

Network License Server

● Administration Guide

Purpose

This document gives instructions for setup and administration of the Bruker network License Server, which uses a single hardware key or “dongle” to authenticate Bruker software on a group of networked computers.

Responsibility

These procedures are to be performed only by trained Bruker personnel or by locally-authorized persons.

Disclaimer

All configurations and specifications are subject to change without notice.

Required Items

The following Table contains a list of items required by this document. It is necessary to have these items available as you work with the document.

Required Items

Item	Description
<None as of this publication>	

Referenced Documentation

The following Table contains a list of documentation referenced by this document. It is necessary to have this additional documentation available as you work with this document. In the documents' part numbers, a variable revision number is given immediately after the part number. Always use the most current revisions available.



All of the documents shown may be found at Bruker's comprehensive support site www.brukersupport.com, or on the Online Documentation CD-ROM that accompanies the shipment.

Referenced documentation

Part Number	Title
<none as of this publication>	

1 License Server System Requirements

For a computer to function as a License Server, it must meet the following requirements:

- License Server functions require Microsoft Windows 7 or XP.
- All computers using the network license must be on the same network.
- At least one Bruker software package must be installed before setting up the License Server.
- The license dongle (also called a “CodeMeter stick”) must be connected to one of the License Server’s USB ports. If the dongle is plugged in and at least one Bruker software package is loaded, a “CmStick connected” icon  appears in the taskbar (if the dongle is not present, the taskbar shows a “no CmStick connected” icon ).

2 About CodeMeter

Bruker license servers’ network settings are controlled by the web-based CodeMeter WebAdmin tool (specifically, the “Configuration” page).

Figure 2.1 — CodeMeter WebAdmin



3 About WebAdmin's "Configuration" Page


WebAdmin's "Configuration" page (available by clicking **Configuration**) has several subsections. Network license administration requires two of these subsections:

- **Access Control**, for defining which client computers are allowed to receive licenses (this is typically used if there are multiple License Servers on the same network).
- **Network**, for defining the host server with the attached CM stick as the License Server. It is also used on the Client computers to designate the particular License Server from which the Client will receive its license (in the case of multiple License Servers on the same network). This is also used if the Client computers are on a different subnet, or on different sides of a firewall.

NOTE: Changes to these parameters take effect only after restarting the computer.

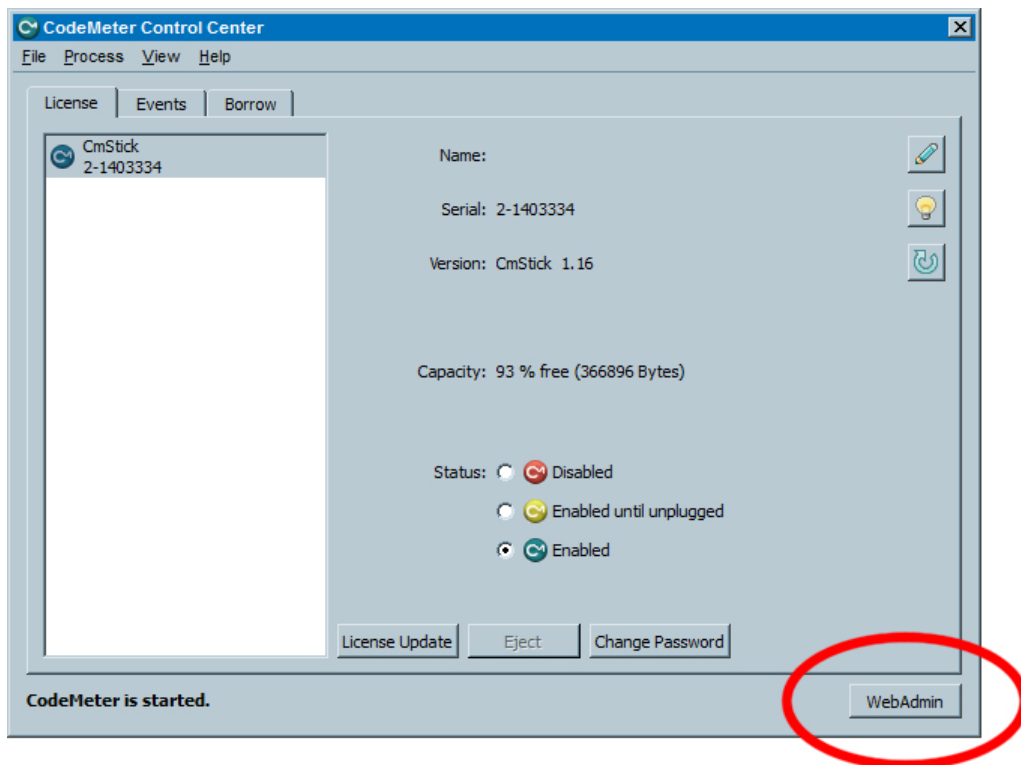
4 Common Tasks

4.1 Open CodeMeter WebAdmin

1. Open CodeMeter Control Center by clicking the  button in the Windows taskbar's bottom right-hand corner.

The CodeMeter Control Center main window opens.

Figure 4.1 — CodeMeter Control Center main window



2. Click the **WebAdmin** button in the main window's lower right-hand corner.

The default web browser opens and navigates to <http://localhost:22350>, showing the WebAdmin interface.

4.2 Define a Computer as a Network Server

If you install the dongle on a computer that has Bruker software, you can also define the computer as a License Server to provide license authentication for other computers on the network.

1. Under WebAdmin's "Configuration" page, click **Network**.
The "Network" area appears, showing a list of options for the CodeMeter server.
2. Activate the **Run Network Server** checkbox to use the computer as a CodeMeter network server.

NOTE: The computer functions as a Network Server **only** when the checkbox is activated.

Figure 4.2 — Run Network Server checkbox (viewed in Windows XP)

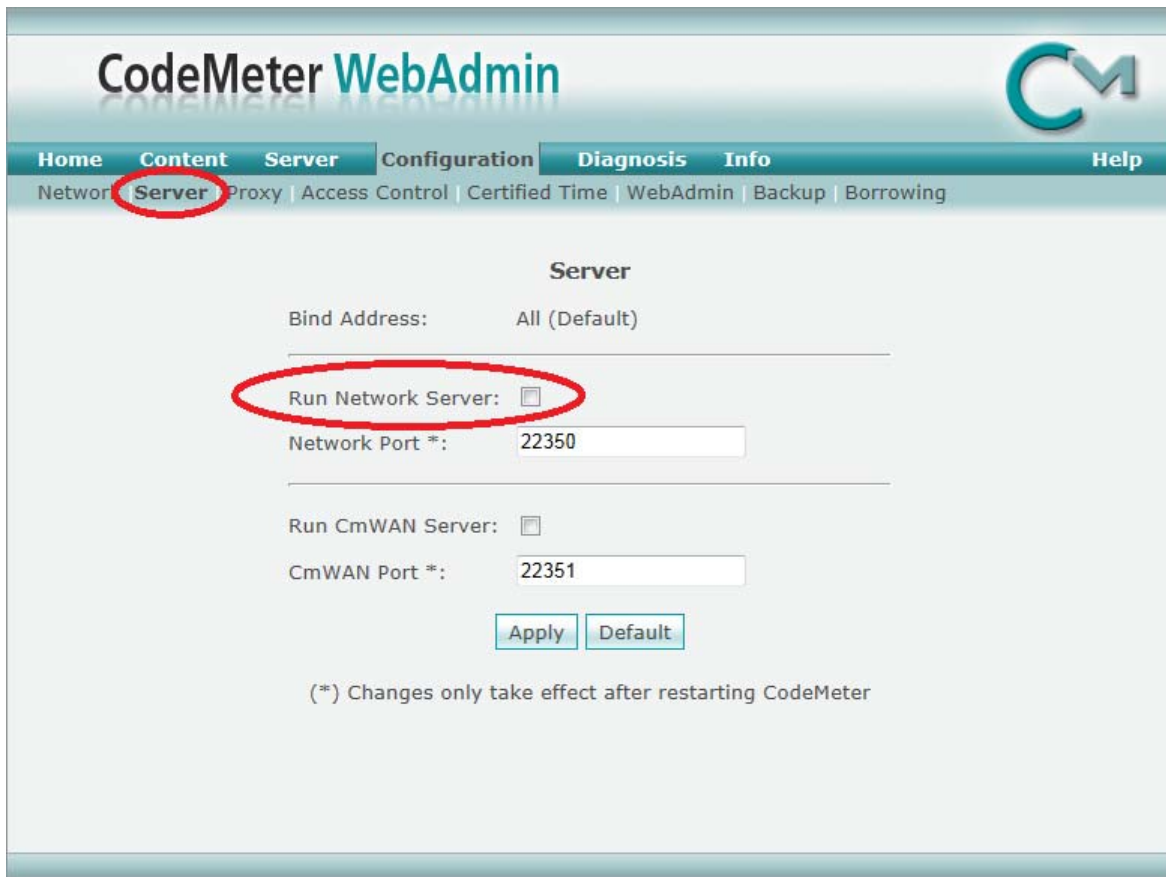


The screenshot shows the CodeMeter WebAdmin interface. The top navigation bar includes Home, Content, Server, Configuration, Diagnosis, Info, and Help. The Configuration page is active, and the Network section is selected. The Network configuration page displays the following settings:

- Bind Address *: All (Default)
- Network Port *: 22350
- UDP Waiting Time *: 1000 ms
- Run Network Server: (circled in red)
- Server Search List: (empty list)

Buttons for 'add', 'remove', 'up', 'down', 'Apply', and 'Default' are visible below the list. A note at the bottom states: (*) Changes only take effect after restarting CodeMeter.

Figure 4.3 — Run Network Server checkbox (viewed in Windows 7)



CodeMeter WebAdmin

Home Content **Server** Configuration Diagnosis Info Help

Network **Server** Proxy | Access Control | Certified Time | WebAdmin | Backup | Borrowing

Server

Bind Address: All (Default)

Run Network Server:

Network Port *: 22350

Run CmWAN Server:

CmWAN Port *: 22351

Apply Default

(*) Changes only take effect after restarting CodeMeter

3. Click **Apply**.
4. Restart the computer.

4.3 Define a Client-Server Search List

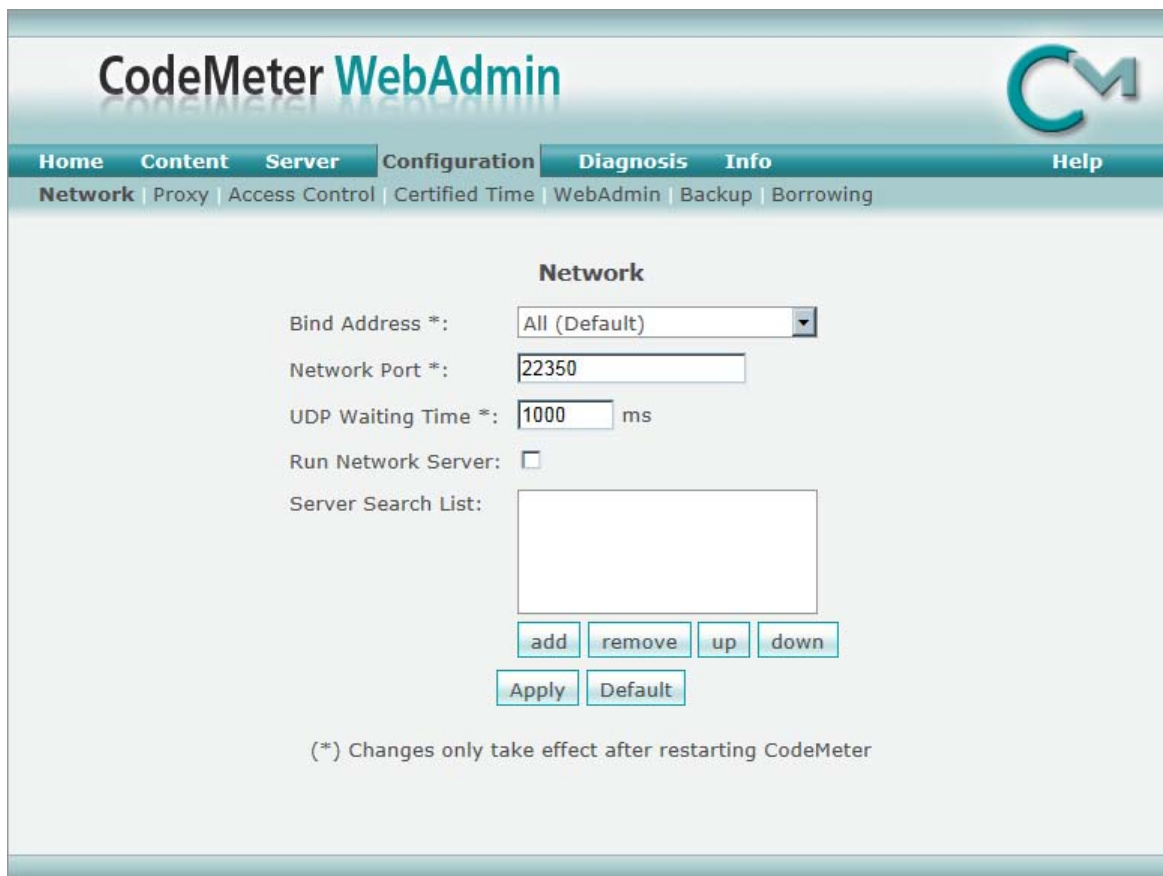
In the “Server Search List” area, you can define the CodeMeter server(s) that are available to be accessed by a certain Client (the Client then only searches for the specified server(s)).

NOTE: This function should be used if the Client computers are on a different subnet, or on different sides of a firewall.

1. Under WebAdmin's “Configuration” page, click **Network**.

The “Network” area appears, showing a list of options for the CodeMeter server.

Figure 4.4 — “Network” area



The screenshot shows the CodeMeter WebAdmin interface. The title bar reads "CodeMeter WebAdmin" with a logo on the right. A navigation menu includes "Home", "Content", "Server", "Configuration", "Diagnosis", "Info", and "Help". Below the menu, a breadcrumb trail shows "Network | Proxy | Access Control | Certified Time | WebAdmin | Backup | Borrowing". The main content area is titled "Network" and contains the following configuration options:

- Bind Address *: All (Default) (dropdown menu)
- Network Port *: 22350 (text input)
- UDP Waiting Time *: 1000 ms (text input)
- Run Network Server:
- Server Search List: (empty text area)

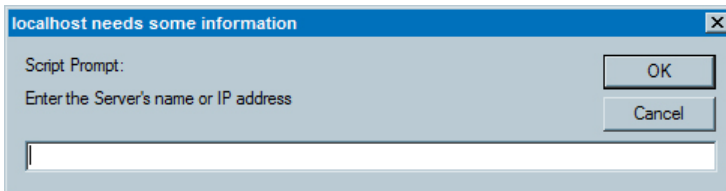
Below the text area are four buttons: "add", "remove", "up", and "down". At the bottom of the configuration area are two buttons: "Apply" and "Default".

(*) Changes only take effect after restarting CodeMeter

2. Set the Search List parameters as desired:
 - To add a Server computer to the list, click **Add**. In the dialog box, enter the IP address or DNS name of the Server. Click **OK**.

NOTE: It is recommended to use the CPU's name rather than its IP address.

Figure 4.5 — Enter the Server's name or IP address



- To remove a Server, highlight the desired Server in the list and click **Remove**.
3. When you are finished, click **Apply**.
 4. Restart the computer.

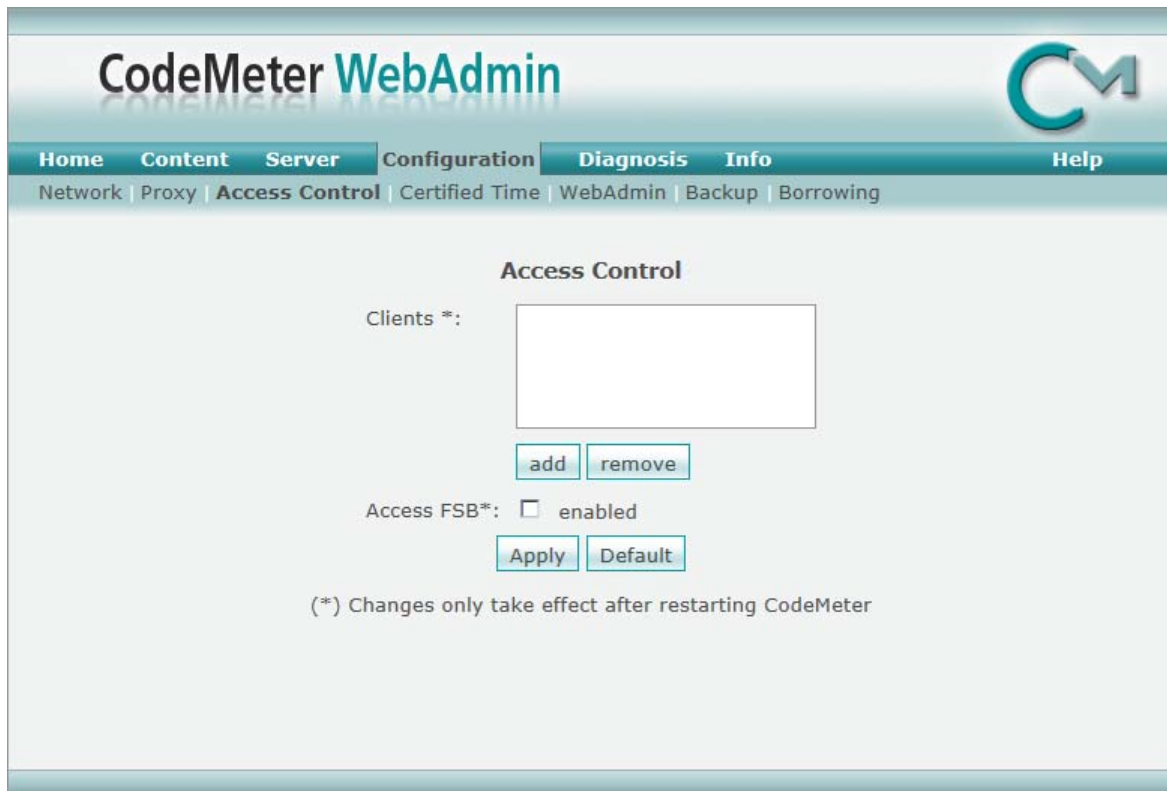
4.4 Define Server Access Control

1. Under WebAdmin's "Configuration" page, click **Access Control**.

The "Access Control" area appears, showing a list of all CodeMeter client computers that may access the CodeMeter server.

NOTE: If the "Clients" list is empty (it is empty by default), all CodeMeter clients may access this CodeMeter network server.

Figure 4.6 — "Access Control" area

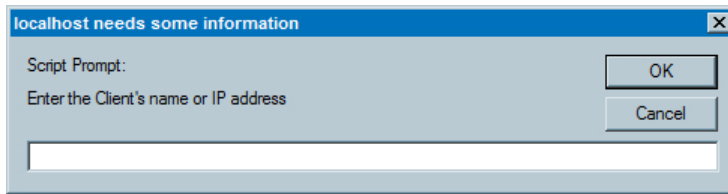


The screenshot shows the CodeMeter WebAdmin interface. At the top, the title "CodeMeter WebAdmin" is displayed in a teal font, with a logo to the right consisting of a stylized 'C' and 'M'. Below the title is a navigation bar with tabs: Home, Content, Server, Configuration (selected), Diagnosis, Info, and Help. Under the Configuration tab, there is a sub-menu with links: Network, Proxy, Access Control (selected), Certified Time, WebAdmin, Backup, and Borrowing. The main content area is titled "Access Control" and contains the following elements:

- A label "Clients *:" followed by an empty rectangular text input box.
- Two buttons: "add" and "remove".
- A label "Access FSB*:" followed by an unchecked checkbox and the text "enabled".
- Two buttons: "Apply" and "Default".
- A note at the bottom: "(*) Changes only take effect after restarting CodeMeter".

2. Add or remove Clients as necessary:
 - To add a Client computer to the list, click **Add**. In the dialog box, enter the IP address or DNS name of the Client. Click **OK**.

Figure 4.7 — Enter the Client's name or IP address




- To remove a Client, highlight the desired Client in the list and click **Remove**.
3. When you are finished, click **Apply**.
 4. Restart the computer.

5 Troubleshooting

5.1 Common Problems and Solutions

Table 5.1 — Common problems and solutions

Problem	Possible Cause(s)	Solution
The dongle is not recognized by the system when it is plugged in locally (i.e., the CodeMeter icon is gray ). Note that the icon turns green only when a dongle is plugged in locally.	The dongle uses more power than an ordinary memory stick.	Use a USB port on the backplane, and avoid using a USB hub.
No connection to the license network server.	Network problems.	From the Command Prompt, use the <code>ping <Server IP></code> command to test your network connection. If the results indicate no connection, contact your IT department.
	Incorrect settings on the WebAdmin page.	Check your settings in WebAdmin. Use only the settings described in this document (see ***UNRESOLVED***).
No access to the network licenses.	There may be a problem with the dongle's internal firmware if the firmware version is 1.14 and the dongle's serial number is "2-x".	Perform a firmware update using the CodeMeter Control Center.
	The license server's or the client computer's CodeMeter runtime software version is too old.	Perform a CodeMeter runtime update on all computers to the latest version. You can download the latest version from http://www.wibu.de/download_user.php#cm
	Incorrect settings on the WebAdmin page.	Check your settings in WebAdmin. Use only the settings described in this document (see ***UNRESOLVED***).
The WebAdmin application does not open in the web browser.	Incompatible web browser version.	Update your web browser to the latest version. Use Internet Explorer or Firefox.
	A problem occurred during the CodeMeter runtime installation.	Uninstall and reinstall the CodeMeter runtime.
A CodeMeter stick firmware update is not possible, showing the error message "Connection to the update server failed (Error WB5000)".	CodeMeter WebAdmin has incorrect proxy settings.	Configure the proxy in the Configuration page's "Proxy" area.

5.2 Create and Send Diagnostic Files

To get the best support in the event of a problem, create two diagnostic files and send them to Bruker:

1. Copy the Event Log to a text file:
 - 1.1 Open the CodeMeter Control Center, and click on the “Events” tab.
 - 1.2 Select all of the events, and copy them to the Clipboard. Paste them into a new text file, and save it.

2. From Windows’ Start menu, choose **Start > Programs > CodeMeter > Tools > CmDust**.

The diagnostic program opens in a Command Prompt window. When the diagnosis is complete, Windows opens the folder containing the results file “CmDust-Result.log”.

3. Contact Bruker Service, and email the two diagnostic files to the address you are given.

6 Network License Server Technical Support

You are invited to contact Bruker whenever there are problems or questions related to the system. Before you contact Bruker, please:

- Have the system's serial number available;
- Determine the system's software version (if you suspect a software problem);
- Record any error messages that appear; and
- Determine steps and conditions that recreate the problem (if possible).



CAUTION

Failure to refer instrument servicing to qualified Bruker personnel may result in injury or property damage!

6.1 Instruments in North America

If the instrument is in North America, contact Bruker's North American Service Center:

Table 6.1 — Bruker AXS North American Service Center contact information

Bruker AXS North American Service Center	
Address:	Bruker AXS Inc. Customer Support 5465 East Cheryl Parkway Madison, WI 53711-5373 USA
Toll-free telephone:	1 (800) 234-XRAY [9729]
Direct line:	1 (608) 276-3000
Fax:	1 (608) 276-9162
E-mail:	Customer.Service@bruker-axs.com
Web:	http://www.bruker-axs.com

6.2 Instruments Outside North America

If the instrument is outside North America, contact Bruker's Karlsruhe Service Center:

Table 6.2 — Bruker AXS Karlsruhe Service Center contact information

Bruker AXS Karlsruhe Service Center	
Address:	Bruker AXS GmbH Customer Support Östliche Rheinbrückenstr. 49 76187 Karlsruhe Germany
Telephone:	+49 (721) 595-8403
XRD Hotline:	+49 (721) 50997 5200
E-mail:	service@bruker-axs.de
Web:	http://www.bruker-axs.de

Bruker Corporation

40 Manning Road
Billerica, MA USA

Phone +1 (978) 663-3660
Fax: +1 (978) 667-5993

E-mail: info@bruker.com
www.bruker.com

● Bruker AXS Inc.

5465 East Cheryl Parkway
Madison, WI 53711-5373 USA

Phone: +1 (800) 234-XRAY [9729]
Fax: +1 (608) 276-3006

E-mail: info@bruker-axs.com
www.bruker-axs.com