



COPADATA
do it your way

zenon manual

Licensing

v.7.60





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1. Welcome to COPA-DATA help

ZENON VIDEO-TUTORIALS

You can find practical examples for project configuration with zenon in our YouTube channel (https://www.copadata.com/tutorial_menu). The tutorials are grouped according to topics and give an initial insight into working with different zenon modules. All tutorials are available in English.

GENERAL HELP

If you cannot find any information you require in this help chapter or can think of anything that you would like added, please send an email to documentation@copadata.com (<mailto:documentation@copadata.com>).

PROJECT SUPPORT

You can receive support for any real project you may have from our Support Team, who you can contact via email at support@copadata.com (<mailto:support@copadata.com>).

LICENSES AND MODULES

If you find that you need other modules or licenses, our staff will be happy to help you. Email sales@copadata.com (<mailto:sales@copadata.com>).

2. Licensing

To be able to use zenon as an editor or Runtime, the product must be licensed. zenon runs in Demo Mode (on page 6) until it has been licensed.

3. License zenon

There are several possibilities for licensing zenon:

1. To license
 - In Windows, open *Start -> All programs -> COPA-DATA -> Licensing*, or
 - In the zenon Editor, open *File -> General configuration -> License product ...* or:
 - In the zenon Editor, open *Help -> About -> Change/request license*, or
 - In the **Startup Tool**, click on the **Tools** button, select **Licensing** then click on **Start**.
2. The dialog for entering license data opens.
3. Select **zenon Editor/Runtime**
4. Enter serial number and activation number

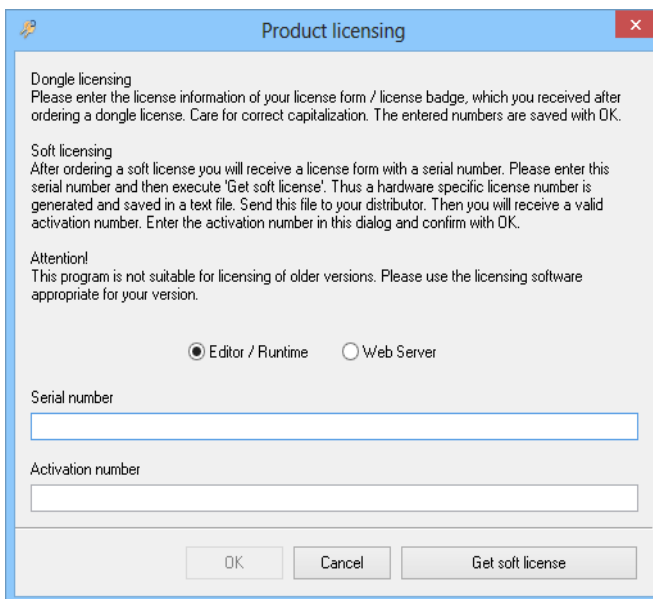
You find the data for this:

- on your license certificate
- On the license sticker

Note: Pay attention to capital letters and small letters when entering the data!

5. After the Editor/Runtime is restarted, use zenon with the license entered

LICENSING DIALOG



The image shows a Windows-style dialog box titled "Product licensing". It contains instructions for "Dongle licensing" and "Soft licensing". Under "Soft licensing", there are two radio buttons: "Editor / Runtime" (selected) and "Web Server". Below these are two text input fields labeled "Serial number" and "Activation number". At the bottom are three buttons: "OK", "Cancel", and "Get soft license".

Product licensing

Dongle licensing
Please enter the license information of your license form / license badge, which you received after ordering a dongle license. Care for correct capitalization. The entered numbers are saved with OK.

Soft licensing
After ordering a soft license you will receive a license form with a serial number. Please enter this serial number and then execute 'Get soft license'. Thus a hardware specific license number is generated and saved in a text file. Send this file to your distributor. Then you will receive a valid activation number. Enter the activation number in this dialog and confirm with OK.

Attention!
This program is not suitable for licensing of older versions. Please use the licensing software appropriate for your version.

☒ Editor / Runtime ☐ Web Server

Serial number

Activation number

OK Cancel Get soft license

Parameter	Description
Editor/Runtime	Active: License is valid for the zenon Editor or the zenon Runtime.
Web Server	Active: License valid for zenon Web Server.
Serial number	License serial number. If there is already a license available, its serial number is displayed here. Enter the current serial number here.
Activation number	License activation number. If there is already a license available, its activation number is displayed here.
OK	Import data and start zenon with this license when it is next started.
Cancel	Discard entries and use zenon with the previous license or no license.
Request soft license	Opens the dialog to request a soft license.

4. Demo mode

If the editor is not licensed, it runs in demo mode. Runtime runs in demo mode if it is not licensed.

Demo mode	Conditions
Editor:	The Editor runs: <ul style="list-style-type: none"> ▶ the first 40 times it is started for 30 minutes ▶ from the 41st to the 50th Start: 20 minutes ▶ from the 51st Start at: 10 minutes
Runtime:	A not-licensed Runtime runs for 30 days or 40 starts according to which comes first. From the 41st start or the 31st day on, Runtime only runs for 10 minutes.

The user is informed that it is running in demo mode when it starts.

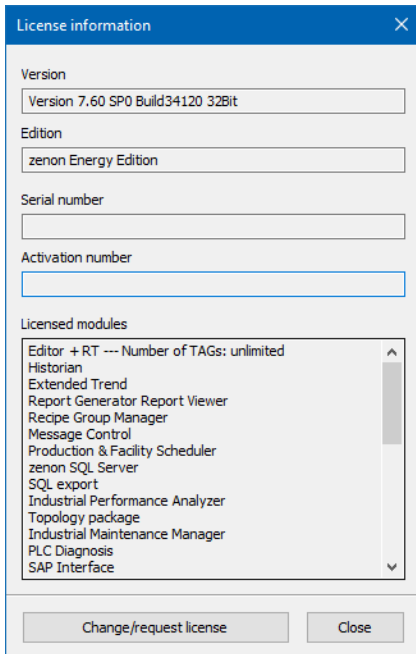
Note: This behavior for unlicensed version is also applicable to the zenon Logic Workbench and Runtime.

5. Version and license information

You can see the version and license that you are currently using and which modules are included in this:

- In the Editor: If, in the zenon Editor, you click on **Help** -> **About....**
- In Runtime: If you execute the **Show license information** function.

Note: The **Change/request license** button is not present in Runtime.



The 'License information' dialog box displays the following fields and list:

- Version:** Version 7.60 SP0 Build34120 32Bit
- Edition:** zenon Energy Edition
- Serial number:** (empty field)
- Activation number:** (empty field)
- Licensed modules:**
 - Editor + RT --- Number of TAGs: unlimited
 - Historian
 - Extended Trend
 - Report Generator Report Viewer
 - Recipe Group Manager
 - Message Control
 - Production & Facility Scheduler
 - zenon SQL Server
 - SQL export
 - Industrial Performance Analyzer
 - Topology package
 - Industrial Maintenance Manager
 - PLC Diagnosis
 - SAP Interface
- Buttons:** Change/request license, Close

Parameters/buttons	Description
Version	Version number of Editor or Runtime.
Edition	Edition used.
Serial Number	License serial number.
Activation number	License activation number.
Expiration time (optional)	Information on the expiration date of the license for limited licenses.
Licensed modules	Information on licensed module.
Change/request license	Opens the dialog for licensing (on page 5).
Close	Closes the dialog.

6. Selecting the appropriate license size

The licenses for the Editor and the Runtime are calculated by adding up the necessary TAGs or IOs.

CALCULATION VIA TAGS

1 TAG equals 1 variable. For determining the license size, consider the total number of TAGs (= variables) of the following drivers:

- ▶ PLC drivers and bus drivers

Variables of the following drivers do not count:

- ▶ Internal driver
- ▶ system driver
- ▶ mathematics driver
- ▶ simulation driver

You can license TAGs for the Editor and the Runtime in the following gradation:

- ▶ 64 TAGs
- ▶ 128 TAGs
- ▶ 256 TAGs
- ▶ 512 TAGs
- ▶ 1,024 TAGs
- ▶ 2,048 TAGs
- ▶ 4,096 TAGs
- ▶ 8,192 TAGs
- ▶ 16,384 TAGs
- ▶ 65536 TAGs
- ▶ unlimited

A license upgrade to a higher number of TAGs is possible at any time.

CALCULATION VIA IOS

License can also be based on I/Os. For determining the license size, consider the total number of IOs of the following drivers:

- ▶ PLC drivers and bus drivers

Variables of the following drivers do not count:

- ▶ Internal driver
- ▶ system driver
- ▶ mathematics driver
- ▶ simulation driver

CALCULATION

Data type	Valence
1 bit	1 I/Os
1 byte	8 I/Os
1 WORD	16 I/Os
1 DWORD	16 I/Os
1 float	16 I/Os
1 string (max. 64 characters)	16 I/Os

If you cannot find the desired data type in the list, it is because of the selected driver. Some drivers have a specific denotation of the data types. You will find more information in the driver documentation of the driver you use. You will find this either in the online help in the **Drivers** section, as a PDF file on our installation medium or on our website www.copadata.com (<http://www.copadata.com>) in the download section.



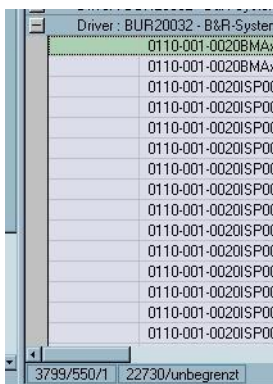
Example

96 binary and 20 numerical values are to be visualized in zenon:

Multiply the 20 numeric values with 16 and you receive 320 I/Os. Add these to the 96 binary values. As a result you get 416 I/Os, which now are the basis for the license size.

DISPLAY IN ZENON

In the status line of the detail view of the variables the following information can be found:



- ▶ How many I/Os are used currently.
- ▶ How many I/Os are licensed.

An example:

- ▶ 3799/550/1: 3799 entries exist, 550 are listed because of a filter, one entry is selected.
- ▶ For project 22730 an unlimited number of I/Os is licensed.

NOTE FOR CLIENT LICENSE

You can use client licenses if:

- ▶ The start project is a standalone project or a client
- ▶ The start project uses a maximum of 64 TAGs when a license is required, if it is not a client
- ▶ All subprojects are clients

7. Types of licensing

You can license zenon in different ways:

- ▶ Soft licensing (on page 11): Requests a unique PC identification number when the editor or Runtime is started.
Characteristics:
 - The license cannot be stolen.
 - The license is computer related.
 - Practical for notebooks.
- ▶ Dongle licensing (on page 12): Looks for a hardware dongle at a parallel port or USB port when the editor or Runtime is started.

Dongles are available as:

- Workplace dongle:
- Network dongle: A certain number of licenses are booked on a central dongle on the network, which can be used at the same time as concurrent-use licenses.

Notes for dongles:

- easy handling
- A license can be taken from one PC to another by simply moving the dongle.
- No problems due to hard disk failures



Information

If there is no license or all licenses are assigned in the network, then the editor or Runtime starts in demo mode (on page 6).

7.1 Soft licensing

The soft license assigns a computer with a unique identification. In doing so, certain components of the computer are examined. This license always only works on a certain computer. If it is to be transferred to another computer or too many components on the licensed computer are changed, it must be reissued.

To obtain a software license:

1. In the File menu, select: *General configuration -> License product.*
2. The licensing dialog (on page 4) opens.
3. Enter the serial number.
4. Click on **Request soft license.**
5. The **product licensing** dialog opens.
If this has not yet happened, enter the serial number.
6. Click on **License request for soft licensing.**
7. Enter your contact details.
8. click on **Next.**
9. There are two possibilities for sending these:
 - a) automatic
 - Click on the **Send to** button
 - Select the desired COPA-DATA organization
 - When clicking on **OK**, the license request is sent by your email program
 - via button **Print** you can print your copy or send it to a connected fax machine
 - a) manually
 - Click on the **Finish** button
 - The license request is saved as a text file
 - An information window informs you of the name and save location
 - the file is automatically opened in the Text Editor
 - send the email by email or fax to your sales partner

As soon as you have received your license data, reopen the licensing dialog and enter your activation number.

7.2 Dongle licensing

With dongle licensing, a dongle is connected directly to the computer for an individual workspace license or to a network computer for a network license. zenon uses two dongle systems:

- ▶ **CodeMeter** (on page 12)
(included with setup)
- ▶ **WibuKey** (on page 41)
(software included on installation medium)

Software necessary for the installation of **CodeMeter** licensing is also automatically installed during the installation of zenon.

CONFIGURATION

In general, no further settings need to be made for dongles used locally. The use of network dongles may mean that individual configuration is necessary. You can find these in the respective dongle software.

For details of this, see the chapters on the **WibuKey** (on page 41) and **CodeMeter** (on page 12).

WIBUKEY

The additional **WibuKey** administration software is no longer automatically installed with the setup from zenon version 7.50. This software is however supplied with zenon. If necessary, install the current version of the **WibuKey** software from your zenon installation medium:

- ▶ `...\AdditionalSoftware\WIBU-SYSTEMS WibuKey`

Note: Users who already work with **WibuKey** continue to receive new licenses for their **WibuKey** dongles.

7.2.1 CodeMeter

The **CodeMeter** dongle can be used at a single workplace or in a network.

The following must be the case in order for **CodeMeter** to be used:

- ▶ The **CodeMeter** USB stick must be available in a USB port on the local computer or as a server on a network computer.
- ▶ The dongle firmware must be at least version 1.16 or above

Note: Descriptions of the **CodeMeter WebAdmin** relate to version 6.10 thereof.

**ATTENTION**

If the dongle is removed during ongoing operation, zenon closes and is opened in demo mode until a valid license is detected again.

CONFIGURATION

To configure, start the **CodeMeter control center** application via: *Windows Desktop -> Start -> All programs -> CodeMeter -> CodeMeter Control Center.*

The **CodeMeter** control centre opens with 2 tabs:

- ▶ **License:** Contains information on the dongles found.
- ▶ **Events:** Displays the number of sticks connected, the license entries, the firm items found and all access to the **CodeMeter** Runtime server. To log the entries on a permanent basis, activate the **Logging** entry in the **File** menu.

Note: In versions before 6.10, there is also the **Allocation** tab available to configure allocation processes for licenses. From **CodeMeter** version 6.10, it is only still available if the corresponding entries are present on the client.

**Information**

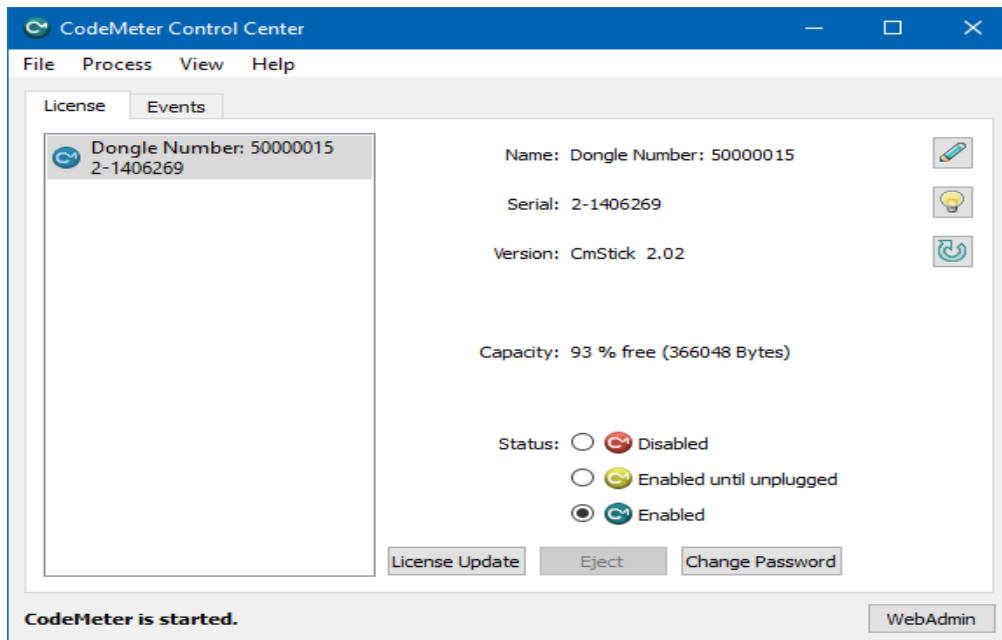
*This manual covers the most important applications for zenon users.
You can find detailed help on the use of **CodeMeter** in the help integrated into **CodeMeter**. To call these up in the:*

- ▶ Control center: In the **Help** menu, click on the **Help** entry.
- ▶ WebAdmin: Click on the question mark in the second line of the menu.

*The **CodeMeter** help is called up context-sensitively.*

License tab

Dongles and licenses are displayed and configured in this tab.



Option	Description
License	Lists all active CodeMeter sticks.
Name:	Individual name of the stick selected; can be amended using the button with the pen (to the right of it).
Serial Number:	Serial number of the stick selected.
Version:	Firmware version of the selected stick.
Capacity:	Display of free memory in percentage and bytes.
Status	<p>Selection of the status of the selected CodeMeter stick using radio buttons.</p> <ul style="list-style-type: none"> ▶ Deactivated: The stick connected is deactivated and cannot be used by any application. ▶ Activates when connected: The stick is activated as long as it is connected. It is automatically deactivated after removal from the PC. ▶ Activated: The stick is fully activated and remains activated after it is removed. Recommended status: Ensures that unauthorized persons do not have access to licenses and personal data (e.g. CmPasswordManager) <p>Changes must be confirmed using the dongle password.</p>
License updating	Starts the assistant to add, amend and delete licenses.
Eject	Allows the stick to be ejected.
Change password	Enables the password to be changed.
CodeMeter has been started/stopped	Information on whether the CodeMeter service is running. Can be changed in the Action menu.
WebAdmin	Starts the web browser with the administration user interface for network dongles Port 22350 must be open for this. For more details, see the Network administration (on page 21) chapter.

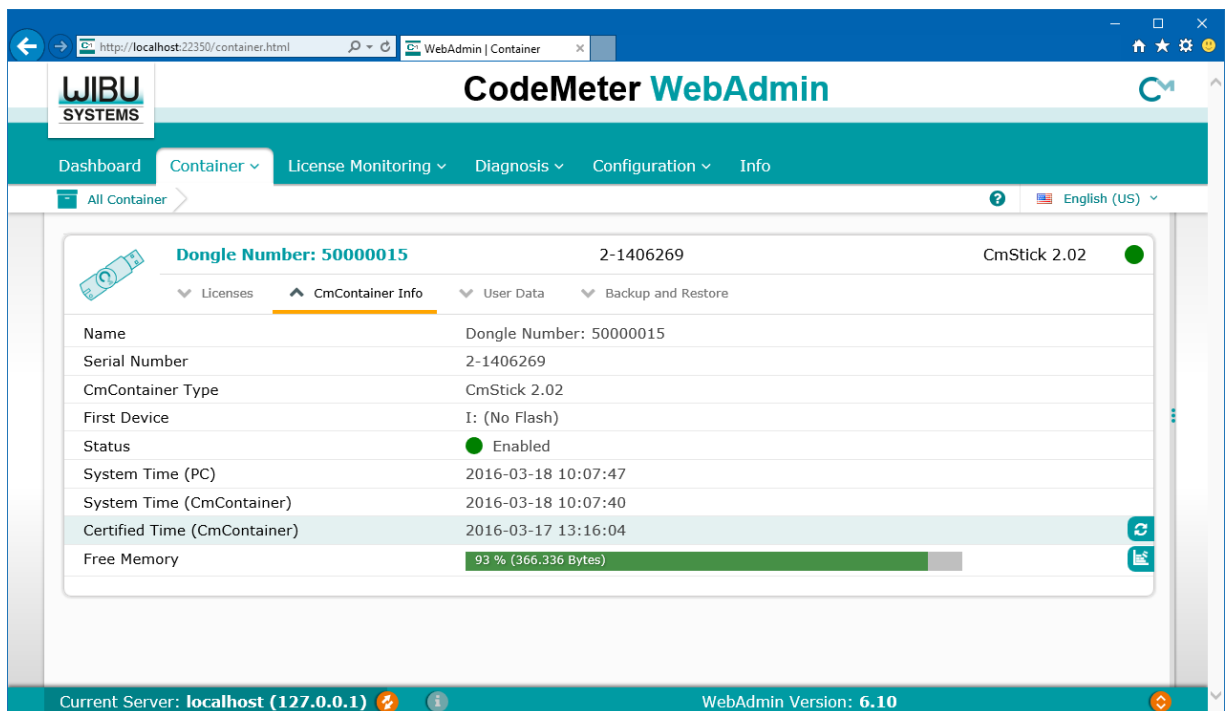
Update certified time

You can update the certified time saved in the dongle via the **CodeMeter** time server. You need access to the Internet for this.

To update the time:

1. Start the **CodeMeter WebAdmin**

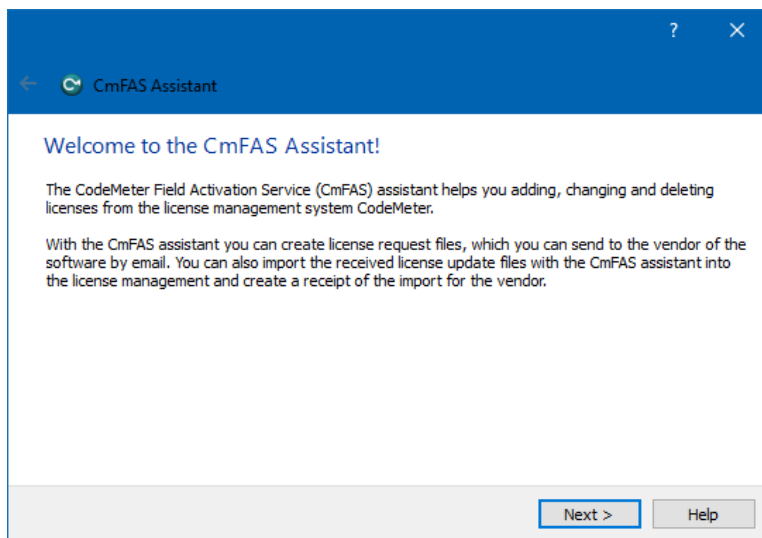
2. Check your network settings (on page 22):
 - a) Are the proxy settings correct in CodeMeter Webadmin?
 - b) Is your access data up-to-date?
3. Navigate to the **Container** menu.
4. Select the desired stick.
5. Click on **CMContainer info**



6. Navigate to the **Certified time (CM Container)** entry.
7. Click on the symbol to update:
8. You are notified that this will update all sticks.
9. Click on **OK**.
10. You receive information on the update carried out.
Hint: In the event of an error message (on page 34), you primarily check your access data.

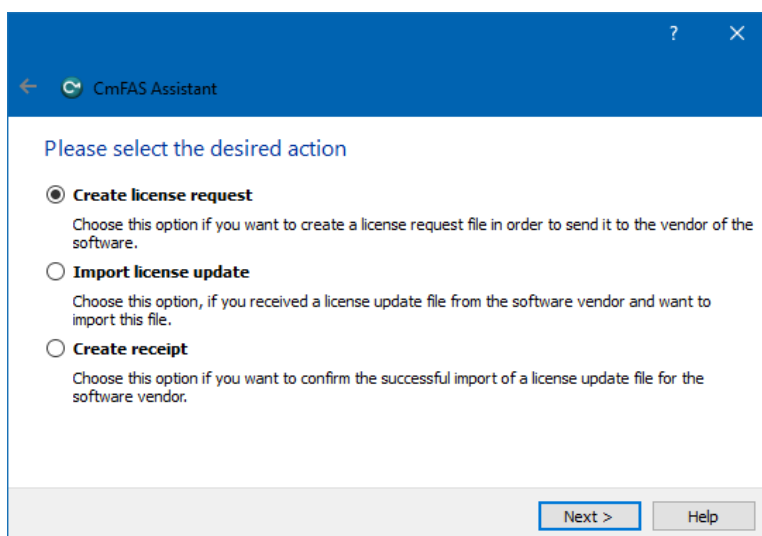
Request license

To request or update licenses for **CodeMeter**, select the **Update license** button in the **Licenses** tab in the **CodeMeter** control center (on page 12). The license update assistant starts:



Decide if you are:

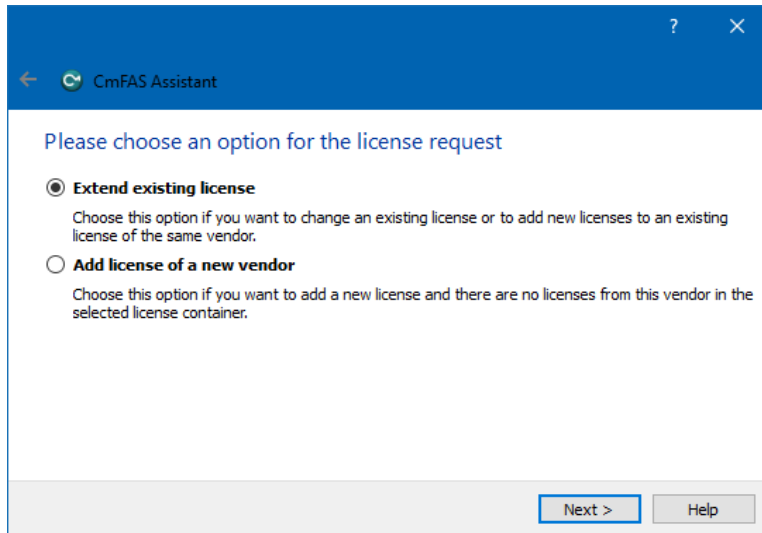
- ▶ requesting a license
- ▶ entering a license update
- ▶ want to create a receipt for COPA-DATA



LICENSE REQUEST

With license requests, you can:

- ▶ extend an existing COPA-DATA license
- ▶ create a new COPA-DATA license



ENHANCE LICENSE

To add another COPA-DATA license:

1. In the **Option** step, select **Enhance existing license**.
2. Click on **Next**.
3. Select in COPA-DATA.
4. Click on **Next**.
5. Select the save location.
6. click on **Apply**.
7. Send the file to your COPA-DATA sales partner.

REQUEST NEW LICENSE

To request a new COPA-DATA license:

1. In the **Option** step, select **Enhance existing license**.
2. Click on **Next**.
3. enter the **Firmcode** that you received from COPA-DATA.
4. Click on **Next**.
5. Select the save location.
6. click on **Apply**.

7. Send the file to your COPA-DATA sales partner.

Adapt license

You can adapt the scope of your license concerning extent and runtime at any time. To do this:

1. Order the desired change at COPA-DATA.
2. You will receive a *.WibuCmRaU file for your dongle.
3. Install the file
 - a) either via double click on the file
 - b) or by dragging the file on the **CodeMeter control center**

You will receive a message about successfully updating your license.

If you receive an error message (on page 34) **229**, the license on the dongle is already up to date

If it is necessary for your license request to create a .WibuCmRaC file or to install the .WibuCmRaU file with the update manually, follow the instructions in chapter **Update license manually** (on page 19).

Request or update license

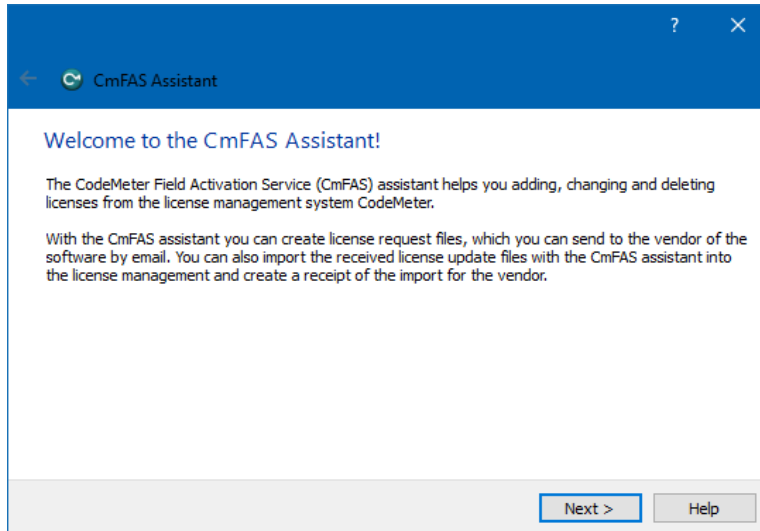
To update your license manually:

1. Create a .WibuCmRaC file
2. Send this file to COPA-DATA.
3. You will get an updated .WibuCmRaU file back.
4. Copy this to the dongle

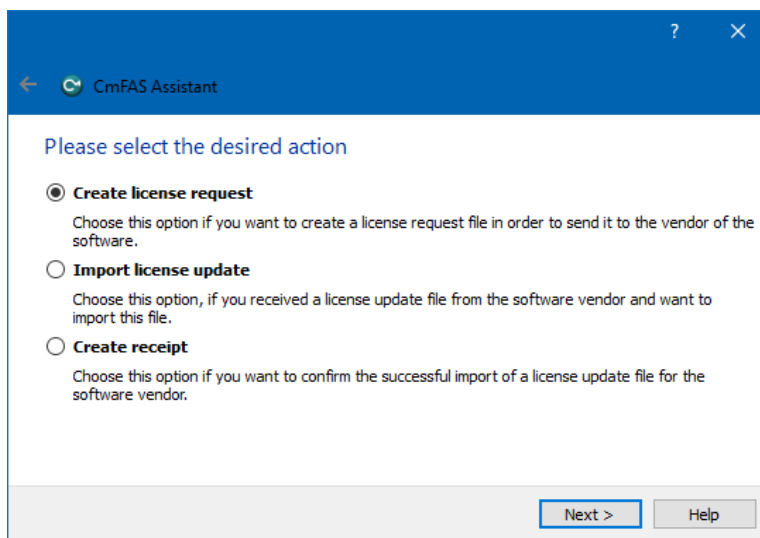
CREATE WIBUCMRAC FILE

1. Make sure that the **CodeMeter** dongle is connected to your PC.
2. Open the **CodeMeter** Control Center.
Path: Start -> Programs -> CodeMeter -> CodeMeter Control Center
3. In the **License** tab, click on the **License update** button.
4. The license update assistant starts.

5. Click on **Next**.

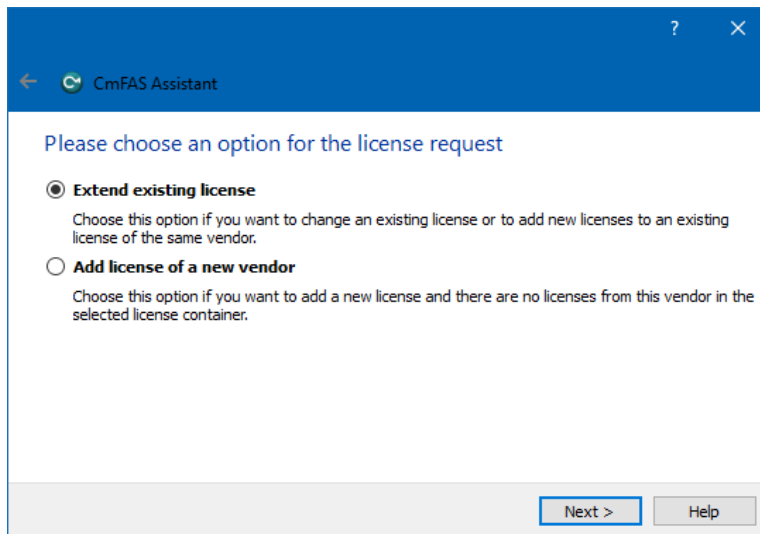


6. Select **Create license** and click **Next**.



7. Select **Enhance existing license**.

8. Click on **Next**.



9. Select the manufacturer and click on **Next**.
10. Select the desired location for the appropriated `.WibuCmRaC` file.
11. Click on **Apply**.
12. The `.WibuCmRaC` file is created.
13. Send the file to sales@copadata.com or the address you have been given.

INSTALL WIBUCMRAU FILE

You will receive, from COPA-DATA, an updated `*.WibuCmRaU` file.

Install the file via double click on the file on the dongle.

Alternative:

1. Open the CodeMeter control center.
2. In the dialog for updating licenses, select **Lizenzaktualisierung einspielen**.
3. Follow the instructions given to you by the installation wizard.

Network administration using WebAdmin

For network administration, start the WebAdmin user interface by clicking on the **WebAdmin** button in the **CodeMeter** control center. Detailed information on the individual settings can be found in the **CodeMeter WebAdmin** help pages. You can get to this using the question mark (?) symbol in WebAdmin. The most important options and instructions are also in this document:

- ▶ CodeMeter stick administration (on page 27)
- ▶ License administration (on page 28)

- ▶ Saving license data (on page 28)
- ▶ Network settings (on page 22)
- ▶ Proxy settings (on page 22)



Attention

CodeMeter WebAdmin uses port 22350 by default.

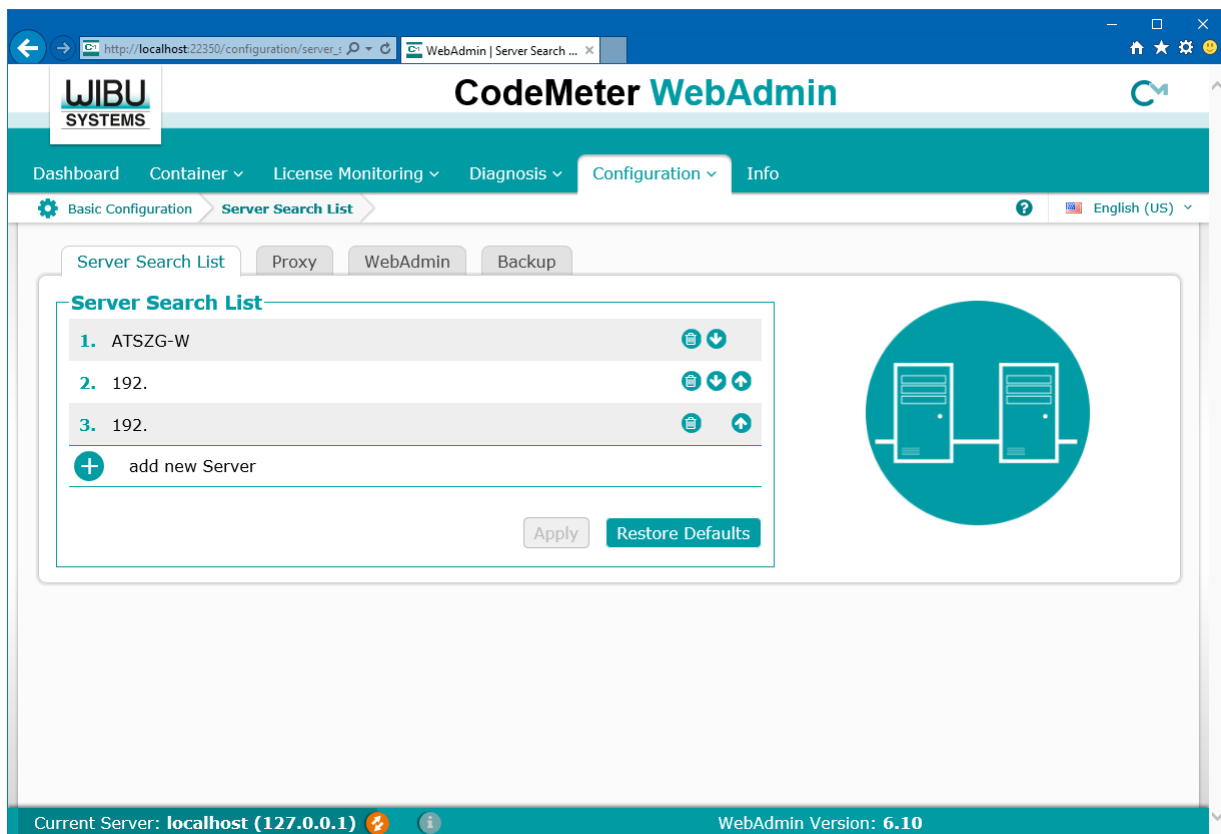
Note:

- ▶ If a firewall other than that integrated into the Windows operating system is used, this port must be enabled.
- ▶ If the port is changed, the WebAdmin surface cannot be started, because the port is part of the address.
For example: <http://localhost:22350/configuration/extra.html>
In this case, use appropriate freeware tools or standard Windows tools to determine which port is currently being used and enter this address into the address line of the browsers instead of 22350.
Then amend the port in WebAdmin via *Settings-> Advanced-> Extras* .

Network

For faultless communication with a Network dongle and the start of the **WebAdmin**, correct network settings are a requirement.

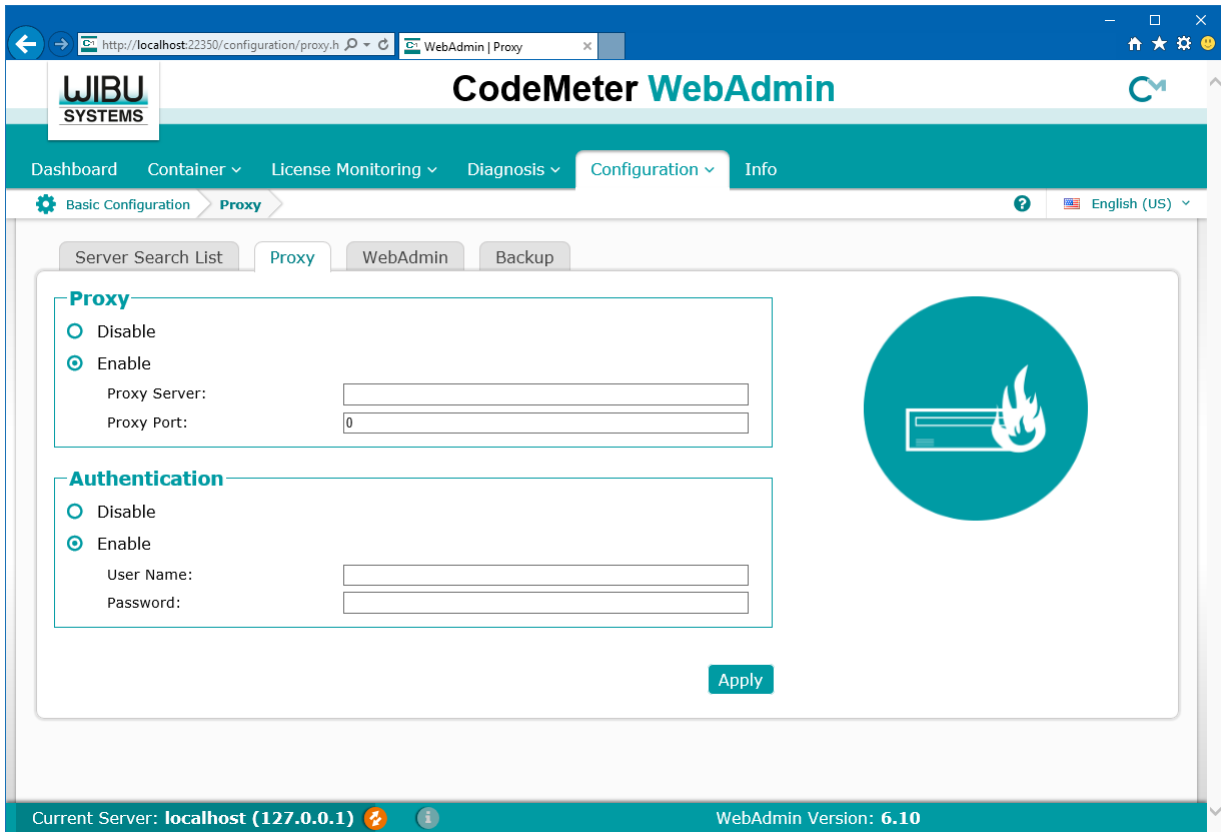
SERVER SEARCH LIST



Option	Description
Server search list	<p>Display of the available CodeMeter servers. The entries can be removed and sorted. The order defined here decides the order of connection attempts made by clients.</p> <p>Only the servers defined in the list are searched for. This way, requests from clients are directed to a defined CodeMeter Network server.</p> <p>Note: If a CodeMeter Server is in a different subnetwork, use the IP address for the search list.</p> <p>This search list should only be used if the CM Stick cannot be found in the network.</p>
Add new server	<p>Opens the dialog for selecting a server.</p> <p>You define the CodeMeter network server here using its computer name or IP address.</p>
Apply	Applies the changes.
Restore default	Restores the default settings.

PROXY

For access to **CodeMeter** services in the Internet, such as time server, enter the applicable access data for your company here.



CodeMeter WebAdmin

Dashboard Container License Monitoring Diagnosis Configuration Info

Basic Configuration Proxy

Server Search List Proxy WebAdmin Backup

Proxy

☐ Disable

☒ Enable

Proxy Server:

Proxy Port:

Authentication

☐ Disable

☒ Enable

User Name:

Password:

Apply

Current Server: localhost (127.0.0.1) WebAdmin Version: 6.10

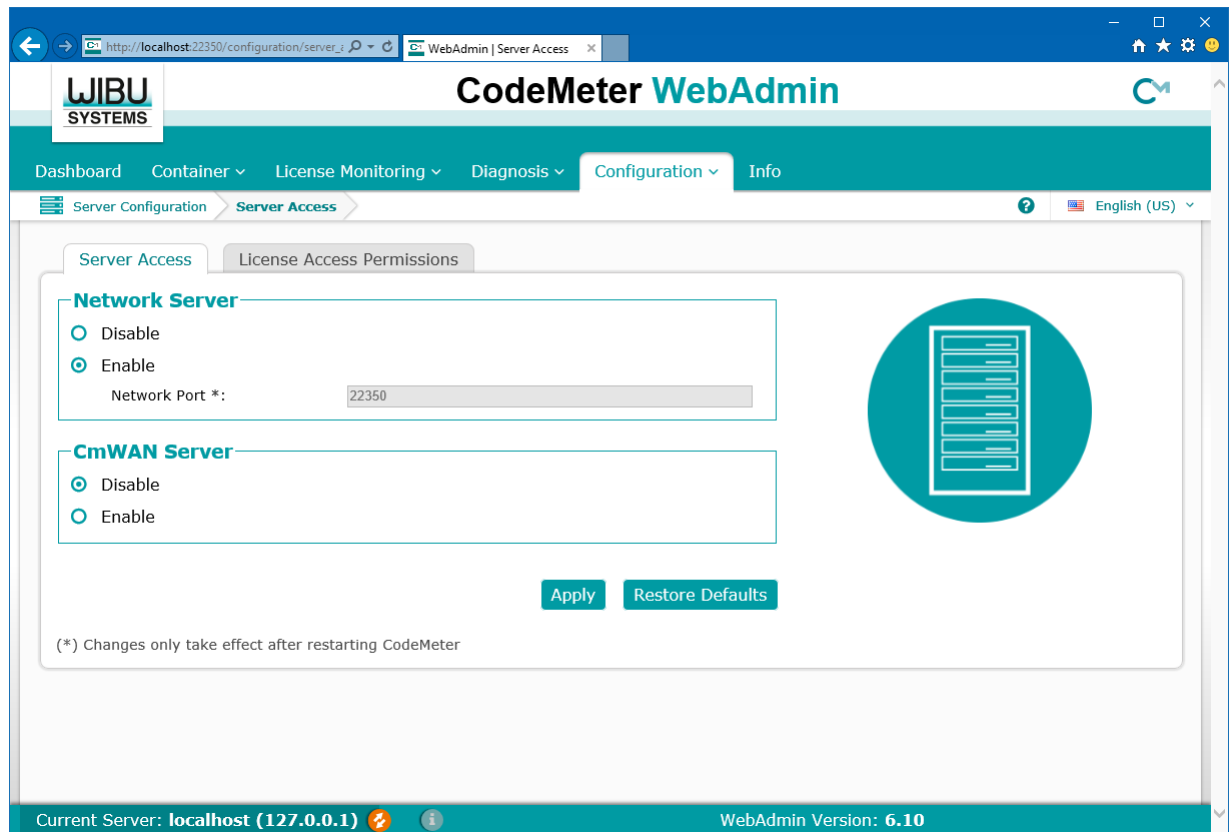
Attention

***CodeMeter** notes this credentials. If you regularly change your access password, you must also change this in the **CodeMeter WebAdmin** proxy settings!*

ACTIVATE AS SERVER

To activate a stick as a server in the network:

1. Click on *Settings* -> *Server* -> *Server access*.



2. In the **Network server** area, click on **Activate**.

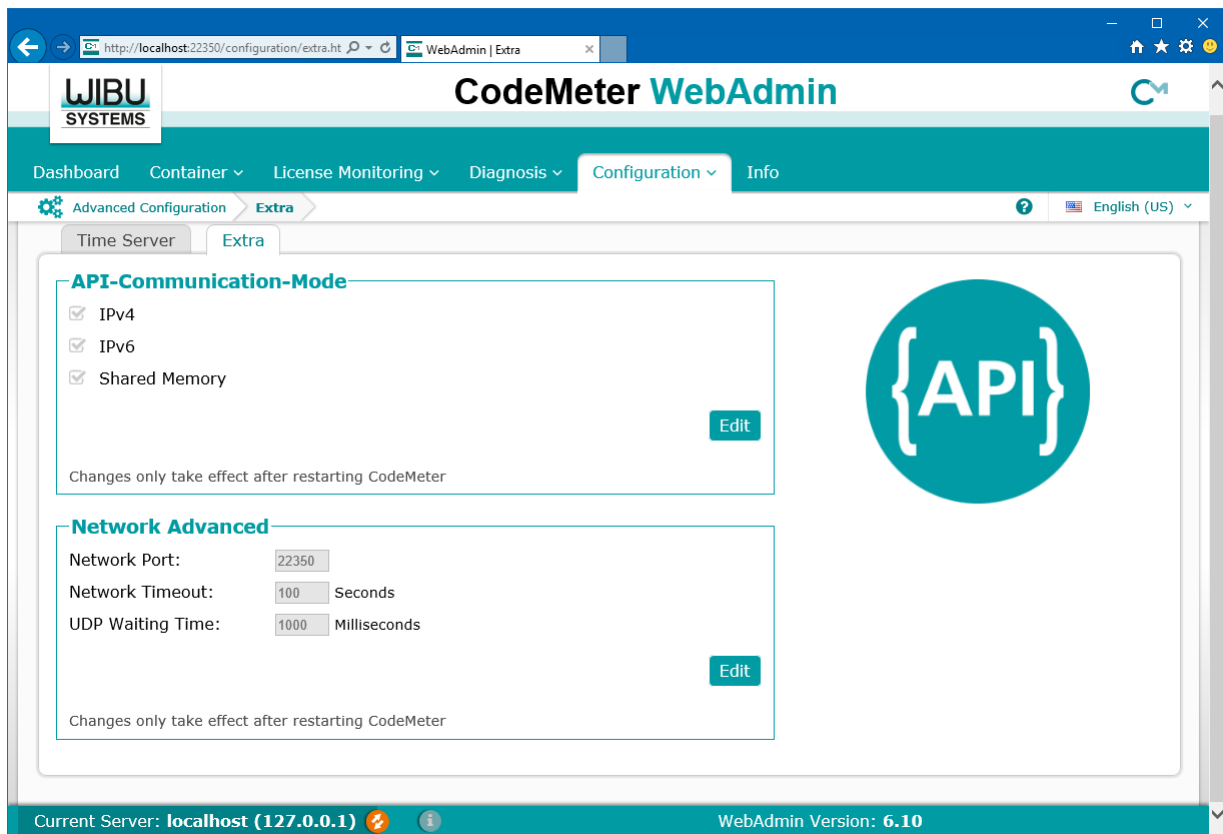
If you need another port for communication, then change it using *Settings* -> *Advanced* -> *Extras*.

The computer becomes a **CodeMeter** network server and makes all its licenses available in the network.

AMEND PORT

You can amend several communication parameters via *Settings -> Advanced -> Extras*.

CodeMeter WebAdmin communicates using port 22350 by default. You can amend it here if necessary.



Option	Description
Network port	<p>Port for CodeMeter communication in the network.</p> <p>Default: 22350</p> <p>The value can be adjusted individually. In this case, it must be ensured that all CodeMeter Runtime servers use the same port.</p> <p>The CodeMeter service must be restarted once a change has been made.</p> <p>Recommendation: do not change port.</p>
Network waiting time	<p>Time that is waited for a response from the server.</p> <p>Default: 100 seconds</p>
UDP response time	<p>Maximum response time within which a UDP request must be answered.</p> <p>Default: 1000 milliseconds.</p>

CodeMeter sticks

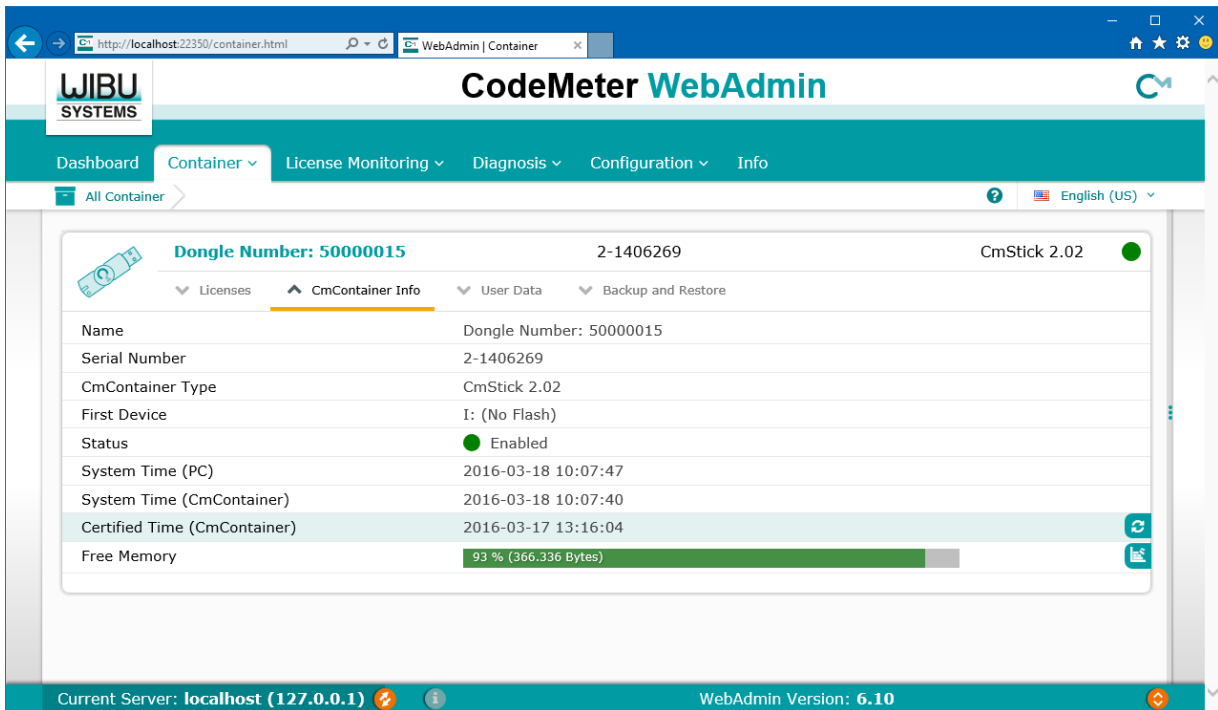
The WebAdmin starts in the **Container/All containers** view.

Here, you select the desired dongle and the desired information and actions:

- ▶ **Licenses:** Display of the available licenses.
- ▶ **CmContainer Infos:** Information on the dongle.
- ▶ **User data:** Data on users, number of licenses and validity.
- ▶ **Backing up and restoring:** Backing up the data from a stick to a file and restoring it.

CMCONTAINER INFOS

You show details of the selected dongle with the **CmContainer Infos** button.



The screenshot shows the CodeMeter WebAdmin interface. The top navigation bar includes 'Dashboard', 'Container', 'License Monitoring', 'Diagnosis', 'Configuration', and 'Info'. The 'Container' tab is active, showing 'All Container'. The main content area displays details for a selected dongle with the following information:

Dongle Number: 50000015		2-1406269	CmStick 2.02
<div> <div>▼ Licenses</div> <div>▲ CmContainer Info</div> <div>▼ User Data</div> <div>▼ Backup and Restore</div> </div>			
Name	Dongle Number: 50000015		
Serial Number	2-1406269		
CmContainer Type	CmStick 2.02		
First Device	I: (No Flash)		
Status	● Enabled		
System Time (PC)	2016-03-18 10:07:47		
System Time (CmContainer)	2016-03-18 10:07:40		
Certified Time (CmContainer)	2016-03-17 13:16:04		
Free Memory	93 % (366.336 Bytes)		

The bottom status bar shows 'Current Server: localhost (127.0.0.1)' and 'WebAdmin Version: 6.10'.

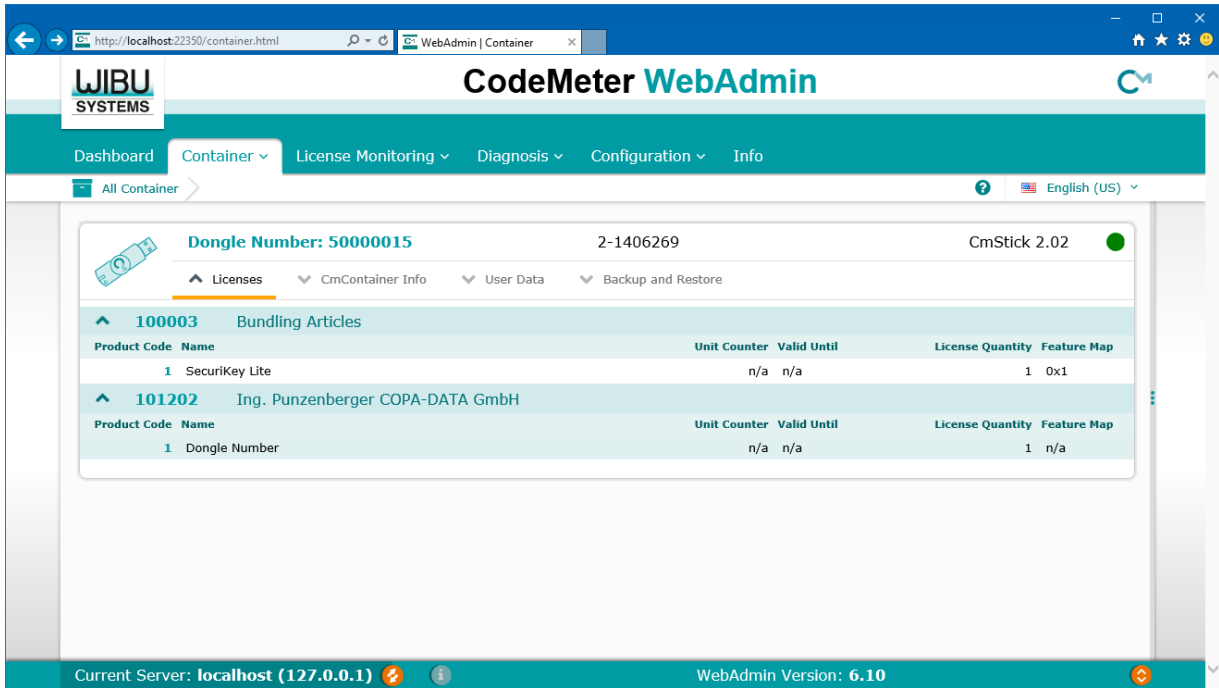
Option	Description
CmStick	Display of the detected sticks and their status. All other information relates to the selected stick.
Name	Shows the name given in the control center (on page 12).
Serial Number	Serial number of the stick.
CmContainer type	Hardware version of the stick.
Drive	Drive information for the stick, drive sizes are only given for sticks with flash memory.
Status	Activation status as defined in the control center (on page 12).
System time (PC)	Local time on the CodeMeter Runtime server.
System time (CMContainer)	Internal time saved on the stick.
Certified time	The certified time saved on the stick. Is amended with the update symbol (to the right). Note: to update (on page 15) using the CodeMeter timeserver, you require an active internet connection. Ensure that the network settings (on page 22) are correct, in particular in relation to current access data.
Free memory	Free memory available on the stick. To defragment the memory, click on the Defragment symbol (to the right).

Administering licenses

You administer your licenses in the **Licenses** tab in the **Container** menu.

1. Select the desired dongle.
2. You can find information on the licenses of these dongles below the <COPA-DATA> subheading.
3. For further details, click on the figure in the **Product Code** column.

OVERVIEW



The screenshot displays the CodeMeter WebAdmin interface in a web browser. The browser's address bar shows the URL `http://localhost:22350/container.html`. The page header includes the WIBU SYSTEMS logo and the title "CodeMeter WebAdmin". A navigation bar at the top contains links for Dashboard, Container (selected), License Monitoring, Diagnosis, Configuration, and Info. Below the navigation bar, there is a section for "All Container" with a dropdown menu. The main content area shows details for a specific container, including the Dongle Number (50000015), a unique identifier (2-1406269), and the version (CmStick 2.02). There are tabs for Licenses, CmContainer Info, User Data, and Backup and Restore. The Licenses tab is active, showing a table of bundled articles. The table has columns for Product Code, Name, Unit Counter, Valid Until, License Quantity, and Feature Map. Two articles are listed: "100003 SecuriKey Lite" and "101202 Ing. Punzenberger COPA-DATA GmbH". The bottom status bar indicates the current server is localhost (127.0.0.1) and the WebAdmin version is 6.10.

WIBU SYSTEMS CodeMeter WebAdmin

Dashboard Container License Monitoring Diagnosis Configuration Info

All Container

Dongle Number: 50000015 2-1406269 CmStick 2.02

Licenses CmContainer Info User Data Backup and Restore

100003 Bundling Articles

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	SecuriKey Lite	n/a	n/a	1	0x1

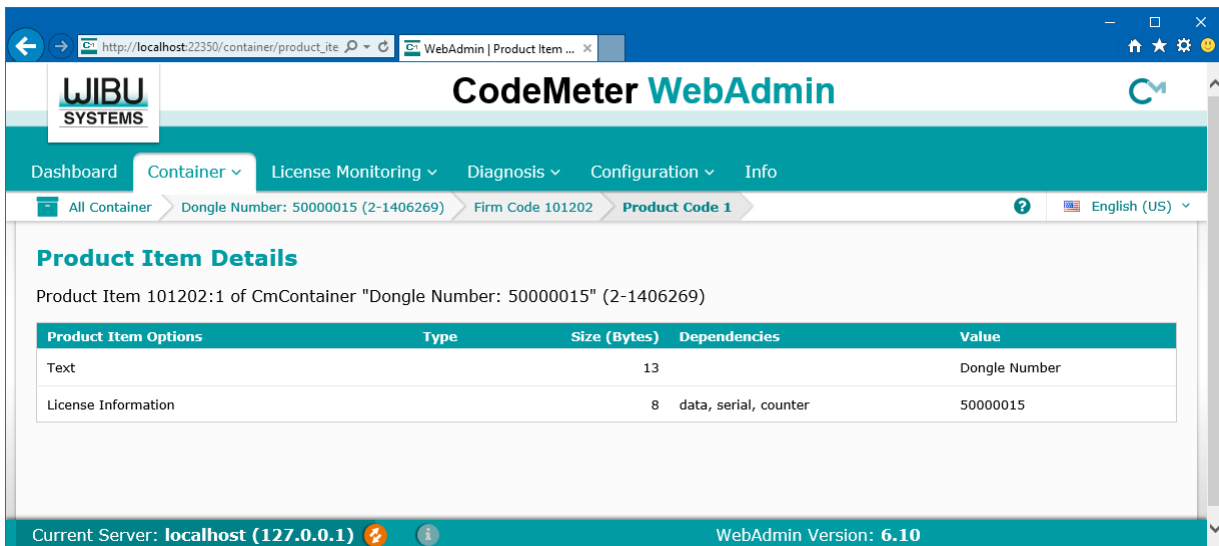
101202 Ing. Punzenberger COPA-DATA GmbH

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	Dongle Number	n/a	n/a	1	n/a

Current Server: localhost (127.0.0.1) WebAdmin Version: 6.10

Option	Description
Product Code	Numerical value for the product. Clicking on the number leads to the details.
Name	Dongle name
Usage units	If applicable, display of usage units remaining.
Expiration date	If applicable, the expiration date is shown. Afterwards, zenon switches to demo mode (on page 6).
Number of licenses	Total number of licenses
Feature Map	Licenses that are supplied with different functionality or modules.

DETAILS



The screenshot shows the CodeMeter WebAdmin interface. The breadcrumb trail is: All Container > Dongle Number: 50000015 (2-1406269) > Firm Code 101202 > **Product Code 1**. The main content area is titled "Product Item Details" and shows "Product Item 101202:1 of CmContainer 'Dongle Number: 50000015' (2-1406269)". Below this is a table with the following data:

Product Item Options	Type	Size (Bytes)	Dependencies	Value
Text		13		Dongle Number
License Information		8	data, serial, counter	50000015

The footer of the interface shows "Current Server: localhost (127.0.0.1)" and "WebAdmin Version: 6.10".

Option	Description
Dongle Number	Serial number of the dongle. Must correspond with the number of the active dongle.

TIME LIMITS

A dongle can also have a time limit through:

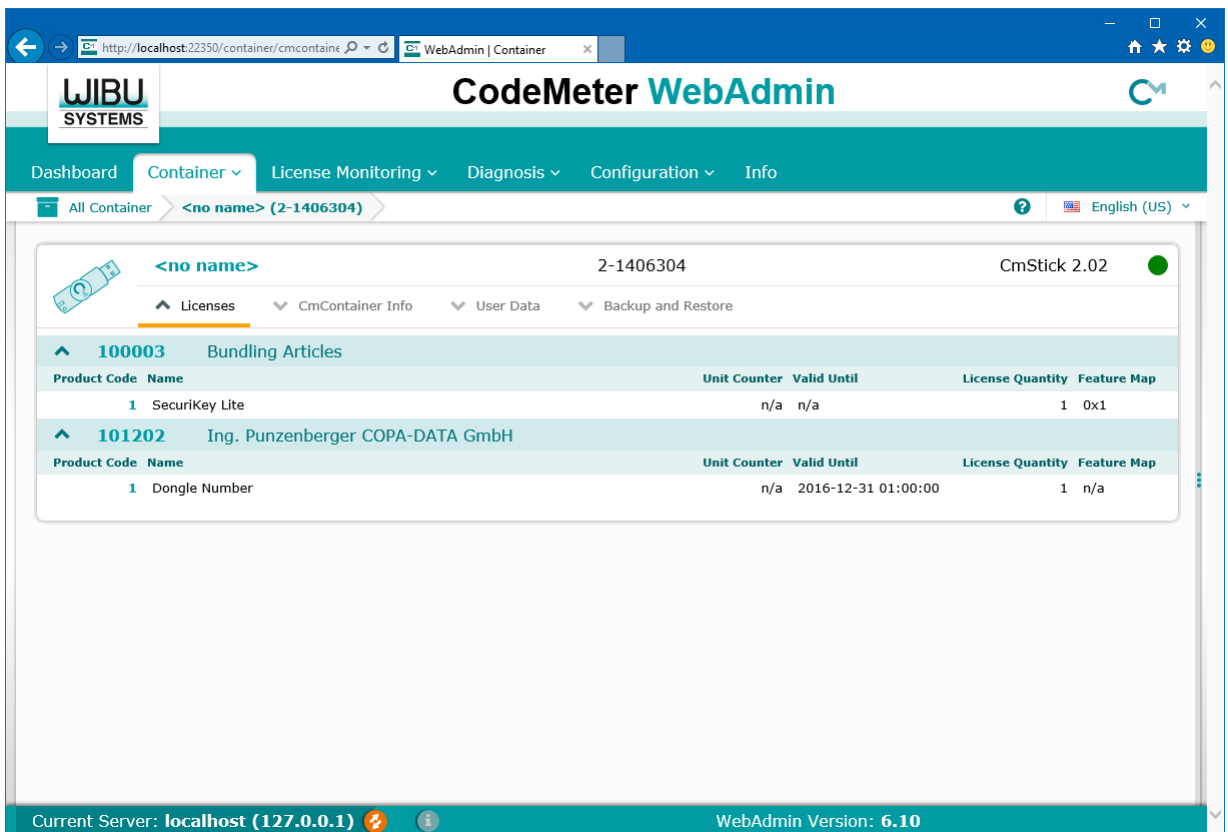
- ▶ Expiration date
- ▶ Time period for use

EXPIRATION DATE

The dongle can be equipped with a fixed expiration date. The expiration date denotes the last day on which the license is valid. zenon switches to demo mode afterwards. The expiration date is shown in **CodeMeter WebAdmin**.

To find out the expiration date:

1. Navigate to the dongle.
2. The end date is shown in the **Date of expiration** column in the Licenses view.



WIBU SYSTEMS CodeMeter WebAdmin

Dashboard Container License Monitoring Diagnosis Configuration Info

All Container > <no name> (2-1406304)

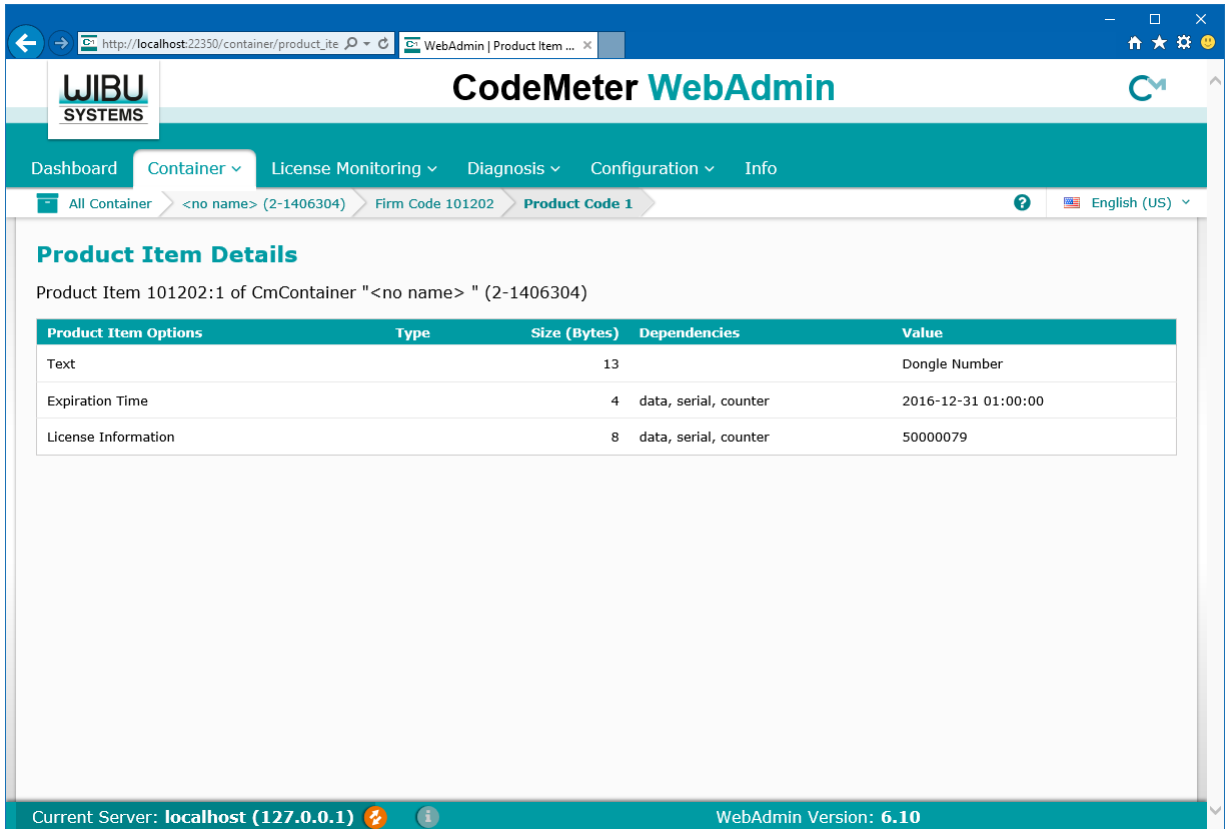
<no name> 2-1406304 CmStick 2.02

^ Licenses ^ CmContainer Info ^ User Data ^ Backup and Restore

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
100003	Bundling Articles				
1	SecuriKey Lite	n/a	n/a	1	0x1
101202	Ing. Punzenberger COPA-DATA GmbH				
1	Dongle Number	n/a	2016-12-31 01:00:00	1	n/a

Current Server: localhost (127.0.0.1) WebAdmin Version: 6.10

3. The end date is also shown on the **Value** column in the detail view.



The screenshot shows the CodeMeter WebAdmin interface. The breadcrumb trail is: All Container > <no name> (2-1406304) > Firm Code 101202 > **Product Code 1**. The main section is titled "Product Item Details" and shows "Product Item 101202:1 of CmContainer "<no name> " (2-1406304)". Below this is a table with the following data:

Product Item Options	Type	Size (Bytes)	Dependencies	Value
Text		13		Dongle Number
Expiration Time		4	data, serial, counter	2016-12-31 01:00:00
License Information		8	data, serial, counter	50000079

The footer of the interface shows "Current Server: localhost (127.0.0.1)" and "WebAdmin Version: 6.10".

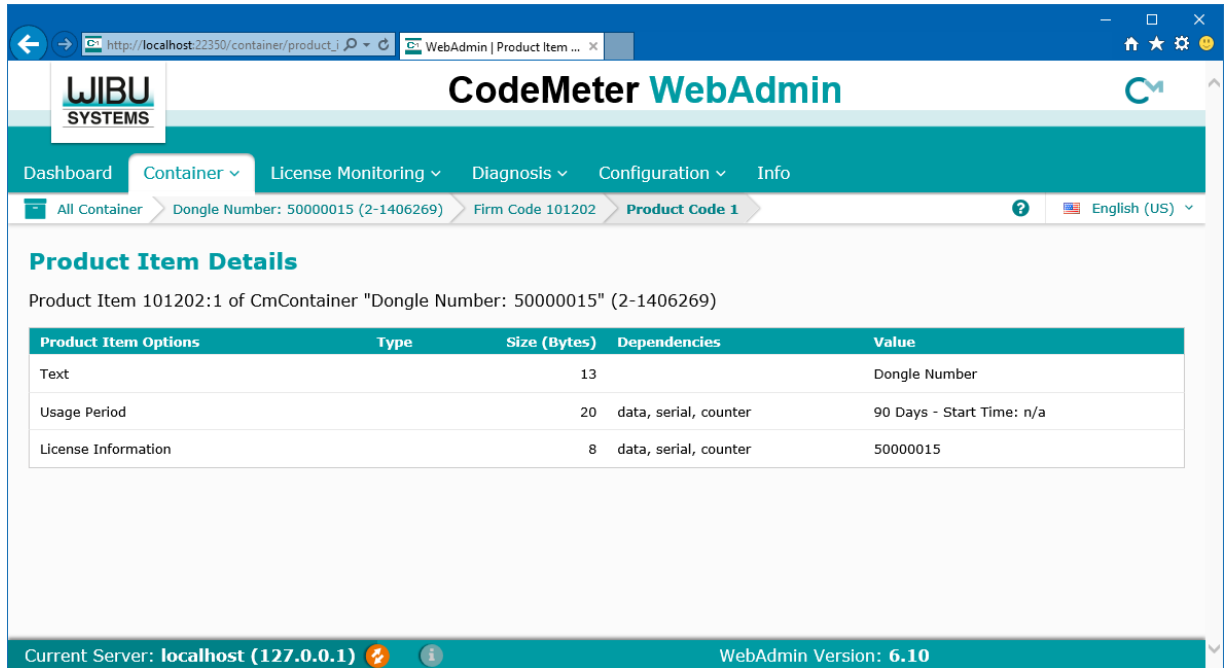
TIME PERIOD FOR USE

The dongle can be equipped with a specified usage period. This starts from the first time that zenon Editor or Runtime is used. Once the time period has expired, zenon switches to demo mode. To check the time limit:

1. Navigate to the dongle.
2. Show the licenses.
3. Click, in the entry under COPA-DATA, on the figure in the **Product Code** column.

The **Product Item Details** window opens.

In the **Usage period** line, you can see the licensed time period and the start date in the **Value** column.



The screenshot shows the CodeMeter WebAdmin interface. The browser address bar displays `http://localhost:22350/container/product...`. The page title is "CodeMeter WebAdmin". The navigation menu includes "Dashboard", "Container", "License Monitoring", "Diagnosis", "Configuration", and "Info". The breadcrumb trail shows "All Container" > "Dongle Number: 50000015 (2-1406269)" > "Firm Code 101202" > "Product Code 1". The "Product Item Details" section shows "Product Item 101202:1 of CmContainer 'Dongle Number: 50000015' (2-1406269)". Below this is a table with the following data:

Product Item Options	Type	Size (Bytes)	Dependencies	Value
Text		13		Dongle Number
Usage Period		20	data, serial, counter	90 Days - Start Time: n/a
License Information		8	data, serial, counter	50000015

The footer of the interface shows "Current Server: localhost (127.0.0.1)" and "WebAdmin Version: 6.10".

Troubleshooting

Error	Solution
zenon only runs in demo mode.	<p>Check</p> <ul style="list-style-type: none"> ▶ your licenses ▶ The connection to the network dongle ▶ if the license information (SERIAL7= and ACTIVATIONKEY7=) was correctly entered in zenon6.ini. Take care for possible blanks behind the serial number (SERIAL7=) or the activation key (ACTIVATIONKEY7=). Directory for zenon6.ini: Vista: %ProgramData%\COPA-DATA\System
Dongle is not found.	<ul style="list-style-type: none"> ▶ Check the network settings (on page 22). ▶ If the stick is in another domain, add it to the server list (on page 22). ▶ Increase the UDP response time (on page 22). ▶ If it is a virtual machine, then configure the stick as removable media (on page 35). Attention: Configuration as removable media can - depending on the computer configuration - also lead to a computer no longer booting. ▶ Configure the stick as HID (on page 36).
Error 410 (with SD cards)	<p>The connection to the SD card is unstable.</p> <p>Use an external card reader.</p>
Certified time cannot be updated.	<p>Please check:</p> <ul style="list-style-type: none"> ▶ Proxy settings (on page 22), especially access data and Password ▶ List of time server under <i>Settings</i> -> <i>time server</i> for example: cmtime.codemeter.com, cmtime.codemeter.de, cmtime.codemeter.fr, cmtime.codemeter.us
<p>Error message at updating the license:</p> <p>Error at updating the CmSticks x-xxxxxxx: This update can no longer be read in. The content of the CmStick has a newer version, error229.</p>	<p>The update for this license has already been written to the dongle. The dongle is up-to-date.</p>

<p>Windows operating system shows the message:</p> <p>Low Memory</p>	<p>The dongle is identified as local memory. In some cases, this can lead to the operating system giving the message "Insufficient memory".</p> <p>This message can be ignored.</p> <p>Alternatively, the dongle can also be configured as removable media. For details on configuration, see the Configure dongle as removable media or HID (on page 35) section.</p> <p>Attention: Configuration as removable media can - depending on the computer configuration - also lead to a computer no longer booting.</p>
<p>Windows operating system no longer shows symbol for the Recycle Bin.</p>	<p>This may happen if the dongle is identified as a fixed local network.</p> <p>Alternatively, the dongle can also be configured as removable media. For details on configuration, see the Configure dongle as removable media or HID (on page 35) section.</p> <p>Attention: Configuration as removable media can - depending on the computer configuration - also lead to a computer no longer booting.</p>

Configuration possibilities for the CodeMeter dongle

The dongle is integrated into the system as an HID (Human Interface Device) device by default. This configuration is recommended. The dongle can also be configured as a local mass-storage device or removable media.

CONFIGURATIONS

Configured as:	Description	Limitations
HID	<p>The dongle:</p> <ul style="list-style-type: none"> ▶ Is not displayed in the list of available drives ▶ Is not allocated a drive letter. 	Only available for CodeMeter dongles without memory.
Local mass-storage device	<p>The dongle is displayed and managed as a local drive.</p> <p>For configuration, see the Configure dongle as an HID or mass-storage device (on page 36) section.</p>	<p>Can lead to:</p> <ul style="list-style-type: none"> ▶ The operating system reporting too little memory for the dongle ▶ the icon for the Windows Recycle Bin no longer being displayed ▶ the dongle not being found in virtual machines
Removable media	<p>The dongle is displayed and managed as removable media.</p> <p>For details about configuration see the Configure dongle as removable media chapter.</p>	<p><i>With configuration as removable media:</i></p> <ul style="list-style-type: none"> ▶ The booting of the computer can be prevented for with computers that can boot from a USB drive ▶ The dongle appears as a drive in the task bar and can be removed (ejected) at any time

Configure dongle as an HID or mass-storage device

CodeMeter supports, from version 5.0, the **Human Interface Device (HID)** class of USB standards. CodeMeter dongles can therefore log onto the system as a HID instead of a Mass Storage Device. The dongle is thus not shown in the list of available drives and is not allocated a drive letter. HID support is available for all CodeMeter dongles without memory. Special USB host drivers do not need to be installed for configuration, because the functionality is provided by the operating system.

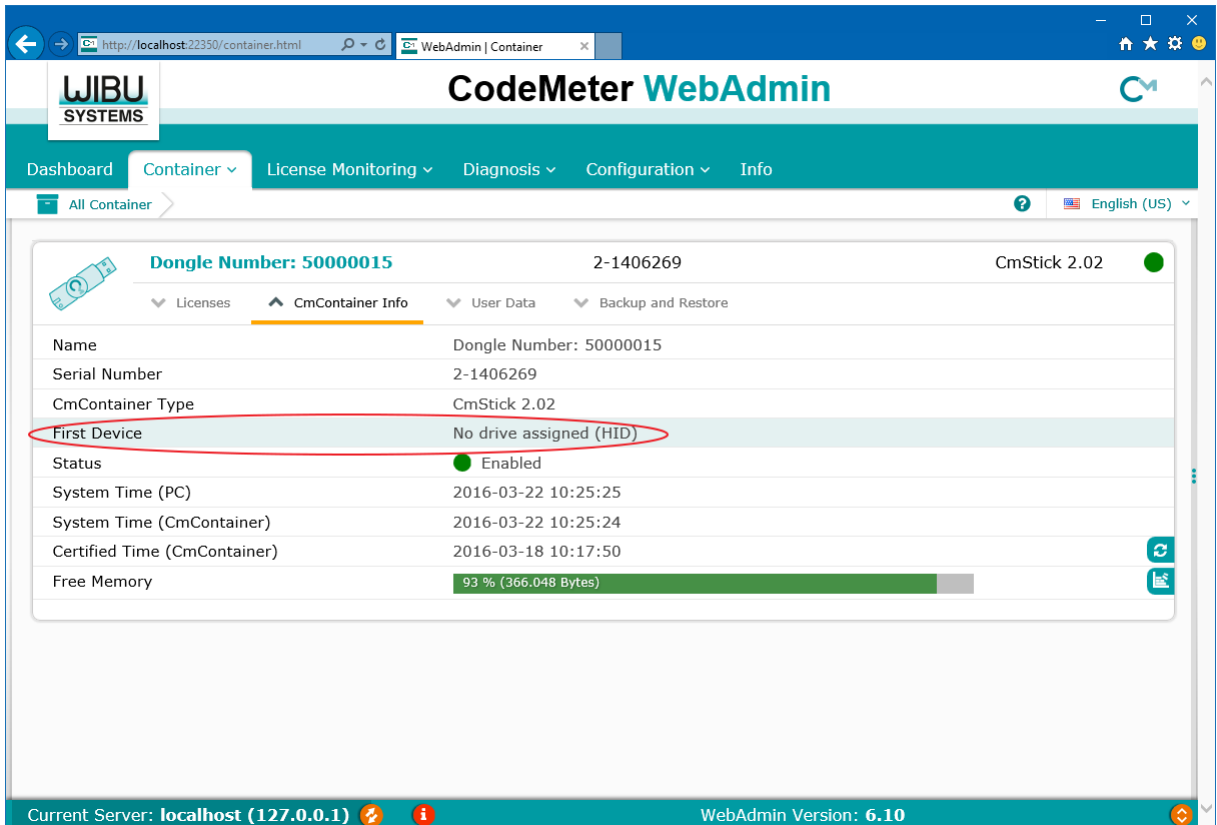
Requirements:

- ▶ **CodeMeter** container with the identification "**2-xxxxxxx**" or "**3-xxxxxxx**".
- ▶ **CodeMeter** firmware 2.02 or higher.
- ▶ **CodeMeter** Runtime 5.0 or higher. Should the version of **CodeMeter** that you have installed be older, you can download the current **CodeMeter** Runtime from Wibu Systems (www.wibu.com (<http://www.wibu.com/support-downloads.html>)).

HID TO MASS STORAGE DEVICE

To switch USB communication from Human Interface Device (HID) to Mass Storage Device:

1. Check, in **CodeMeter WebAdmin**, the status in the **Container** -> **CmContainer Info** tab.
2. No drive is assigned.



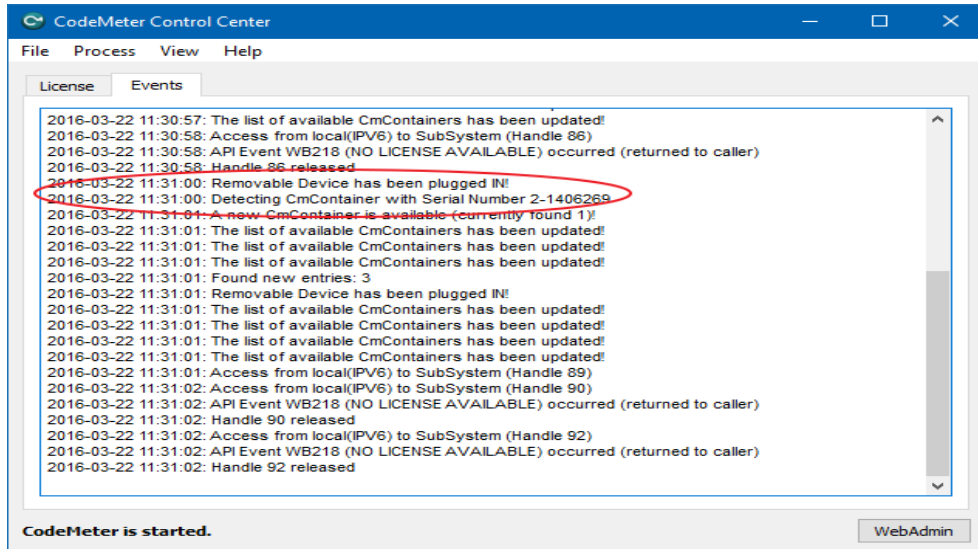
The screenshot shows the CodeMeter WebAdmin interface. The 'Container' tab is selected, and the 'CmContainer Info' sub-tab is active. The 'First Device' field is circled in red and shows 'No drive assigned (HID)'. Other fields include Dongle Number (50000015), Serial Number (2-1406269), CmContainer Type (CmStick 2.02), Status (Enabled), System Time (PC), System Time (CmContainer), Certified Time (CmContainer), and Free Memory (93 % (366.048 Bytes)).

Dongle Number: 50000015		2-1406269	CmStick 2.02
<div> <div>Licenses</div> <div>CmContainer Info</div> <div>User Data</div> <div>Backup and Restore</div> </div>			
Name	Dongle Number: 50000015		
Serial Number	2-1406269		
CmContainer Type	CmStick 2.02		
First Device	No drive assigned (HID)		
Status	Enabled		
System Time (PC)	2016-03-22 10:25:25		
System Time (CmContainer)	2016-03-22 10:25:24		
Certified Time (CmContainer)	2016-03-18 10:17:50		
Free Memory	93 % (366.048 Bytes)		

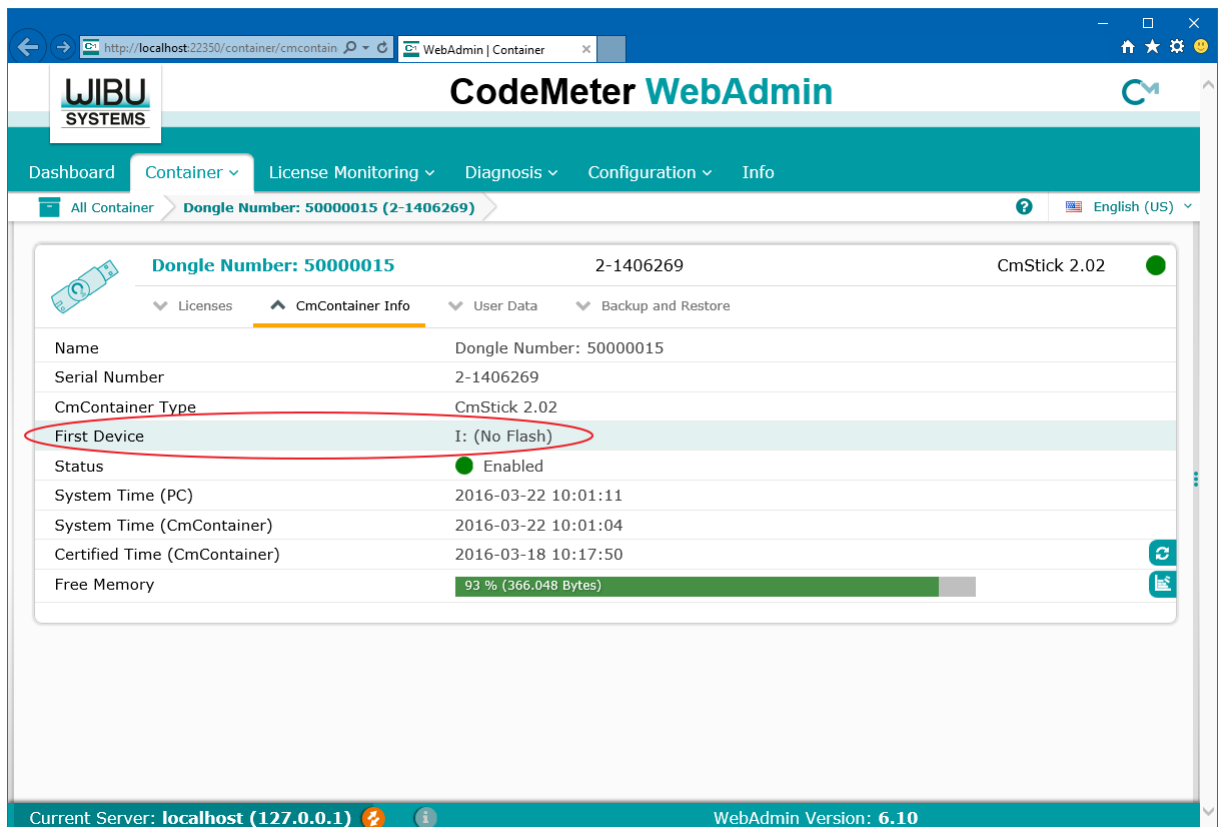
Current Server: localhost (127.0.0.1) WebAdmin Version: 6.10

3. Call up the CodeMeter command line interface **cmu**: Start -> Program Files -> CodeMeter -> Tools -> CodeMeter Command Prompt.
4. Enter the following commands in the command input line that appears:
cmu32 /s [box mask-serial number] --set-config-disk MsdCommunication
Note: For [box mask - serial number], enter the serial number of the stick.
 Once the command has been successfully executed, the following is displayed:
 Communication mode changed successfully.
 Please replug your CmDongle to apply the changes.
5. Remove the dongle from the computer.
6. Reconnect the dongle to the computer.

7. In the **CodeMeter Control Center**, the switch to MSD is shown in the **Events** tab.



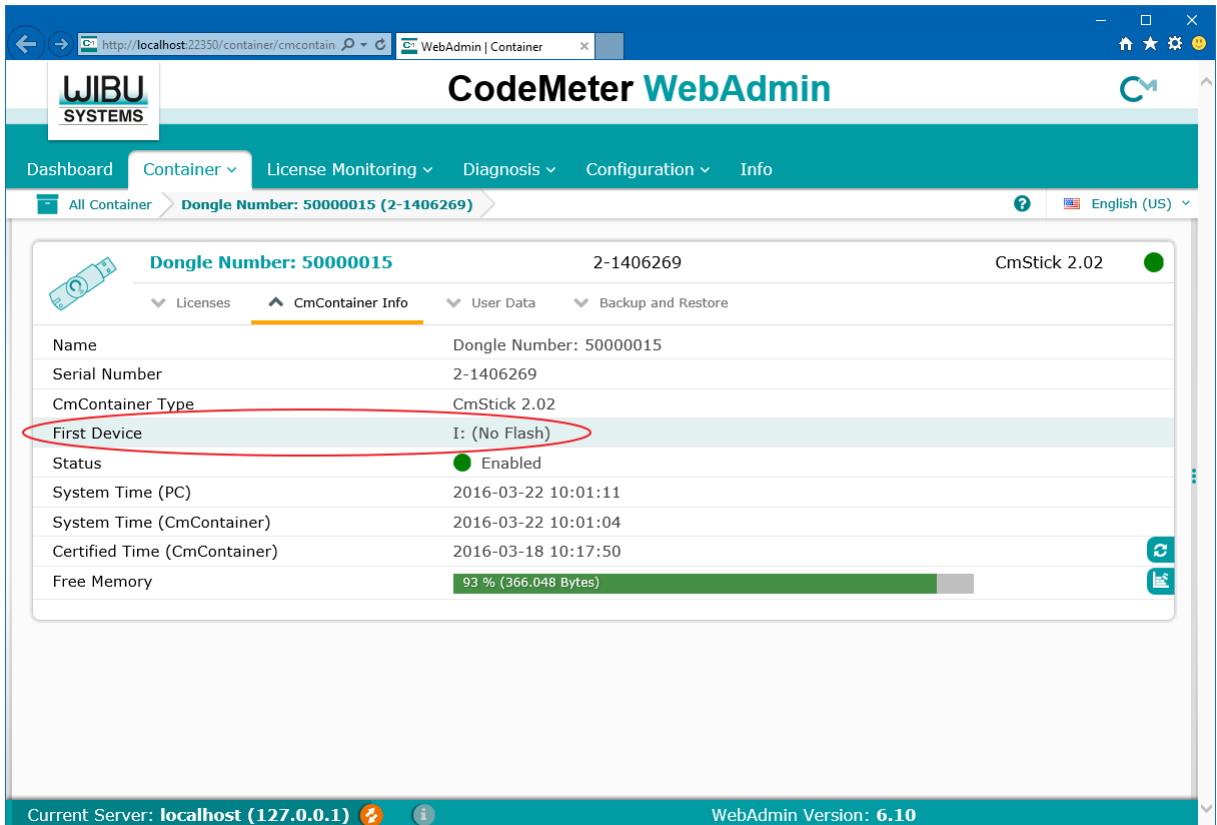
8. In **CodeMeter WebAdmin**, check the drive in the **Container** -> **CmContainer Info** tab. A drive is entered but there is no flash memory.



MASS STORAGE DEVICE TO HID

To switch the USB communication from Mass Storage Device to Human Interface Device (HID):

1. Check, in **CodeMeter WebAdmin**, the status in the **Container** -> **CmContainer Info** tab.
2. A drive is assigned but there is no flash memory.



The screenshot shows the CodeMeter WebAdmin interface. The 'Container' tab is selected, and the 'CmContainer Info' sub-tab is active. The 'First Device' is listed as 'I: (No Flash)', which is circled in red. The interface also shows the 'Dongle Number: 50000015' and '2-1406269'. The 'Status' is 'Enabled'. The 'System Time (PC)' is '2016-03-22 10:01:11'. The 'System Time (CmContainer)' is '2016-03-22 10:01:04'. The 'Certified Time (CmContainer)' is '2016-03-18 10:17:50'. The 'Free Memory' is '93 % (366.048 Bytes)'. The 'Current Server' is 'localhost (127.0.0.1)' and the 'WebAdmin Version' is '6.10'.

3. Call up the CodeMeter command line interface **cmu**: *Start -> Program Files -> CodeMeter -> Tools -> CodeMeter Command Prompt*.

Enter the following commands in the command input line that appears:

cmu32 /s [box mask-serial number] --set-config-disk HidCommunication

Note: For [box mask - serial number], enter the serial number of the stick.

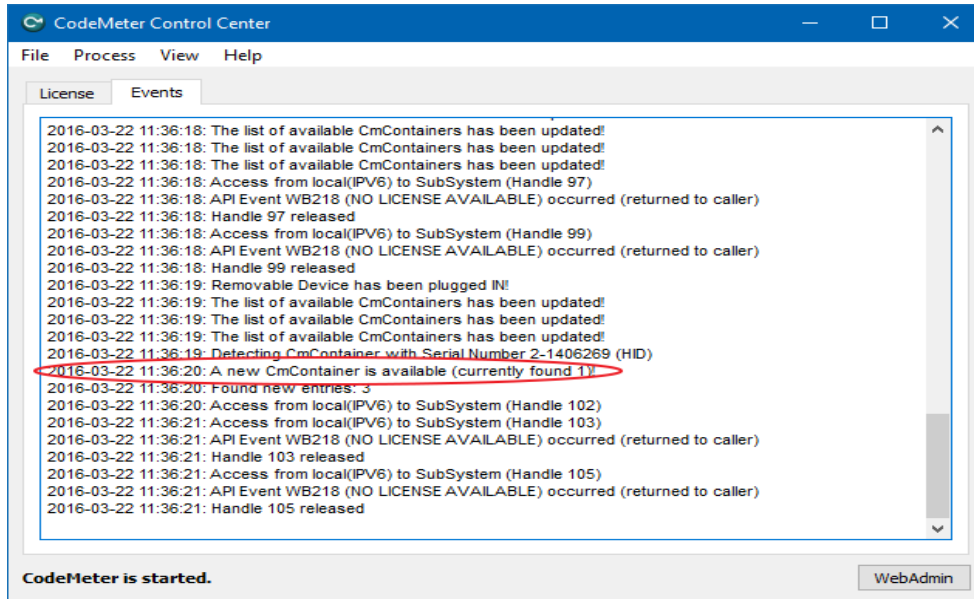
Once the command has been successfully executed, the following is displayed:

Communication mode changed successfully.

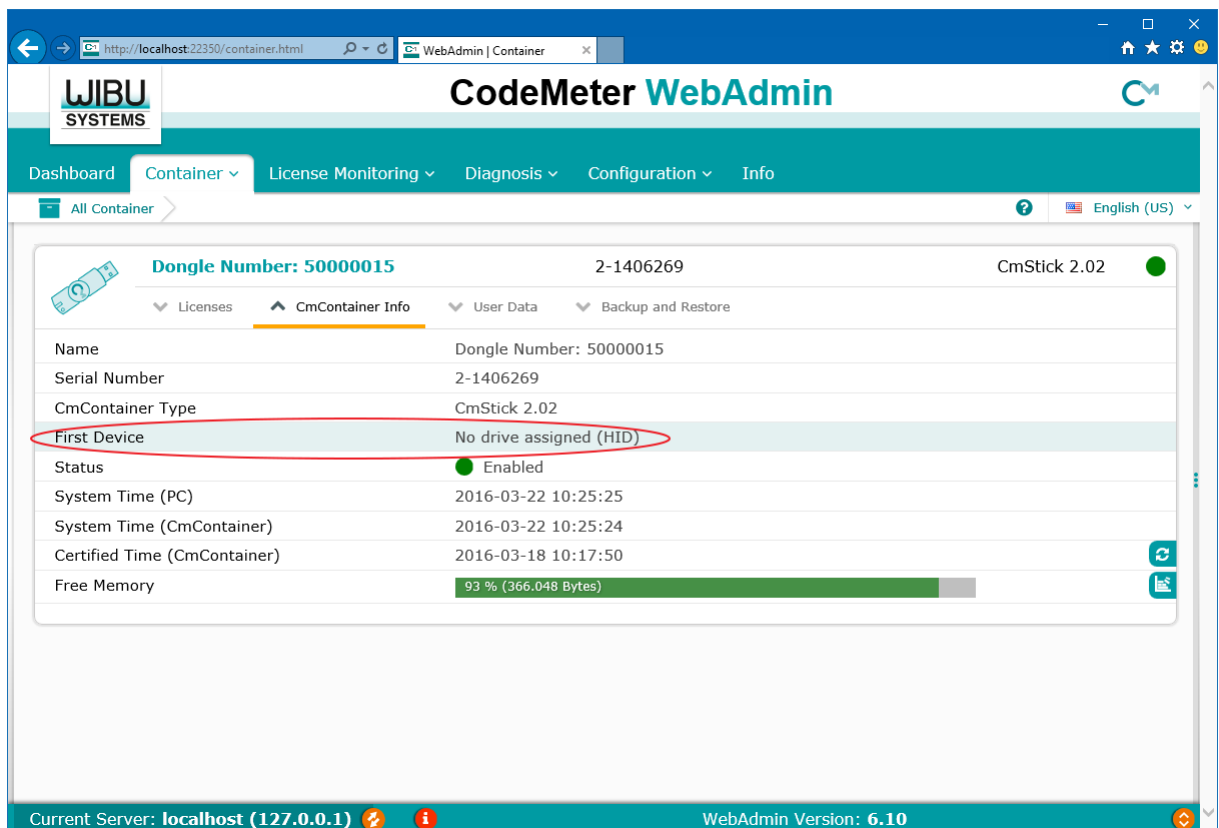
Please replug your CmDongle to apply the changes.

4. Remove the dongle from the computer.
5. Reconnect the dongle to the computer.

6. In the **CodeMeter Control Center**, the switch to HID is shown in the **Events** tab.



7. Check the drive in **CodeMeter WebAdmin**, in the **Content/CmContainer** tab. Nothing should be entered.

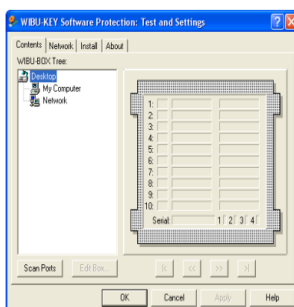


7.2.2 WibuKey

WibuKey can be used at a single workplace or in a network. The dongle must be active in a USB port or parallel port on the local computer or as a server on a network computer.

To check the settings of the stick:

1. Install the WibuKey administration software from the installation medium.
Save location:
`\AdditionalSoftware\WIBU-SYSTEMS WibuKey`
Use this software for licensing with the network dongle.
2. Open the **Control Panel**.
3. Open the **WibuKey** system control element.
4. Select the stick to be tested on the local computer or on the network.
To list server Wibu boxes in the network, click on the **Read in** button.
5. Check if the number in the last column of the second row is identical with the starting number of the stick.



You can read more about the operation of the stick in the **network dongle** (on page 41) chapter.

Network dongle

To use a WibuKey in the network as a dongle, the server and client must be configured accordingly:

- ▶ Server configuration (on page 42)
- ▶ Client configuration (on page 43)



Attention

WibuKey uses port 22347. This port is fixed and cannot be changed. Note:

- If a firewall other than that integrated into the Windows operating system is used, this port must be enabled if you wish to use the WibuKey as a network dongle.

Configuring the server

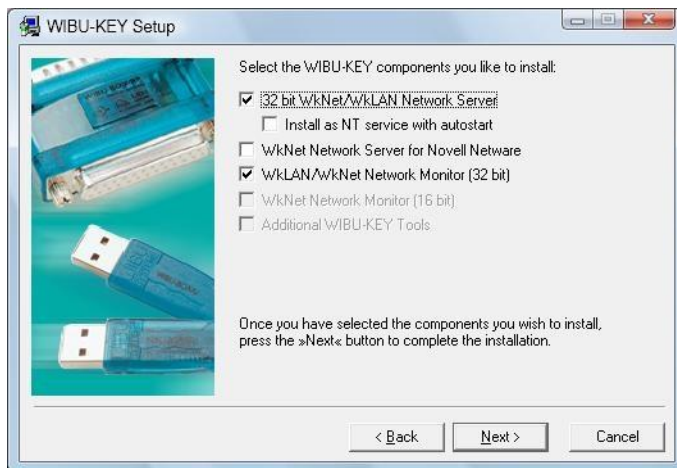
The WibuKey server has to run on the dongle server. The WibuKey server can be configured either as an application (e.g. started via Autostart) or as a service.

On installing the WibuKey software the options

32 Bit WkNet/WkLAN network server

Install as NT service with Autostart

have to be activated, so that the WibuKey server is installed as a service (recommended).



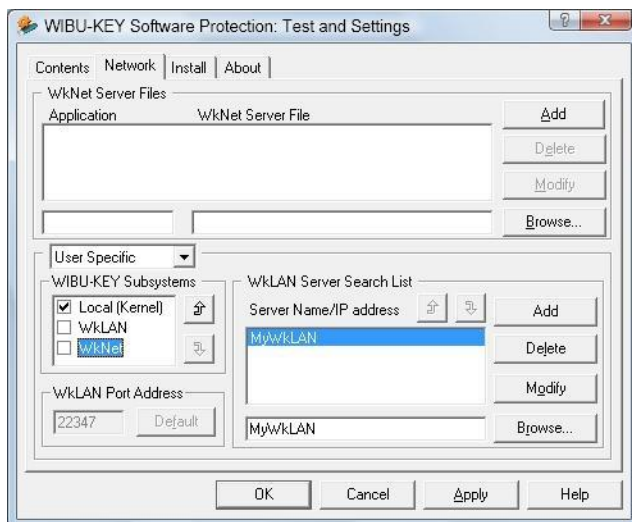
In order to start the WibuKey server as an application, a link to the file `WkSvW32.exe` has to be created in the Windows Autostart.

The file can be found in the `C : / Programme / WIBUKEY / Server /` folder after installation.

Configuring a client

Some network settings for the client have to be entered in the Control Panel. Under WibuKey subsystems, you can select the type of network access you use. The licensing of zenon uses the **WkLan** subsystem.

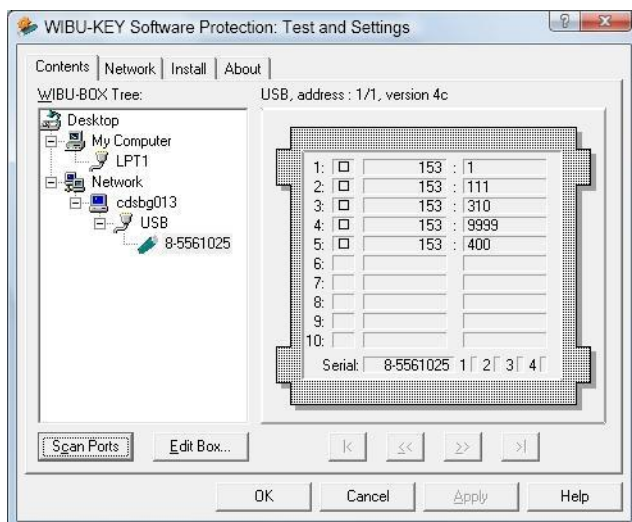
Under Server Name/IP address either the server name or its IP address or a mask for the IP address is entered. With Browse the list is filled with all found dongle servers.



The entries are processed in the sequence of the list and also can be combined.

If the first entry is a certain server, it is checked, if the dongle server service runs on that PC and if a dongle is plugged in (faster!). If no dongle is found here and the next entry is a filter mask, all PCs in the network going with that filter mask are tried out.

On the **Contents** page, the server(s) where the dongles were found should then be listed:



8. Command line parameter for licensing tool

The licensing tool can be controlled with the following flags as parameters:

Passing over a parameter is done by putting a `/` or a `-` before the parameter:

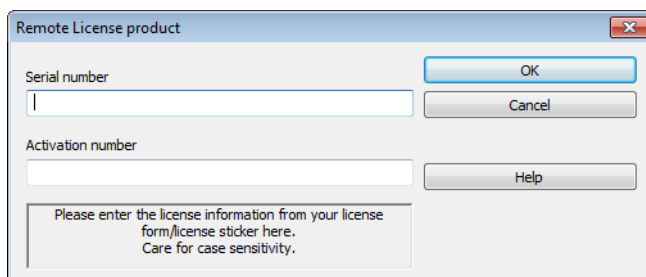
for example: `/silent` or `-silent`

Parameters	Description
request	forces the program to omit the first dialog and go straight to the dialog for requesting the activation key (it does not matter if the flag <code>/silent</code> or <code>-silent</code> is also used)
sernum:<num>	forces the program to use the <code>serial number</code> which is passed with <code><num></code> for licensing instead of reading the number from the <code>zenon6.ini</code> file.
actkey:<key>	forces the program to use the <code>activation key</code> which is passed with <code><key></code> for licensing instead of reading the key from the <code>zenOn6.ini</code> file.
silent	forces the program to not show a dialog. The file <code>License.txt</code> is still created.
mailto:<addr>	works only in connection with the flag <code>silent</code> and forces the program to send the license request to the specified address <code><addr></code> via e-mail.

9. Remote licensing

To allocate a license to a computer via remote connection:

1. in the context menu of the project select *Remote Transport -> Change password and display licensing*
2. start the Remote Transport
3. as soon as the connection is established, the licensing of the remote computer is displayed



The dialog box titled "Remote License product" contains two input fields: "Serial number" and "Activation number". Below these fields is a text box with the instruction: "Please enter the license information from your license form/license sticker here. Care for case sensitivity." To the right of the input fields are three buttons: "OK", "Cancel", and "Help".

4. enter the serial number and the activation number of your license form
5. confirm the input by clicking OK

10. Characteristics of the Server Client operation

Licensing of modules in the server client operation has the following characteristics:

HISTORIAN

The following cases are distinguished:

- ▶ Server and client licensed: Archives can be opened and edited at the client
- ▶ Server licensed and client not licensed: Archives can be opened but not edited at the client
- ▶ Client not licensed and started as standalone: Archive window can be opened; the individual archives cannot be opened

AUTOMATIC LINE COLORING

The following cases are distinguished:

- ▶ Server licensed and client not licensed: ALC functionality is available unrestrictedly
- ▶ Client not licensed and started as standalone: ALC functionality is not available



Information

If the Server is licensed for the Energy Edition, ALC is also licensed.

BATCH CONTROL

The client gets the license from the server and does not need its own license. If the server does not have a license of its own, the client cannot use the module.

LOAD MANAGEMENT

The following cases are distinguished:

- ▶ Server licensed and client not licensed: **Load Management**EMS functionality is available without restriction
- ▶ Client not licensed and started as standalone: **Load Management**EMS functionality is not available

MESSAGE CONTROL

The client gets the license from the server and does not need its own license. If the server does not have a license of its own, the client cannot use the module.

11. Everywhere Server by zenon

Everywhere Server gets the license of the Runtime. The license for Everywhere Server is issued by Runtime. The **Everywhere Server** can not be used, If the Runtime does not have a corresponding license.

For this reason, it may happen that the Runtime is running, but the **Everywhere Server** can not be started because of missing license rights. In this case, please use the licensing tool (on page 4) in order to receive a corresponding license.