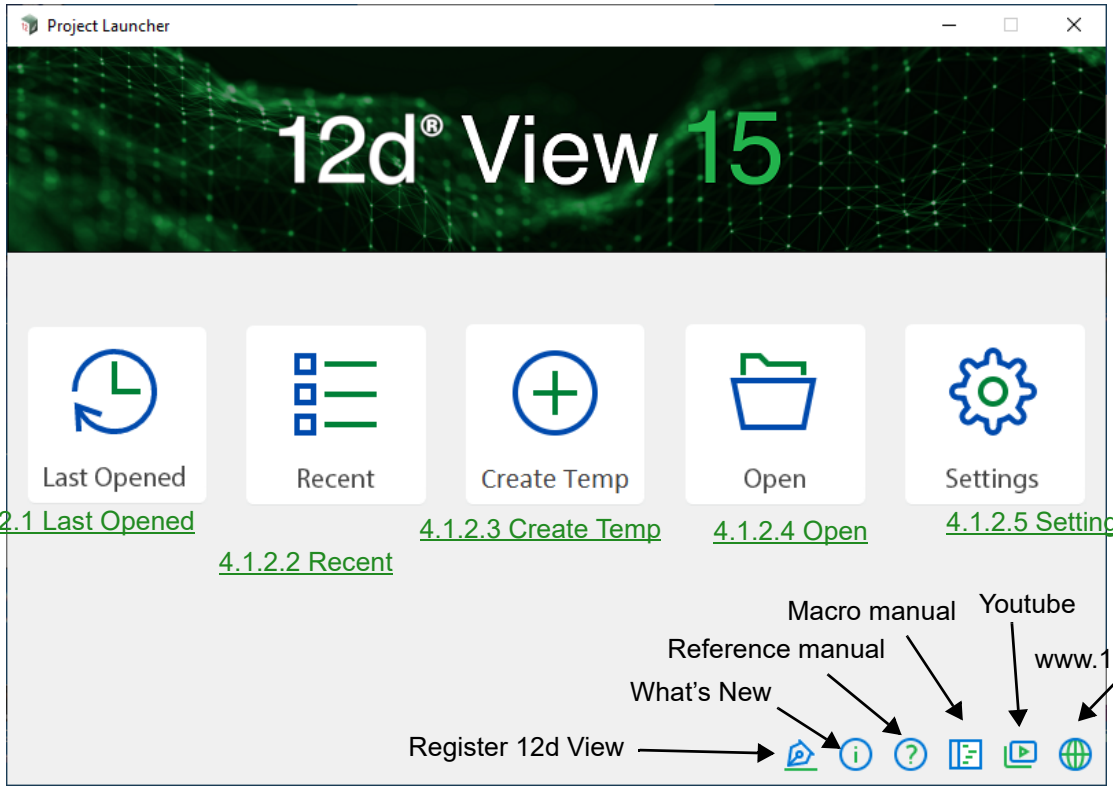
When ***12d View*** is installed from the ***setup.exe***, the ***12d View 15*** icon is created.



Double clicking the ***12d View*** icon starts ***12d View*** and brings up the **Project Launcher** panel (4.1.2 Project Launcher).

4.1.2 Project Launcher

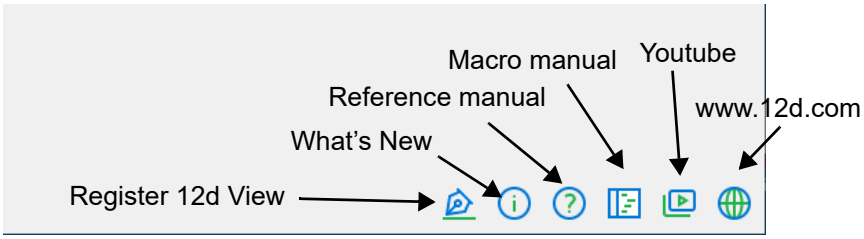
The **Project launcher** panel is used to access existing ***12d Model*** projects and create new projects.



4.1.2.1 Last Opened
4.1.2.2 Recent
4.1.2.3 Create Temp
4.1.2.4 Open
4.1.2.5 Settings

Note: If there are no projects that have been previously opened, the **Last Opened** and **Recent** icons will not appear on the **Project launcher**:

The icons in the bottom right hand corner **Register 12d View**, open the ***What's New in 12d Model 15*** pdf, the ***12d Model 15 Reference Manual***, the ***12d Model*** section of ***Youtube*** and the **12d** website www.12d.com



Clicking on the icons ***Last Opened, Recent***, ***Create Temp***, ***Open*** and ***Settings*** accesses the functionality of the ***Project Launcher***.

See

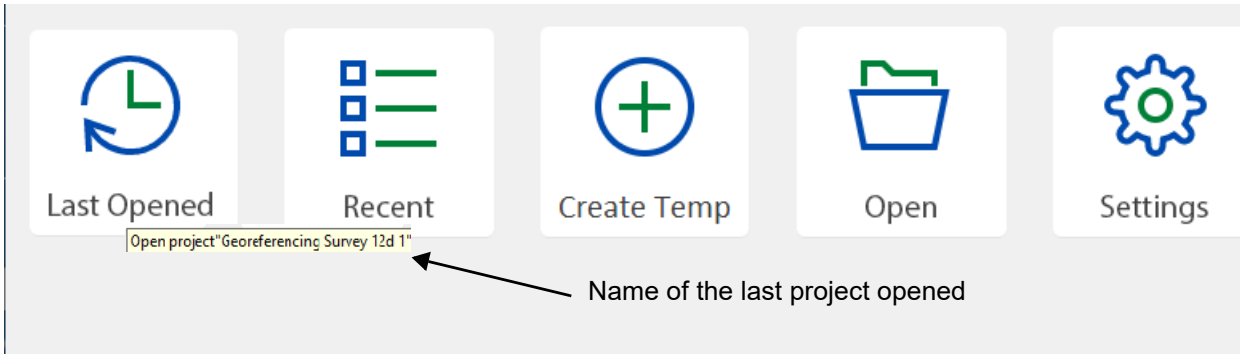
4.1.2.1 Last Opened
4.1.2.2 Recent
4.1.2.3 Create Temp
4.1.2.4 Open
4.1.2.5 Settings

4.1.2.1 Last Opened

Hovering over the **Last Opened** icon displays the name of the last opened project as a **tool tip**.

Clicking **Last Opened** opens the last ***12d Model*** project was opened and uses the same settings as when that project was last opened.

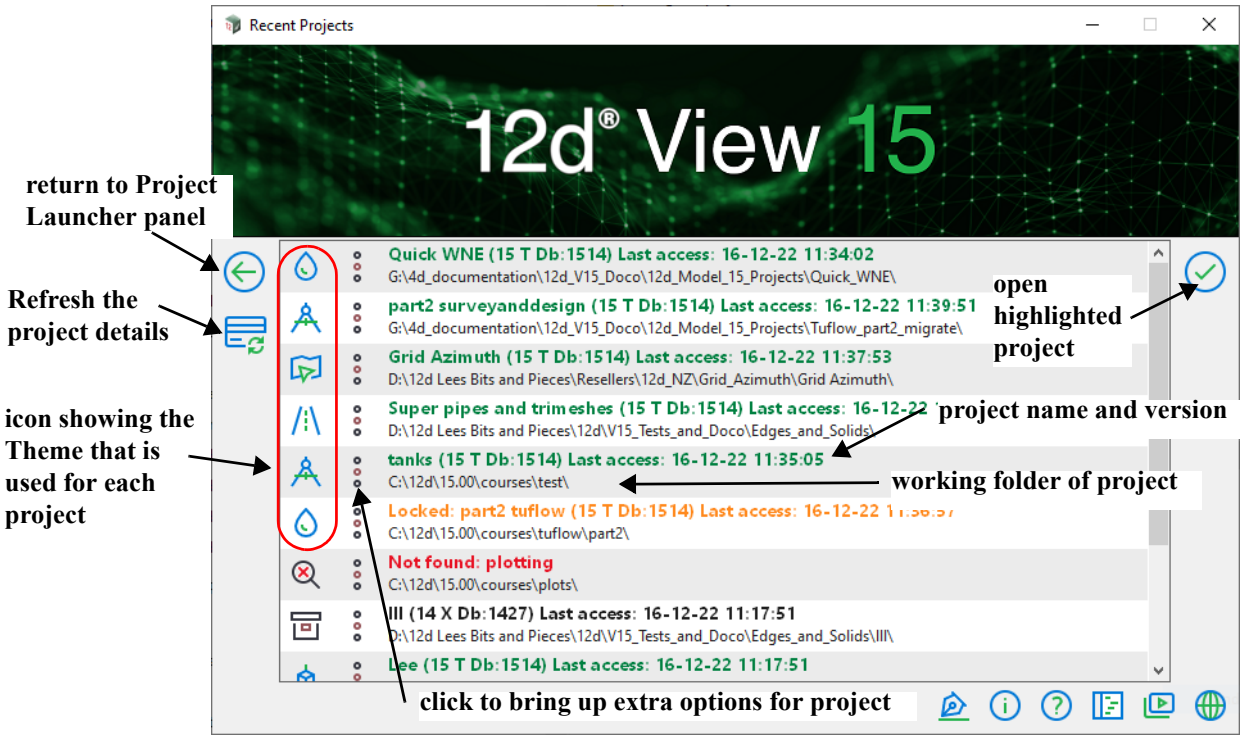
That is, it opens the first project in the ***Recent Projects*** list (see 4.1.2.2 Recent).



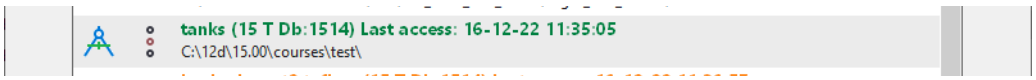
Continue to 4.1.2.2 Recent or return to 4.1.2 Project Launcher.

4.1.2.2 Recent

Clicking **Recent** accesses the **Recent Projects** panel which displays a list of your recently opened projects sorted in the reverse data order of when the projects were last opened.



For each project in the **Recent Projects** list, there are two icons and two lines of information about each project.



(a) On the left is the **Theme** icon

Clicking on the **Theme** icon brings up a panel to display information about the project. See 4.1.2.2.1 Project Information.

(b) Next is an icon that when clicked on, brings up extra options that can be performed on the project. See 4.1.2.2.2 Extra Options for the Project.

(c) On the right, there are two lines of information about the project.

The **first line** gives the project name, the project view, the project database number and finally the date that the project was last accessed.

The first line is **coloured** to provide additional information about the project. The line is:

orange if the project is already open and hence locked

green if the project is a V15 Object Tree project

red if the project no longer exists

blue if the project is a V15 non-object Tree project which will need to be migrated to a V15 Object Tree project before use

black if the project is an earlier ***12d Model*** version that needs to be migrated to a V15 project

The **second line** gives the path of the working folder that contains the project.

Double clicking on the lines of information **opens the project**.

And when the project lines are selected (and hence highlighted), clicking on the tick icon also opens the project.

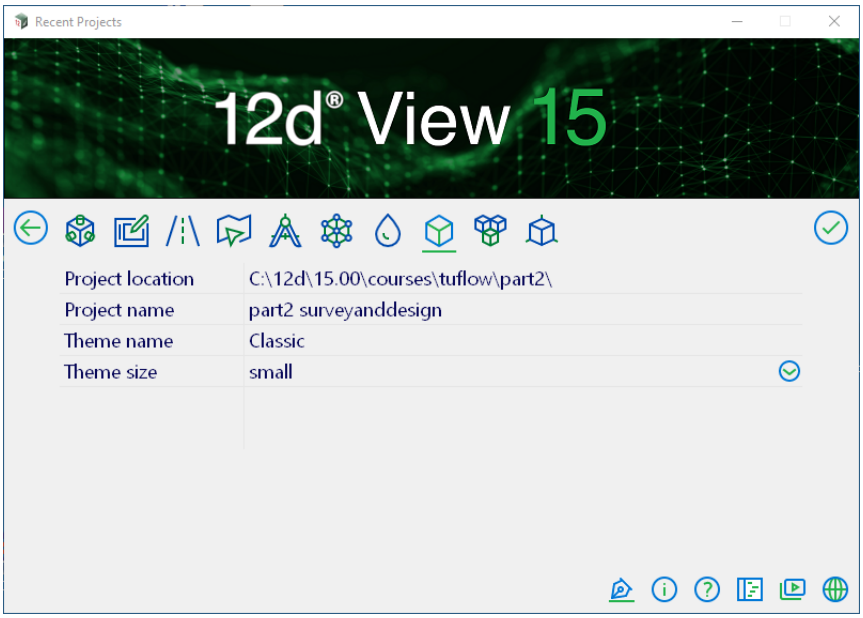
Click the refresh icon to refresh the details of the projects in the **Recent Projects** list.

Click the left arrow icon to return to the **Project launcher** panel.

Continue to 4.1.2.2.1 Project Information or return to 4.1.2 Project Launcher.

4.1.2.2.1 Project Information

Clicking on the Theme icon beside the project name displays more information about the project



The fields and buttons used in this panel have the following functions.

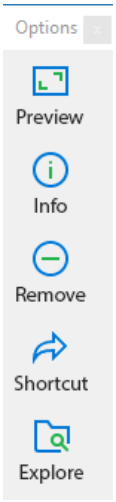
Field Description	Type	Defaults	Pop-Up
Project location	output only		
Location of the working folder for the project.			
Project name	output only		
Name of the project.			
Theme name	Not used		
Not used.			
Theme size	Not used		
Not used.			

Clicking on the tick icon opens the project.

Clicking the left arrow icon returns to the **Project Launcher** panel.

Continue to 4.1.2.2.2 Extra Options for the Project or return to 4.1.2 Project Launcher.

4.1.2.2.2 Extra Options for the Project



Preview - display the preview of the project. See 4.1.2.2.2.1 Preview icon

Info - display the project description. See 4.1.2.2.2.2 Info icon

Remove the project from the **Recent Projects** list

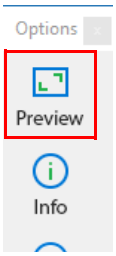
Shortcut - create a desktop shortcut that starts ***12d Model*** and opens the project.

Explore - open Windows explorer at the working folder

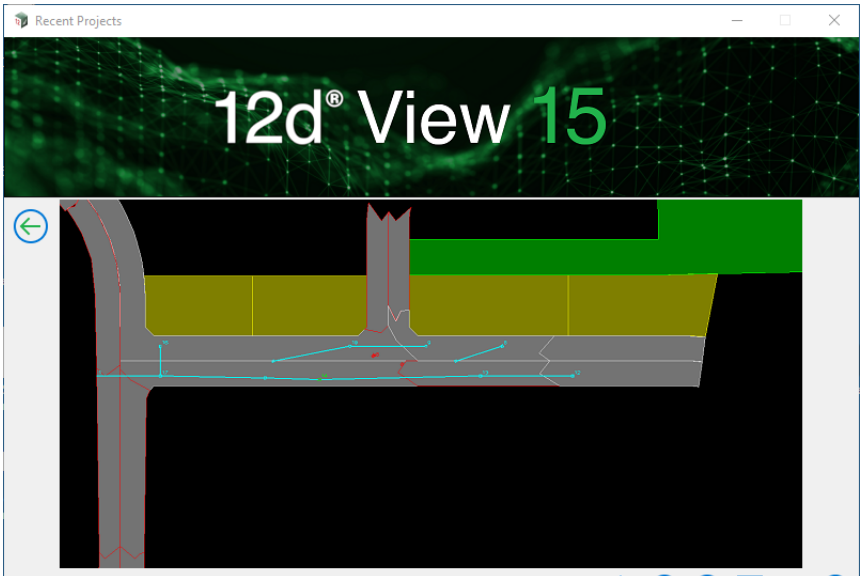
Click the left arrow icon to return to the **Project Launcher** panel.

Continue to 4.1.2.2.2.1 Preview icon or return to 4.1.2.2 Recent.

4.1.2.2.2.1 Preview icon



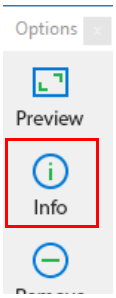
Clicking on the **Preview** icon displays the **preview** of the **project**



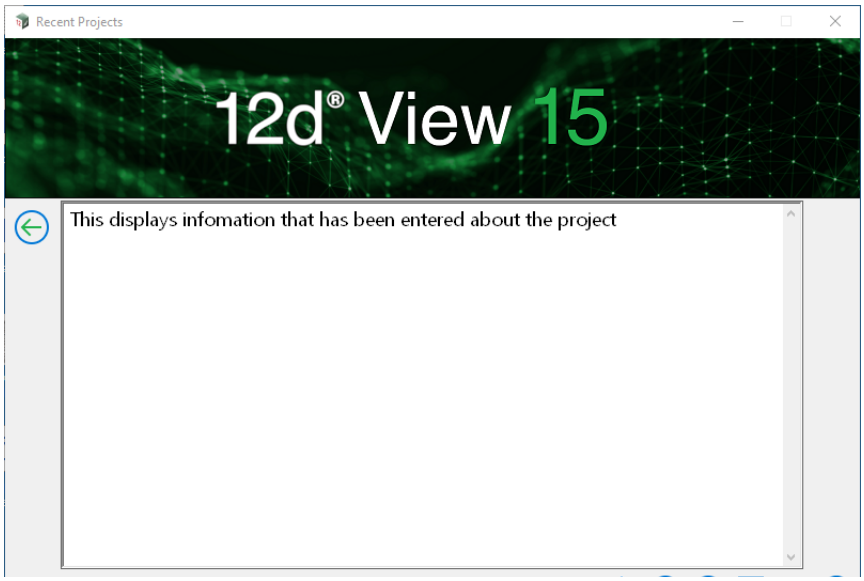
Click the left arrow icon to return to the **Project Launcher** panel.

Continue to 4.1.2.2.2.2 Info icon or return to 4.1.2.2.2 Extra Options for the Project.

4.1.2.2.2.2 Info icon



Clicking on the **Info** icon displays the **description** for the **project**

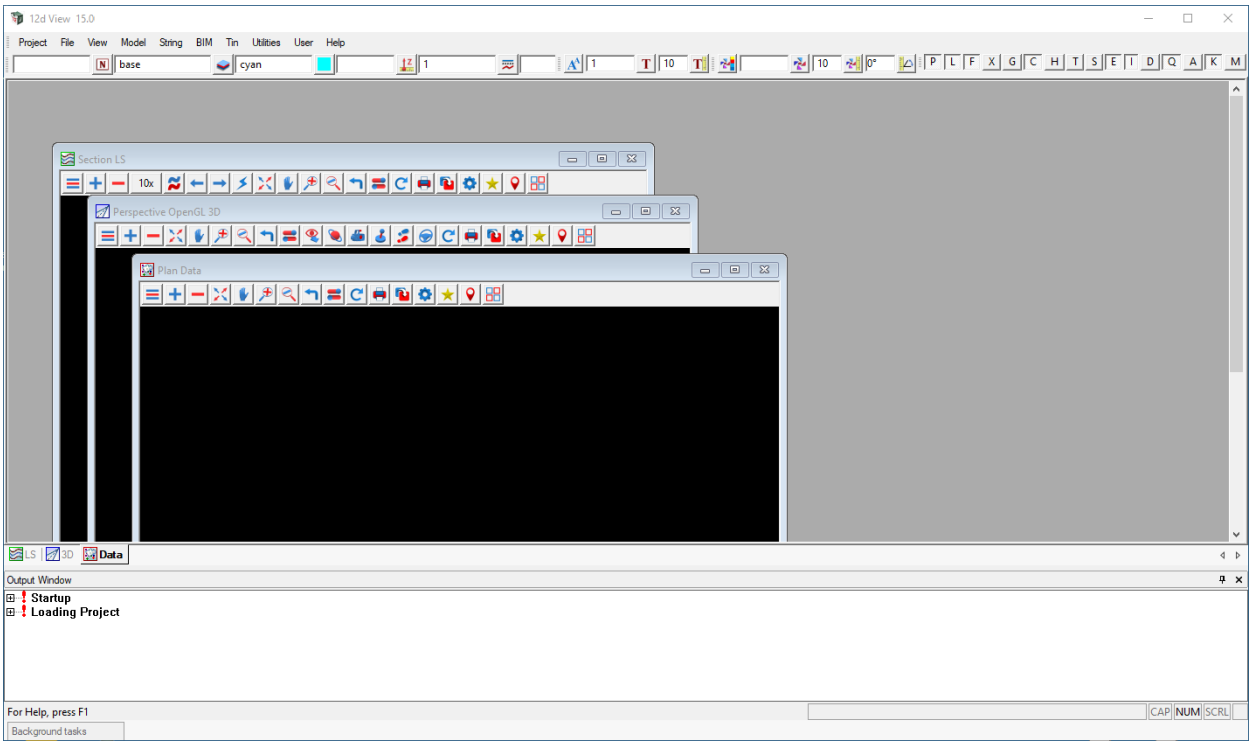


Click the left arrow icon to return to the **Project Launcher** panel.

Continue to 4.1.2.3 Create Temp or return to 4.1.2.2.2 Extra Options for the Project.

4.1.2.3 Create Temp

Clicking on **Create Temp** creates a temporary empty ***12d Model*** project and then opens the project.



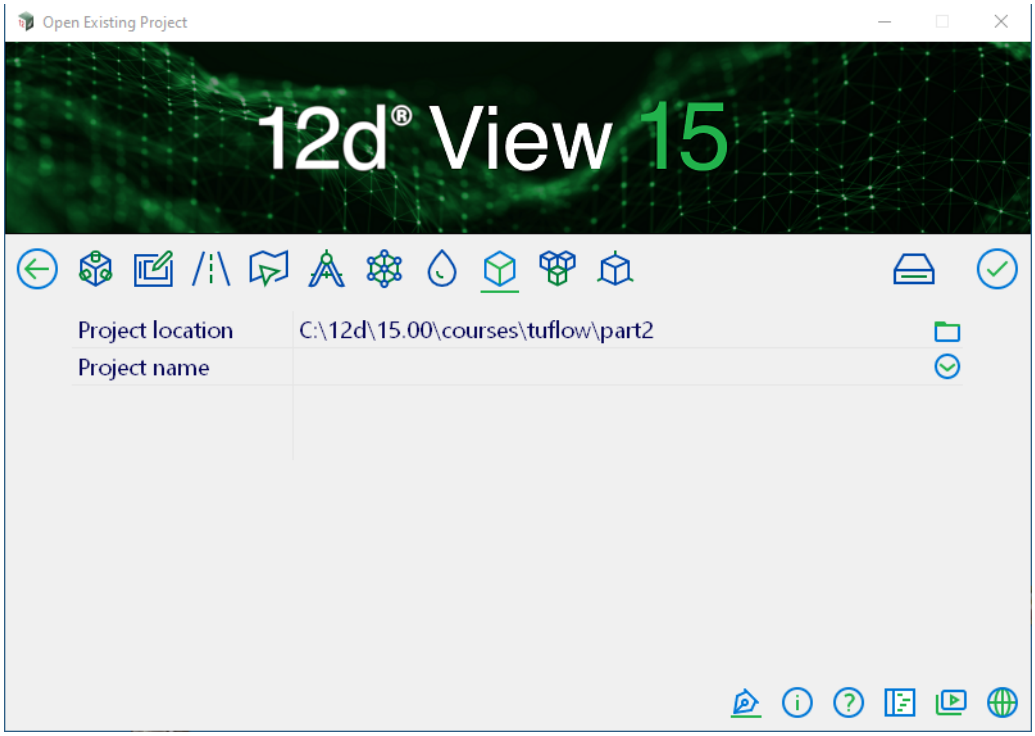
Data can be read into the project and displayed but nothing can be saved.

For more information on **Create Temp**, see 4.3 Creating an Empty Project with 12d View.

Continue to 4.1.2.4 Open or return to 4.1.2 Project Launcher.

4.1.2.4 Open

Clicking on **Open** brings up the **Open Existing Project** panel that allows you to browse and open an existing ***12d Model 15*** project.



The fields and buttons used in this panel have the following functions.

Field Description	Type	Defaults	Pop-Up
Project location	folder box		
Location for the project to be opened.			
Project name	project box		projects in Project location
Name of the project to be opened.			
Dongle configuration			
*If the project has an **dongle configuration** then it is displayed in this field.*			
A new dongle configuration can be selected from the pop-up for this field.			

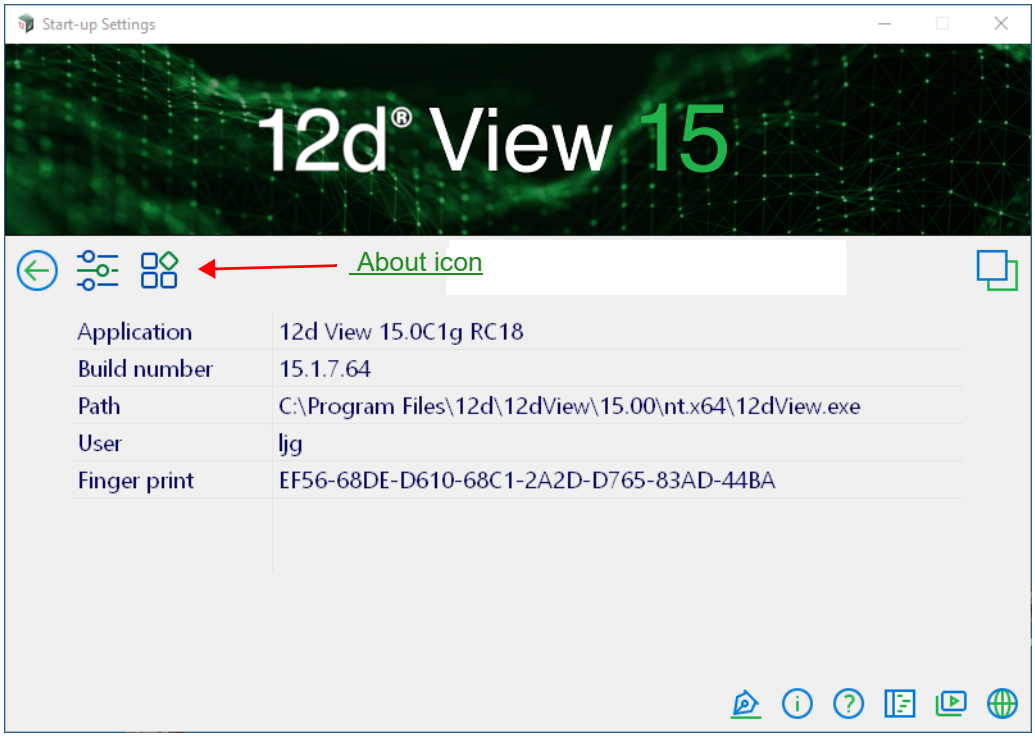
After filling in the details for the project to be opened, click the tick icon to open the existing project.

Clicking the left arrow icon will return to the **Project Launcher** panel **without** opening a project.

Continue to 4.1.2.5 Settings or return to 4.1.2 Project Launcher.

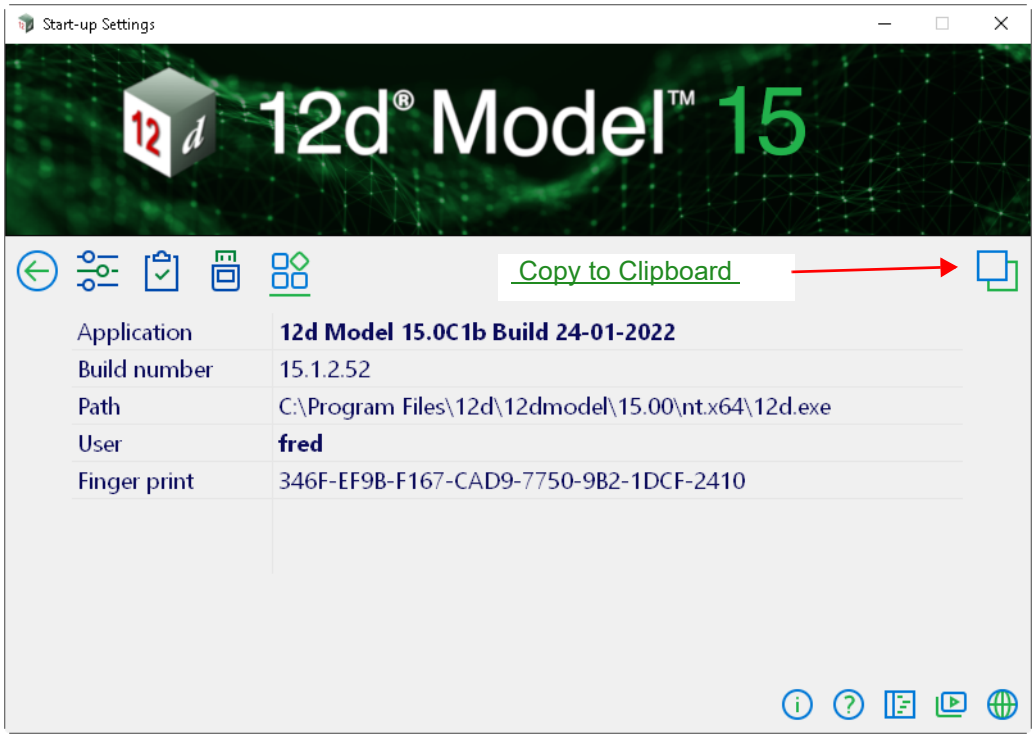
4.1.2.5 Settings

Clicking on **Settings** displays the **Start-up Settings** panel.



About icon

Clicking on the **About** icon changes to the **About** information



Copy to Clipboard icon

Clicking on the **Copy to clipboard** copies the information on the panel to the clipboard.

Click the left arrow icon to return to the **Project Launcher** panel.

Continue to 4.2 Reading Data into 12d View.

4.2 Reading Data into 12d View

12d View has options under the **File** menu to read in and display.

These include:

(a) 12da and 12dxml files

(b) IFC files

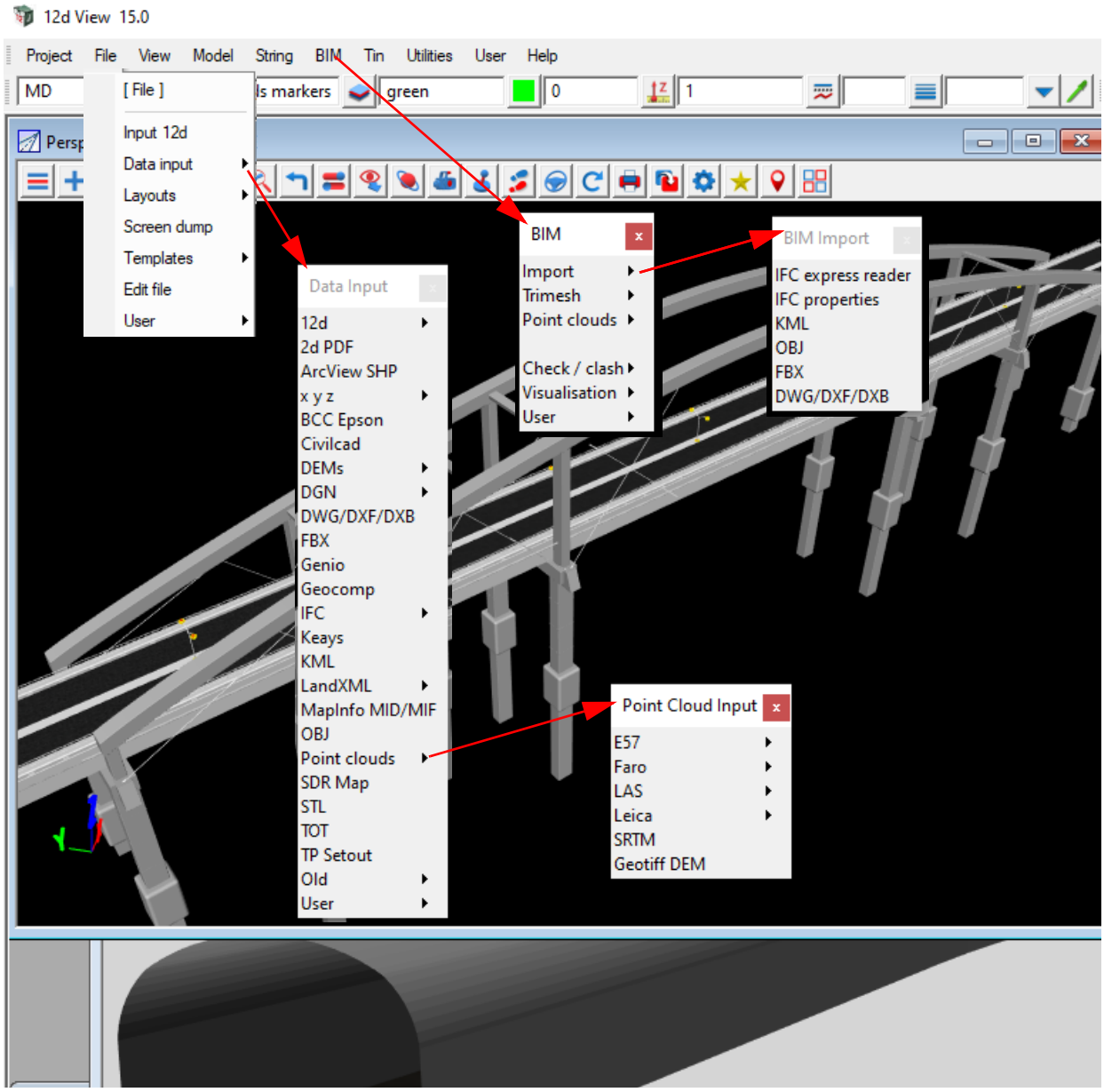
(c) ADAC files

(d) KML files

(e) Point clouds

(f) DWG/DXF/DXB files

(g) Genio files

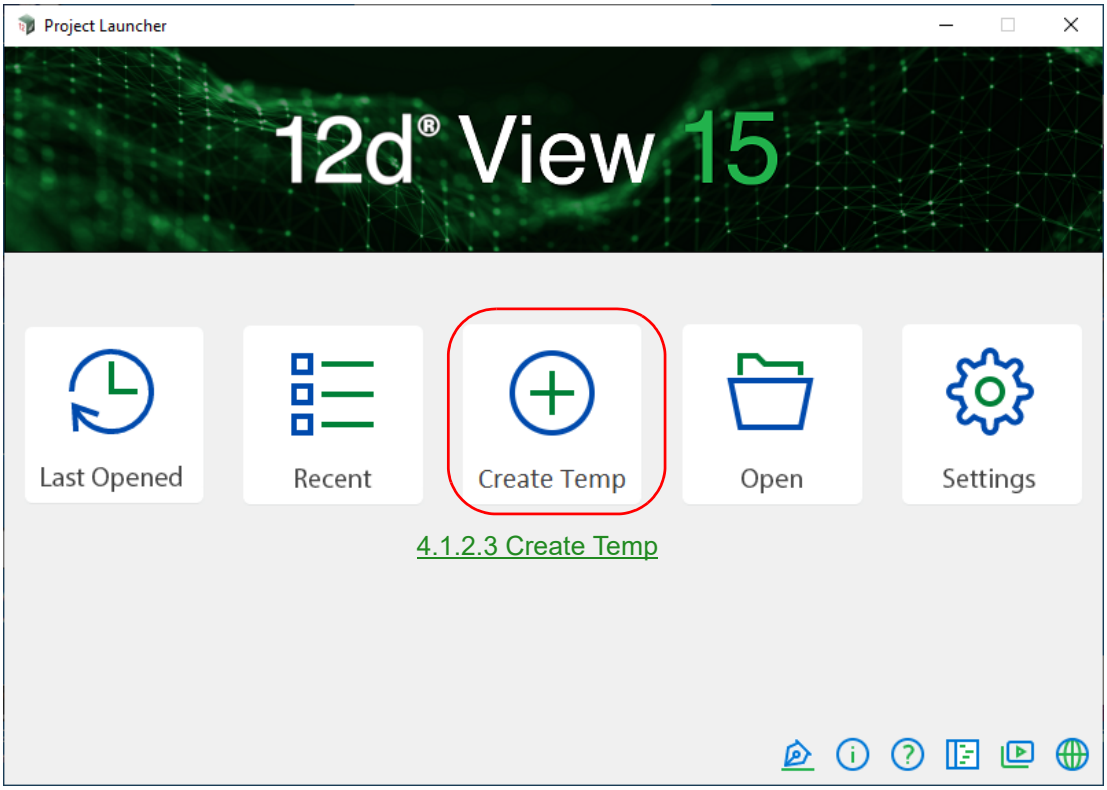


Continue to 4.3 Creating an Empty Project with 12d View.

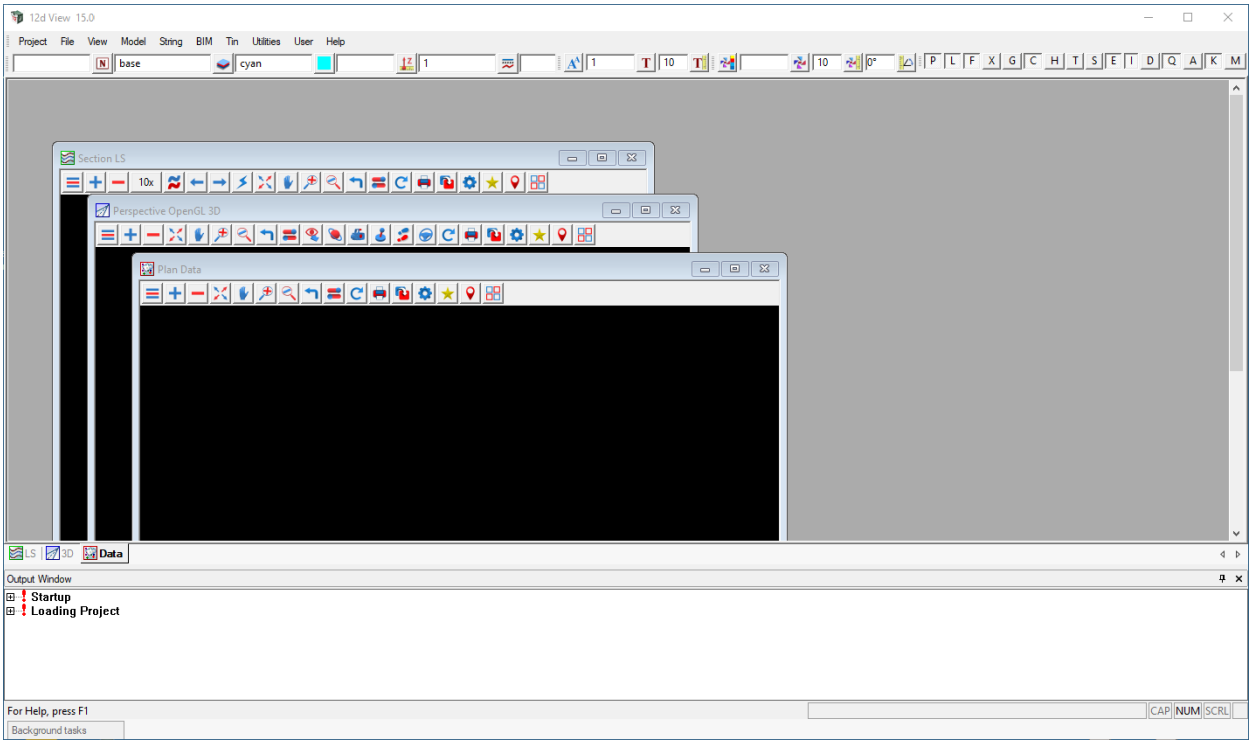
4.3 Creating an Empty Project with 12d View

It is possible to use ***12d View*** without having an existing ***12d Model*** project.

When the ***12d View Project Launcher*** starts up, there is a **Create Temp** icon in the middle of the panel.



Clicking on the **Create Temp** creates a temporary empty ***12d Model*** project and then ***12d View*** opens the project.



Data can then be read in using the reading options 4.2 Reading Data into 12d View.

Continue to 4.4 Exiting 12d View.

4.4 Exiting 12d View

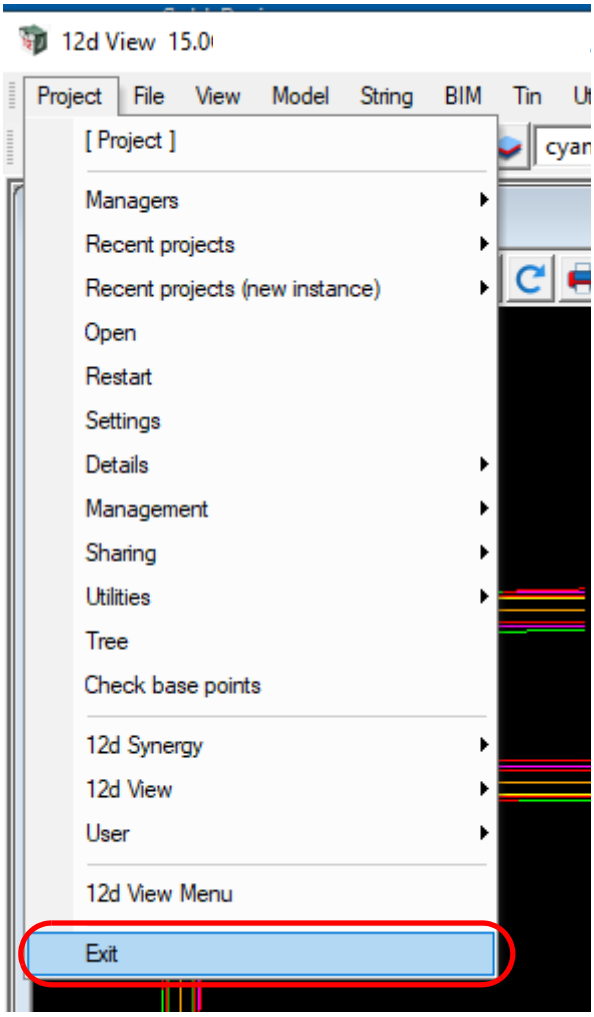
Important Note - Save is Disabled

Although in ***12d View 15*** you can create new views, add and remove models from views, and change view settings, ***the ability to save this modified information and view information is disabled***.

When you exit ***12d View***, the project is left in the same state as when you first opened the project.

To exit the project, click on **Exit** on the **Project** menu:

on Main menu



Return to 4.1 Starting Up 12d View.