Instruction manual

Bronkhorst® Software Dongle

ATTENTION
Please read this instruction manual carefully before installing and operating the instrument.
Not following the guidelines could result in personal injury and/or damage to the equipment.

Bronkhorst®

Disclaimer

The information in this manual has been reviewed and is believed to be wholly reliable. No responsibility, however, is assumed for inaccuracies. The material in this manual is for information purposes only, and is subject to change without notice.

Symbols

Important information. Discarding this information could cause injuries to people or damage to the Instrument or installation.

Helpful information. This information will facilitate the use of this instrument.

Additional info available on the internet or from your local sales representative.

Table of contents

1   GENERAL PRODUCT INFORMATION

1.1   INTRODUCTION

Some advanced features of Bronkhorst® software are protected against copying and reverse engineering. These features can only be accessed when using a Software Dongle obtained from Bronkhorst®. The Bronkhorst® Software Dongle is a CodeMeter Stick developed by Wibu-Systems.

An example of such a feature is FLUIDAT®. The FLUIDAT routines calculate physical properties of gases and liquids. These properties can be used in e.g. FLUICAL® calibration software to calculate accurate conversion factors.

This manual describes how to install the Bronkhorst® Software Dongle. It has been written based on the CodeMeter Runtime Kit V4.30d, but should be suited for former (and future) versions as well, although functionality may differ from what is described.

1.2   SYSTEM REQUIREMENTS

Processor	x86 or x64 700 MHz or higher
Memory (RAM)	64 MB
Hard disk	40 MB available disk space
Display	800 x 600 or higher resolution, 256 colors or more
Connections	USB port
Operating system	Windows XP SP3, Vista (x86 or x64) or 7 (x86 or x64)

1.3   INSTALLATION

1.3.1   CodeMeter Runtime Kit

The CodeMeter Runtime Kit is available on e.g. the FLUICAL CD-ROM, part number 9.11.051 - FLUICAL software on CD with license, but can also be downloaded at http://www.wibu.com.

Follow on-screen instructions when installing the CodeMeter Runtime Kit.

1.3.2   FLUIDAT

FLUIDAT is only available on the FLUICAL CD-ROM, part number 9.11.051 - FLUICAL software on CD with license. Installation is required to calculate physical properties in FLUICAL.

Follow on-screen instructions when installing FLUIDAT.

2 OPERATION

2.1 USING THE BRONKHORST® SOFTWARE DONGLE

After the installation, the CodeMeter Runtime Kit runs as a Windows service. When the Bronkhorst® Software Dongle (a Wibu-Systems CodeMeter Stick or CmStick) is inserted into a USB port, the runtime will automatically detect it and any application that requires a license on the Bronkhorst® Software Dongle will run without user interaction.

The CodeMeter service can be controlled by the CodeMeter Control Center, which can be started by **Start >> (All) Programs >> CodeMeter >> CodeMeter Control Center**. Once the Control Center has been started, the main window will appear.
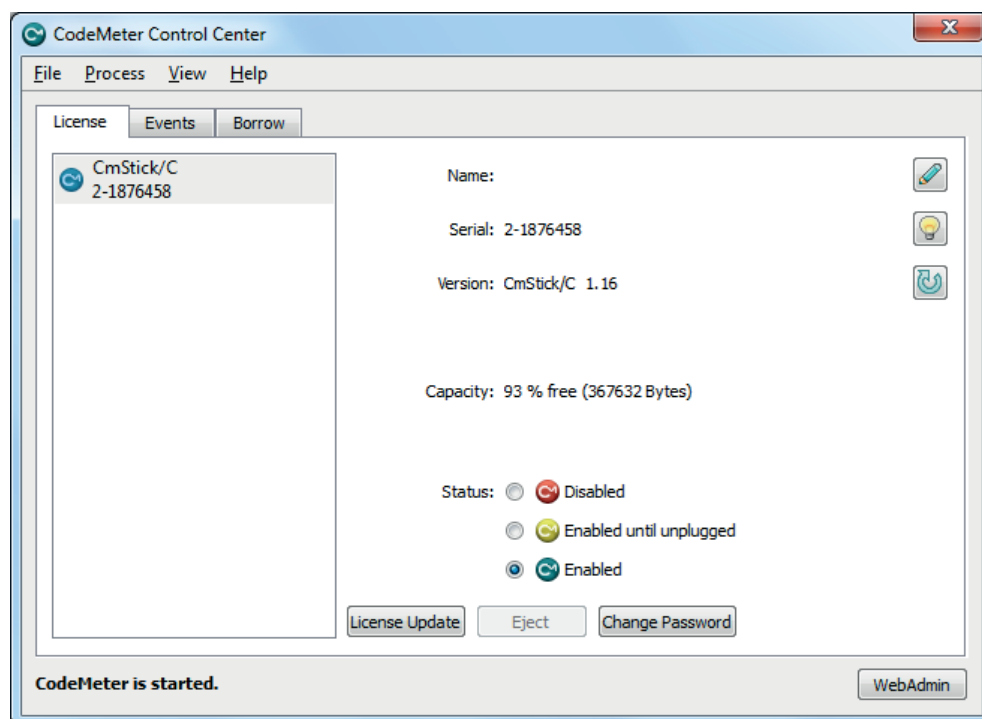
Only the main features of the CodeMeter Control Center are important for normal use and only those are described here. For information of other features, the CodeMeter Control Center Help may be used.

### 2.1.1 Presence of the Bronkhorst® Software Dongle

At startup, the License tab is active and shows all connected Bronkhorst® Software Dongles. Usually only one Bronkhorst® Software Dongle is present. In case the Bronkhorst® Software Dongle is shown here, it is correctly detected by the CodeMeter Runtime. If no License is shown here, check if the Bronkhorst® Software Dongle is at the USB port of the PC.

> *The CodeMeter Runtime Kit supports using licenses on the local network so no local Bronkhorst® Software Dongle is required. This feature however, is beyond the scope of this manual.*

2.1.2 Stopping and starting the CodeMeter Service

Before Bronkhorst® software can use the licenses on the Bronkhorst® Software Dongle, the CodeMeter Service needs to be started. By default, the service starts automatically with Windows, but it may be stopped and started manually. To be sure the service is running, open the **Process** menu and see if **Start CodeMeter Service** is grayed out. The service may be stopped by **Process >> Stop CodeMeter Service**, whereas it may be started by **Start CodeMeter Service**.
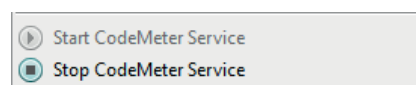
3 LICENSES

Each Bronkhorst® Software Dongle may contain one or more licenses. For the protected software to function, a valid license is required.

3.1 VIEW LICENSES

The license(s) on the connected Bronkhorst® Software Dongle can be viewed using the CodeMeter WebAdmin. It can be opened by pressing the **WebAdmin** button of the CodeMeter Control Center. The WebAdmin is shown in the web browser.
At the **Content >> Licenses** tab, the licenses are shown. At **100514 Bronkhorst High-Tech**, the **Expiration Time** of each licence is shown.


In this case the FLUIDAT license expires on March 3rd 2013, after which the protected Bronkhorst® FLUIDAT software can no longer be used. Obtain an extended licence before this date.

> *Two weeks before the license expires, the Bronkhorst® software warns the user that the license will expire.*

3.2 EXTEND A LICENSE

To avoid expiration or to reactivate after expiration, it is possible to extend a license. For this, the user must create a license request file (LR) by the CodeMeter Control Center and send it to the licensor, Bronkhorst®. After the license request is accepted and processed, Bronkhorst will return a remote update file (RU). The user needs to import this file in the CodeMeter Control Center to update the license on the Bronkhorst® Software Dongle.
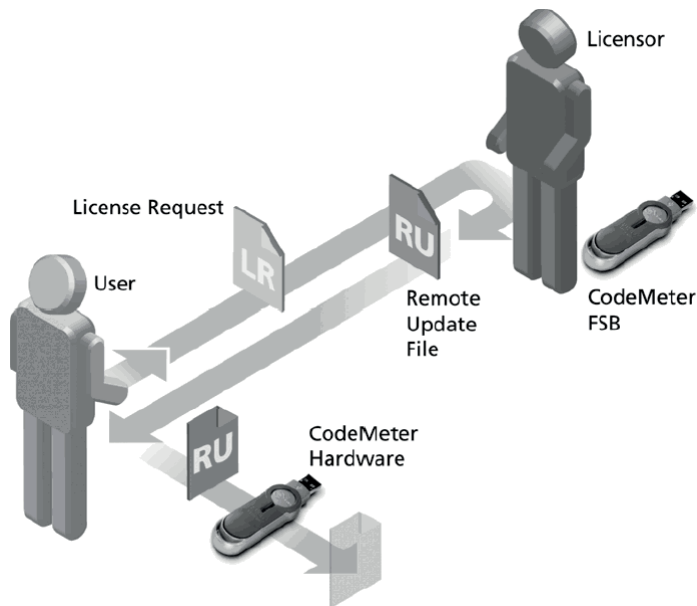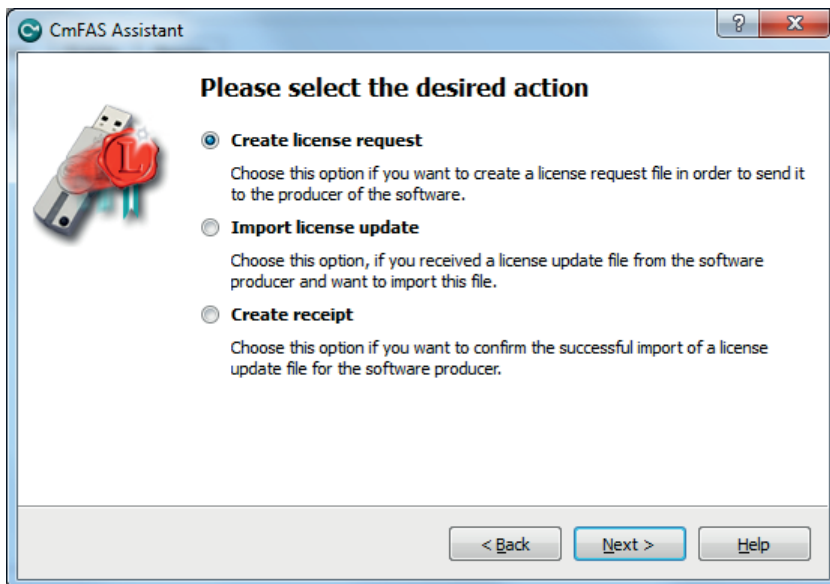
3.2.1   Create a license request file

Start the CodeMeter Control Center by **Start >> (All) Programs >> CodeMeter >> CodeMeter Control Center**.
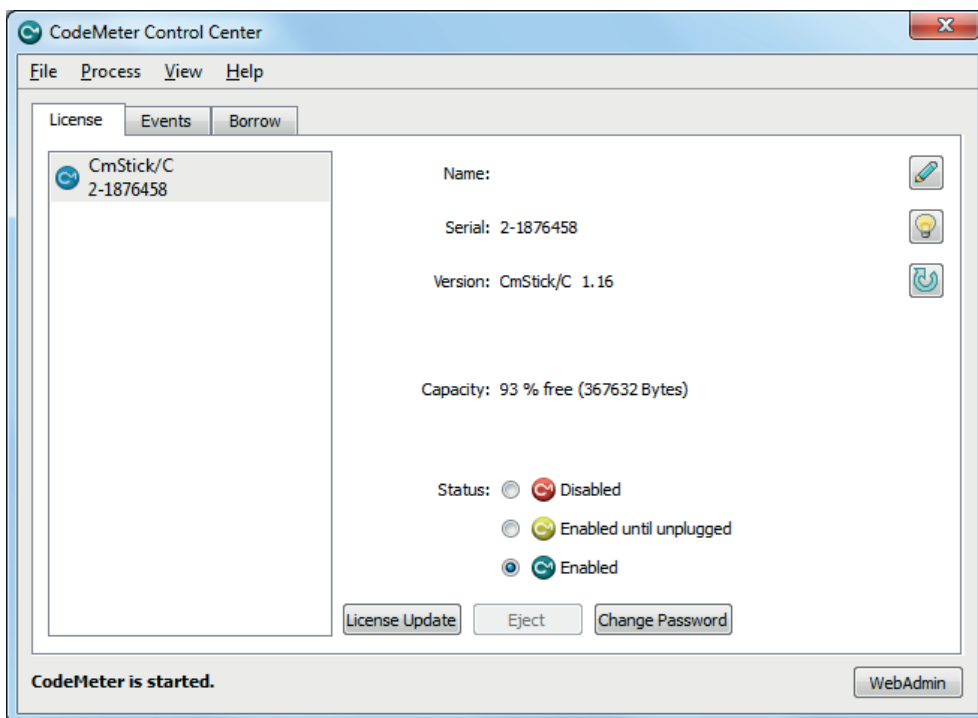
At the License tab, select the correct Bronkhorst® Software Dongle and press **License Update** to start the CodeMeter Field Activation Service Assistant. After the first page is been left by **Next >**, on the second page select **Create license request** and press **Next >**.

Then choose **Extend existing license** and press **Next >** again.
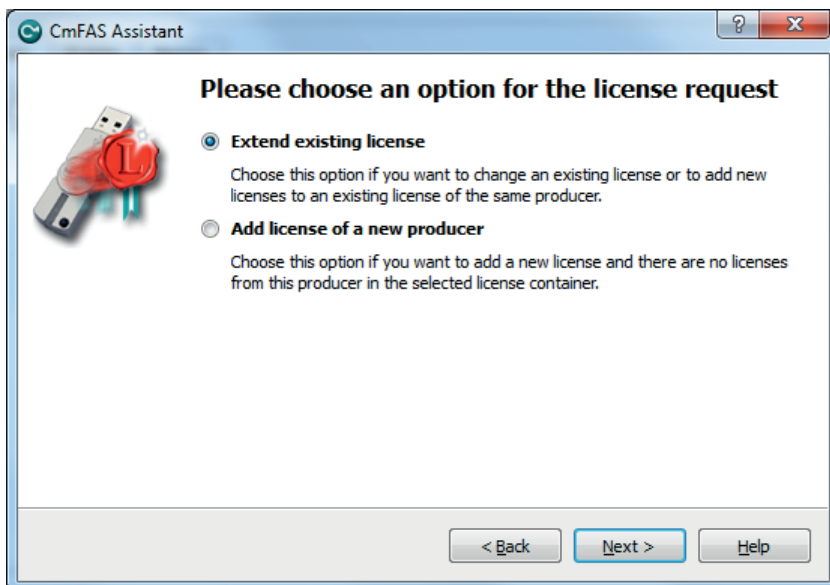
Make sure the **Bronkhorst High-Tech B.V. (100514)** producer is selected before pressing **Next >**.
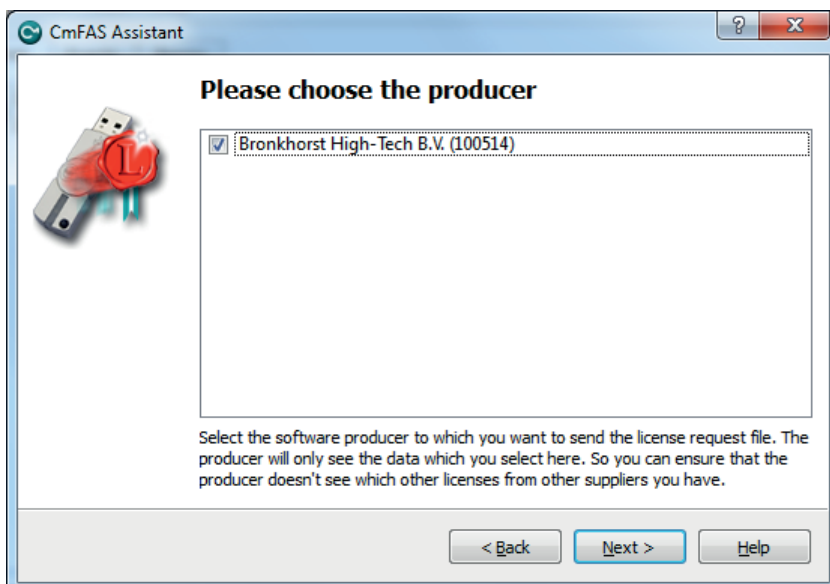
Finally select the location to store the license request file. Make sure to remember this location as the license request file needs to be send to Bronkhorst®. On **Commit**, the file will be created and the final page is shown that the license file has been successfully created.

Now, send the created file with the extension **.WibuCmRaC** by e-mail to support@bronkhorst.com.

3.2.2 *Import a remote update file*

In case the license request is accepted and processed, you will receive the remote update file (with extension **.WibuCmRaU**) from Bronkhorst® by e-mail.

Start the CodeMeter Control Center by **Start >> (All) Programs >> CodeMeter >> CodeMeter Control Center**.

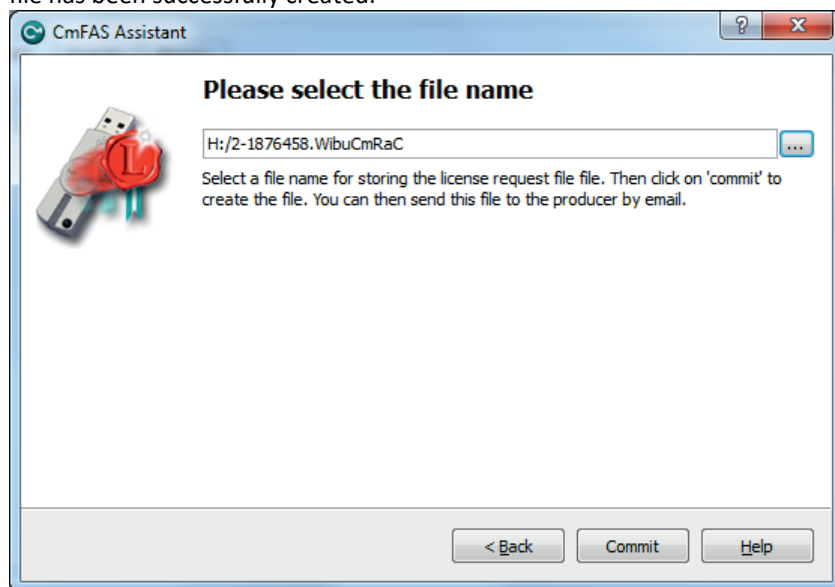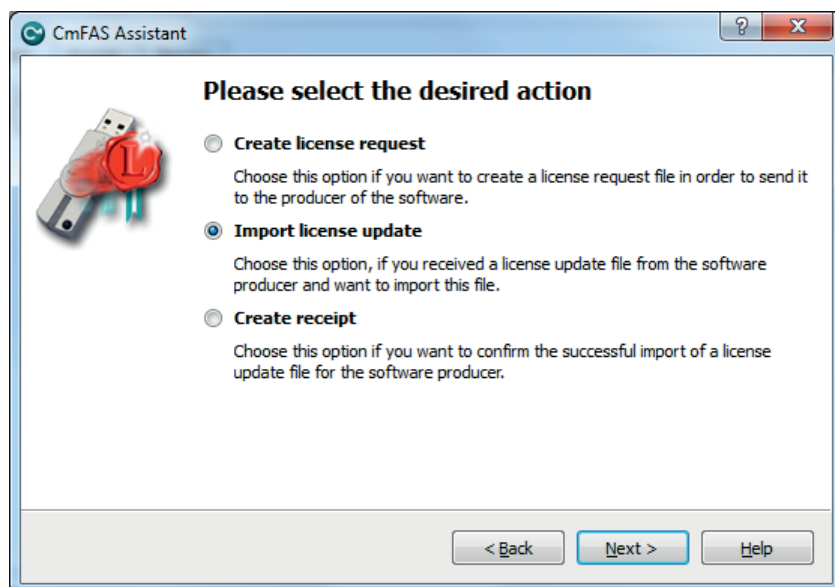Select the correct Bronkhorst® Software Dongle and start the CmFAS Assistant by pressing **License Update**.
At the second page, select **Import license update** as the desired action and press **Next >**.

Select the location of the remote update file with the extension **.WibuCmRaU** and press **Commit** to start the update process.
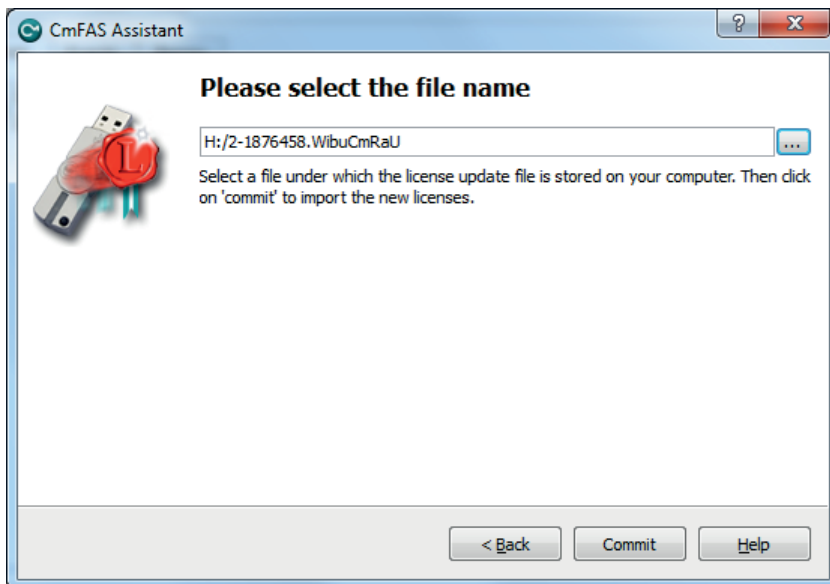
After a few seconds, the message appears that the license update has been successfully imported and it will be visible in the WebAdmin.
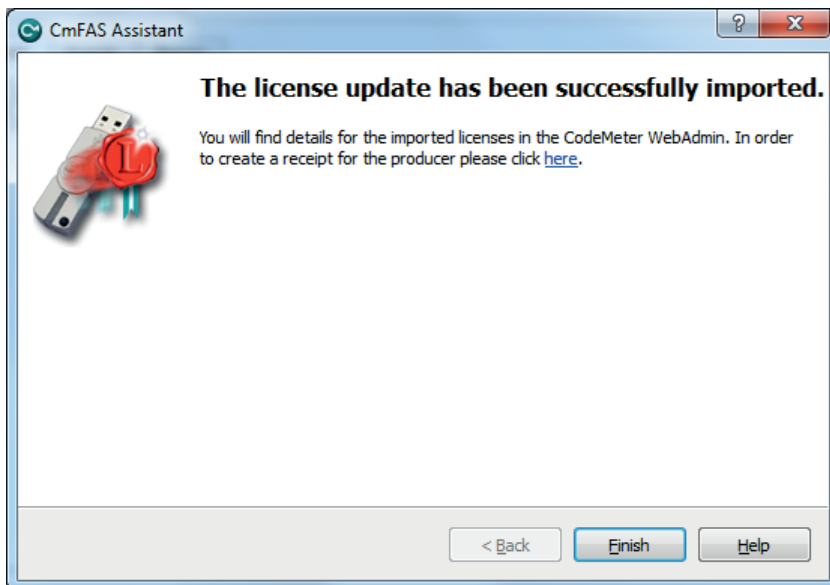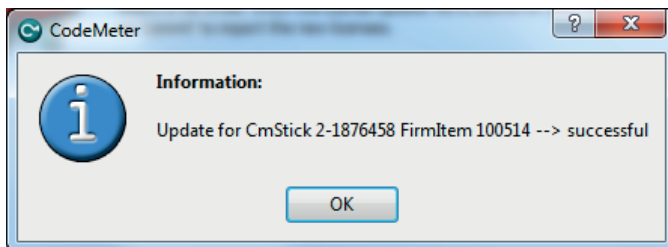
4 CODEMETER TECHNICAL DETAILS

In the following diagram, the communication from a Bronkhorst® application to the Bronkhorst® Software Dongle is schematically drawn.

```
┌─────────────────────────────────────────────────────────┐
│          Bronkhorst® application, e.g. FLUICAL           │
└─────────────────────────────────────────────────────────┘
                            ↕
                 calls to protected component
┌─────────────────────────────────────────────────────────┐
│           Protected component, e.g. FLUIDAT              │
└─────────────────────────────────────────────────────────┘
                            ↕
                  calls to CodeMeter Service
┌─────────────────────────────────────────────────────────┐
│                   CodeMeter Service                      │
└─────────────────────────────────────────────────────────┘
                            ↕
                 encrypted USB communication
┌─────────────────────────────────────────────────────────┐
│                  CodeMeter USB Stick                     │
└─────────────────────────────────────────────────────────┘
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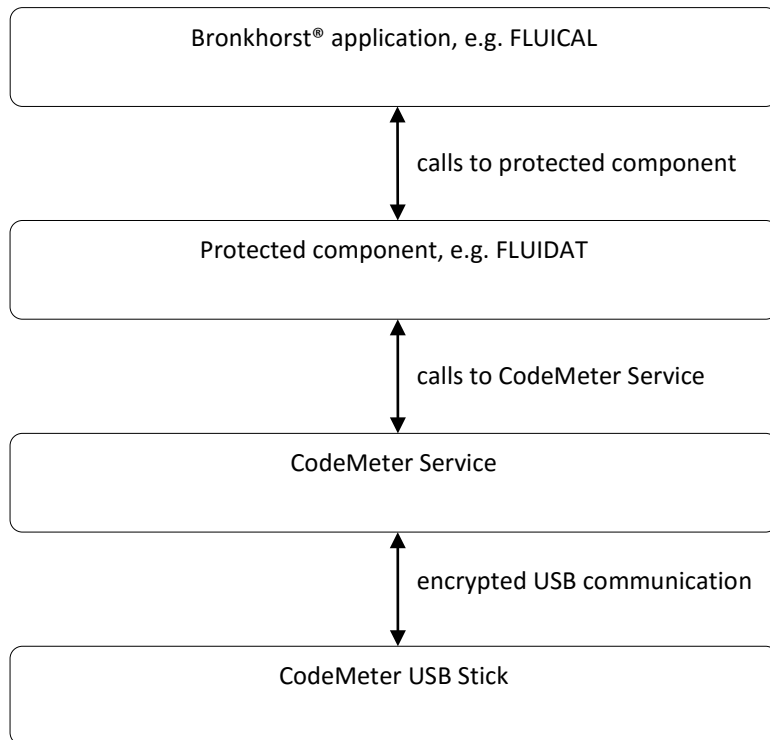
A Bronkhorst® application makes a call to function in a protected component. At the first communication, the protected component checks if a valid license is available by making a call to the CodeMeter Service. When the required license is available, the protected component decrypts the required part of the component and executes the function. The CodeMeter Service periodically communicates to the CodeMeter USB Stick to ensure the Bronkhorst® Software Dongle is present and the license is still valid.

5 SERVICE

For current information on Bronkhorst® and service addresses please visit our website:

http://www.bronkhorst.com

Do you have any questions about our products? Our Sales Department will gladly assist you selecting the right product for your application. Contact sales by e-mail:

sales@bronkhorst.com

For after-sales questions, our Customer Service Department is available with help and guidance. To contact CSD by e-mail:

support@bronkhorst.com

No matter the time zone, our experts within the Support Group are available to answer your request immediately or ensure appropriate further action. Our experts can be reached at:

+31 859 02 18 66