Description of plugin

The "APTO stream processing (Linear Acoustic)" plugin allows you to normalize output audio signal during real-time broadcasting ("on-the-fly") without preliminary processing.

Linear Acoustic company adaptive algorithms (APTO) are used.

The plugin works with products based on FDExt boards (FD322, FD422, FD722, FD842, FD788) or in solutions that do not use board but work with the FDExtSrvs service (for example, Forward TS IP).

The "APTO stream processing (Linear Acoustic)" plugin is a software option additional to the main software. The "APTO stream processing (Linear Acoustic)" plugin is purchased separately. The license is purchased for 1 stereo sound channel.

Important! The "APTO stream processing (Linear Acoustic)" plugin is an additional software option that is purchased separately.

All who want are provided with a temporary license for a period of 1 month to test work of the plugin if necessary. Please inform us about number of your FDExt series board (FD322, FD422, FD722, FD842, FD788). You may also tell the Support department HASP key number and you will be provided with a temporary license then. How to identify number of board or HASP-key study here.

Features of software license use

The "APTO stream processing (Linear Acoustic)" plugin uses a virtual key with software license. The license is linked to computer, i.e. it is computer dependent. The license must be used only on computer where request for temporary or permanent license is made and where virtual key is created.

The computer where the plugin is tested may differ from computer on which the plugin with permanent license will work.

It is possible to transfer license from one machine to another one in the following cases:

- physical malfunction of computer (for example, failure of system hard disk)
- upgrade of computer in order to improve its features (for example, processor performance)

Important! When contacting the Support (forward@softlab.tv) or the Sales (sales@softlab.tv) department concerning transfer of license from one PC to another one inform on serial number of license - see the " Information on licenses " section.

Restrictions

- The "APTO stream processing (Linear Acoustic)" plugin does not work with products based on the FD300 board.
- The plugin requires a 64-bit operating system. **List** of supported OS.
- The CodeMeter software of version not earlier than 6.20 (see the "Installing CodeMeter software" section) must be preinstalled.

General order

Receiving temporary license for testing

1. Install the CodeMeter software (see the "Installation of CodeMeter software" section).
2. Collect information for license request (see the " Creating license request" section).

Important! Computer dependent license is used. So, license request must be created on computer where plugin will be tested or work under a permanent license.

3. Send a file with information (with the WibuCmRac extension) either to the Sales (sales@softlab.tv) or to the Support department (forward@softlab.tv).
4. Get a file with temporary license (with the WibuCmRaU extension) from either the Sales or the Support department.
5. Apply file with temporary license (see the "License applying" section).
6. Check information on licenses (see the " Checking information about licenses " section).
7. Install software for "APTO stream processing (Linear Acoustic)" plugin (see the "Installation of software for the "APTO stream processing (Linear Acoustic) plugin" section).
8. Configure plugin (see the " Configuration of the "APTO stream processing (Linear Acoustic) plugin" section).
9. Reboot PC.

Applying permanent license after purchasing the plugin

Important! It is supposed that CodeMeter software and software for the "APTO stream processing (Linear Acoustic)" plugin are installed. If not than examine corresponding sections of the document.

1. Collect information for license request (see the "Creating license request" section).

Important! Computer dependent license is used. So, license request must be created on computer where plugin will be tested or work under a permanent license.

2. Send a file with information (with the WibuCmRac extension) either to the Sales (sales@softlab.tv) or to the Support department (forward@softlab.tv).
3. Get a file with permanent license (with the WibuCmRaU extension).
4. Apply file with permanent license (see the "License applying" section).
5. Check information on licenses (see the " Checking information about licenses " section).
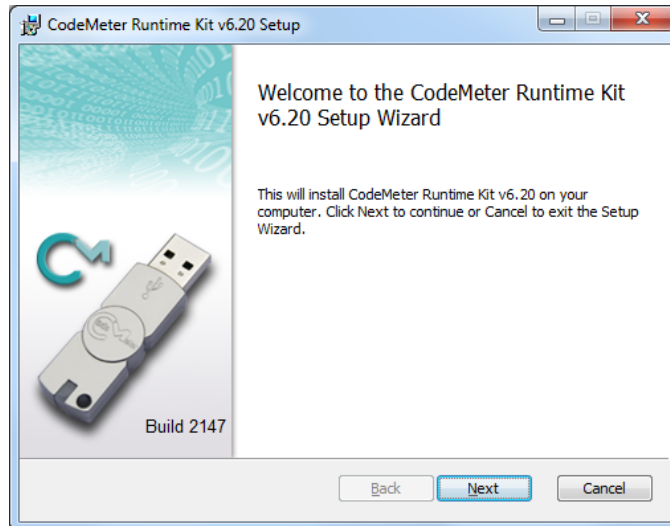
6. Reboot PC.

Installation of CodeMeter software

1. Preinstal the CodeMeter software of version not earlier than 6.20 for "APTO stream processing (Linear Acoustic)" plugin.
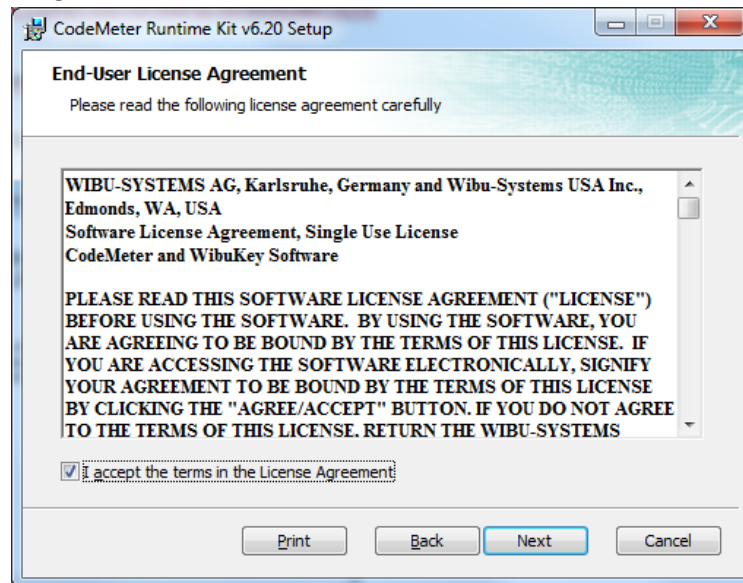
    You can download CodeMeter software from the developer's site:
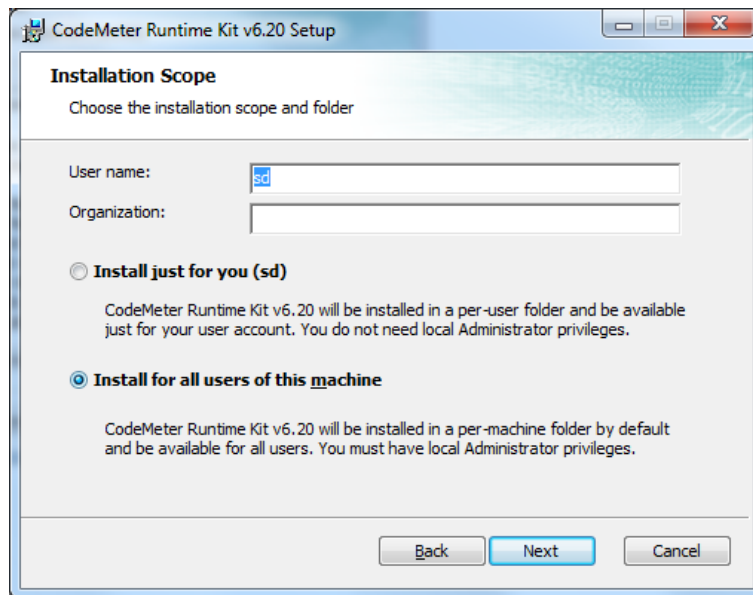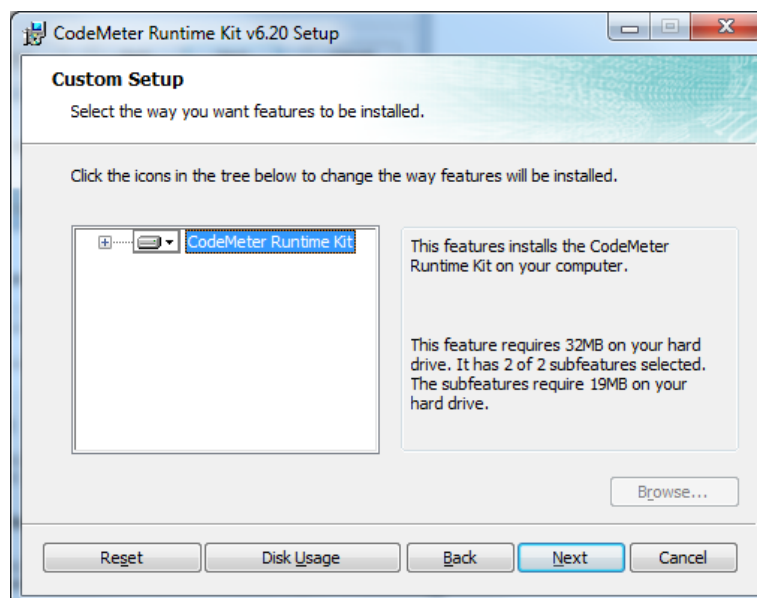   https://www.wibu.com/us/support/user/downloads-user-software.html
2. Run CodeMeter software installer.

3. Accept an end-user license agreement.
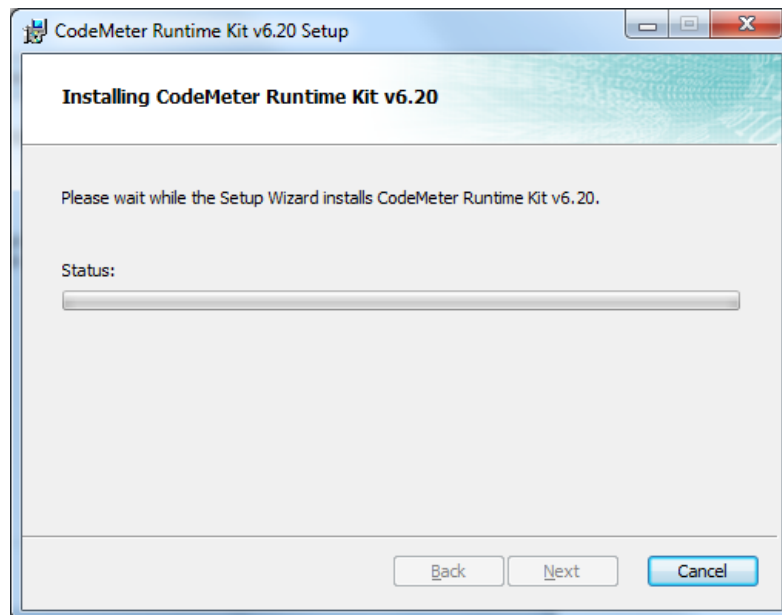

4. Choose installation scope of CodeMeter software.

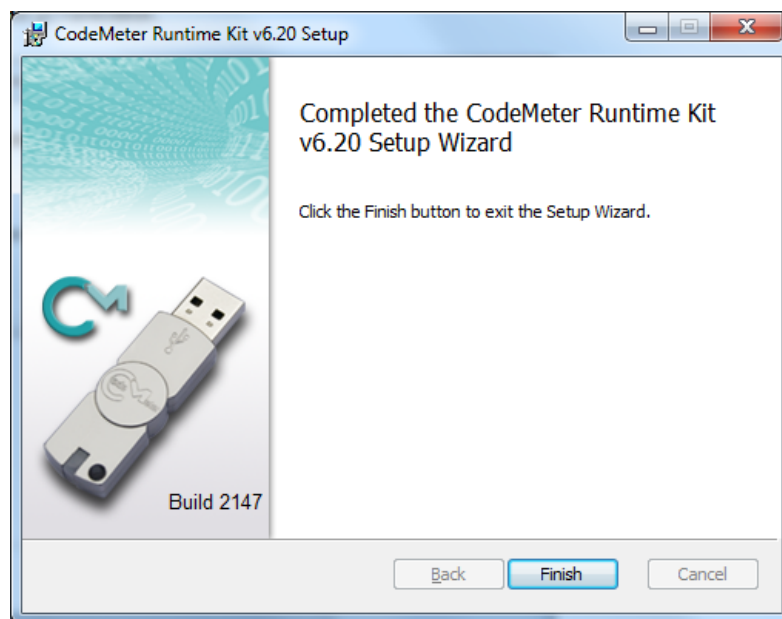5. Select directory where CodeMeter software is installed.

6. Start installation of CodeMeter software.
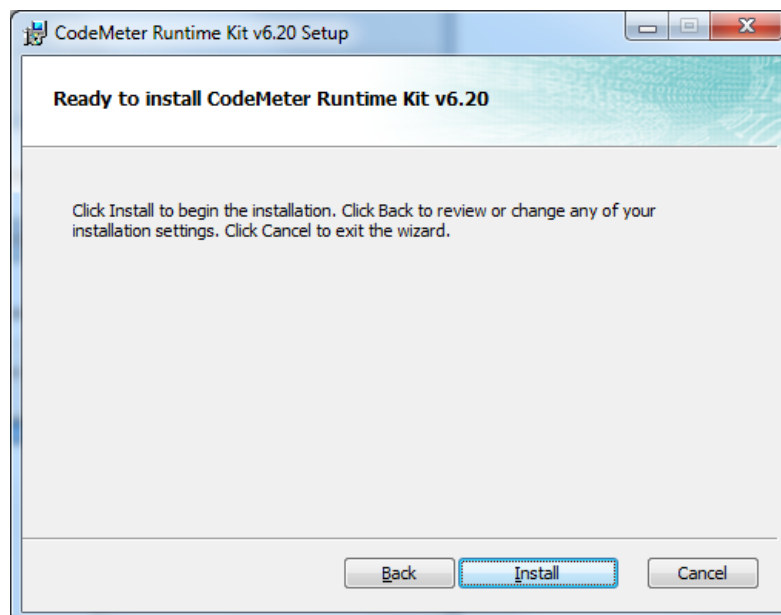
7. Wait finish of installation.

8. Exit the Setup Wizard.

9. The CodeMeter software icon in the notification area (system tray) appears.
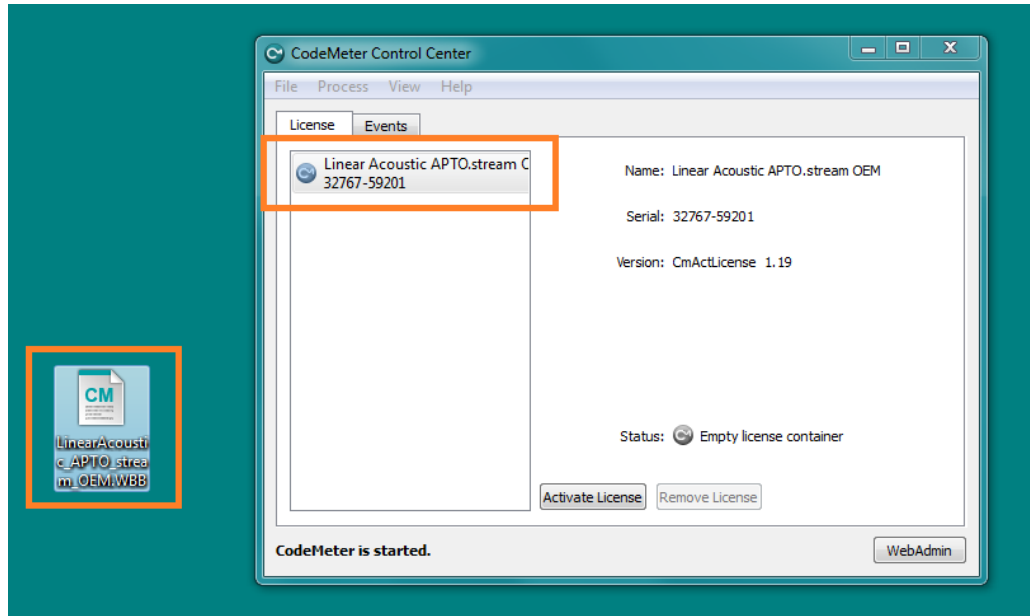

Creating license request

Creating license request is necessary for getting a temporary license for testing or permanent after plugin purchasing.

Important! Computer dependent license is used. So, license request must be created on computer where plugin will be tested or work under a permanent license.

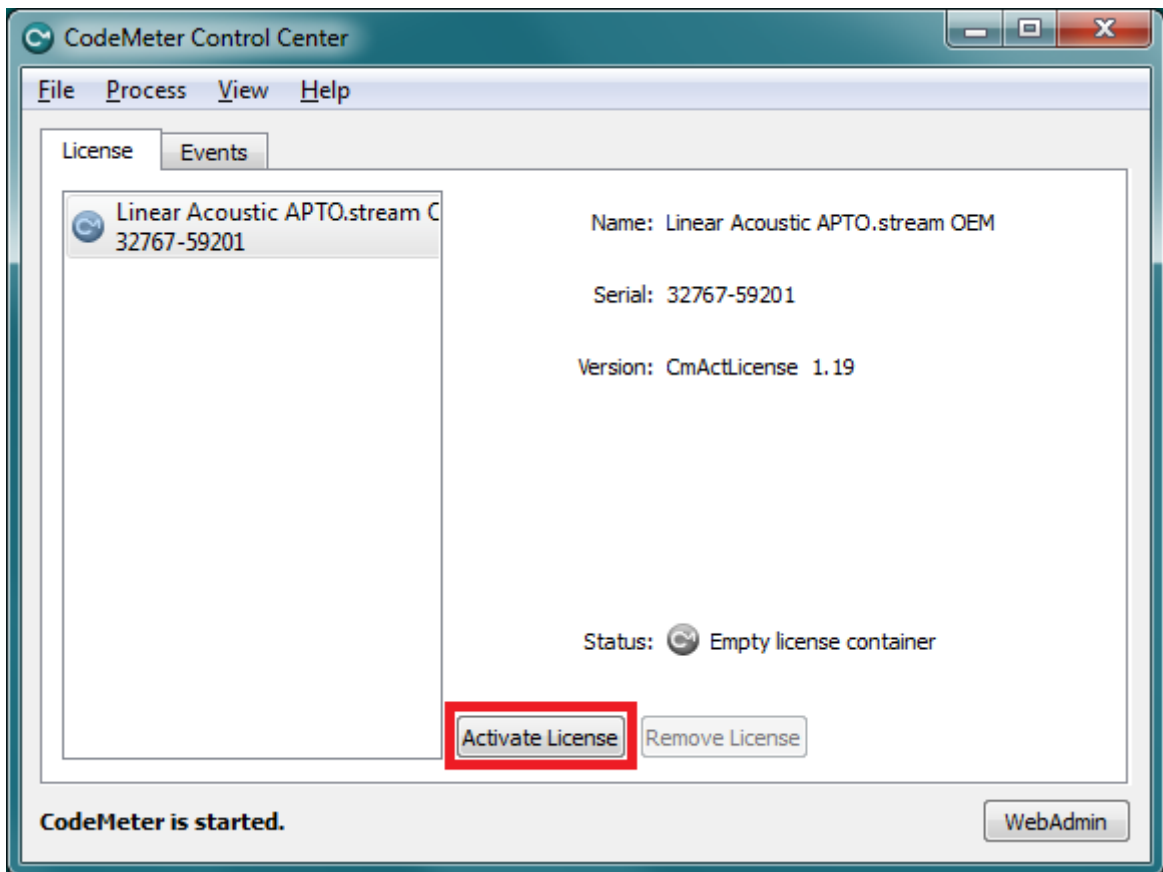1. Right-click CodeMeter software icon in notification area (system tray).
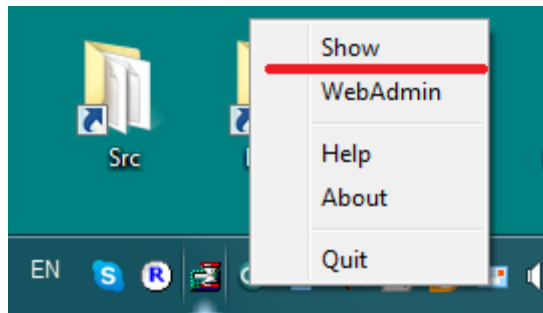
2. Select "Show" in the opened menu. Run the CodeMeter Control Center application.

3. Drag and drop the specific **LinearAcoustic_APTO_stream_OEM.WBB** file into the program window to the "License" tab. You may download this file **here**.
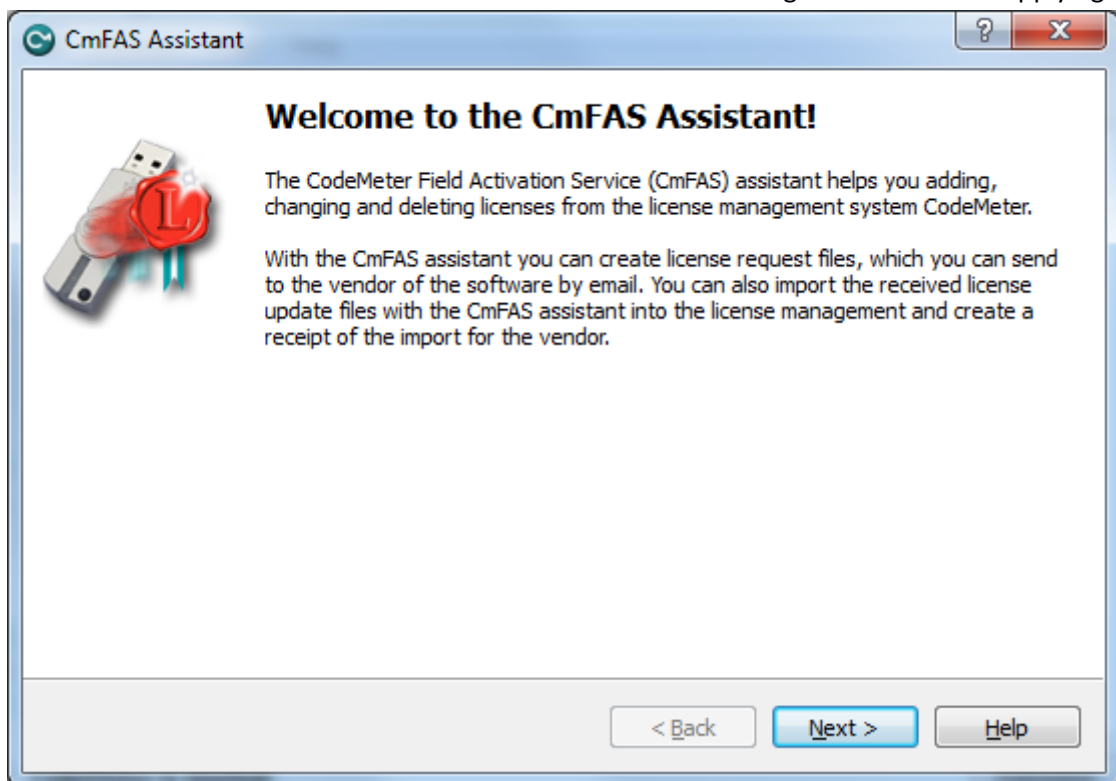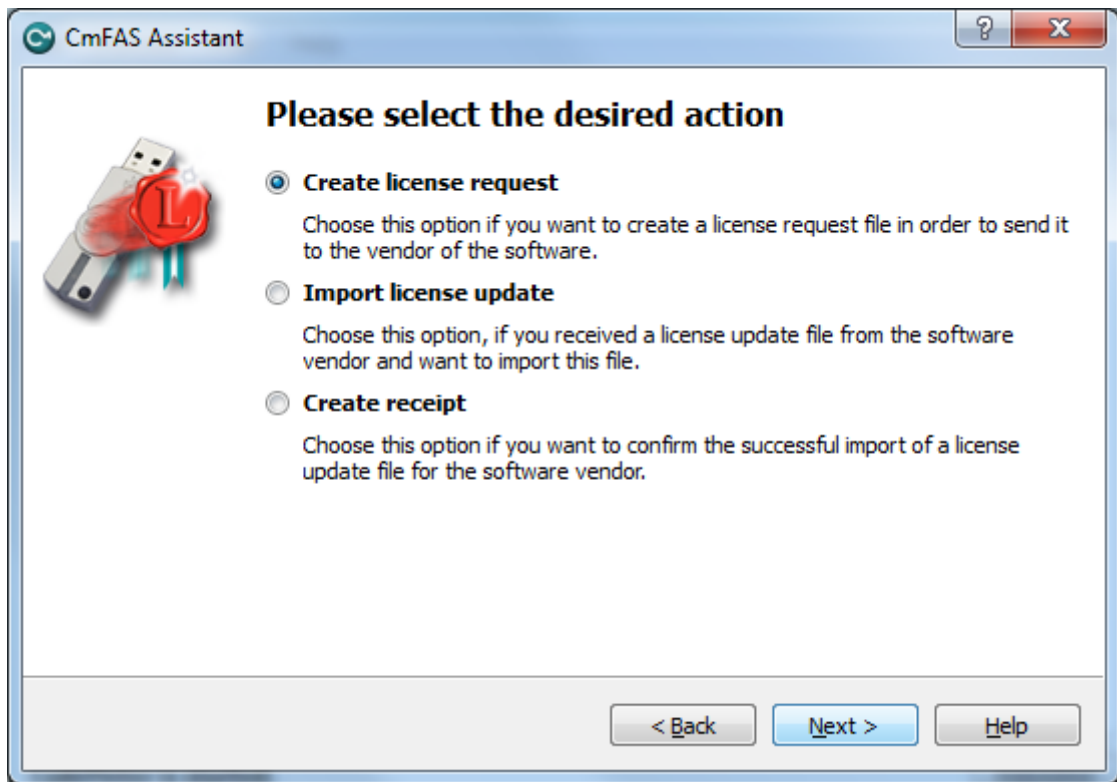

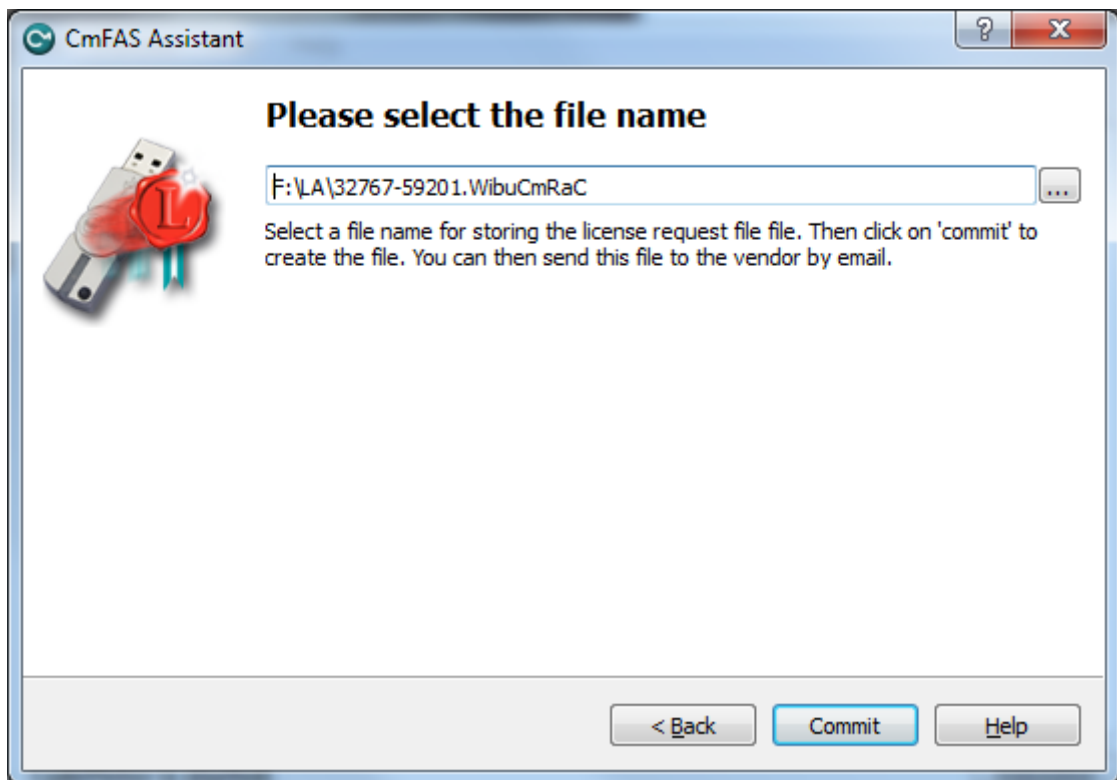Temporary virtual key is created.

4. Click "Activate License".

5. The CodeMeter Field Activation Service assistant runs. It assists in collecting information and applying licenses.

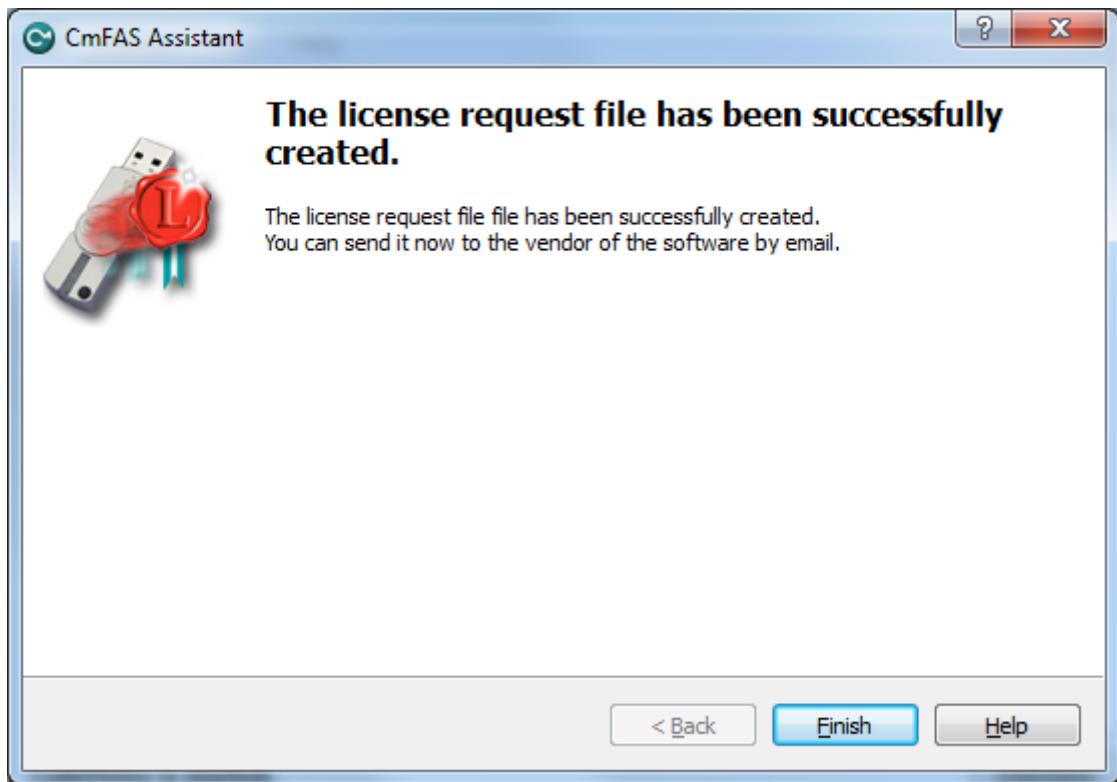6. Click "Next". Then select "Create license request".

7. Select path to file where information is saved. Then click "Commit"

8. Click "Finish". Close Assistant and the CodeMeter Control Center program.

9. Send license request file (with the WibuCmRac extension) to the Support (forward@softlab.tv) or the Sales department (sales@softlab.tv).

Installation of "APTO stream processing (Linear Acoustic)" plugin software

Run plugin **installer**. Select "APTO stream processing (Linear Acoustic)" on the "Select Components" page.

Important! The "APTO stream processing (Linear Acoustic)" item can be absent in the list with plugins if:

- **OS different from 64-bit is used**
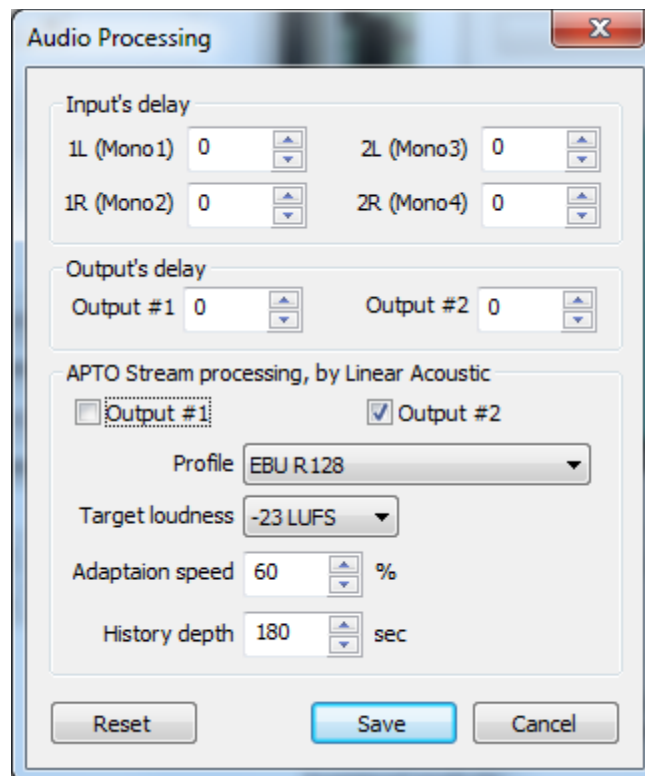- **CodeMeter software is not installed or its version below 6.20 is installed**
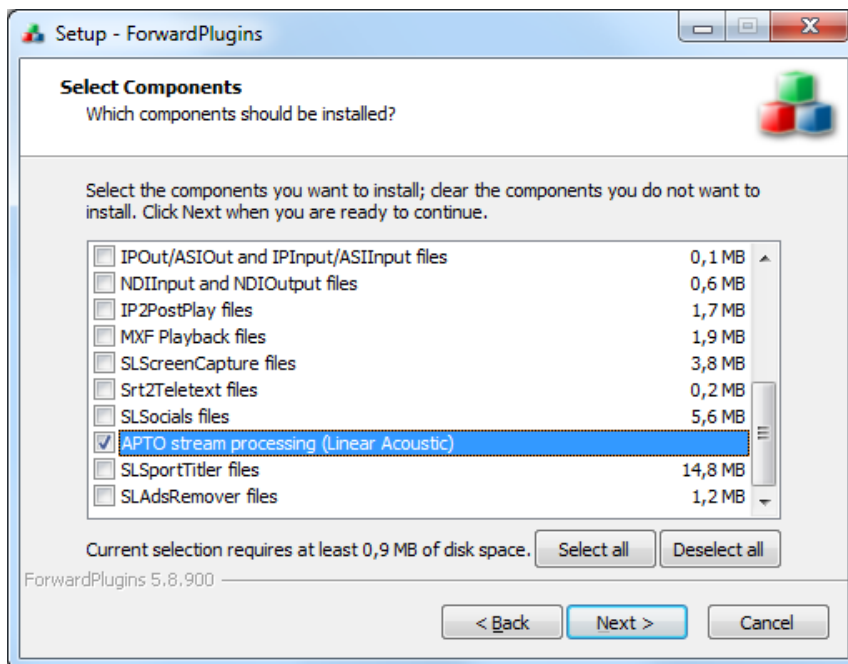
Next procedure of plugin installation is as usual.

Configuration of "APTO stream processing (Linear Acoustic)" plugin

Run the FDConfig2 program when plugin is installed.

Click "Audio processing…".

Select for which of output channels the plugin should be used in the "Audio Processing" opened dialog window in the "APTO Stream processing, by Linear Acoustic" group.

You may select necessary profile from the "Profile" list.

Settings:

- "Target loudness" denotes target value of level (in LUFS) for selected profile;
- "Adaptation speed"denotes speed of response to changes in sound level; the higher, the adjustment to target level is faster but with reasonably high sound distortion;
- "History depth" denotes time interval when analysis of sound parameters is executed.

Click "Save" to exit the FDConfig2 program.

Applying of licenses

1. Licenses (both temporary and permanent) are in the file with the WibuCmRaU extension.

Important! Computer dependent license is used. So, license request must be created on computer where plugin will be tested or work under a permanent license.
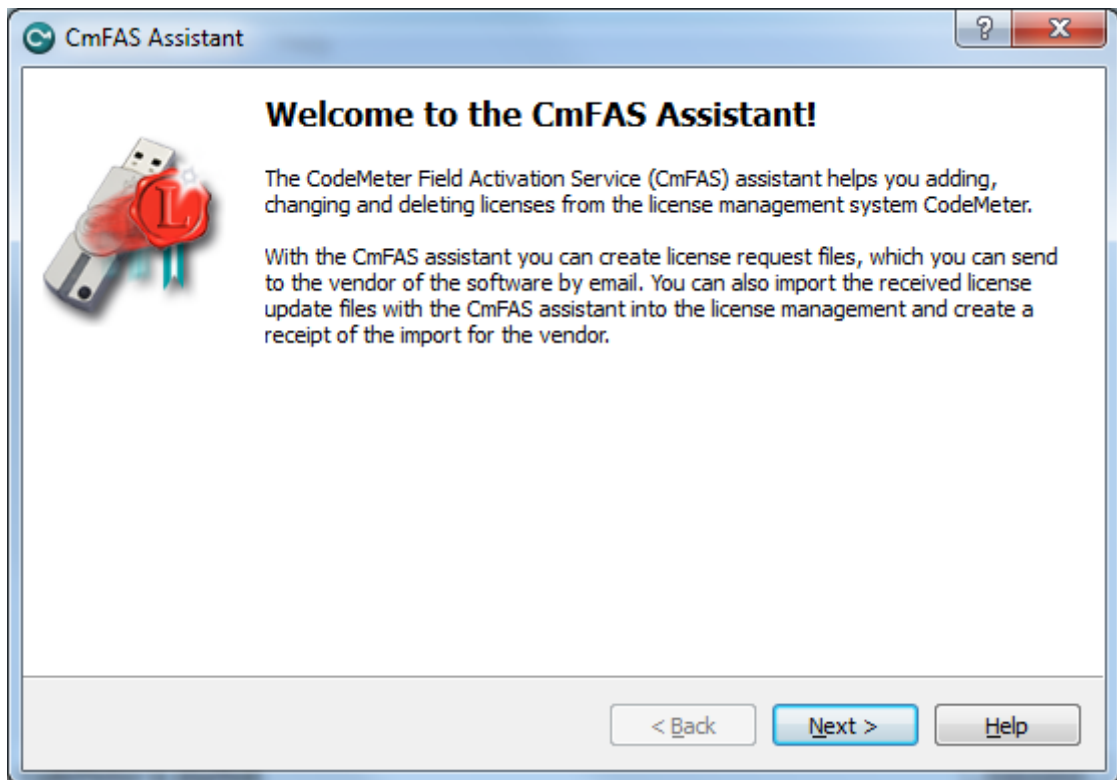
2. Right-click CodeMeter software icon in notification area (system tray) to apply licenses.
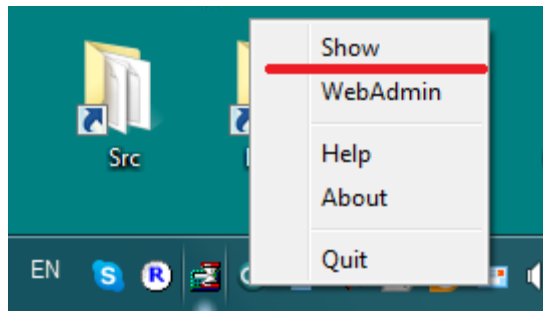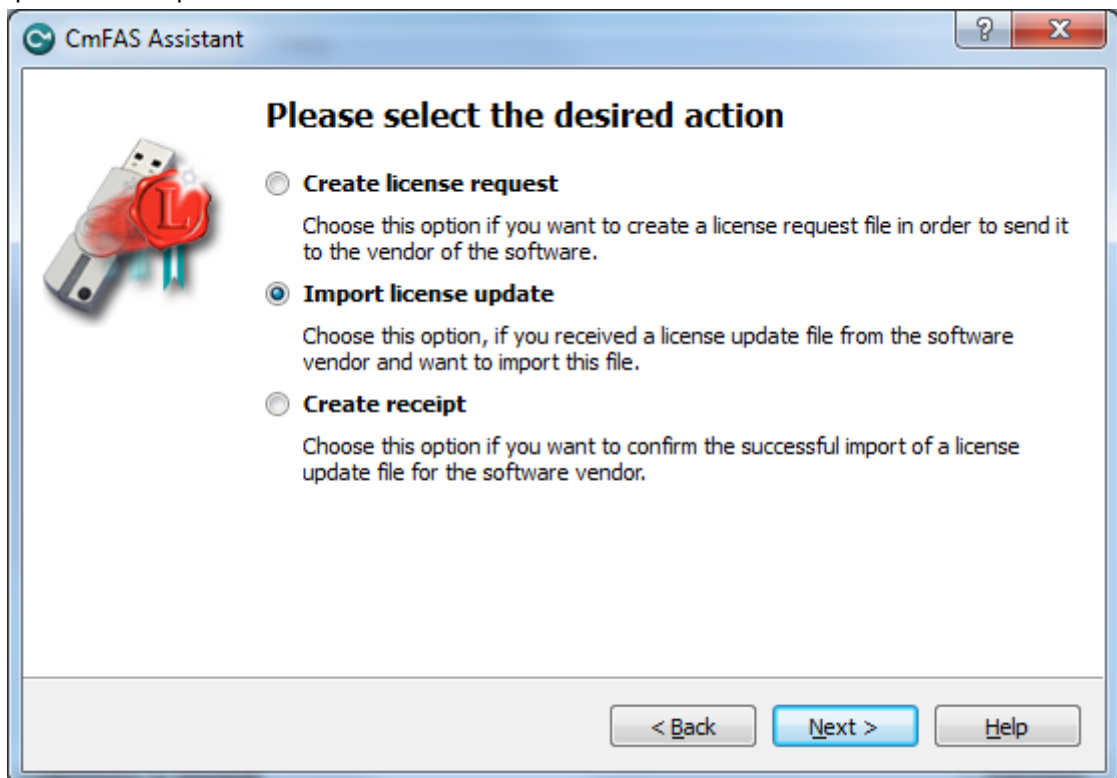

3. Select "Show" in the appeared menu. Run the CodeMeter Control Center application. Then click "License Update".
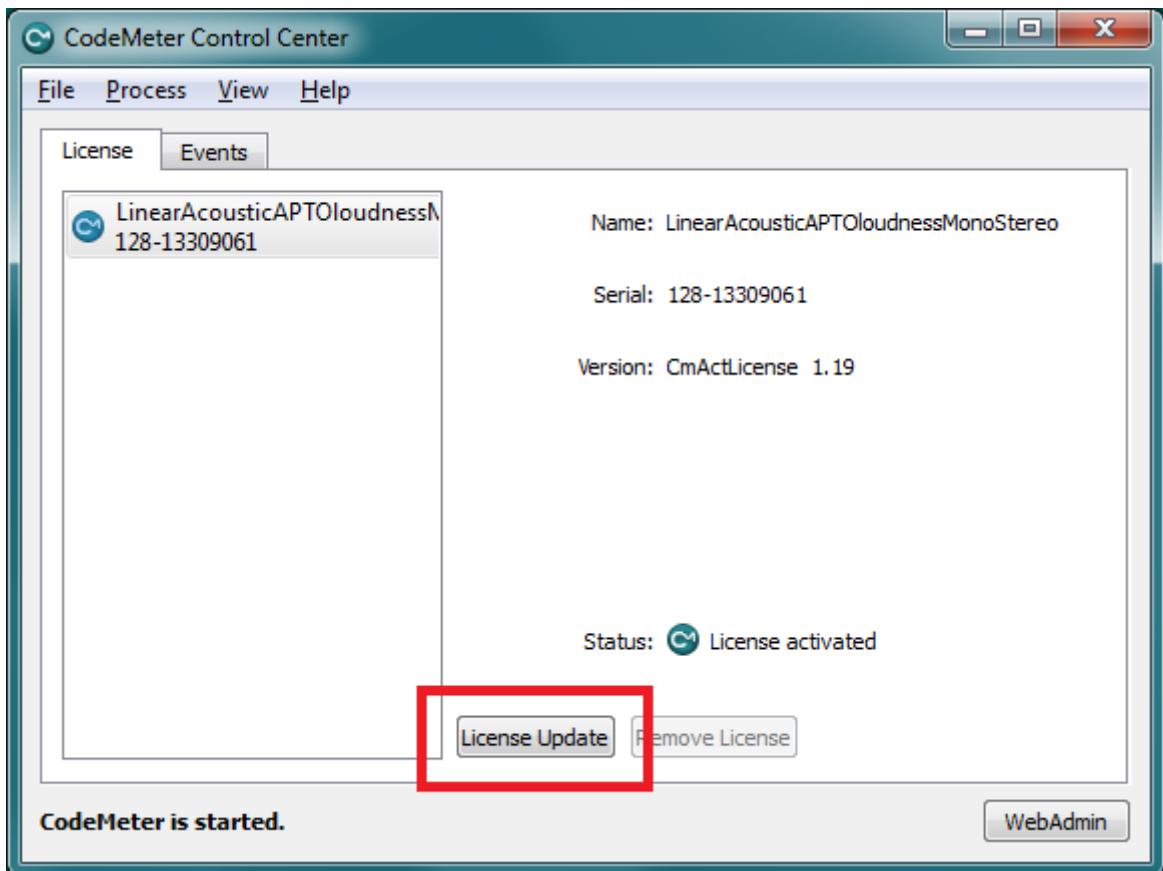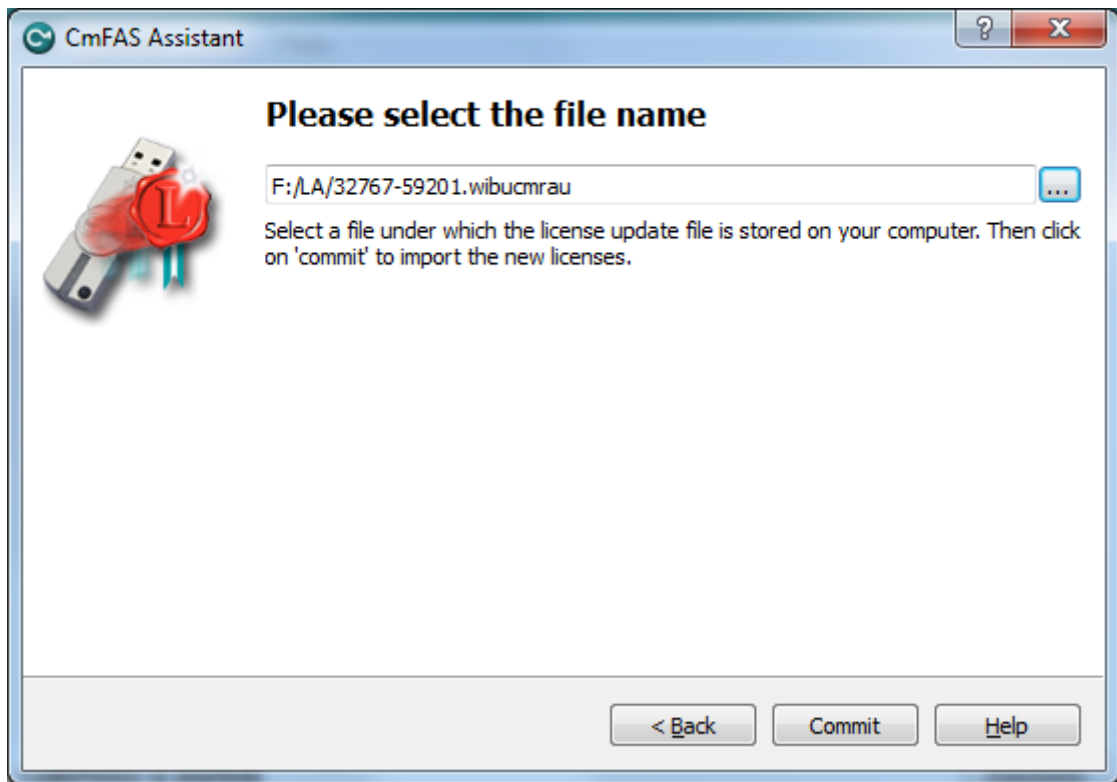

4. CmFAS Assistant for collecting information and applying licenses is run.

5. Select "Import license update".

6. Select file with licenses. Click "Commit".

7. Message about successful applying of registrations appears. Close the Assistant.
8. Exit the CodeMeter Control Center program. Check newly applied licenses — see the "Checking information about licenses" section.

Checking information about licenses

Right-click CodeMeter software icon in notification area (system tray).
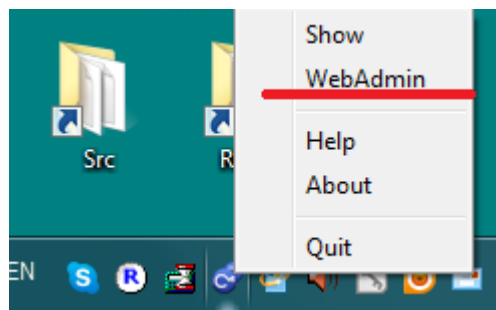
Select WebAdmin item in the appeared window. Corresponding page in the browser opens. Click link with 1070 code product on the "Container" tab.

You can see information about license index, time of validity and quantity on opened page.

CodeMeter WebAdmin

Dashboard | Container ⌄ | License Monitoring ⌄ | Diagnosis ⌄ | Configuration ⌄ | Info

All Container > LinearAcousticAPTOloudnessMonoStereo (128-13309087) > Firm Code 5000124 > Product Code 1070

Product Item Details

Product Item 5000124:1070 of CmContainer "LinearAcousticAPTOloudnessMonoStereo" (128-13309087)

Product Item Option	Type	Size (Bytes)	Dependencies	Value
Text		36		LinearAcousticAPTOloudnessMonoStereo
Expiration Time		4	data, serial, counter	2018-05-01 06:00:00
License Information		9	data, serial, counter	APT234567
Secret Data	136	32	data, serial, counter	<secret>

Important! When contacting the Support (forward@softlab.tv) or the Sales (sales@softlab.tv) department concerning transfer of license from one PC to another one inform on serial number of license (s/n is circled in red). We recommend you to keep this index serial number not on the machine on which it is applied.