Application protection using CodeMeter software

User Guide

March 01, 2024

Contents

Chapter 1.Protection system common information

CodeMeter security system of Wibu-Systems AG is based on the use of a cryptographic chip with hardware implementation of 128-bit AES, 224-bit ECC и 1024-bit RSA algorithms.

The standard delivery of the BAZIS system includes a device for protection against unauthorized use — a hardware protection key (fig. 1.1), which is installed in the USB port connector of the computer.

Fig. 1.1. Hardware protection key

1.1. Software implementation of the protection system

1.1.1. Common information

The protection system allows to use the following operating modes of the software:

- **Network mode**. The computers are connected to a local network. The key driver is installed on each computer with the BAZIS system (**client workplace**) installed, ensuring the launch of protected software and its interaction with the network protection key during operation. The network key for hardware protection can be installed on any computer on the network, in the settings of the key driver on this computer, you must start the network server (see section 3.2.1 on p. 11). This computer is **a license server**. The key stores information about the number of available licenses. An appropriate number of client workplaces can use the hardware protection network key.
- **Local mode**. The BAZIS system is installed on a local computer (workplace). A hardware protection key and, accordingly, a key driver must be installed at each workplace.

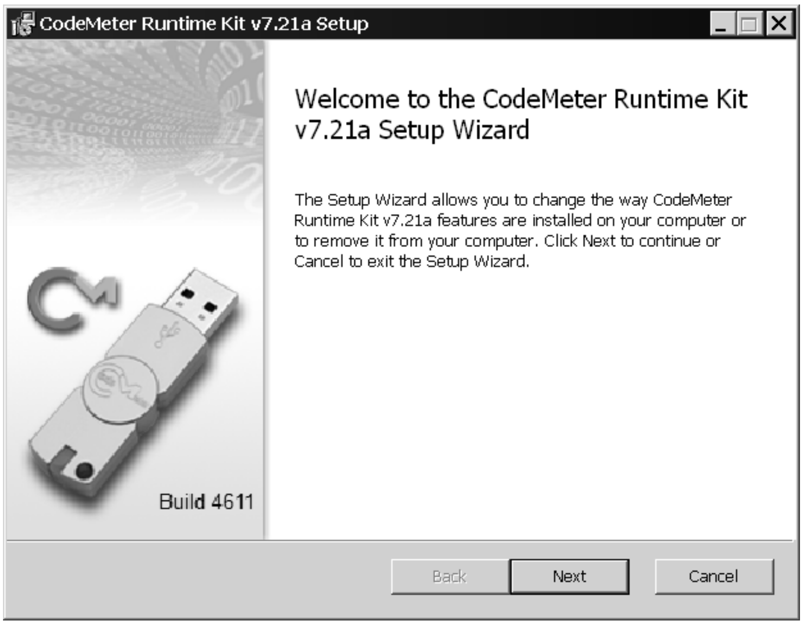
The separation of operating modes is conditional. Any hardware protection key can be used both in network and local mode.

1.1.2. Floating licenses

Licenses for the BAZIS system modules use during network operation are **floating**. Each time the BAZIS system module is launched at the client workplace, it receives the appropriate license stored in the key. The number of available licenses is decreasing. After the end of the work session, the license is automatically released and can be used by another workplace. Thus, licenses are not tightly linked to specific workplaces. The use of floating licenses ensures maximum convenience of the BAZIS system in network mode.

Chapter 2.CodeMeter protection software installation

CodeMeter protection system software installation will be fulfilled automatically after DBMS FireBird installation completion. Installation dialogue will appear on the screen (fig. 2.1).



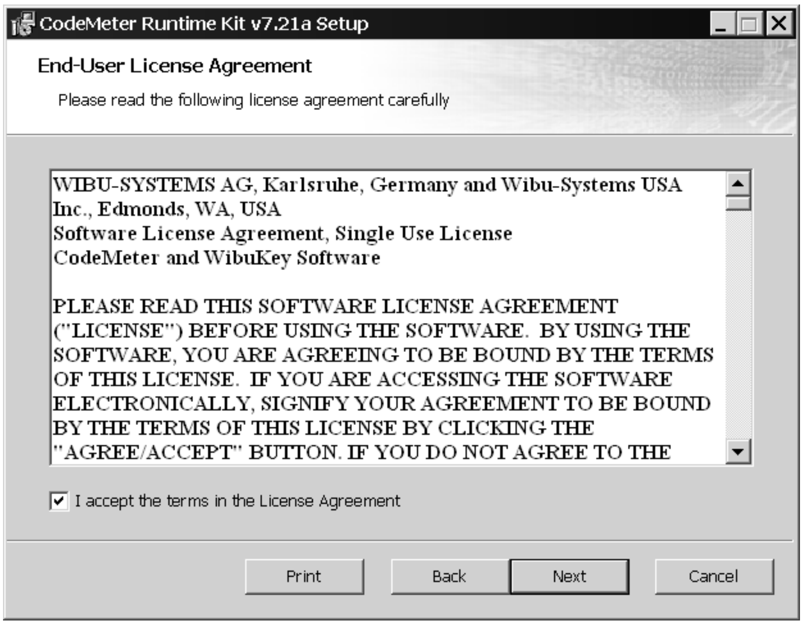
CodeMeter Runtime Kit v7.21a Setup

Welcome to the CodeMeter Runtime Kit v7.21a Setup Wizard

The Setup Wizard allows you to change the way CodeMeter Runtime Kit v7.21a features are installed on your computer or to remove it from your computer. Click Next to continue or Cancel to exit the Setup Wizard.

Fig. 2.1.

For software installation push **Next** button. In **End-User License agreement** dialogue enable the option, accept license agreement and push **Next** button (fig. 2.2).


CodeMeter Runtime Kit v7.21a Setup

End-User License Agreement

Please read the following license agreement carefully

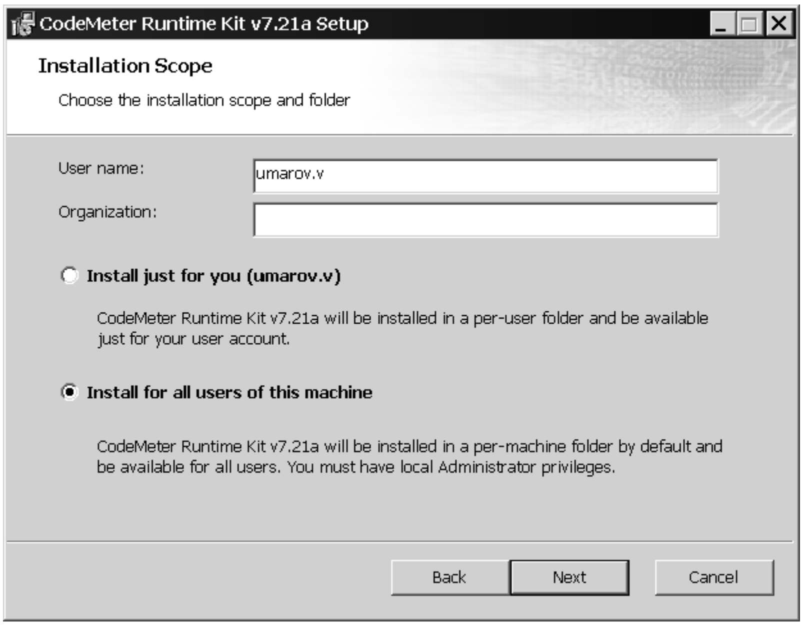
WIBU-SYSTEMS AG, Karlsruhe, Germany and Wibu-Systems USA Inc., Edmonds, WA, USA
Software License Agreement, Single Use License
CodeMeter and WibuKey Software

PLEASE READ THIS SOFTWARE LICENSE AGREEMENT ("LICENSE") BEFORE USING THE SOFTWARE. BY USING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS LICENSE. IF YOU ARE ACCESSING THE SOFTWARE ELECTRONICALLY, SIGNIFY YOUR AGREEMENT TO BE BOUND BY THE TERMS OF THIS LICENSE BY CLICKING THE "AGREE/ACCEPT" BUTTON. IF YOU DO NOT AGREE TO THE

☑ I accept the terms in the License Agreement

Fig. 2.2.

Installation scope dialogue will appear on the screen. Specify user name and organization, choose software accounts and push **Next** button (fig. 2.3).


CodeMeter Runtime Kit v7.21a Setup

Installation Scope

Choose the installation scope and folder

User name: umarov.v

Organization:

○ Install just for you (umarov.v)

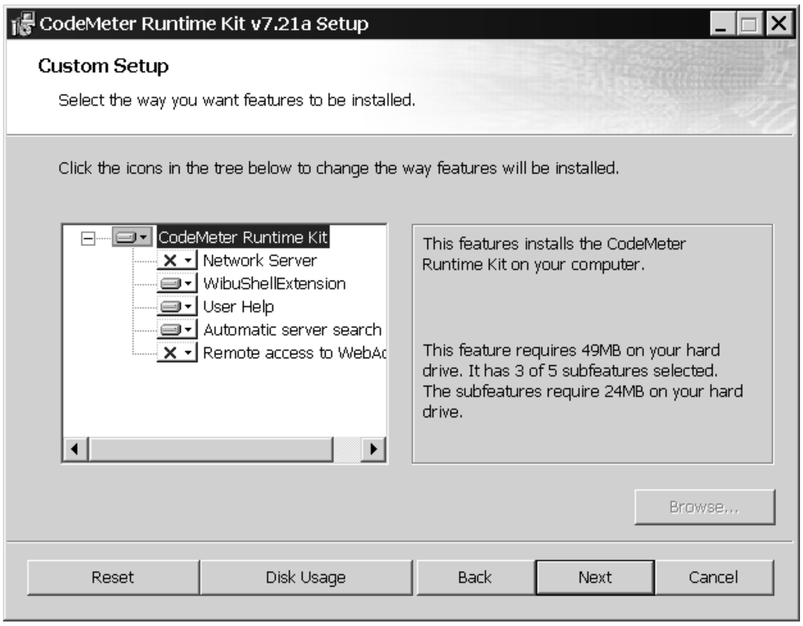
CodeMeter Runtime Kit v7.21a will be installed in a per-user folder and be available just for your user account.

● Install for all users of this machine

CodeMeter Runtime Kit v7.21a will be installed in a per-machine folder by default and be available for all users. You must have local Administrator privileges.

Fig. 2.3.

In **Custom setup** dialogue select software components for installation. It is recommended to complete full installation. To continue installation, push **Next** button (fig. 2.4).



CodeMeter Runtime Kit v7.21a Setup

Custom Setup

Select the way you want features to be installed.

Click the icons in the tree below to change the way features will be installed.

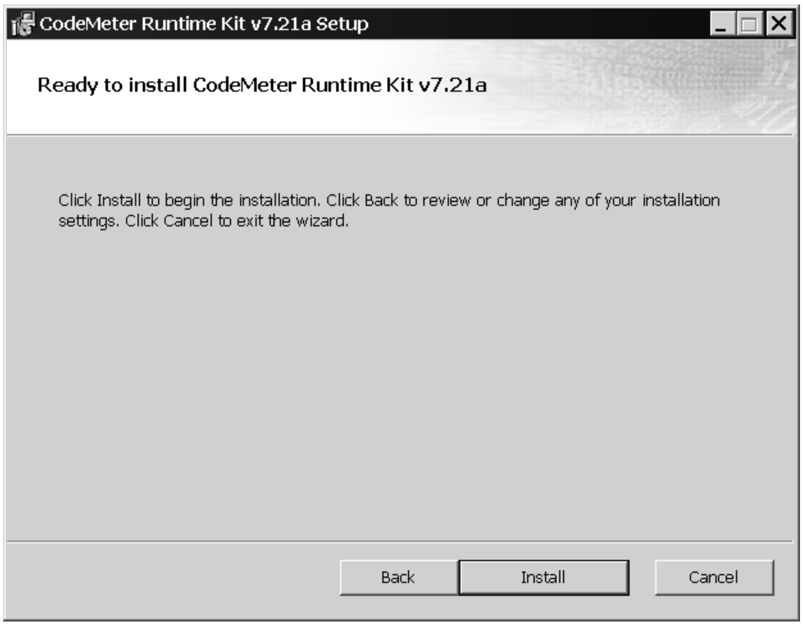
- CodeMeter Runtime Kit
  - ☒ Network Server
  - WibuShellExtension
  - User Help
  - Automatic server search
  - ☒ Remote access to WebAc

This features installs the CodeMeter Runtime Kit on your computer.

This feature requires 49MB on your hard drive. It has 3 of 5 subfeatures selected. The subfeatures require 24MB on your hard drive.

Fig. 2.4.

The following dialogue will appear on the screen (fig. 2.5). For software installation push **Install** button.



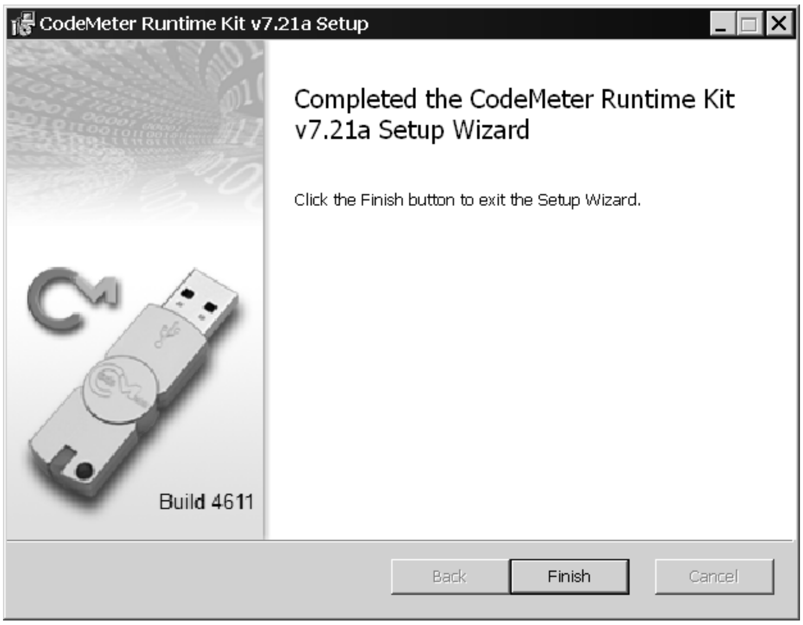
CodeMeter Runtime Kit v7.21a Setup

Ready to install CodeMeter Runtime Kit v7.21a

Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.

Fig. 2.5.

After installation completion, a final dialogue will appear on the screen (fig. 2.6). To exit installation push **Finish** button.


CodeMeter Runtime Kit v7.21a Setup

Completed the CodeMeter Runtime Kit v7.21a Setup Wizard

Click the Finish button to exit the Setup Wizard.

Build 4611

Fig. 2.6.

Chapter 3.Protection software access setup

3.1. Local use of protected software setup

At BAZIS system applications on local computer use with installed protection key, no extra actions for protected software use are required.

3.2. Protected software network use setup

3.2.1. Back-end

1. Click with mouse right button on CodeMeter icon in Windows notification area.
2. Call **WebAdmin** command.

   Internet browser will be started automatically, CodeMeter WebAdmin page will be opened.
3. Open **Configuration —Server —Server access** tab and check **Run** in **Network server** group (see section 5.8 on p. 25).

3.2.2. Front-end

1. Click with mouse right button on CodeMeter icon in Windows notification area.
2. Call **WebAdmin** command.

Internet browser will be started automatically, CodeMeter WebAdmin page will be opened.

3. Open **Configuration —Server —Server access** tab and select **Disable** variant in **Network server** group (see 5.8 on p. 25).

   By default, search for free licenses is fulfilled from front end work place for all available computers, where CodeMeter program is run as license server.

4. To select the computers, which can be used as a server, specify their IP-address or domain names in **Server search list**, e.g. *192.168.1.100* or *server* on **Configuration —Base —Server search list** tab.

Protection system setup is described in detail in в Chapter 5 on p. 18*.*

3.3. Common settings

Network parameters settings take effect only after program restart. For CodeMeter restart, push **Apply** button.

If Windows firewall or similar software is used on a computer, make the port used by CodeMeter system available (by default, it is port 22350).

3.4. Protection key setup

Protection key should be put into free USB port. No extra actions are required; BAZIS system checks automatically, whether the key is installed on computer.

Several protection keys can be applied to one computer.

Chapter 4.CodeMeter Control Center use

4.1. CodeMeter Control Center start

CodeMeter Control Center program provides access to the license server settings.

When installing CodeMeter, the shortcut to launch CodeMeter Control Center is placed by default in **Autorun** section of the Windows Main menu. Thus, it starts automatically in a minimized window with the start of each session of the operating system. At the same time, the system icon is displayed in the notification area. The icon colour shows the status of the hardware protection key (tab. 4.1), see section 4.6.1 on p. 16.

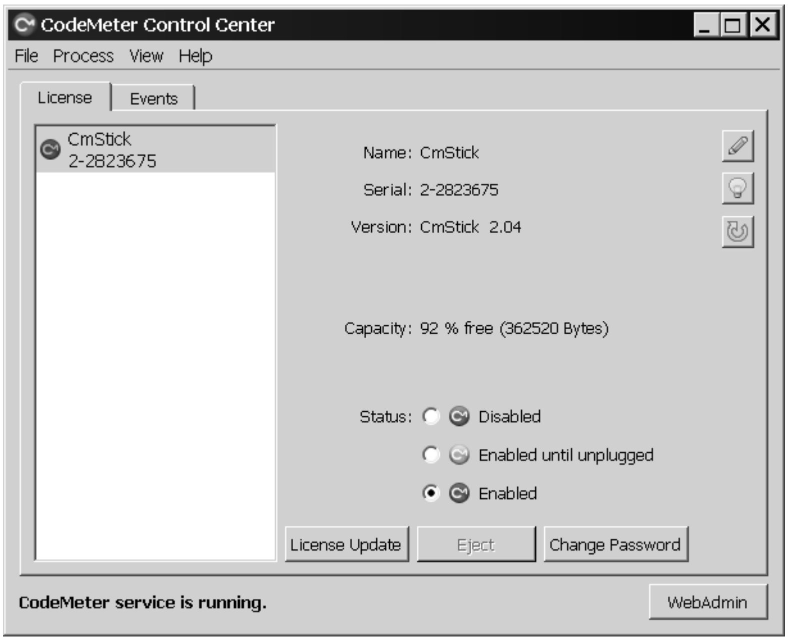
Tab. 4.1.

	Icon colour	Key state
●	**Grey**	The local key is not connected or the CodeMeter Runtime Server service is running. In this case, the workplace can use the network key on the license server.
●	**Green**	The local key is activated and connected.
●	**Double blue**	Several keys are connected and activated.
●	**Yellow**	The key is connected and activated until it is disconnected.
●	**Red**	The deactivated key is connected.

To open CodeMeter Control Center window, you can use the following methods.

- Call Windows menu command **Start** — **Programs** — **Autorun** — **CodeMeter Control Center**.
- Click on program icon with mouse left button.

CodeMeter Control Center window will appear on the screen (fig. 4.1).



CmStick
2-2823675

Name: CmStick
Serial: 2-2823675
Version: CmStick 2.04
Capacity: 92 % free (362520 Bytes)
Status: ○ Disabled
○ Enabled until unplugged
● Enabled

CodeMeter service is running.

Fig. 4.1.

The Main menu of the program is located in the upper part of the window. The main set of control elements is located on the tabs. The program status bar and the CodeMeter WebAdmin program launch button are located at the bottom of the window.

4.2. File menu commands

4.2.1. License import

License import command allows to import a license from a file. After command call, a standard Windows dialogue will appear on the screen.

4.2.2. CodeMeter Web Admin start

WebAdmin command allows to start CodeMeter WebAdmin (see section 5.1 on p. 18).

4.2.3. Report file creation

Logging command allows to start recording a report file on all processes related to the license server operation. The command functions as a switch. If reporting is enabled, an option is enabled next to command name. In this case, the report contents will be shown on **Events** tab. If CodeMeter WebAdmin is running, **Diagnostics** tab will also show the report contents (see section 5.7 on p. 24).

Report file is saved in *%\Program Files\CodeMeter\Logs* folder.

4.2.4. Network parameters setup

Preferences command allows to start Code Meter WebAdmin. **Configuration** tab will be opened (see section 5.8 on p. 25).

4.2.5. CodeMeter Control Center work completion

Quit command allows to finish work of CodeMeter Control Center. At the same time CodeMeter Control Runtime Server will continue to work.

4.3. Process menu commands

4.3.1. Defragmentation of license memory area

Defragment License Memories command allows to defragment license memory area of the key selected in **License** tab.

4.3.2. Time certificates refreshing

Update Time Certificates command allows to refresh the program current time using certified servers.

4.3.3. Configuration restore

Repair Hardware Configuration command does not matter for keys of CmDongle type.

4.3.4. CodeMeter service start

Start CodeMeter Service command allows to start this service in a case, if it has been stopped.

4.3.5. CodeMeter service stop

Stop CodeMeter Service command allows to stop the service in a case, if it has been started.

4.3.6. CodeMeter service restart

Restart CodeMeter Service command allows to restart the service.

4.4. View menu commands

4.4.1. CodeMeter Control Center window collapse

Hide window command allows to minimize the program window to an icon in the notification area.

4.4.2. Information refresh

Refresh command allows to refresh all connected keys state visualization.

4.4.3. Report font size change

Zoom In and **Zoom Out** commands allow to change the font size when displaying report in **Events** tab.

4.4.4. Report contents copying to the clipboard

Copy Event Content command allows to copy the contents of current report on processes related to CodeMeter Runtime Server operation to the clipboard.

4.4.5. Report contents flush

Clear Event Window command allows to delete the current report contents in **Events** tab.

4.4.6. Displaying key information

Show all connected CmContainer command allows to display information about all keys connected to the computer on **Events** tab.

4.4.7. Displaying open IDs

List all open handles command allows to display a list of all open IDs (handles) on **Events** tab. The information is necessary for software developers.

4.4.8. Available licenses visualization

Show All Available Licenses Entries command allows to display a list of all licenses recorded on the key on **Events** tab.

4.5. Help menu commands

4.5.1. Help calling

Help command allows to open help system in the default browser.

4.5.2. Key registration

Register CmDongle command allows to register a key on a secure site https://my.codemeter.com.

4.5.3. Program data viewing

About command allows to view the data about the current version of CodeMeter.

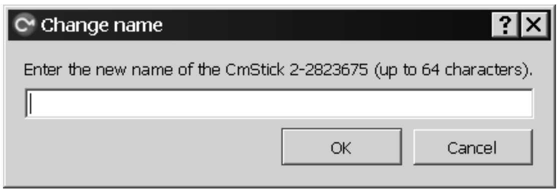
4.6. Program window tabs

4.6.1. License tab

The list on the tab (fig. 4.1 on p. 13) contains the serial numbers of the keys connected to the computer. One of the designations is selected. The buttons located on the tab allow to control the key.

Key rename

Change name of selected CmDongle button allows to rename the selected key. After pushing the button, a dialogue will appear on the screen, it allows to name the key (fig. 4.2).



Enter the new name of the CmStick 2-2823675 (up to 64 characters).

Fig. 4.2.

Key highlighting

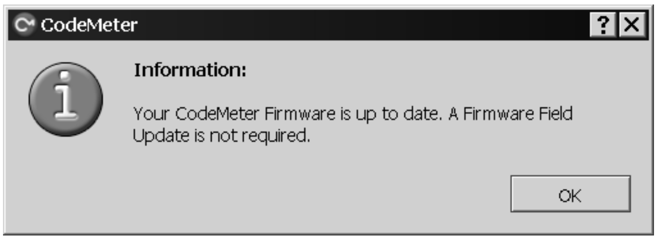
Let flash LED of selected CmStick button allows to turn on the LED indicator of the key for a short time, the designation of which is highlighted in the list.

Key firmware updating

Update Firmware of selected CmDongle button allows to update the key firmware selected in the list. The firmware updating requires an Internet connection. After pushing the button, CodeMeter Control Center automatically connects to the Wibu-Systems automatic firmware update server. To perform the update, specify the key password.

The firmware update may take some time. Before the process is completed, you cannot disconnect the firmware key from the USB port. Failure to comply with this requirement will result in damage to the key.

If a firmware update is not required, an informational message will appear on the screen (fig. 4.3).



Information:

Your CodeMeter Firmware is up to date. A Firmware Field Update is not required.

Fig. 4.3.

Key state control

State group variants allow to control the state of selected key (tab. 4.2).

Tab. 4.2.

	Name	Description
●	**Disabled**	The connected key is programmatically disabled. Licenses from this key cannot be used.
○	**Enabled until unplugged**	The key is connected during the time it is physically connected to the computer. When the key is disconnected, the use of programs for which licenses are recorded on the key will be unavailable.
●	**Enabled**	The key is available. The use of programs licensed on the key will be available even if the key is physically disconnected.

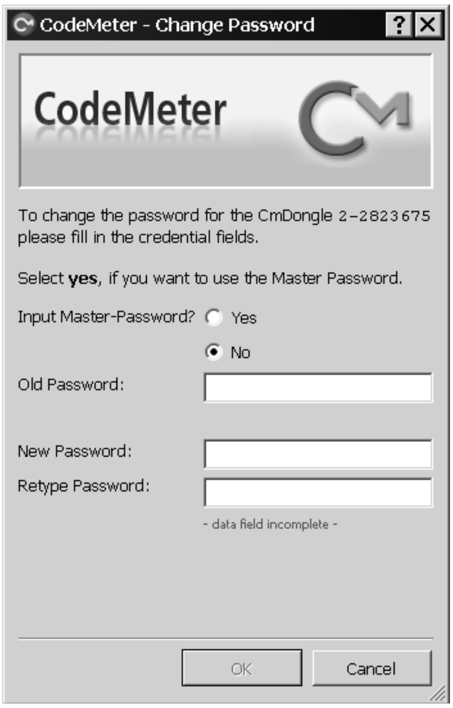
To change the key state, you must enter the key password in the dialogue that automatically appears on the screen.

License refreshing

License Update button allows to get new or refresh the existing licenses for selected key.

Key password changing

Change password button allows to change the password of chosen key. After pushing the button, **CodeMeter-change password** dialogue will appear on the screen (fig. 4.4).



To change the password for the CmDongle 2-2823675 please fill in the credential fields.

Select **yes**, if you want to use the Master Password.

Input Master-Password? ○ Yes ● No

Old Password:

New Password:

Retype Password:

- data field incomplete -

Fig. 4.4.

Enter the current password in **Old password** field. Enter a new password in **New password** field and enter it again in **Change password type** field. If you have lost your old password, select **Yes** variant in **Master Password Entry** group. In this case, the master password received from the site must be used as the current password *my.codemeter.com* when registering a key (see section 4.5.2 on p. 16).

4.6.2. Events tab

The tab can display information about connected keys, licenses that are recorded on these keys, a report on processes related to the operation of CodeMeter Runtime Server, etc. The tab contents control is described in sections 4.2.3 on p. 14 and 4.4 on p. 15.

Chapter 5.CodeMeter setup using Web-interface

5.1. CodeMeter WebAdmin start

The main settings of the CodeMeter service are performed using CodeMeter WebAdmin program. This program has a WEB interface and opens in the window of the default browser, e.g. MS Internet Explorer, Opera, etc. To launch CodeMeter WebAdmin (CMWA), you can use the following methods.

- Push **WebAdmin** button in CodeMeter Control Center window.
- In the browser window, enter the domain name or IP address of the computer with the installed CodeMeter Runtime Server and port number 22350, e.g. *http://10.3.1.37:22350* or *http://LM_server:22350*, and go to this address.

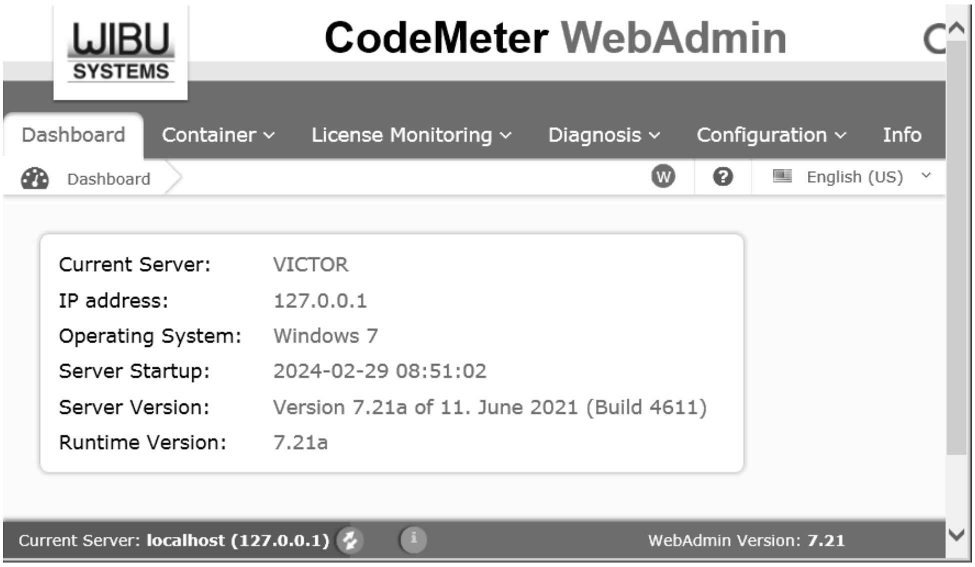
Port 22350 must be open, otherwise it will be impossible to use CMWA.

To access the CodeMeter Runtime Server on a remote computer, it is necessary that the CMWA settings of this computer allow access from users from other computers on the network.

To access the license manager on the local computer, address bar contents must be as follows: *http://localhost:22350* or *http://127.0.0.1:22350*.

5.2. CodeMeter WebAdmin interface

After launching CMWA, a default browser window will appear on the screen, in which the program page is open. In fig. 5.1. the Internet Explorer window is shown with the CodeMeter WebAdmin program running.



Current Server: VICTOR
IP address: 127.0.0.1
Operating System: Windows 7
Server Startup: 2024-02-29 08:51:02
Server Version: Version 7.21a of 11. June 2021 (Build 4611)
Runtime Version: 7.21a

Current Server: **localhost (127.0.0.1)**
WebAdmin Version: **7.21**

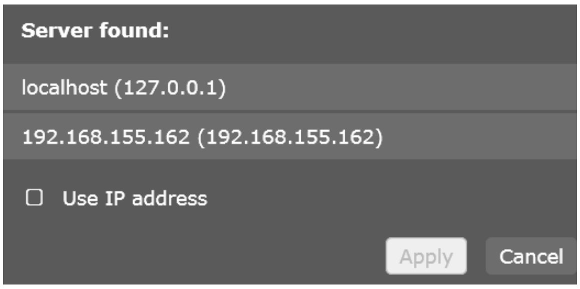
Fig. 5.1.

The CMWA command menu is displayed at the top of the page. These commands refer to the License Manager of the computer which network name and IP address are shown on the CMWA **Control panel** tab (hereinafter referred to as the *current computer*). After command call, a set of additional commands appears in the browser window. **Help** command opens a browser window containing the CMWA help section associated with this tab. **Language** combobox allows to select the language of the CodeMeter WebAdmin interface.

5.3. CodeMeter WebAdmin tabs

5.4. Control panel

The tab contains general information about the computer and the CodeMeter program. The button with the name of the current hostname allows to select another computer with the CodeMeter client software installed to display the properties. After pushing the button, a dialogue will appear on the screen shown in fig. 5.2.



Server found:

localhost (127.0.0.1)

192.168.155.162 (192.168.155.162)

□ Use IP address

Fig. 5.2.

To view information about another computer, select its name from a combobox and push **Apply** button.

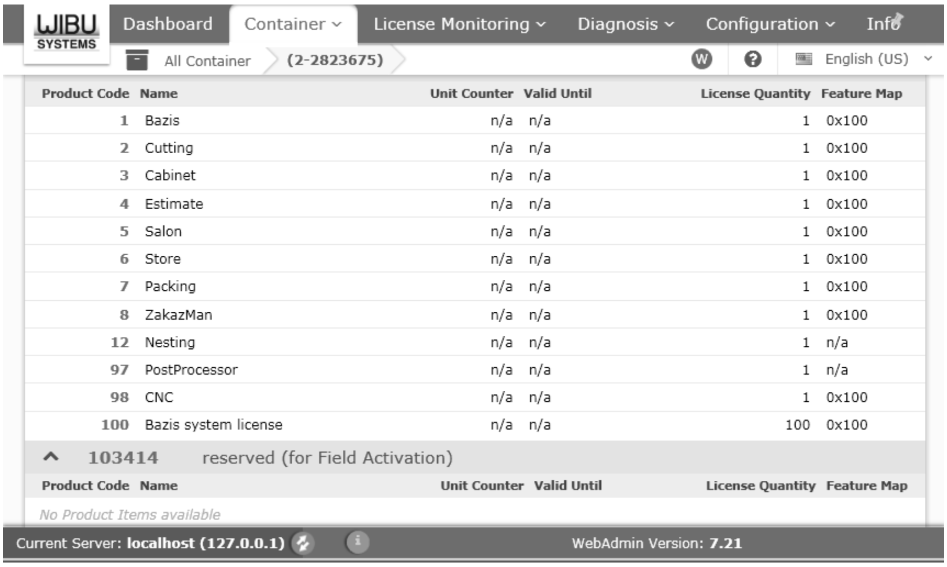
If the combobox items are IP addresses, enable **Use IP address** option.

5.5. Container

The tab control elements allow to view information about the key which serial number is selected in the **All CmContainer:** combobox.

5.5.1. Licenses

The tab control elements (fig. 5.3) allow to view licenses data, recorded on the current key.



Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map
1	Bazis	n/a	n/a	1	0x100
2	Cutting	n/a	n/a	1	0x100
3	Cabinet	n/a	n/a	1	0x100
4	Estimate	n/a	n/a	1	0x100
5	Salon	n/a	n/a	1	0x100
6	Store	n/a	n/a	1	0x100
7	Packing	n/a	n/a	1	0x100
8	ZakazMan	n/a	n/a	1	0x100
12	Nesting	n/a	n/a	1	n/a
97	PostProcessor	n/a	n/a	1	n/a
98	CNC	n/a	n/a	1	0x100
100	Bazis system license	n/a	n/a	100	0x100

103414 reserved (for Field Activation)

Product Code	Name	Unit Counter	Valid Until	License Quantity	Feature Map

No Product Items available

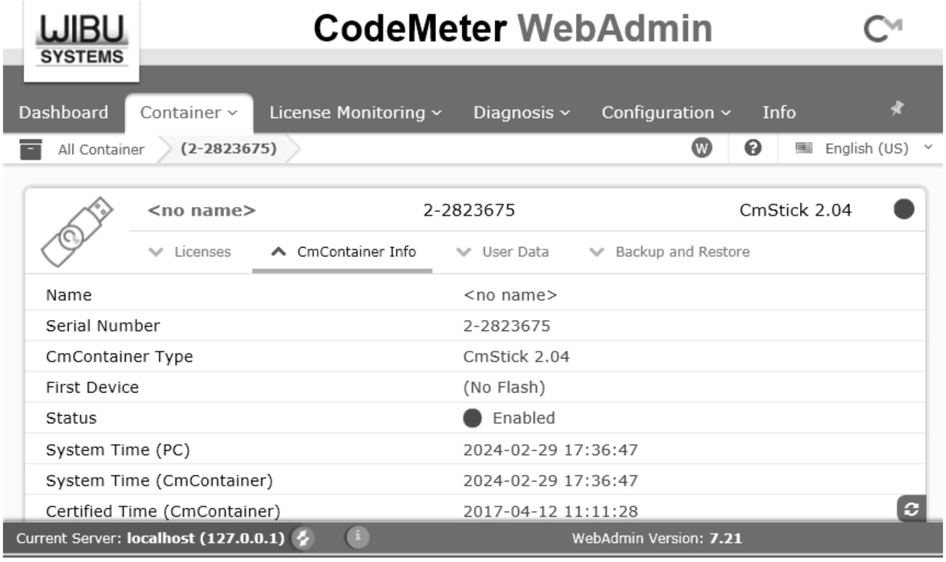
Current Server: localhost (127.0.0.1) WebAdmin Version: 7.21

Fig. 5.3.

The tab displays the developer code of protected software and its name. For each component of the protected software, its code, name and parameters of the paid licenses are shown.

5.5.2. Information about CmContainer

The tab control elements allow to view information about the current key (fig. 5.4).



Name	<no name>
Serial Number	2-2823675
CmContainer Type	CmStick 2.04
First Device	(No Flash)
Status	● Enabled
System Time (PC)	2024-02-29 17:36:47
System Time (CmContainer)	2024-02-29 17:36:47
Certified Time (CmContainer)	2017-04-12 11:11:28

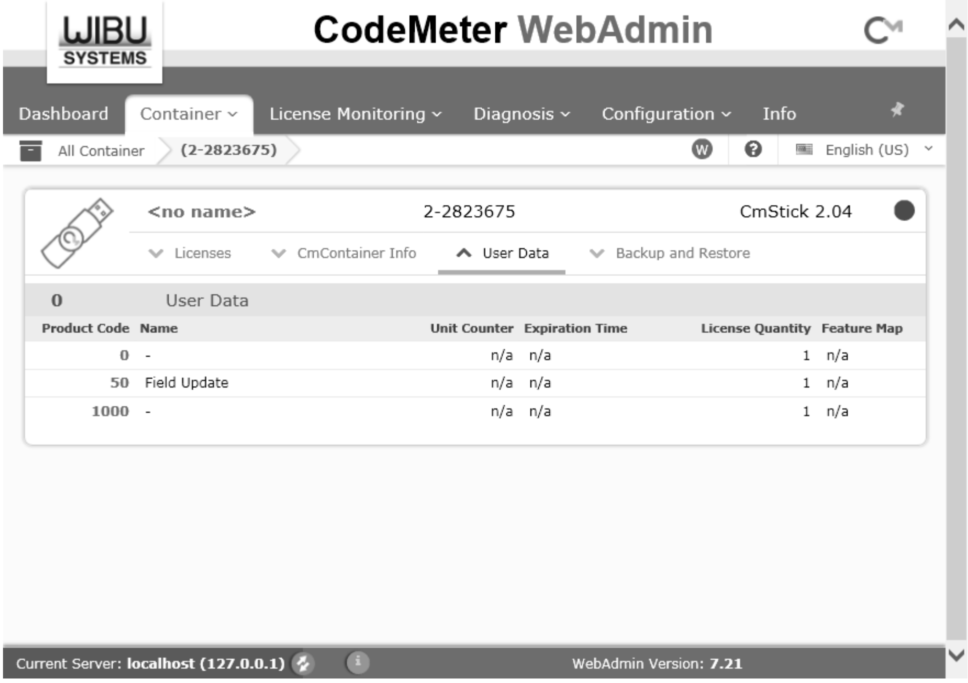
Current Server: localhost (127.0.0.1) WebAdmin Version: 7.21

Fig. 5.4.

Refresh button allows to synchronize the system time of the local computer with the time of certified server. **Defragment** button allows to defragment protection key memory.

5.5.3. User data

The tab control elements allow to view custom data for the current key (fig. 5.5).

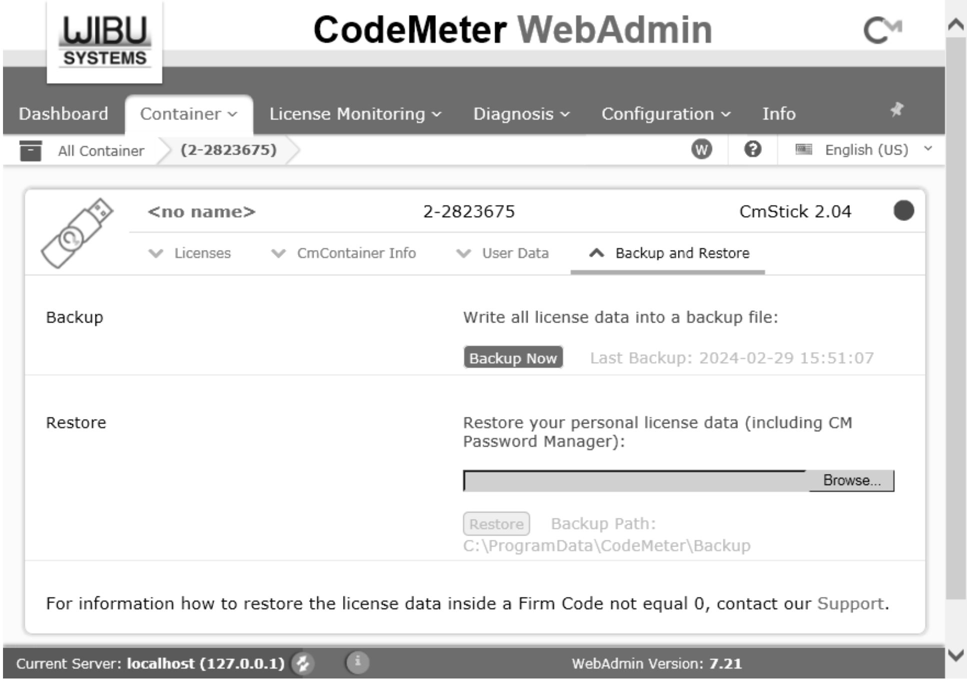


Product Code	Name	Unit Counter	Expiration Time	License Quantity	Feature Map
0	-	n/a	n/a	1	n/a
50	Field Update	n/a	n/a	1	n/a
1000	-	n/a	n/a	1	n/a

Fig. 5.5.

5.5.4. Backup and Restore

The tab control elements allow to back up information saved on the current key to a file on disk and restore this information from a backup. The file name is generated automatically and contains the serial number of the key, as well as the time and date of file creation. The file is assigned the *wbb* extension. **Backup now** button (fig. 5.6) allows to perform the backup immediately, regardless of the scheduled backup.



Backup

Write all license data into a backup file:

Last Backup: 2024-02-29 15:51:07

Restore

Restore your personal license data (including CM Password Manager):

Backup Path: C:\ProgramData\CodeMeter\Backup

For information how to restore the license data inside a Firm Code not equal 0, contact our Support.

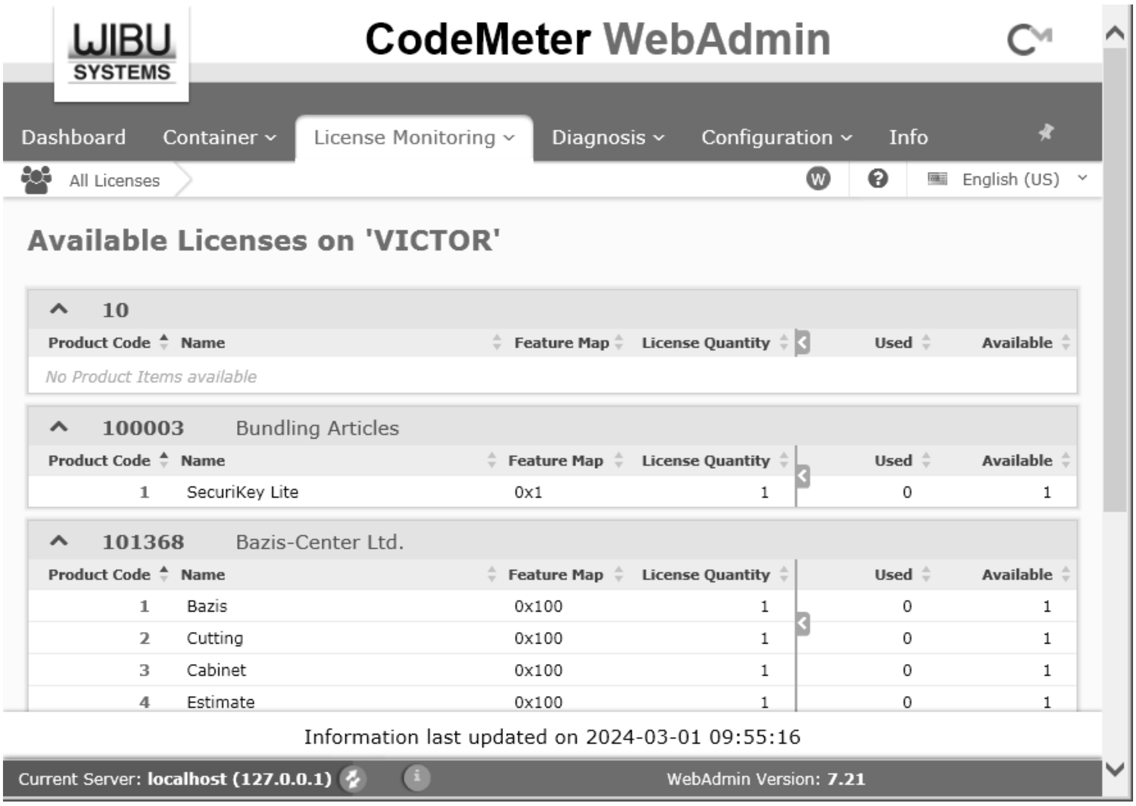
Fig. 5.6.

The folder where the backup file will be saved can be set in **Configuration — Base — Backup** tab. To restore the information on the key from the backup file, select the file in which the backup file is saved by pushing **Browse...** button and push **Restored** button. See section Base configuration — Backup on p. 27.

5.6. License monitoring

5.6.1. All licenses

This tab shows information about all available network licenses (fig. 5.7).



Available Licenses on 'VICTOR'

10

Product Code	Name	Feature Map	License Quantity	Used	Available
No Product Items available					

100003 Bundling Articles

Product Code	Name	Feature Map	License Quantity	Used	Available
1	SecuriKey Lite	0x1	1	0	1

101368 Bazis-Center Ltd.

Product Code	Name	Feature Map	License Quantity	Used	Available
1	Bazis	0x100	1	0	1
2	Cutting	0x100	1	0	1
3	Cabinet	0x100	1	0	1
4	Estimate	0x100	1	0	1

Information last updated on 2024-03-01 09:55:16

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

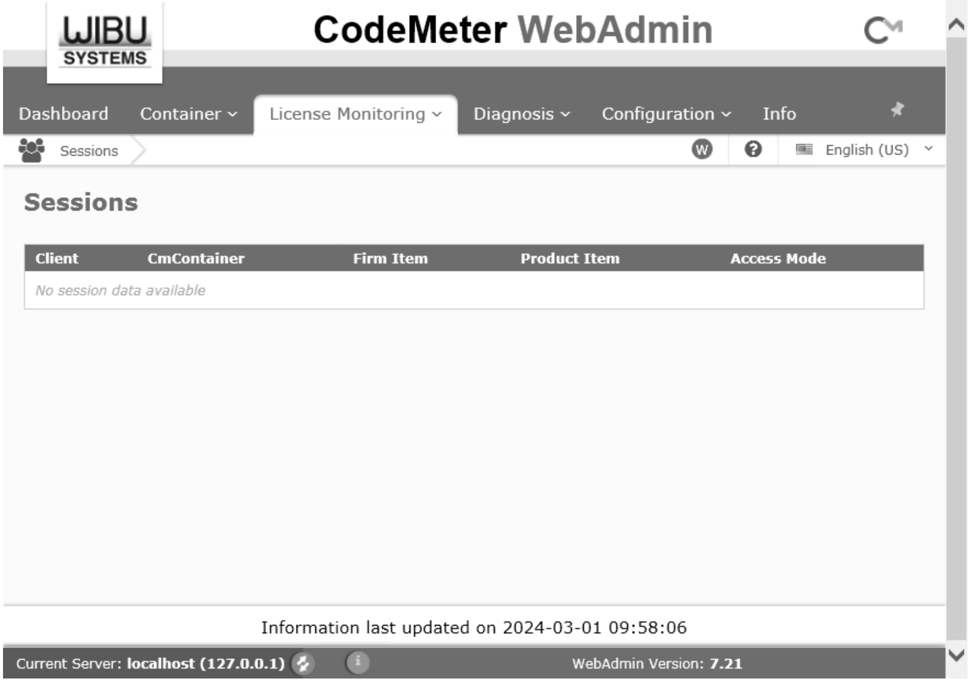
Fig. 5.7.

Network licenses can be used if CodeMeter is running as a license server.

Left-clicking on the product code designation allows to display detailed information about the license for this product.

5.6.2. Sessions

This tab shows information about all users using the server network licenses (fig. 5.8).



Sessions

Client	CmContainer	Firm Item	Product Item	Access Mode
No session data available				

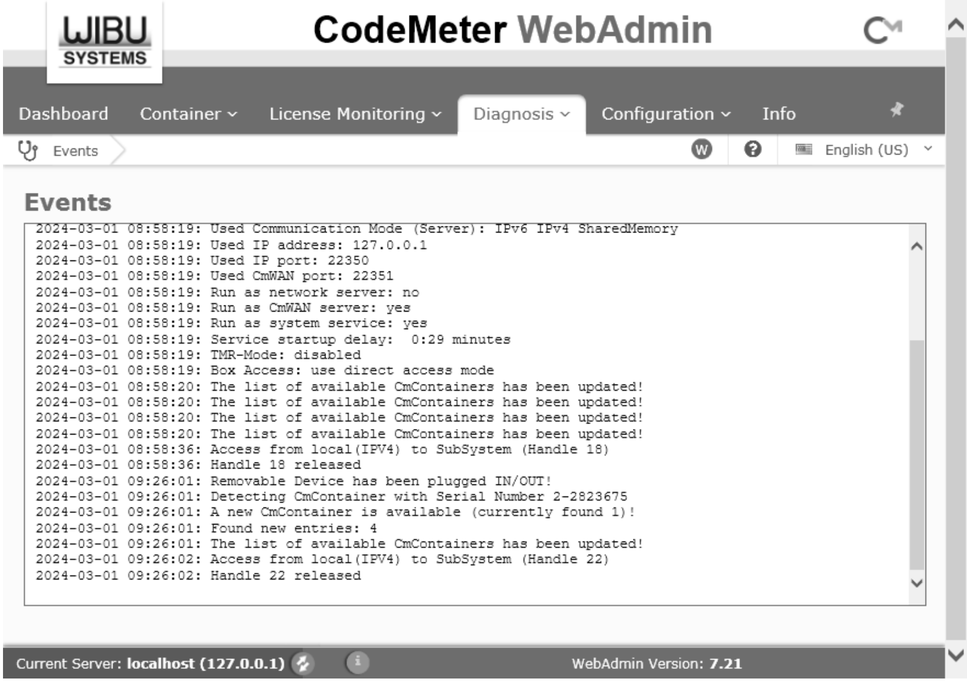
Information last updated on 2024-03-01 09:58:06

Fig. 5.8.

5.7. Diagnostics

5.7.1. Events

The tab displays information about all processes related to the operation of the CodeMeter license server (fig. 5.9).



Events

```
2024-03-01 08:58:19: Used Communication Mode (Server): IPv6 IPv4 SharedMemory
2024-03-01 08:58:19: Used IP address: 127.0.0.1
2024-03-01 08:58:19: Used IP port: 22350
2024-03-01 08:58:19: Used CmWAN port: 22351
2024-03-01 08:58:19: Run as network server: no
2024-03-01 08:58:19: Run as CmWAN server: yes
2024-03-01 08:58:19: Run as system service: yes
2024-03-01 08:58:19: Service startup delay:  0:29 minutes
2024-03-01 08:58:19: TMR-Mode: disabled
2024-03-01 08:58:19: Box Access: use direct access mode
2024-03-01 08:58:20: The list of available CmContainers has been updated!
2024-03-01 08:58:20: The list of available CmContainers has been updated!
2024-03-01 08:58:20: The list of available CmContainers has been updated!
2024-03-01 08:58:20: The list of available CmContainers has been updated!
2024-03-01 08:58:36: Access from local(IPV4) to SubSystem (Handle 18)
2024-03-01 08:58:36: Handle 18 released
2024-03-01 09:26:01: Removable Device has been plugged IN/OUT!
2024-03-01 09:26:01: Detecting CmContainer with Serial Number 2-2823675
2024-03-01 09:26:01: A new CmContainer is available (currently found 1)!
2024-03-01 09:26:01: Found new entries: 4
2024-03-01 09:26:01: The list of available CmContainers has been updated!
2024-03-01 09:26:02: Access from local(IPV4) to SubSystem (Handle 22)
2024-03-01 09:26:02: Handle 22 released
```

Fig. 5.9.

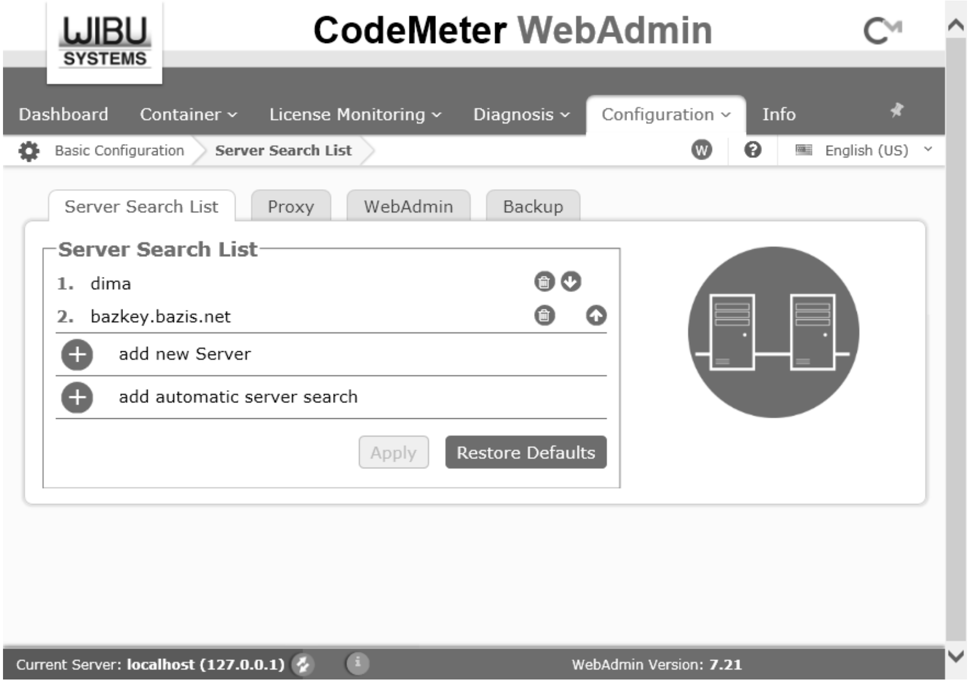
This information is intended to help you find the causes of errors.

The report will be displayed only if saving the report is enabled in the CodeMeter Control Center program, see section 4.2.3 on p. 14.

5.8. Configuration

5.8.1. Base configuration — Server search list

The tab control elements allow to configure network connections to the server. By default, the client workplace searches for free licenses on all available computers on which CodeMeter is running as a license server. To specify specific computers that can be used as a server, you should specify their domain names or IP addresses in **Server search list** (fig. 5.10).



Server Search List

1. dima
2. bazkey.bazis.net

Current Server: **localhost (127.0.0.1)**

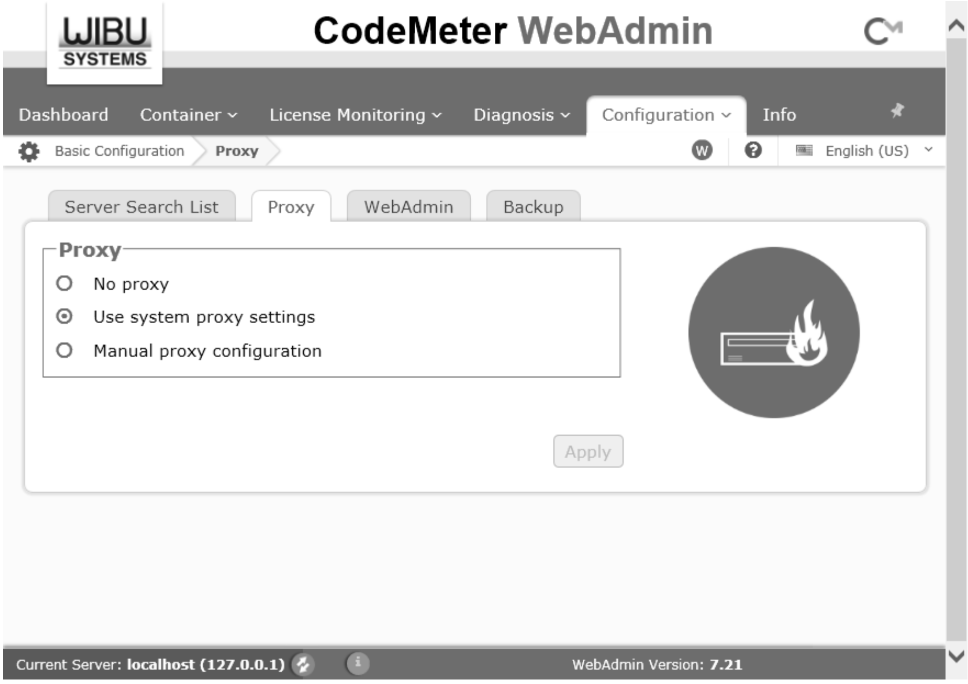
WebAdmin Version: **7.21**

Fig. 5.10.

Add and **Delete** buttons allow to control the presence of addresses in the list. The up and down arrow buttons allow you to control the order in which addresses are searched on the network. To make the changes take effect, push **Apply** button. CodeMeter program will be restarted. **Restore date** button allows to reset the settings to their default values.

5.8.2. Base configuration — Proxy

If you are using communication via a proxy server, it is necessary to enable its use and set the parameters (fig. 5.11).



Proxy

○ No proxy

● Use system proxy settings

○ Manual proxy configuration

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

Fig. 5.11.

Enable variant allows to use a proxy server. If it is selected, the fields for setting proxy server parameters become available. If user authentication is used to use the proxy server, enable **Authentication enabled** option and enter the user name and password in the appropriate fields. To make the settings take effect, push **Apply** button.

5.8.3. Base configuration — WebAdmin

Remote Read Access

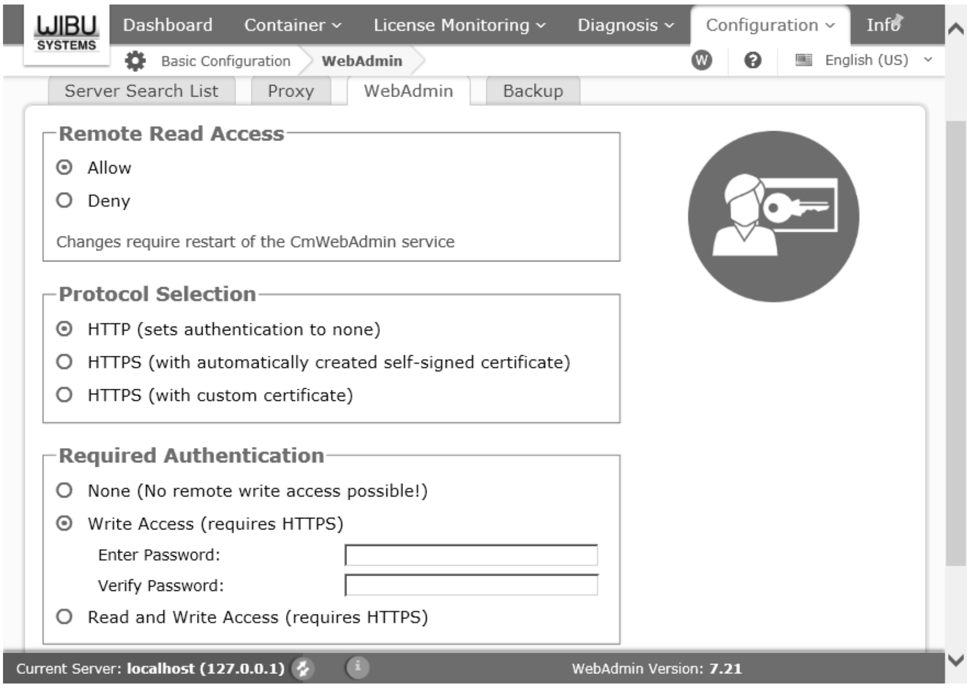
Deny variant in **Remote Read Access** group allows access to the CodeMeter program settings only from the computer on which the hardware protection key is installed. To provide access to them via the network, choose **Allow** variant.(fig. 5.12).

Protocol Selection

Variants of this group allow to select access protocol.

Required Autentification

Variants of this group allow to select required autentification. If **Write** or **Read and Write** variants are selected, set password.



Remote Read Access

● Allow

○ Deny

Changes require restart of the CmWebAdmin service

Protocol Selection

● HTTP (sets authentication to none)

○ HTTPS (with automatically created self-signed certificate)

○ HTTPS (with custom certificate)

Required Authentication

○ None (No remote write access possible!)

● Write Access (requires HTTPS)

Enter Password:

Verify Password:

○ Read and Write Access (requires HTTPS)

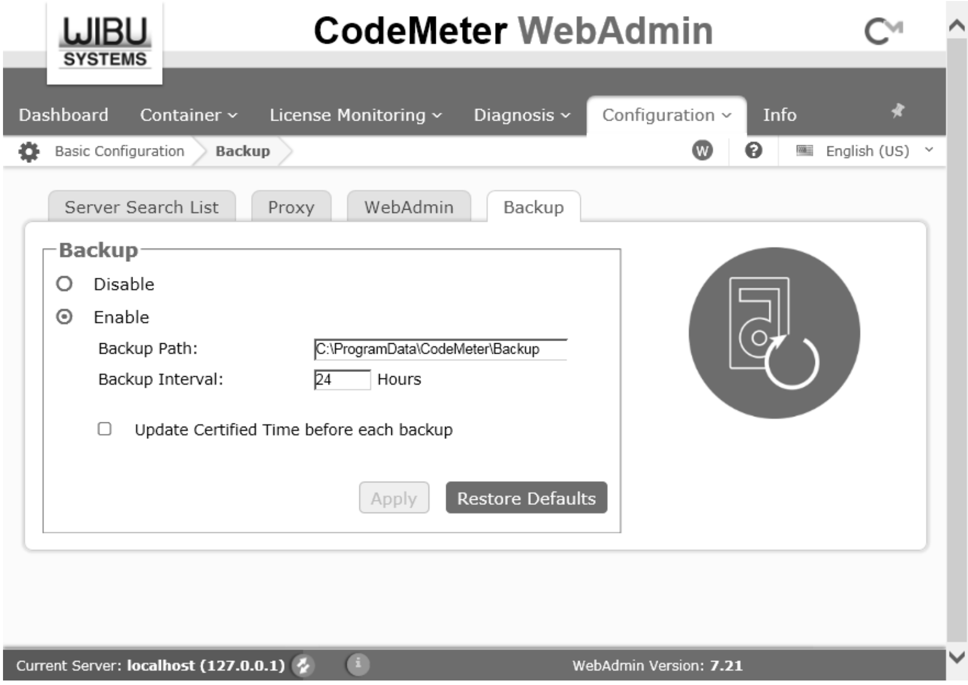
Current Server: **localhost (127.0.0.1)** WebAdmin Version: **7.21**

Fig. 5.12.

To make the changes take effect, push **Apply** button. CodeMeter program will be restarted. **Restore date** button allows to reset the settings to their default values.

5.8.4. Base configuration — Backup

The tab control elements allow to configure contents of the CodeMeter key backup (fig. 5.13).



Backup

○ Disable

● Enable

Backup Path: C:\ProgramData\CodeMeter\Backup

Backup Interval: 24 Hours

□ Update Certified Time before each backup

Current Server: **localhost (127.0.0.1)** WebAdmin Version: **7.21**

Fig. 5.13.

The contents of the CodeMeter key can be saved to a file on disk. **Disable** and **Enable** variants allow to control backup process. The file name is generated automatically and contains the serial number of the key, as well as the time and date of file creation. The file is assigned the *wbb* extension. **Backup path** field allows to specify a folder for saving backup files. Backup files are created automatically. **Backup interval** field allows to set the time interval in hours between backup sessions. By default, it is 24 hours.

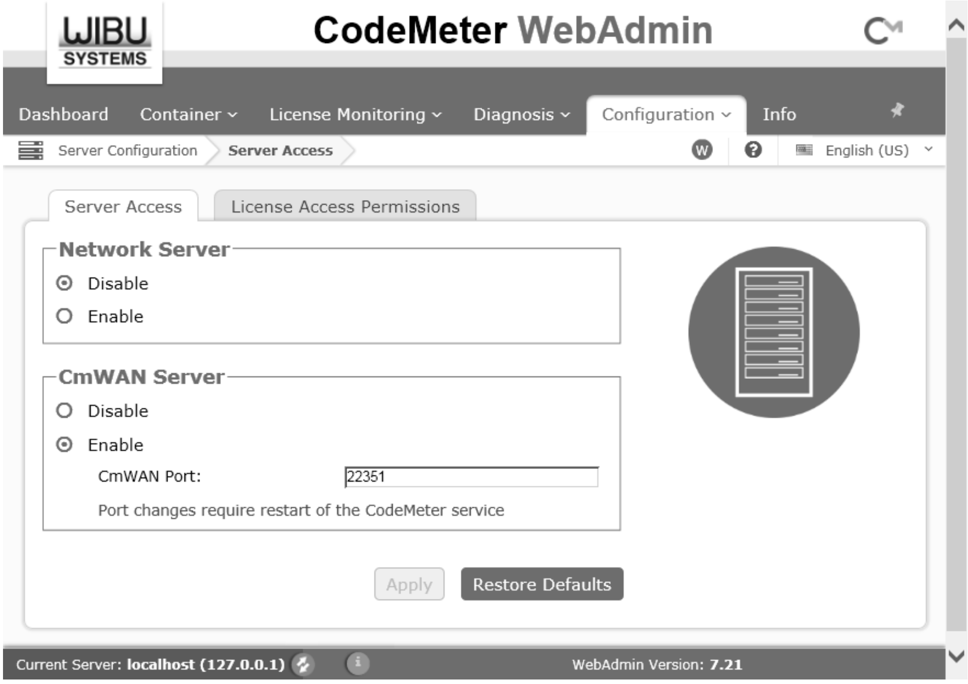
However, the creation of backups can be performed at any time forcibly (see section Backup and Restore on p. 22). **Update certified time before each backup** option allows to synchronize the local time with the certified server time before creating a backup file.

The settings made on the tab take effect only after restarting the program. To restart CodeMeter, push **Apply** button. **Restore Defaults** button allows to reset the settings to their default values.

5.8.5. Server configuration — Server access

The tab control elements allow to control the use of the computer on which the electronic protection key is installed as a license server.

Enable variant in **Network server** group (fig. 5.14) allows to start the license server (see Chapter 3 on p. 11).



Network Server

● Disable

○ Enable

CmWAN Server

○ Disable

● Enable

CmWAN Port: 22351

Port changes require restart of the CodeMeter service

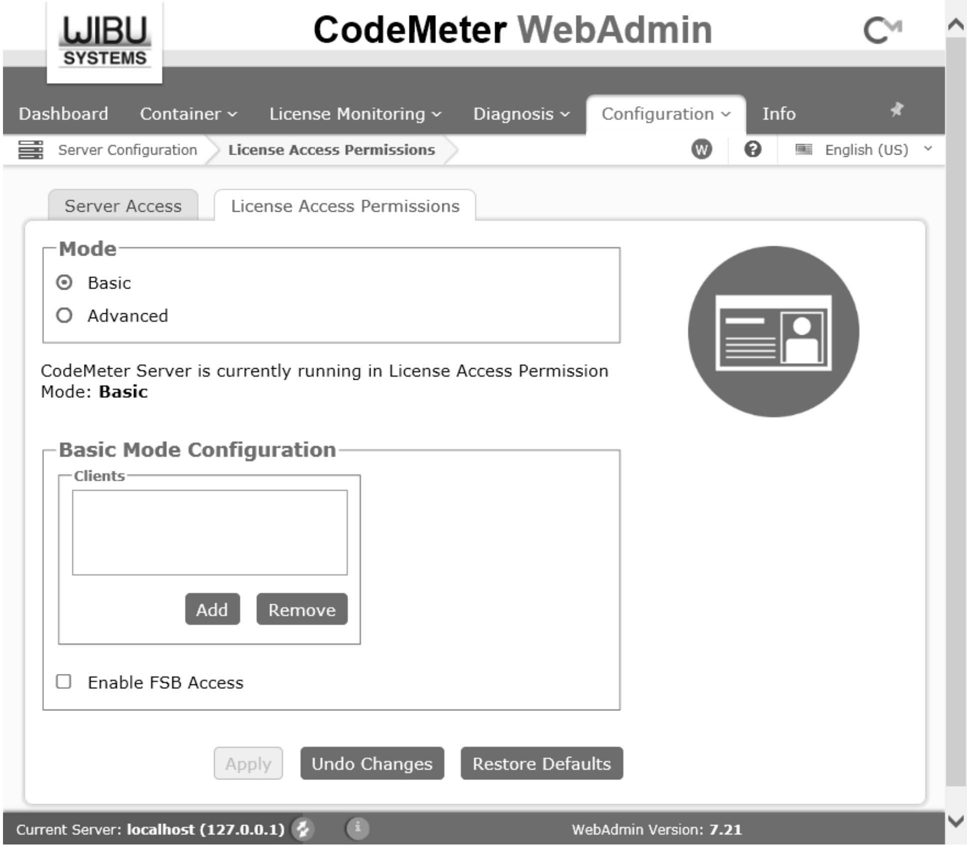
Fig. 5.14.

Enable variant in **CmWAN server** group allows to start server in the Internet with authorization. When this option is selected, a field becomes available in which the port number should be set, by default it is 22351.

The settings made on the tab take effect only after restarting the program. To restart CodeMeter, push **Apply** button. **Restore date** button allows to reset the settings to their default values.

5.8.6. Server configuration — License access rights

Clients list is available in the basic access control mode. It contains the domain names or IP addresses of specific client workplace computers whose users have access to the license server. If the list is empty (fig. 5.15), access to the license server is allowed for all computers.



Mode
● Basic
○ Advanced

CodeMeter Server is currently running in License Access Permission Mode: **Basic**

□ Enable FSB Access

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

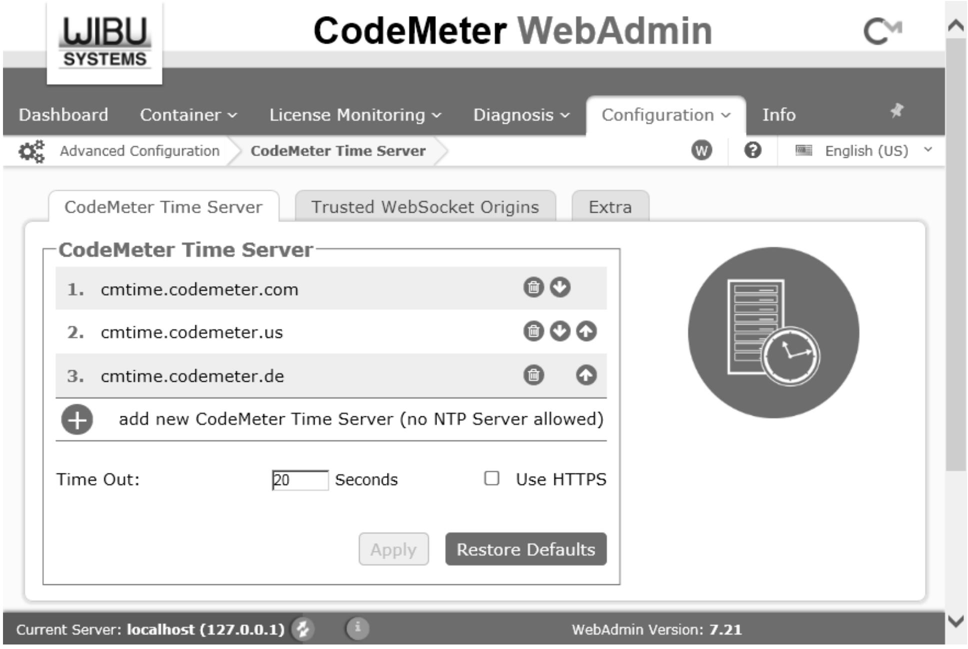
Fig. 5.15.

Add and **Delete** buttons allow to control the presence of addresses in the list. **Enable master key access** option allows to control user access to the main protection key (FSB, Firm Security Box) for programmatically recording licenses into the CodeMeter hardware.

The settings made on the tab take effect only after restarting the program. To restart CodeMeter, push **Apply** button. **By default** button allows to return the settings to their default values.

5.8.7. Advanced Configuration — Time server

CodeMeter Time server list contains a list of servers that are used by the CodeMeter to synchronize time (fig. 5.16).



CodeMeter Time Server

1. cmtime.codemeter.com
2. cmtime.codemeter.us
3. cmtime.codemeter.de

Time Out: 20 Seconds

□ Use HTTPS

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

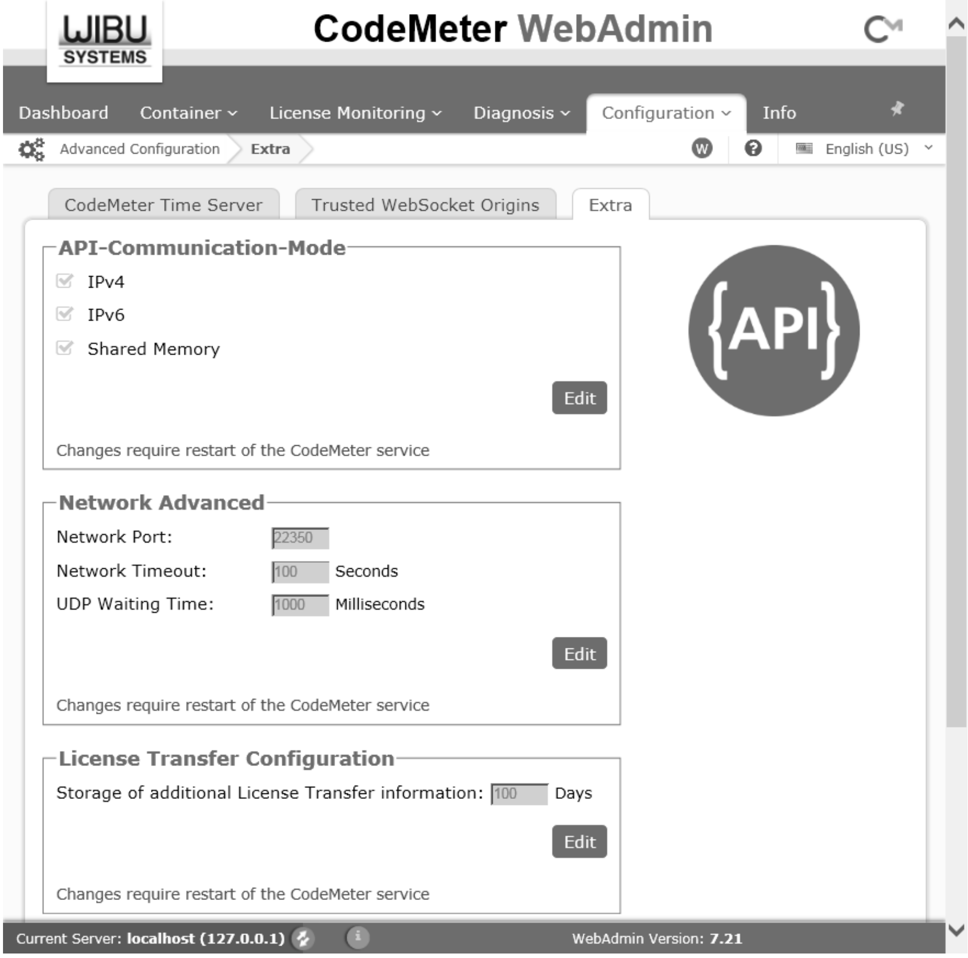
Fig. 5.16.

Add and **Delete** buttons allow to control the presence of addresses in the list. **Up** and **Down** buttons allow to control the order in which addresses are searched on the network. **Timeout:** field allows to set the timeout value for time servers.

The settings made on the tab take effect only after restarting the program. To restart CodeMeter, push **Apply** button. **Restore date** button allows you to reset the settings to their default values.

5.8.8. Advanced Configuration — Extra

Extra tab control elements (fig. 5.17) allow to set program additional parameters.



API-Communication-Mode

☑ IPv4

☑ IPv6

☑ Shared Memory

Changes require restart of the CodeMeter service

Network Advanced

Network Port: 22350

Network Timeout: 100 Seconds

UDP Waiting Time: 1000 Milliseconds

Changes require restart of the CodeMeter service

License Transfer Configuration

Storage of additional License Transfer information: 100 Days

Changes require restart of the CodeMeter service

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

Fig. 5.17.

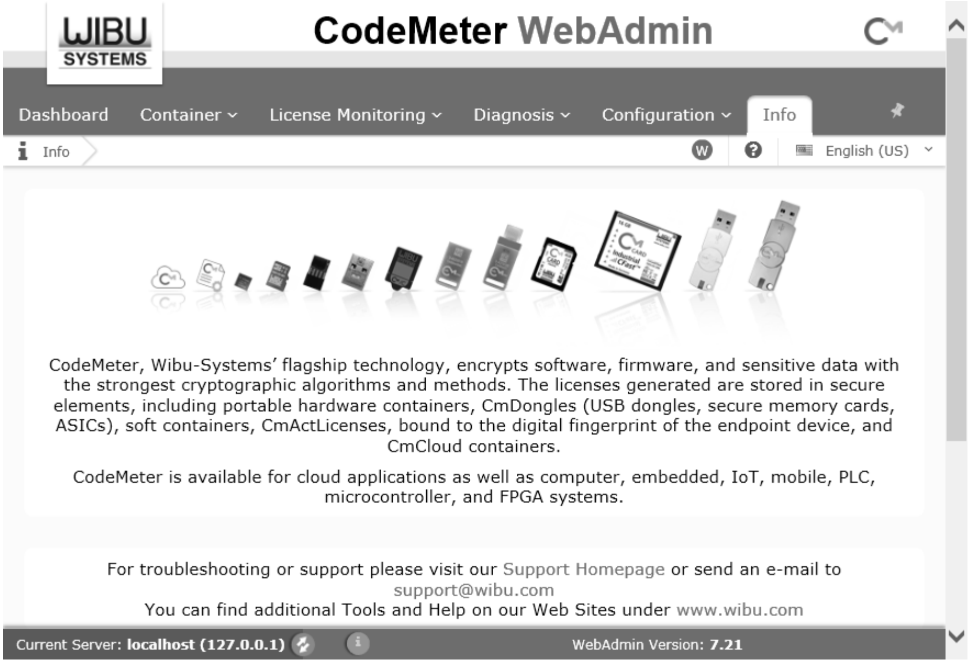
Options next to parameters names in **API Interaction mode** group allow to control the use of these parameters. To be able to change the options state, push **Change** button.

The completed settings take effect only after restarting the program. To restart CodeMeter, push **Apply** button. **Restore date** button allows to reset the settings to their default values. **Cancel** button allows to cancel the configuration results.

The input fields in **Network** (Advanced) group allow to configure network settings. By default, the program uses port 22350. **Network port** field displays and allows to change the port number if necessary. If a port other than the default is selected, its number must be specified for all network workplaces using CodeMeter. **UDP timeout** field allows to set the maximum value of the time interval during which a response to a request over the UDP protocol should be received. To be able to change the parameter values, push **Edit** button.

5.9. Information

The tab displays the contact information of the security software company WIBU Systems AG (fig.).



CodeMeter, Wibu-Systems' flagship technology, encrypts software, firmware, and sensitive data with the strongest cryptographic algorithms and methods. The licenses generated are stored in secure elements, including portable hardware containers, CmDongles (USB dongles, secure memory cards, ASICs), soft containers, CmActLicenses, bound to the digital fingerprint of the endpoint device, and CmCloud containers.

CodeMeter is available for cloud applications as well as computer, embedded, IoT, mobile, PLC, microcontroller, and FPGA systems.

For troubleshooting or support please visit our Support Homepage or send an e-mail to support@wibu.com
You can find additional Tools and Help on our Web Sites under www.wibu.com

Current Server: **localhost (127.0.0.1)**

WebAdmin Version: **7.21**

Fig. 5.18.