

12dModel

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

For 12d Model 12 C1u

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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 on page 6](#)

- (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.


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

	Stubby USB		Long USB	
	with end cap and ring	without end cap and ring		
Micro SD				

Note: the end cap and ring are cosmetic only

12d Network CodeMeter

Silver USB



For notes on setting up a **Network CodeMeter**, go to [9 Network CodeMeters on page 59](#)

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 on page 8](#).

For detailed instructions and links for Installing the Release Version of **12d Model**, go to [4 Detailed Notes for Installing 12d Model on page 14](#).

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 on page 14](#).

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 64-bit and a 32-bit, on your computer at the same time as **12d Model 12**.
- (c) You can have both a 64-bit and a 32-bit **12d Model 12** on your computer at the same time.
- (d) A new **12d Model 12** 64/32 can't be installed if there is already a matching **12d Model 12** 64/32 on your computer.

The **12d Model 12 Installer** will check for an existing matching **12d Model 12 64/32** 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 [3.5 Certifying Codemeters on page 9](#)).

3.2 Hardware 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 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_C1u/12d_hardware_lock_drivers_installation_16_Aug_19.exe

3.4 12d Model Installs for Windows 7, 8.1 and 10

(a) 12d Model Install for 64 bit Window 7, 8.1 and 10 - approximately 1 Gb

http://downloads.12dmodel.com/v12/12d_Model_12_C1u/12d_Model_12_C1u_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_C1u/12d_Model_12_C1u_32_Setup.exe

3.5 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 [5 Certifying CodeMeters on page 42](#).

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

3.6 For Users with 12d Model 11 Already Installed

3.6.1 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**.

3.6.2 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**.

3.6.3 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**.

3.6.4 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.

3.7 Network CodeMeters

3.7.1 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 [9 Network CodeMeters on page 59](#).

3.7.2 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 [10.5 Updating Licenses in Network CodeMeters on page 116](#).

3.8 Documentation and What's New

The links for downloading documentation on **12d Model** are given in [6 Documentation on page 47](#).

The links for downloading documentation, power points and videos on what is new in **12d Model 12** are given in [7 What's New in 12d Model 12 on page 52](#).

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 on page 14](#)

[9 Network CodeMeters on page 59](#)

[6 Documentation on page 47](#)

[7 What's New in 12d Model 12 on page 52](#)

[8 Errors Installing and Authorising on page 55](#)

[9 Network CodeMeters on page 59](#)

[10 CodeMeter Control Center & WebAdmin on page 84](#)

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 hardware locks before installing drivers

The **12d CodeMeter** or **12d Wibu** hardware 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

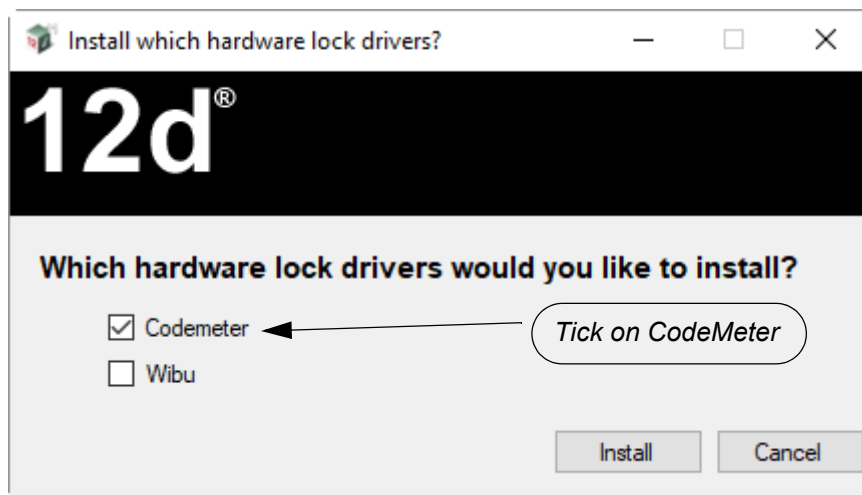
The first step is to install the *CodeMeter/Wibu drivers* using *12d_hardware_lock_drivers_installation_date.exe* which is downloaded from:

http://downloads.12dmodel.com/v12/12d_Model_12_C1u/12d_hardware_lock_drivers_installation_16_Aug_19.exe

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

Once you have downloaded *12d_hardware_lock_drivers_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**.


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

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.

- (a) If you have only **CodeMeter** ticked on then clicking on **Install** will install the CodeMeter drivers.
Go to [Installing the CodeMeter Drivers: on page 17](#)
- (b) If you have only **Wibu** ticked on then clicking on **Install** will install the Wibu drivers.
Go to [Installing the Wibu Drivers: on page 21](#).
- (c) 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: on page 21](#)

Page 16

Documentation and What's New

Installing the CodeMeter Drivers:

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

CodeMeter Setup

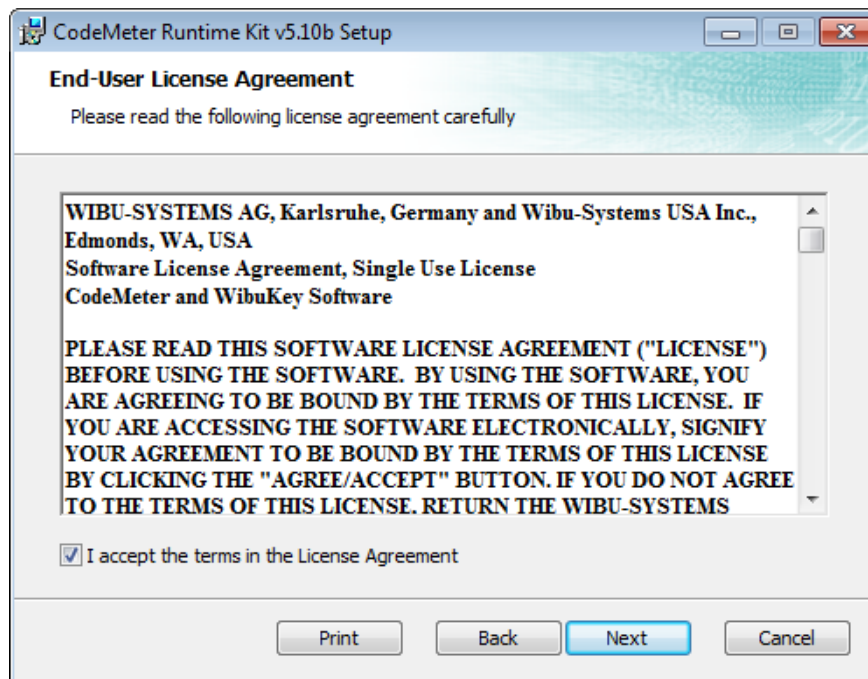
CodeMeter Runtime Kit Setup



Select **Next** to continue

End-User License Agreement

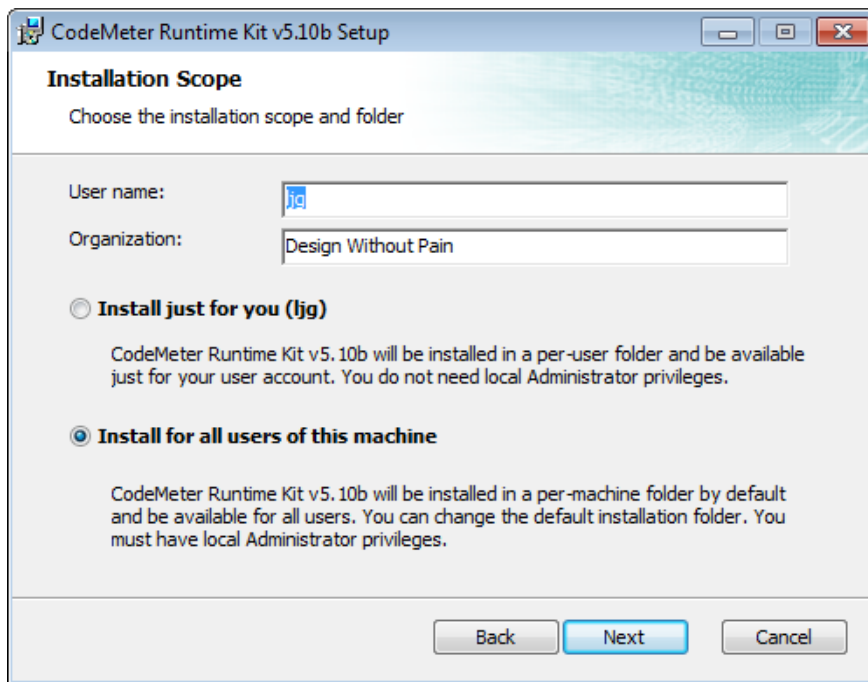
CodeMeter Runtime Kit Setup



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

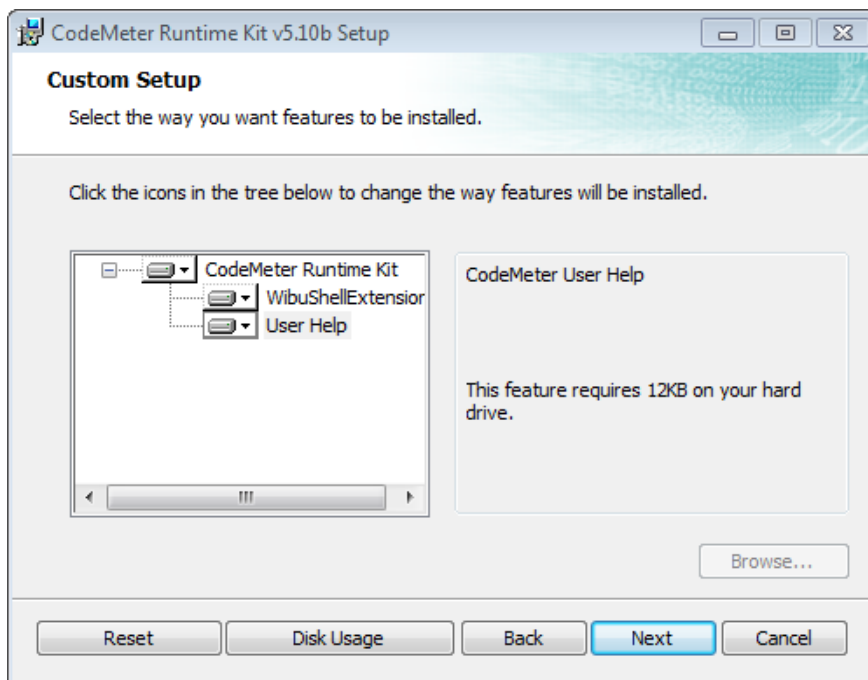


Enter your **User name** and **Organisation**.

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

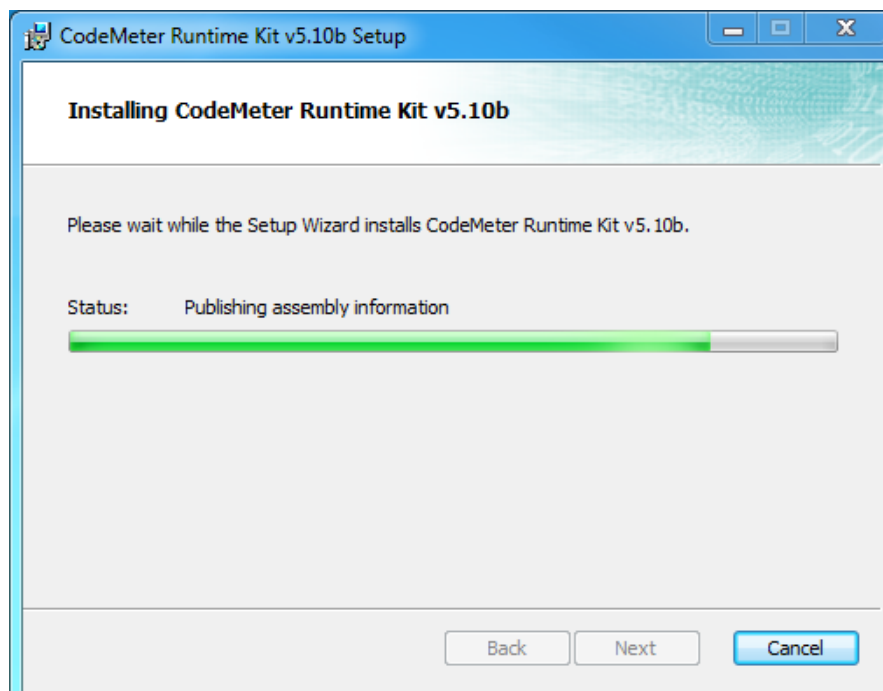
CodeMeter Runtime Kit Setup



Select **Install** to continue

Installing

CodeMeter Runtime Kit Setup



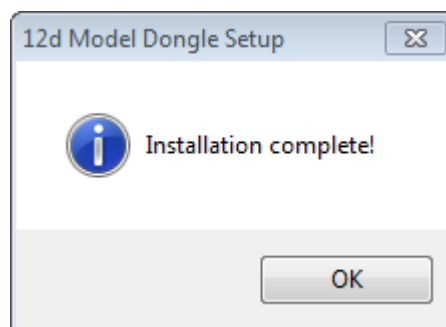
Completed

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.](#)

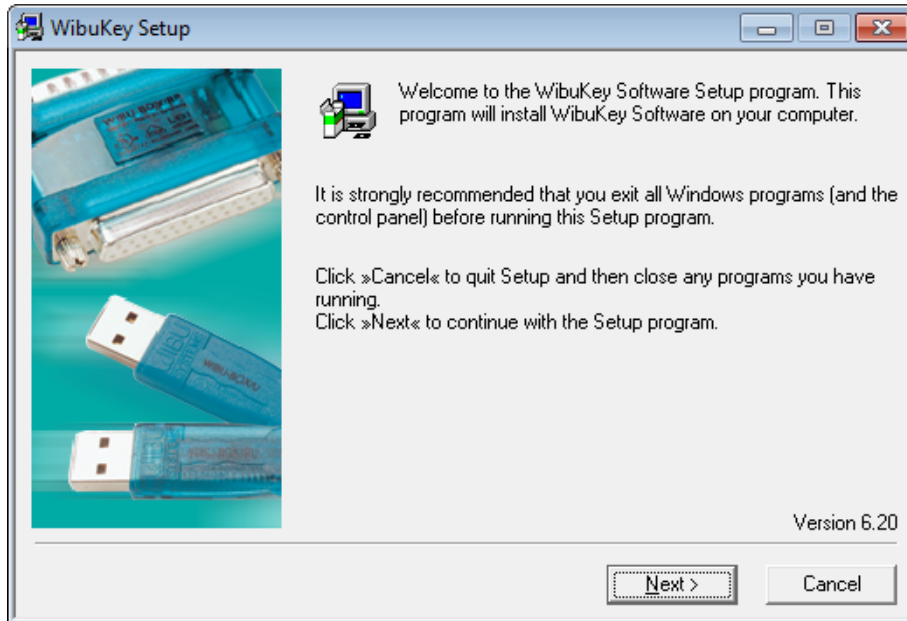
Otherwise continue to [Step 2. Attach the Dongle.](#)

Installing the Wibu Drivers:

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

WIBU-KEY Setup

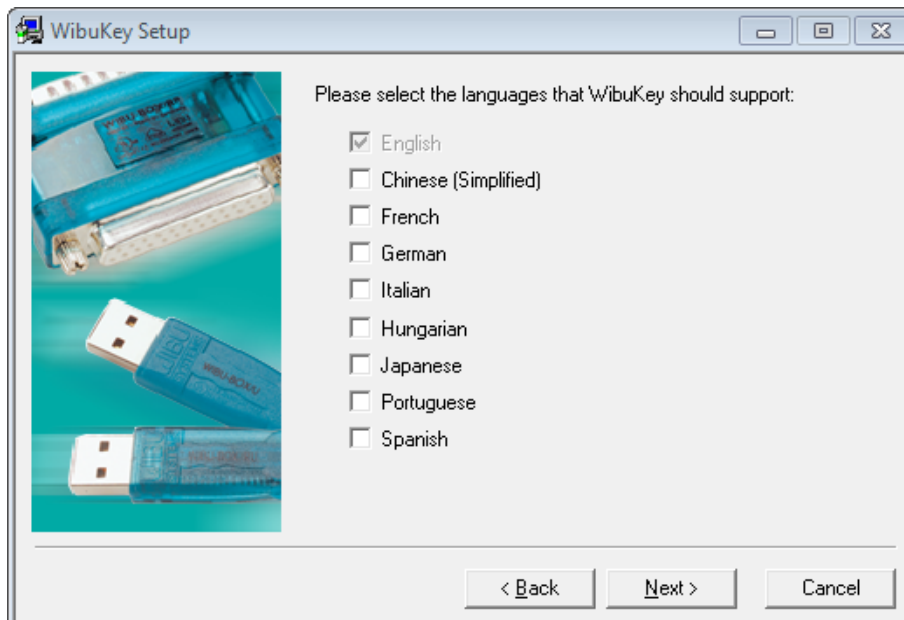
Welcome to WIBU-KEY Software Setup



select **Next** to continue

WIBU-KEY Setup

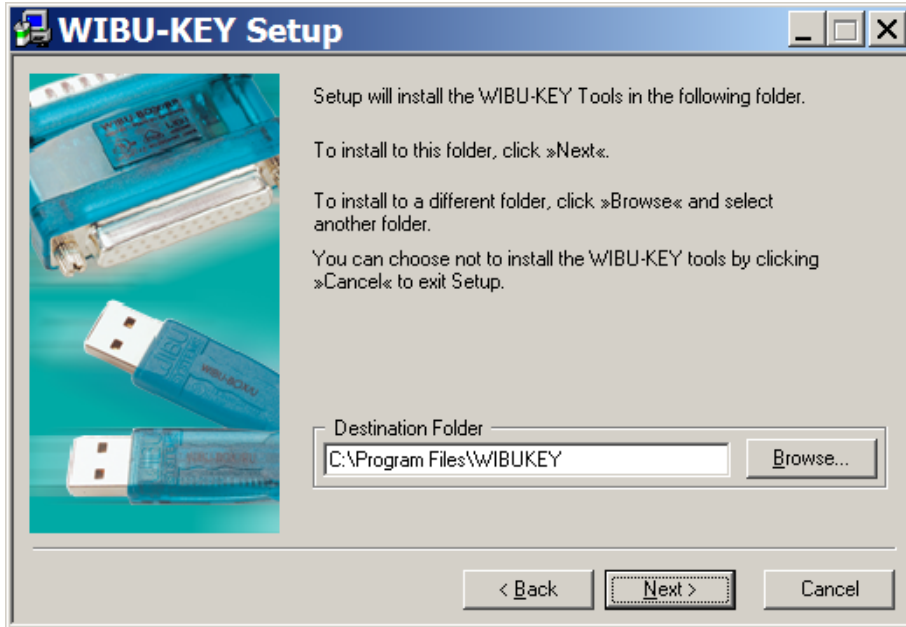
Language Selection



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

WIBU-KEY Setup

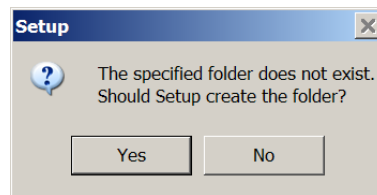
Installation folder



select **Next** to continue

WIBU-KEY Setup

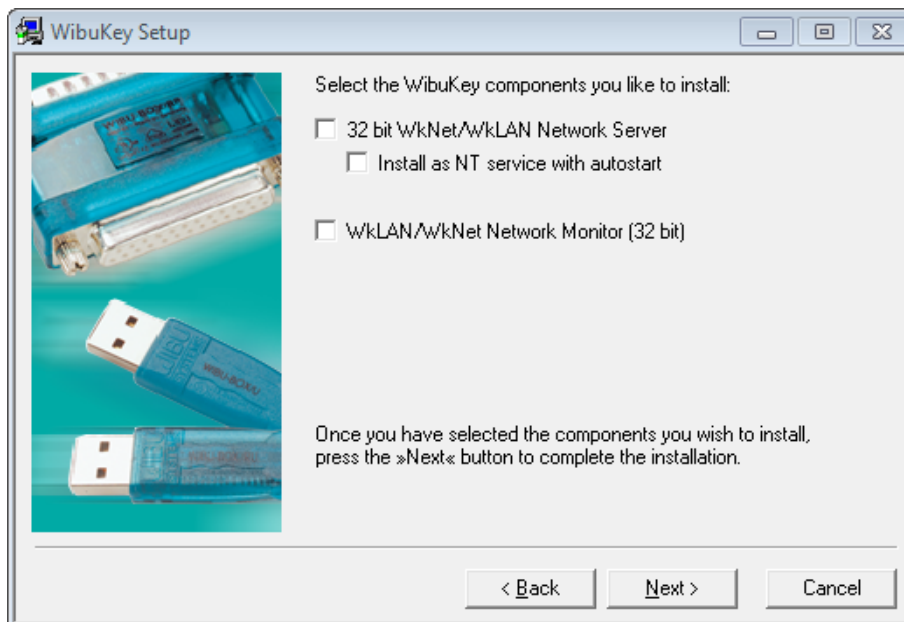
Installation folder doesn't exist



click Yes to continue

WIBU-KEY Setup

Component Selection

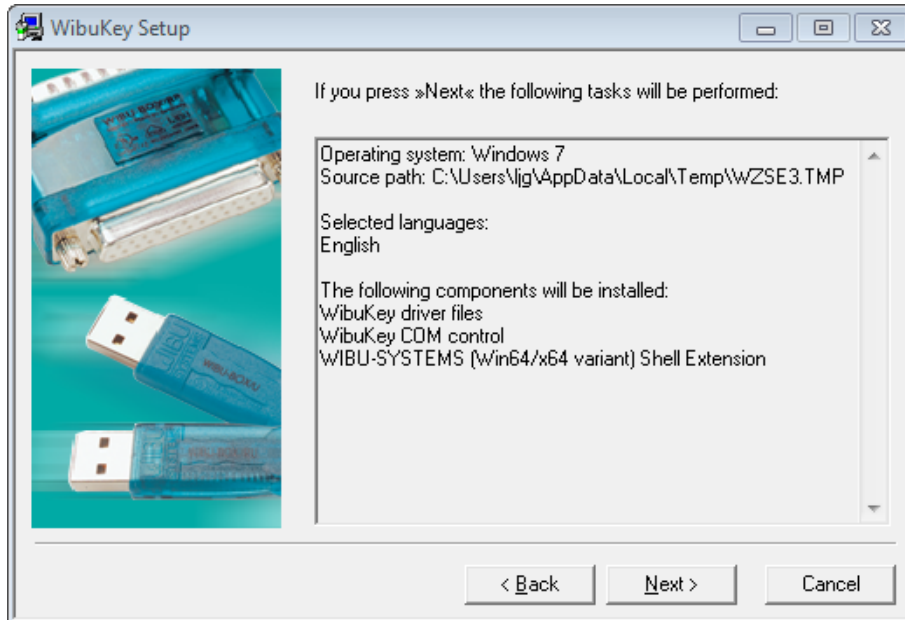


For a standard install, nothing needs to be ticked on (the WibuKey components are for monitoring a Wibu network dongle).

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

WIBU-KEY Setup

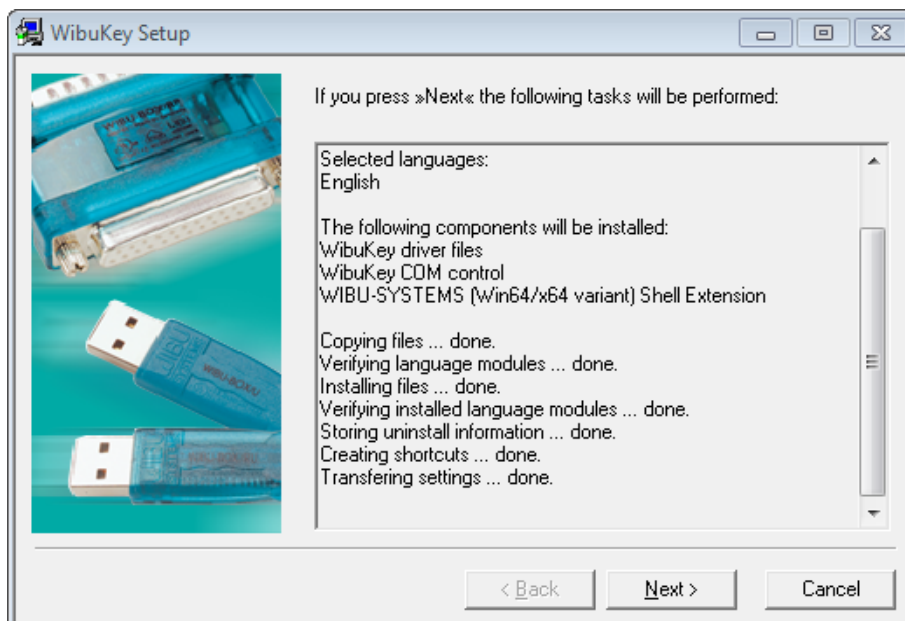
Tasks to be Performed



select **Next** to continue

WIBU-KEY Setup

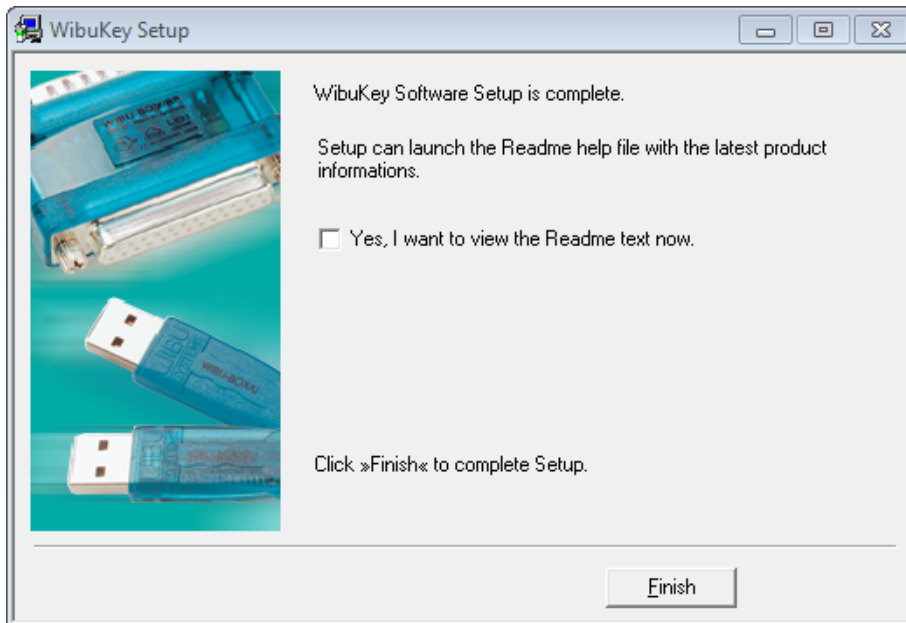
Tasks done



select **Next** to continue

WIBU-KEY Setup

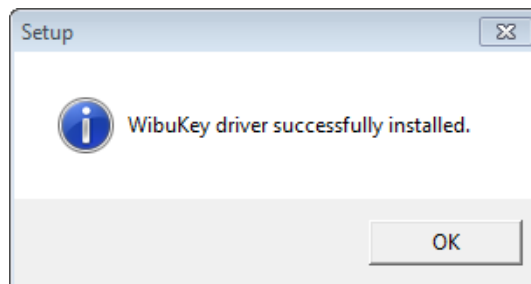
Setup Complete



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

Setup OK

Setup OK

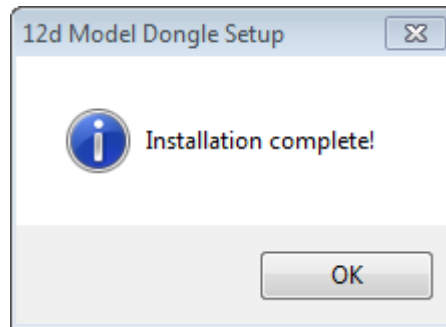


click **OK**

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: on page 17](#),

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



click **OK**

Continue to [Step 2. Attach the Dongle on page 26](#).

Step 2. Attach the Dongle

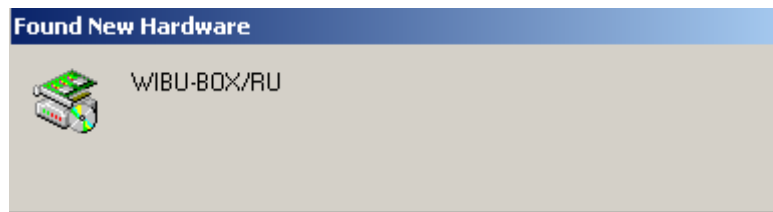
The **12d Model** dongle (CodeMeter or old Wibu) can now be attached to the computer.

For USB dongles:

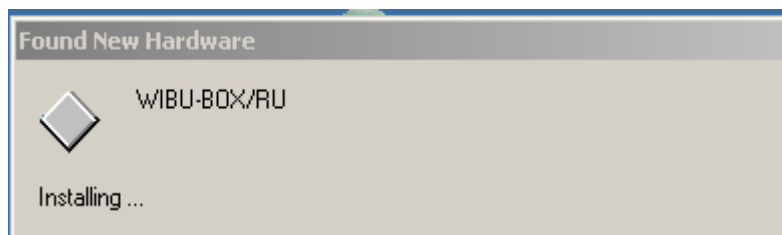
Warning: you must have System Administration rights the first time you attach a USB dongle to any USB port:

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 [5 Certifying CodeMeters on page 42](#).

Continue to [Step 3. Installing 12d Model 12 Release Version on page 28](#).

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_C1u/12d_Model_12_C1u_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:

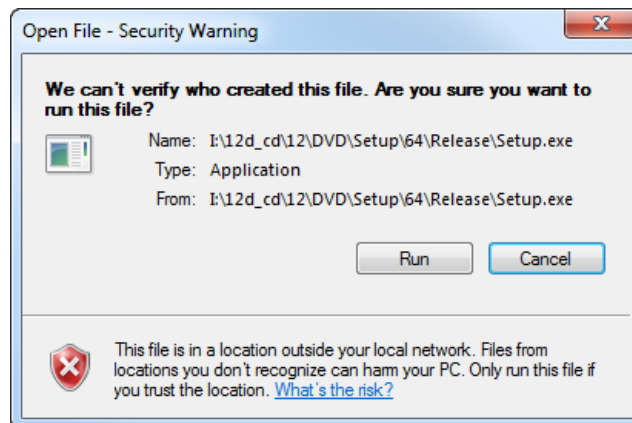
If you are running **12d Model** on **32 bit Windows**, then you need to download the **12d Model 32 bit** installer which installs a **32-bit 12d.exe**.

To download the installer, click on

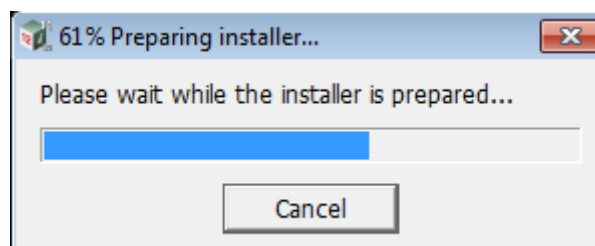
http://downloads.12dmodel.com/v12/12d_Model_12_C1u/12d_Model_12_C1u_32_Setup.exe

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:



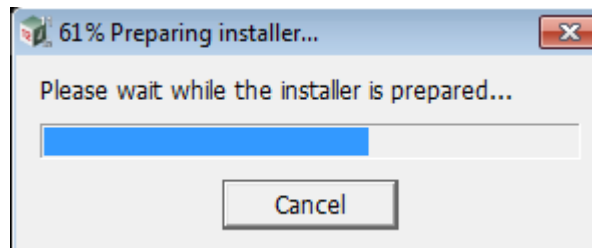
Click on **Run** so that the installation can begin.



Continue to [Installing 12d Model on page 29](#).

Installing 12d Model

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

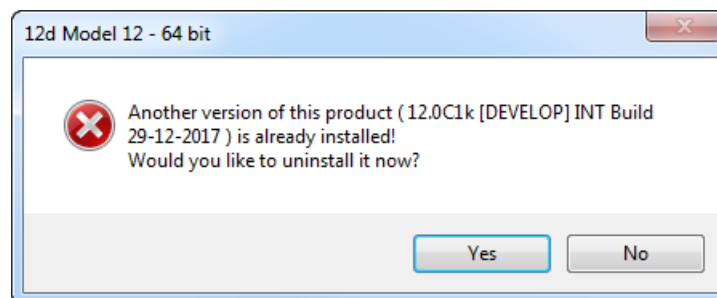


Note - the following screens are for the **64 bit** install but the **32 bit** install is identical except the words **64 bit** are replaced by **32 bit**.

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.

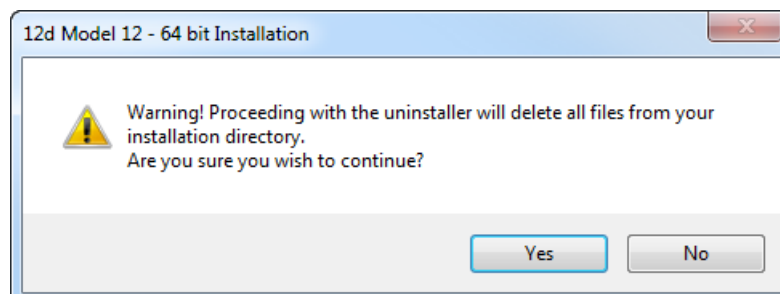
If the Installer detects this case, you will be asked if the Installer can **uninstall the existing version**. Unless this is done, the installation can not proceed.

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.



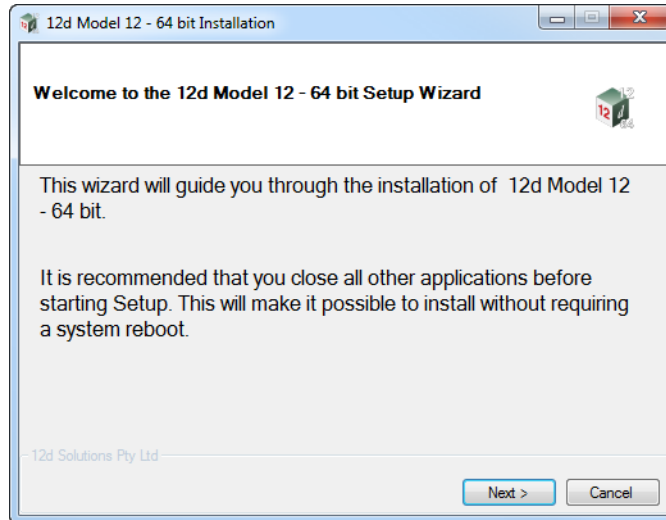
Click on **Yes** to continue.

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

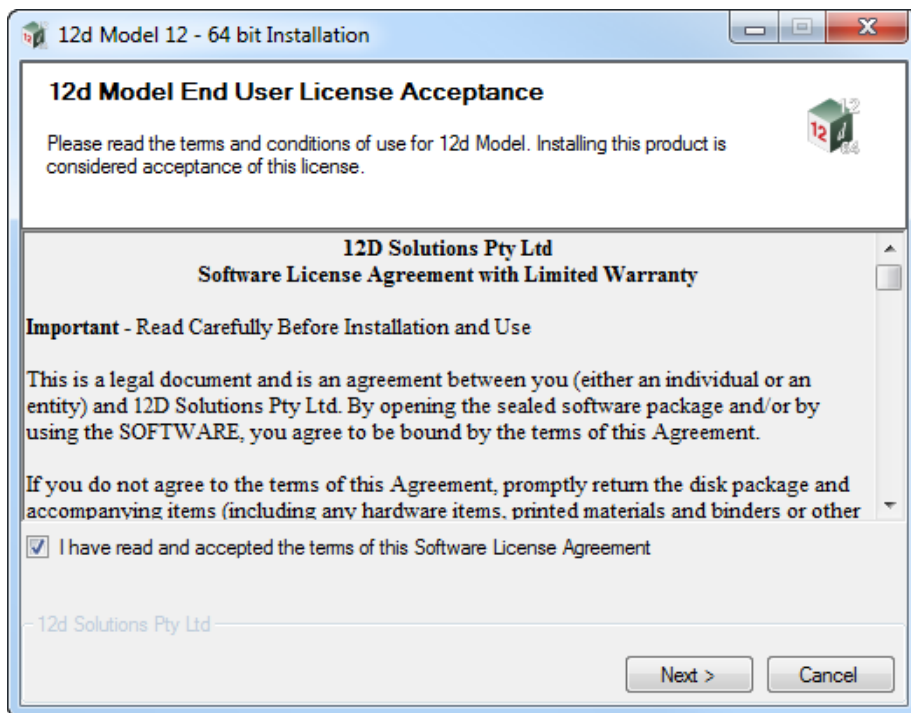
Welcome message



Select **Next** to continue with the installation

Software License Agreement

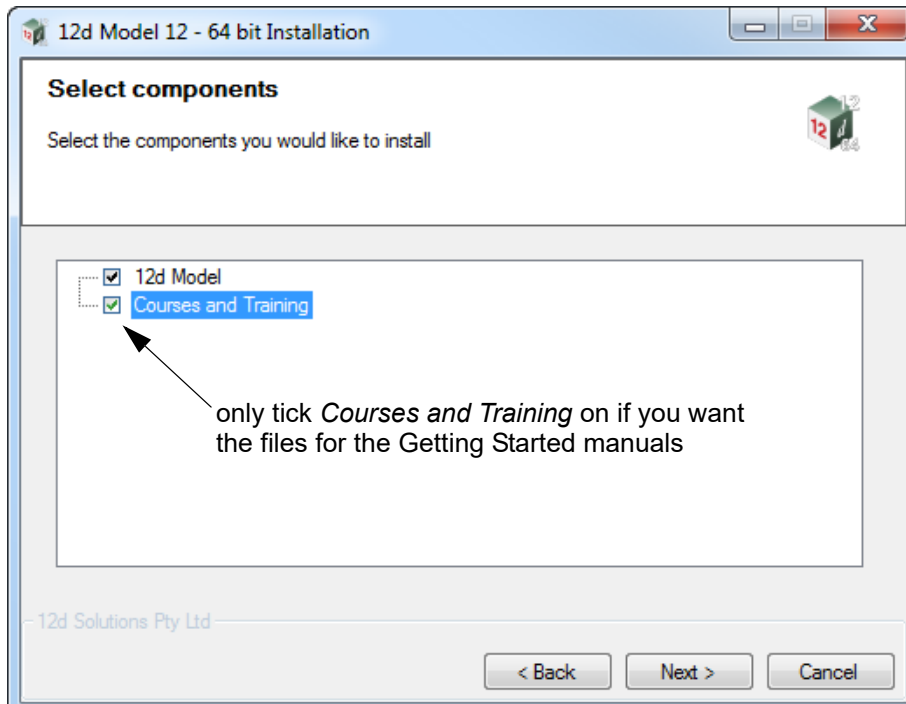
12D Solutions license agreement



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

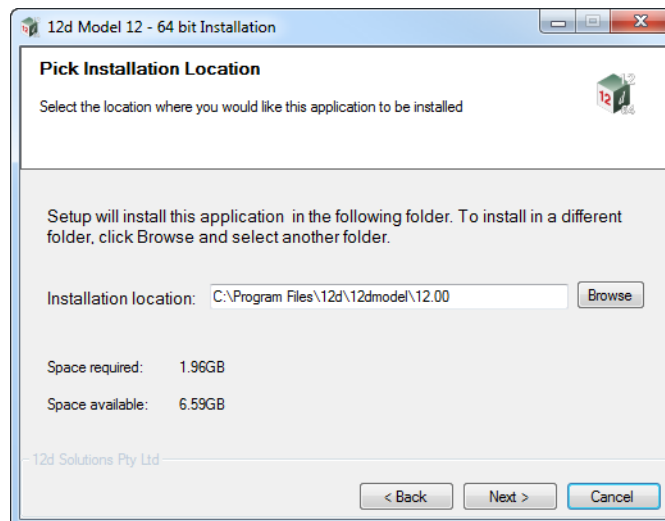


Tick on **12d Model** to install **12d Model**.

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:

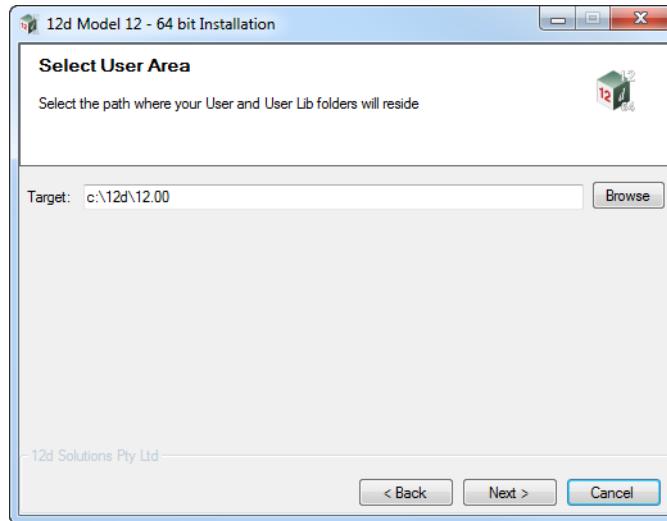
for 64 bit version: *c:\Program Files\12d\12dmodel\12.0*

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



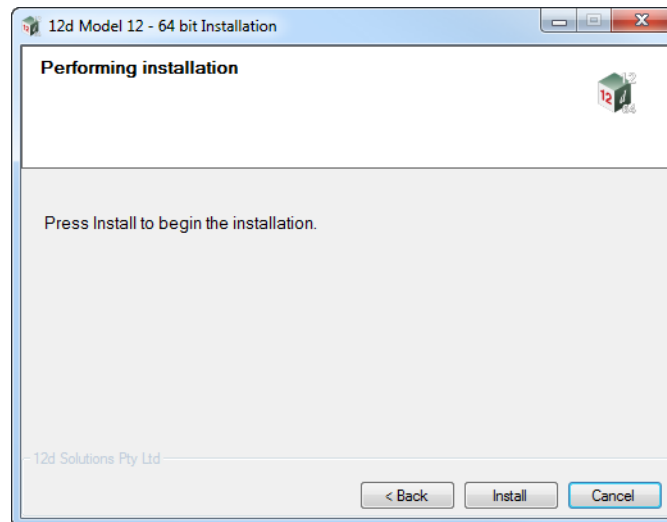
Continue with the default folder for the **User Area** for the software:

`c:\12d\12.0`

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

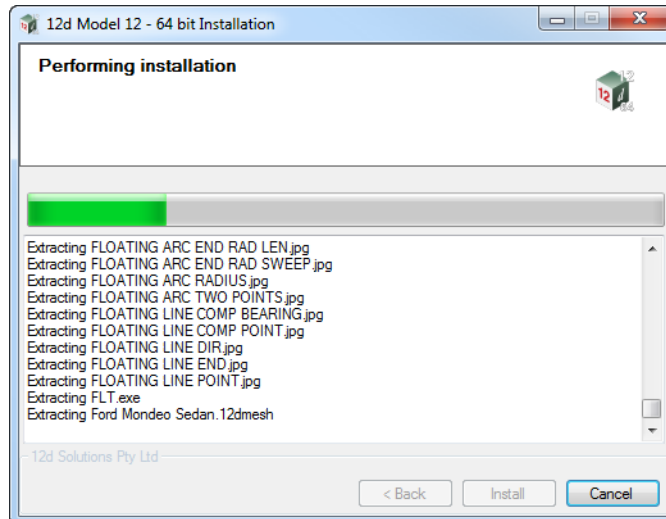
Select **Next** to continue with the installation

Ready to Install

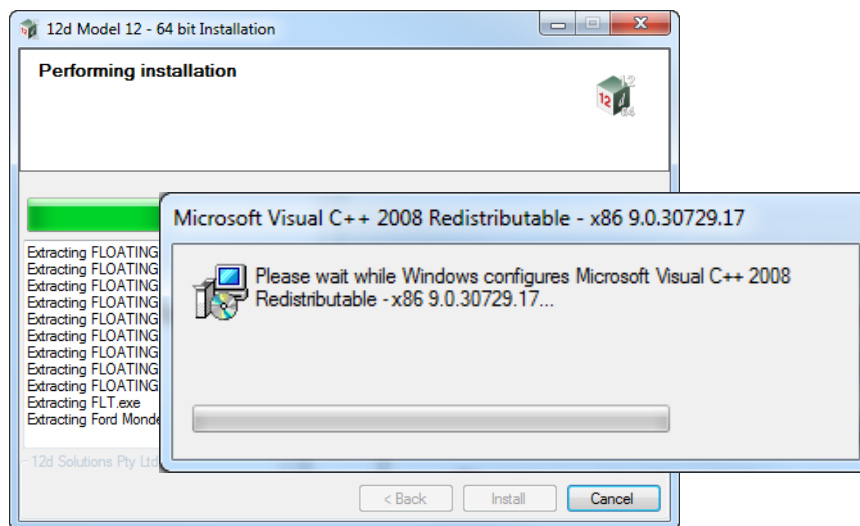


Select **Install** to begin the actual installation

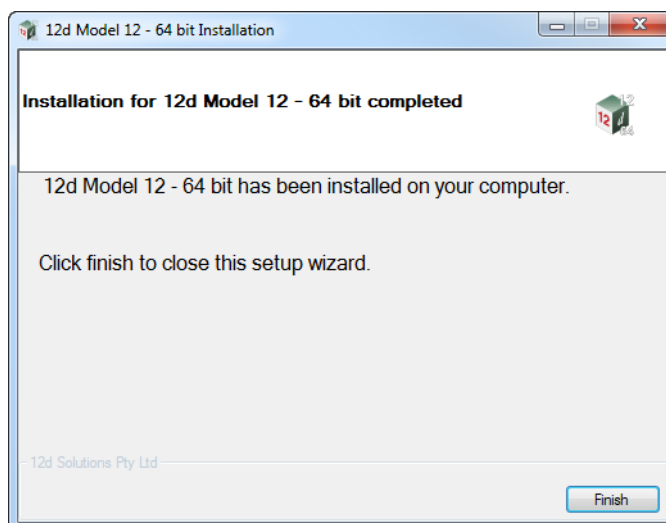
The software will be copied and installed onto the computer.



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 on page 35](#).

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

[4.1 Folders Created by the Installation on page 38](#)

[4.2 Icons Created by the Installation on page 40](#),

Continue to [Step 4. Installing the Nodes.4d file on page 35](#).

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.

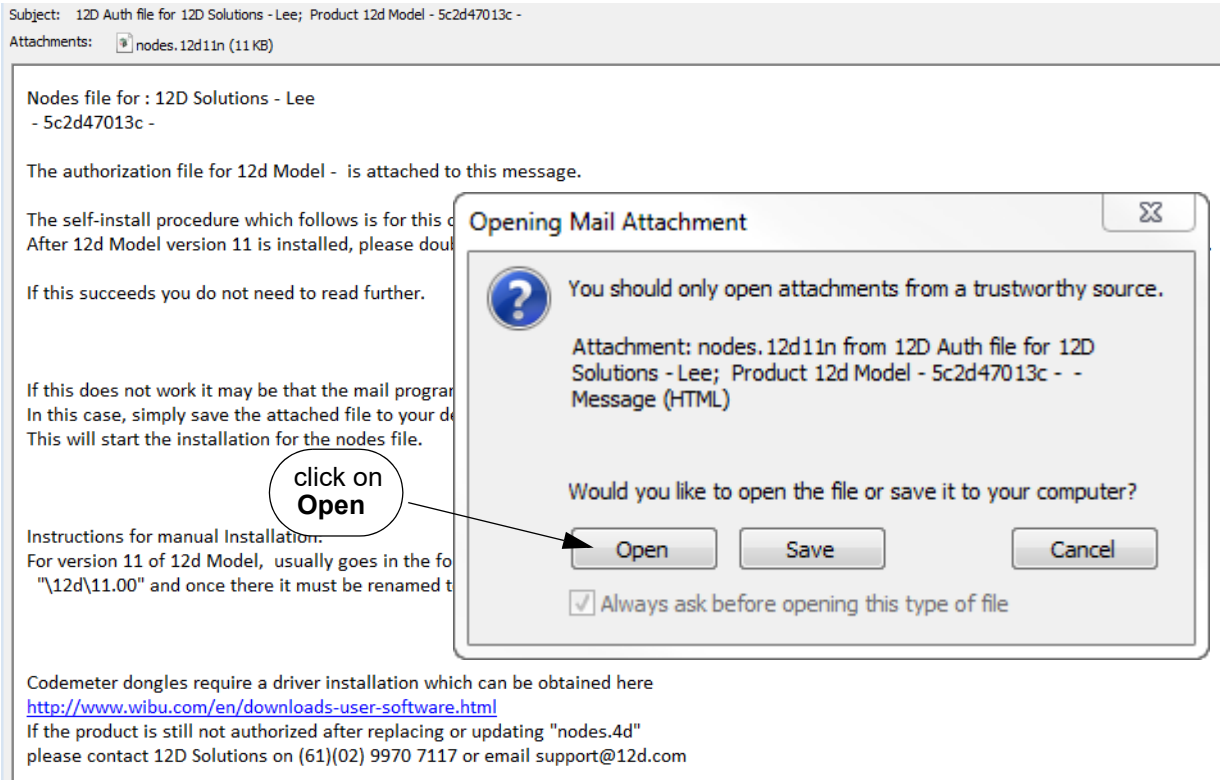
If this does not work it may be that the mail programme does not allow you to run attachments.
In this case, simply save the attached file to your desktop and open (from the right-mouse menu or by double-click).
This will start the installation for the nodes file.

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"

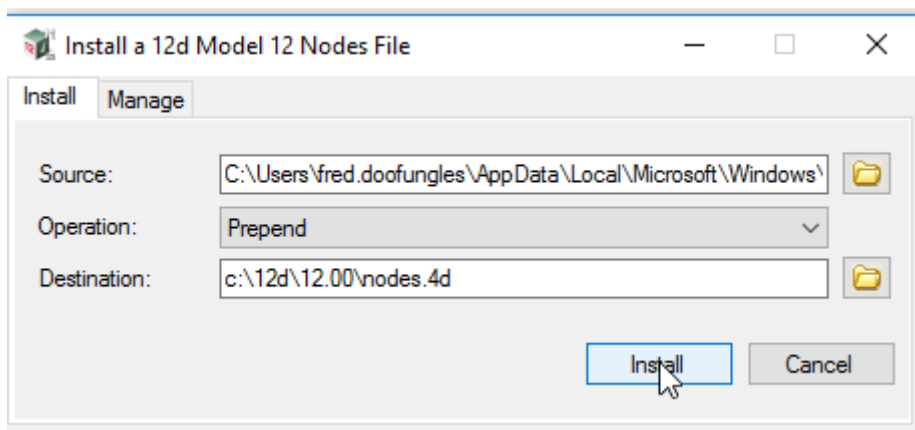
Codemeter dongles require a driver installation which can be obtained here
<http://www.wibu.com/en/downloads-user-software.html>
If the product is still not authorized after replacing or updating "nodes.4d"
please contact 12D Solutions on (61)(02) 9970 7117 or email support@12d.com

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.



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



The choices for **Operation** are:

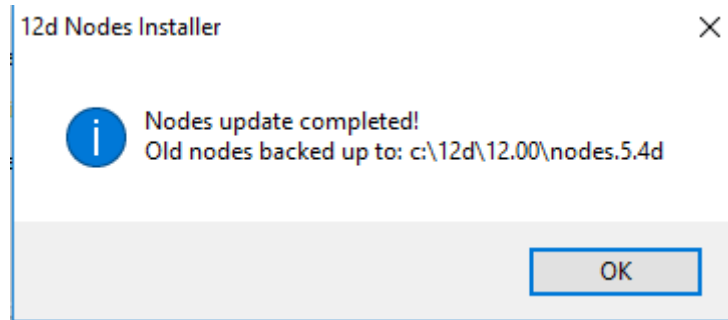
Prepend - if a **nodes.4d** file already exists, the information in the **nodes.12d12n** file is added to the beginning of the existing **nodes.4d** file. A backup up copy of the existing **nodes.4d** is created.

Replace - if a **nodes.4d** file already exists, it is replaced by a new **nodes.4d** file with the information in the **nodes.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.4d** 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 on page 55](#), of these notes.

To obtain documentation for **12d Model**, go to [6 Documentation on page 47](#).

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

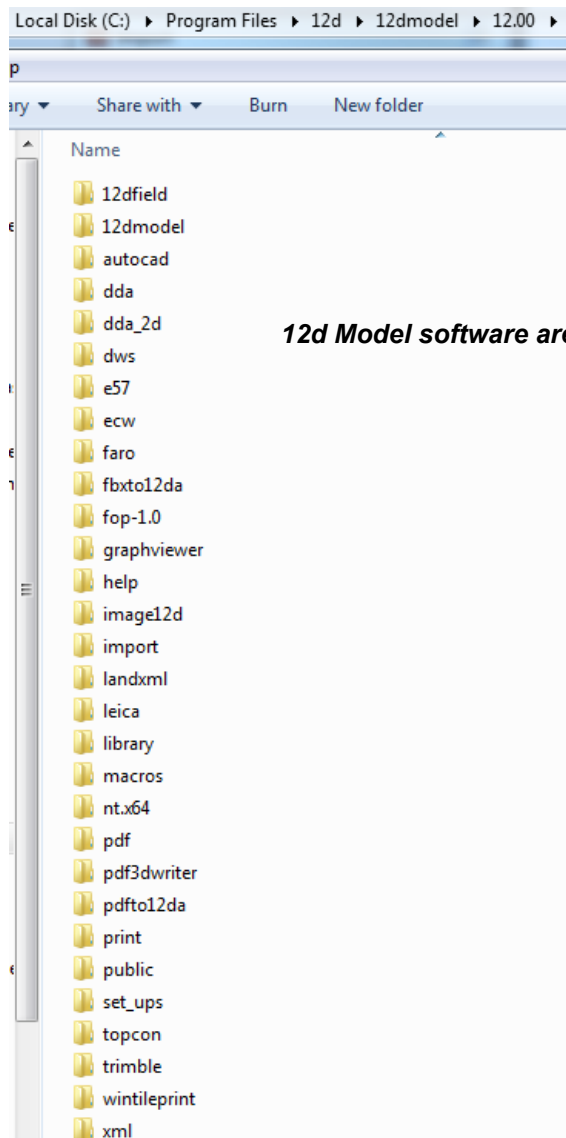
OR

- (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

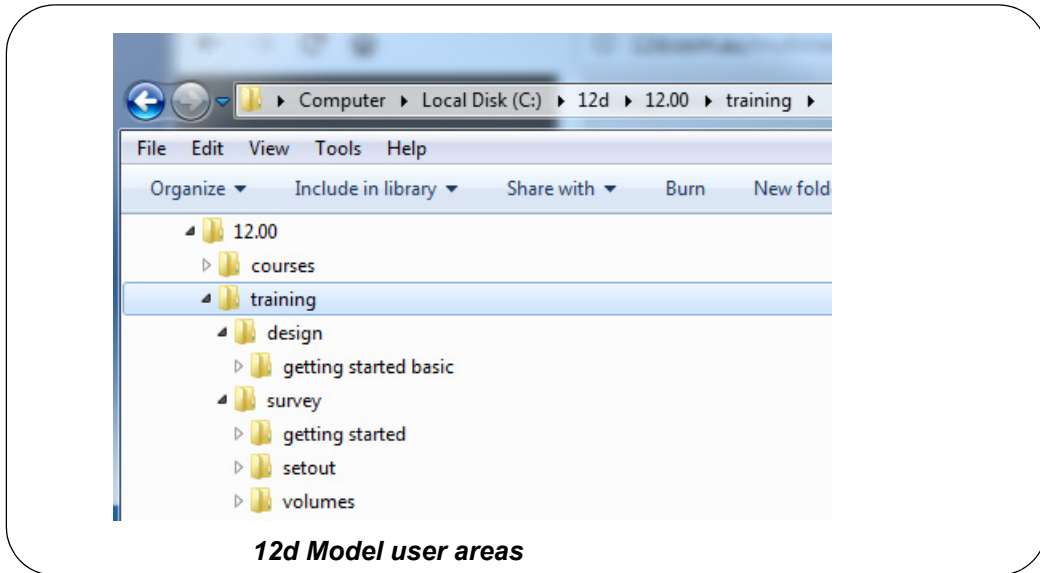
12d Model users normally only have **read** access to the *Program Files* and/or *Program Files (x86) folders*.



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)



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**.

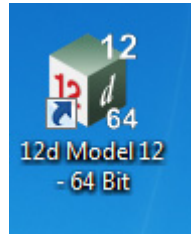
Warning

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.

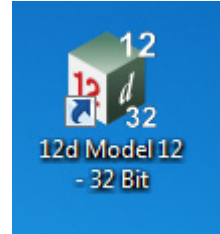
The **12d Model 12** Install (32 bit and 64 bit) will overwrite any files of the same name in these areas.

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*, *linesty1.4d*) 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\11.00\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\11.00\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 [7 What's New in 12d Model 12 on page 52](#).

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 [9 Network CodeMeters on page 59](#).

The links for downloading documentation on **12d Model** are given in [6 Documentation on page 47](#).

The links for downloading information, power points and videos on what is new in **12d Model 12** are given in [7 What's New in 12d Model 12 on page 52](#).

The rest of the chapters in this document are

[6 Documentation on page 47](#)

[7 What's New in 12d Model 12 on page 52](#)

[8 Errors Installing and Authorising on page 55](#)

[9 Network CodeMeters on page 59](#)

[10 CodeMeter Control Center & WebAdmin on page 84](#)

5 Certifying CodeMeters

Codemeters use the **Certified Time** capability of the CodeMeter and the CodeMeter must communicate **over the Internet** with a certified Time Server every two months to check that there is no problem with the CodeMeter, and to **update** the **Certified time** in the CodeMeter.

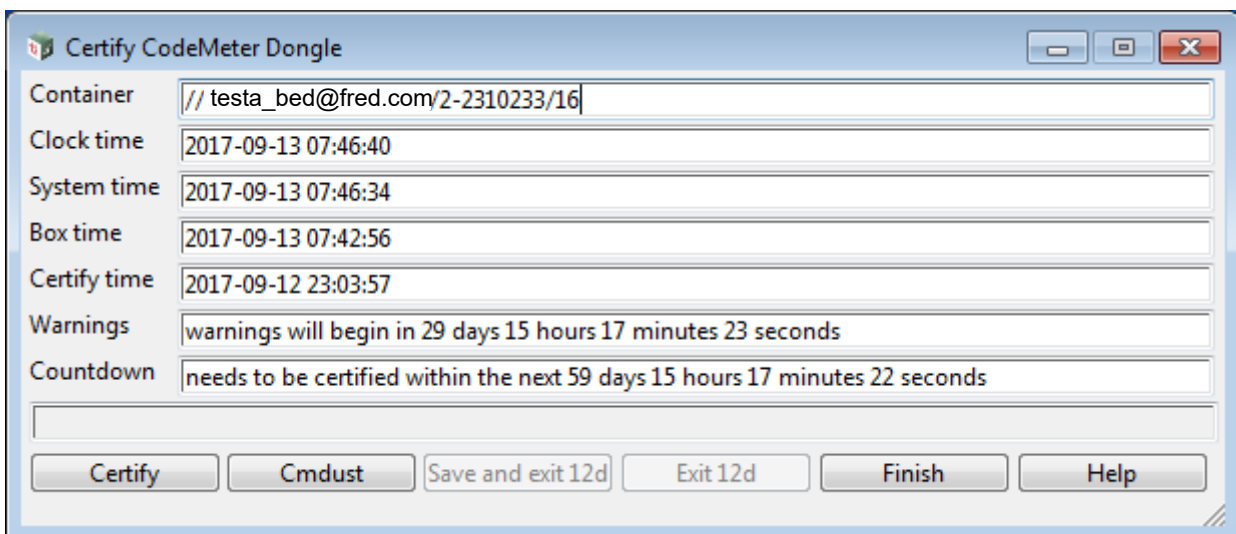
This process is called **Certifying the CodeMeter**.

Certifying a CodeMeter can be done

- (a) manually from inside **12d Model** itself
Already documented. See [5.1 Certifying CodeMeters from 12d Model on page 42](#)
 - (b) automatically by **12d Model**
Already documented. See [5.2 Automatically Certifying CodeMeters from 12d Model on page 44](#)
 - (c) outside of **12d Model** when the Codemeter is on the computer you are using outside
Using **CodeMeter Control Centre** - already documented in [5.3 Certifying CodeMeters Using Control Center on page 45](#).
- or
- (d) outside **12d Model** when the Codemeter is **NOT** on the computer your are using
It is possible to certify CodeMeters that are on other computers but this is usually only needed by Administrators. See [10.3.1 Certifying CodeMeters Using WebAdmin on page 94](#)

5.1 Certifying CodeMeters from 12d Model

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



The **Certify CodeMeter Dongle** panel can also be brought up from within **12d Model** by the option
Project =>Management =>Dongles =>Certify CodeMeter

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

Important Note

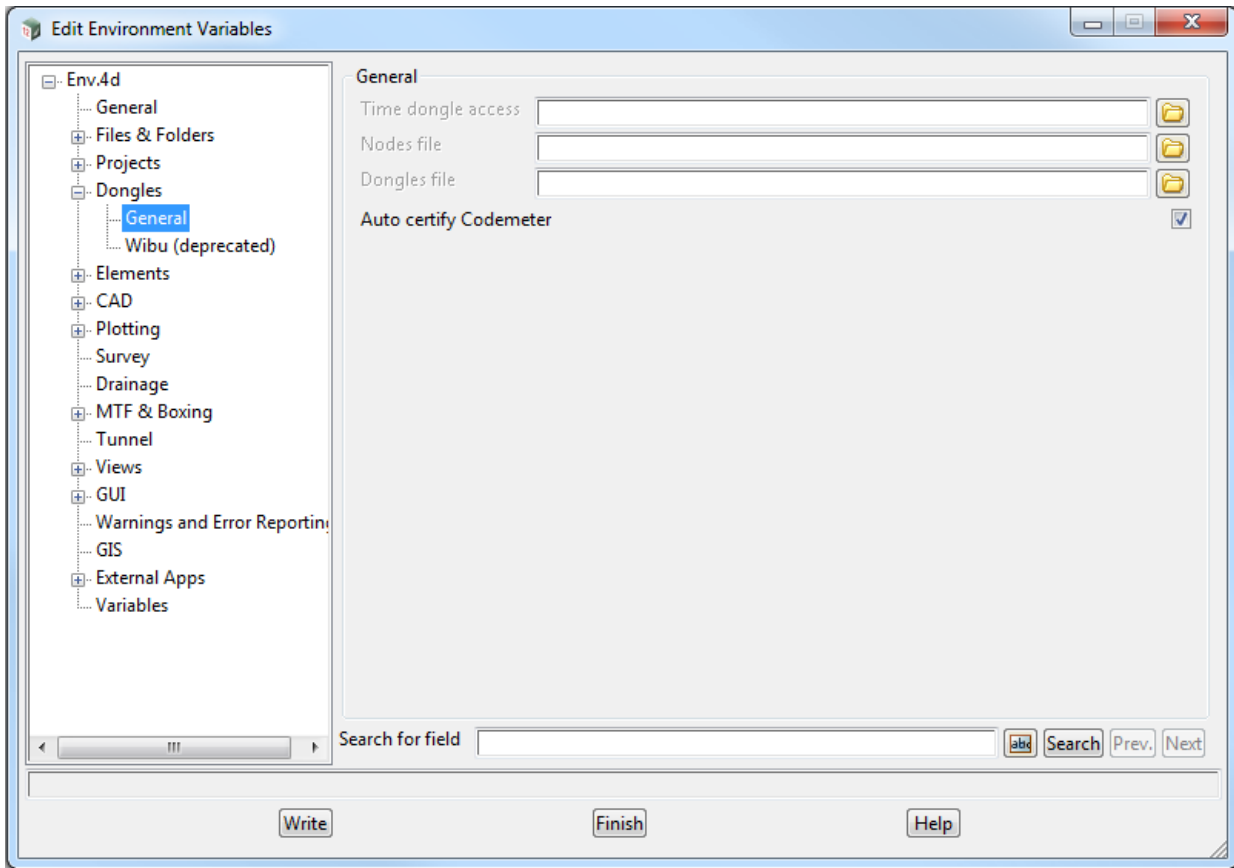
There is an environment variable **AUTO_CERTIFY_DONGLE_4D** and if it is set on then when the warning period is active for the CodeMeter (dongle) being used by **12d Model, 12d Model** will automatically attempt to certify the CodeMeter and if successful, no intervention by the user is required. See [5.2 Automatically Certifying CodeMeters from 12d Model on page 44](#).

5.2 Automatically Certifying CodeMeters from 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 license from a **12d dongle**.

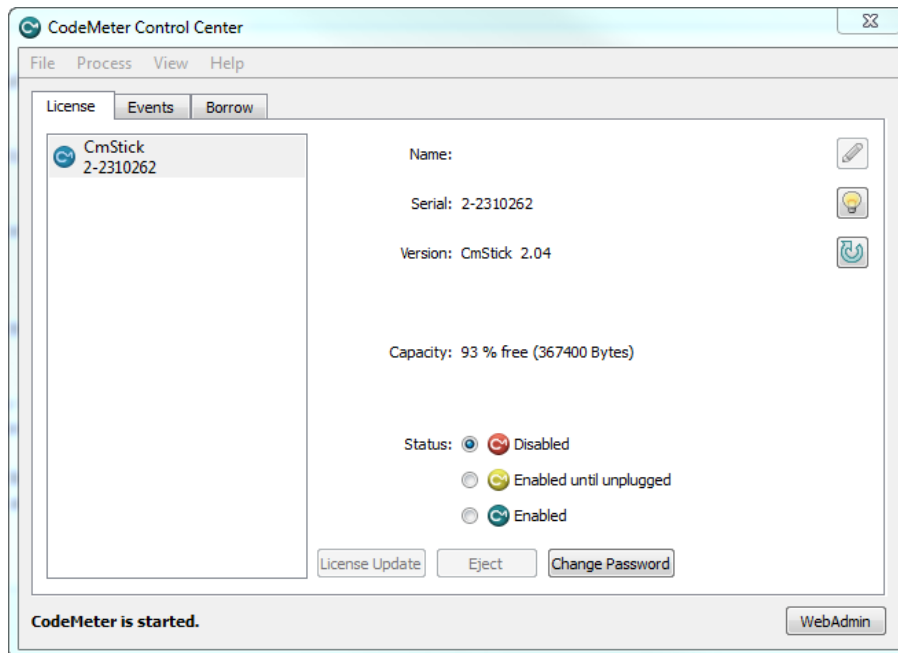
Please contact your **12d Model Reseller** if you are having problems certifying your **CodeMeter**.

5.3 Certifying CodeMeters Using Control Center

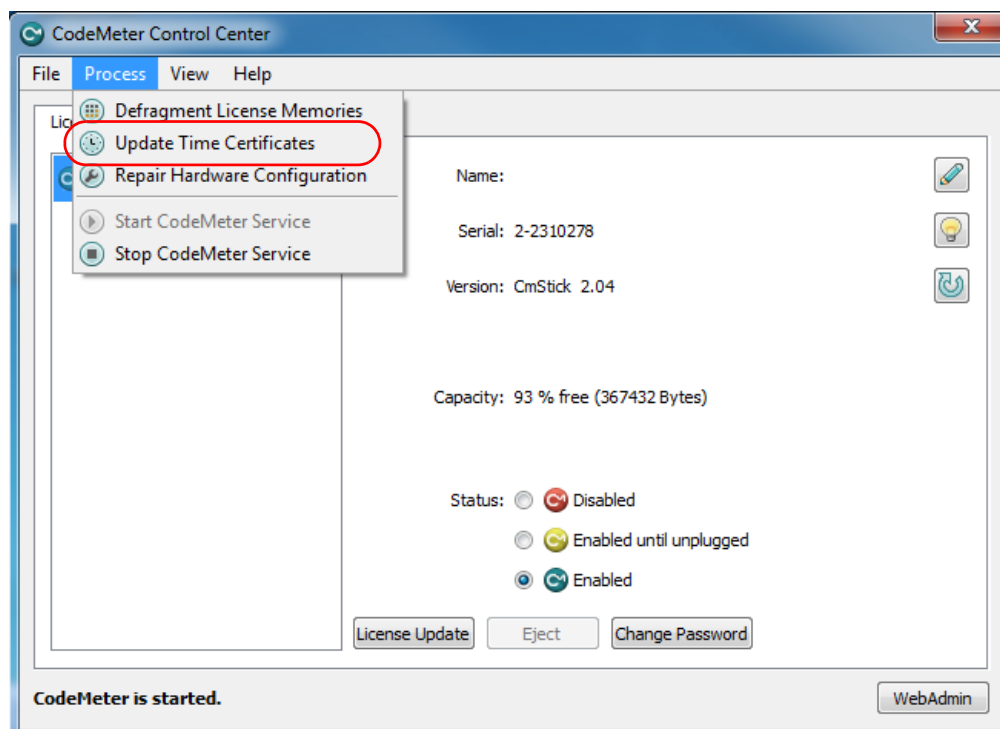
The Certified Time for any **CodeMeter** attached to your current computer can be displayed by using the **CodeMeter Control Center** which is brought up by clicking on the **CodeMeter** icon that was installed on your task bar.



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**



Note

If the **CodeMeter** is not on the computer you are using then certifying the codemeter must be done using CodeMeter WebAdmin (see [10.3.1 Certifying CodeMeters Using WebAdmin on page 94](#)).

6 Documentation

See

- [6.1 12d Model Reference Manual on page 47](#)
- [6.2 Getting Started for Design Manual on page 48](#)
- [6.3 Getting Started for Surveying Manual on page 49](#)
- [6.4 12d Model Programming Language Manual on page 50](#)
- [6.5 12d XML File Format on page 51](#)
- [6.6 12d A File Format on page 51](#)
- [7 What's New in 12d Model 12 on page 52](#)

6.1 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**.

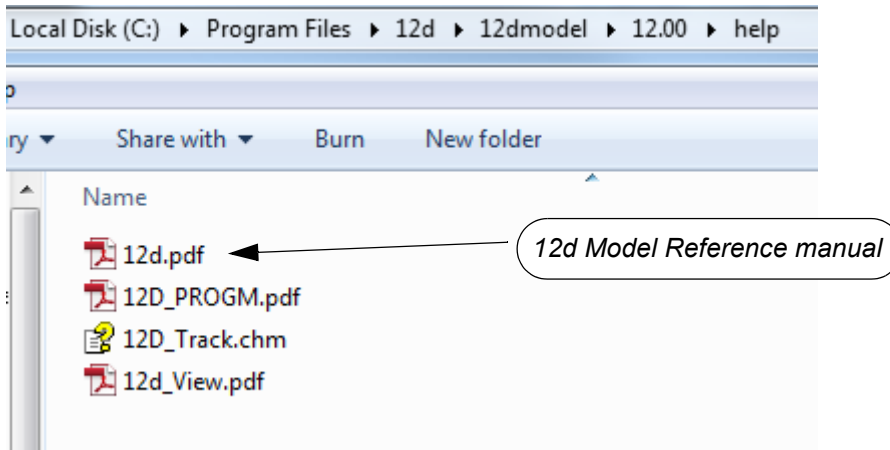
The **12d Model Reference** manual also acts as a **context sensitive Help** system when **12d Model** is running.

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_C1u/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 [6.2 Getting Started for Design Manual](#) or return to [6 Documentation](#).

6.2 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_C1u/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 [6.3 Getting Started for Surveying Manual](#) or return to [6 Documentation](#).

6.3 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.

The **12d Model Getting Started for Surveying** 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 surveying tasks.

Wherever possible, The **12d Model Getting Started for Surveying** 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 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_C1u/
12dm_getting_started_for_surveying_Jun_18.pdf](http://downloads.12dmodel.com/v12/12d_Model_12_C1u/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 [6.4 12d Model Programming Language Manual](#) or return to [6 Documentation](#).

6.4 12d Model Programming Language Manual

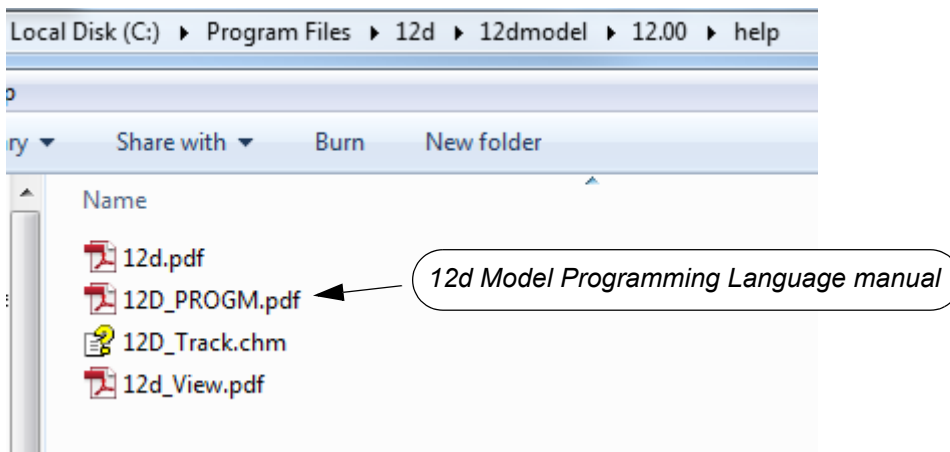
The **12d Model Programming Language** (12dPL), is a powerful programming language designed to run from within **12d Model**. It is also known as 4DML from when the product was called **4d Model**.

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_C1u/12d_prog_28_Sep_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 [6.5 12d XML File Format](#) or return to [6 Documentation](#).

6.5 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 [6.1 12d Model Reference Manual](#)) but the chapter as 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_C1u/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 [6.6 12d A File Format](#) or return to [6 Documentation](#).

6.6 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 [6.1 12d Model Reference Manual](#)) but the chapter as 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_C1u/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 [6.5 12d XML File Format](#))

Continue to [7 What's New in 12d Model 12](#) or return to [6 Documentation](#).

7 What's New in 12d Model 12

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

See

[7.1 What's New Summary for 12d Model 12 C1u Only on page 52](#)

[7.2 What's New Summary for 12d Model 12 C1u Only - Dated on page 52](#)

[7.3 What's New Summary for 12d Model 12 on page 52](#)

[7.4 What's New Summary for 12d Model 12 by Sub-Version on page 53](#)

[7.5 What's New in 12d Model 12 pdf on page 53](#)

[7.6 Video Playlist from What's New in 12d 12 Webinars on page 53](#)

[7.7 What's New Summary from 12d Conference 2016 on page 53](#)

[7.8 Power Point Show on Some What's New in V12 on page 54](#)

7.1 What's New Summary for 12d Model 12 C1u Only

The **What's New Summary** gives a one line summary of the New Features and Bugs Fixed in this sub-version and sorted by Components:

http://downloads.12dmodel.com/V12/12d_Model_12_C1u/Whats_New_Summary_in_12d_Model_12_C1u_split_bugs_combined_12_May_20.htm

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

7.2 What's New Summary for 12d Model 12 C1u Only - Dated

The **What's New Summary Dated** gives a one line summary of the New Features and Bugs Fixed in this sub-version but sorted in reverse date of any additions.

http://downloads.12dmodel.com/V12/12d_Model_12_C1u/Whats_New_Summary_in_12d_Model_12_C1u_split_dated_bugs_combined_12_May_20.htm

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

7.3 What's New Summary for 12d Model 12

The **What's New Summary All** 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_C1u/Whats_New_Summary_in_12d_Model_12_all_combined_12_May_20.htm

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

7.4 What's New Summary for 12d Model 12 by Sub-Version

The **What's New Summary All Split** gives a one line summary of all the New Features and Improvements in **12d Model 12** but it is broken up into each sub-version (ie C1a, C1b etc):

http://downloads.12dmodel.com/V12/12d_Model_12_C1u/Whats_New_Summary_in_12d_Model_12_all_split_combined_12_May_20.htm

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

7.5 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_C1u/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.

7.6 Video Playlist from What's New in 12d 12 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.

7.7 What's New Summary from 12d Conference 2016

The **What's New in 12d Model 12 Summary** 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.

7.8 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_C1u/
Whats_New_in_12d_Model_12_Forum_Dec_16.pps](http://downloads.12dmodel.com/V12/12d_Model_12_C1u/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 [7 What's New in 12d Model 12](#).

8 Errors Installing and Authorising

See

[8.1 12d Model XX Not Authorising on page 55](#)

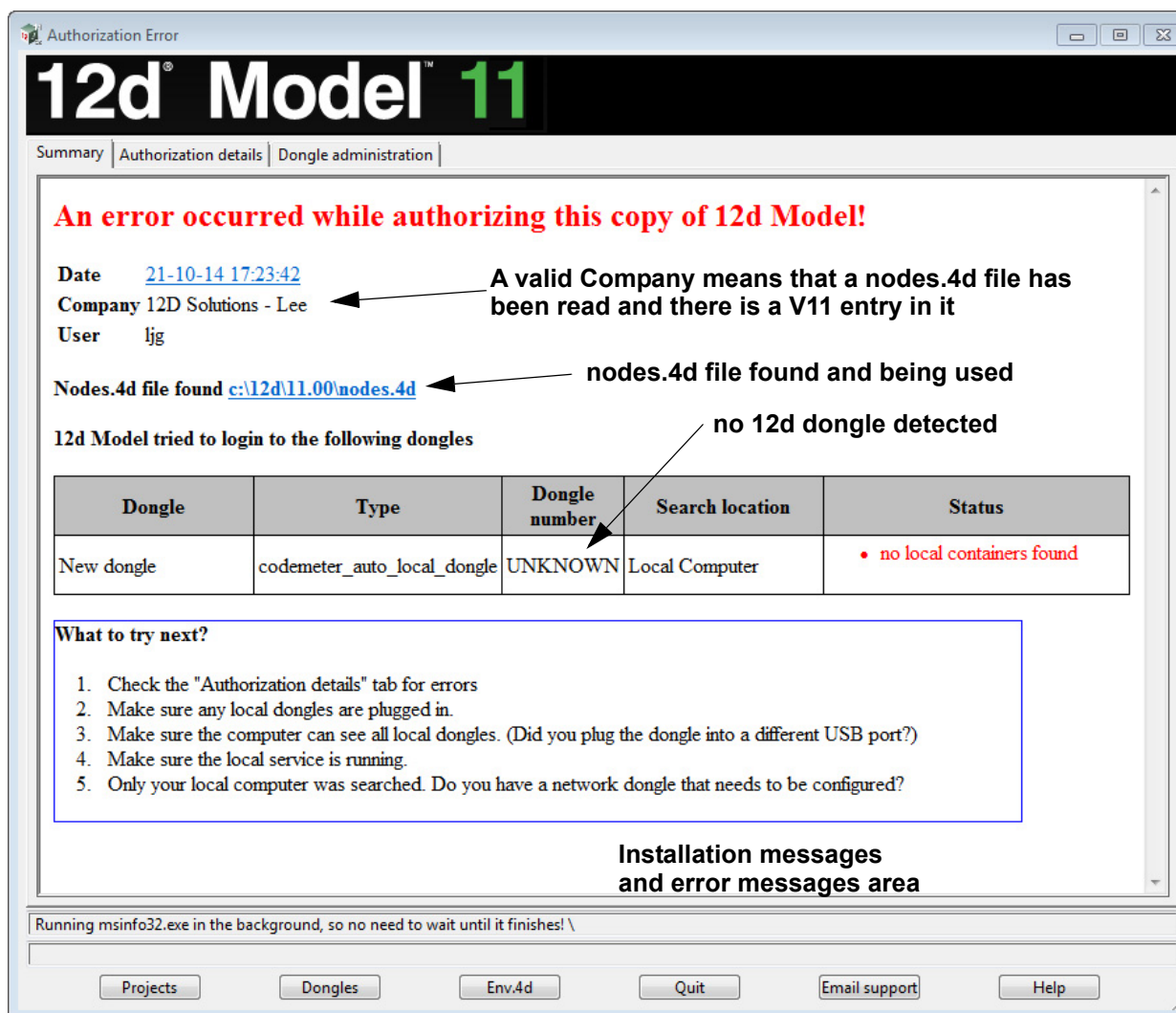
[8.2 Licence Expiry Warning on page 56](#)

[8.3 Dongle Missing on page 57](#)

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**



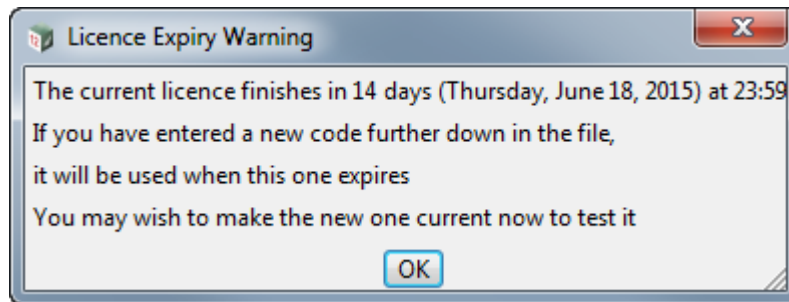
In the above panel, the UNKNOWN in the **Dongle number** column shows that no **12d** dongle has been detected.

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:

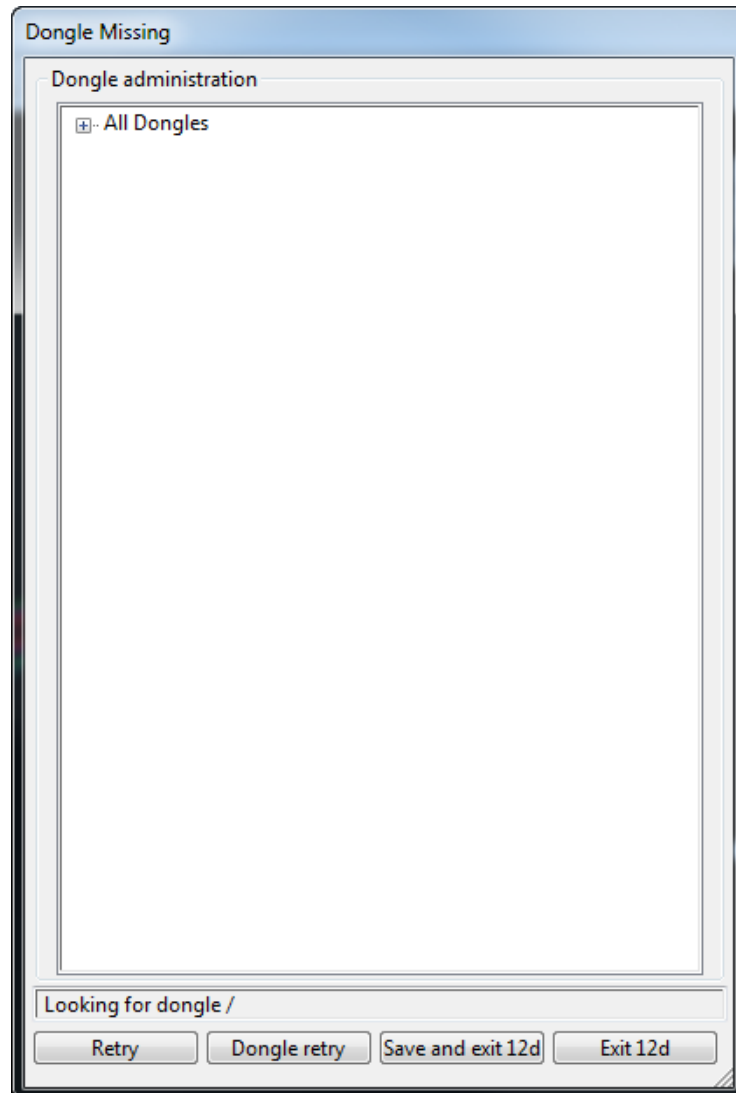


it simply means that the **nodes.4d** file needs to be updated.

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 Network CodeMeters

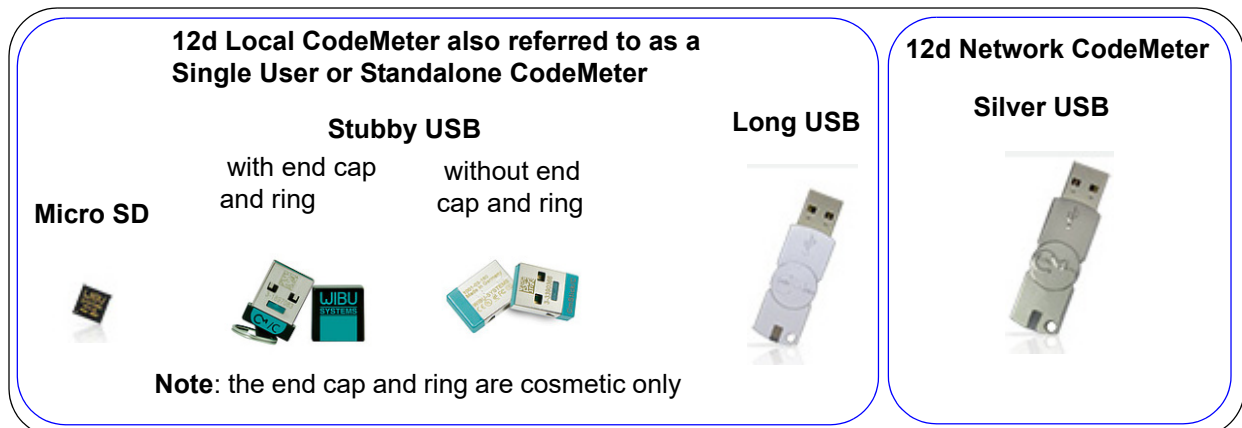
A **12d Local CodeMeter** (also known as a **Standalone** or **single-user CodeMeter**) is a CodeMeter that is attached to a computer and only allows **12d Model** to be run on **that computer only**.

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 needed a **12d Local CodeMeter**.

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



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**.

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 when **12d Model** is installed it is set up for users with a **Local (single user or stand alone)** CodeMeter and 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 and the **nodes.4d** file you use will 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**.

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

1. the Network CodeMeter

IMPORTANT WARNING

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

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_C1u/
12d_hardware_lock_drivers_installation_16_Aug_19.exe](http://downloads.12dmodel.com/v12/12d_Model_12_C1u/12d_hardware_lock_drivers_installation_16_Aug_19.exe)

For example, *12d_dongles_installation_16_Aug_19.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.

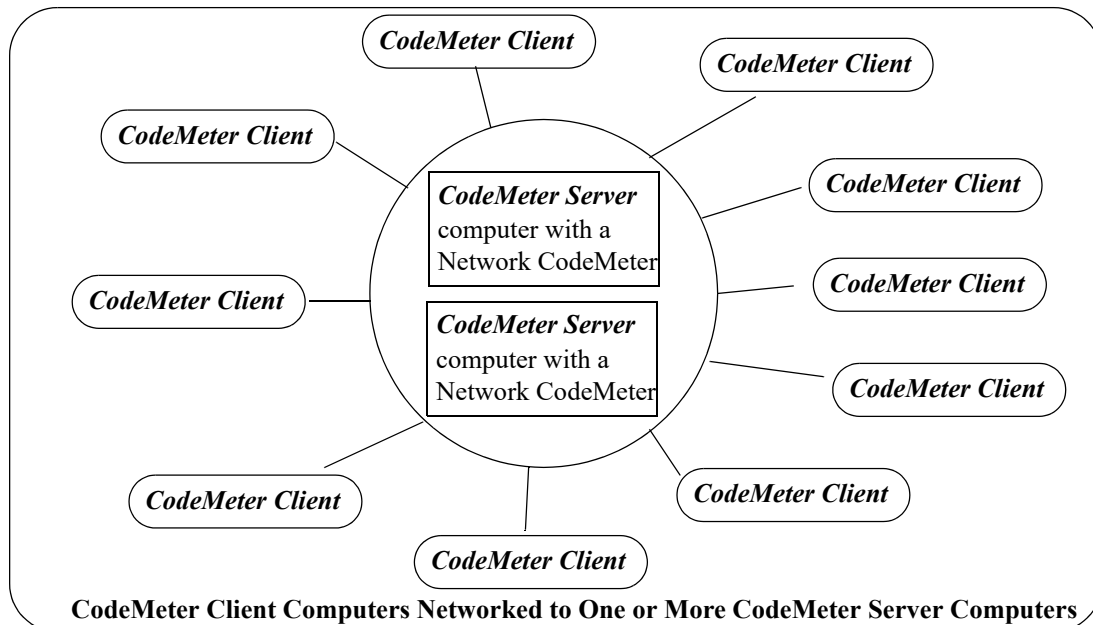
Full instructions setting up Network Codemeters, and making the required modifications to the **dongles.4d** file and the **nodes.4d** file, are given in the rest of this chapter.

Continue to [9.1 Definitions and Guide to the Network Notes on page 61](#).

9.1 Definitions and Guide to the Network Notes

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 [9.2 Installing CodeMeter Drivers on page 63](#).

CodeMeter Servers must also have the **CodeMeter Network Server** running and this is described in [Step 6. Starting the Network Server on page 71](#).

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 [9.4 dongles.4d and nodes.4d on page 73](#).

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 [10.5 Updating Licenses in Network CodeMeters on page 116](#).

if your are installing a **Network CodeMeter** on the computer for the first time, please continue to the next section [9.1 Definitions and Guide to the Network Notes on page 61](#).

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 [9.4 dongles.4d and nodes.4d on page 73](#)).

Also a valid **nodes.4d** file for the **12d dongle** inside the **Network CodeMeter** is needed (see [10.5 Updating Licenses in Network CodeMeters on page 116](#)).

9.2 Installing 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 on page 15.](#)

If a computer is to become a CodeMeter Server but already has the CodeMeter Drivers installed on it, then go straight to [9.3 Setting up a Network CodeMeter on page 66.](#)

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 [10.5.1.1 Updating Using the .WibuCmRaU File on page 120.](#)

If you are replacing the existing Network CodeMeter by a new Network CodeMeter, go to [10.6 Replacing an Existing Network CodeMeter on page 124.](#)

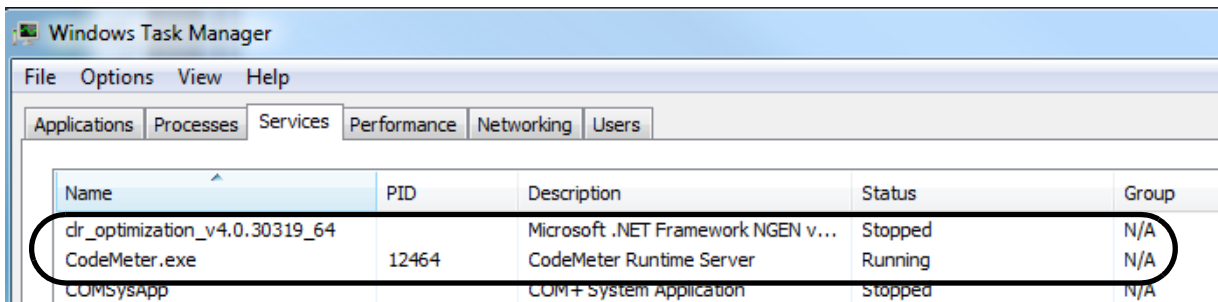
What is Done to the Computer By Step 1

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, with 'CodeMeter.exe' highlighted by a red circle. The table has the following data:

Name	PID	Description	Status	Group
dr_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

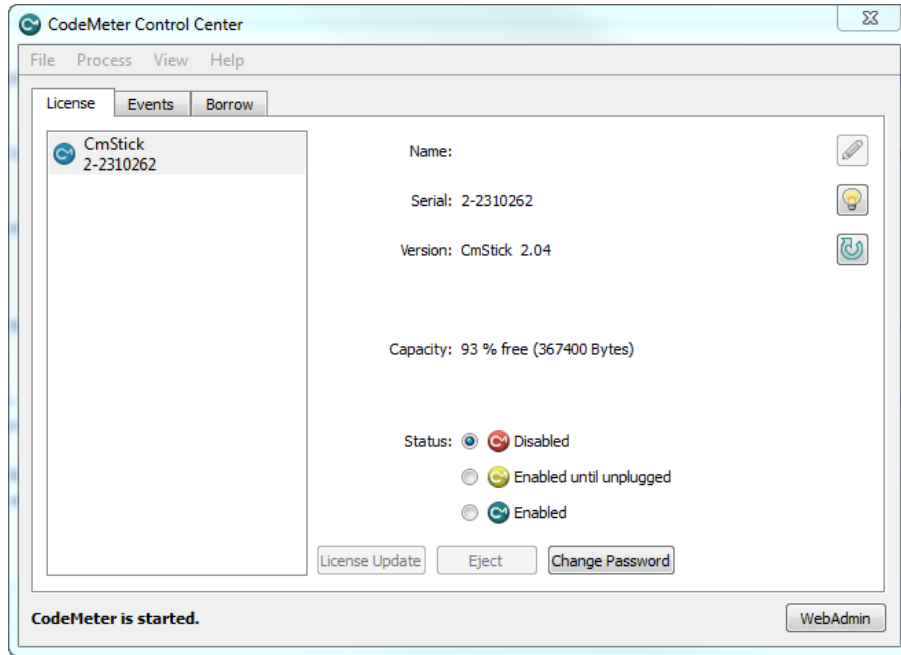
If for some reason the **CodeMeter Runtime Server** is shown as **Stopped**, to restart it again go to [Step 6. Starting the Network Server on page 71](#).

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 [9.3 Setting up a Network CodeMeter on page 66](#).

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 [9.4 dongles.4d and nodes.4d on page 73](#).

9.3 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.

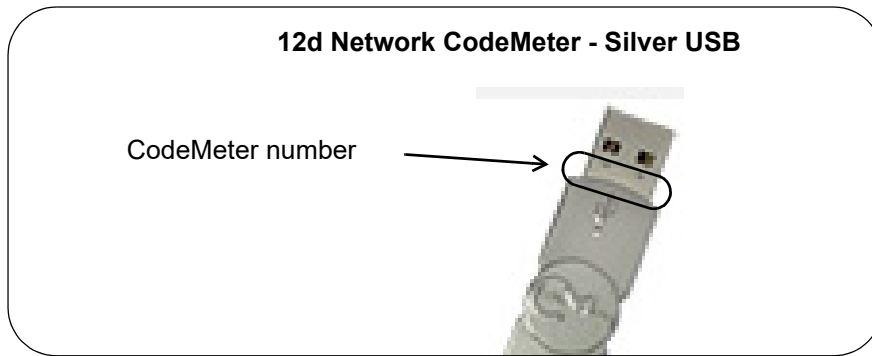
These steps will complete the setting up of the Network CodeMeter as a **CodeMeter Server**.

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.

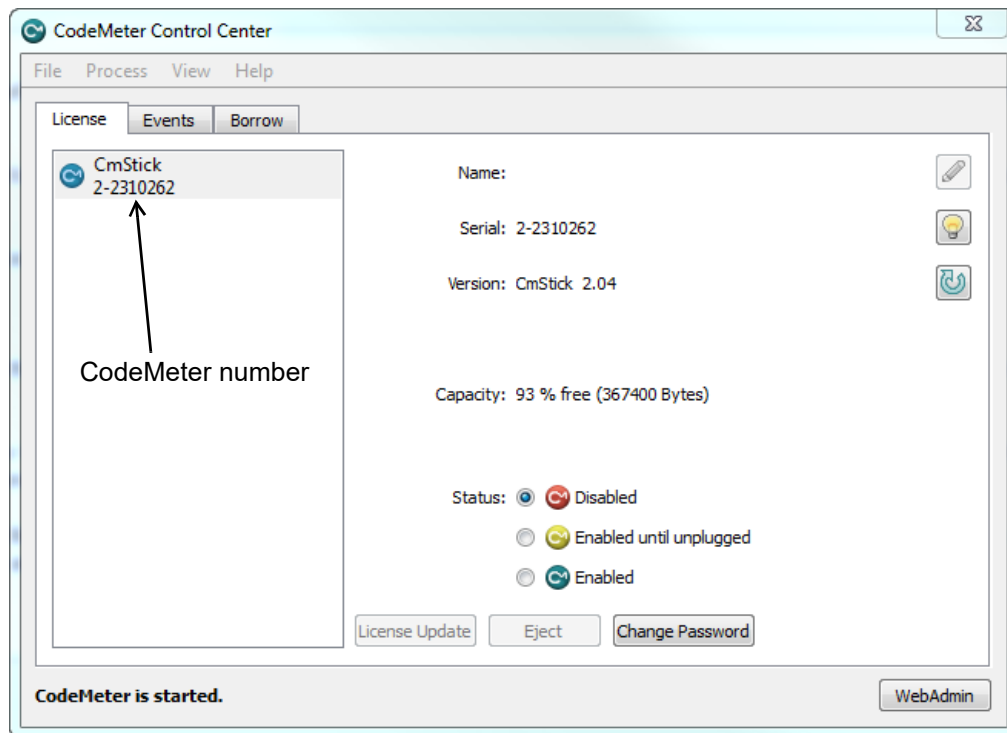
If the CodeMeter number can't be read, it is also possible to obtain the number after the Network CodeMeter is plugged into the USB port of the computer (see [Step 3. Checking that the Network CodeMeter is Visible on page 67.](#))



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

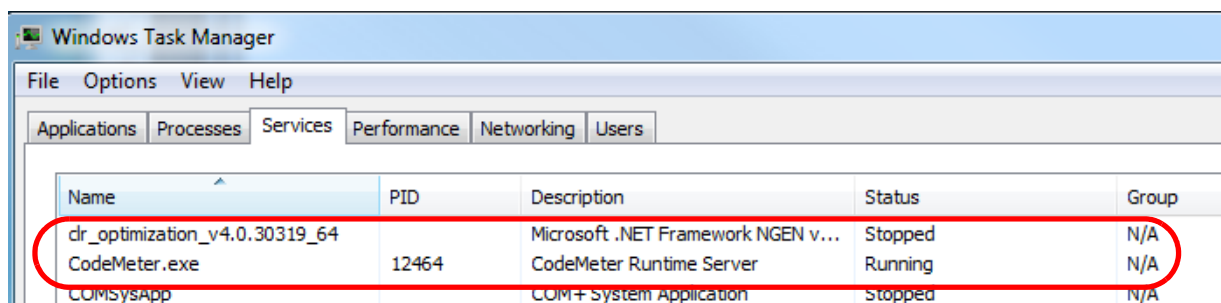
Click on the **CodeMeter** icon that was installed on your task bar to bring up the **CodeMeter Control Center** which shows what Codemeters are on this computer.



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 71.](#)

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

Step 5. Checking the Virtual 12d Virtual 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 virtual dongle** inside the Network CodeMeter.

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

Aside:

The **12d virtual dongle** issues the **12d Model** licenses but the actual **12d Model** modules that go with a license from a **12d virtual 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. The word **virtual** is used because the 12d virtual dongle is **NOT** a physical lock. The **12d virtual dongle** is often abbreviated to **12d dongle**.

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. **Note** - you may have one of two versions of WebAdmin - see [10.8 Which Version of WebAdmin? on page 125](#).

For WebAdmin 6:

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

The screenshot shows the CodeMeter WebAdmin interface for a container named '<no name>' with ID '2-2310233'. The 'Licenses' tab is active, displaying a table of licenses. The table has columns for Product Code, Name, Unit Counter, Valid Until, License Quantity, and Feature Map. Two license entries are shown under product code '101956' (12d.com). The second entry, '12d Model - Stock - 12d Solutions - ec51470114', is highlighted with a red box. Below the table, the current server is identified as 'BUILD-SERVER (192.168.68.252)' and the WebAdmin version is '6.40'.

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	SecuriKey Lite	n/a	n/a	1	0x1
101956 12d.com					
Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	12d Model - Stock - 12d Solutions - ec51470113	n/a	n/a	5	n/a
1	12d Model - Stock - 12d Solutions - ec51470114	n/a	n/a	25	n/a

Current Server: BUILD-SERVER (192.168.68.252) WebAdmin Version: 6.40

12d Product name
12d Customer name
12d virtual dongle number
Total number of licenses on the 12d virtual dongle

For instructions on how to select and see CodeMeters on a particular Network Server, see [10.4.1 Getting Info on CodeMeters on a Particular Server - WebAdmin 6 on page 103](#)

For WebAdmin 5:

Clicking on the tab **Content >Licenses** of the **CodeMeter WebAdmin** panel displays the **12d virtual 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 virtual dongle number

12d Customer name

Total number of licenses on the 12d dongle

For instructions on how to select and see CodeMeters on a particular Network Server, see [10.4.3 Getting Info on CodeMeters on a Particular Server - WebAdmin 5 on page 110](#)

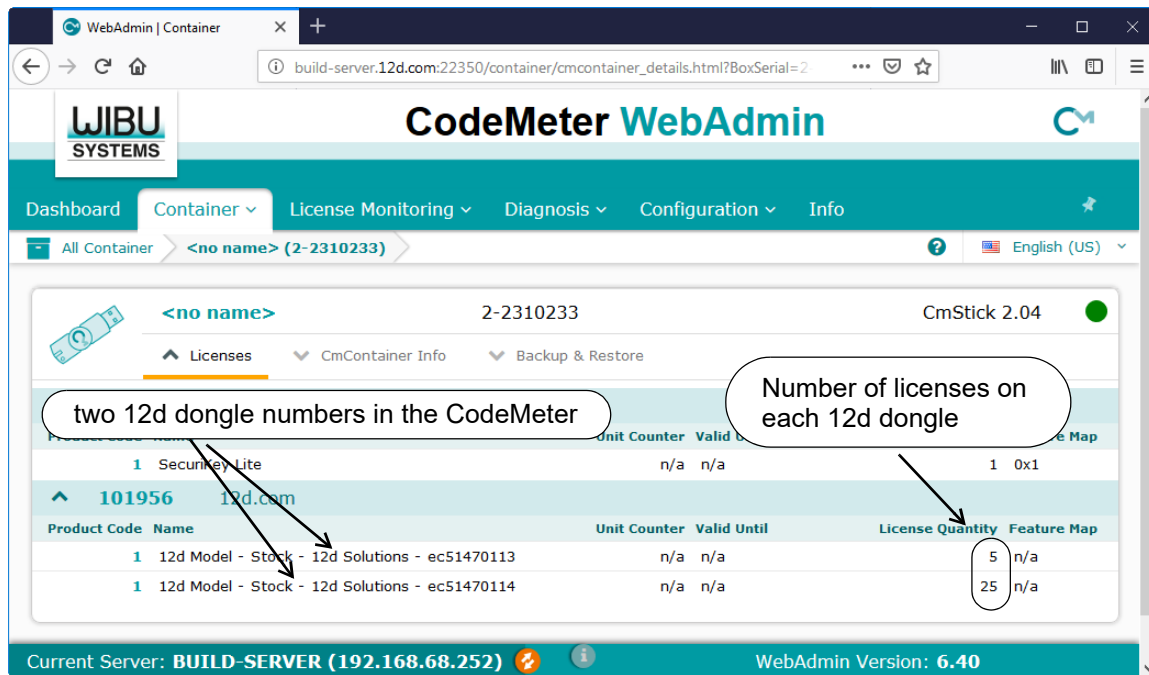
If there are no **12d dongle numbers** displayed inside the Network CodeMeter, or no **12d dongle number** starting with **ec**, contact your **12d Model Reseller**.

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 is **Stopped**, to restart it again see [Step 6. Starting the Network Server on page 71](#).

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,



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 [9.4.1 Updating dongles.4d on page 73](#).

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**.

For WebAdmin 6:

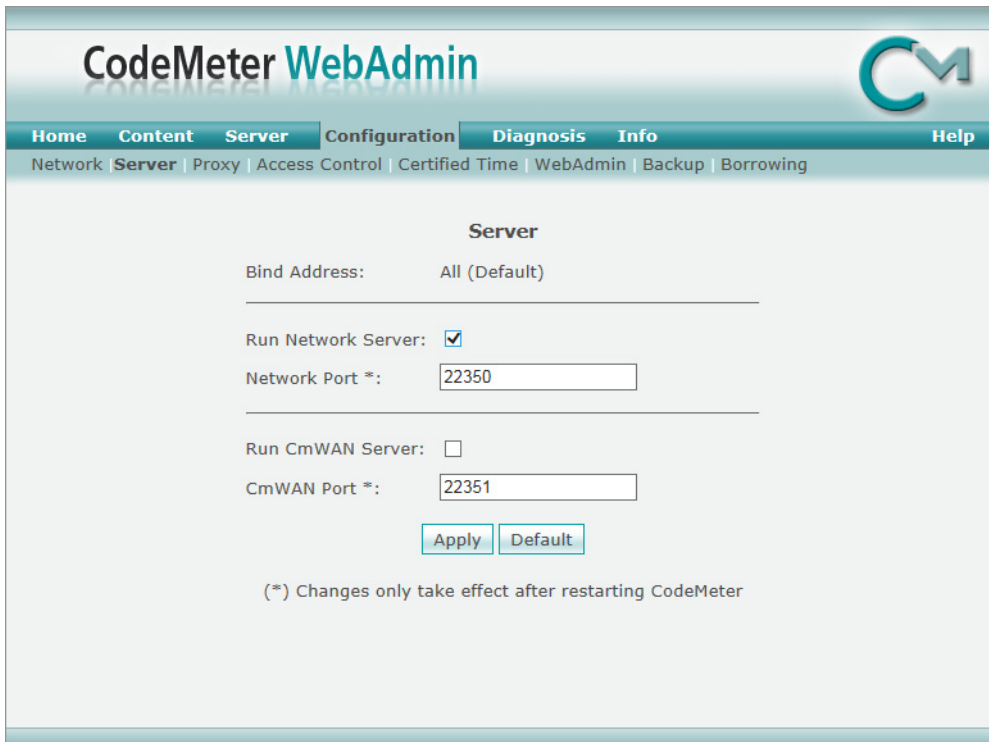
In the **CodeMeter WebAdmin** panel, click on the **Configuration >Server >Server access** menu.

The screenshot shows the CodeMeter WebAdmin interface in a browser window. The address bar shows the URL `localhost:22350/configuration/server_access.html`. The page title is "CodeMeter WebAdmin". The navigation menu includes "Dashboard", "Container", "License Monitoring", "Diagnosis", "Configuration", and "Info". The "Configuration" menu is expanded, showing "Basic", "Server", and "Advanced". The "Server" menu is further expanded, showing "Server Access" and "License Access Permissions". The "Server Access" sub-menu is selected, and the "Enable" radio button is selected. The "Network Port *" field is set to "22350". The "CmWAN Server" section has the "Enable" radio button selected and the "CmWAN Port *" field set to "22351". The "Apply" button is highlighted with a red circle. A note at the bottom states: "(*) Changes only take effect after restarting CodeMeter".

Click on **Enable** and then **Apply**.

For WebAdmin 5:

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



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**.

9.4 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 [9.4.1 Updating dongles.4d on page 73](#).

For the updating of **nodes.4d**, see [9.4.2 Updating nodes.4d on page 81](#).

9.4.1 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.

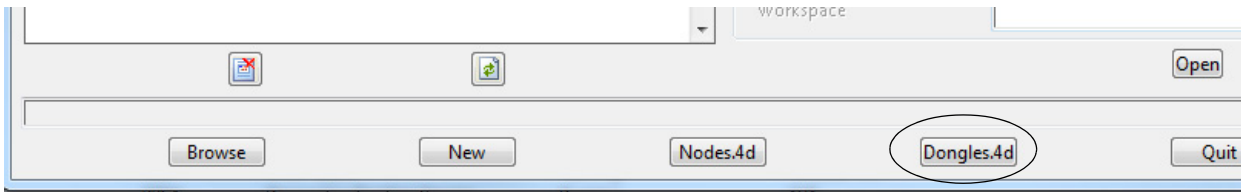
For example, for **12d Model 12**

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 on 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.

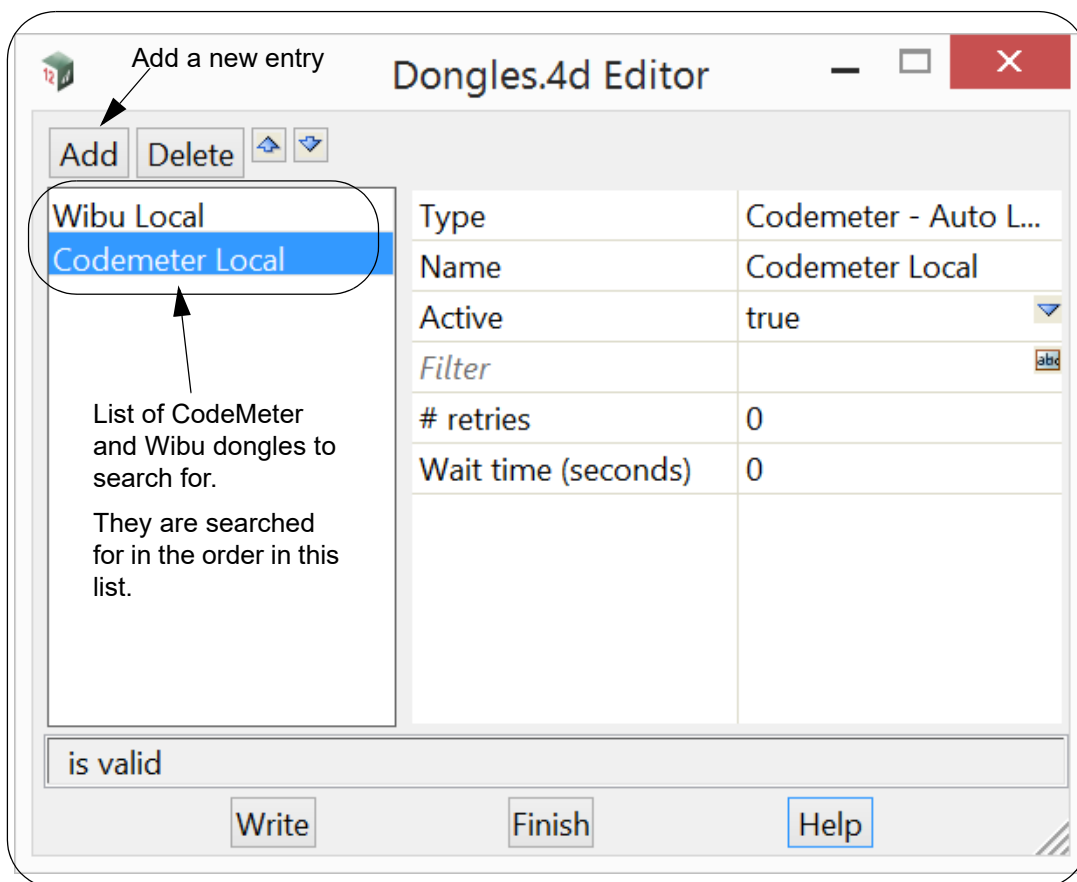


Or if the **12d Model** you are running is already authorized and you are in an open project, by picking the option

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

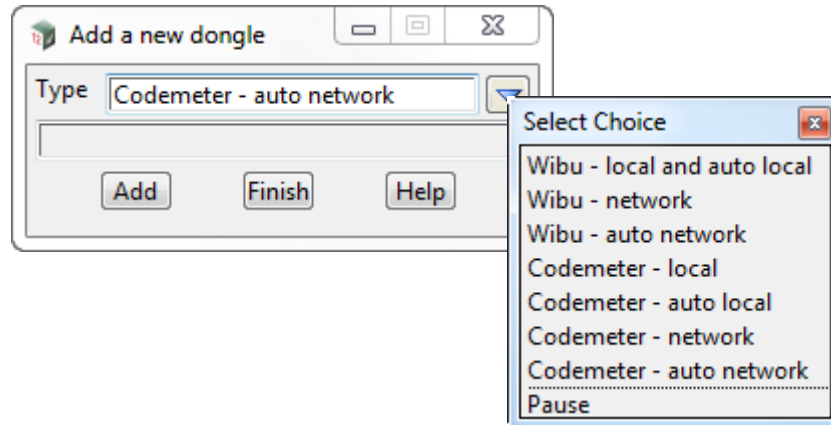
Both of these bring up the **Dongles.4d Editor** panel.

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.

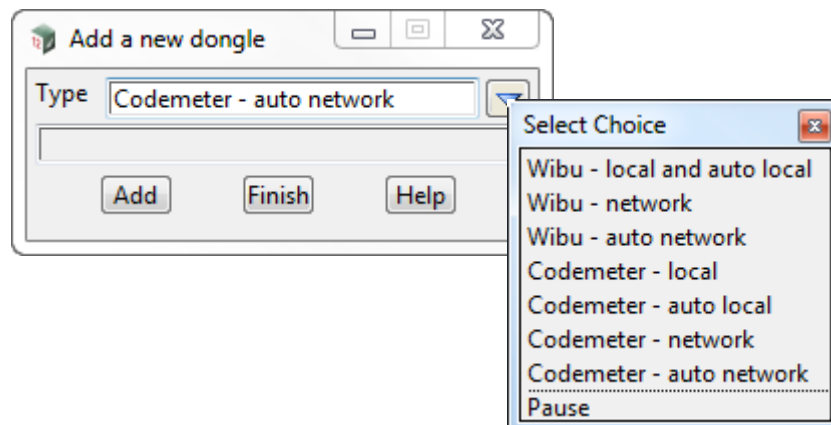


To add an entry to search for all Network CodeMeter on the network, see [9.4.1.1 Search for any Network CodeMeter on page 75](#).

To add an entry to use a particular 12d dongle number in a particular Network CodeMeter, see [9.4.1.2 Using a 12d Dongle Number in a Network CodeMeter on page 77](#).

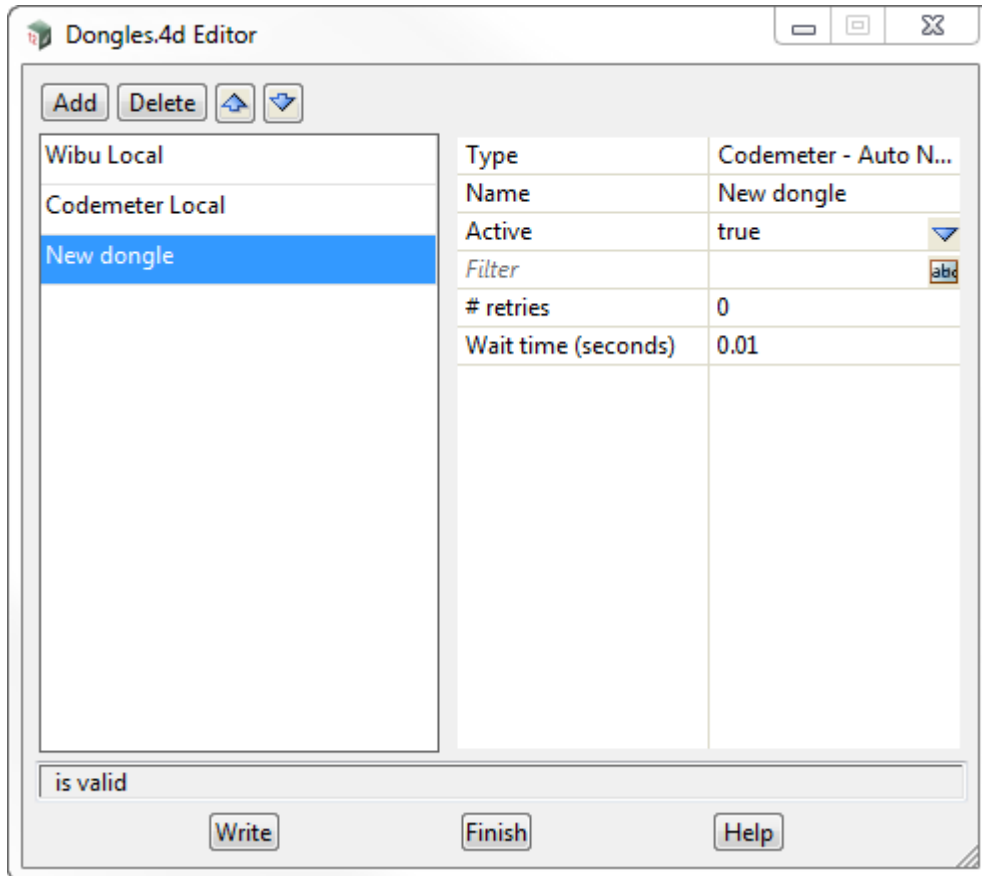
9.4.1.1 Search for any Network CodeMeter

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



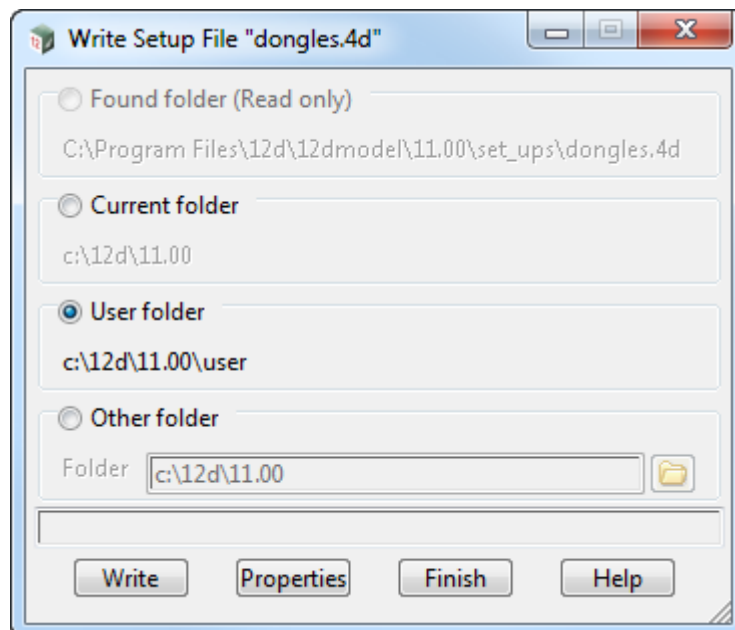
For this case, select **CodeMeter - auto network** for **Type** and then click on **Add**.

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.

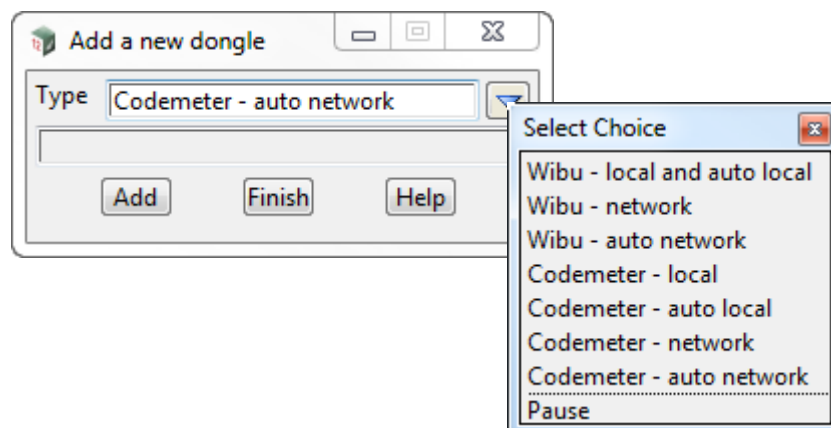
9.4.1.2 Using a 12d Dongle Number in a Network CodeMeter

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

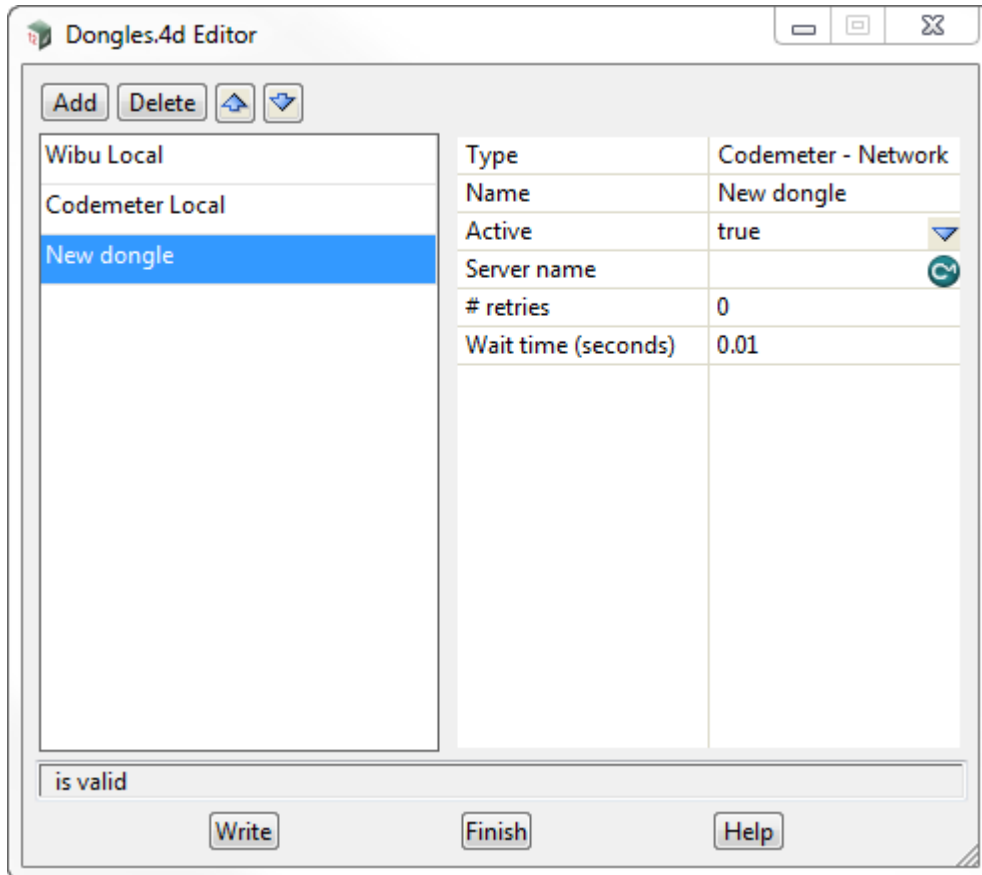
If you don't already know this, the CodeMeter WebAdmin panel can be used to look inside the Network CodeMeter. See [Step 5. Checking the Virtual 12d Virtual Dongles Inside the Network CodeMeter on page 68](#).

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**.



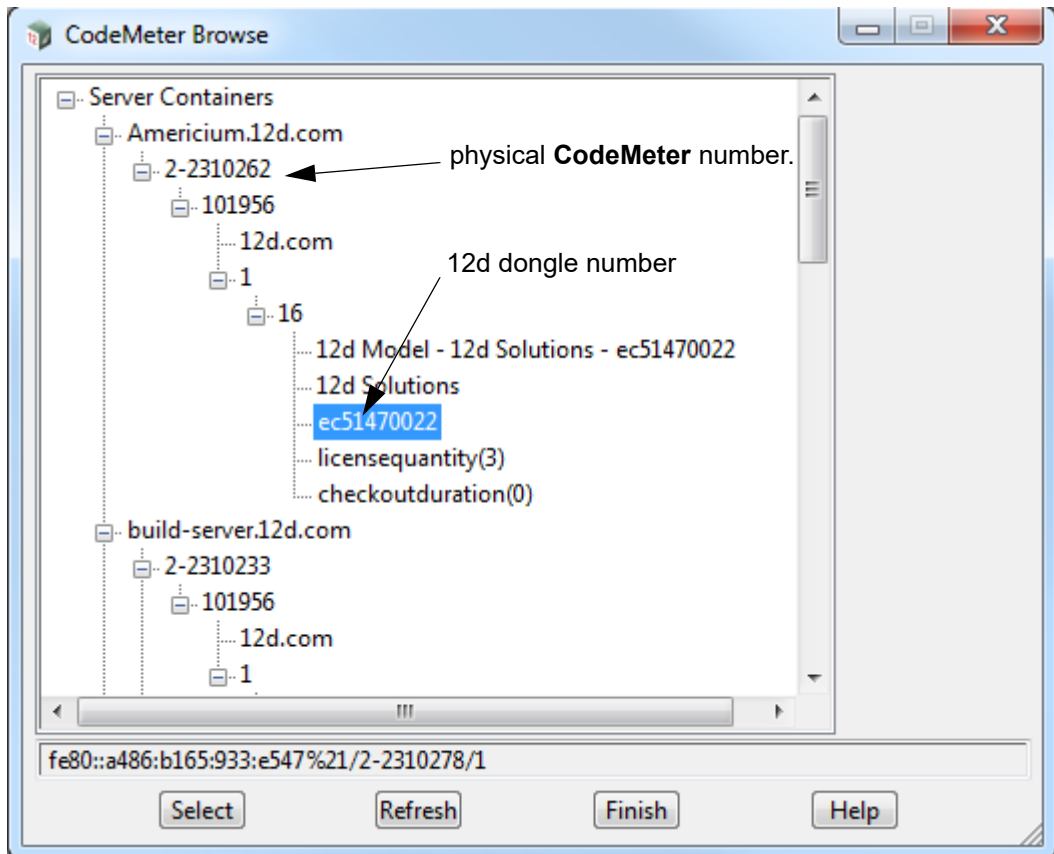
A new entry with the default name **New dongle** is added to the bottom of the list.



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:

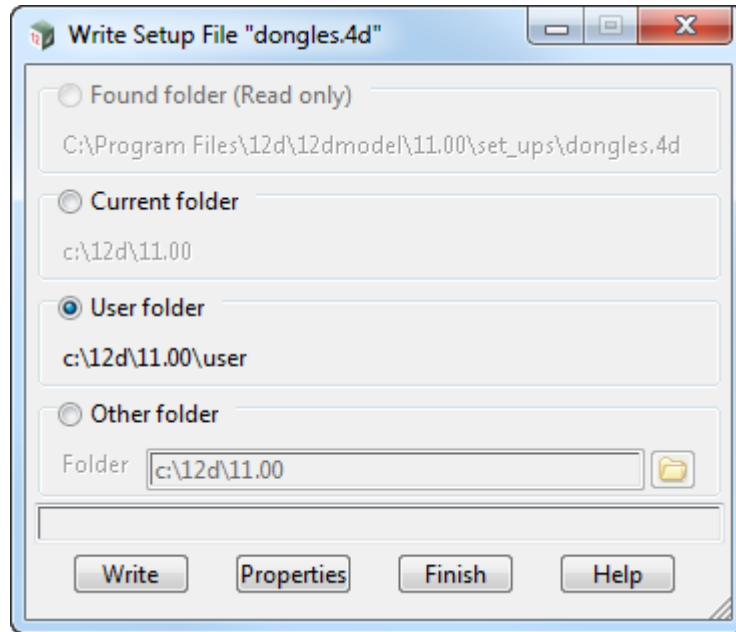
CMUNC is the 12d CodeMeter Universal Naming Convention. An example would be

```
//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 [9.4.1 Updating dongles.4d on page 73](#).

9.4.2 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 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 -

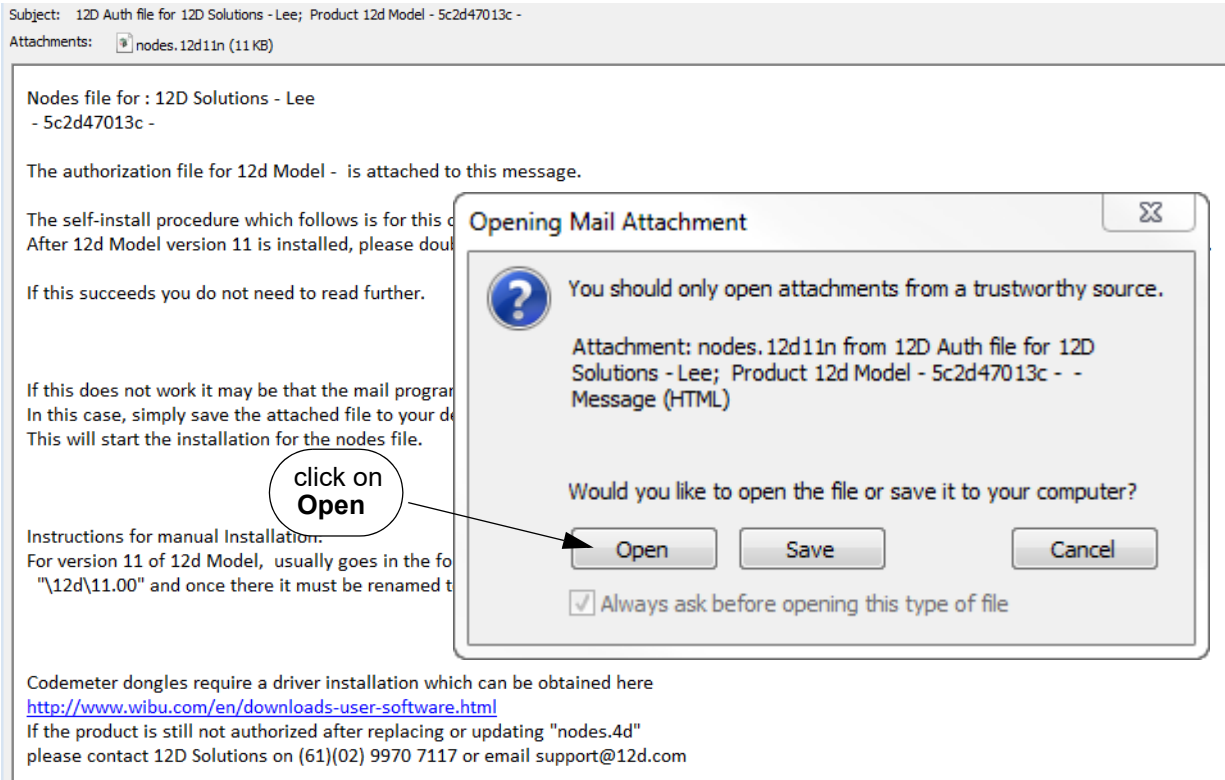
The authorization file for 12d Model - is attached to this message.

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.

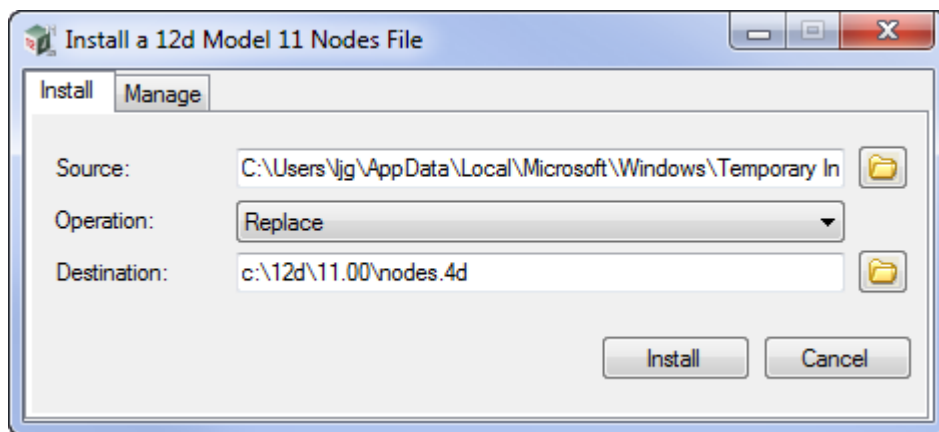
If this does not work it may be that the mail program
 In this case, simply save the attached file to your d
 This will start the installation for the nodes file.

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



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



The choices for **Operation** are:

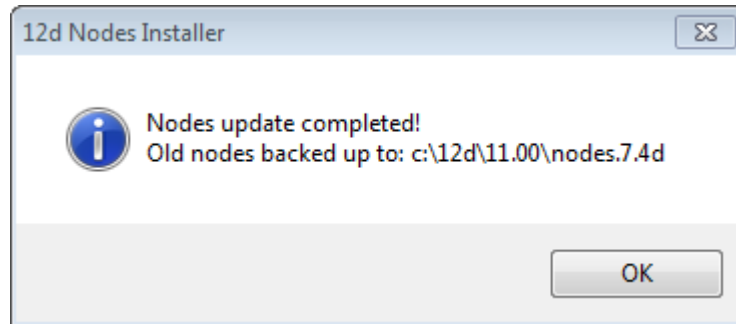
Prepend - if a **nodes.4d** file already exists, the information in the **nodes.12dxxn** file is added to the beginning of the existing **nodes.4d** file. A backup up copy of the existing **nodes.4d** is created.

Replace - if a **nodes.4d** file already exists, it is replaced by a new **nodes.4d** file with the information in the **nodes.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.4d** 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\1xx.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**.

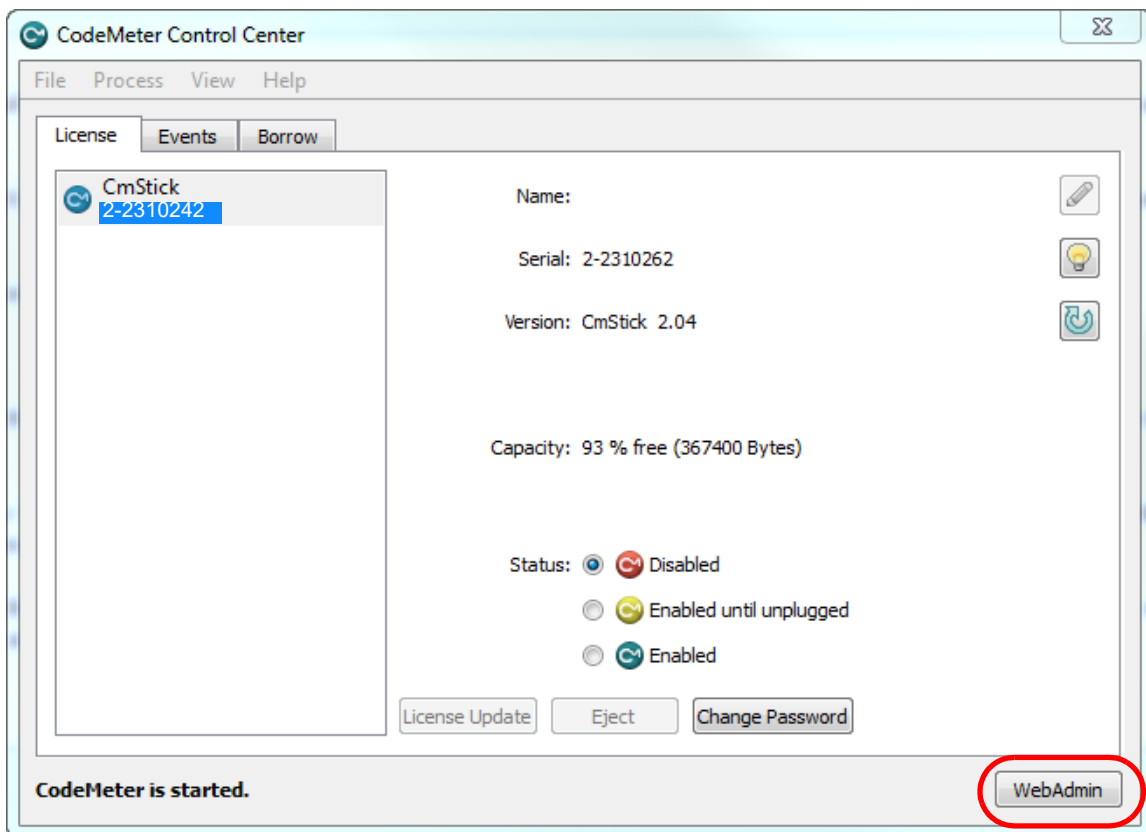
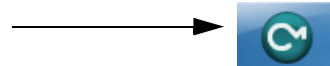
This ends the notes for setting up the **12d CodeMeter Server** and any **12d CodeMeter Clients**.

10 CodeMeter Control Center & WebAdmin

The **CodeMeter Control Center** is used on a particular computer to display which Codemeters are on the computer the Control Centre is being run on, to stop and start the **CodeMeter Runtime Server** service on the computer, Certify Codemeters on the computer and to update the contents of any CodeMeters on the computer. It can also bring up the **CodeMeter WebAdmin** panel.

The **CodeMeter WebAdmin** can do whatever the Control Centre can do but it can work on CodeMeters on **ANY** computer that are visible on the network and it has permission to access.

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 [10.1 Stopping & Starting the CodeMeter Runtime Server on page 85](#))

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 [10.5 Updating Licenses in Network CodeMeters on page 116](#)).

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 [10.8 Which Version of WebAdmin? on page 125](#).

10.1 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 CodeMeter Runtime Server on a particular computer can be done from running **CodeMeter Control Center** on that computer, or **WebAdmin** can be used to stop and start the CodeMeter Runtime Server on any computer that has access to and adequate permissions.

See

[10.1.1 CodeMeter Runtime Server - Control Centre on page 86](#)

[10.1.2 CodeMeter Runtime Server - WebAdmin on page 89](#)

10.1.1 CodeMeter Runtime Server - Control Centre

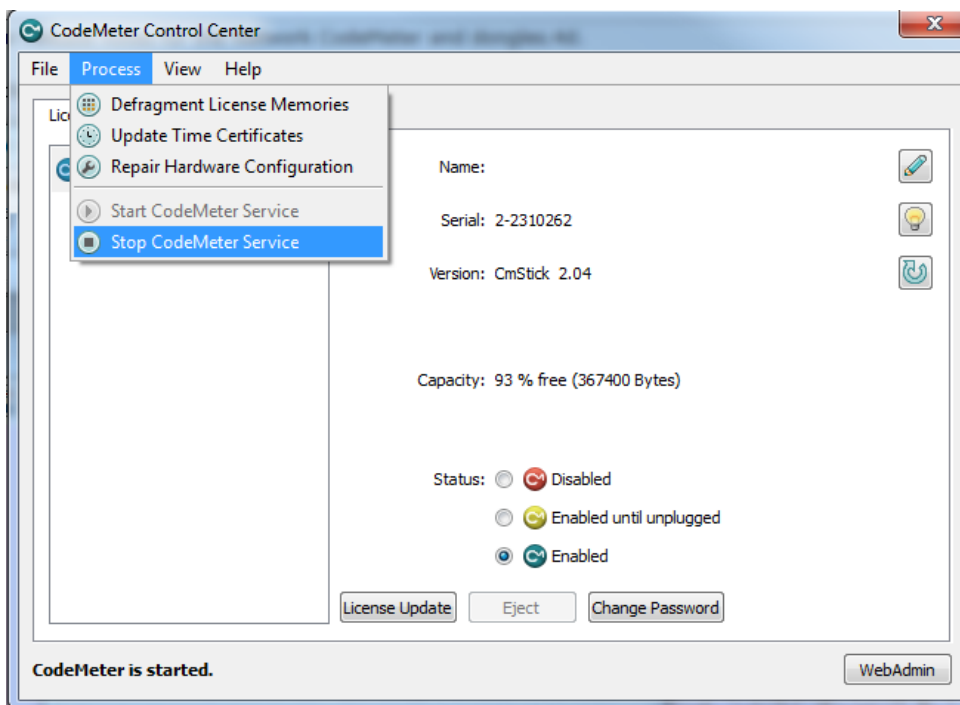
Click on the **CodeMeter** icon that was installed on your task bar to bring up the **CodeMeter Control Center**.



Clicking on the **WebAdmin** button on the **CodeMeter Control Center** brings up the **CodeMeter WebAdmin**.

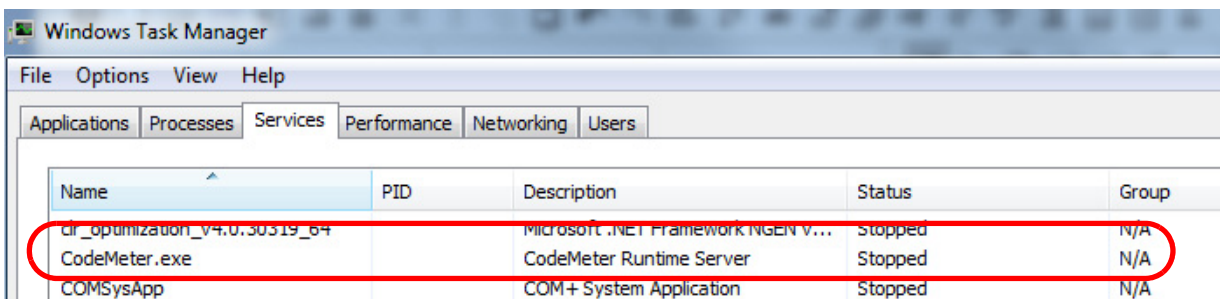
For WebAdmin 6:

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

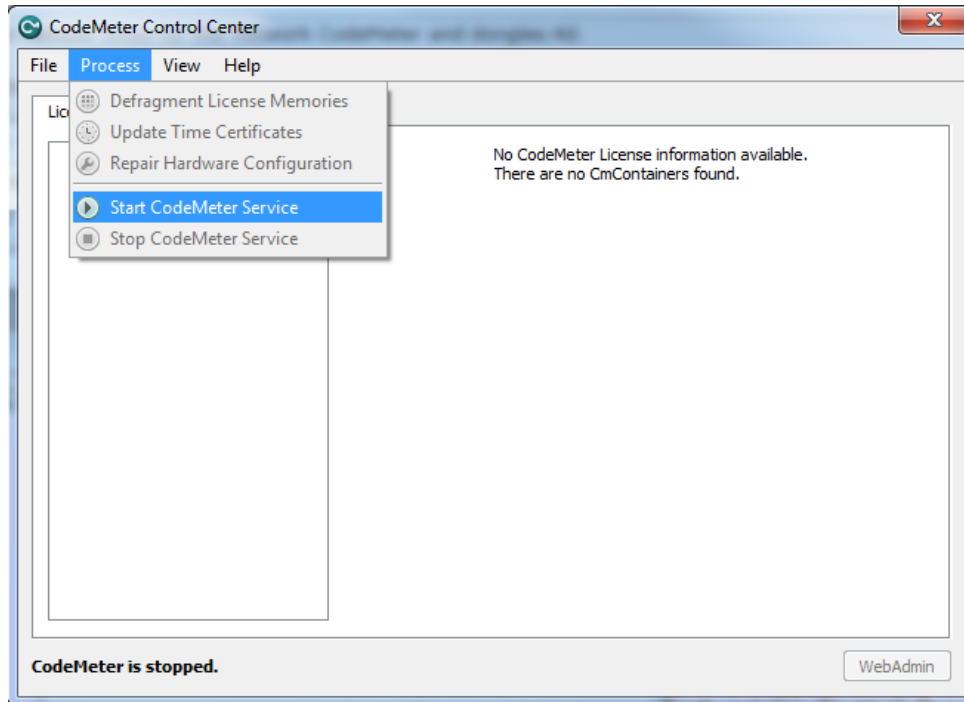


You will be asked to confirm that this is to be done.

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**.

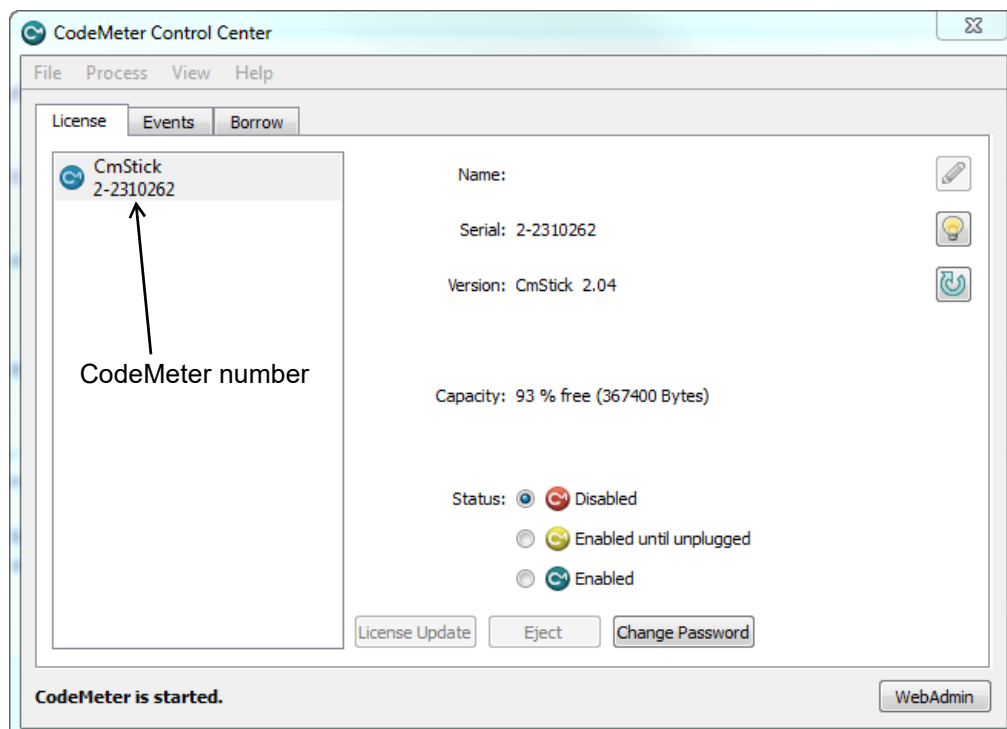


To **start** the **CodeMeter Runtime Server** service, click on **Process > Start CodeMeter Service** in the **CodeMeter Control Center**.

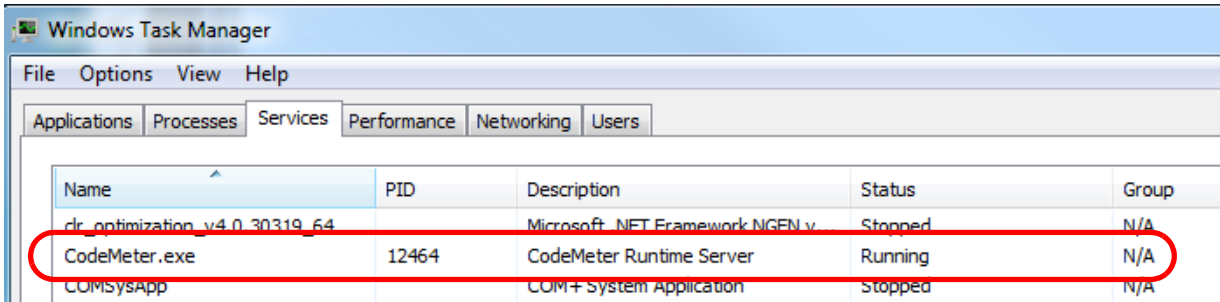


You will be again be asked to confirm that it is to be done.

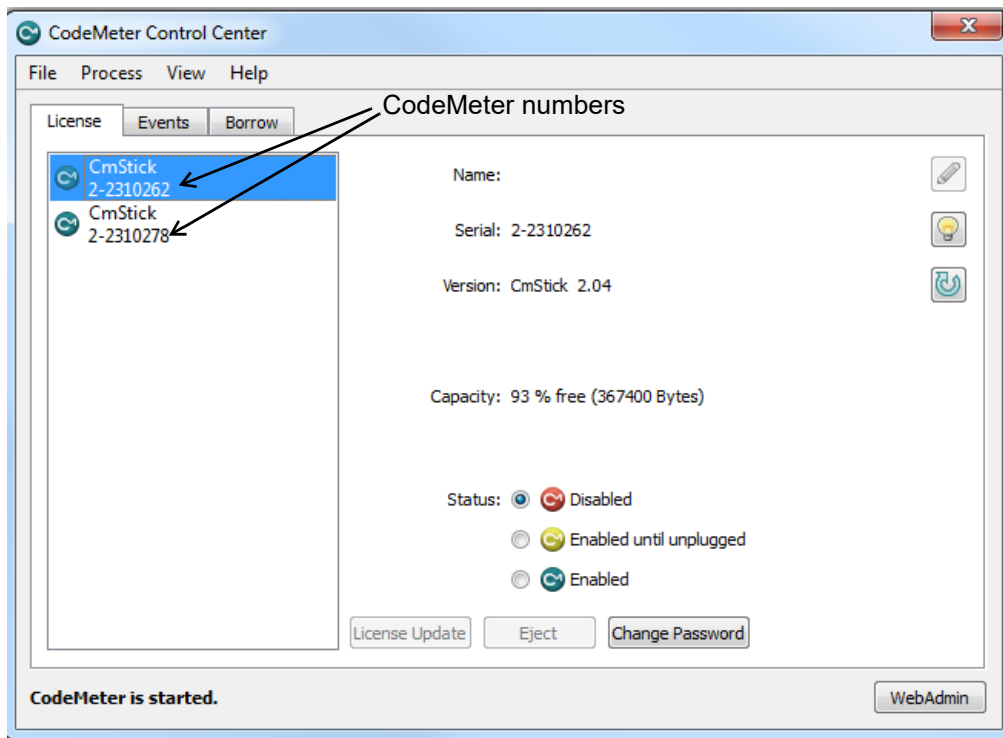
After a short time, the **CodeMeter Control Center** panel will then reappear displaying the CodeMeters on this computer.



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.

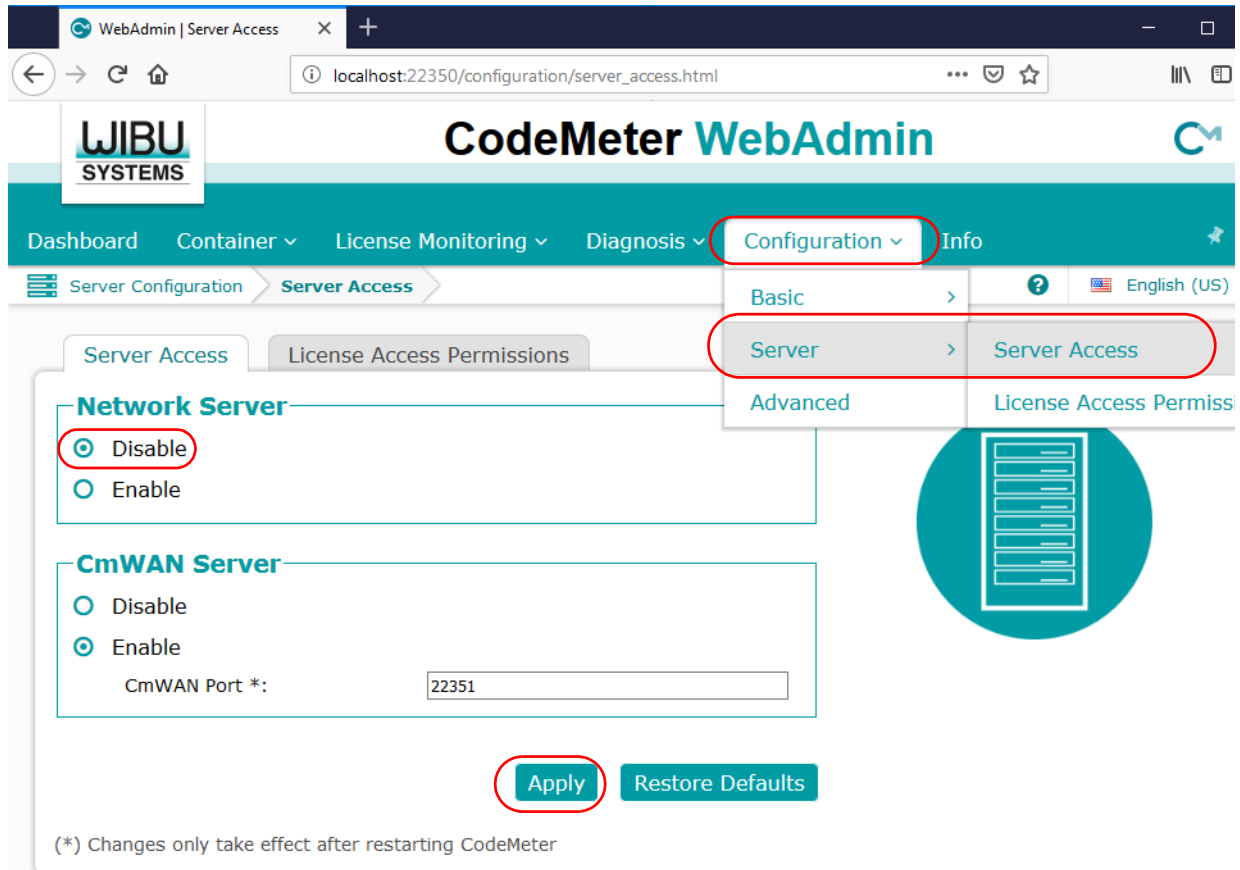
10.1.2 CodeMeter Runtime Server - WebAdmin

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

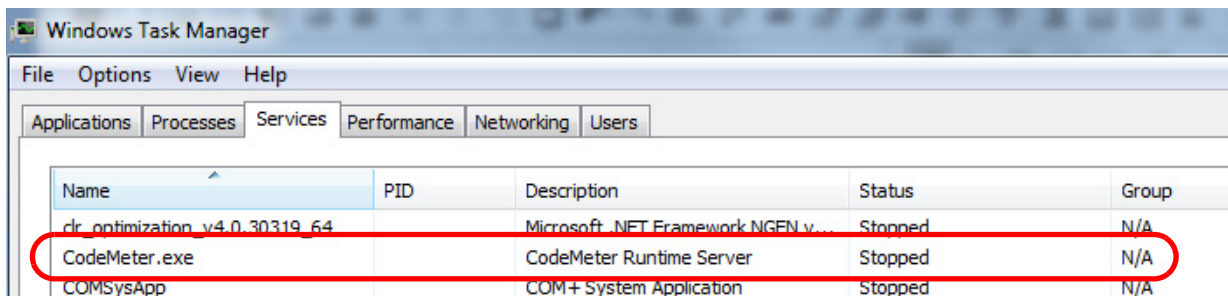
For WebAdmin 6:

For instructions on how to select and see CodeMeters on a particular Network Server, see [10.4.1 Getting Info on CodeMeters on a Particular Server - WebAdmin 6 on page 103](#)

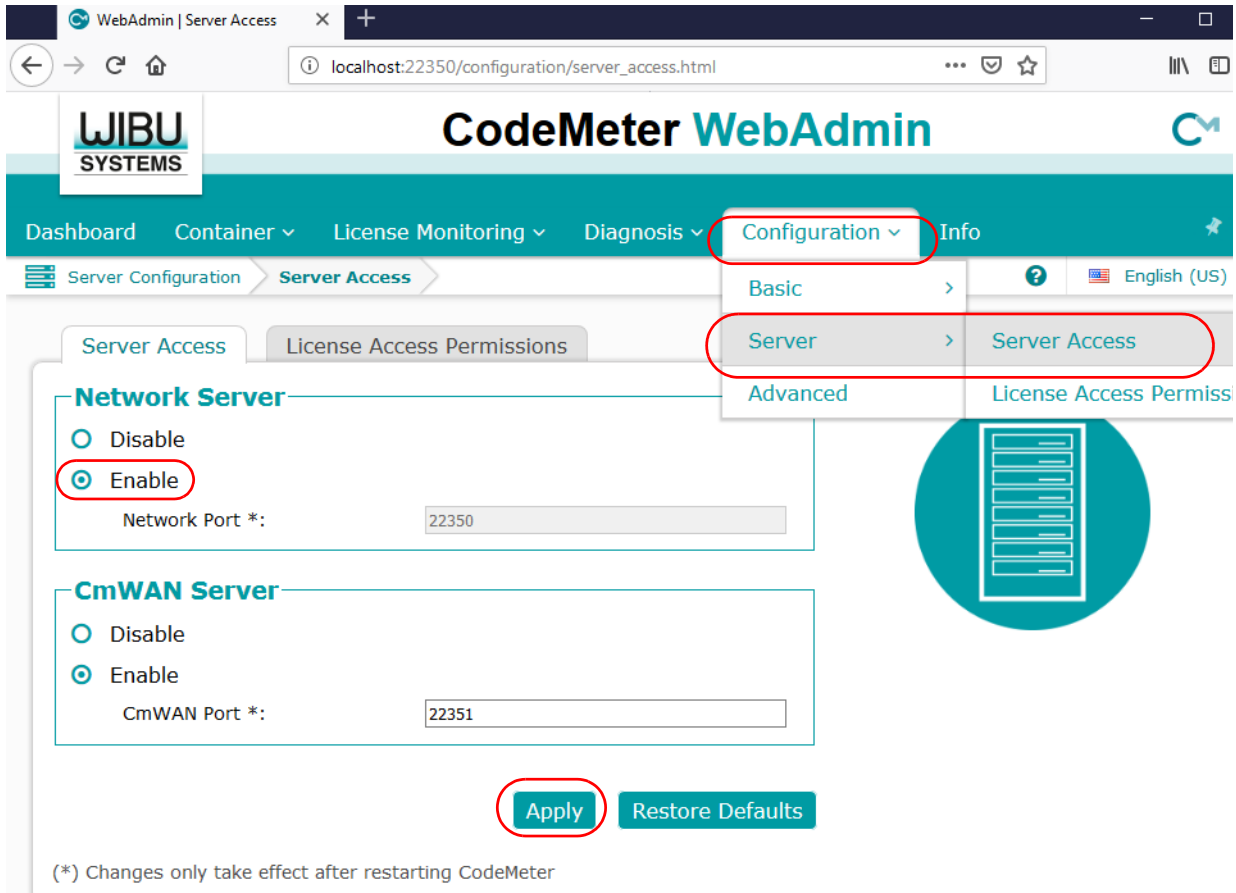
Once the required Computer is selected in the **CodeMeter WebAdmin** panel, to **stop** the Network Server, click on the **Configuration >Server >Server access** menu, then select **Disable** and finally click on **Apply**.



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**.

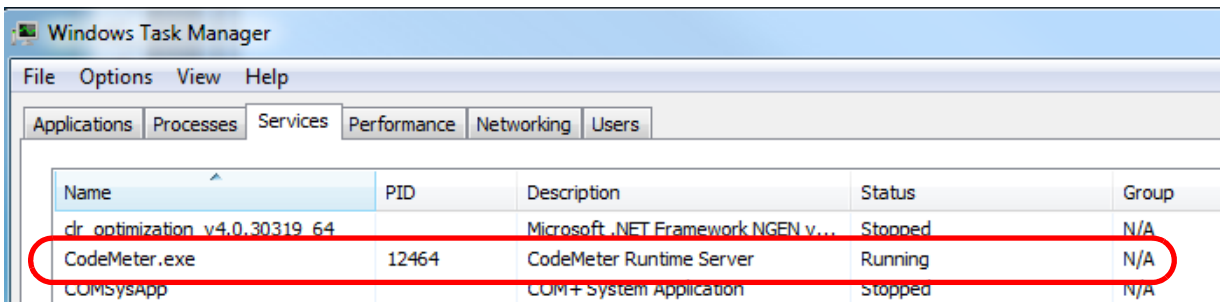


To **start** the **CodeMeter Runtime Server** service, click on the **Configuration >Server >Server access** menu, then select **Enable** and finally click on **Apply**



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

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



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

10.2 Port Address for CodeMeter Communication

For **CodeMeter WebAdmin 6**, see [10.2.1 Port Address - WebAdmin 6 on page 91](#)

For **CodeMeter WebAdmin 5**, see [10.2.2 Port Address - WebAdmin 5 on page 92](#).

10.2.1 Port Address - WebAdmin 6

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 >Server access** menu.

The screenshot shows the CodeMeter WebAdmin interface. The browser address bar indicates the URL is localhost:22350/configuration/server_access.html. The navigation menu includes Dashboard, Container, License Monitoring, Diagnosis, Configuration, and Info. The Configuration menu is expanded, showing Basic, Server, and Advanced options. The Server menu is also expanded, showing Server Access and License Access Permissions. The Server Access page is active, showing the Network Server and CmWAN Server sections. The Network Server section has radio buttons for Disable and Enable (selected), and a text input field for Network Port * with the value 22350. The CmWAN Server section has radio buttons for Disable and Enable (selected), and a text input field for CmWAN Port * with the value 22351. There are Apply and Restore Defaults buttons at the bottom. A note at the bottom 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**.

Important: For the change to take effect, you need to stop and then restart the **CodeMeter Runtime Server** service. See [10.1 Stopping & Starting the CodeMeter Runtime Server on page 85](#).

10.2.2 Port Address - WebAdmin 5

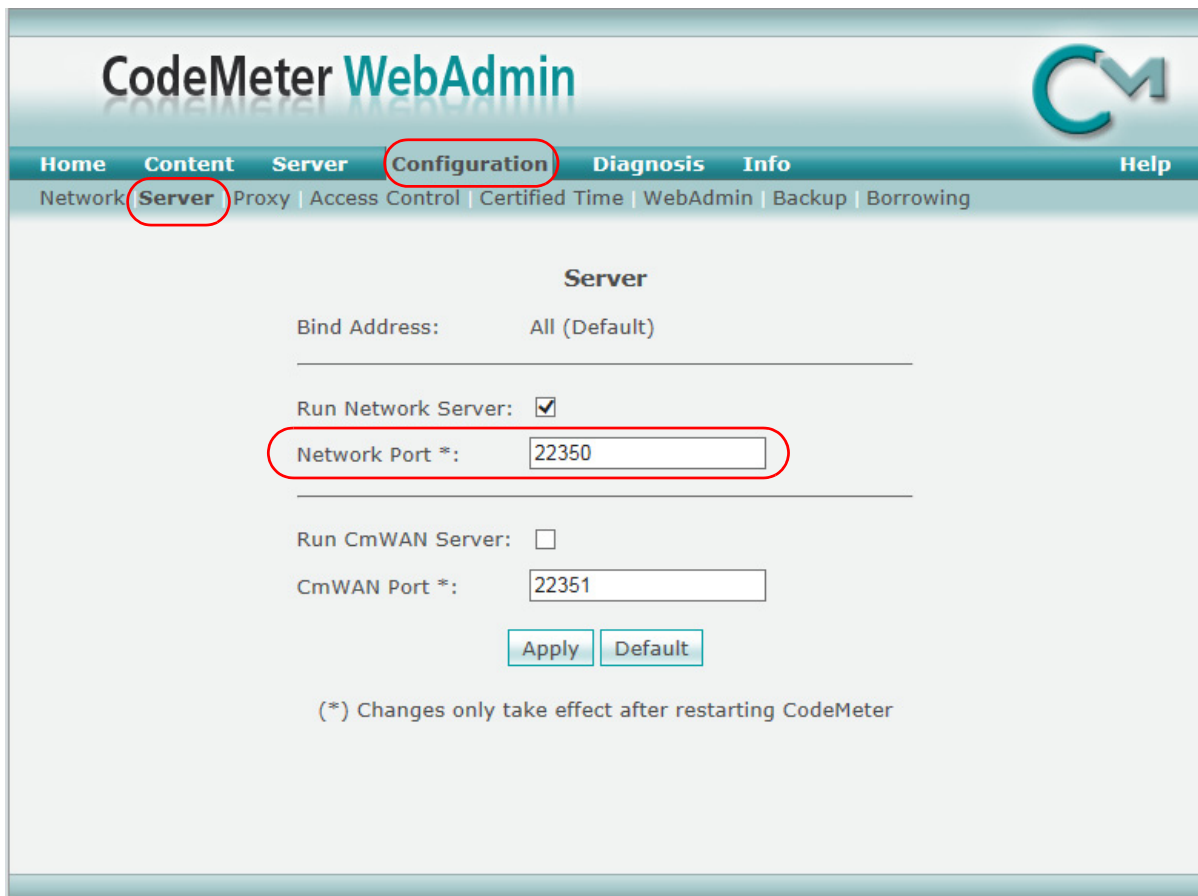
The **CodeMeter License Server** uses a specific IP port (defaulted on 22350) to communicate with your computer and the network. This network port is registered at **IANA** (Internet Assigned Numbers Authority) and is uniquely assigned for CodeMeter® communication.

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 main title is "CodeMeter WebAdmin" with a logo on the right. The navigation bar includes "Home", "Content", "Server", "Configuration", "Diagnosis", "Info", and "Help". Below the navigation bar, there are links for "Network", "Server", "Proxy", "Access Control", "Certified Time", "WebAdmin", "Backup", and "Borrowing". The "Server" sub-tab is selected. The "Server" configuration page shows the following settings:

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

Buttons for "Apply" and "Default" are located below the settings. A note at the bottom 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**.

Important: For the change to take effect, you need to stop and then restart the **CodeMeter Runtime Server** service. See [10.1 Stopping & Starting the CodeMeter Runtime Server on page 85](#).

10.3 Certifying CodeMeters

Updating the **Certified Time** in a **CodeMeter** must be done at least every two month over the Internet and Certifying 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) manually from inside **12d Model** itself

See [5.1 Certifying CodeMeters from 12d Model on page 42](#)

- (b) automatically by **12d Model**

See [5.2 Automatically Certifying CodeMeters from 12d Model on page 44](#)

- (c) outside of **12d Model** when the Codemeter is on the computer you are using outside

Using the **CodeMeter Control Centre** - see [5.3 Certifying CodeMeters Using Control Center on page 45](#).

or

- (d) outside **12d Model** when the Codemeter is **NOT** on the computer your are using

It is possible to certify CodeMeters that are on other computers but this is usually only needed by Administrators. See [10.3.1 Certifying CodeMeters Using WebAdmin on page 94](#)

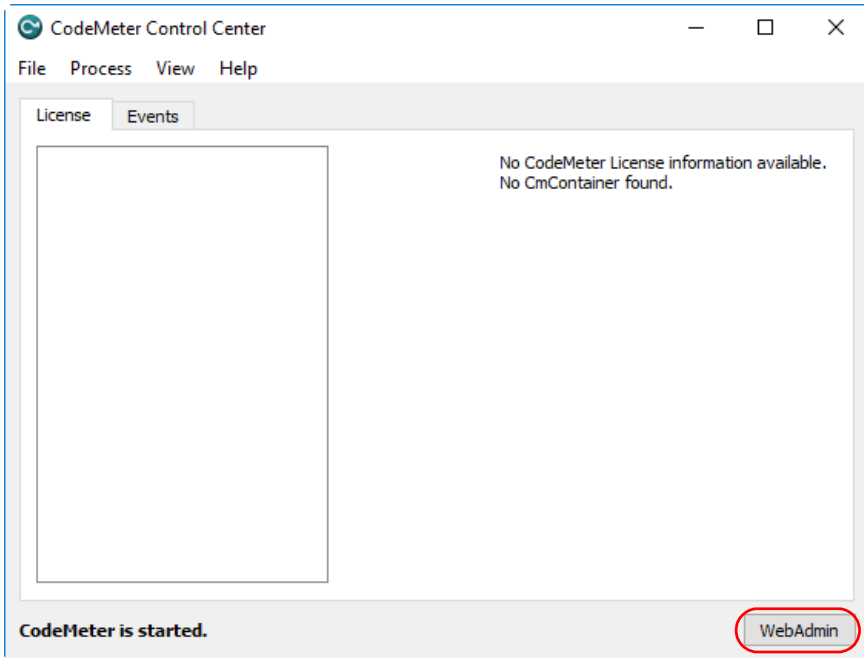
Important Note

To display and update the **Certified Time** in the **CodeMeter**, you need access over the Internet to a **CodeMeter Time Server** (see [10.3.2 Time Servers for Certified Time on page 100](#)) and this Internet communication must be allowed to be done through an **IP port** (see [9 Network CodeMeters on page 59](#)).

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

10.3.1 Certifying CodeMeters Using WebAdmin

If the **CodeMeter** is **NOT** attached to your current computer you need to use the **CodeMeter WebAdmin** panel which is brought up by clicking on the **WebAdmin** button on the **CodeMeter Control Center**.



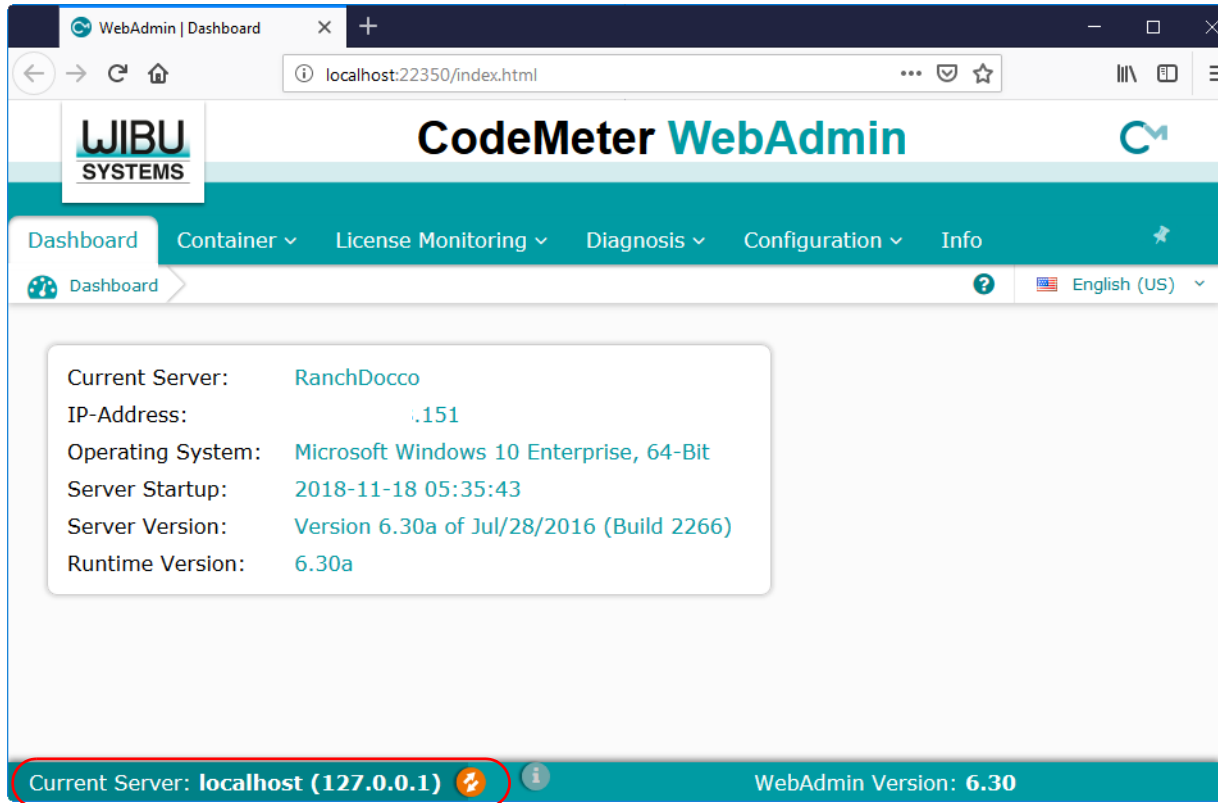
For **CodeMeter WebAdmin 6**, see [10.3.1.1 Certifying CodeMeters Using WebAdmin 6 on page 95](#)

For **CodeMeter WebAdmin 5**, see [10.3.1.2 Certifying CodeMeters Using WebAdmin 5 on page 99](#).

10.3.1.1 Certifying CodeMeters Using WebAdmin 6

After getting up CodeMeter WebAdmin panel up, on the Dashboard you need to set the **Current Server** to the server that the CodeMeter is on.

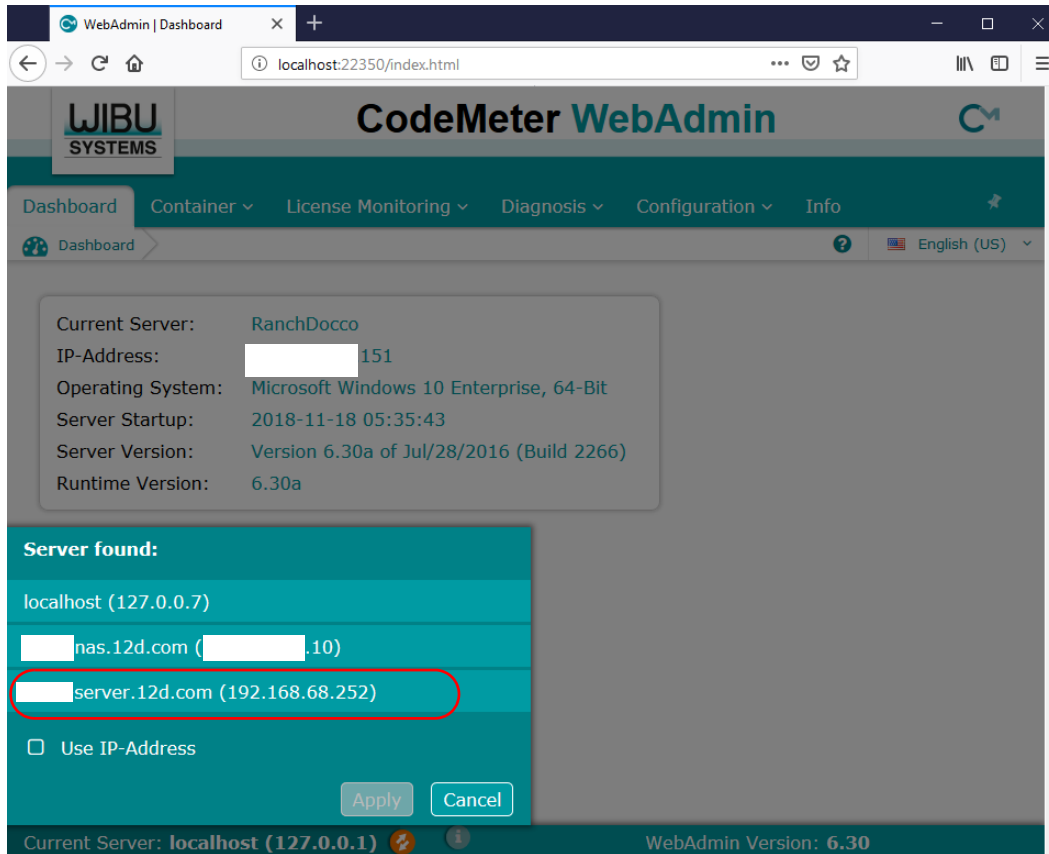
To get a list of servers, click on the Current Server: field at the bottom of the Dashboard and you will get a list of the servers found.



The screenshot displays the CodeMeter WebAdmin interface. The browser address bar shows 'localhost:22350/index.html'. The page header includes the WJBU SYSTEMS logo and the title 'CodeMeter WebAdmin'. The navigation menu contains 'Dashboard', 'Container', 'License Monitoring', 'Diagnosis', 'Configuration', and 'Info'. The main content area shows the following server details:

Current Server:	RanchDocco
IP-Address:	.151
Operating System:	Microsoft Windows 10 Enterprise, 64-Bit
Server Startup:	2018-11-18 05:35:43
Server Version:	Version 6.30a of Jul/28/2016 (Build 2266)
Runtime Version:	6.30a

At the bottom of the dashboard, the 'Current Server: localhost (127.0.0.1)' field is highlighted with a red circle. The footer indicates 'WebAdmin Version: 6.30'.

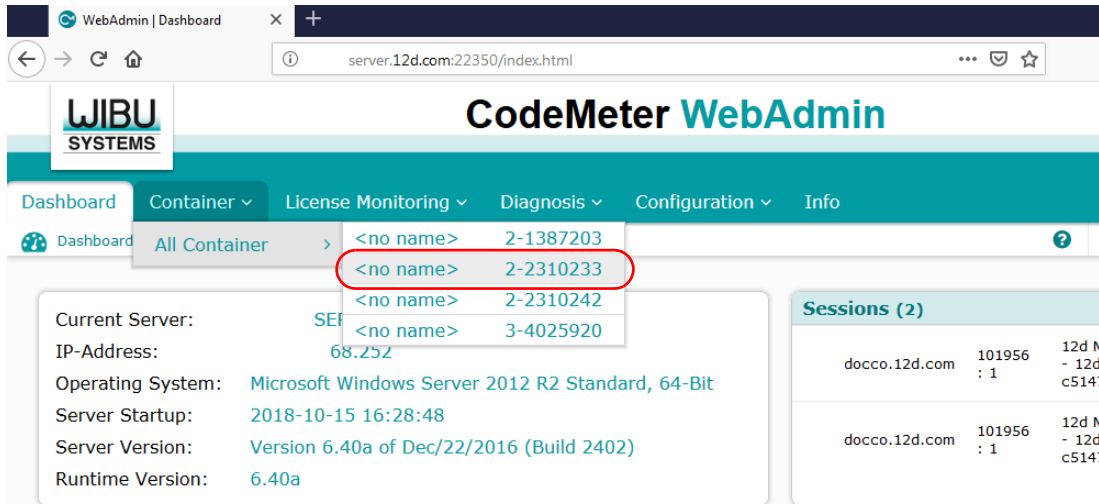


If there is more than one **CodeMeter** on that computer/server, select the one that you want to examine and click on **Apply**.

The information about the selected Server will be displayed, including any CodeMeters that are found on the server and the current sessions on them.

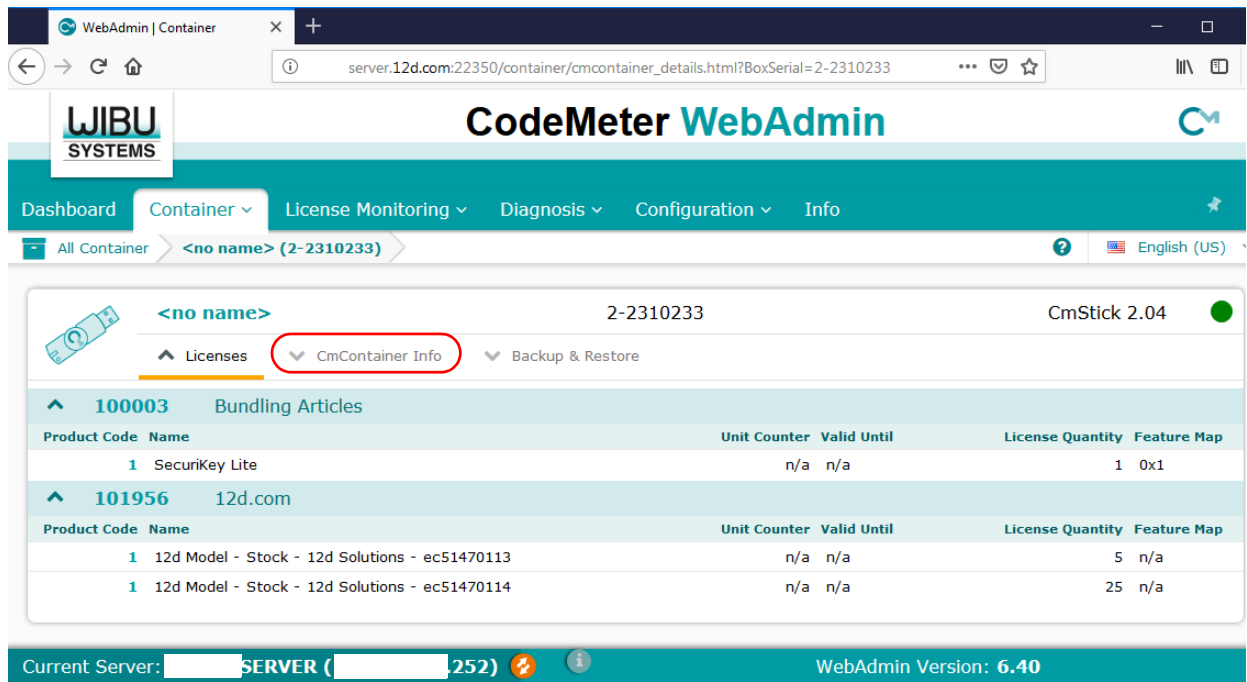


If there is more than one **CodeMeter (CmContainer)** on that computer/server, select the one that you want by Walking right on the **Container** menu.



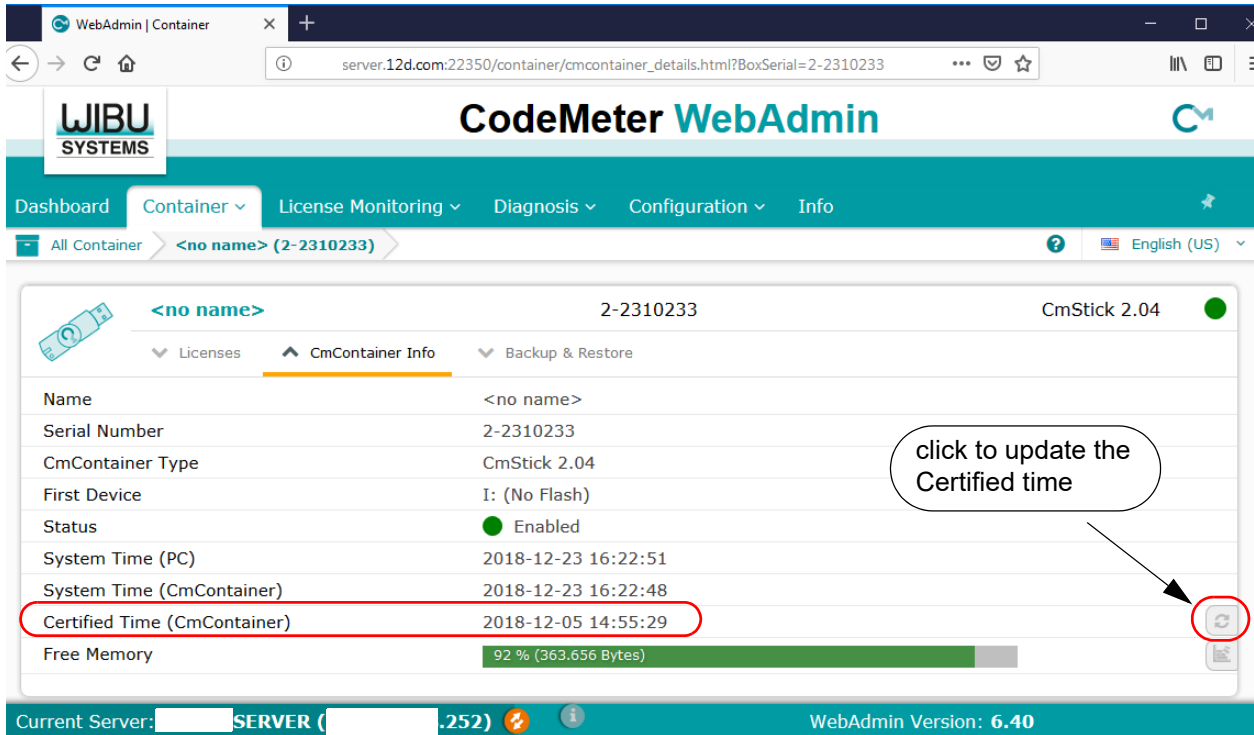
Information about the selected CodeMeter is then displayed.

Click on the **CmContainer Info** button to expand the information displayed.



The current **Certified time** for that **CodeMeter** will be displayed.

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



If you have permission to do so, 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 [10.3.2 Time Servers for Certified Time on page 100](#)). This Internet communication is through a set IP port (see [9 Network CodeMeters on page 59](#)).

10.3.1.2 Certifying CodeMeters Using WebAdmin 5

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.

The screenshot shows the CodeMeter WebAdmin interface. The 'Content' tab is selected, and the 'CmContainer' sub-tab is active. The main content area displays details for a specific CmContainer. The 'Certified Time (CmContainer)' field is highlighted with a red circle, and an arrow points to it from a callout box labeled 'Certified time'. Another callout box labeled 'click to update the Certified time' points to the 'Update' button, which is also circled in red. The 'Status' section shows three radio buttons: 'Disabled' (selected), 'Enabled until Unplugged', and 'Enabled'. The 'Free Memory' section shows '93 % (367.432 Bytes)' and a 'Defragment' button.

If there is more than one **CodeMeter (CmContainer)** 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 [10.3.2 Time Servers for Certified Time on page 100](#)). This Internet communication is through a set IP port (see [9 Network CodeMeters on page 59](#)).

10.3.2 Time Servers for Certified Time

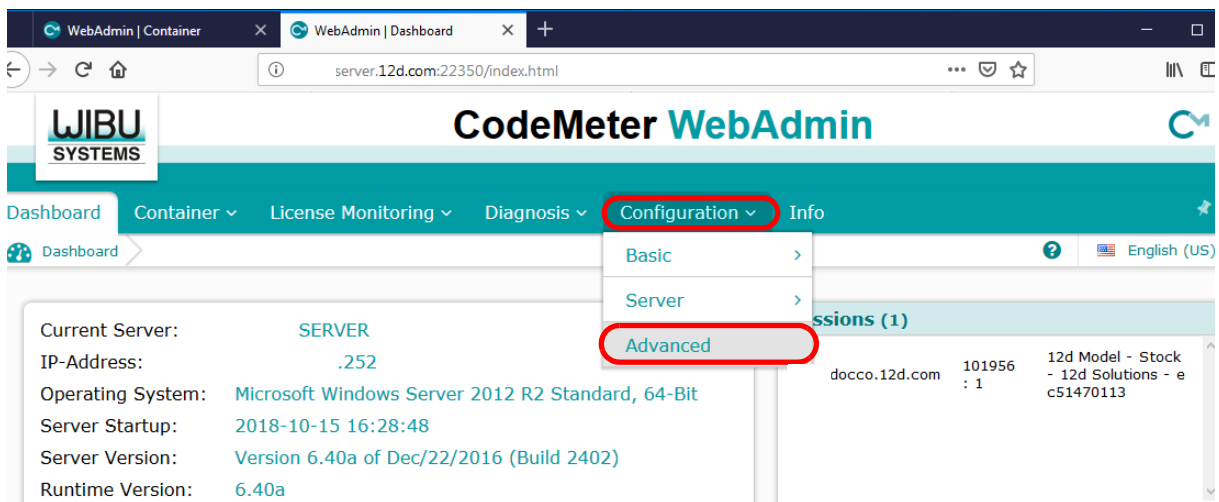
When you certify a **CodeMeter** it searches the internet for a **CodeMeter Time Server** to update the **Certified Time** in the CodeMeter.

For **CodeMeter WebAdmin 6**, see [10.3.2.1 Time Servers - WebAdmin 6 on page 100](#)

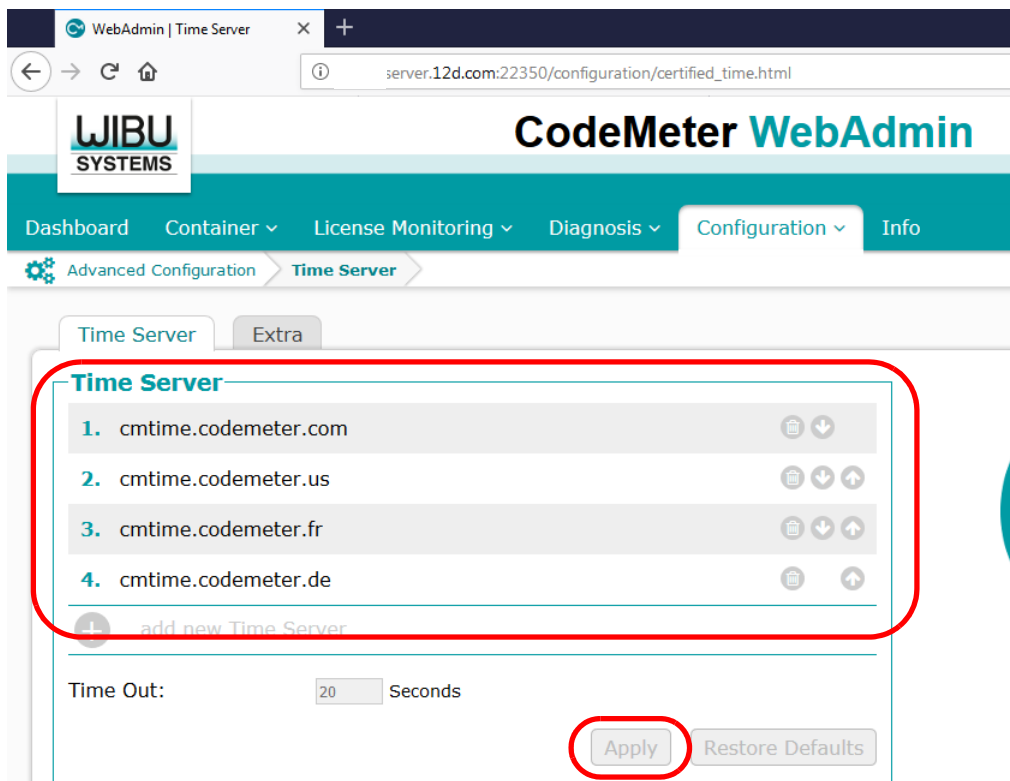
For **CodeMeter WebAdmin 5**, see [10.3.2.2 Time Servers - WebAdmin 5 on page 101](#).

10.3.2.1 Time Servers - WebAdmin 6

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 list of **Time Servers** used for **this** CodeMeter are then displayed.



The Time Servers list is searched in order from the top to the bottom.

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.

10.3.2.2 Time Servers - WebAdmin 5

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 screenshot shows the CodeMeter WebAdmin interface. The main navigation bar includes 'Home', 'Content', 'Server', 'Configuration' (highlighted with a red box), 'Diagnosis', 'Info', and 'Help'. Below this, a secondary navigation bar contains 'Network | Server | Proxy | Access Control | Certified Time' (highlighted with a red box) | WebAdmin | Backup | Borrowing'. The main content area is titled 'Certified Time'. It features a list of 'Time Server:' entries: cmtime.codemeter.com, cmtime.codemeter.us, cmtime.codemeter.fr, and cmtime.codemeter.de. This list is enclosed in a red rounded rectangle. Below the list are four buttons: 'add', 'remove', 'up', and 'down'. Below these buttons is a 'Time Out:' field with the value '20' and the unit 'sec'. At the bottom of the form are two buttons: 'Apply' and 'Default'.

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

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.

10.4 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.

For instructions on finding information about **CodeMeters** on a **particular Network Server**, see

[10.4.1 Getting Info on CodeMeters on a Particular Server - WebAdmin 6 on page 103](#)

[10.4.3 Getting Info on CodeMeters on a Particular Server - WebAdmin 5 on page 110.](#)

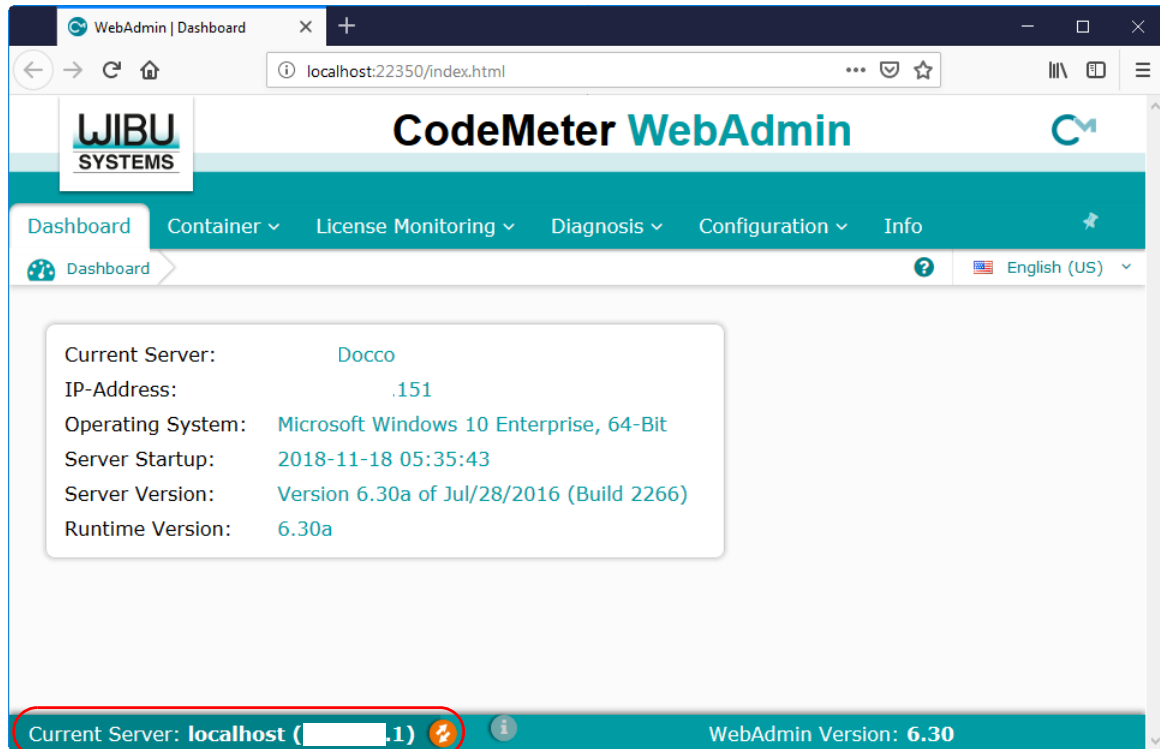
10.4.1 Getting Info on CodeMeters on a Particular Server - WebAdmin 6

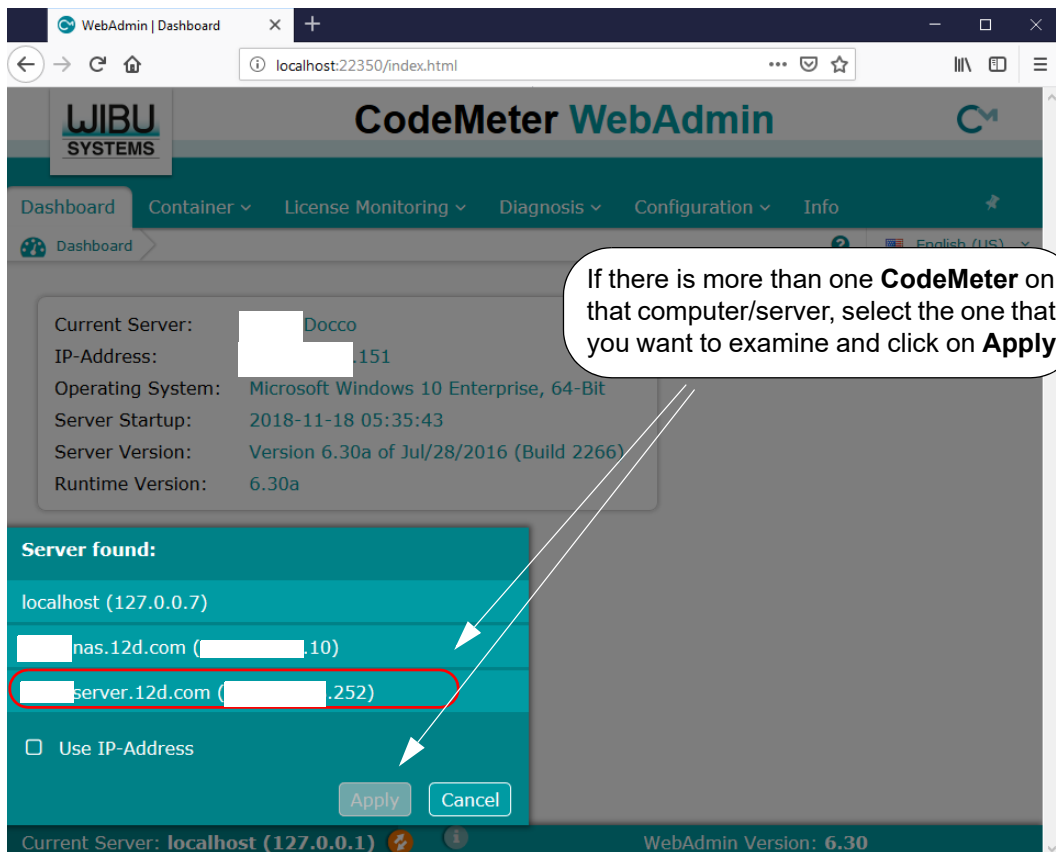
Clicking on the **WebAdmin** button brings up the **CodeMeter WebAdmin** panel which can display information about **12d Model** licenses for **any** CodeMeter (Network or Standalone) that is visible on the computer network.

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

To get information about CodeMeters on another Server, you need to set the **Current Server** to the server that you wish to exam **CodeMeters** on.

To get a list of servers, click on the Current Server: field at the bottom of the Dashboard:





Important Note:

It is possible to have different versions of **WebAdmin** installed on different Servers. So depending on which Server you are looking at, you may now need to swap between the notes for **WebAdmin 6** and **WebAdmin 5**.

For instructions on Monitoring and Cancelling Licenses on this **Server**, see [10.4.2 Monitoring and Cancelling Licenses - WebAdmin 6 on page 105](#) [10.4.4 Monitoring and Cancelling Licenses - WebAdmin 5 on page 112](#).

10.4.2 Monitoring and Cancelling Licenses - WebAdmin 6

The information about a selected Server will be displayed, including any CodeMeters that are found on the server and the current sessions on them.



The screenshot shows the CodeMeter WebAdmin dashboard. The left sidebar contains navigation options: Dashboard, Container, License Monitoring, Diagnosis, Configuration, and Info. The main content area is divided into two sections. The left section displays server details for 'SERVER' with IP address '.252', operating system 'Microsoft Windows Server 2012 R2 Standard, 64-Bit', server startup time '2018-10-15 16:28:48', server version 'Version 6.40a of Dec/22/2016 (Build 2402)', and runtime version '6.40a'. The right section, titled 'Sessions (2)', is highlighted with a red box and contains a table of active sessions.

Sessions (2)		
docco.12d.com	101956 : 1	12d Model - Stock - 12d Solutions - e c51470113
docco.12d.com	101956 : 1	12d Model - Stock - 12d Solutions - e c51470113

To find out information about all the **CodeMeters (CmContainer)** on that computer/server, select the **Container >All Containers** option, and expand the **12d Model product code 101956** for each CodeMeter to show any **virtual 12d dongles** in a Codemeter or any **standalone** CodeMeters.

The example below shows a Server with three CodeMeters attached to it: one with a single virtual 12d dongle, one with two virtual 12d dongles and one which is a standalone Codemeter.

The screenshot displays the WebAdmin interface for License Monitoring. It shows three CodeMeter instances, each with a table of licenses. Annotations highlight specific details:

- CodeMeter 1 (2-2310233):** Labeled "CodeMeter numbers". It contains two licenses under product code 101956, annotated as "two virtual 12d dongles in the one CodeMeter".

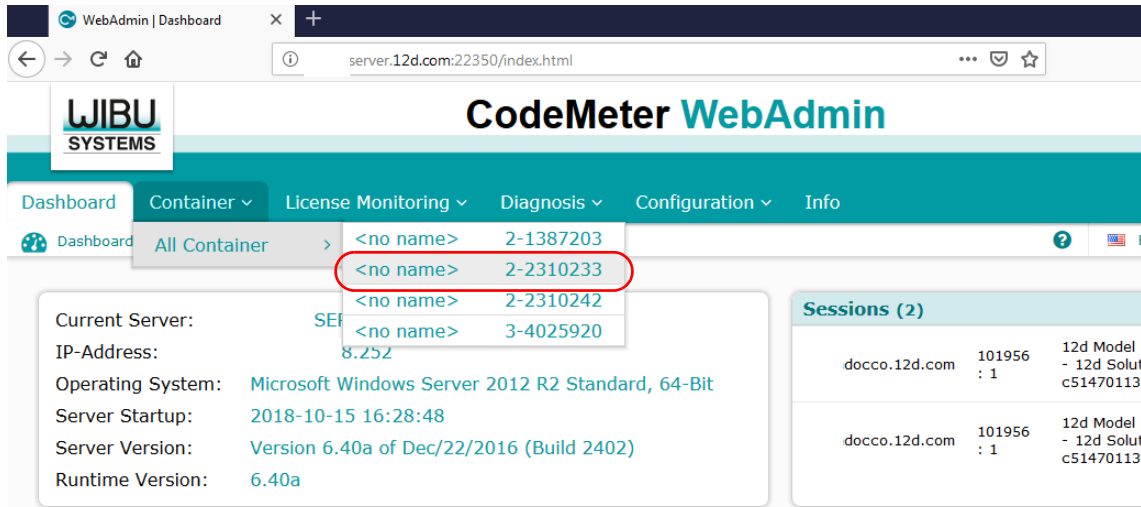
Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	12d Model - Stock - 12d Solutions - ec51470113	n/a	n/a	5	n/a
1	12d Model - Stock - 12d Solutions - ec51470114	n/a	n/a	25	n/a
- CodeMeter 2 (2-2310242):** Labeled "one 12d Model virtual dongle in a CodeMeter". It contains one license under product code 101956.

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	12d Model - 12D Solutions - NSW - ec51470101	n/a	n/a	3	n/a
- CodeMeter 3 (3-4025920):** Labeled "one standalone 12d Model CodeMeter". It contains one license under product code 101956.

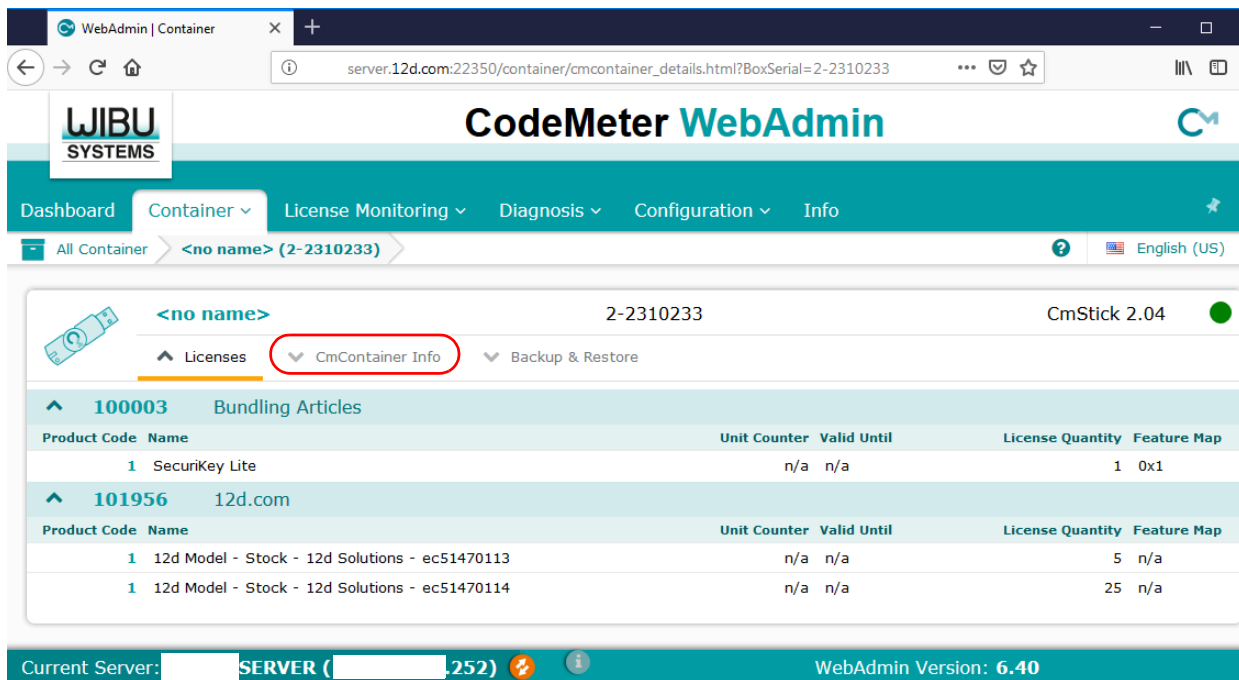
Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	12d Model - 12d Solutions - 5c2d470ac1	n/a	n/a	1	n/a

At the top, a list of containers includes product codes 99, 100003, and 100021. The bottom status bar shows "Current Server: SERVER (252)" and "WebAdmin Version: 6.40".

If there is more than one **CodeMeter (CmContainer)** on the computer/server, information about just one of them can be obtained by walking right on the **Container >All Container** menu and selecting the required CodeMeter number.

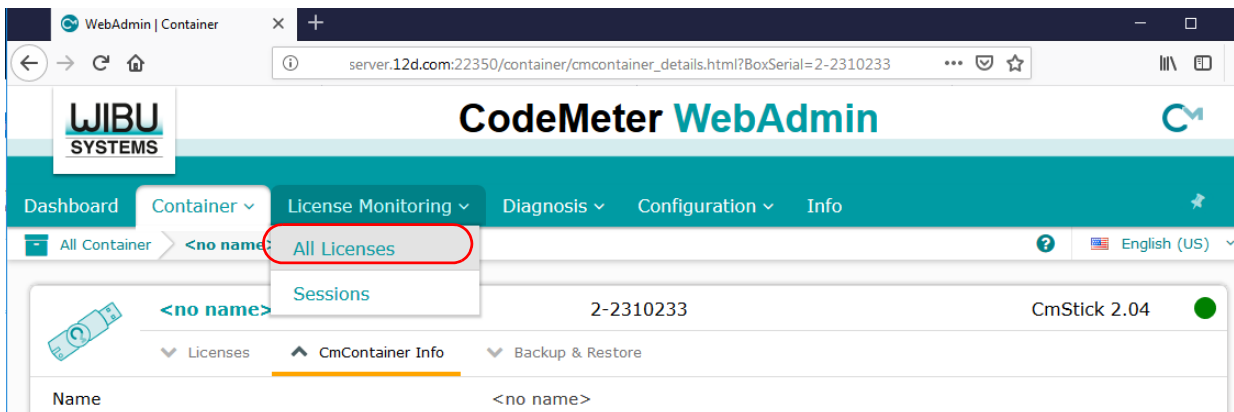


Information about the selected CodeMeter is then displayed. Expanding the **12d Model product code 101956** will show any **virtual 12d dongles** in a CodeMeter.

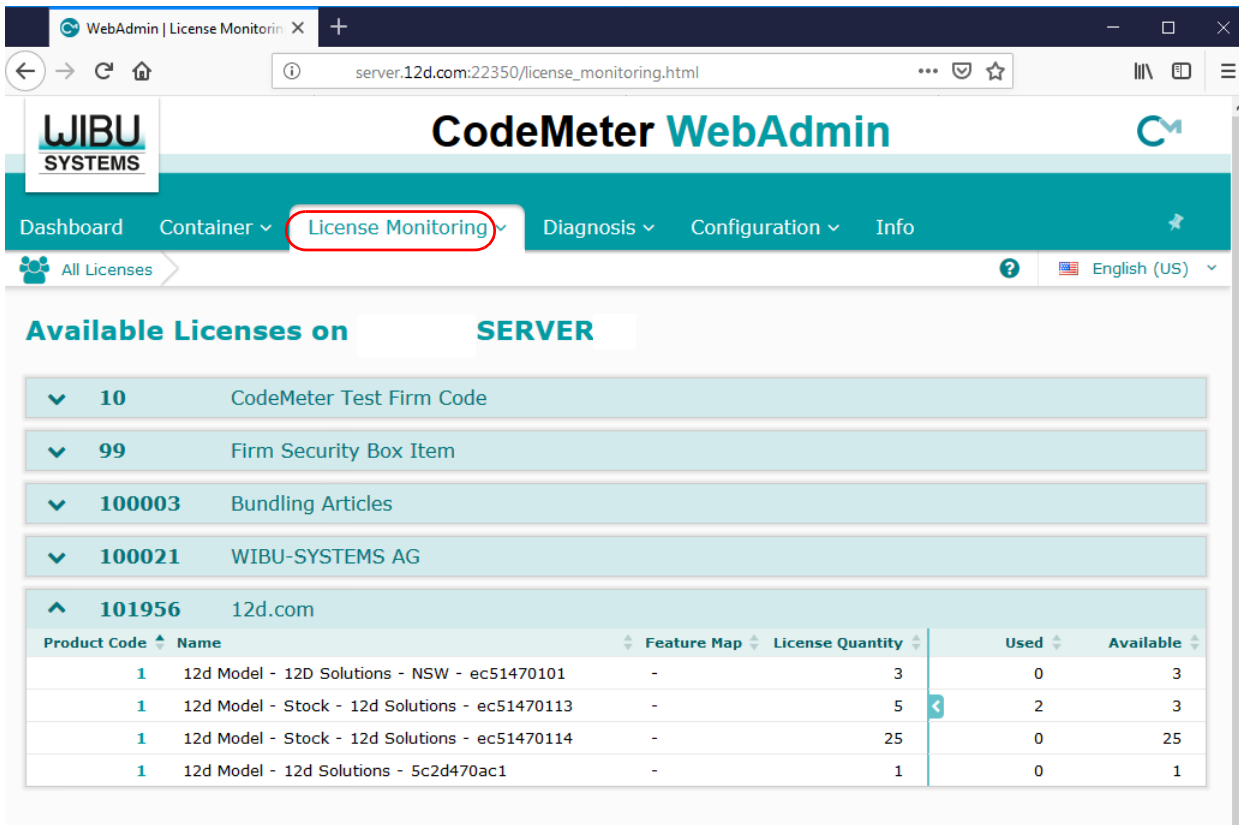


And as discussed in the Certifying section, clicking on the **CmContainer Info** button expands the information displayed for the **CodeMeter**.

To see information about the total number of licenses available for each **virtual 12d dongle**, and the number of licenses currently being used and how many are left to use, click on the **License Monitoring >All Licenses** menu.



Information about the selected CodeMeter is then displayed.



Information last updated on 2018-12-25 11:29:20

Clicking on the Product Code 1 for a CodeMeter showing some licenses are being used will (for example ec514470113), displays the user name of the user of each license (session).

If you have the required permission, the session can be **terminated** by selecting **Cancel** at the end of the session row and in the **Action** column.

Information last updated on 2018-12-26 12:11:17

10.4.3 Getting Info on CodeMeters on a Particular Server - WebAdmin 5

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.

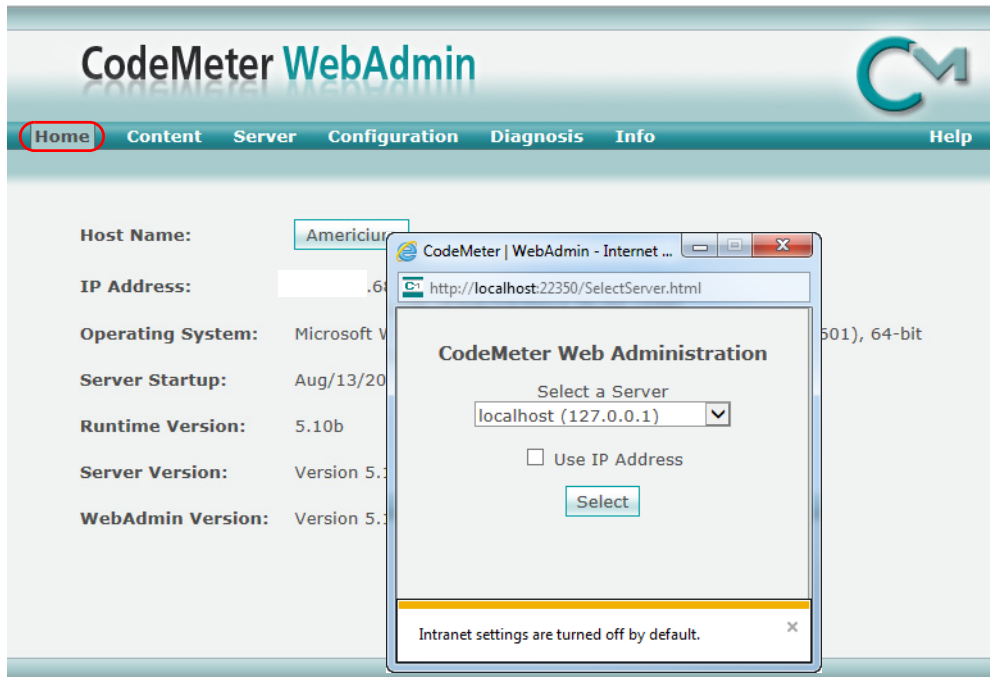
The panel comes up with the **Content > CmContainer** tab displaying information about one of the CodeMeters on **this** computer.

The screenshot shows the CodeMeter WebAdmin interface. The title bar reads "CodeMeter WebAdmin" with a logo on the right. Below the title bar is a navigation menu with tabs: Home, Content (highlighted with a red circle), Server, Configuration, Diagnosis, Info, and Help. Under the Content tab, there are sub-tabs: CmContainer (highlighted with a red circle), Licenses, User Data, and Backup/Restore. The main content area displays configuration details for a CmContainer:

CmContainer:	2-2310278	<input type="button" value="v"/>
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.

Important Note:

It is possible to have different versions of **WebAdmin** installed on different Servers.

So depending on which Server you are looking at, you may now need to swap between the notes for **WebAdmin 6** and **WebAdmin 5**.

For instructions on Monitoring and Cancelling Licenses on this **Server**, see

[10.4.2 Monitoring and Cancelling Licenses - WebAdmin 6 on page 105](#)

[10.4.4 Monitoring and Cancelling Licenses - WebAdmin 5 on page 112.](#)

10.4.4 Monitoring and Cancelling Licenses - WebAdmin 5

The tab **Content >Licenses** will display information about any selected CodeMeter on the selected computer.

The screenshot shows the CodeMeter WebAdmin interface. The 'Content' tab is selected, and the 'Licenses' sub-tab is active. The 'CmContainer' is set to '2-2310233'. The interface displays two tables of license information:

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 - 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

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.

CodeMeter WebAdmin

Home Content **Server** Configuration Diagnosis Info Help

Cluster | User

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	1	Details
1608	CmDemo for C++ created this Product Item	-							Details
101956 12d.com									
1	12d Model - 12D Solutions - NSW - ec51470101	-	3					3	Details
1	12d Model - Stock - 12d Solutions - ec51470113	-	5	2 (-)	0	0	0	3	Details
1	12d Model - Stock - 12d Solutions - ec51470114	-	25					25	Details

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

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

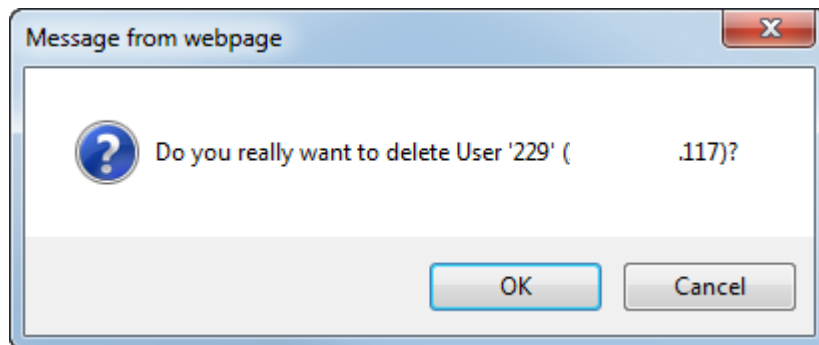
License Details CmContainer 2-2310233

Entry 101956 : 1 (-)
 Free 3
 Total 5

ID	Client (User)	Client Process ID	Application Information	Access Mode	First Access	Last Access	Expires	Action
229	.117 (T3600-1 \ alg)	0		User Limit	2015-08-14 19:41:48	2015-08-14 19:49:22		Cancel
242	.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



10.5 Updating Licenses in Network CodeMeters

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 [10.5.1 Generating the Context File \(.WibuCmRac\) on page 117.](#)

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

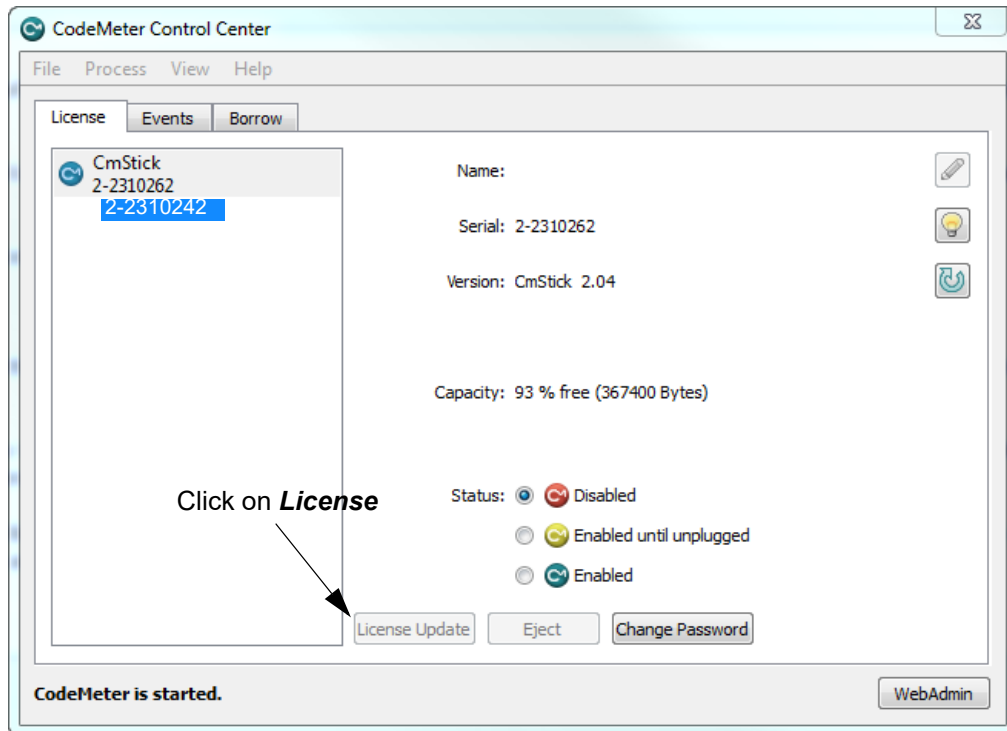
You will be emailed one or more special files (ending in **.WibuCmRaU**) which are used to update the information about the virtual **12d dongles** in the Network CodeMeter.

If you have a **WibuCmRaU** file, go to [10.5.1.1 Updating Using the .WibuCmRaU File on page 120.](#)

10.5.1 Generating the Context File (.WibuCmRac)

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

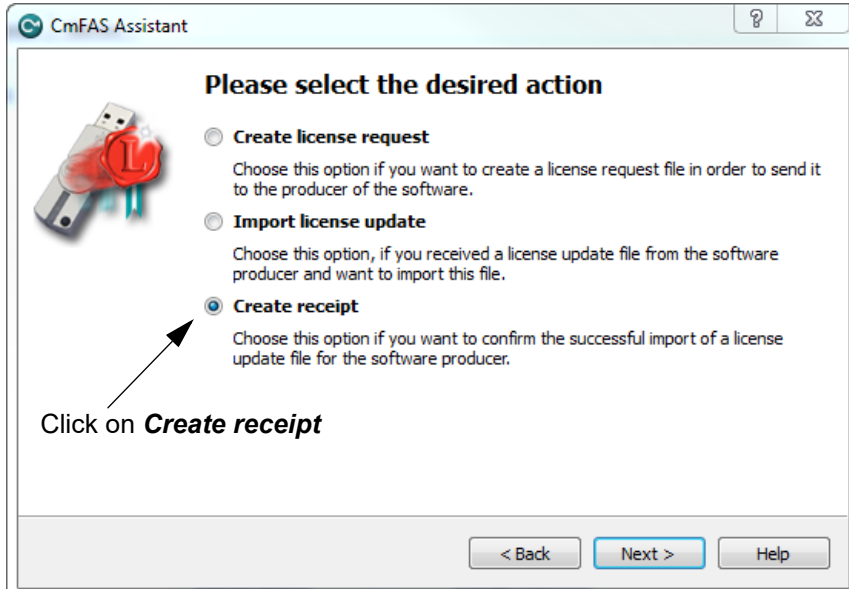
The *CodeMeter Control Center* panel is accessed by clicking on the **CodeMeter** icon that was installed on your task bar.



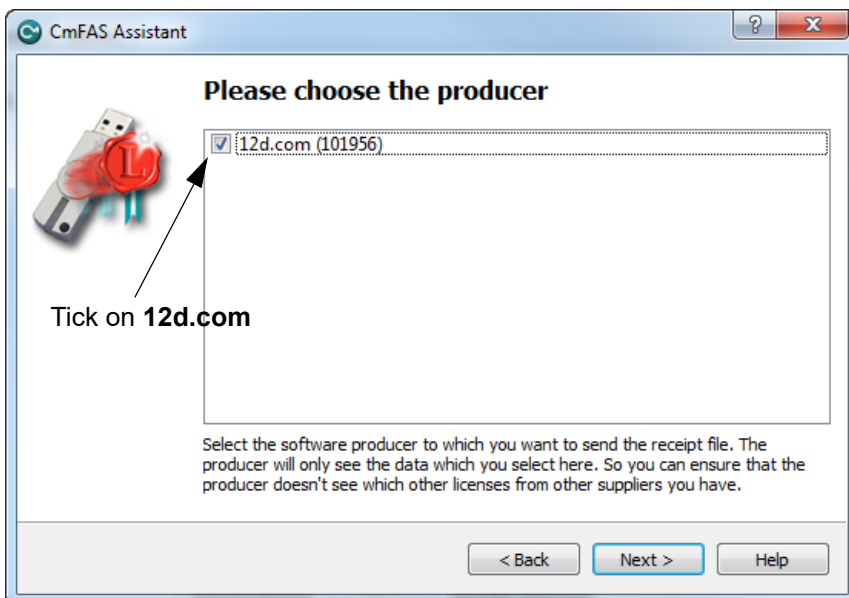
Click on **License Update** to bring up the **CmFAS Assistant** panel.



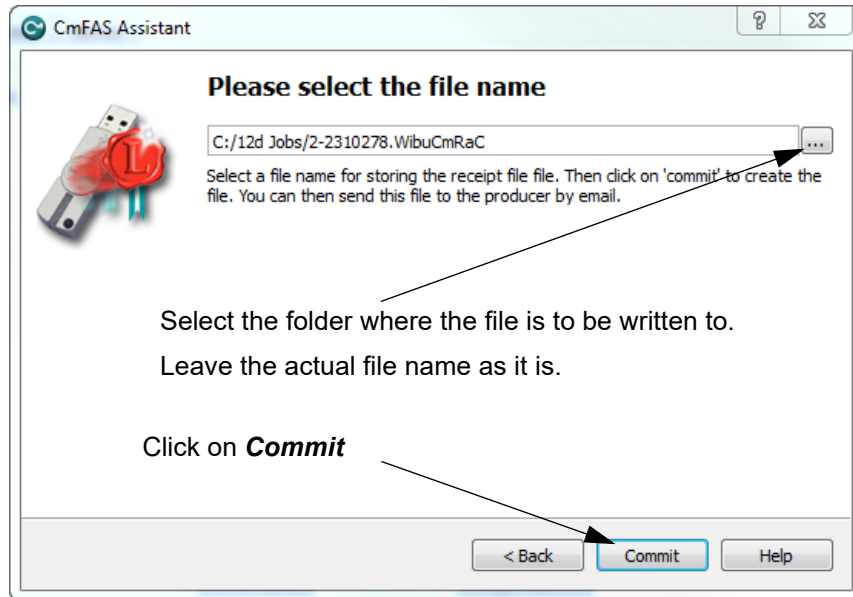
Select **Next**.



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 [10.5.1.1 Updating Using the .WibuCmRaU File on page 120](#).

10.5.1.1 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.

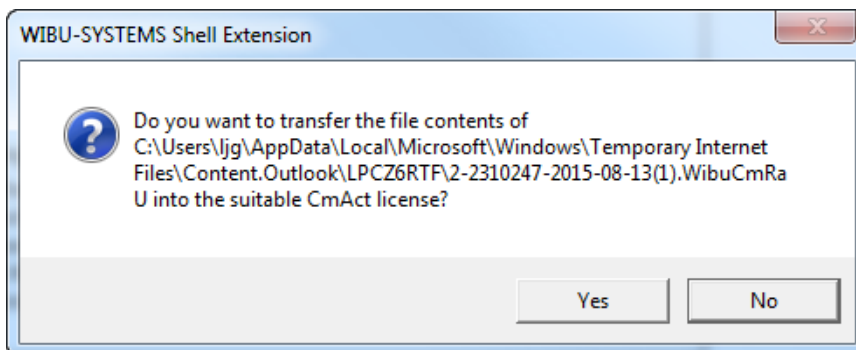
To update the CodeMeter, you will be sent a file starting with the CodeMeter number, then the date and finally ending in **.WibuCmRau**.

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

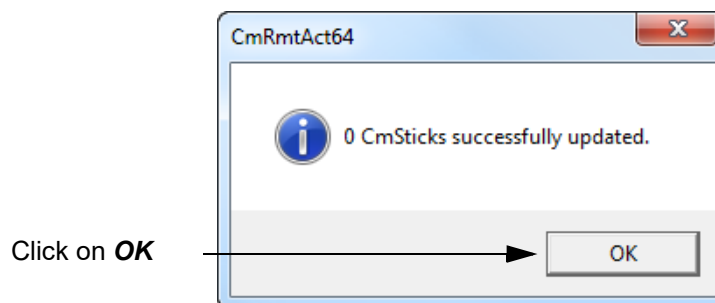
You need to have System Administrator rights to update the Network CodeMeter.

Before updating a Network CodeMeter dongle, run the **CodeMeter WebAdmin** software to check that no one is using the Network CodeMeter ([10.4 Monitoring and Cancelling Licenses on page 102](#)). 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 [10.5.1.2 Manually Updating the Network CodeMeter on page 121](#).

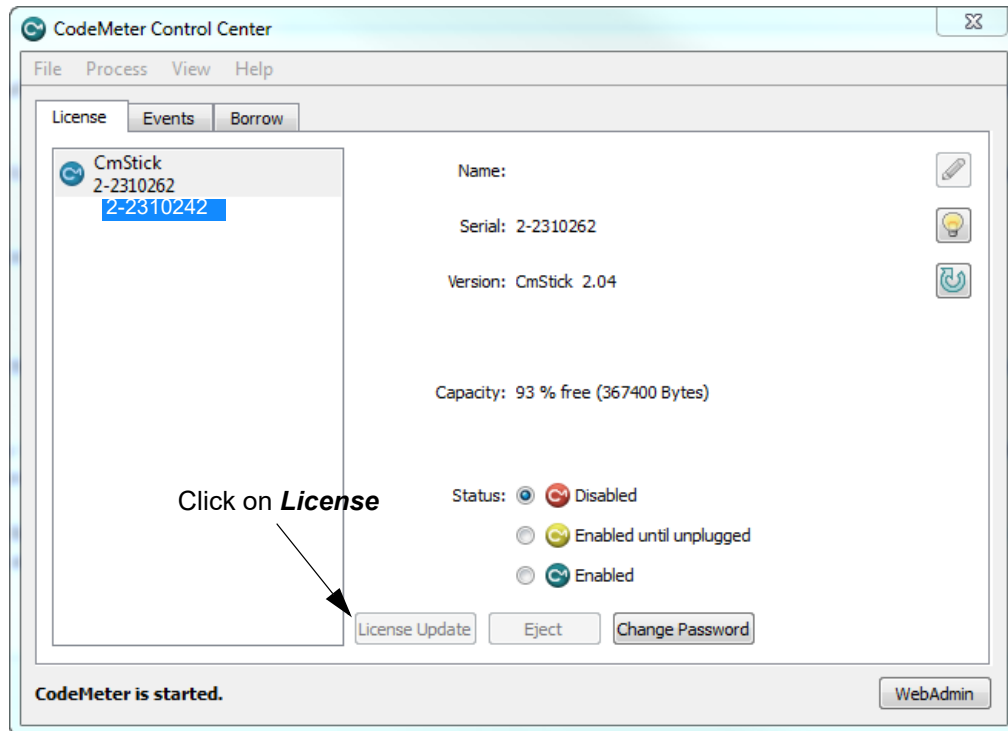
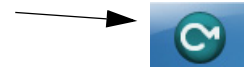
Nodes.4d:

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.

10.5.1.2 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.

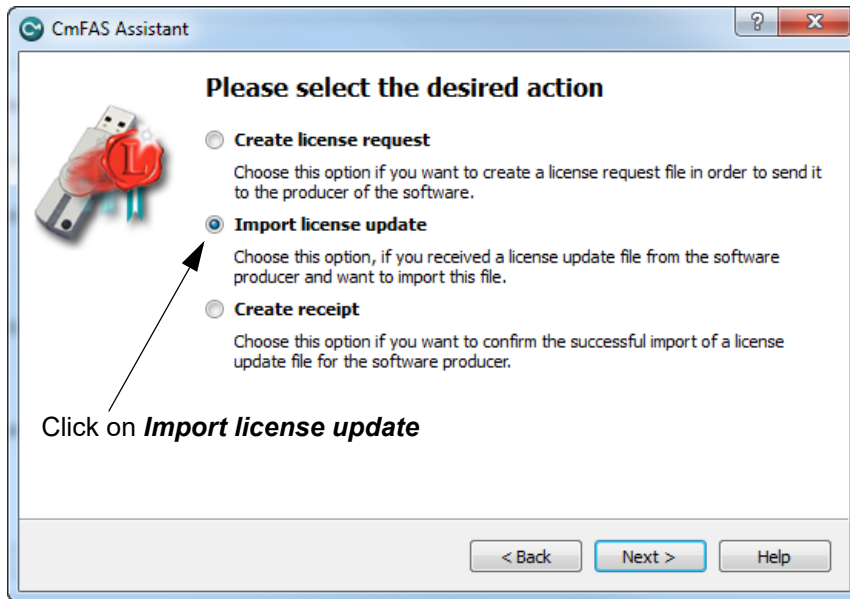
The *CodeMeter Control Center* panel is accessed by clicking on the **CodeMeter** icon that was installed on your task bar.



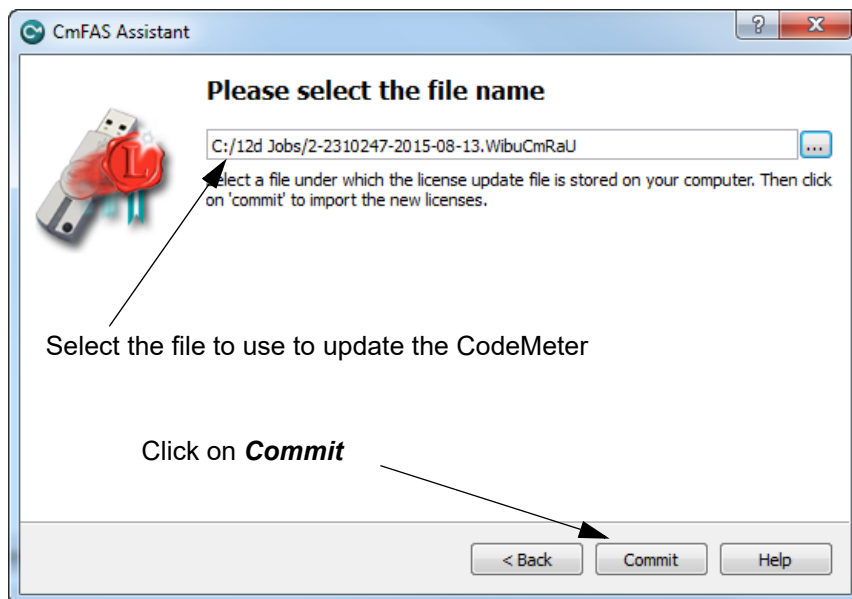
Click on **License Update** to bring up the **CmFAS Assistant** panel.



Select **Next**.



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



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

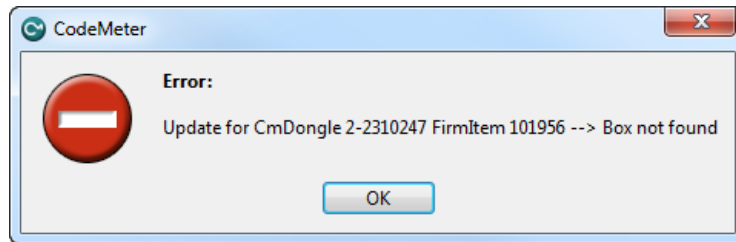
Nodes.4d:

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 [10.5.2 Errors Updating the Network CodeMeter on page 123](#).

10.5.2 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**.

10.6 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 ([10.4 Monitoring and Cancelling Licenses on page 102](#)).

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.

10.7 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 on page 55](#).

If you need to install **12d Model** on a computer, go to the section [2 Installing 12d Model 12 Release Version on page 6](#).

The links for downloading documentation on **12d Model** are given in [6 Documentation on page 47](#).

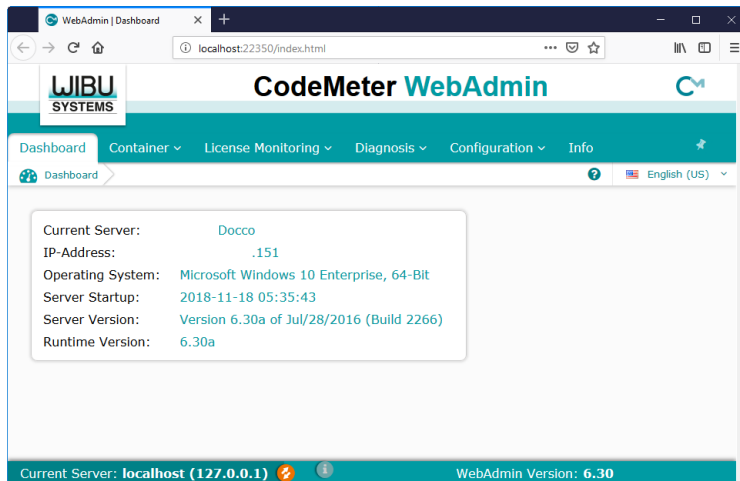
The links for downloading information, power points and videos on what is new in **12d Model 12** are given in [7 What's New in 12d Model 12 on page 52](#).

10.8 Which Version of WebAdmin?

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 Servers in the computer network.

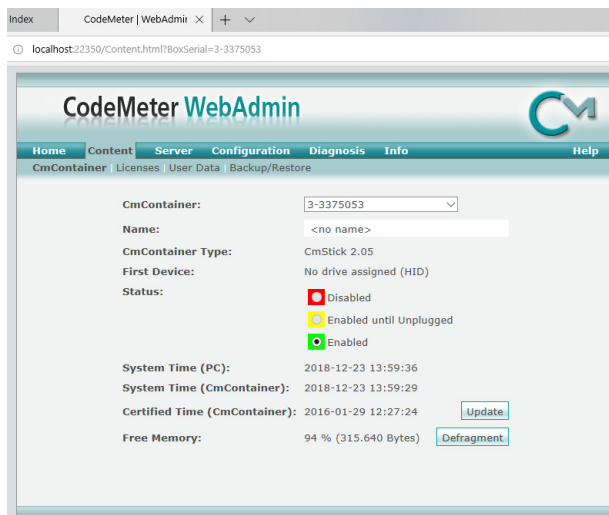
Depending on when the **CodeMeter** was installed on a particular Server, you can get different versions of the **WebAdmin** pages.

If on a Server the **WebAdmin Dashboard** page looks like:



In this case you need to follow instructions and images for **CodeMeter WebAdmin 6**

Otherwise if the **WebAdmin Home** page on a Server looks like:



In this case you need to follow instructions and images for **CodeMeter WebAdmin 5**

Important Note:

It is possible to have different versions of **WebAdmin** installed on different Servers.

So depending on which Server you are looking at, you may need to swap between the notes for **WebAdmin 6** and **WebAdmin 5**.

For instructions on finding information about **CodeMeters** on a **particular Network Server**, see

[10.4.1 Getting Info on CodeMeters on a Particular Server - WebAdmin 6 on page 103](#)

[10.4.3 Getting Info on CodeMeters on a Particular Server - WebAdmin 5 on page 110.](#)

