

12dModel

Installing the Release Version of 12d Model 12 and Network CodeMeters

For 12d Model 12 C1p

September 2018

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1 A Guide to the Notes

These notes contain the information for:

(a) Installing the release version of **12d Model**

12d Model needs to be installed on each computer it is going to run on.

For notes on installing **12d Model** for the first time, or on a computer that is already running **12d Model**, go to [2 Installing 12d Model 12 Release Version](#)

(b) Setting up a Network CodeMeter


By default when **12d Model** is installed it is set up for users with a **Local (single user or stand alone) CodeMeter** that only allows **12d Model** to be run on the computer with the Local CodeMeter attached to it. With a Local CodeMeter, if **12d Model** is to be run on another computer with that Local CodeMeter then the Local CodeMeter must be **moved** to the new computer. And **12d Model** will stop running on the computer that no longer has the Local CodeMeter attached to it.

To allow **12d Model** to run on a number of computers without having to move a CodeMeter to different computers, a **NETWORK CodeMeter** is used.

For notes on setting up a **Network CodeMeter**, go to [7 Network CodeMeters](#)


12d Local CodeMeter also referred to as a Single User or Standalone CodeMeter

Micro SD




Stubby USB


with end cap and ring



without end cap and ring




Long USB



12d Network CodeMeter

Silver USB



Note: the end cap and ring are cosmetic only

2 Installing 12d Model 12 Release Version

2.1 Requirements for Installing & Running 12d Model 12d

Before Installing and running **12d Model 12**, you need the following:

- (a) You must have **Administrator** privileges to install **12d Model**
- (a) Approximately 2 Gigabytes of disc space is required for the installation to succeed.
- (b) A **12d Model CodeMeter** or **Wibu** Lock for your computer
If **12d Model 11** is already running on your computer, the **CodeMeter** (or **Wibu**) lock you already have will work with the new version of **12d Model 12** once you have a *nodes* file for **12d Model 12**.
If **12d Model** has NOT been running on your computer then DO NOT ATTACHE THE LOCK TO YOUR COMPUTER until after the CodeMeter/Wibu drivers have been installed as part of the installation procedure.
- (c) An email with the **12d Model 12** authorization file **nodes.12d12n** attached, or a folder with the **12d Model 12** authorization file **nodes.12d12n** or **nodes.4d** in it.
- (d) This document which has the internet links to the required executables and files
- (e) Access to the internet to download the required executables and files

Please check that you have all the above items before commencing the installation.

Also note that:

- (a) **12d Model 12** will **not install** on Windows XP or Windows Vista.
- (b) **12d Model 12** will not run with the **Hardlock** locks which were used for **12d Model 10** and earlier versions.
If you have a **12d Hardlock** lock, please contact your **12d Model Reseller** to obtain a replacement **CodeMeter** lock.
- (c) **12d Field** will only run on **CodeMeter** locks
If you are running **12d Field** and have a **12d Wibu** or **12d Hardlock** lock, please contact your **12d Model Reseller** to obtain a replacement **CodeMeter**.
- (d) A three-button mouse is essential to efficiently use **12d Model** on the desktop.

2.2 64 bit or 32 bit Version of 12d Model?

Microsoft has a 64 bit Windows and a 32 bit Windows operating system and so there are both 64 bit and 32 bit versions of **12d Model**.

In 64 bit Windows, Microsoft has allowed for both 32 bit and 64 bit versions of the same software to coexist on the same computer, so you could install both the 32 bit and the 64 bit version of **12d Model**.

The **64 bit 12d Model** only runs on **64 bit Windows** and supports any of the **12d Model** point sizes from 5K through to 5M and **Bigfoot**.

The **32 bit 12d Model** runs on both **32 bit** and **64 bit Windows** and only supports the **12d Model** point sizes from 5K through to 5M. That is, all point sizes **except Bigfoot**

So to run **12d Model Bigfoot**, you must run **64 bit 12d Model** on **64 bit Windows**.

2.3 Quick or Detailed Installation Notes

For abbreviated instructions and links for Installing the Release Version of **12d Model**, go to [3. Quick Installation Notes for 12d Model 12.](#)

For detailed instructions and links for Installing the Release Version of **12d Model**, go to [4. Detailed Notes for Installing 12d Model.](#)

3 Quick Installation Notes for 12d Model 12

This chapter contains abbreviated notes for Installing **12d Model 12**, and the links to download all the files required for the installation.

For more detailed notes on installing **12d Model**, see [4 Detailed Notes for Installing 12d Model](#).

Important Note: 12d Model 12 will not install on Windows XP or Vista.

3.1 Installing and Uninstalling

- (a) You need to be Administrator to install **12d Model 12** and **CodeMeter** and/or **Wibu** drivers
- (b) You can have earlier versions of **12d Model**, both 32-bit and a 64-bit, on your computer at the same time as **12d Model 12**.
- (c) You can have both a 32-bit and a 64-bit **12d Model 12** on your computer at the same time.
- (d) A new **12d Model 12** 32/64 can't be installed if there is already a matching **12d Model 12** 32/64 on your computer.

The **12d Model 12 Installer** will check for an existing matching **12d Model 12 32/64** and if one exists, displays the version number and asks *if you want to Uninstall it*.

If you say **No** then the **12d Model 12** Install will terminate.

Important Note

The **Uninstaller** deletes everything in the **12d\12dmodel\12.00** folder in **Program Files** (or in **Program Files (x86)** for a 32-bit Install on a 64-bit O/S) so **do not** modify any of those files.

Any modification that you make to these files must go into **User** or **User_Lib**.

- (e) The Uninstaller will not delete any of the training material loaded into the folders **12d\12.0\training** and **12d\12.0\courses**.

The **12d Model 12 Installer** (32 bit and 64 bit) will overwrite any files of the same name in those folders.

- (f) **Do not attach the CodeMeter or Wibu locks before installing the drivers**

The **12d CodeMeter** or **12d Wibu** locks (dongles) must **NOT be attached** to the computer before the CodeMeter/Wibu drivers are installed (see [3.3.1 CodeMeter and Wibu Drivers](#)).

3.2 Locks (Dongles) Supported

- (a) **Hardlock** locks **can not** be used for **12d Model 12**.
- (b) **12d Field** is only available in **12d Model 12** for **Codemeters**.
- (c) **Network Codemeters** only support **12d Model 11** and above.
- (c) **Wibu** locks are supported for **12d Model 12**.

3.3 12d Model Installs for Windows 7, 8.1 and 10

(a) 12d Model Install for 64 bit Window 7 - approximately 900 Mb

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_Model_12_C1p_64_Setup.exe

(b) 12d Model Install for 32 bit Windows 7, 8.1 and 10 - approximately 900 Mb

To download the 32-bit Install click on the link

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_Model_12_C1p_32_Setup.exe

3.3.1 CodeMeter and Wibu Drivers

If you are using a **CodeMeter** for the first time on this computer, then you will need to install the **CodeMeter** drivers.

If you are using a **Wibu** for the first time on this computer, then you will need to install the **Wibu** drivers. If you already have Wibu, the drivers need to be **Wibu 6.1** or above.

CodeMeter and/or **Wibu** drivers can be installed with:

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_dongles_installation_13_Oct_16.exe

3.3.2 Certifying Codemeters

A **CodeMeter** needs to be Certified **over the Internet** every two months. So you need to have access to the Internet for the first time you start up **12d Model** with a **CodeMeter** and then at least every two months.

Once **12d Model** is installed, there is an environment variable **AUTO_CERTIFY_DONGLE_4D** that can set so that **12d Model** automatically certifies the **CodeMeter** when required.

See [6 Certifying CodeMeters](#).

Please contact your **12d Model Reseller** if you have any problems Certifying CodeMeters.

3.3.3 For Users with 12d Model 11 Already Installed

3.3.3.1 Setting Up Your User Folder for 12d Model 12

The folder **User** contains the files that you have modified to replace those that **12d Model** installs in the folder **Set_ups**. For example, your own *names.4d* or *linestyl.4d*.

So if you have files in your **User** folder in **12d Model 11**, you will probably also want to use many of them with **12d Model 12**.

In **12d Model 11**, the default place for **User** is **c:\12d\11.00\User** but it could also be pointed to by the environment variable **USER_4D**.

For **12d Model 12**, you need to create a new **User** folder and copy to it any files from the **12d Model 11 User** folder that you want to use with **12d Model 12**. You may need to copy the whole of the **12d Model 11 User** folder to the new area.

The default location for the **12d Model 12 User** folder is **c:\12d\12.00\User** but if the environment variable **USER_4D** was used to point to a different location for the **User** folder in **12d Model 11** then you will probably want to use a non-standard **User** folder for **12d Model 12**. If that is the case then you will need to change **USER_4D** in the **env.4d** file for **12d Model 12** to point to your **User** folder for **12d Model 12**.

3.3.3.2 Setting Up Your User_Lib Folder for 12d Model 12

The folder **User_Lib** contains your own library files and if you had files in a **User_Lib** folder in **12d Model 11**, you will probably also want to use many of them with **12d Model 12**.

In **12d Model 11**, the default place for **User_Lib** is **c:\12d\11.00\User_Lib** but it could also be pointed to by the environment variable **USER_LIB_4D**.

For **12d Model 12**, you need to create a new **User_Lib** folder and copy to it any files from the **12d Model 11 User_Lib** folder that you want to use with **12d Model 12**. You may need to copy the whole of the **12d Model 11 User_Lib** folder to the new area.

The default location for the **12d Model 12 User_Lib** folder is **c:\12d\12.00\User_Lib** but if the environment variable **USER_LIB_4D** was used to point to a different location for the **User_Lib** folder in **12d Model 11** then you will probably want to use a non-standard **User_Lib** folder for **12d Model 12**. If that is the case then you will need to change **USER_LIB_4D** in the **env.4d** file for **12d Model 12** to point to your **User_Lib** folder for **12d Model 12**.

3.3.3.3 Setting Up Your env.4d File for 12d Model 12

The file **env.4d** contains environment variables that are used to customise **12d Model**.

An **env.4d** file is installed in the Set_Ups folder when **12d Model** is installed and if a user wants to make any modifications to any of the environment variables in **env.4d**, then the modified **env.4d** file is placed in the **User** folder.

So if you have an **env.4d** file in your **User** folder in **12d Model 11**, you will probably also want to use it **12d Model 12**.

The default location for your modified **env.4d** file in **12d Model 11** is in your **User** folder for **12d Model 11** so for **12d Model 12**, you need to copy this **env.4d** file to your **User** folder in **12d Model 12**.

3.3.3.4 Are You Using a 12d Network Lock?

If you are using a **12d Network Lock** (**CodeMeter** or **Wibu**) for **12d Model 11**, then the file **dongles.4d** which is in the **User** folder contains the information to tell **12d Model** that it has to search for a network lock, and possibly which computer the network lock is on.

So if you are using a **12d Network Lock** for **12d Model 12**, you will need to copy your **12d Model 11 dongles.4d** file to the **12d Model 12 User** folder.

3.3.4 Network CodeMeters

3.3.4.1 Using a 12d Network CodeMeter for the First Time

If you are setting up **12d Model** to use a **12d Network CodeMeter** for the first time, please read the section [7 Network CodeMeters](#).

3.3.4.2 Updating Licenses in a Network Codemeter

If you are modifying the virtual **12d Model** dongle within a Network CodeMeter (for example increasing the number of licenses), go to section [7.6 Updating Licenses in a Network CodeMeter](#).

3.3.5 Documentation and What's New

The links for downloading documentation on **12d Model** are given in [9 Documentation](#).

The links for downloading documentation, power points and videos on what is new in **12d Model 12** are given in [10 What's New in 12d Model 12](#).

This ends the Quick Installation notes for **12d Model 12**.

The rest of the Chapters in this document are:

[4 Detailed Notes for Installing 12d Model](#)

[7 Network CodeMeters](#)

[9 Documentation](#)

[10 What's New in 12d Model 12](#)

[8 Errors Installing and Authorising](#)

[8 Errors Installing and Authorising](#)

4 Detailed Notes for Installing 12d Model

These are the complete notes are for installing the **Release** version of **12d Model 12**.

A. Disk Space required for installing 12d Model 12

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

Before installing **12d Model**, it is best to reboot the computer.

Your login must have **Administrator** privileges.

B. Do not attach the 12d Model locks before installing dongle drivers

The **12d CodeMeter** or **12d Wibu** locks must **NOT be attached** to the computer before the CodeMeter/Wibu drivers are installed in Step 1.

C. Installing

The following **Steps 1 to 4** will take you through the Installation of CodeMeter and/or Wibu drivers, the installation of **12d Model** and the setting up of the **nodes.4d** file.

Step 1. Install the CodeMeter or Older Wibu Drivers

WARNING You need to have System Administrator rights to install the CodeMeter/Wibu drivers

The first step is to install the *CodeMeter/Wibu drivers* using *12d_dongles_installation_date.exe* which is downloaded from:

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_dongles_installation_13_Oct_16.exe

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

Dongle Driver

To download a file please **right-click your mouse & select "Save Target As"**

New Wibu drivers and CodeMeter drivers (Combined 32bit & 64bit)

Wibu USB standalone - Green colour, see through - dongle number starts with 57.

Wibu USB Network - Solid Green colour, - dongle number starts with e15.

Codemeter USB standalone - dongle number starts with - 5c2d.

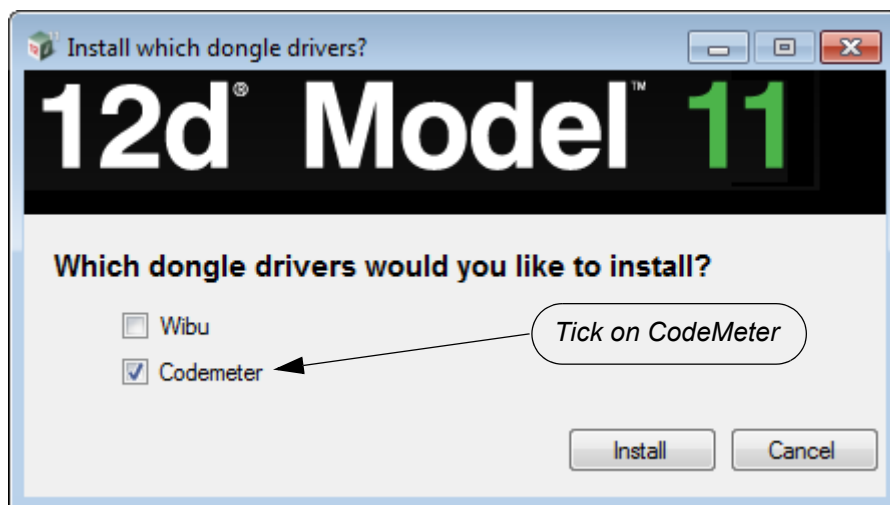
Codemeter USB Network - dongle number starts with ec514.

[download](#) - **right-click your mouse & select "Save Target As"**
[WIBU-Key or Codemeter Driver Website](#)

download the drivers

Once you have downloaded *12d_dongles_installation_date.exe*, click on it to begin the installation process.

The **Install which dongle drivers?** panel will appear.

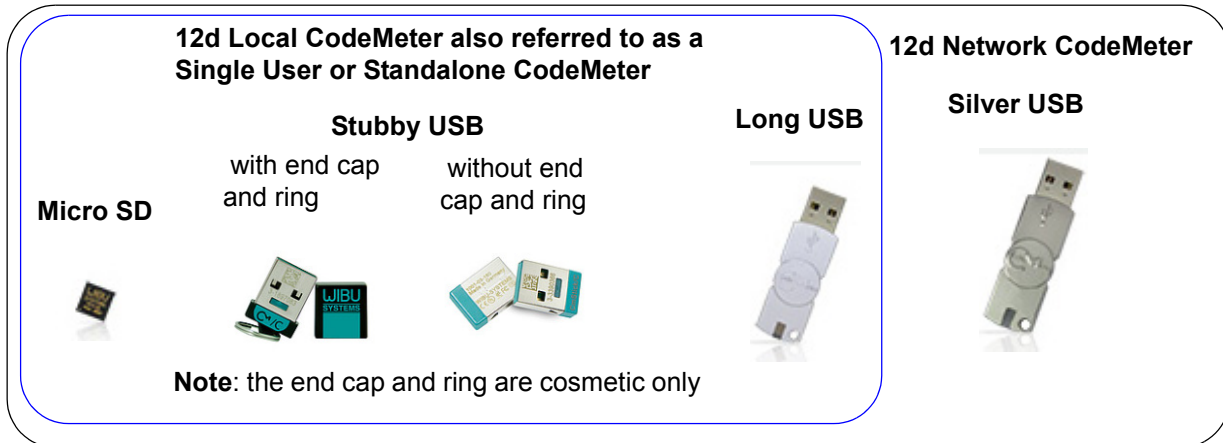


If you are using a **CodeMeter** for the first time on this computer, then you will need to install the **CodeMeter** drivers.

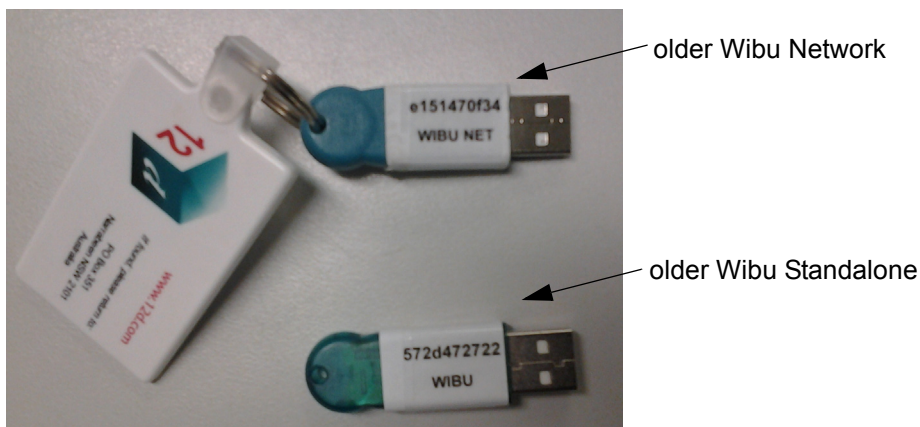
If you are using a **Wibu** for the first time on this computer, then you will need to install the **Wibu**

drivers. If you already have Wibu, the drivers need to be **Wibu 6.1** or above.

Note that If you only using **CodeMeters** (variety of colours and sizes) then you only need to install the drivers for **CodeMeters**.



Note: for a **Stubby USB**, the end cap and ring are cosmetic only and can be pulled off to make it into a **Stubby USB** without the end cap and ring. This does not affect the performance of the **Stubby USB**.



If you have both *CodeMeter* and the older *Wibu* dongles then both sets of drivers **must** be installed.

- If you have only **CodeMeter** ticked on then clicking on **Install** will install the CodeMeter drivers.
Go to [Installing the CodeMeter Drivers:](#)
- If you have only **Wibu** ticked on then clicking on **Install** will install the Wibu drivers.
Go to [Installing the Wibu Drivers:](#).
- If you have both **CodeMeter** and **Wibu** and ticked on then clicking on **Install** will first install the Wibu drivers and then continue on to installing the CodeMeter drivers.
Go to [Installing the Wibu Drivers:](#)

Installing the CodeMeter Drivers:

The script to install the **CodeMeter** drivers begins.

CodeMeter Setup

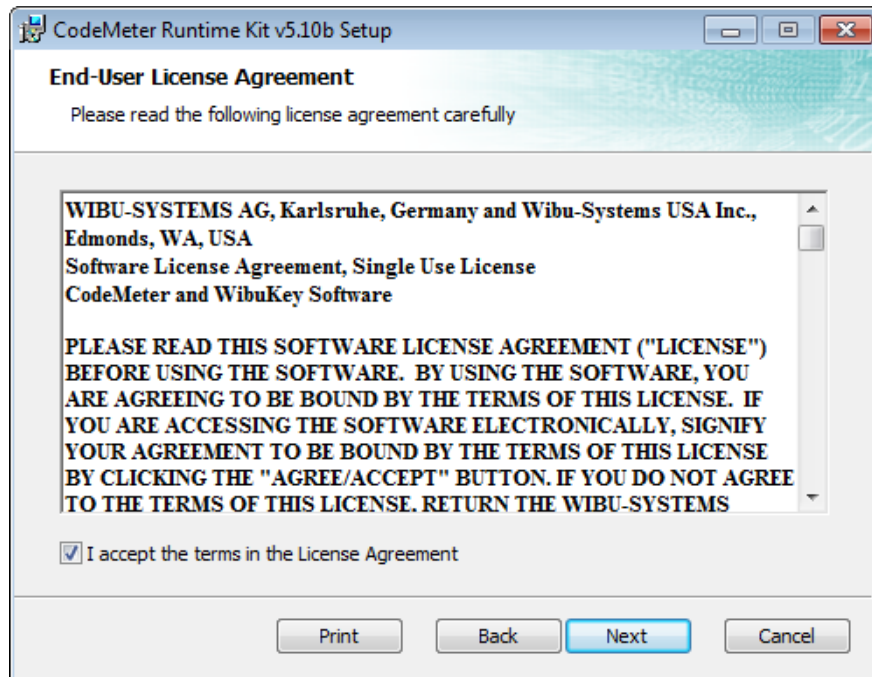
CodeMeter Runtime Kit Setup



Select **Next** to continue

End-User License Agreement

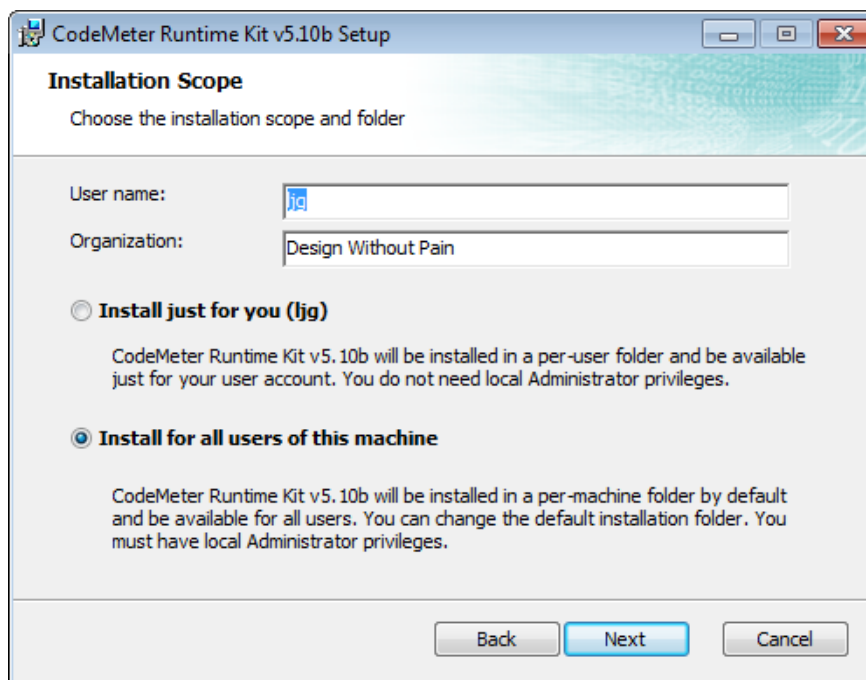
CodeMeter Runtime Kit Setup



Read the License Agreement and if you are happy with it, tick "I accept the terms in the License Agreement" and then select **Next** to continue

Installation Scope

CodeMeter Runtime Kit Setup

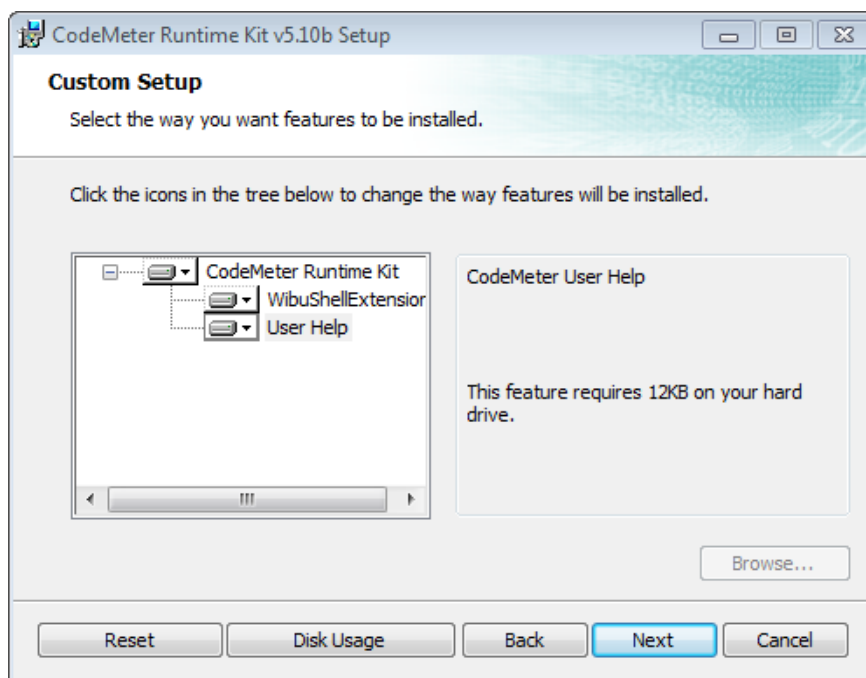


Enter your **User name** and **Organisation**.

Click on either **Install just for you** or **Install for all users of this machine** and then select **Next** to continue

Custom Setup

CodeMeter Runtime Kit Setup



Select **Next** to continue

Ready to Install

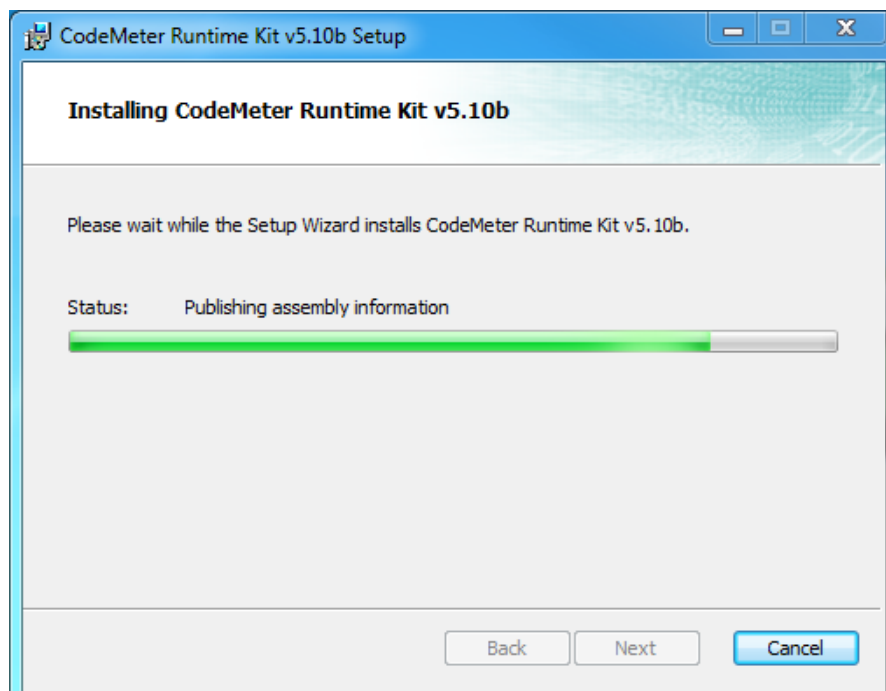
CodeMeter Runtime Kit Setup



Select **Install** to continue

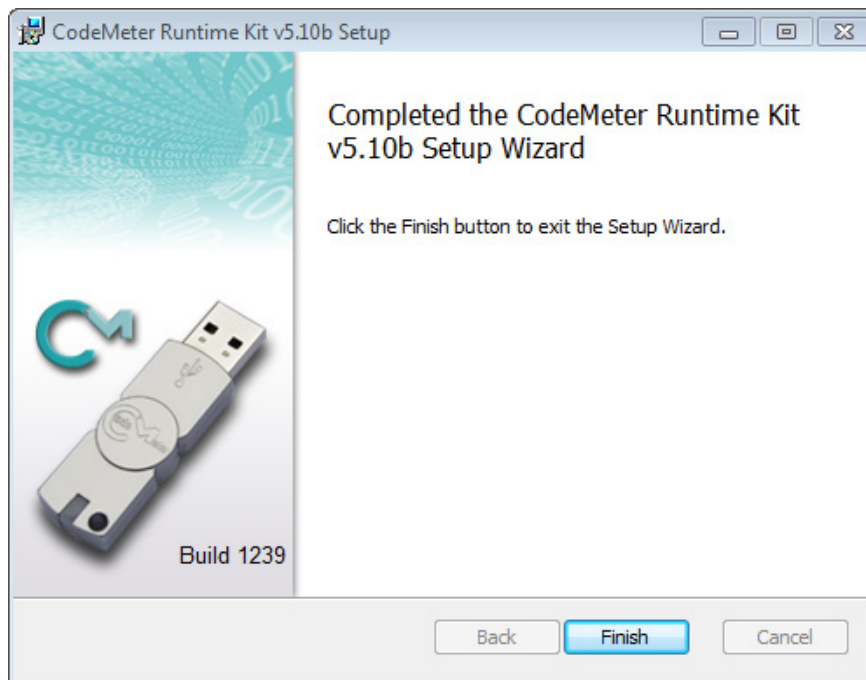
Installing

CodeMeter Runtime Kit Setup



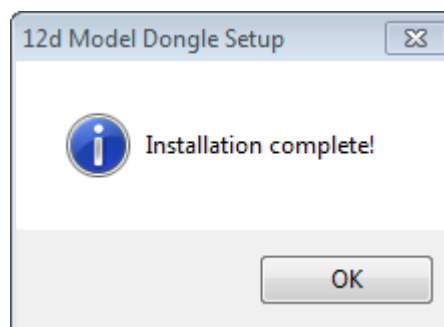
Completed

CodeMeter Runtime Kit Setup



Select **Finish** to end

The **CodeMeter** dongle drivers have now been installed and the **12d Model Dongle Setup** screen will appear.



click **OK**

Note: A **CodeMeter** icon, that is used to bring up the **CodeMeter Control Center**, is also installed on your task bar.



If you were installing the CodeMeter drivers as part of setting up a **Network CodeMeter**, go to [What is Done to the Computer By Step 1.](#)

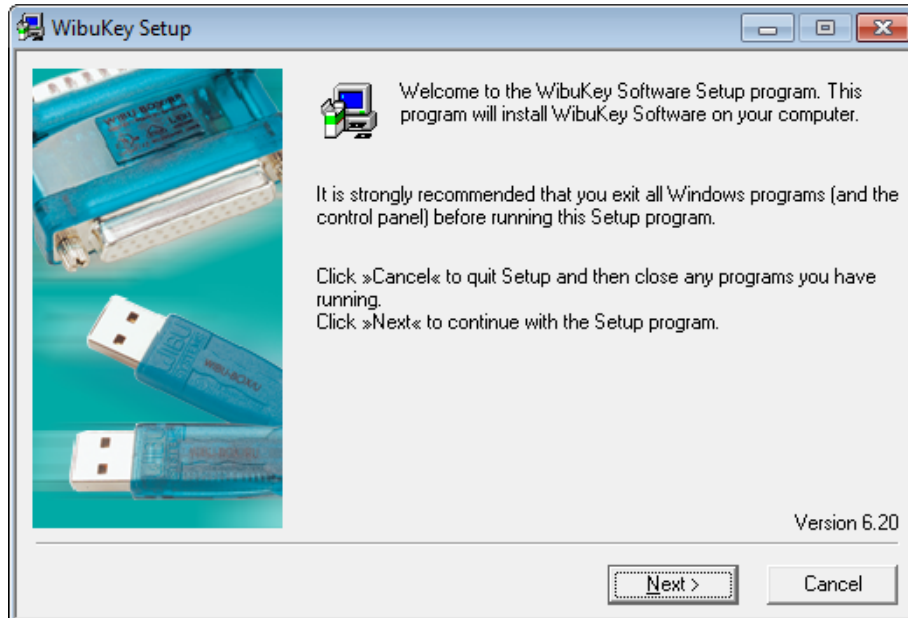
Otherwise continue to [Step 2. Attach the Dongle.](#)

Installing the Wibu Drivers:

The script to install the old **Wibu** dongle drivers begins.

WIBU-KEY Setup

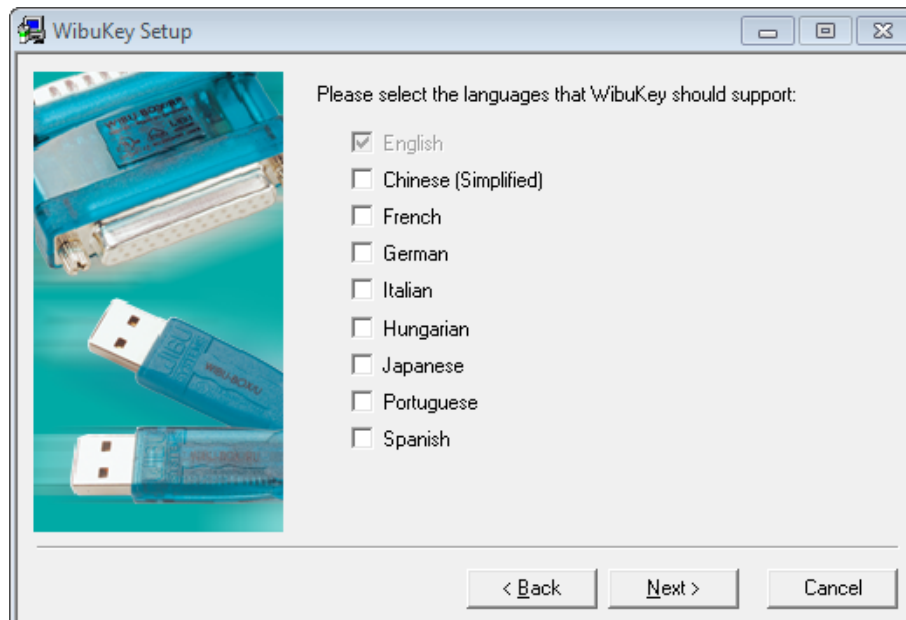
Welcome to WIBU-KEY Software Setup



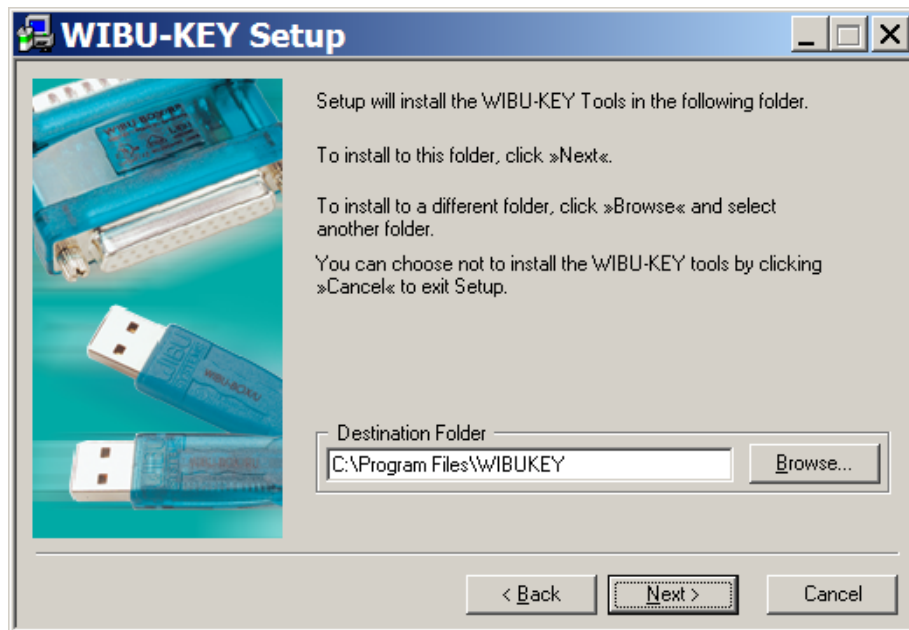
select **Next** to continue

WIBU-KEY Setup

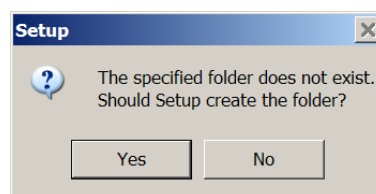
Language Selection



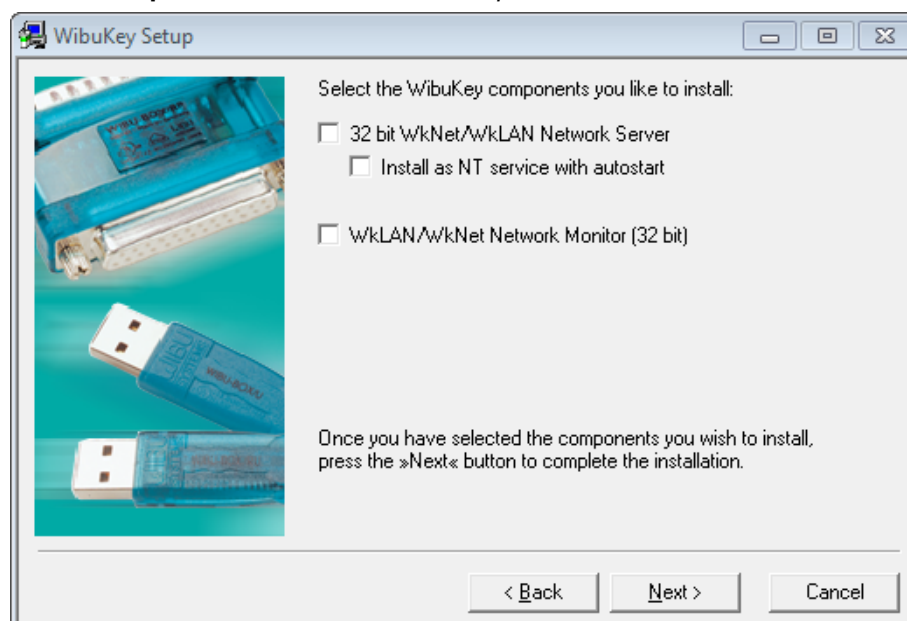
tick your language and then select **Next** to continue

WIBU-KEY Setup*Installation folder*

select **Next** to continue

WIBU-KEY Setup*Installation folder doesn't exist*

click Yes to continue

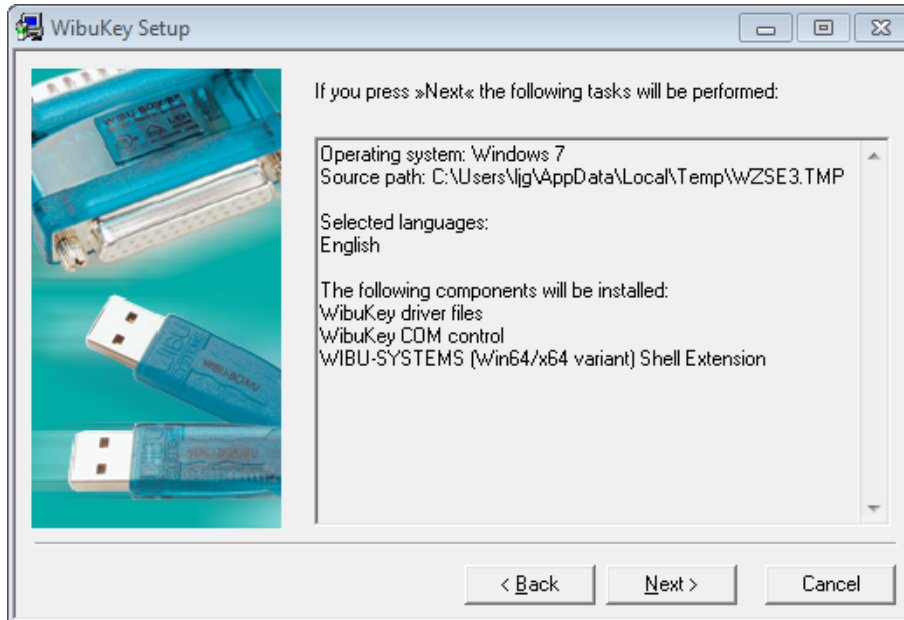
WIBU-KEY Setup*Component Selection*

For a standard install, nothing needs to be ticked on (the WibuKey components are for monitoring a Wibu network dongle).

make sure nothing is ticked and then select **Next** to continue

WIBU-KEY Setup

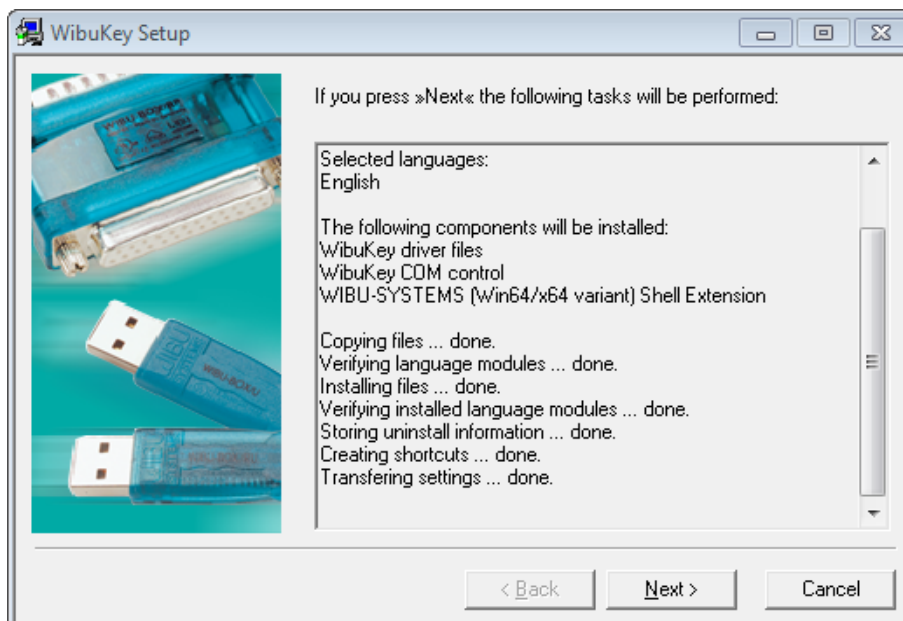
Tasks to be Performed



select **Next** to continue

WIBU-KEY Setup

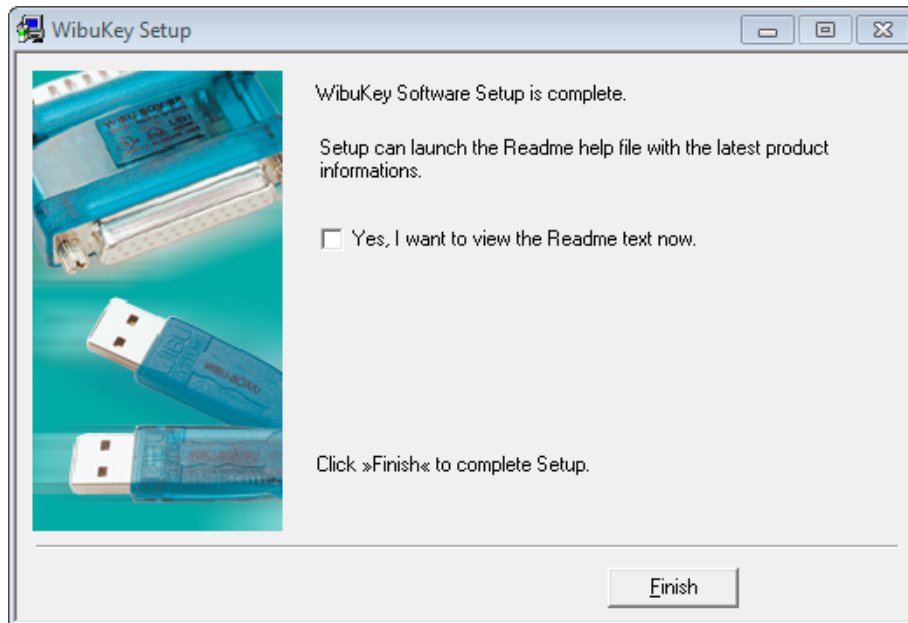
Tasks done



select **Next** to continue

WIBU-KEY Setup

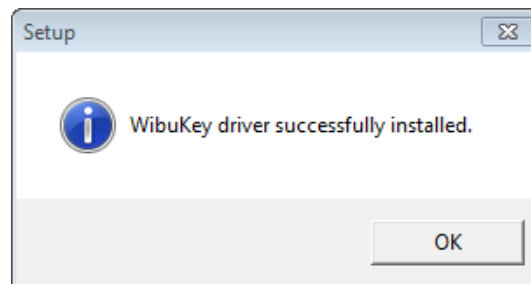
Setup Complete



leave **Yes, I want to view the Readme text now** unticked and select ***Finish***

Setup OK

Setup OK

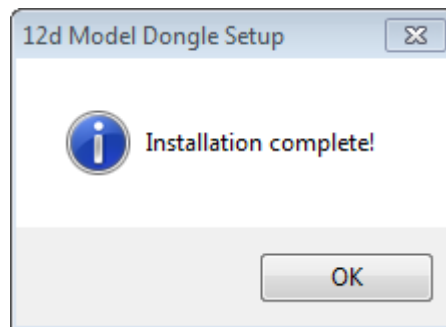


click ***OK***

The WIBU dongle drivers have now been installed

If both **CodeMeter** and **Wibu** were ticked on then the installation of the CodeMeter drivers will then begin. See [Installing the CodeMeter Drivers](#);

Otherwise the **12d Model Dongle Setup** screen will appear.



click **OK**

Continue to [Step 2. Attach the Dongle](#).

Step 2. Attach the Dongle

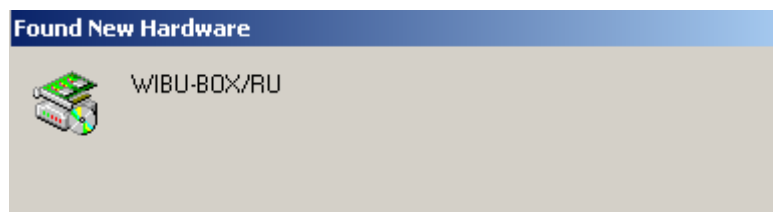
The **12d Model** dongle (CodeMeter or old Wibu) can now be attached to the computer.

For USB dongles:

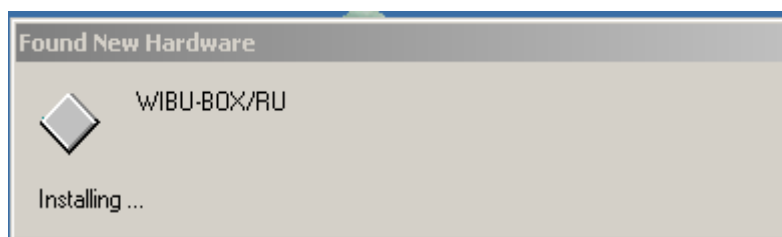
Warning: you must have System Administration rights the first time you attach a USB dongle to any USB port:

When a USB dongle is attached for the first time to any USB port, Windows will detect that it is new hardware and needs to load the dongle drivers for that USB port - this will require System Administration rights.

Since the dongle drivers have already been loaded onto your computer, when the USB dongle is attached to a new USB port, it will be recognised as new hardware



and Windows should automatically install the correct dongle driver.



IMPORTANT NOTE IF THE WIBU DONGLE IS NOT RECOGNISED:

If the WIBU dongle is not recognised and you get the **Found New Hardware** screen



please go to the section on how to find the Wibu drivers

NOTE - even though your dongle is working on one USB port, if you try and attach the dongle to a new USB port, the dongle drivers will need to be installed for the new USB port. You will need System Administration rights to install the dongle drivers on the **new** USB port.

The dongle must be attached to the USB port at all times, otherwise **12d Model** will stop running.

SPECIAL NOTE ON CERTIFYING CODEMETERS

The **12d CodeMeters** must communicate over the Internet with a **Wibu Time Server** every two months to check that there is no problem with the **CodeMeter** that your **12d Model** license is using. This is called **Certifying the CodeMeter**.

For Certification to occur, a computer that can access the **CodeMeter** must also have access to the Internet to run the **Certification**.

One month before the end of the two month period, **12d Model** brings up the **Certify CodeMeter Dongle** panel which gives the number of days, minutes and seconds remaining until Certification is required.

If you are using a new CodeMeter from your **12d Model Reseller**, then it will usually come already Certified.

For more information on Certifying, see [8 Errors Installing and Authorising on page 92](#).

Continue to [Step 3. Installing 12d Model 12 Release Version](#).

Step 3. Installing **12d Model 12** Release Version

The installer for **12d Model 12** is downloaded from the internet.

(a) Installing 12d Model from the Download Files:

To Run 12d Model 12 on 64 bit Windows:

If you are running **12d Model** on **64 bit Windows**, then you need to download the **12d Model 64 bit** installer which installs a **64-bit 12d.exe**.

To download the installer, click on

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_Model_12_C1p_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.

When running 12d Model 12 on 32 bit Windows:

If you are running **12d Model** on **32 bit Windows**, then you need to download the **12d Model 32 bit** installer which installs a **32-bit 12d.exe**.

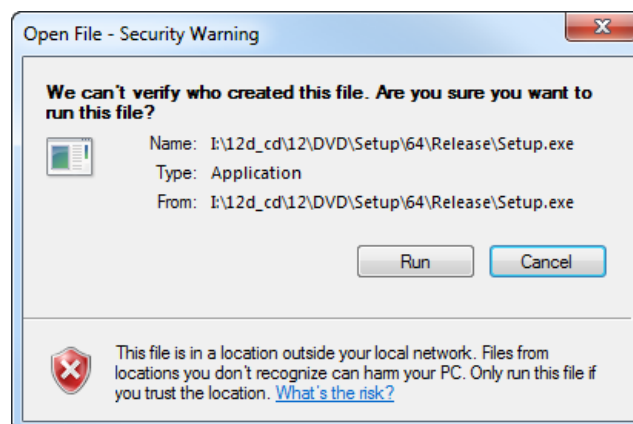
To download the installer, click on

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_Model_12_C1p_32_Setup.exe

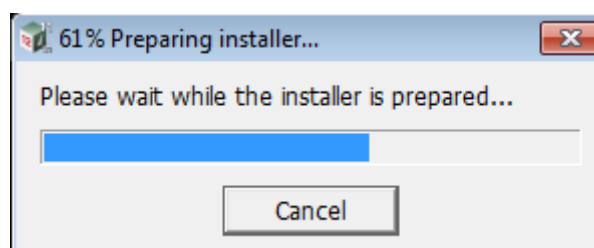
Note: If clicking on the link does not start up your Browser then copy the text of the link into your Browser.

Once the installer is downloaded, click on it (or run it) and the **12d Model** installation begins.

You may get a message warning you about not being able to verify who created the file:



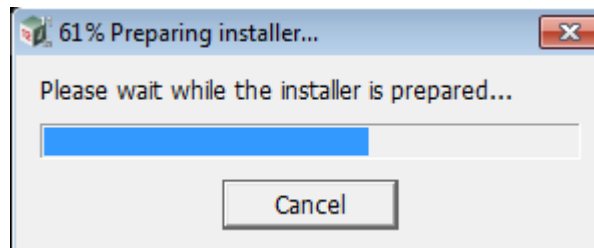
Click on **Run** so that the installation can begin.



Continue to [Installing 12d Model](#).

Installing 12d Model

The **12d Model 12** installation starts by unpacking the information in the installation exe and then the installation begins.

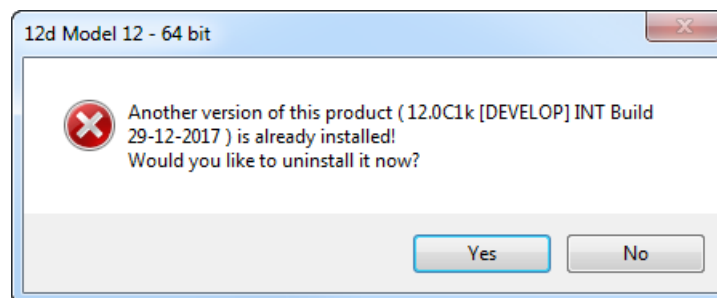


Note - the following screens are for the **64 bit** install but the **32 bit** install is identical except the words **64 bit** are replaced by **32 bit**.

If a **12d Model 12** of the same bit type is already installed on your computer, it must be uninstalled before the installation can proceed.

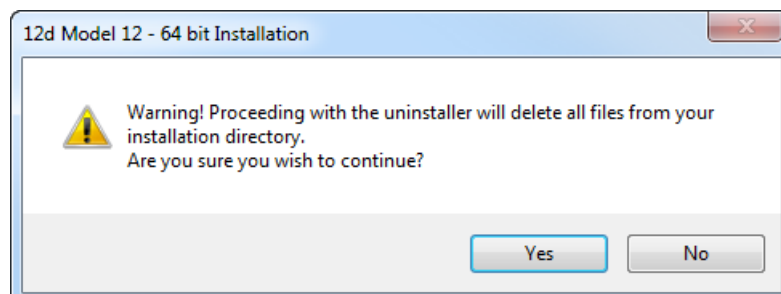
If the Installer detects this case, you will be asked if the Installer can **uninstall the existing version**. Unless this is done, the installation can not proceed.

Note: The uninstall deletes everything in the **12d\12dmodel\12.00** folder in **Program Files** (or in Program Files (x86) for a 32-bit Install on a 64-bit O/S) so you should never modify any of those files.



Click on **Yes** to continue.

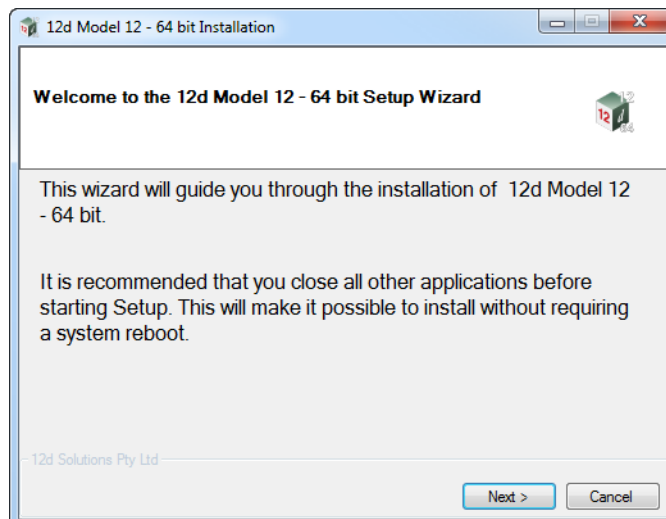
You then receive a **Warning** that the files will be deleted.



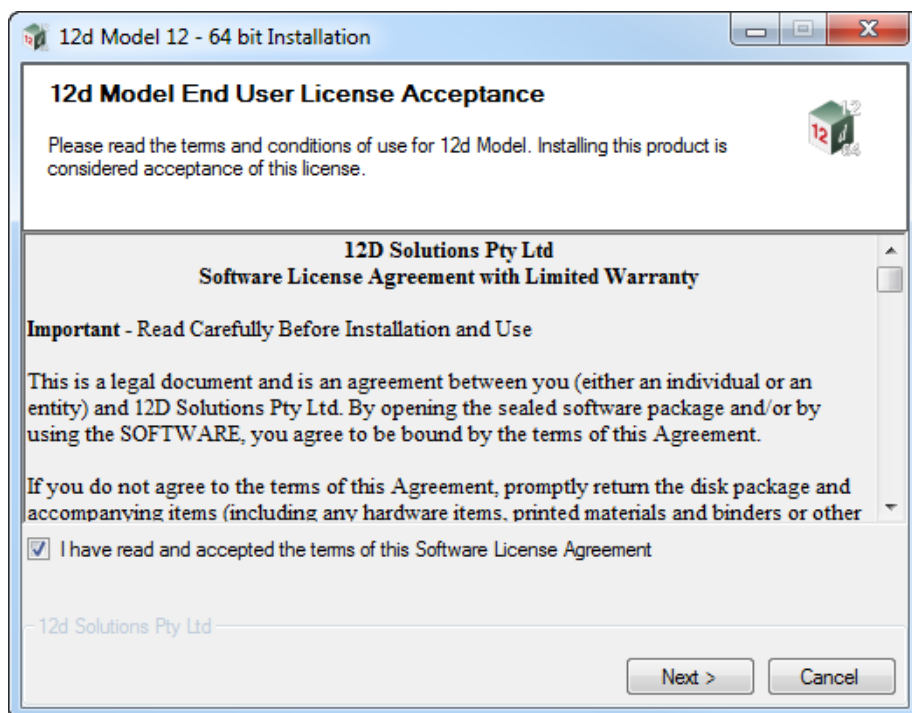
Click on **Yes** to continue.

All the files in the **12d\12dmodel\12.00** folder in **Program Files** (or in Program Files (x86) for a 32-bit Install on a 64-bit O/S) will then be deleted, and the **12d Model xx** entry removed from the Windows Registry.

The installation of the new **12d Model** can now begin and the **Welcome** screen is displayed.

Welcome*Welcome message*

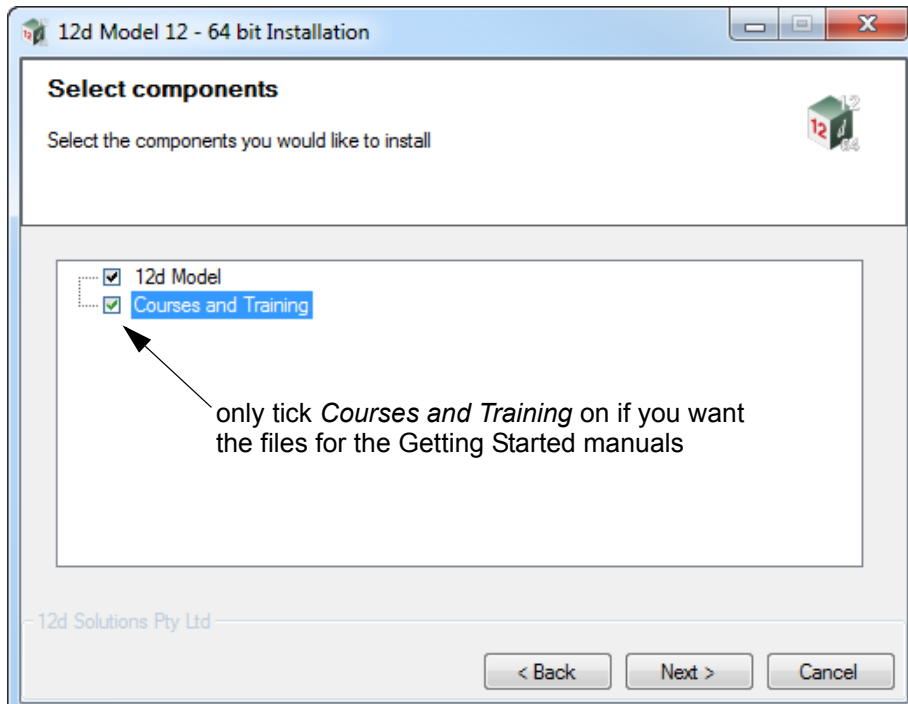
Select **Next** to continue with the installation

Software License Agreement*12D Solutions license agreement*

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

Select **Next** to continue with the installation

Select Components

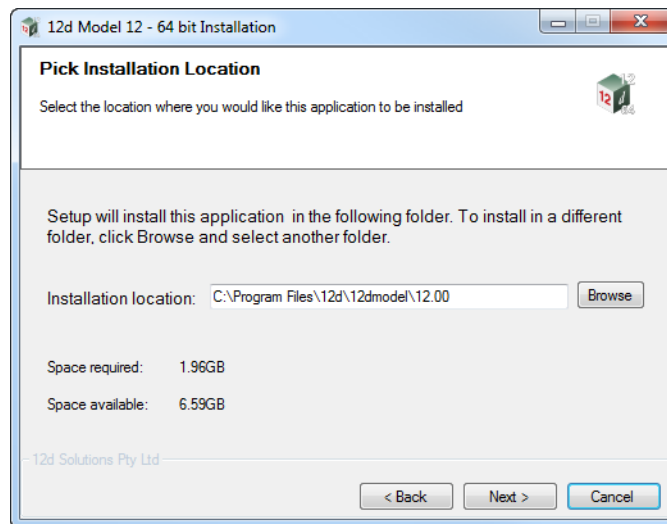


Tick on **12d Model** to install **12d Model**.

Only tick on **Courses and Training** if you want to install the files for the **Getting Started** manuals.

Select **Next** to continue with the installation

Installation Location



Continue with the default installation folder for the software:

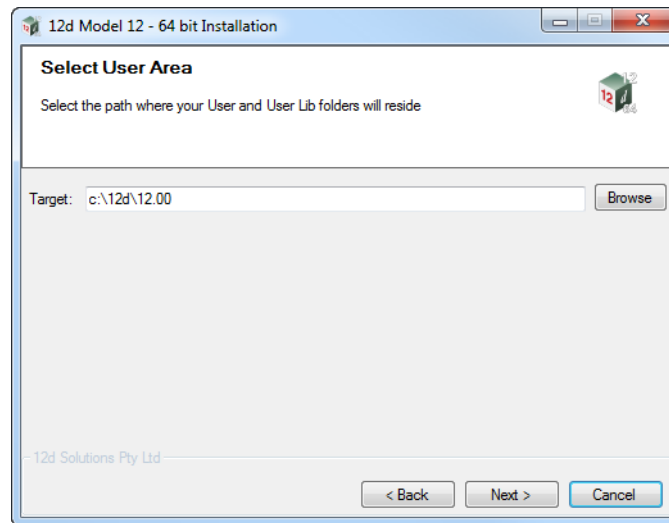
for 64 bit version: *c:\Program Files\12d\12dmodel\12.0*

for 32 bit version: *c:\Program Files (x86)\12d\12dmodel\12.0*

or click on **Browse** to browse to another folder for the installation

Select **Next** to continue with the installation

User Area



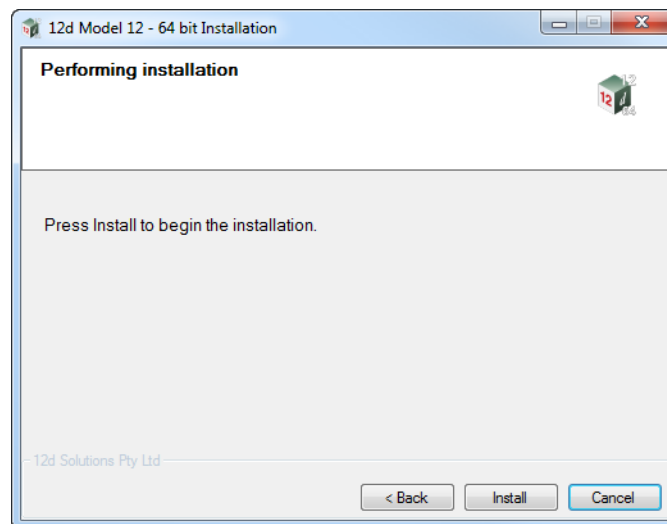
Continue with the default folder for the **User Area** for the software:

`c:\12d\12.0`

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

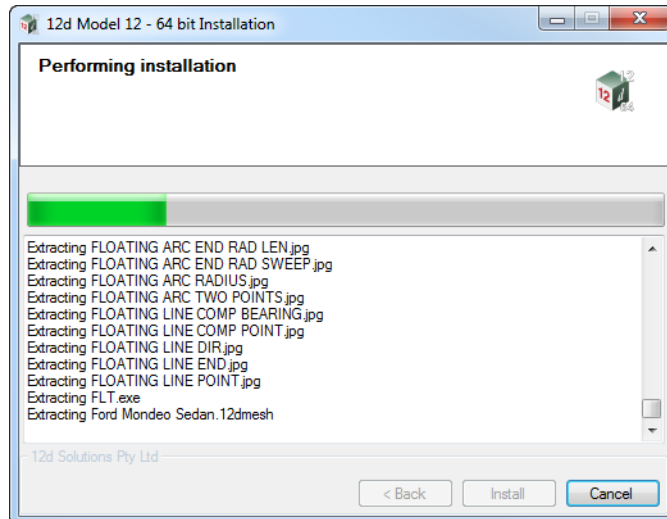
Select **Next** to continue with the installation

Ready to Install

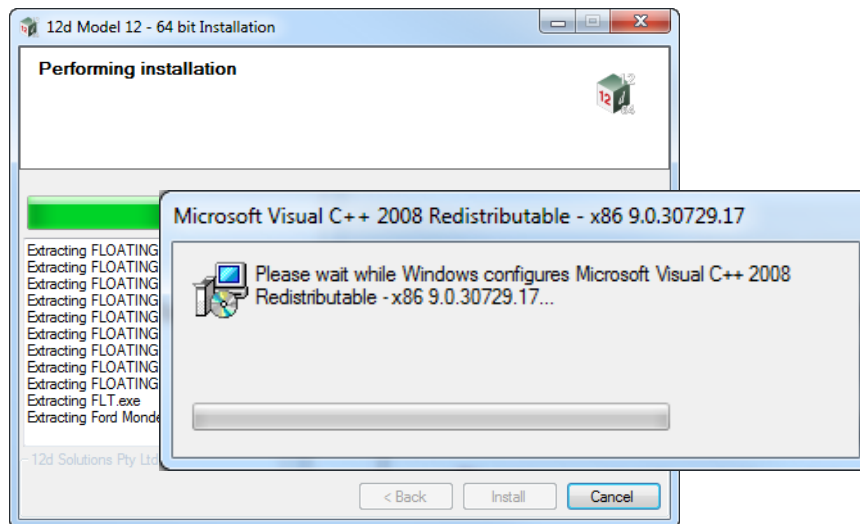


Select **Install** to begin the actual installation

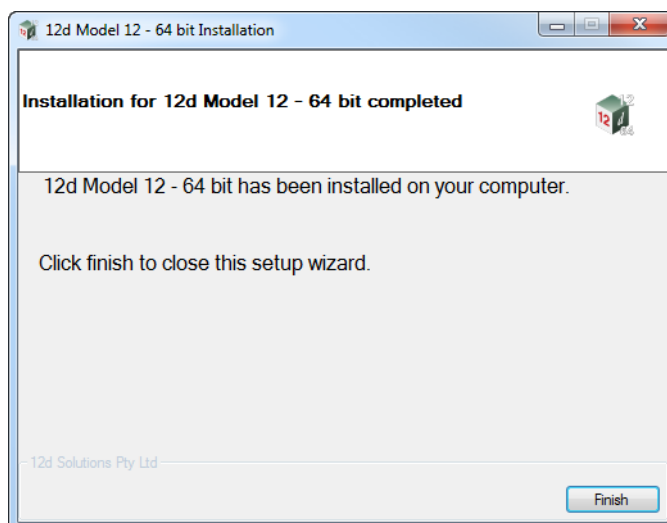
The software will be copied and installed onto the computer.



The Microsoft C++ Redistributables will be automatically installed (64 and 32 for 64-bit install)



Setup Complete



End of the installation.

Select **Finish** to complete the installation

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

12d Model will not function without an authorisation file called **nodes.4d**.

The final step is to install and test the **nodes** file. Go to [Step 4. Installing the Nodes.4d file.](#)

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

[4.1 Folders Created by the Installation](#)

[4.2 Icons Created by the Installation,](#)

Continue to [Step 4. Installing the Nodes.4d file.](#)

Step 4. Installing the **Nodes.4d** file

12d Model will not create new projects or open an existing project without an authorisation file called **nodes.4d** with valid information in it.


The information inside **nodes.4d** controls

- (a) **which 12d dongles** are authorised to run **12d Model**
- (b) what **version** of **12d Model** will run for a dongle
- (c) what **modules** are authorised to run for a particular 12d dongle

To authorise **12d Model** to run with **your 12d dongles**, a file called **nodes.12dxxn** where **xx** is the **12d Model** version number, will have been emailed to you by your local **12d Model** Reseller.

For example, for **12d Model 11** the file will be called **nodes.12d11n**

Subject: 12D Auth file for 12D Solutions - Lee; Product 12d Model - 5c2d47013c -

Attachments:  nodes.12d11n (11 KB)

Nodes file for : 12D Solutions - Lee
- 5c2d47013c -

The authorization file for 12d Model - is attached to this message.

The self-install procedure which follows is for this one workstation and requires 12dmodel installed.
After 12d Model version 11 is installed, please double click on the file attachment [nodes.12d11n] & to open it and 12d will guide you through.

If this succeeds you do not need to read further.

If this does not work it may be that the mail programme does not allow you to run attachments.
In this case, simply save the attached file to your desktop and open (from the right-mouse menu or by double-click).
This will start the installation for the nodes file.

Instructions for manual Installation:
For version 11 of 12d Model, usually goes in the folder
"12d\11.00" and once there it must be renamed to "nodes.4d"

Codemeter dongles require a driver installation which can be obtained here
<http://www.wibu.com/en/downloads-user-software.html>
If the product is still not authorized after replacing or updating "nodes.4d"
please contact 12D Solutions on (61)(02) 9970 7117 or email support@12d.com

Installing **12d Model xx** on a computer sets up a **Windows** file association so that a **nodes.12dxxn** file is recognised and brings up the **Install a 12d Model xx Nodes File** panel which is used to install a **nodes.4d** file in the correct location.

In the email, double click on the files **nodes.12dxxn** and the **Opening Mail Attachment** panel comes up.

Subject: 12D Auth file for 12D Solutions - Lee; Product 12d Model - 5c2d47013c -
 Attachments: nodes.12d11n (11 KB)

Nodes file for : 12D Solutions - Lee
 - 5c2d47013c -

The authorization file for 12d Model - is attached to this message.

The self-install procedure which follows is for this d
 After 12d Model version 11 is installed, please dou

If this succeeds you do not need to read further.

If this does not work it may be that the mail program
 In this case, simply save the attached file to your d
 This will start the installation for the nodes file.

Instructions for manual Installation.

For version 11 of 12d Model, usually goes in the fo
 "12d\11.00" and once there it must be renamed t

Codemeter dongles require a driver installation which can be obtained here

<http://www.wibu.com/en/downloads-user-software.html>

If the product is still not authorized after replacing or updating "nodes.4d"

please contact 12D Solutions on (61)(02) 9970 7117 or email support@12d.com

Opening Mail Attachment



You should only open attachments from a trustworthy source.

Attachment: nodes.12d11n from 12D Auth file for 12D
 Solutions - Lee; Product 12d Model - 5c2d47013c - -
 Message (HTML)

Would you like to open the file or save it to your computer?

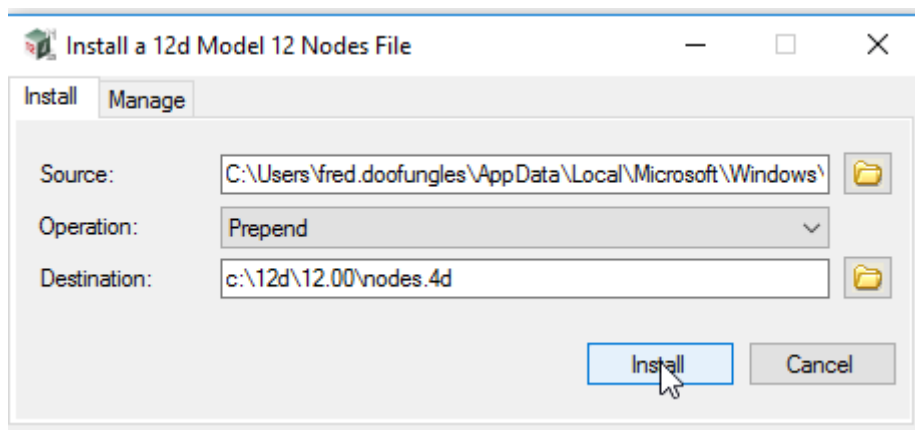
Open

Save

Cancel

☒ Always ask before opening this type of file

Click on **Open** and then the **Install a 12d Model xx Nodes File** panel appears



The choices for **Operation** are:

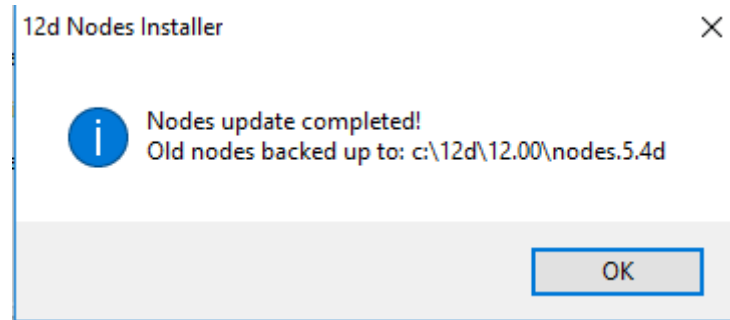
Prepend - if a **nodes.4d** file already exists, the information in the **nodes.12d12n** file is added to the beginning of the existing nodes file. A backup up copy of the existing **nodes.4d** is created.

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

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

Select **Replace**, **Append** or **Prepend** and then click **Install**.

The new/updated **nodes.4d** file is created in the **Destination** folder (default is **C:\12d\12.00**) and if a **nodes.4d** file already existed, a backup copy of it is made.



Note - if you don't have the file **nodes.12dxxn** 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.12dxxn** 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.

If that doesn't work, start up **12d Model xx** and click on the **Nodes.4d** button at the bottom of the **Open a Recent Project** panel. This will also bring up the **Install a 12d Model Nodes File** panel and you can browse for the **nodes.12dxxn** file in the **Source** panel field. You can then continue as per the instructions above.

CONGRATULATIONS - 12d Model has now been successfully installed.

If **12d Model** did **not** install correctly and an Authorization Error panel came up, go to the section, [8 Errors Installing and Authorising](#), of these notes.

To obtain documentation for **12d Model**, go to [9 Documentation on page 95](#).

Expanded Important Note on Nodes.12d12n and Nodes.4d

The **12d Model 12 nodes.12d12n** file will normally be emailed to you.

During the installation of **12d Model 12**, an association is created for files ending in **.12d12n** so after the installation, opening the **nodes.12d12n** on the email will bring up the **Install a 12d Model Nodes File** program which can copy the information in the **nodes.12d12n** file to the required area (normally **C:\12d\12.00**) and **nodes.4d** file.

If you do not have the **nodes.12d12n** attached to an email but instead have it in a folder and have installed **12d Model 12**, double clicking on the **nodes.12d12n** file will also bring up the **Install a 12d Model Nodes File** program which can copy the information in the **nodes.12d12n** file to the required area (normally **C:\12d\12.00**) and **nodes.4d** file.

Or if the **12d Model 12** icon is clicked on, the **Open a Recent Project** panel comes up and clicking on the **Nodes** button will also bring up the **Install a 12d Model Nodes File** program which can copy the information in the **nodes.12d12n** file to the required area (normally **C:\12d\12.00**) and **nodes.4d** file

Please **do not change** the **name** of the created **nodes.4d** file. **12d Model** will only search for an authorization file called **nodes.4d**.

4.1 Folders Created by the Installation

- (a) For **64 bit 12d Model** on **Windows 64 bit** operating systems:

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

C:\Program Files\12d\12dmodel\12.00

OR

- (b) For **32 bit 12d Model** on **Windows 32 bit** operating systems

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

C:\Program Files\12d\12dmodel\12.00

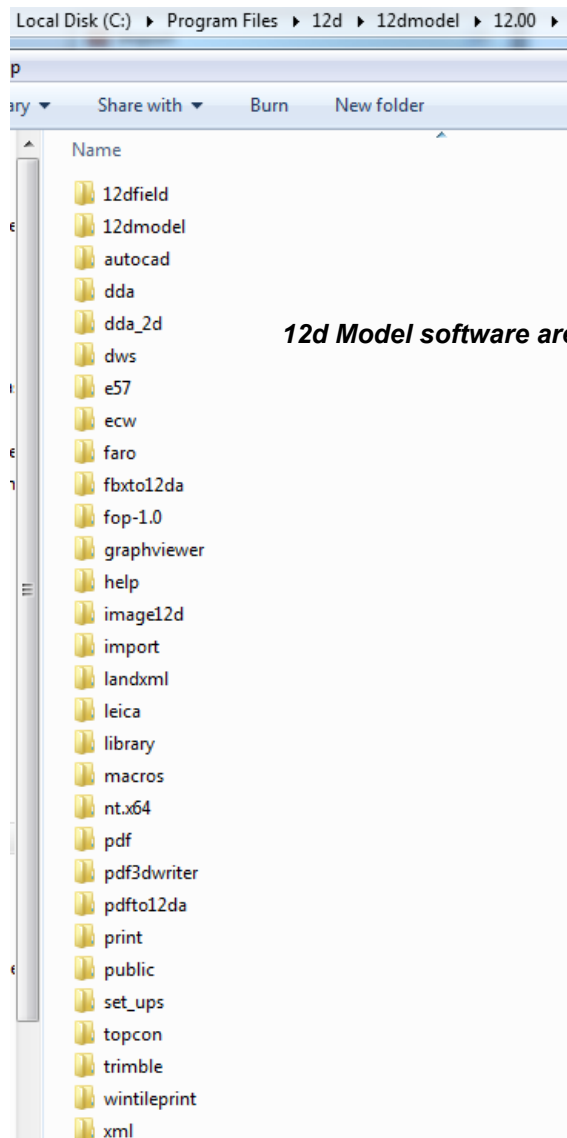
OR

- (c) For **32 bit 12d Model** 32 bit (for versions up to 5M) on **Windows 64 bit** operating systems:

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

C:\Program Files (x86)\12d\12dmodel\12.00

12d Model users normally only have **read** access to the *Program Files* and/or *Program Files (x86)* folders.

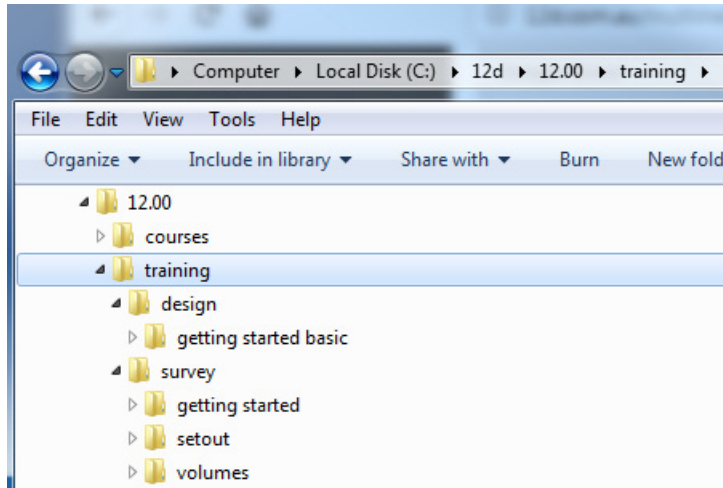


12d Model software area under Program Files

The **12d Model** installation on either 32 bit or 64 bit Windows, also creates an area
C:\12d\12.00

which during the installation is given read/write access for the user.

If the **Courses and Training** component was ticked, then the installation will place the training data used with the *Getting Started for Design and Getting Started for Surveying* manual in the folder **12d\12.00** (or the folder you selected)



12d Model user areas

The folder **12d\12.00** is also the default folder where the *nodes.4d* file will be installed, and is also the default area where a user creates their own subfolders **User** and **User_Lib** for their user configurations of **12d Model**.

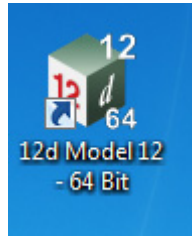
Warning

An Uninstall will NOT delete any of the training material loaded into **12d\12.0\training** and **12d\12.0\courses** by a previous installation.

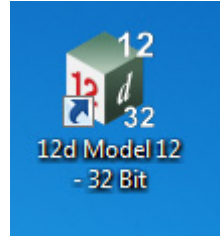
The **12d Model 12** Install (32 bit and 64 bit) will overwrite any files of the same name in these areas.

4.2 Icons Created by the Installation

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



icon for 12d Model 64 bit exe



icon for 12d Model 32 bit exe

The **12d Model 12 - 64** and **12d Model 12 - 32** icons fire up **12d Model** and attach to the folder 12d\12.00.

4.3 Copying Existing User, User_Lib and env.4d

If you have **12d Model 11** installed on your computer, then you will probably want the files in the folders **User** and **User_Lib**, and **env.4d** to be used for **12d Model 12**.

- (a) The folder **User** contains your files that are to replace those that **12d Model** installs in *Set_ups* (e.g. *names.4d*, *linestyl.4d*) and if you already have some, you will probably also want to use them for **12d Model 12**.

For **12d Model 11**, the default place for **User** is *c:\12d\10.00\User* but it could also be pointed to by the environment variable **USER_4D**.

If there is an existing **User** folder, you need to create a new **User** folder for **12d Model 12** and copy to it any files that you want for **12d Model 12**.

The default place for the new **User** in **12d Model 12** is *c:\12d\12.00\User* but if **USER_4D** in your *V11 env.4d* was used to point to your *V11 User* then you will need to change **USER_4D** in your *V12 env.4d* to point to your *V12 User* folder

You may need to copy the whole of **User** to the new area.

- (b) The folder **User_Lib** contains your own library files and you will probably also want to use them for **12d Model 12**.

For **12d Model 11**, the default place for **User_Lib** is *c:\12d\10.00\User_lib* but it could also be pointed to by the environment variable **USER_LIB_4D**.

If there is an existing **User_Lib** folder, you need to create a new **User_Lib** folder for **12d Model 12** and copy to it any files that you want for **12d Model 12**.

The default place for the new **User_Lib** in **12d Model 12** is *c:\12d\12.00\User_Lib* but if **USER_LIB_4D** in your *V11 env.4d* was used to point to your *V11 User_Lib* then you will need to change **USER_LIB_4D** in your *V12 env.4d* to point to your *V12 User_Lib* folder

You may need to copy the whole of **User_Lib** to the new area.

- (c) Setting Up Your *env.4d* File for 12d Model 12

The file **env.4d** contains environment variables that are used to customise **12d Model**.

An **env.4d** file is installed in the *Set_Ups* folder when **12d Model** is installed and if a user wants to make any modifications to any of the environment variables in *env.4d*, then the modified *env.4d* file is placed in the **User** folder.

So if you have an **env.4d** file in your **User** folder in **12d Model 11**, you will probably also want to use it **12d Model 12**.

The default location for your modified **env.4d** file in **12d Model 11** is in your **User** folder for **12d Model 11** so for **12d Model 12**, you need to copy this **env.4d** file to your **User** folder in **12d Model 12**.

(d) Are you using a 12d Network Lock ?

If you are setting up **12d Model** to use a **12d Network CodeMeter** for the first time, please read the section [10 What's New in 12d Model 12](#).

If you are using a **12d Network Lock** (**CodeMeter** or **Wibu**) for **12d Model 11**, then the file **dongles.4d** which is in the **User** folder contains the information to tell **12d Model** that it has to search for a network lock, and possibly which computer the network lock is on.

So if you are using a **12d Network Lock** for **12d Model 12**, you will need to copy your **12d Model 11 dongles.4d** file to the **12d Model 12 User** folder.

4.4 End of the Notes for Installing 12d Model 12

This ends the detailed notes for installing **12d Model 12**.

If you need to set up a **Network CodeMeter**, go to the section [7 Network CodeMeters](#).

The links for downloading documentation on **12d Model** are given in [9 Documentation](#).

The links for downloading information, power points and videos on what is new in **12d Model 12** are given in [10 What's New in 12d Model 12](#).

The rest of the chapters in this document are

[7 Network CodeMeters](#)

[9 Documentation](#)

[10 What's New in 12d Model 12](#)

[8 Errors Installing and Authorising](#)

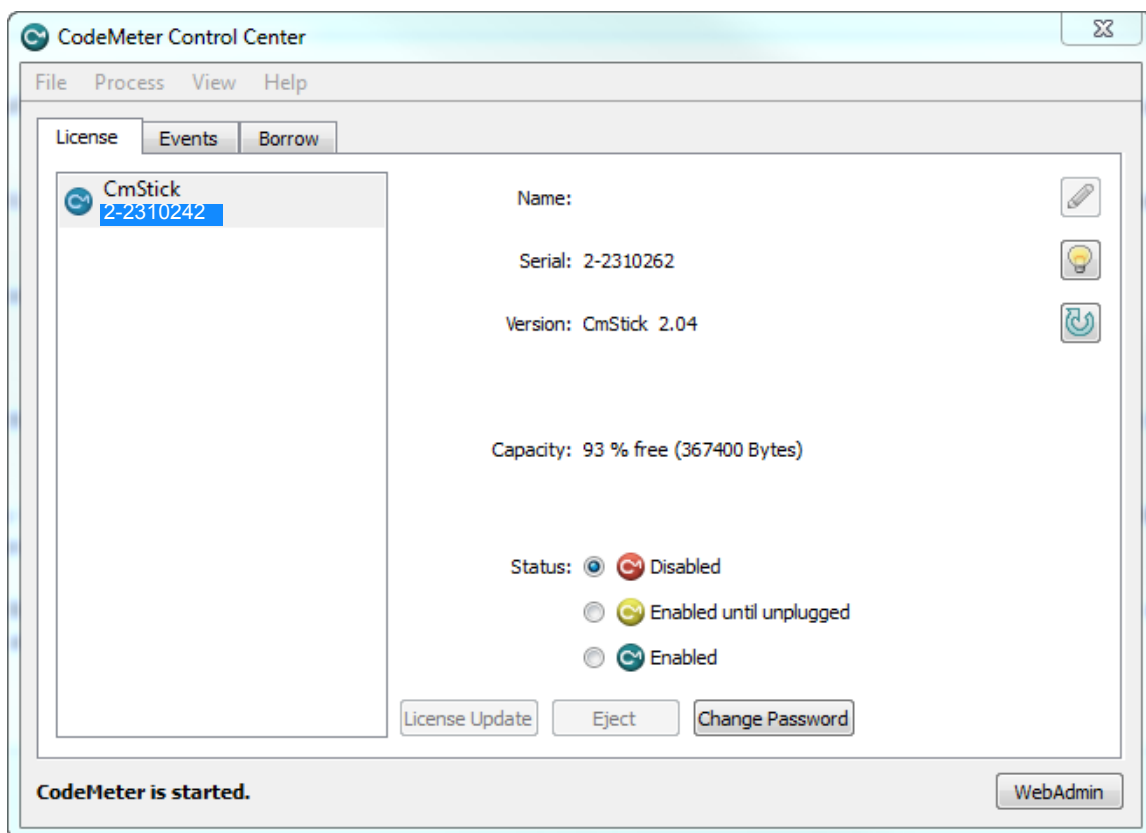
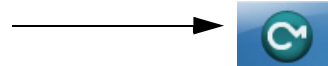
[8 Errors Installing and Authorising](#)

5 The CodeMeter Control Center Software

The **CodeMeter Control Center** is used on a particular computer to display which Codemeters are on the computer, to stop and start the **CodeMeter Runtime Server** service on the computer, and to update the contents of any CodeMeters on the computer.

It can also bring up the **CodeMeter WebAdmin** panel which gives information on CodeMeters on any computer that are visible on the network. It can monitor the number of licenses being used by any of the **12d dongles** within any of the CodeMeters visible on the network.

To bring up the **CodeMeter Control Center**, click on the **CodeMeter** icon that was installed on your task bar.



Options under the **Process** menu can start and stop the **CodeMeter Runtime Server** service on the computer. See [5.1 Stopping & Starting the CodeMeter Runtime Server on page 41](#))

The **License Update** button is for reporting on, and updating the information about **12d Model** licenses for any CodeMeter (Network or Standalone) attached to **this** computer. See [7.6 Updating Licenses in a Network CodeMeter on page 78](#)).

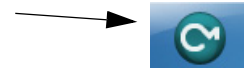
The **WebAdmin** button brings up the **CodeMeter WebAdmin** panel which can display information about **12d Model** licenses for **any** CodeMeter (Network or Standalone) that is visible on the computer network. See [7.6 Updating Licenses in a Network CodeMeter on page 78](#).

5.1 Stopping & Starting the CodeMeter Runtime Server

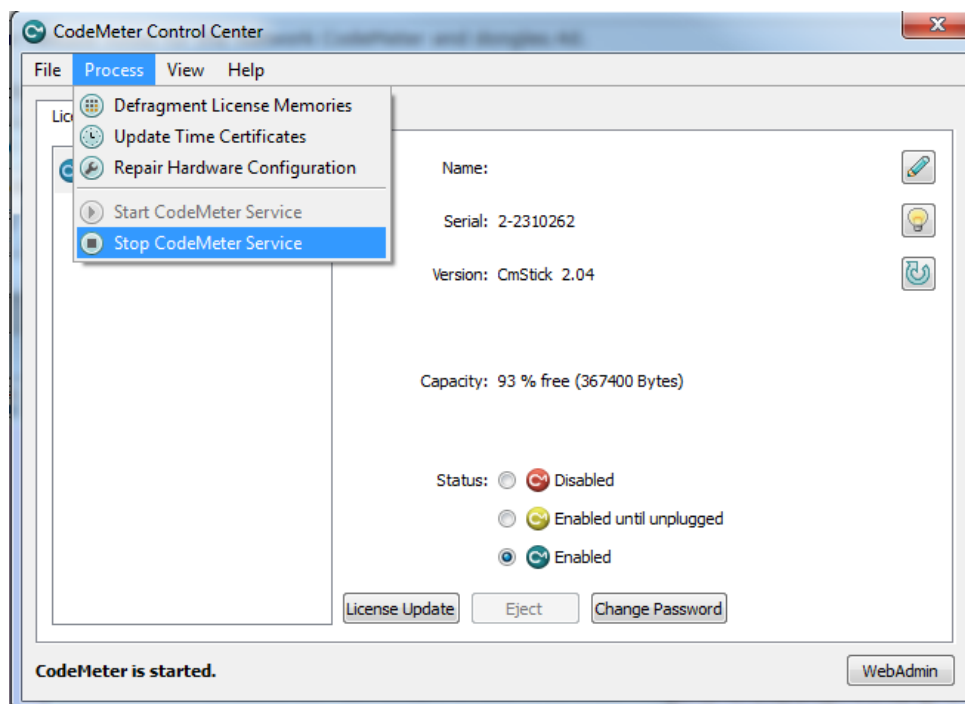
Some changes to CodeMeter configurations on a computer require that the **CodeMeter Runtime Server** service is restarted on the computer. In these cases, there is usually a message to say **Changes only take effect after restarting CodeMeter**.

The stopping and starting of the CodeMeters on a computer is done from the **CodeMeter Control Center**.

Click on the **CodeMeter** icon that was installed on your task bar to bring up the **CodeMeter Control Center** which shows what Codemeters are on this computer.

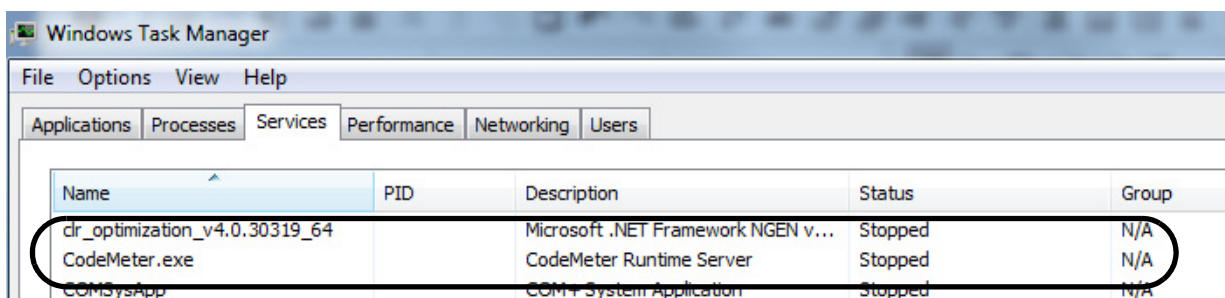


To **stop** the **CodeMeter Runtime Server** service, click on **Process > Stop CodeMeter Service** in the **CodeMeter Control Center**.

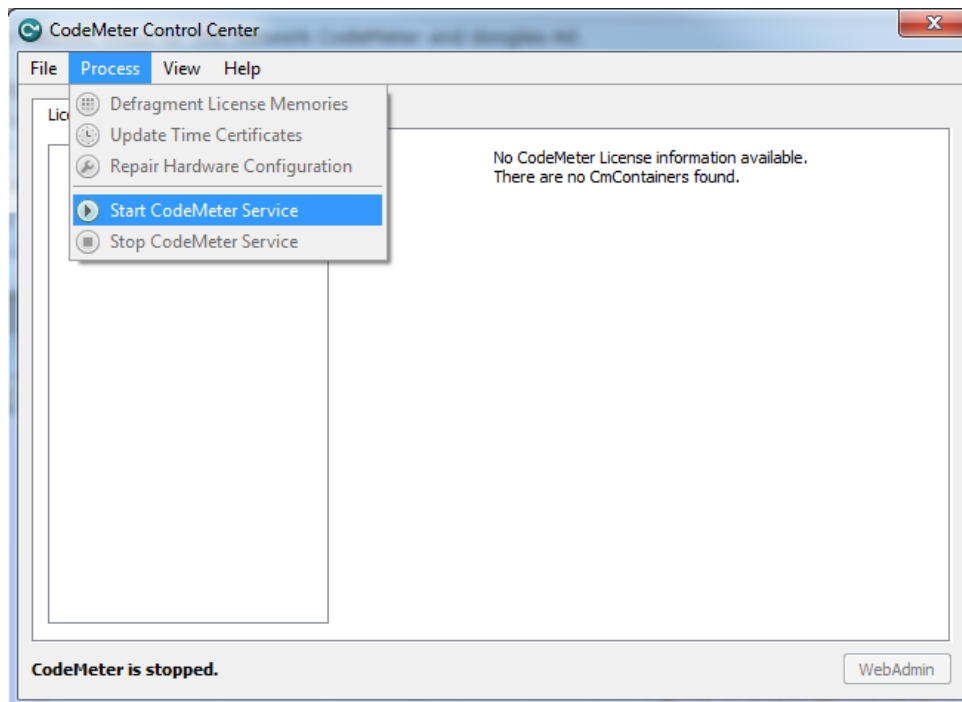


You will be asked to confirm that this is to be done.

The **CodeMeter Control Center** will then reappear with no CodeMeters being found on the computer and if you look in the Windows Task Manager, the **CodeMeter Runtime Server** service will be shown as **Stopped**.

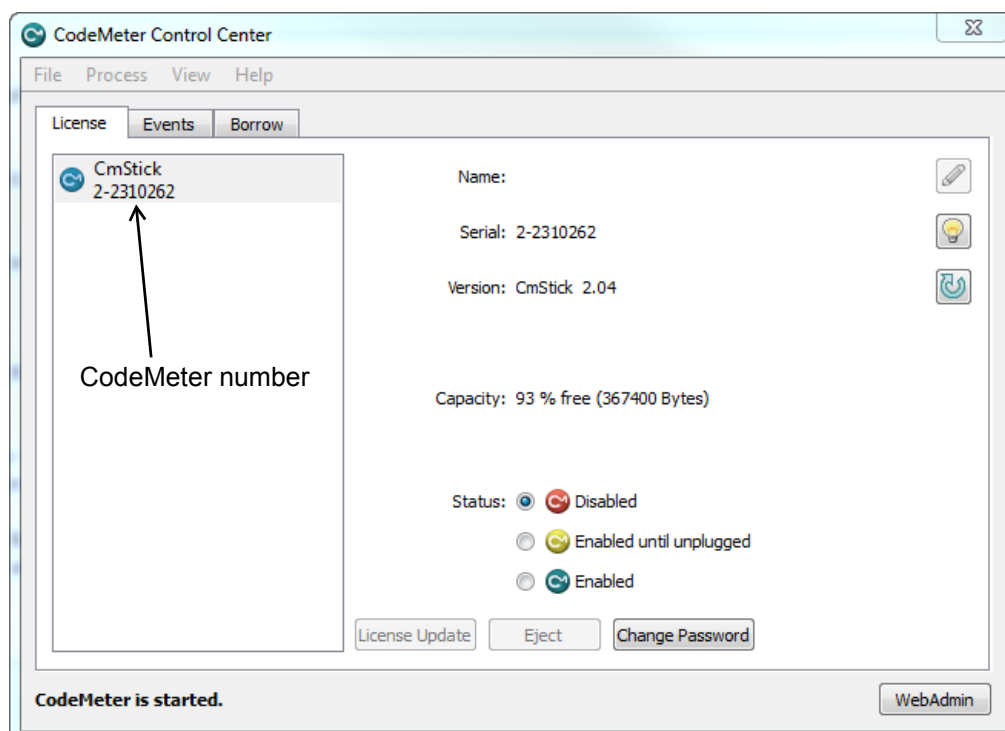


To **start** the **CodeMeter Runtime Server** service, click on **Process > Start CodeMeter Service** in the **CodeMeter Control Center**.

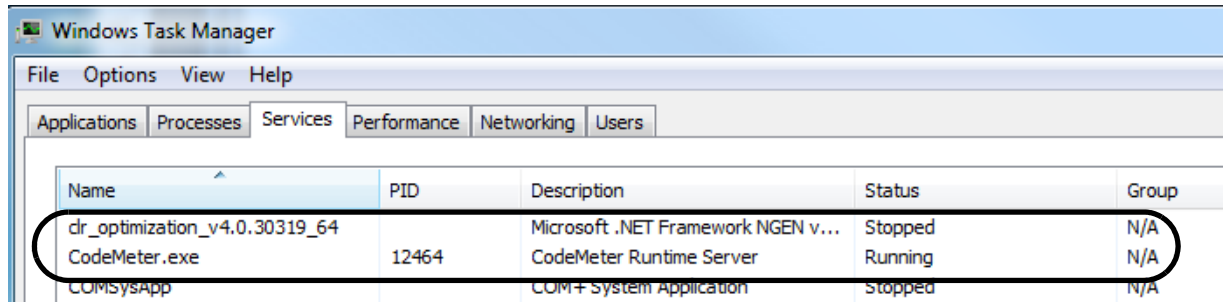


You will be again be asked to confirm that it is to be done.

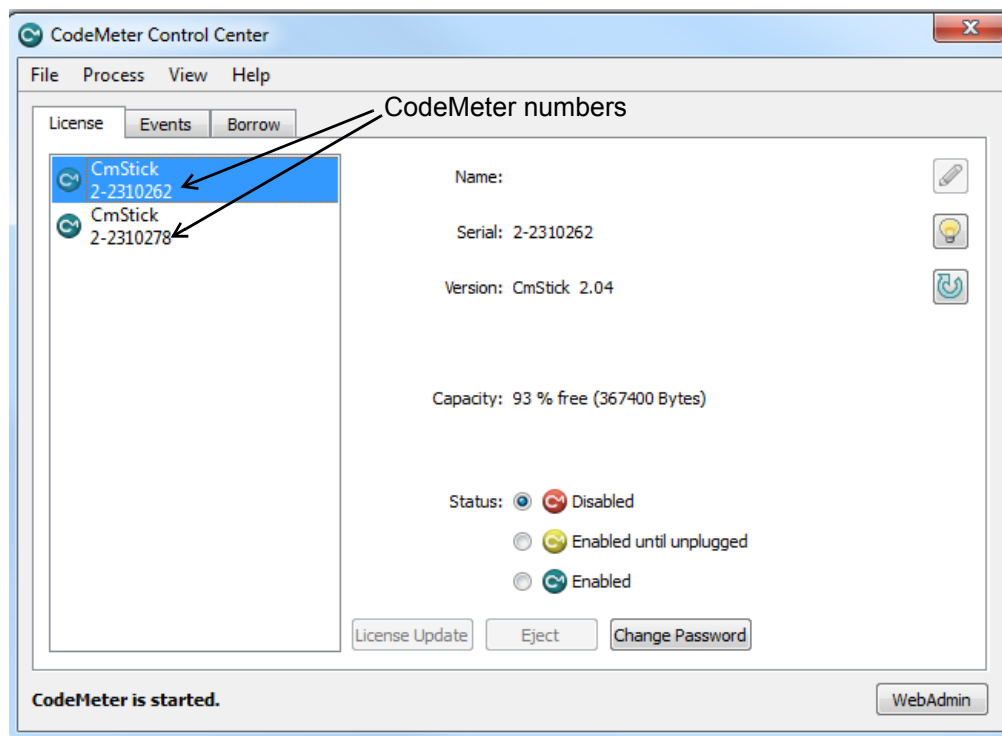
After a short time, the **CodeMeter Control Center** panel will then reappear displaying the CodeMeters on this computer.



If you look in the Windows Task Manager, the **CodeMeter Runtime Server** service will be shown as **Running**.



Note: There may be more than one **CodeMeter** attached to the computer. For example



Warning: Access to **all** the CodeMeters on the computer is stopped by stopping the **CodeMeter Runtime Server** service.

5.2 Port Address for CodeMeter Communication


The **CodeMeter License Server** uses a specific IP port (defaulted on 22350) to communicate with your computer and the network. This network port is registered at **IANA** (Internet Assigned Numbers Authority) and is uniquely assigned for CodeMeter® communication.

Please make sure that your firewall is not blocking this port.

Enable the used IP port 22350 and make sure it is accessible by CodeMeter®, *i.e.* share the communication for this IP port.

The IP port used for communication can be changed by the **CodeMeter WebAdmin** panel.

Click on the **Configuration > Server** tab.



The screenshot shows the CodeMeter WebAdmin interface. The title bar reads "CodeMeter WebAdmin" with a logo on the right. Below the title bar is a navigation menu with tabs: Home, Content, Server, Configuration, Diagnosis, Info, and Help. Under the "Configuration" tab, there is a sub-menu: Network, Server, Proxy, Access Control, Certified Time, WebAdmin, Backup, and Borrowing. The "Server" sub-tab is selected. The main content area is titled "Server" and contains the following configuration options:

- Bind Address: All (Default)
- Run Network Server: ☒
- Network Port *: 22350
- Run CmWAN Server: ☐
- CmWAN Port *: 22351

At the bottom of the configuration area are two buttons: "Apply" and "Default". Below the buttons, a note states: "(*) Changes only take effect after restarting CodeMeter".

Change the **Network Port**: field to the number of the port that you want the CodeMeter to communicate over, and then press **Apply**.

After that for the change to take effect, you need to stop and then restart the **CodeMeter Runtime Server** service. See [5.1 Stopping & Starting the CodeMeter Runtime Server](#).

6 Certifying CodeMeters

Both **Network CodeMeters** and stand alone **Codemeters** (both will now be referred to as **CodeMeters**) use the **Certified Time** capability of the **CodeMeter**.

What this means is that the **Codemeter** stores a time called the **Certified Time**, and a **12d Model** license can only be obtained from the **Codemeter** for up to two months after the **Certified Time** stored in the **CodeMeter**.

Consequently for a **CodeMeter** to be usable, the **Certified Time** in the **CodeMeter** must be updated to the current date at least every two months.

This process of updating the **Certified Time** in a **CodeMeter** is called **Certifying the CodeMeter**.

Updating the **Certified Time** in a **CodeMeter** must be done over the Internet and needs communication between the **CodeMeter** and a **Certified Wibu Time Server**.

So for Certification to occur, a computer that can access the **CodeMeter** must also **have access to the Internet at least every two months** so it can run the Certification.

Certifying a CodeMeter can be done

- (a) from inside **12d Model** itself
- (b) over the internet by using the **CodeMeter Control Centre**
- or
- (c) automatically by **12d Model**

For full information on **Certifying CodeMeters**, see:

[6.1 Displaying and Updating the Certified Time](#)

[6.2 Time Servers for Certified Time](#)

[7 Network CodeMeters](#)

Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

6.1 Displaying and Updating the Certified Time

To display and update the **Certified Time** in the **CodeMeter**, you need access over the Internet to a **CodeMeter Time Server** (see [6.2 Time Servers for Certified Time](#)).

This Internet communication is done through a set IP port (see [7 Network CodeMeters](#)).

The **Certified Time** can be displayed and updated either

(a) **manually over the internet**

See [6.1.1 Updating the Certified Time From Outside 12d Model](#)

(b) **manually from within 12d Model**

See [6.1.2 Updating the Certified Time from 12d Model](#)

or

(c) **automatically by 12d Model**

See [6.1.3 Automatically Updating the Certified Time with 12d Model](#).

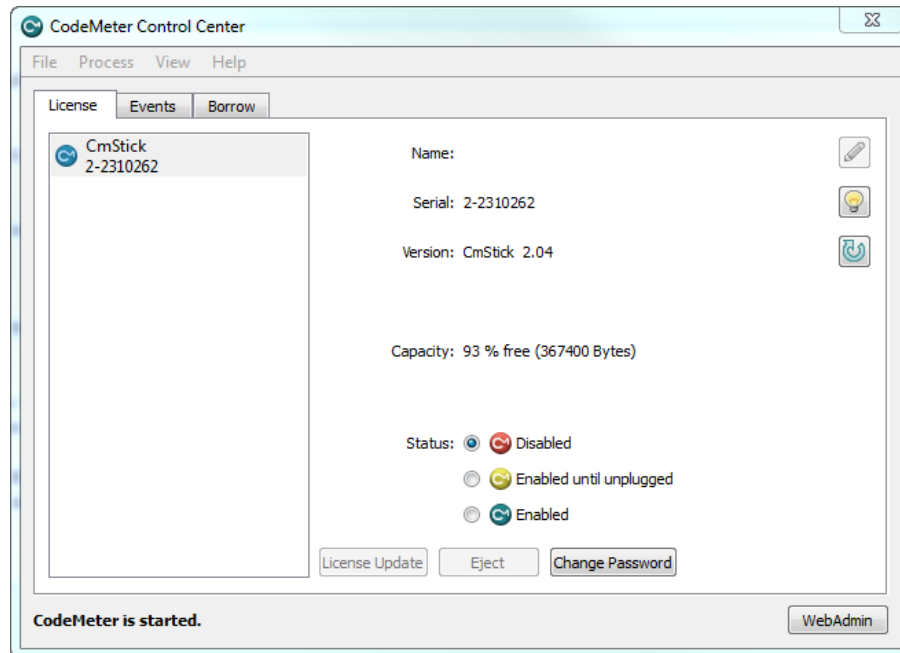
Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

6.1.1 Updating the Certified Time From Outside 12d Model

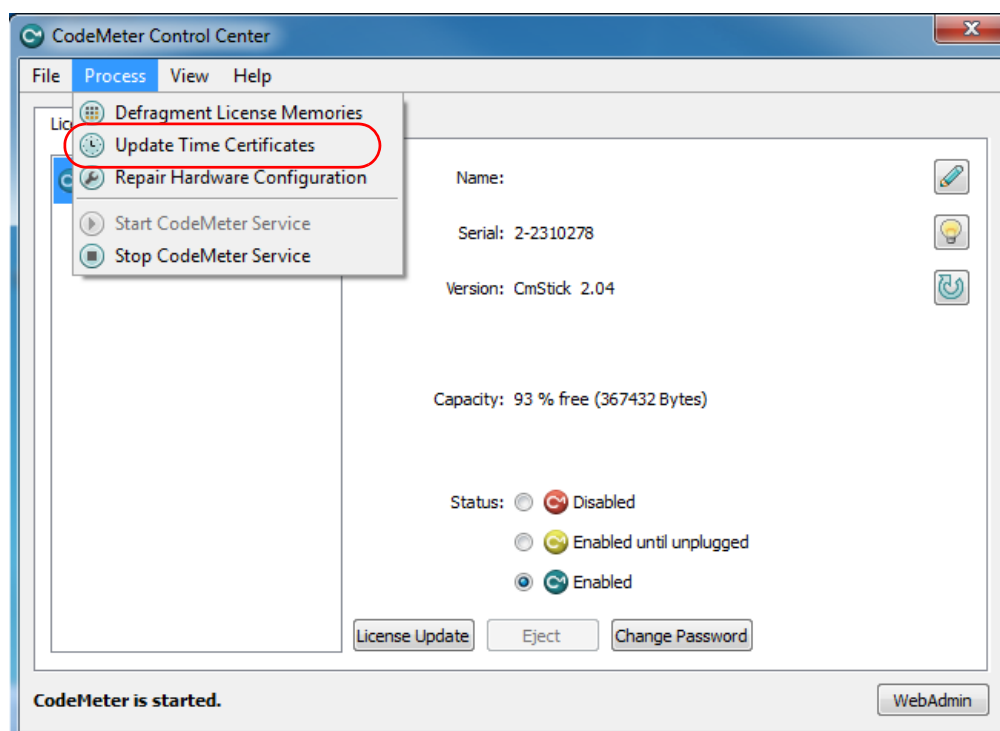
The Certified Time for any **CodeMeter** attached to your current computer can be displayed by using the **CodeMeter Control Center** which is brought up by clicking on the **CodeMeter** icon that was installed on your task bar.



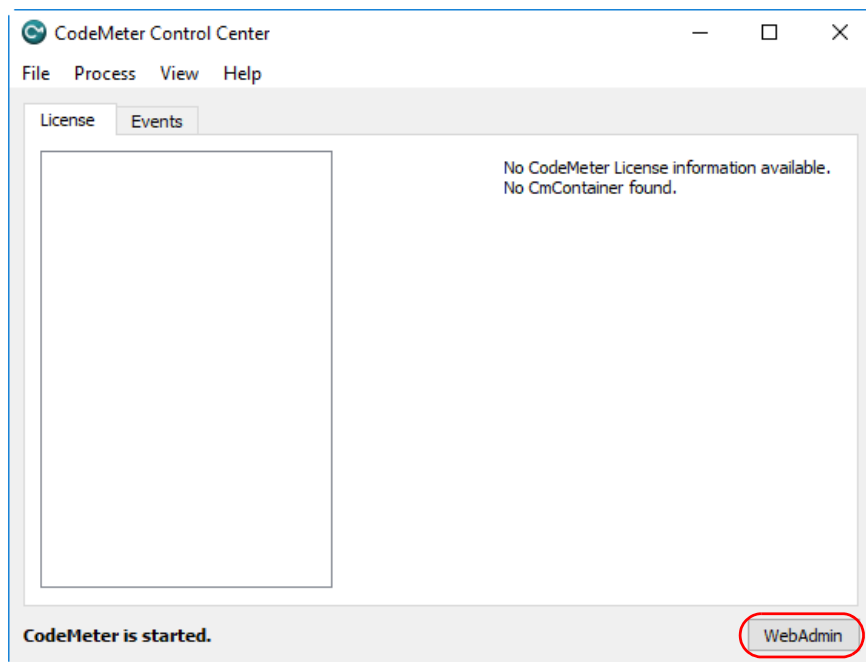
The **CodeMeter Control Center** shows any **CodeMeters** that are attached to the this computer.



The Certified Time in a CodeMeter that is on this computer can be displayed and updated by clicking on **Process >Update Time Certificates**



If the **CodeMeter** is not attached to your current computer, the **CodeMeter Control Center** is still used to update the Certified Time for the Codemeter but you need to use the **CodeMeter WebAdmin** panel which is brought up by clicking on the **WebAdmin** button on the **CodeMeter Control Center**.



After getting up **CodeMeter WebAdmin** panel up, on the **Home** tab set the **Host Name:** field to the name of the computer or server that the **CodeMeter** to be certified is on, and then go to the **Content > CmContainer** tab.

If there is more than one **CodeMeter** on that computer/server, select the one that you want to examine in the **CmContainer:** field.

The **Certified time** for that **CodeMeter** can be updated to the current date by clicking on the **Update** button.

Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

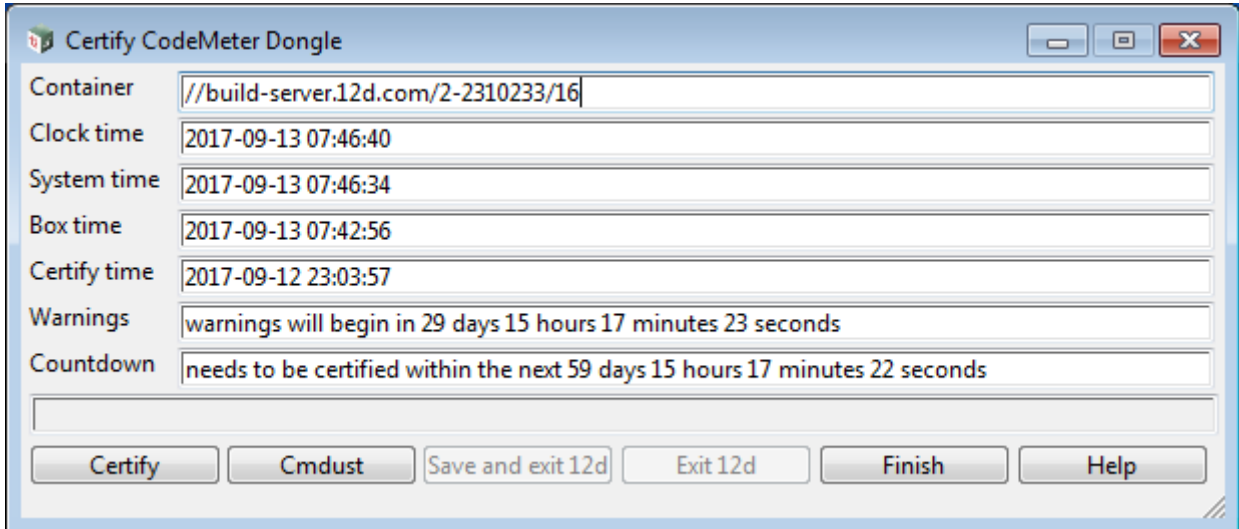
Important Note

To display and update the **Certified Time** in the **CodeMeter**, you need access over the Internet to a **CodeMeter Time Server** (see [6.2 Time Servers for Certified Time](#)). This Internet communication is through a set IP port (see [7 Network CodeMeters](#)).

6.1.2 Updating the Certified Time from 12d Model

In **12d Model** the Certified Time is displayed in the **Certify CodeMeter Dongle** panel that is brought up by the option

Project =>Management =>Dongles =>Certify CodeMeter



The **Certified time** for that **CodeMeter** can be updated to the current date by clicking on the **Certify** button.

Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

Important Note:

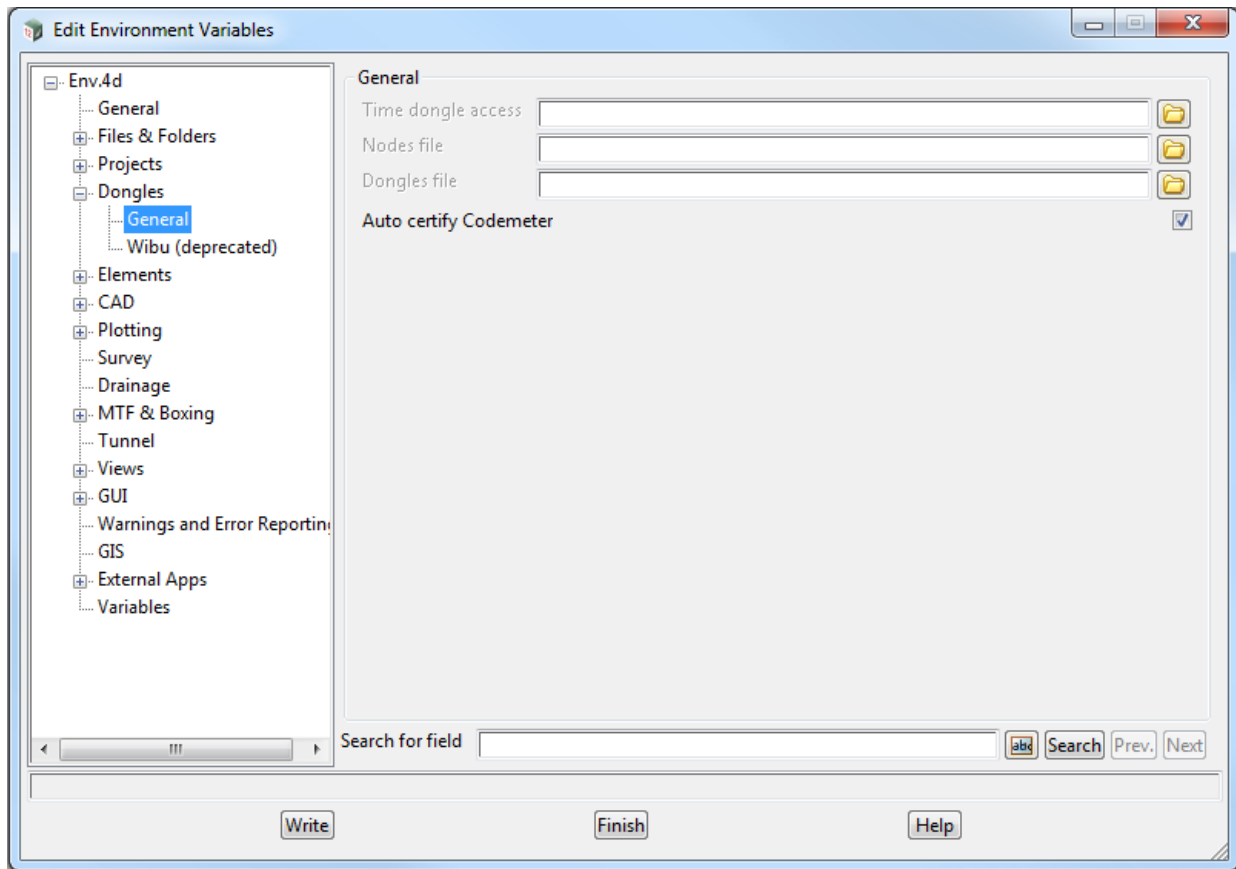
To update the **Certified Time** in the **CodeMeter**, **12d Model** needs access over the Internet to a **CodeMeter Time Server** (see [6.2 Time Servers for Certified Time](#)). This Internet communication is through a set IP port (see [7 Network CodeMeters](#)).

6.1.3 Automatically Updating the Certified Time with 12d Model

12d Model can automatically attempt to certify the CodeMeter whenever it is within the warning period (within one month of the two months after the Certified Time).

If the environment variable **AUTO_CERTIFY_DONGLE_4D** to **1**, whenever **12d Model** is started up, then if it is in the warning period **12d Model** will automatically attempt to certify the dongle. And if successful, no user intervention is required.

The environment variable **AUTO_CERTIFY_DONGLE_4D** is set by the **Edit Environment Variables** panel, which is brought up by the **Projects =>Management =>env.4d** option.



Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

Note

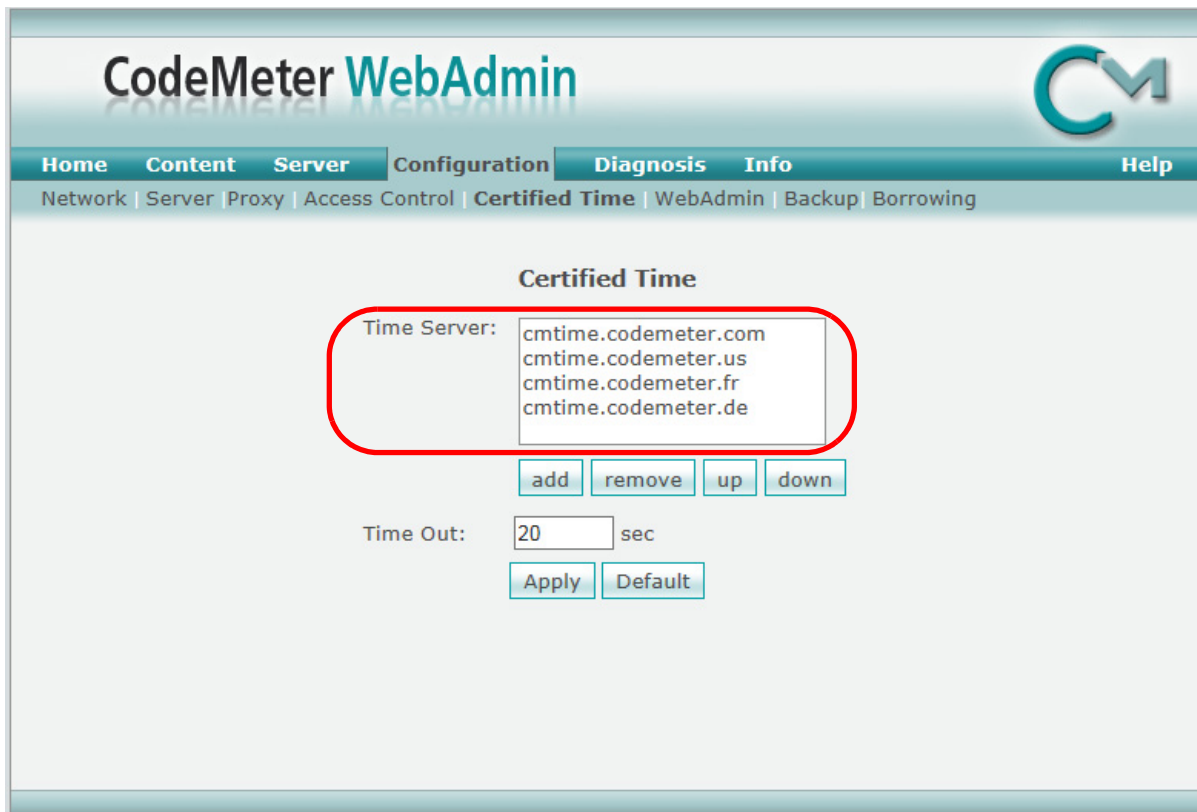
Any computer which has the environment variable **AUTO_CERTIFY_DONGLE_4D** set to 1 can certify the Network CodeMeter that it is using to obtain a **12d dongle**.

6.2 Time Servers for Certified Time

When you certify a **CodeMeter** it searches for a **CodeMeter Time Server** to update the Certified Time in the CodeMeter.

For a particular **CodeMeter** on a Server, the Internet or IP addresses of the CodeMeter Time Servers that are searched to set the **Certified Time** are given in the **Configuration > Certified Time** tab of the **CodeMeter WebAdmin** panel.

The Servers to search are given in the list labelled **Time Server**:. The list is searched in order from the top to the bottom.



Timer Server:

This shows the list of the **CodeMeter Timer Servers** to search to Certify Time for the CodeMeter. The Timer Servers can be specified by either an Internet address or an IP address.

Servers in the list are added or removed using the **add** or **remove** buttons, and a highlighted entry in the list is moved up or down with the **up** and **down** buttons.

Clicking **Apply** saves these entries in the Windows Registry of the Server that the CodeMeter is on.

7 Network CodeMeters

A **12d Local CodeMeter** (also known as a **Standalone** or **single-user CodeMeter**) is a CodeMeter that is attached to a computer and only allows **12d Model** to be run on **that computer only**.

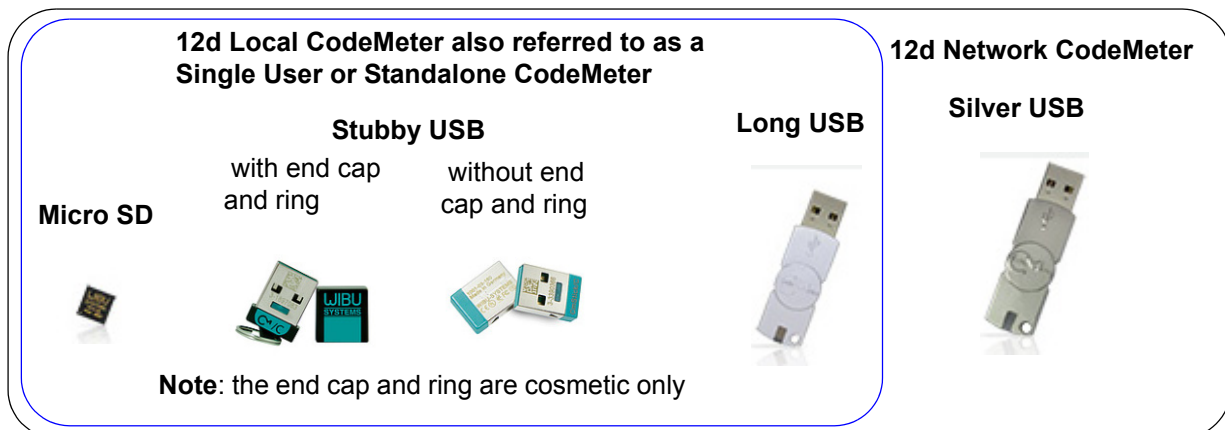
If the **12d Local CodeMeter** is to be used on another computer then the **12d Local CodeMeter** must be moved to the other computer. This means that **12d Model** will no longer run on the computer that no longer had the **12d Local CodeMeter**.

This is the default installation for **12d Model**.

A **12d Network CodeMeter** is a CodeMeter that controls a number of **12d Model** licenses and the **12d Network CodeMeter** can potentially be accessed by **any other computer on the network** and allows copies of **12d Model** to be run on those computers without needing a **12d Local CodeMeter**.

Note: When using a **12d Network CodeMeter**, each running copy of **12d Model** using a **12d Network CodeMeter** on a computer requires a **license** from the **12d Network CodeMeter**.

12d Network CodeMeters are metallic and a silver colour, and are labelled with a number starting with **ec**.



If your computer is not using a **12d Local CodeMeter** and is only using a **12d Network CodeMeter** to obtain **12d Model** licenses then **12d Model** and the CodeMeter Drivers **still need to be installed on the computer** that is wanting to run **12d Model**.

BUT the **12d Model** installation installs a **dongles.4d** file that assumes that **12d Model** is only using a **12d Local CodeMeter** and has no access to a **12d Network CodeMeter**.

So to access a **12d Network CodeMeter**, the **dongles.4d** file needs to be modified.

The **nodes.4d** file you use will also need to contain an authorization for the **12d Local CodeMeter**.

Note: a computer can be set up to look for both a **12d Local CodeMeter** and a **12d Network CodeMeter**.

Full instructions setting up Network Codemeters, and making the required modifications to the **dongles.4d** file and the **nodes.4d** file, are given in the rest of this chapter.

Continue to [7.1 CodeMeter Servers and Clients](#).

7.1 CodeMeter Servers and Clients

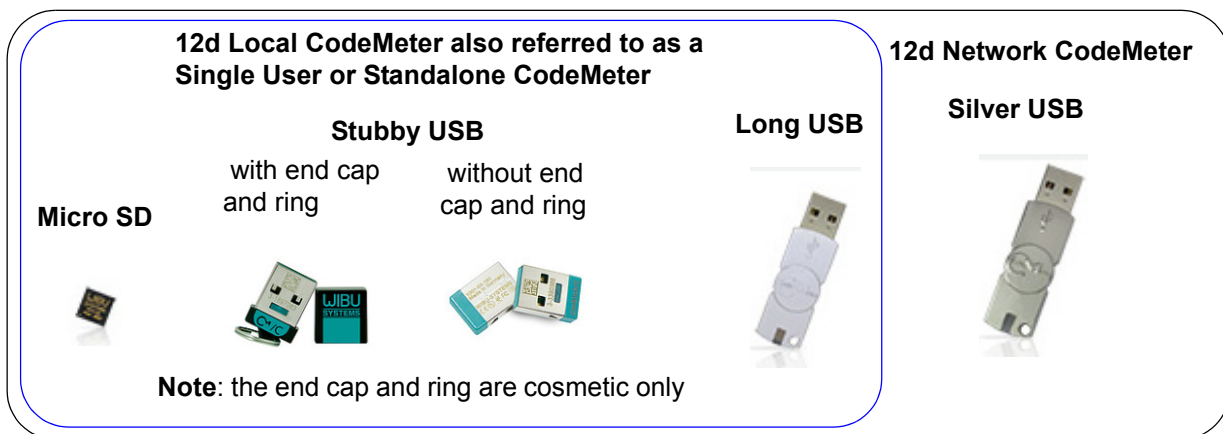
IMPORTANT WARNING

Do not attach any CodeMeters, Network or Standalone, to your computer until after you have installed the CodeMeter Drivers.

7.1.1 A Guide to the Notes

By default when **12d Model** is installed it is set up for users with a **Local** (single user or **stand alone**) CodeMeter that only allows **12d Model** to be run on the computer with the **Local** CodeMeter attached to it. With a **Local** CodeMeter, if **12d Model** is to be run on another computer with that **Local** CodeMeter then the Local CodeMeter must be **moved** to the new computer. And **12d Model** will stop running on the computer that no longer has the **Local** CodeMeter attached to it.

To allow **12d Model** to run on a number of computers without having to move a CodeMeter to different computers, a **NETWORK** CodeMeter is used.



A **Network CodeMeter** sits on the one computer (known as the **12d License Server**) and users who have access to that Network CodeMeter can obtain a **12d Model** license from the Network CodeMeter (if a license is available) to run a copy of **12d Model**.

To install the **Network CodeMeter** and configure computers to use the Network CodeMeter, you will need

1. the Network CodeMeter
2. the latest CodeMeter Drivers installation program *12d_dongles_installation_date.exe*

12d_dongles_installation_date.exe is downloaded from:

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_dongles_installation_13_Oct_16.exe

For example, *12d_dongles_installation_13_Oct_16.exe*

3. a **nodes.4d** file to authorize any **12d Model xx** licenses where **xx** is the **12d Model** version
This is usually supplied in an email as the attached file **nodes.12dxxn** (for example, for **12d Model 12**, it will be **nodes.12d12n**)

Or you may already have it in a folder with the **12d Model** authorization file **nodes.12dxxn** or **nodes.4d** in it.

These notes are for

- (a) Installing and setting up a new Network CodeMeter to act as a 12d License server
 - (b) Setting up other computers (Clients) so they can access the Network CodeMeter and **12d Model** licenses in the Network CodeMeter.
 - (c) Setting up/Updating **dongles.4d** to instruct the other computers (Clients) which Network CodeMeters to use. This can be down to the level of using a particular virtual **12d dongle** inside a particular Network CodeMeter.
 - (d) Setting up/Updating the **nodes.4d** file with the authorization to match the **12d dongle** being accessed inside a Network CodeMeter.
 - (e) Updating the **12d Model** licenses in a Network CodeMeter
- and
- (f) Monitoring Network CodeMeters.

WARNING

If the computers accessing a **Network CodeMeter** are in a **different subnet** (behind a **router**) to the Network CodeMeter then **12d Model** needs to be given the IP address or the computer names of the servers with the **Network CodeMeter**. This will be explained later in the notes. This will also apply to computers connected by Wireless or DHCP.

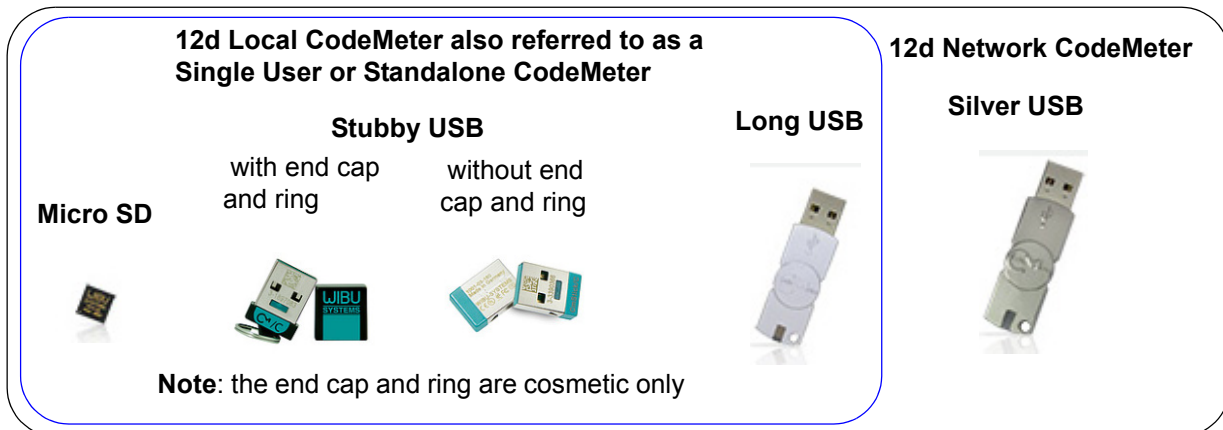
If you already have a **Network CodeMeter** and are simply updating a **12d dongle** inside the **Network CodeMeter**, go to the section [7.6 Updating Licenses in a Network CodeMeter](#).

if your are installing a **Network CodeMeter** on the computer for the first time, please continue to the next section [7.1.2 Definitions](#).

7.1.2 Definitions

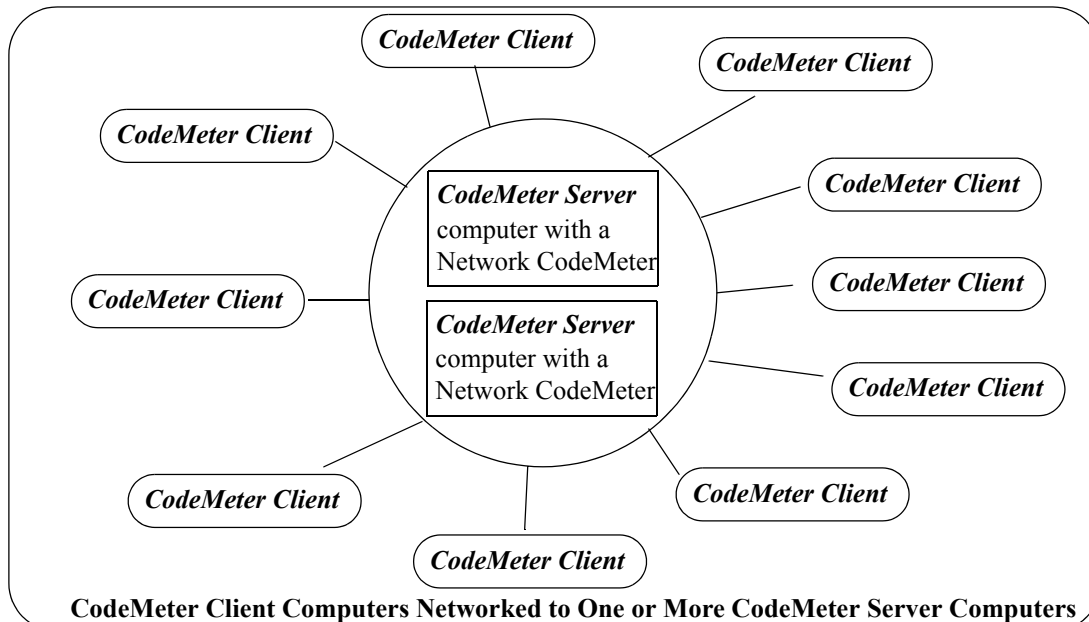
A **12d Local CodeMeter** (also known as a **Standalone** or **single-user CodeMeter**) is a CodeMeter that is attached to a computer and only allows **12d Model** to be run on that computer. This is the default installation for **12d Model**. If the **Local CodeMeter** is labelled with a **12d dongle number** then it will start with **5c**.

A **12d Network CodeMeter** is a CodeMeter that controls a set number of **12d Model** licenses. The **12d Network CodeMeter** can be accessed by any other computer on the network and allows copies of **12d Model** to be run on those computers. Each running copy of **12d Model** requires a license from the **12d Network CodeMeter**. **12d Network CodeMeters** are metallic and a silver colour, and are labelled with a number starting with **ec**.



A **12d CodeMeter Server** is a computer with a 12d Network CodeMeter attached to it. Note that this can be any computer, it does not have to be a Server Computer.

A **12d CodeMeter Client** is a computer that gets its **12d Model** licenses from a 12d CodeMeter Server. The CodeMeter Client computer does not have a Network CodeMeter attached to it.



Both **CodeMeter Servers** and **CodeMeter Clients** must have the **CodeMeter Drivers** and **CodeMeter Runtime Server** service installed and running and this is described in [7.2 Installing the CodeMeter Drivers](#).

CodeMeter Servers must also have the **CodeMeter Network Server** running and this is

described in [Step 6. Starting the Network Server](#).

To run **12d Model** on a CodeMeter Client, an appropriate **dongles.4d** and valid **nodes.4d** file must be obtained and set up. This is describing in [7.4 dongles.4d and nodes.4d](#).

Important Note for Going From Local CodeMeters to CodeMeter Servers

The *CodeMeter drivers* are exactly the same ones that are used for a Local (standalone or single-user) CodeMeter. So if a computer is already been used for a Local CodeMeter with **12d Model**, then the *CodeMeter drivers* have already been installed and will not need to be installed again.

This means that if a **Network CodeMeter** is introduced, all the computers that are currently running **12d Model** with a Local CodeMeter will not need the CodeMeter drivers installed.

However, such **CodeMeter Client** computers will need a modification to their **dongles.4d** file to tell the computer that **12d Model** licenses can be obtained from a **Network CodeMeter** rather than a Local CodeMeter (see [7.4 dongles.4d and nodes.4d](#)).

Also a valid **nodes.4d** file for the **12d dongle** inside the **Network CodeMeter** is needed (see [7.6 Updating Licenses in a Network CodeMeter](#)).

7.2 Installing the CodeMeter Drivers

IMPORTANT WARNING - Do not attach a *CodeMeter* to your computer until after you have installed the *CodeMeter* drivers.

This section is installing the *CodeMeter* drivers.

This must be done on the computer that will have the Network CodeMeter attached to it (the **CodeMeter Server**) and also for all the computers that are **CodeMeter Clients** using the CodeMeter Server.

If the computer has **no** CodeMeter Drivers, or **old** CodeMeter Drivers, installed on it, go to [Step 1. Install the CodeMeter or Older Wibu Drivers](#).

If a computer is to become a CodeMeter Server but already has the CodeMeter Drivers installed on it, then go straight to [7.3 Setting up a Network CodeMeter](#).

If the computer is already set up as a CodeMeter Server and you are adding a new **12d dongle** to the Network CodeMeter, or upgrading the number of 12d licenses on a **12d dongle** in the Network CodeMeter, go to [7.6.1.1 Updating Using the .WibuCmRaU File](#).

If you are replacing the existing Network CodeMeter by a new Network CodeMeter, go to [7.8 Replacing an Existing Network CodeMeter](#).

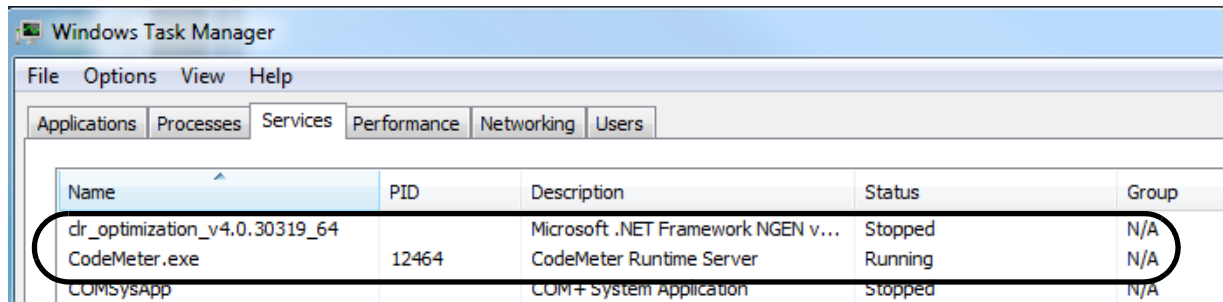
What is Done to the Computer By Step 1

1. CodeMeter Drivers

The CodeMeter drivers that allows software to access CodeMeters anywhere on the network is installed.

2. CodeMeter Runtime Server

The service **CodeMeter Runtime Server** service is also installed and started on the computer and if you look in the **Services** tab of the *Windows Task Manager*, the **CodeMeter Runtime Server** will be shown as **Running**.



The screenshot shows the Windows Task Manager window with the 'Services' tab selected. A table lists several services. The 'CodeMeter Runtime Server' service is highlighted with a black circle, showing its status as 'Running'.

Name	PID	Description	Status	Group
clr_optimization_v4.0.30319_64		Microsoft .NET Framework NGEN v...	Stopped	N/A
CodeMeter.exe	12464	CodeMeter Runtime Server	Running	N/A
COMSysApp		COM+ System Application	Stopped	N/A

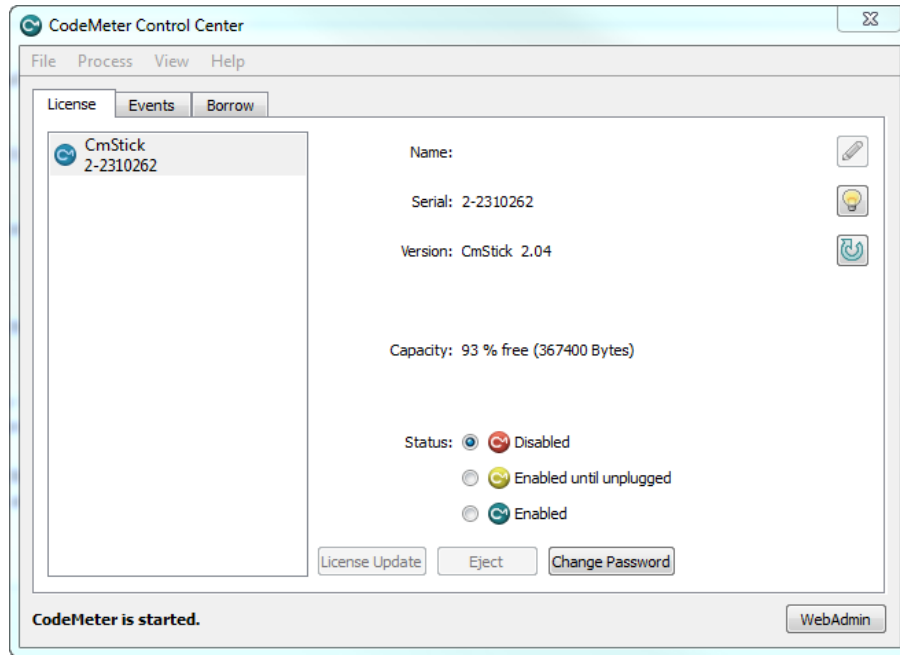
If for some reason the **CodeMeter Runtime Server** is shown as **Stopped**, to restart it again go to [Step 6. Starting the Network Server on page 65](#).

3. CodeMeter Icon

As well as installing the CodeMeter drivers., a **CodeMeter** icon is installed on your task bar



Clicking on the **CodeMeter** icon brings up the **CodeMeter Control Center** which shows any Codemeters that are attached to the this computer. The **CodeMeter Control Center** also has options to stop and start the **CodeMeter Runtime Server** and bring up the **WebAdmin** panel to examine the content of CodeMeters anywhere on the network.



If the computer is to be a **CodeMeter Server**, then the next step is to check the Network CodeMeter. If this is the case then go to [7.3 Setting up a Network CodeMeter on page 61](#).

If the computer is a **CodeMeter Client**, then the next steps are to

- (a) set up the **dongles.4d** file to see the **Network CodeMeter** (and if required a particular 12d dongle inside the Network CodeMeter)
- and
- (b) set up the **nodes.4d** with the authorization for the required 12d dongle number.

For setting up **dongles.4d** and **nodes.4d**, see [7.4 dongles.4d and nodes.4d on page 66](#).

7.3 Setting up a Network CodeMeter

The **CodeMeter drivers** are now installed and the **CodeMeter Runtime Server** is running.

The next steps are to actually attach the Network CodeMeter, examine its contents to make sure everything that are correct, and then start up the **Network Server** so that other computers in the network will be able to see and use the Network CodeMeter.

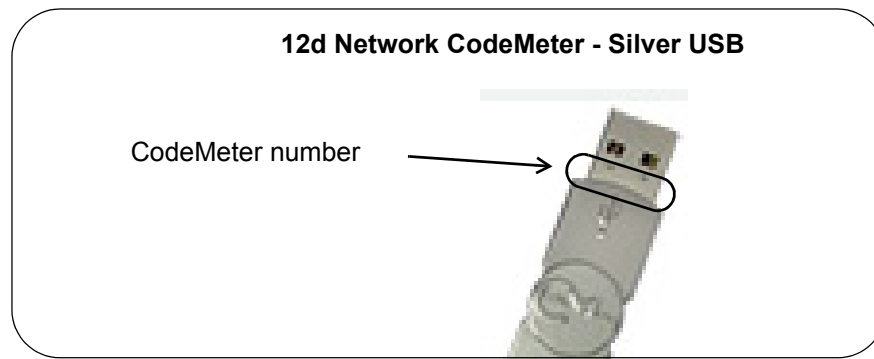
These steps will complete the setting up of the Network CodeMeter as a **CodeMeter Server**.

Step 2. Attaching the Network CodeMeter

The **physical CodeMeter number** can be found on the part of the Network CodeMeter that is pushed into the USB port (the CodeMeter shaft). The number starts with **2-**.

This number needs to be recorded but you need to have very good eyes to be able to read it or have a magnifying glass.

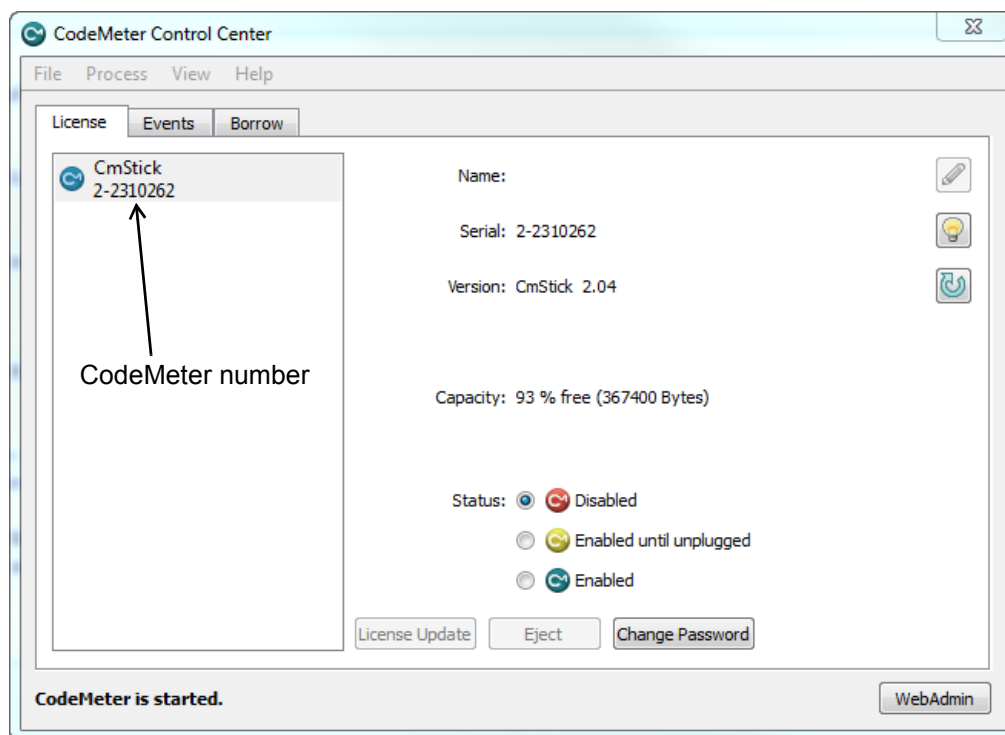
If the CodeMeter number can't be read, it is also possible to obtain the number after the Network CodeMeter is plugged into the USB port of the computer (see [Step 3. Checking that the Network CodeMeter is Visible on page 62.](#))



Now that the CodeMeter drivers are installed on the computer, the **12d Network CodeMeter** can now be attached to the USB port on the computer.

Step 3. Checking that the Network CodeMeter is Visible

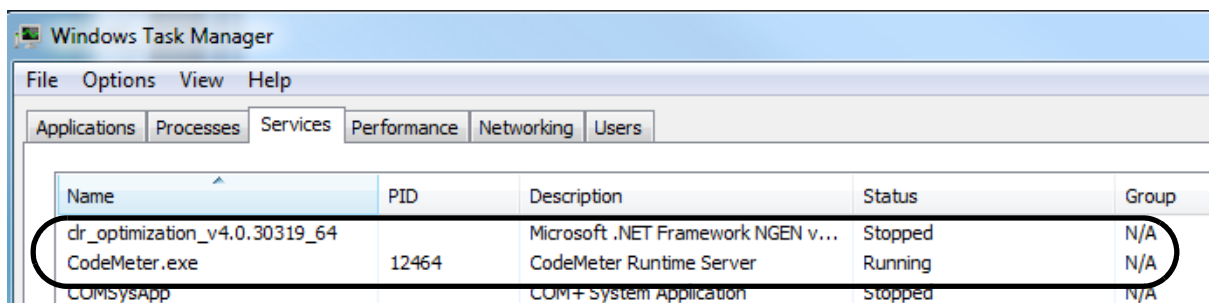
Click on the **CodeMeter** icon that was installed on your task bar to bring up the **CodeMeter Control Center** which shows what Codemeters are on this computer.



The CodeMeter number, that is written on the shaft of the CodeMeter, should be displayed in the **CodeMeter Control Center**.

Step 4. What to Do If You Can't See the CodeMeter

If you were unable to see the CodeMeter number in the **CodeMeter Control Center** then first check that the service **CodeMeter Runtime Server** service is installed and running on the computer by looking in the *Windows Task Manager* and checking that **CodeMeter Runtime Server** is shown as **Running**.



If for some reason the **CodeMeter Runtime Server** is there but shown as **Stopped**, to restart it again see [Step 6. Starting the Network Server on page 65](#).

If you are still having problems then contact your **12d Model Reseller**.

Step 5. Checking the Virtual 12d Network Dongles Inside the Network CodeMeter

The Network CodeMeter alone is not enough to provide a license to run **12d Model**.

There must also be a **12d network dongle** inside the Network CodeMeter.

It is the **12d network dongle** that controls how many network licenses of **12d Model** are available.

Aside: The **12d network dongle** issues the **12d Model** licenses but the actual **12d Model** modules that go with a license from a **12d network dongle** is controlled by a matching entry in the nodes.4d file. This means that what **12d Model** modules you have can be updated by just emailing a new entry for the nodes.4d file.

Clicking on the **WebAdmin** button on the **CodeMeter Control Center** brings up the **CodeMeter WebAdmin** panel which is used to display information about any of the CodeMeters that it can see.

Clicking on the tab **Content > Licenses** of the **CodeMeter WebAdmin** panel displays the **12d network dongle** information stored in the selected CodeMeter.

CodeMeter WebAdmin

Home | **Content** | Server | Configuration | Diagnosis | Info | Help

CmContainer | **Licenses** | User Data | Backup/Restore

CmContainer: 2-2310262

100003 Bundling Articles					
Product Code	Name	Unit Counter	Expiration Time	Activation Time	License Quantity
1	SecuriKey Lite	n/a	n/a	n/a	1

101956 12d.com					
Product Code	Name	Unit Counter	Expiration Time	Activation Time	License Quantity
1	12d Model - 12d Solutions - ec51470022	n/a	n/a	n/a	3

12d Product name

12d dongle number

12d Customer name

Number of licenses on the 12d dongle

If there are no **12d dongle number** displayed inside the Network CodeMeter, or no **12d dongle number** starting with **ec**, contact your **12d Model Reseller**.

You need to make a note of the **12d dongle number** because there must be a valid entry with the matching 12d dongle number in the **nodes.4d** file.

Note: The **WebAdmin** button is only selectable if the **CodeMeter Runtime Server** is running. If it **Stopped**, to restart it again see [Step 6. Starting the Network Server on page 65](#).

Important Note:

There may be **more than one 12d dongle number** inside the one physical CodeMeter Container. That is why they are also referred to as **virtual 12d dongles**. For example,

CodeMeter WebAdmin

Home | Content | Server | Configuration | Diagnosis | Info | Help

CmContainer | Licenses | User Data | Backup/Restore

CmContainer: 2-2310233

100003 | Bundling Articles

Product Code	Name	Unit Counter	Expiration Time	Activation Time	License Quantity
1	12d Model - Stock - 12d Solutions - ec51470113	n/a	n/a	n/a	5
1	12d Model - Stock - 12d Solutions - ec51470114	n/a	n/a	n/a	25

Within **12d Model**, it is possible to address specific Network CodeMeters, and specific 12d dongles **within** a Network CodeMeter. This is done via the **dongles.4d** file and how it is set up is described in [7.4.1 Updating dongles.4d on page 66](#).

The **CodeMeter WebAdmin** panel can be used to look at the CodeMeters on any computer that is visible on the network. To examine a CodeMeter on another computer, simply click on the **Home** tab and then select the required computer in the **Host Name** field.

Step 6.Starting the Network Server

For a **Network CodeMeter** to be seen and used by other computers in the network, the **Network Server** needs to be running **on the computer with the Network CodeMeter** on it.

The **CodeMeter WebAdmin** panel is used to start the **Network Server**.

Note: The **Network Server** is controlled by the **CodeMeter Runtime Server** service so it is critical that the **CodeMeter Runtime Server** service is running.

To bring up the **CodeMeter WebAdmin** panel, click on the **WebAdmin** button on the **CodeMeter Control Center**.

In the **CodeMeter WebAdmin** panel, click on the **Configuration >Server** tab and then tick on **Run Network Server**.



The screenshot shows the CodeMeter WebAdmin interface. The title bar reads "CodeMeter WebAdmin" with a logo on the right. Below the title bar is a navigation menu with tabs: Home, Content, Server, Configuration (selected), Diagnosis, Info, and Help. Under the Configuration tab, there is a sub-menu: Network, Server (selected), Proxy, Access Control, Certified Time, WebAdmin, Backup, and Borrowing. The main content area is titled "Server" and contains the following settings:

- Bind Address: All (Default)
- Run Network Server: ☒
- Network Port *: 22350
- Run CmWAN Server: ☐
- CmWAN Port *: 22351

At the bottom of the settings are two buttons: "Apply" and "Default". Below the buttons is a note: "(*) Changes only take effect after restarting CodeMeter".

Click on **Apply** and a message **Operation completed successfully - please wait** will appear and when it disappears, the above panel is displayed again.

The **Network Server** should now be running.

Note that unlike the **CodeMeter Runtime Server** service, the **Network Server** is not a service and so will not appear in the **Windows Task Manager**.

The computer with the Network CodeMeter is now ready to use as a **12d CodeMeter Server**.

7.4 dongles.4d and nodes.4d

For **12d Model** to be able to create and/or open existing projects, it requires

- (a) a license from a **12d dongle** inside a **Network CodeMeter**
- and
- (b) a valid entry with the **matching 12d dongle number** in the **nodes.4d** file

Once **dongles.4d** and **nodes.4d** have been updated, they must be the **nodes.4d** and **dongles.4d** files that are used for any computer wanting to use a **12d Model** license from the **Network CodeMeter**.

For the updating of **dongles.4d**, see [7.4.1 Updating dongles.4d on page 66](#).

For the updating of **nodes.4d**, see [7.4.2 Updating nodes.4d on page 74](#).

7.4.1 Updating dongles.4d

The **dongles.4d** file lists the computers to search for Network CodeMeters, Local CodeMeters and Wibu dongles to find **12d dongle numbers**.

It also defines **the order to search for CodeMeters and Wibus**.

When **12d Model** is installed on a computer, it installs a **dongles.4d** file that is configured to only look for *Local (standalone) CodeMeters* and *Local Wibus*.

For each computer that needs to access to a **Network CodeMeter**, a modification has to be made to the **dongles.4d** file used by that computer to tell **12d Model** to **search for a Network CodeMeter** and not just use a *Local CodeMeter*.

The updated **dongles.4d** is then placed in the standard search path for a set up file for that computer and the particular version of **12d Model**. For example, for **12d Model 11**, the **dongles.4d** could be in c:\12d\11.00\User. Or it uses a file pointed to by the environment variable **DONGLES_4D** in **env.4d**. This means that the **dongles.4d** file could be on the one central computer and accessed by all the other computers.

Important Note

In the initial **12d Model** installation, the **dongles.4d** file is a set up file and is installed in the **Set_ups** folder under the **12d Model** version number.

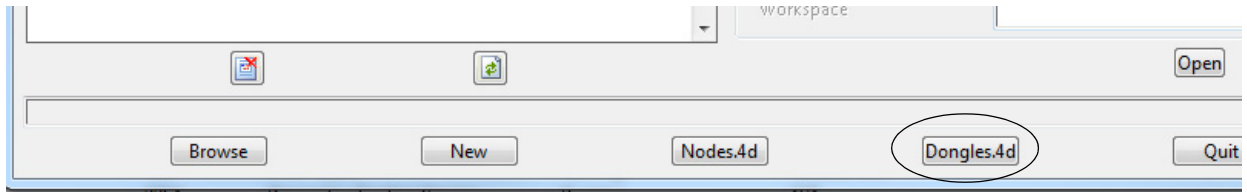
For example, for **12d Model 12**

Program files\12d\12dmodel\12.00\Set_ups

All the files in **Set_ups** are supplied by 12d Solutions and must not be modified. Hence in updating the default **dongles.4d** file, the procedures outlined will modify a copy of the **dongles.4d** file.

The editing of **dongles.4d** **does not** have to be the computer that the *Network CodeMeter* is on. It can be done from any computer.

To edit the **dongles.4d** file you need to start up **12d Model** BUT you won't have to open a **12d Model** project. The current **dongles.4d** file can be edited by simply starting up **12d Model** and clicking on the **dongles.4d** button on the front panel.

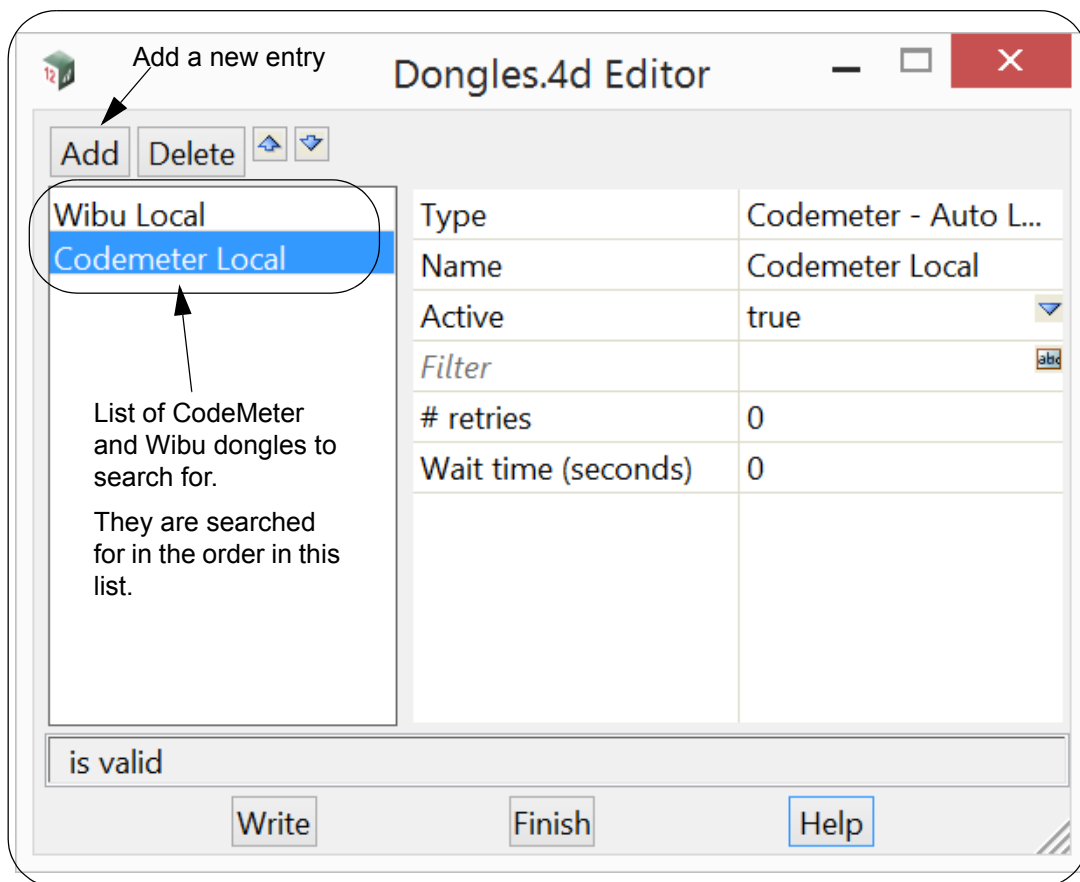


Or if the **12d Model** you are running is already authorized and you are in an open project, by picking the option

Projects =>Management =>Dongles =>Dongles.4d editor

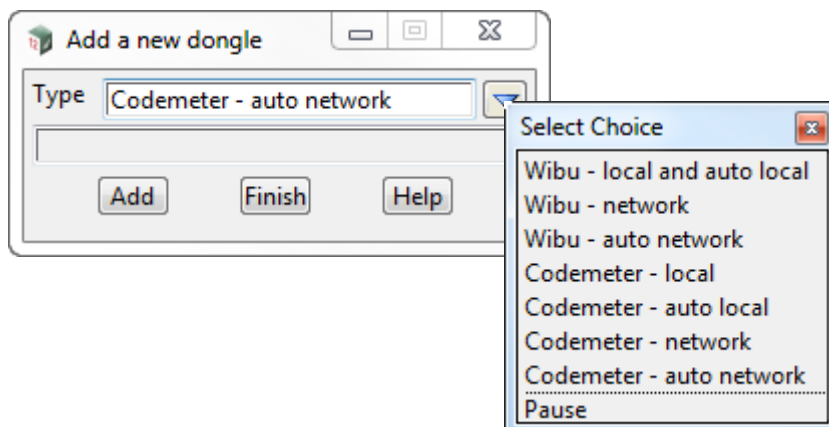
Both of these bring up the **Dongles.4d Editor** panel.

If the **dongles.4d** is the one installed with **12d Model** then it will only be looking for **Local** (standalone) **CodeMeters** and Local (standalone) **Wibus**:



What it needs in the list is an entry to tell **12d Model** to look for **your** Network CodeMeter.

To **Add** a new entry to dongles.4d, click on the **Add** button which then bring up the **Add a New Dongle** panel.

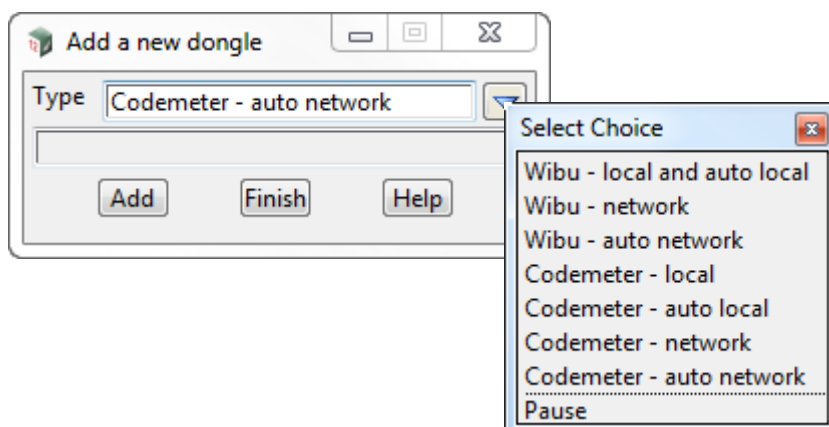


To add an entry to search for all Network CodeMeter on the network, see [7.4.1.1 Search for any Network CodeMeter on page 68](#).

To add an entry to use a particular 12d dongle number in a particular Network CodeMeter, see [7.4.1.2 Using a 12d Dongle Number in a Network CodeMeter on page 70](#).

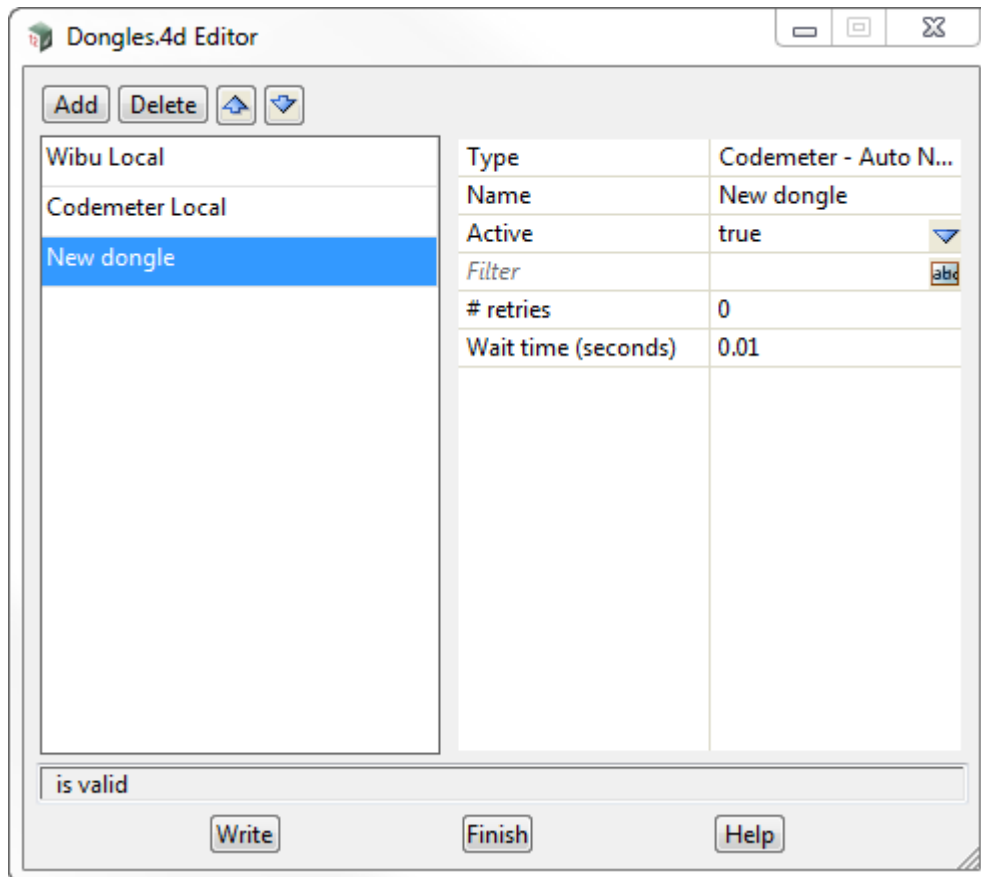
7.4.1.1 Search for any Network CodeMeter

The simplest entry to add is the one that searches for all 12d Network CodeMeters on the network.



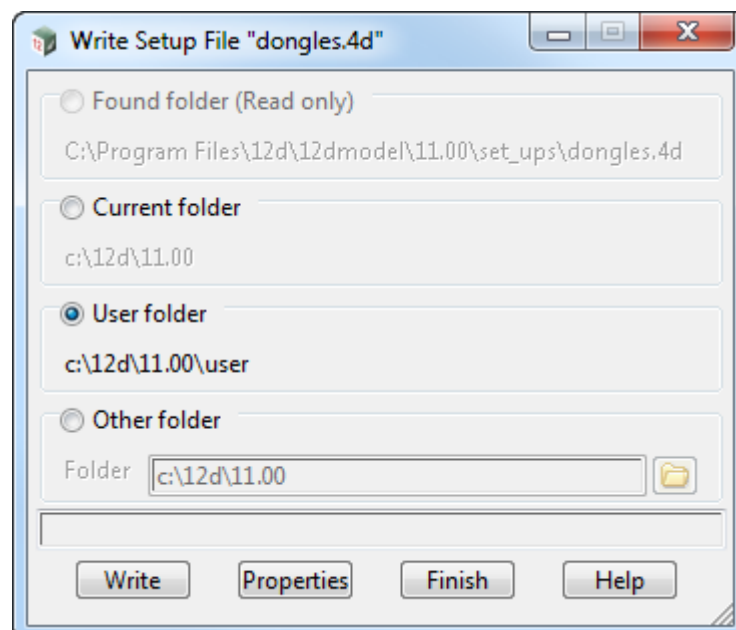
For this case, select **CodeMeter - auto network** for **Type** and then click on **Add**.

A new entry with the default name **New dongle** is added to the bottom of the list.



Click in the **Name** field and change **New dongle** to whatever you want, say **CodeMeter - auto network**.

To save the information to the **dongles.4d** file, press **Write** to bring up the **Write Setup File "dongles.4d"** panel.



Tick on **User folder** and then on **Write**.

For any computer wanting to use a **12d Model** license from a Network CodeMeter, the updated

dongles.4d must be placed in the standard search path for the **User** folder, or in the folder pointed to by the environment variable **USER_4D** in **env.4d**, or is the file pointed to by the environment variable **DONGLES_4D** in **env.4d**.

Using **DONGLES_4D** means that the **dongles.4d** file could be on a central computer that can be accessed by all the other Client computers.

Note that the **dongles.4d** we've saved will search for a Local CodeMeter or a Local Wibu on the computer first and then search for a Network CodeMeter. If you didn't want to search for a Local CodeMeter at all, simply highlight the **CodeMeter - auto network** entry and click on the delete icon to delete it. If you want to search for a Network CodeMeter first before a Local CodeMeter then highlight the **CodeMeter - auto network** entry and use the Up arrow icon to move that entry to the top of the list.

WARNING

Projects can have a local *dongles.4d* file and when the project is selected, the local *dongles.4d* is used before any other *dongles.4d*. If the local file does not have the correct network information in it then the authorization will fail because **12d Model** is no longer being instructed to use the Network CodeMeter.

7.4.1.2 Using a 12d Dongle Number in a Network CodeMeter

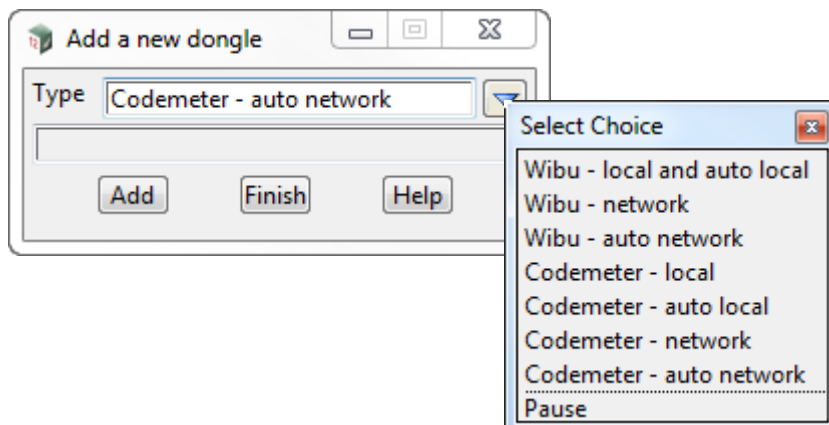
To point to a particular **12d dongle number**, it helps to know the **physical** CodeMeter number that the **12d dongle number** is in.

If you don't already know this, the CodeMeter WebAdmin panel can be used to look inside the Network CodeMeter. See [Step 5. Checking the Virtual 12d Network Dongles Inside the Network CodeMeter](#).

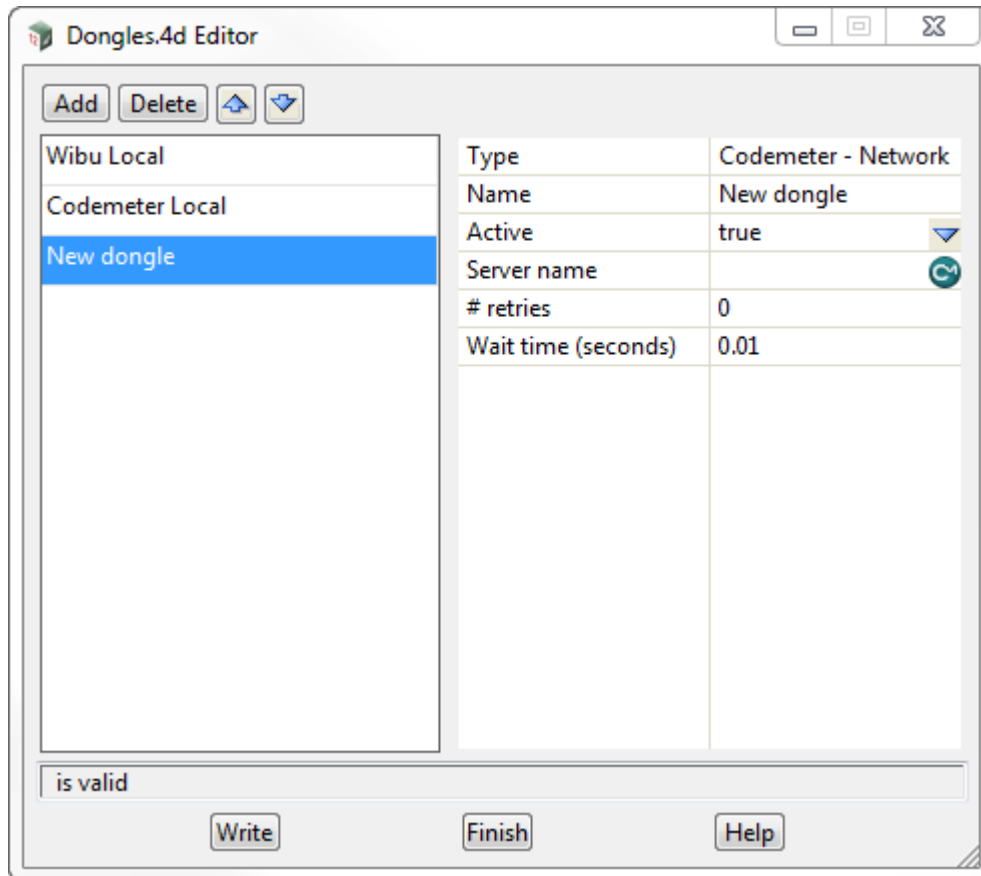
Note: if you still don't know what Network CodeMeter the 12d dongle is in, it is possible to find it when using the **Dongles.4d Editor** but you will need to look through the list of physical CodeMeter numbers and see which one contains the required 12d dongle number.

In the **Add a New Dongle** panel, for the case of using a particular 12d dongle number, select **CodeMeter - network** for **Type** and then click on **Add**.

.



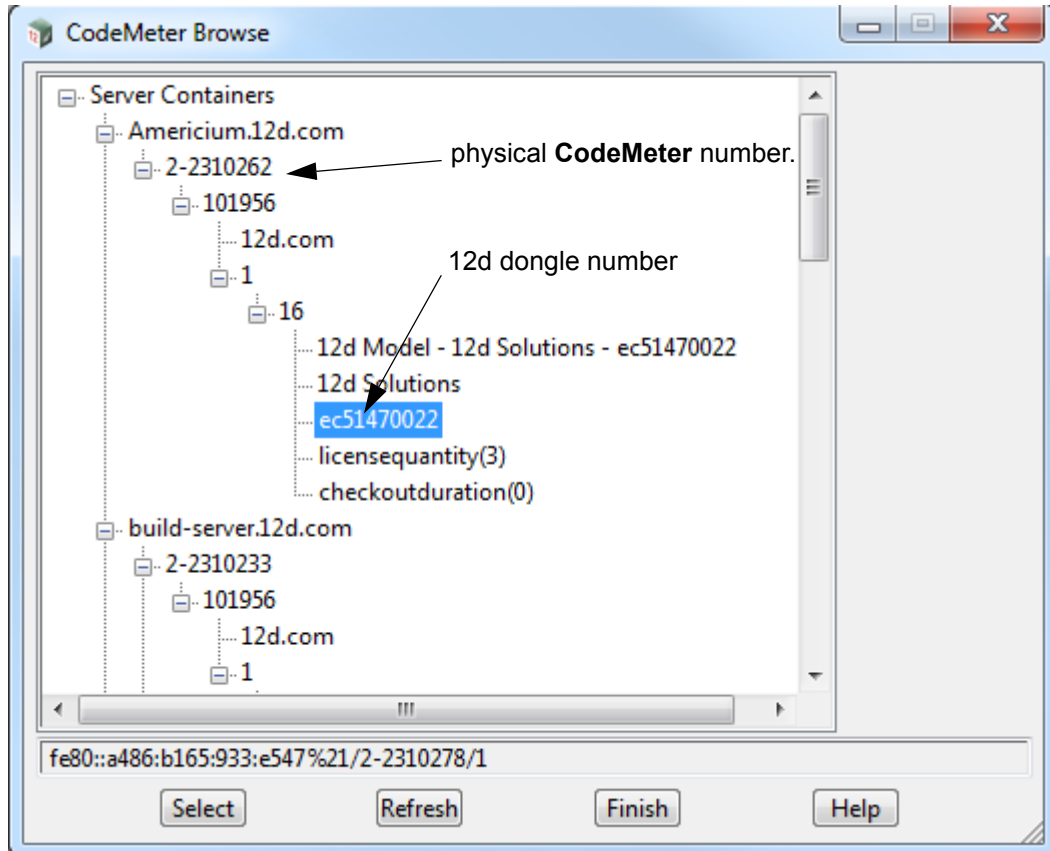
A new entry with the default name **New dongle** is added to the bottom of the list.



Click in the **Name** field and change **New dongle** to whatever you want but it helps to have the 12d dongle number in it. For example **CodeMeter - ec51470022**

Next click on the CodeMeter icon at the end of the **Server name** field.

This will bring up the **CodeMeter Browse** panel that searches for all the 12d Network CodeMeters on the network and for all the **12d dongle numbers** in them, and presents the results in a tree.



Scroll down the tree until you find the **12d dongle number** you are after and click on it.

This will then write what is called the CMUNC to the **Server name** field.

Aside:

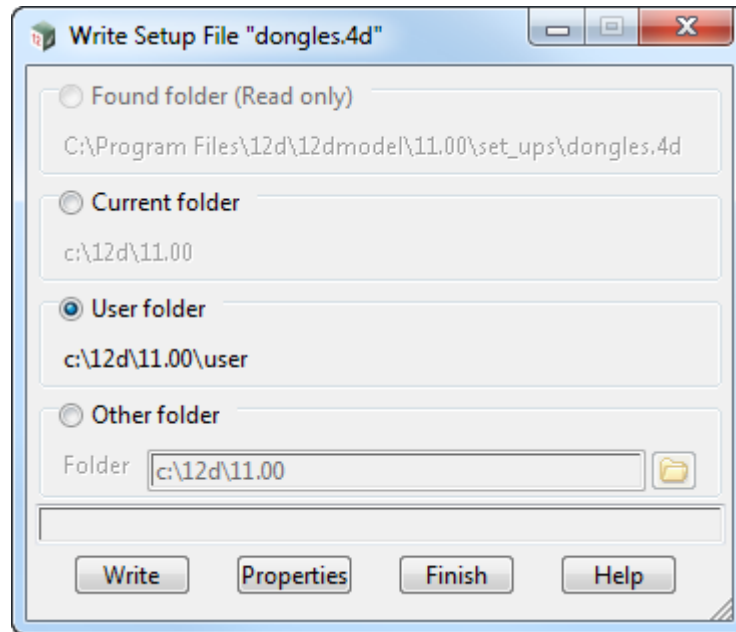
CMUNC is the 12d CodeMeter Universal Naming Convention. An example would be

//server_name.12d.com/2-2310242/1/16

where **server_name** is the server name (Americium) with .12d.com added to it, followed by CodeMeter serial number (2-2310242), then the product code (1), and the final part being the instance within that product code that contains the 12d dongle number.

Note: The instance can only be found by using the **CodeMeter Browse** panel.

To save the information to the **dongles.4d** file, press **Write** to bring up the **Write Setup File "dongles.4d"** panel.



Tick on **User folder** and then on **Write**.

For any computer wanting to use a **12d Model** license from a Network CodeMeter, the updated **dongles.4d** must be placed in the standard search path for the **User** folder, or in the folder pointed to by the environment variable **USER_4D** in **env.4d**, or is the file pointed to by the environment variable **DONGLES_4D** in **env.4d**.

Using **DONGLES_4D** means that the **dongles.4d** file could be on a central computer that can be accessed by all the other Client computers.

Note that the **dongles.4d** we've saved will search for a Local Wibu or Local CodeMeter on the computer first and then search for a Network CodeMeter. If you didn't want to search for a Local CodeMeter at all, simply highlight the **CodeMeter - auto network** entry and click on the delete icon to delete it. If you want to search for a Network CodeMeter first before a Local CodeMeter then highlight the **CodeMeter - auto network** entry and use the Up arrow icon to move that entry to the top of the list.

WARNING

Projects can have a local *dongles.4d* file and when the project is selected, the local *dongles.4d* is used before any other *dongles.4d*. If the local file does not have the correct network information in it then the authorization will fail because **12d Model** is no longer being instructed to use the Network CodeMeter.

For the updating of **nodes.4d**, see [7.4.1 Updating dongles.4d on page 66](#).

7.4.2 Updating nodes.4d

12d Model will not create new projects or open an existing project without an authorization file called **nodes.4d** with valid information in it.


The information inside **nodes.4d** controls

- (a) **which 12d dongles** are authorized to run **12d Model**
- (b) what **version** of **12d Model** will run for a 12d dongle
- (c) what **modules** are authorized for a particular 12d dongle

To authorize **12d Model** to run with **your 12d dongles**, a file called **nodes.12dxxn** where **xx** is the **12d Model** version number, will have been emailed to you by your local **12d Model** Reseller.

For example, for **12d Model 11** the file will be called **nodes.12d11n**

Subject: 12D Auth file for 12D Solutions - Lee; Product 12d Model - 5c2d47013c -

Attachments:  nodes.12d11n (11 KB)

Nodes file for : 12D Solutions - Lee
- 5c2d47013c -

The authorization file for 12d Model - is attached to this message.

The self-install procedure which follows is for this one workstation and requires 12dmodel installed.

After 12d Model version 11 is installed, please double click on the file attachment [nodes.12d11n] & to open it and 12d will guide you through.

If this succeeds you do not need to read further.

If this does not work it may be that the mail programme does not allow you to run attachments.

In this case, simply save the attached file to your desktop and open (from the right-mouse menu or by double-click).

This will start the installation for the nodes file.

Instructions for manual Installation:

For version 11 of 12d Model, usually goes in the folder

"\\12d\\11.00" and once there it must be renamed to "nodes.4d"

Codemeter dongles require a driver installation which can be obtained here

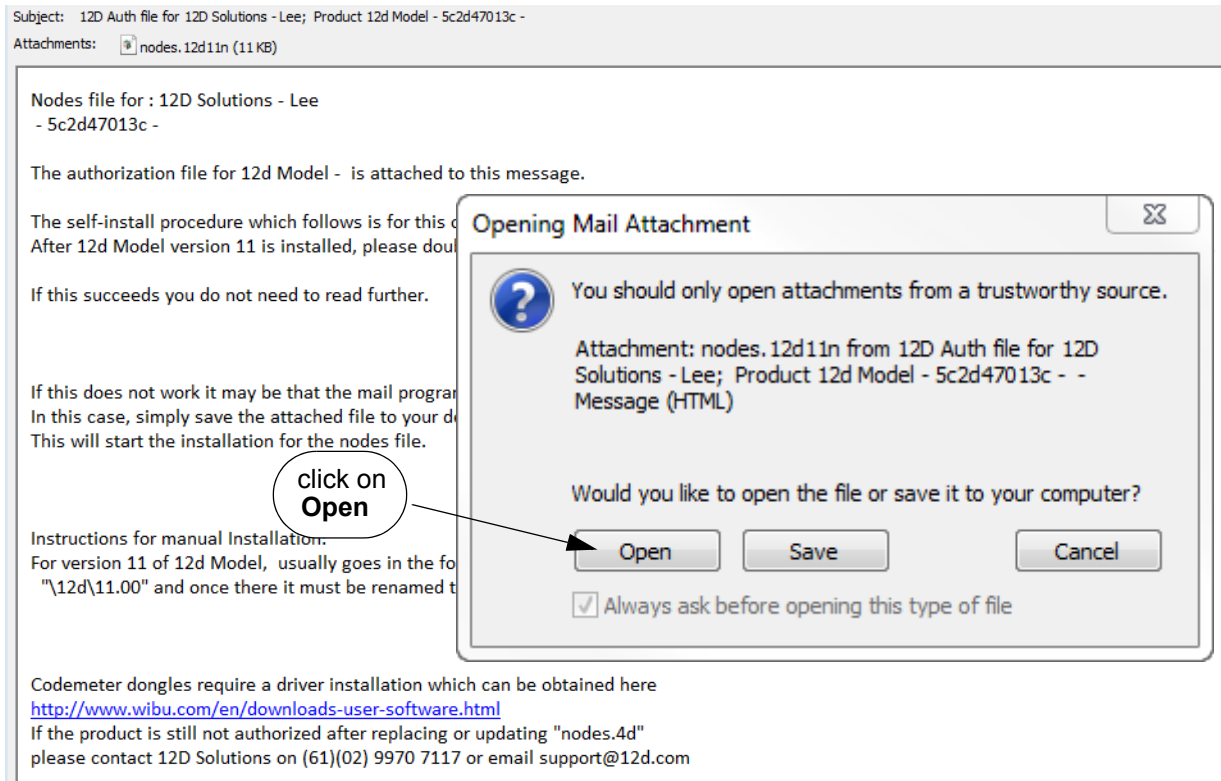
<http://www.wibu.com/en/downloads-user-software.html>

If the product is still not authorized after replacing or updating "nodes.4d"

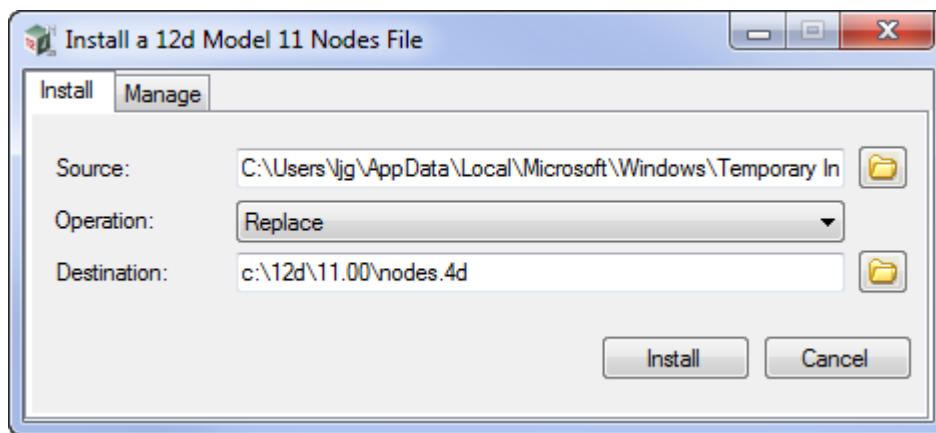
please contact 12D Solutions on (61)(02) 9970 7117 or email support@12d.com

Installing **12d Model** on a computer sets up a *Windows* file association so that a **nodes.12dxxn** file is recognised brings up the **Install a 12d Model xx Nodes File** panel which is used is to install a **nodes.4d** file in the correct location.

In the email, double click on the files **nodes.12dxxn** and the **Opening Mail Attachment** panel comes up.



Click on **Open** and then the **Install a 12d Model xx Nodes File** panel appears.



The choices for **Operation** are:

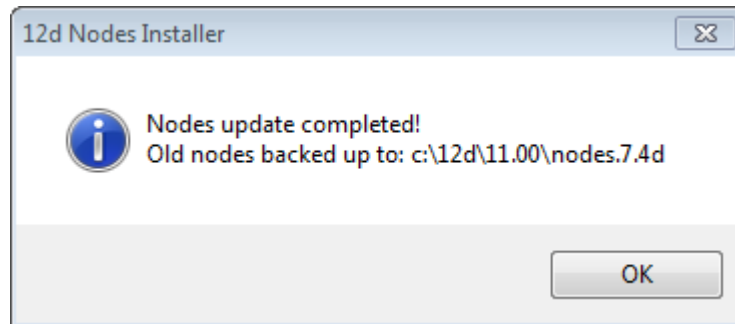
Prepend - if a **nodes.4d** file already exists, the information in the **nodes.12dxxn** file is added to the beginning of the existing nodes file. A backup up copy of the existing **nodes.4d** is created.

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

Select **Replace**, **Append** or **Prepend** and then click **Install**.

The new/updated **nodes.4d** file is created in the **Destination** folder (default is **C:\12d\11.00**) and if a **nodes.4d** file already existed, a backup copy of it is made.



Note - if you don't have the file **nodes.12dxxn** 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.12dxxn** file, double click on that file and the **Install a 12d Model Nodes File** panel should appear and you continue with the instructions above.

If that doesn't work, start up **12d Model xx** and click on the **Nodes.4d** button at the bottom of the **Open a Recent Project** panel. This will also bring up the **Install a 12d Model Nodes File** panel and you can browse for the **nodes.12dxxn** file in the **Source** panel field. You can then continue with the instructions above.

For any computer wanting to use a **12d Model** license from a Network CodeMeter, the updated **nodes.4d** is then placed in the standard search path for the **User** folder.

For example, for **12d Model 11** a **nodes.4d** in **c:\12d\11.00**, or a file pointed to by the environment variable **AUTHORIZATION_4D** in **env.4d**.

Using **AUTHORIZATION_4D** means that the **nodes.4d** file can be on a central computer and accessed by all the other Client computers.

Now that the **dongles.4d** file and the **nodes.4d** file have been updated, any computer on the network that has the CodeMeter drivers installed and has the updated **dongles.4d** and **nodes.4d** file should be able to obtain a **12d Model** license from a Network CodeMeter. That is, it becomes a **12d CodeMeter Client**.

This ends the notes for setting up the **12d CodeMeter Server** and any **12d CodeMeter Clients**.

7.5 Certifying the Network CodeMeter

The **Network CodeMeter** uses the **Certified Time** capability of the **CodeMeter**.

What this means is that the **Network Codemeter** stores a time called the **Certified Time** and a **12d Model** license can only be obtained from the **Network Codemeter** for two months after the **Certified Time** stored in the **Network CodeMeter**.

This means that for the **Network CodeMeter** to be usable, the **Certified Time** in the **Network CodeMeter** must be updated to the current date at least every two months. This process of updating the **Certified Time** in a **Network CodeMeter** is called **Certifying the CodeMeter**.

Certifying a CodeMeter can be done

- (a) from inside **12d Model** itself
 - (b) over the internet by using the **CodeMeter Control Centre**
- or
- (c) automatically by **12d Model**

For information on displaying and updating the **Certified Time**, go to [8 Errors Installing and Authorising](#).

7.6 Updating Licenses in a Network CodeMeter

A **Network CodeMeter** can contain one or more **virtual 12d dongles** and each of these virtual dongles can have a different number of **12d Model** licenses.

Adding extra **12d dongles**, or modifying the number of licenses on each of the **12d dongles** can be done electronically without having to remove the Network CodeMeter from the computer.

Updating virtual **12d dongles** is usually one simple step but it may involve two steps.

Step 1. Generating the CodeMeter Context File (.WibuCmRaC) - only if asked for

The *context* (.WibuCmRaC) file holds information about the current settings in the Network CodeMeter. **12d Solutions** usually knows these setting for your Network CodeMeter and this step is normally not required.

However sometimes you may be asked to generate the .WibuCmRaC file and email it to your local **12d Model** Distributor.

If you need to generate the **.WibuCmRaC** file, go to [7.6.1 Generating the Context File \(.WibuCmRac\) on page 79](#).

Step 2. Updating the Network CodeMeter with the .WibuCmRaU file

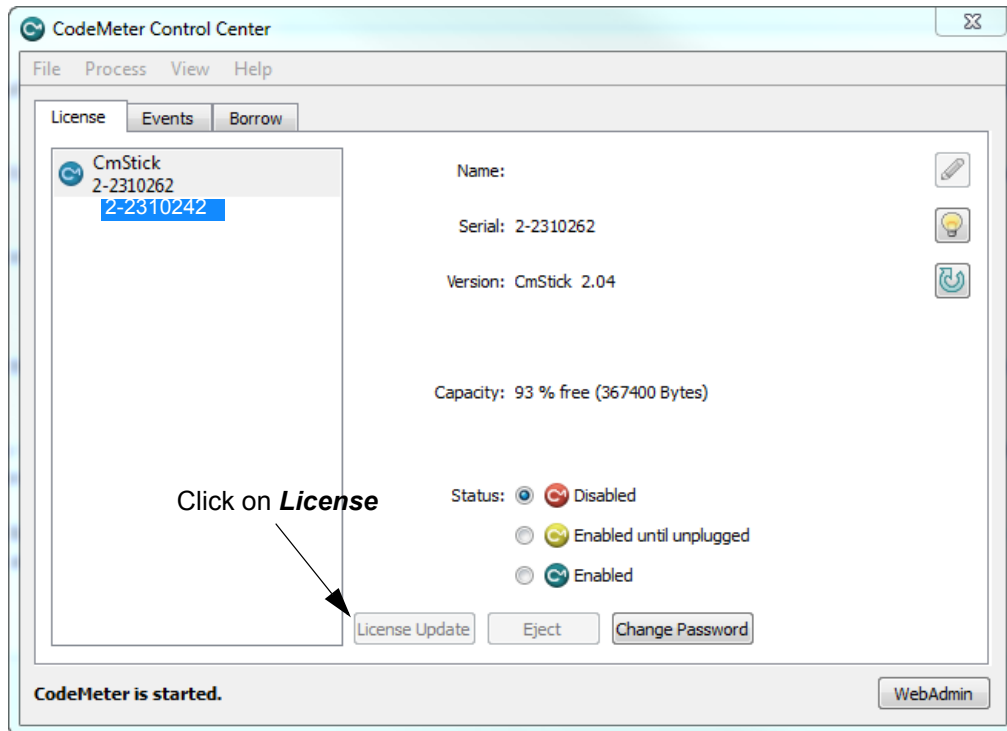
You will be emailed one or more special files (ending in **.WibuCmRaU**) which are used to update the information about the virtual **12d dongles** in the Network CodeMeter.

If you have a **WibuCmRaU** file, go to [7.6.1.1 Updating Using the .WibuCmRaU File on page 82](#).

7.6.1 Generating the Context File (.WibuCmRac)

The follow steps will generate a new context file for a Network CodeMeter using the *CodeMeter Control Center* panel.

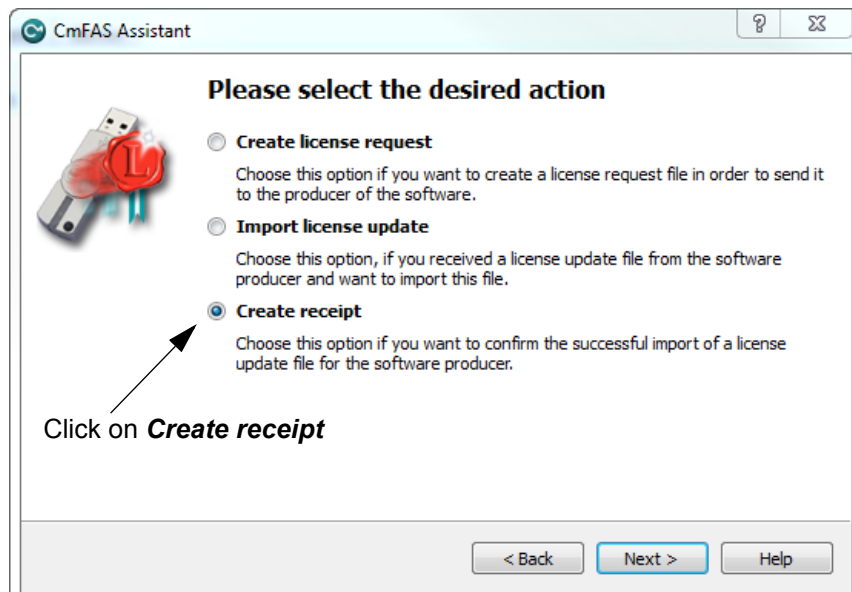
The *CodeMeter Control Center* panel is accessed by clicking on the **CodeMeter** icon that was installed on your task bar.



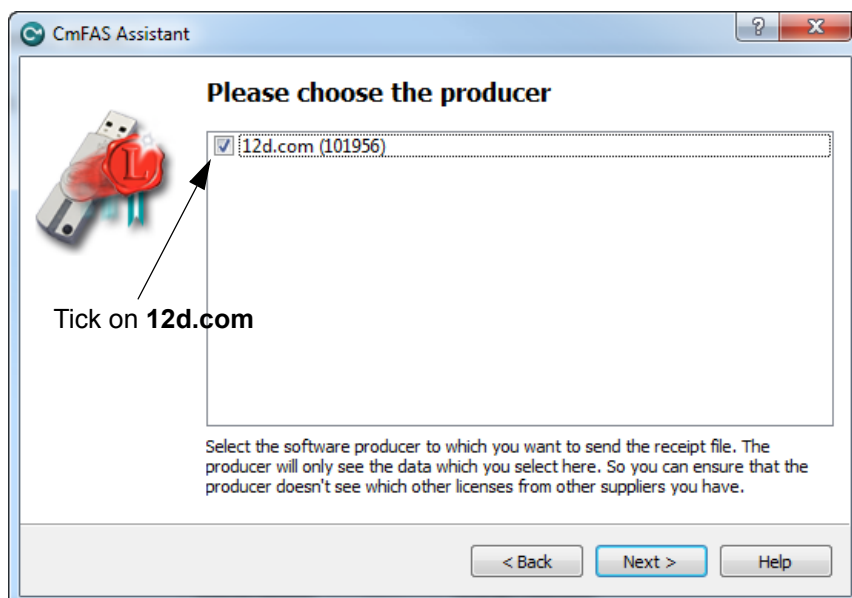
Click on **License Update** to bring up the **CmFAS Assistant** panel.



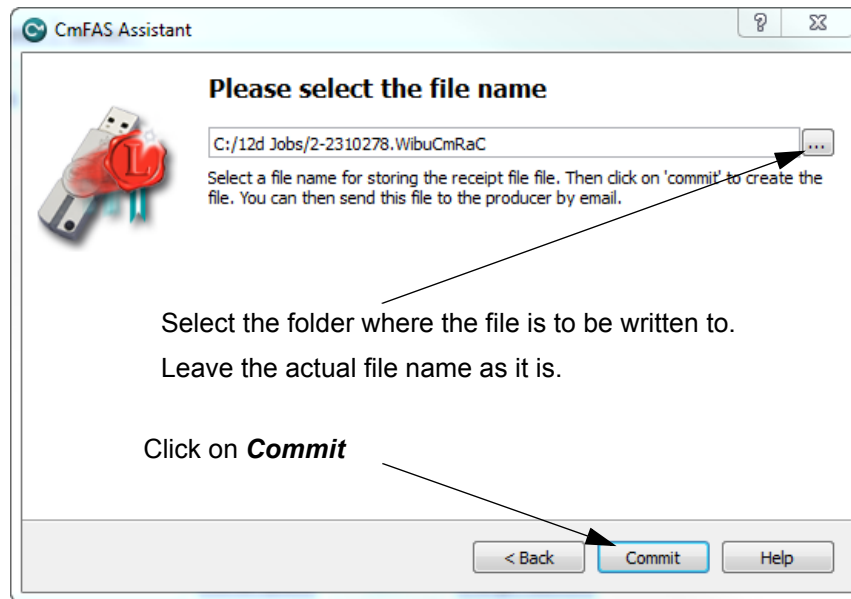
Select **Next**.



Tick on **Create receipt** and then select **Next**.



Tick on **12d.com** and then select **Next**.



Select the file to use to update the CodeMeter and then select **Commit**.

Email the **.WibuCmRaC** file to your **12d Model Reseller**.

Your **12d Model Reseller** will then be able to send you a **.WibuCmRaU** file to update your Network CodeMeter.

For information on how to use a **.WibuCmRaU** file to update the CodeMeter, see [7.6.1.1 Updating Using the .WibuCmRaU File on page 82](#).

7.6.1.1 Updating Using the .WibuCmRaU File

The number of virtual **12d dongles** and the number of **12d Model** licenses on them can be changed electronically without having to remove the CodeMeter from the computer.

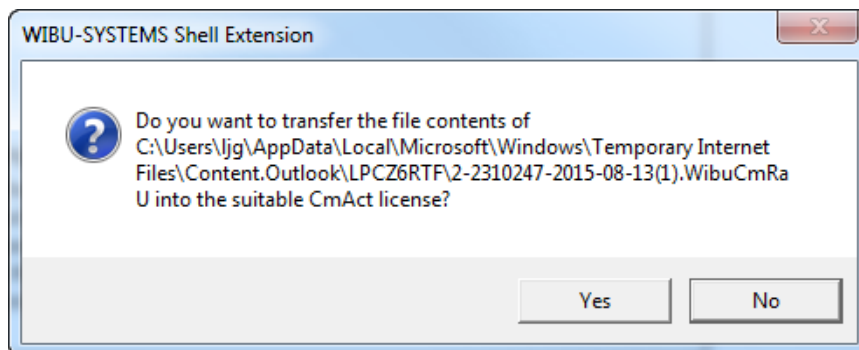
To update the CodeMeter, you will be sent a file starting with the CodeMeter number, then the date and finally ending in **.WibuCmRau**.

The steps below will show how to use the **.WibuCmRau** file to update the Network CodeMeter

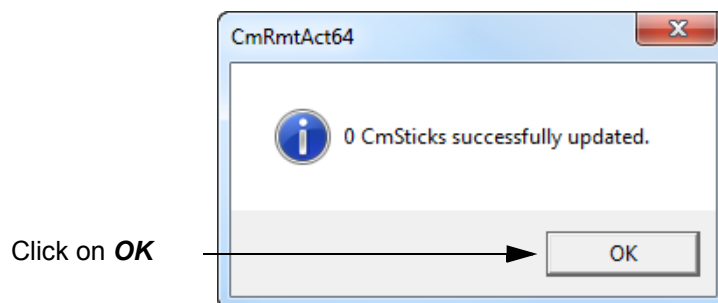
You need to have System Administrator rights to update the Network CodeMeter.

Before updating a Network CodeMeter dongle, run the **CodeMeter WebAdmin** software to check that no one is using the Network CodeMeter ([7.7 Monitoring and Cancelling Licenses](#)). The **CodeMeter WebAdmin** displays network dongle activity and it can also remove users from the network dongle.

Once all the users are off the Network CodeMeter, double click on the file **codemeter_number_date.WibuCmRau** and the following panel will appear:



Select **Yes** and a panel to say how many CodeMeters have been updated should appear.



The CodeMeter should now be updated. The **CodeMeter WebAdmin** can be used to check that the new number of licenses, or new number of 12d dongles, are now available.

WARNING: If there is **no** association for the **.WibuCmRau** file, double clicking on the **.WibuCmRau** file won't work. In that case go to [7.6.1.2 Manually Updating the Network CodeMeter on page 83](#).

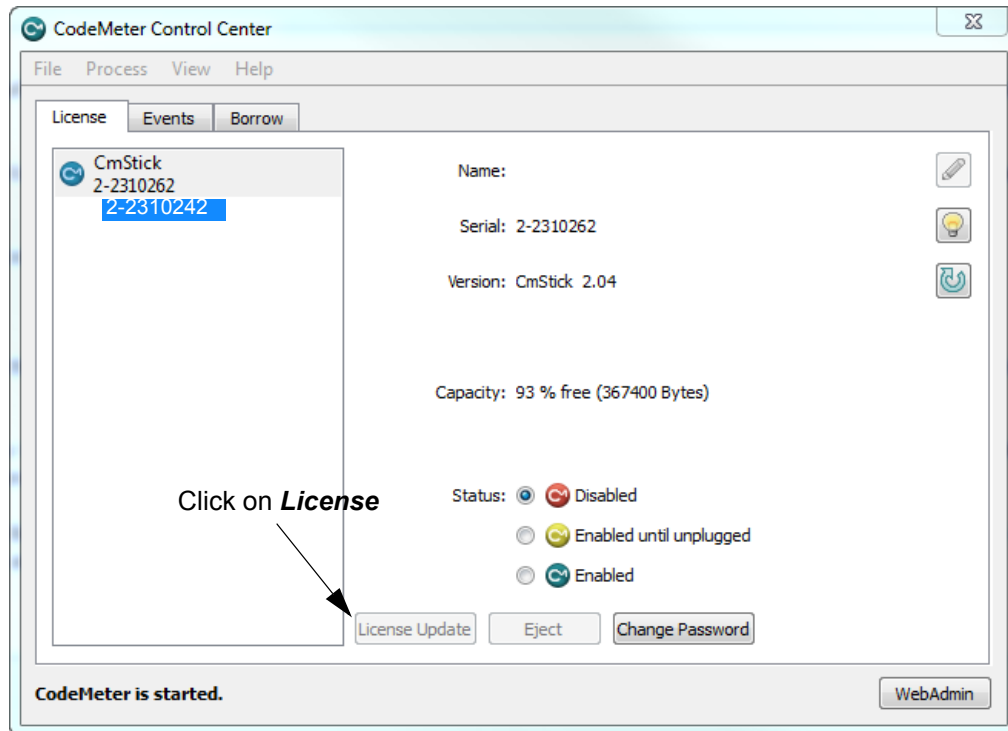
Nodes.4d:

If you've added a new **virtual 12d dongle** to your CodeMeter then a new **nodes.4d** file with that 12d dongle number in it will be needed. If all you did was change the number of licenses for an **existing 12d dongle** in the Network CodeMeter then a new **nodes.4d** file is not required.

7.6.1.2 Manually Updating the Network CodeMeter

If there is **no association** with the **.WibuCmRau** file then double clicking on the **.WibuCmRau** file won't automatically run the CodeMeter update program. So instead, the update will have to be done manually using the *CodeMeter Control Center* panel.

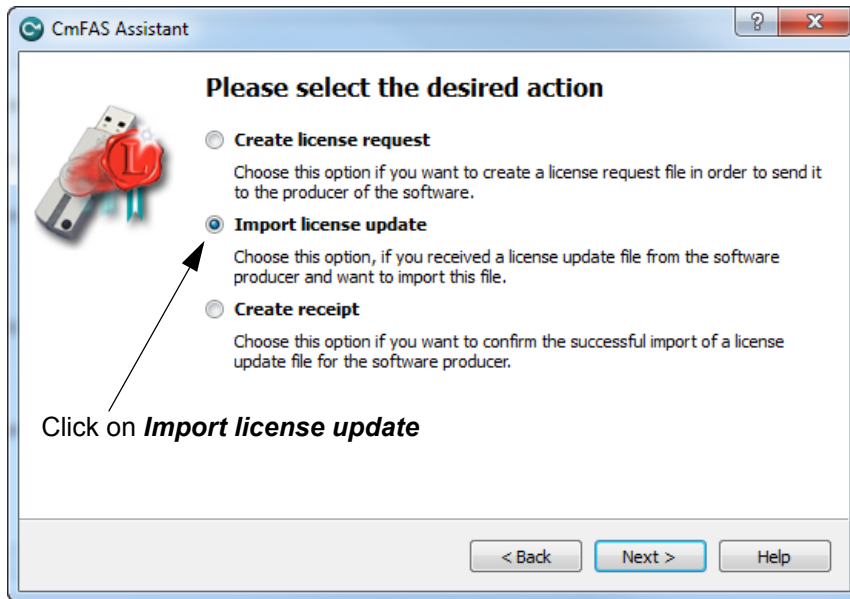
The *CodeMeter Control Center* panel is accessed by clicking on the **CodeMeter** icon that was installed on your task bar.



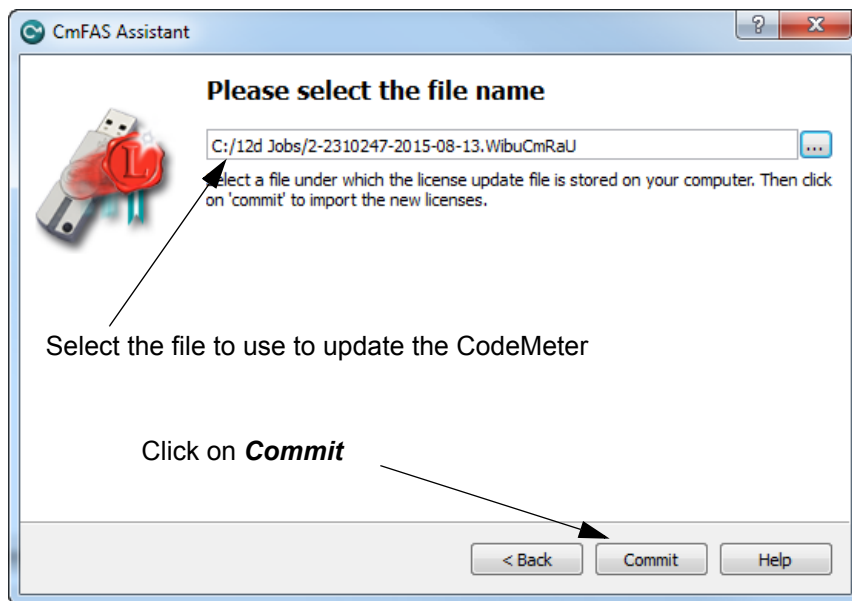
Click on **License Update** to bring up the **CmFAS Assistant** panel.



Select **Next**.



Tick on **Import license update** and then **Next**.



Select the file to use to update the CodeMeter and then select on **Commit**.

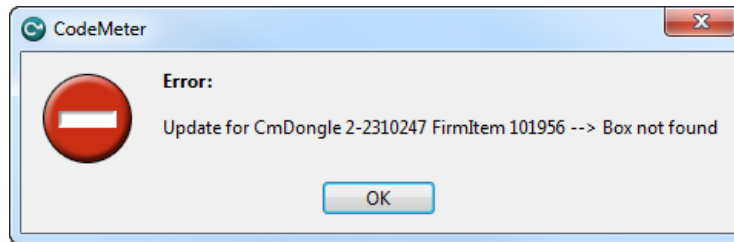
Nodes.4d:

If you've added a new **virtual 12d dongle** to your CodeMeter then a new **nodes.4d** file with that 12d dongle number in it will be needed. If all you did was change the number of licenses for an **existing 12d dongle** in the Network CodeMeter then a new **nodes.4d** file is not required.

Note - if the CodeMeter that the file applies to is not on the computer then an **Error** message will be brought up. See [7.6.2 Errors Updating the Network CodeMeter](#).

7.6.2 Errors Updating the Network CodeMeter

If there was a problem, instead of the dialogue stating that the CodeMeter has been updated, a CodeMeter error panel will appear. For example:



If you can't work out what your error was, email the error message to your **12d Model Reseller**. Doing a *Print Screen* and saving the *png* or *bmp* is the best way to record details of the error and send the image to your **12d Model Reseller**.

7.7 Monitoring and Cancelling Licenses

Clicking on the **WebAdmin** button brings up the **CodeMeter WebAdmin** panel which can display information about **12d Model** licenses for **any** CodeMeter (Network or Standalone) that is visible on the computer network.

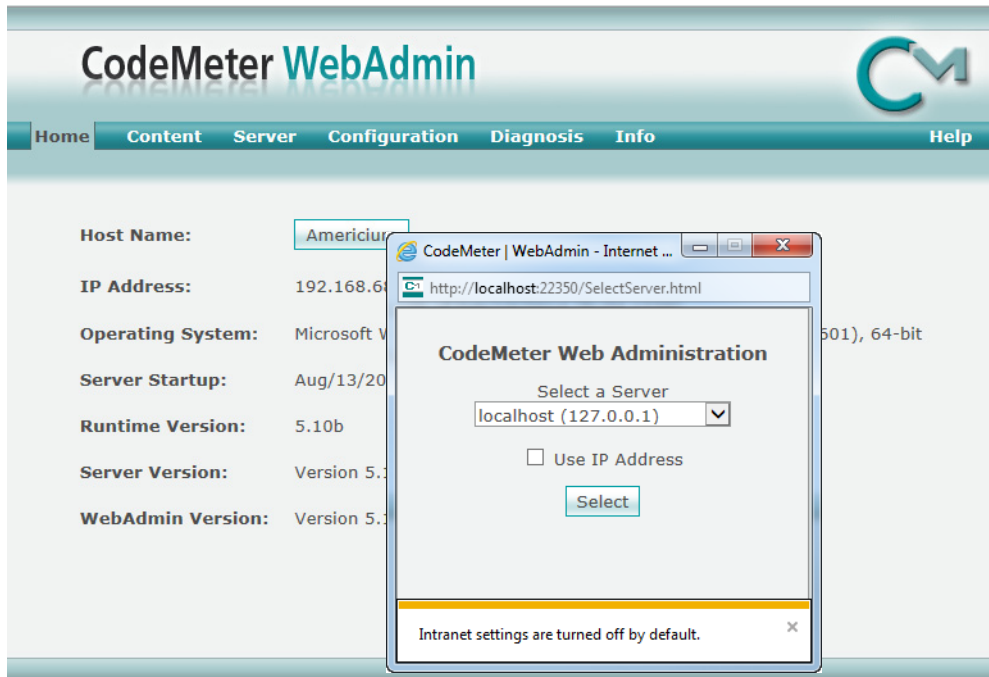
The panel comes up with the **Content > CmContainer** tab displaying information about one of the CodeMeters on **this** computer.



The screenshot shows the CodeMeter WebAdmin interface. At the top, there's a header with the CodeMeter logo and the title "CodeMeter WebAdmin". Below the header is a navigation bar with tabs: Home, Content, Server, Configuration, Diagnosis, Info, and Help. Under the "Content" tab, there's a sub-menu with "CmContainer", "Licenses", "User Data", and "Backup/Restore". The main content area displays information for a specific CmContainer. It includes a dropdown menu for "CmContainer:" with the value "2-2310278". Below this, there's a text field for "Name:" with the value "<no name>". The "CmContainer Type:" is "CmStick 2.04". The "First Device:" is "No drive assigned (HID)". The "Status:" section shows three radio buttons: "Disabled" (selected), "Enabled until Unplugged", and "Enabled". Below this, there are two time fields: "System Time (PC): 2015-08-14 17:24:11" and "System Time (CmContainer): 2015-08-14 17:24:10". The "Certified Time (CmContainer): 2015-08-14 15:36:01" is also shown, with an "Update" button next to it. Finally, the "Free Memory:" is "93 % (367.432 Bytes)", with a "Defragment" button next to it.

CmContainer:	2-2310278
Name:	<no name>
CmContainer Type:	CmStick 2.04
First Device:	No drive assigned (HID)
Status:	<input checked="" type="radio"/> Disabled <input type="radio"/> Enabled until Unplugged <input type="radio"/> Enabled
System Time (PC):	2015-08-14 17:24:11
System Time (CmContainer):	2015-08-14 17:24:10
Certified Time (CmContainer):	2015-08-14 15:36:01 <input type="button" value="Update"/>
Free Memory:	93 % (367.432 Bytes) <input type="button" value="Defragment"/>

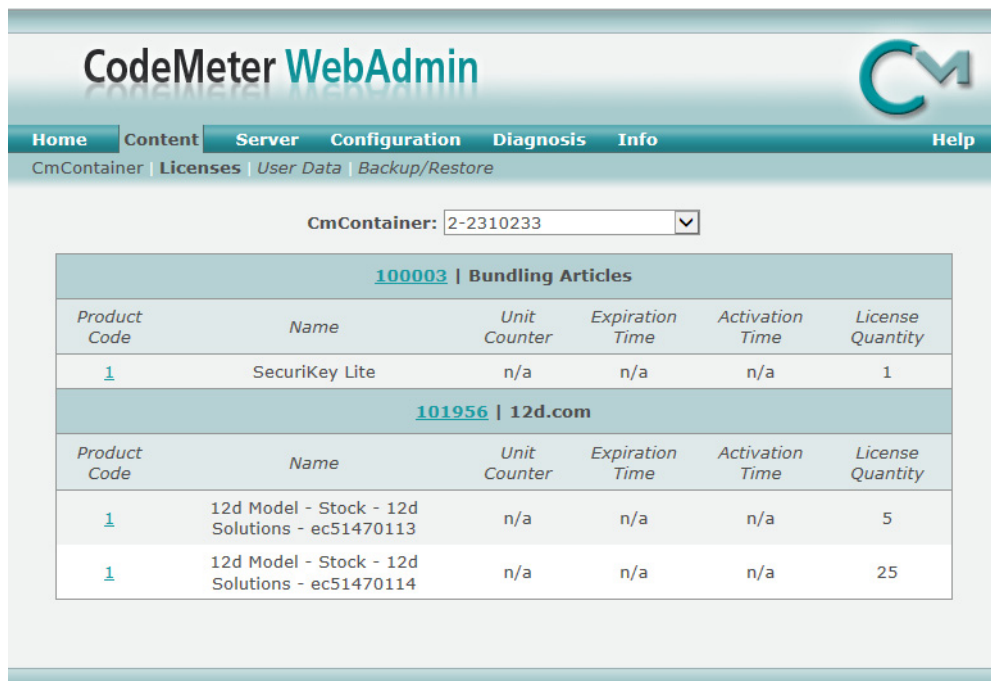
CodeMeters on other computer can be examined by clicking on the **Home** tab and then clicking on the displayed **Host Name:** to bring up the panel to select a **Server** to check for CodeMeters.



A pop up list is automatically created of all the computers that are visible on the network and have CodeMeters on them.

Picking a Server/Computer from the list and then pressing **Select** will set the **Host Name:** to the selected computer and all the tabs on the **CodeMeter WebAdmin** panel will then show information about the CodeMeters on the selected computer.

For example, the tab **Content > Licenses** will then display information about any selected CodeMeter on the selected computer.



To see how many **12d Model** licenses are being used by each virtual **12d dongle** in all the CodeMeters on a particular Server, when that server has been selected on the **Home** tab, click on the **Server > User** tab.

The screenshot shows the CodeMeter WebAdmin interface. The top navigation bar includes Home, Content, Server (selected), Configuration, Diagnosis, Info, and Help. Below the navigation bar, the 'Cluster | User' tab is active. The main section is titled 'Available Network Licenses at 'BUILD-SERVER''.

Product Code	Name	Feature Map	Licenses	Status						
				User Limit (Borrowed)	No User Limit	Exclusive	Shared	Free		
10 CodeMeter Test Firm Code										
13	Test Entry	-	1	0 (-)	0	0	0	0	1	Details
1608	CmDemo for C++ created this Product Item	-	1	0 (-)	0	0	0	0	1	Details
101956 12d.com										
1	12d Model - 12D Solutions - NSW - ec51470101	-	3	2 (-)	0	0	0	0	3	Details
1	12d Model - Stock - 12d Solutions - ec51470113	-	5	2 (-)	0	0	0	0	3	Details
1	12d Model - Stock - 12d Solutions - ec51470114	-	25	2 (-)	0	0	0	0	25	Details

Information last updated on Aug/14/2015 19:47:58

Annotations in the image:

- one 12d Model virtual dongle in a CodeMeter (points to the 'Test Entry' row)
- two 12d Model virtual dongles in a CodeMeter (points to the 'CmDemo for C++' row)
- Number of licenses on each virtual 12d dongle (points to the 'Licenses' column for the '12d Model - 12D Solutions' row)
- Number of licenses free (points to the 'Free' column for the '12d Model - Stock' row)

The **12d dongles** are displayed under the section titled **101956 | 12d.com**.

The table also displays how many **12d Model licenses** are on each **12d dongles**, and how many of those licenses are still **Free** to be used.

Details about each user on a particular **12d dongle** is displayed by clicking on the **Details** button at the end of the row for that virtual **12d dongle**.

CodeMeter WebAdmin

Home Content **Server** Configuration Diagnosis Info Help

Cluster | User

License Details CmContainer 2-2310233

Entry 101956 : 1 (-)

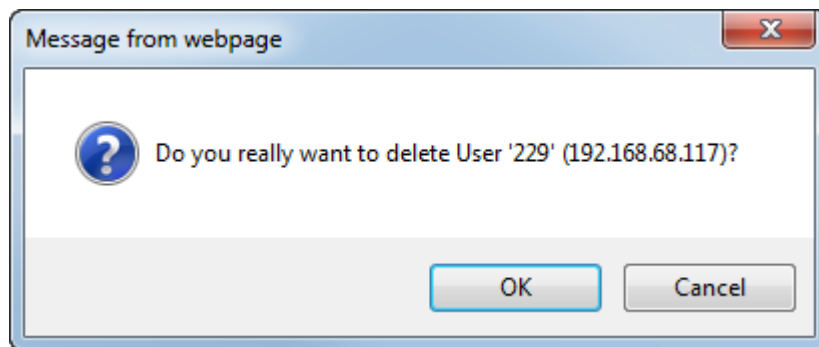
Free 3

Total 5

ID	Client (User)	Client Process ID	Application Information	Access Mode	First Access	Last Access	Expires	Action
229	192.168.68.117 (T3600-1 \ alg)	0		User Limit	2015-08-14 19:41:48	2015-08-14 19:49:22		Cancel
242	192.168.68.117 (T3600-1 \ alg)	0		User Limit	2015-08-14 19:41:57	2015-08-14 19:48:15		Cancel

Information last updated on Aug/14/2015 19:49:25

A particular user session of **12d Model** can be stopped by clicking on the **Cancel** button. A **Confirmation** panel will then be brought up.



If you click on **OK** and have permission to be able to stop people, the session will be terminated. If you do not have permission, you will get the message



7.8 Replacing an Existing Network CodeMeter

Before removing a Network CodeMeter, run the *CodeMeter WebAdmin* software to check that no one is using the Network CodeMeter dongle ([7.7 Monitoring and Cancelling Licenses](#)).

If there are no user on the Network CodeMeter, the existing Network CodeMeter can be removed from the computer and the new Network CodeMeter attached.

The new Network CodeMeter should now be ready to use.

NOTE - a new nodes file will be required for the new virtual **12d dongles** that are in the new Network CodeMeter.

7.9 End of the Notes on Network CodeMeters

This ends the general notes on the Network CodeMeter.

However information on Certifying Network CodeMeters is covered in [8 Errors Installing and Authorising](#).

If you need to install **12d Model** on a computer, go to the section [2 Installing 12d Model 12 Release Version](#).

The links for downloading documentation on **12d Model** are given in [9 Documentation](#).

The links for downloading information, power points and videos on what is new in **12d Model 12** are given in [10 What's New in 12d Model 12](#).

The rest of the chapters in this document are

[8 Errors Installing and Authorising](#)

[9 Documentation](#)

[10 What's New in 12d Model 12](#)

8 Errors Installing and Authorising

See

[8.1 12d Model XX Not Authorising](#)

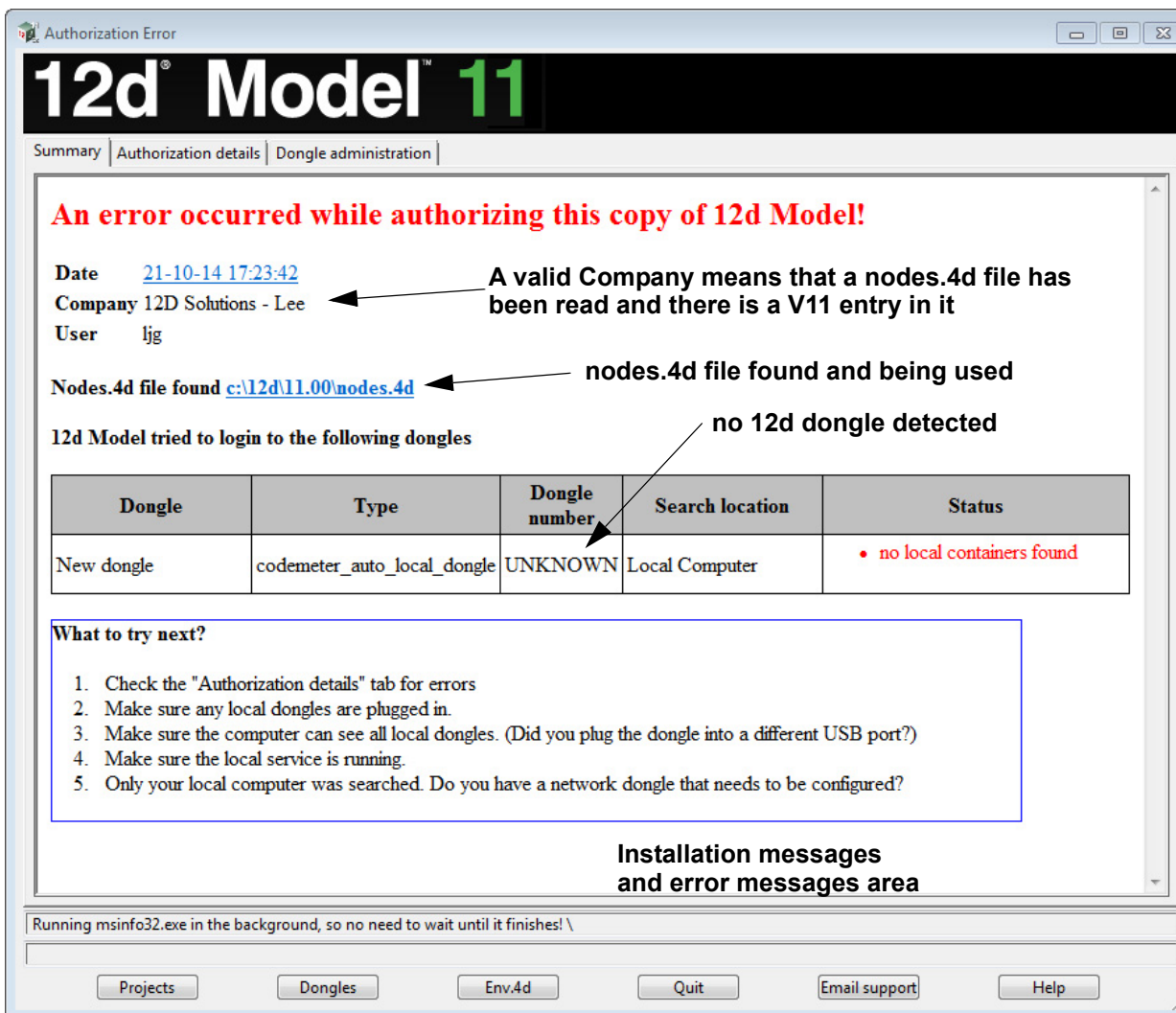
[8.2 Licence Expiry Warning](#)

[8.3 Dongle Missing](#)

8.1 12d Model XX Not Authorising

If there is an **error** with the installation, then the **Error Authorizing Release Version** panel appears with the error messages in the panel message area.

For example, for **12d Model 11**



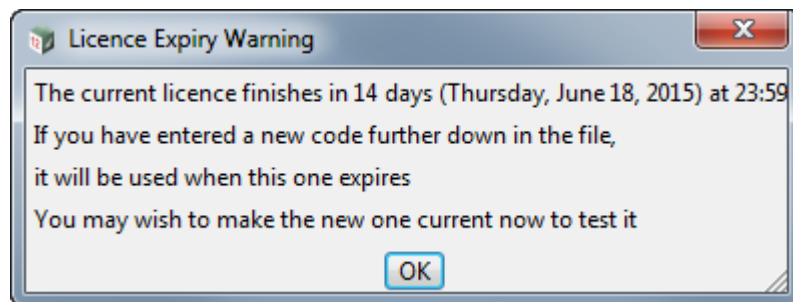
In the above panel, the UNKNOWN in the **Dongle number** column shows that no **12d** dongle has been detected.

If there is no error message on the panel or it is still not obvious what the problem is, please contact your **12d Model Reseller**.

8.2 Licence Expiry Warning

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

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

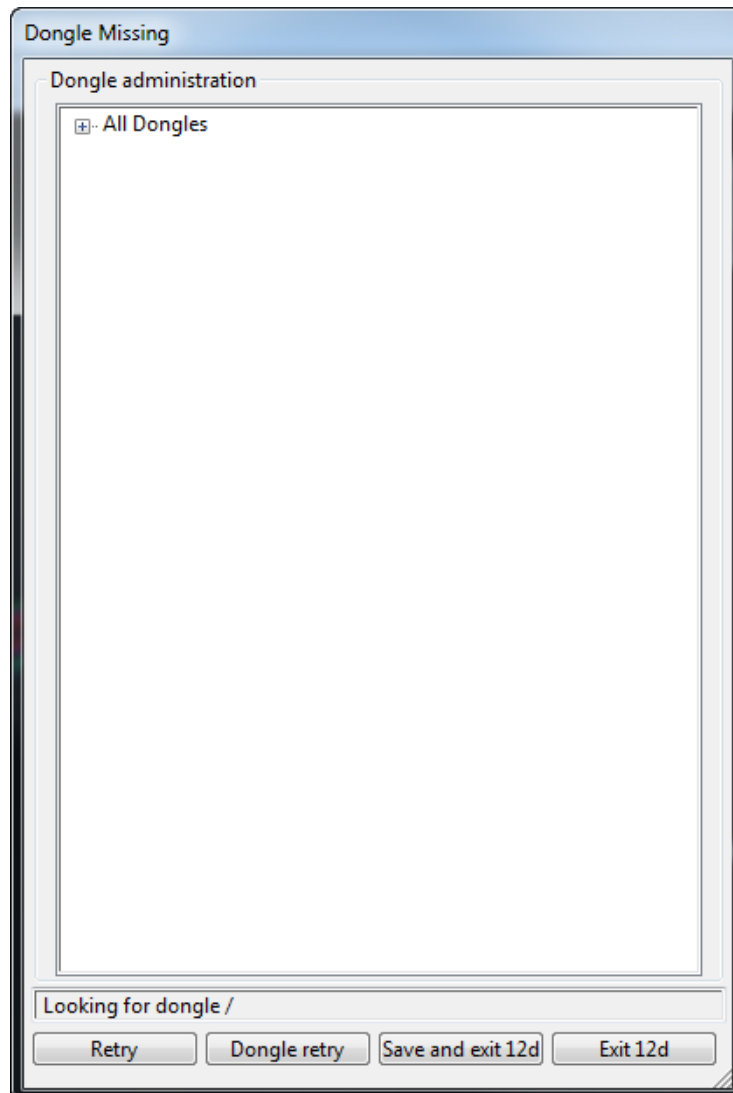


it simply means that the **nodes.4d** file needs to be updated.

Please contact your **12d Model Reseller** to obtain a new **nodes file** before the given date. If this is not done then **12d Model** will no longer run until you do obtain and install a new nodes file.

8.3 Dongle Missing

If when running **12d Model**, the **Dongle Missing** panel appears:



it simply means that the **12d** dongle can no longer be seen by **12d Model**.

Please check that your **12d** dongle is still attached to your computer, or if you are using a network dongle, that your network is still active.

Then click on **Retry**, and if that doesn't work, click on **Dongle retry**.

Even if you still can not see the dongle, **12d Model** will allow you to save your current work so that nothing is lost by clicking on the **Save and exit 12d** button.

9 Documentation

See

- [9.1 12d Model Reference Manual](#)
- [9.2 Getting Started for Design Manual](#)
- [9.3 Getting Started for Surveying Manual](#)
- [9.4 12d Model Programming Language Manual](#)
- [9.5 12d XML File Format](#)
- [9.6 12d A File Format](#)
- [10 What's New in 12d Model 12](#)

9.1 12d Model Reference Manual

The **12d Model Reference** manual contains the technical information required for using **12d Model** includes information such as:

- (a) the tools and concept used in **12d Model**
- (b) descriptions of the **12d Model** screen layout, views and toolbars
- (c) information on each **12d Model** menu
- (d) technical information on the fields in each **12d Model** panel
- (e) information on all the set up files for **12d Model**. E.g. for colours and linestyles
- (f) information on the 12d XML and 12da formats

Although the **12d Model Reference** manual contains some information on each of the field in panels, it is the technical information about what is valid values etc and is not intended to be a full description on how all the options work together. That is, it is **NOT a training manual**.

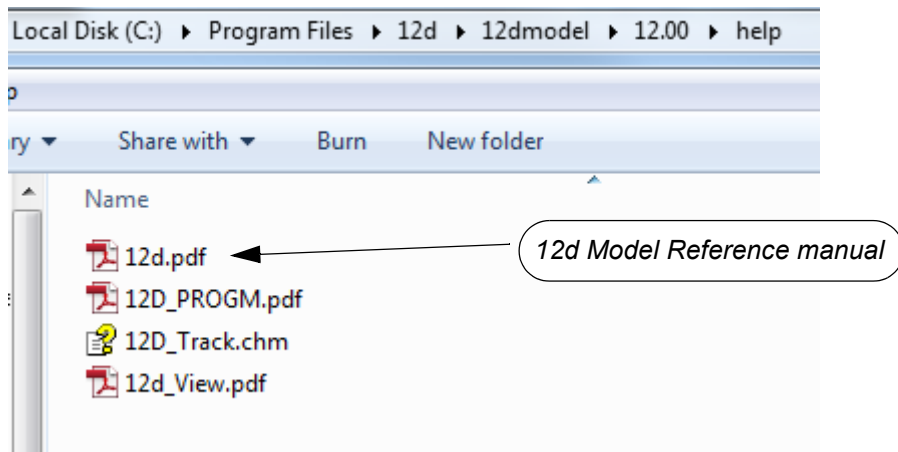
The **12d Model Reference** manual also acts as a **context sensitive Help** system when **12d Model** is running.

That is, when **12d Model** is running:

- (a) for most menus in **12d Model**, when the menu is on the screen and has the Windows focus, pressing F1 will open the **12d Model Reference** manual at that menu
- (b) for most panels in **12d Model**, when the panel is on the screen and has the Windows focus, pressing F1 will open the **12d Model Reference** manual at that panel. Or if the panel has a **Help** button, clicking on the **Help** button opens the **12d Model Reference** manual at that panel.
- (c) by clicking on the option **Help =>12d Model**

The **12d Model Reference** manual is also accessed from within **12d Model** by clicking on the option **Help =>12d Model**.

The **12d Model Reference** is a pdf file called **12d.pdf** and when **12d Model** is installed, **12d.pdf** is copied into the **Help** folder.



To download a zipped copy of the **12d Model Reference** manual, 12d.pdf, click on the following link and then unzip the downloaded file

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_ref_25_Aug_18.zip

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

Continue to [9.2 Getting Started for Design Manual](#) or return to [9 Documentation](#).

9.2 Getting Started for Design Manual

12d Model is supplied with a comprehensive on-line **12d Model Reference** manual which describes the function of each menu option in detail. However, it is a **Reference** manual and makes no attempt to describe how to use **12d Model** for production surveying and civil engineering work.

The **12d Model Getting Started for Design** manual is designed to show you how to work with the context sensitive help system, and then as the first section of Training, help you start to learn how to use **12d Model** to achieve typical civil engineering tasks.

Wherever possible, The **12d Model Getting Started for Design** manual uses examples to clarify usage. It compliments rather than replaces the **12d Model Reference** manual. In general, information in the **12d Model Reference** manual will not be duplicated here.

The **12d Model Getting Started for Design** manual is **NOT** installed with **12d Model** and needs to be downloaded.

To download a pdf copy of the **12d Model Getting Started for Design** manual, click on the following link

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12dm_getting_started_for_design_Mar_18.pdf

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

Continue to [9.3 Getting Started for Surveying Manual](#) or return to [9 Documentation](#).

9.3 Getting Started for Surveying Manual

12d Model is supplied with a comprehensive on-line **12d Model Reference** manual which describes the function of each menu option in detail. However, it is a **Reference** manual and makes no attempt to describe how to use **12d Model** for production surveying and civil engineering work.

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The **12d Model Getting Started for Surveying** manual is **NOT** installed with **12d Model** and needs to be downloaded.

To download a pdf copy of the **12d Model Getting Started for Surveying** manual, click on the following link

[http://downloads.12dmodel.com/v12/12d_Model_12_C1p/
12dm_getting_started_for_surveying_Jun_18.pdf](http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12dm_getting_started_for_surveying_Jun_18.pdf)

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

Continue to [9.4 12d Model Programming Language Manual](#) or return to [9 Documentation](#).

9.4 12d Model Programming Language Manual

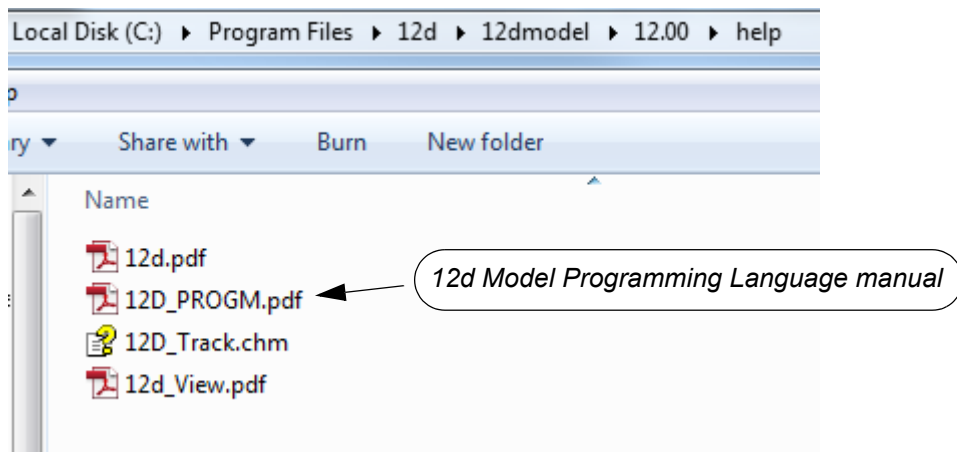
The **12d Model Programming Language** (12dPL), is a powerful programming language designed to run from within **12d Model**. It is also known as 4DML from when the product was called **4d Model**.

Its main purpose is to allow users to enhance the existing **12d Model** package by writing their own programs. These programs are often called **macros**.

The **12d Model Programming Language** manual is a reference manual and does not try to teach programming techniques. Instead this manual sets out the syntax, restrictions and supplied functions available in 12dPL.

is also accessed from within **12d Model** by clicking on the option **Help =>12d Model**.

The **12d Model Programming Language** manual is a pdf file called **12d_prog.pdf** and when **12d Model** is installed, **12d_prog.pdf** is copied into the **Help** folder.



The **12d Model Programming Language** manual can be accessed from within **12d Model** by clicking on the option **Help =>12d Macro Manual**

To download a pdf copy of the **12d Model Programming Language** manual, 12d_prog.pdf, click on the following link

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_prog Jun_18.pdf

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

Continue to [9.5 12d XML File Format](#) or return to [9 Documentation](#).

9.5 12d XML File Format

The **12d XML** file format is a text file definition from **12d Solutions** which is used for reading and writing out string data from **12d Model**. **12d XML** files normally end in **.12dxml**.

The **12d XML** file is a Unicode file.

The documentation for **12d XML** is part of the **12d Model Reference** manual (see [9.1 12d Model Reference Manual](#)) but the chapter has also been separated out so the entire **12d Model Reference** manual is not needed.

To download a pdf copy of the **12d Model 12d XML** manual, click on the following link

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_XML_File_Format_Jan_18.pdf

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

Continue to [9.6 12d A File Format](#) or return to [9 Documentation](#).

9.6 12d A File Format

The **12d A** (12d Archive) file format is a text file definition from **12d Solutions** which is used for reading and writing out string data from **12d Model**. **12d A** files normally end in **.12da**.

The **12d A** file is a Unicode file.

The documentation for **12d A** is part of the **12d Model Reference** manual (see [9.1 12d Model Reference Manual](#)) but the chapter has also been separated out so the entire **12d Model Reference** manual is not needed.

To download a pdf copy of the **12d A File Format** manual, click on the following link

http://downloads.12dmodel.com/v12/12d_Model_12_C1p/12d_A_File_Format_Jan_18.pdf

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

Further Notes:

1. **12da** was originally an Ascii file and stood for **12d Ascii** but now that the 12da file is a Unicode file, **12da** stands for **12d Archive**.
2. 12da has now been superseded by 12d XML (see [9.5 12d XML File Format](#))

Continue to [10 What's New in 12d Model 12](#) or return to [9 Documentation](#).

10 What's New in 12d Model 12

This chapter contains links to information on many of the new things in **12d Model 12**.

See

[10.1 What's New Summary for 12d Model C1n and C1p Only](#)

[10.2 What's New Summary for 12d Model C1n and C1p Only - Dated](#)

[10.3 What's New Summary for 12d Model 12](#)

[10.4 What's New Summary for 12d Model 12 by Subversion](#)

[10.5 What's New in 12d Model 12 pdf](#)

[10.6 Video Playlist from What's New in 12d Webinars](#)

[10.7 What's New Summary from 12d Conference 2016](#)

[10.8 Power Point Show on Some What's New in V12](#)

10.1 What's New Summary for 12d Model C1n and C1p Only

The **What's New Summary** gives a one line summary of the New Features and Bugs Fixed in **12d Model 12 C1p** sorted by Components:

[http://downloads.12dmodel.com/V12/12d_Model_12_C1p/
Whats_New_Summary_in_12d_Model_12_C1n_split_bugs_combined_11_Sep_18.htm](http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_C1n_split_bugs_combined_11_Sep_18.htm)

[http://downloads.12dmodel.com/V12/12d_Model_12_C1p/
Whats_New_Summary_in_12d_Model_12_C1p_split_bugs_combined_11_Sep_18.htm](http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_C1p_split_bugs_combined_11_Sep_18.htm)

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

10.2 What's New Summary for 12d Model C1n and C1p Only - Dated

The **What's New Summary for Dated** gives a one line summary of the New Features and Bugs Fixed in **12d Model 12 C1p** but reverse sorted by date of additions.

[http://downloads.12dmodel.com/V12/12d_Model_12_C1p/
Whats_New_Summary_in_12d_Model_12_C1n_split_dated_bugs_combined_11_Sep_18.htm](http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_C1n_split_dated_bugs_combined_11_Sep_18.htm)

[http://downloads.12dmodel.com/V12/12d_Model_12_C1p/
Whats_New_Summary_in_12d_Model_12_C1p_split_dated_bugs_combined_11_Sep_18.htm](http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_C1p_split_dated_bugs_combined_11_Sep_18.htm)

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

10.3 What's New Summary for 12d Model 12

The **What's New Summary All of 12d Model 12** gives a one line summary of all the New Features in **12d Model 12** and sorted by Component:

http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_all_combined_11_Sep_18.htm

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

10.4 What's New Summary for 12d Model 12 by Subversion

The **What's New Summary All of 12d Model 12** gives a one line summary of all the New Features and Improvements in **12d Model 12** but it is broken up into each subversion:

http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_Summary_in_12d_Model_12_all_split_combined_11_Sep_18.htm

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

10.5 What's New in 12d Model 12 pdf

The **What's New in 12d Model 12 pdf** gives detailed information on many of the new options and features in **12d Model 12**.

http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_in_12d_Model_12_24_Dec_16.pdf

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

10.6 Video Playlist from What's New in 12d Webinars

The **What's New in 12d Model Video Playlist** is three youtube videos of the **What's New in 12d Model 12 Webinars** given in May 2016

https://www.youtube.com/playlist?list=PLvBKANuJGV678MwMrU81rh-pxYY_GdjCP

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

10.7 What's New Summary from 12d Conference 2016

The **What's New in 12d Model Video Playlist** is a youtube video of the presentation by Dr Lee Gregory, Managing Director and Co-Founder of 12d Solutions, welcoming delegates to the **12d International Conference 2016**, and then going through many of the new features in **12d Model 12**. Richard Stoliar also presents some of the new features in **12d Synergy 3**.

<https://www.youtube.com/watch?v=AFVmDed8ndw&index=2&list=PLvBKANuJGV66MIVG-7JKWGVlQRDA0uO1m>

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

10.8 Power Point Show on Some What's New in V12

The **What's New 12d Model 12 Powerpoint Show** (*pps file*) is a powerpoint going through some of the new options and features in **12d Model 12**.

http://downloads.12dmodel.com/V12/12d_Model_12_C1p/Whats_New_in_12d_Model_12_Forum_Dec_16.pps

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

Return to [10 What's New in 12d Model 12](#).

