Advanced Aircraft Analysis 5.1
Local/Network License Upgrade

1 Introduction

DARcorporation uses the Wibu-Systems CodeMeter technology for the AAA software licensing. CodeMeter stores the software license securely in CmActLicnse, a computer-bound license file, or a USB dongle CmDongle, hardware-based security.

The license is saved in a special file that is bound to the hardware of the target computer or stored securely in a CmDongle. The CmDongle device embeds a smart card chip, which offers additional security to CodeMeter technology. The designated target computer, referred as the license server, can provide license access locally or on a network. All computers running AAA must be able to access the license server where AAA uses the license server CodeMeter Runtime Server (CodeMeter.exe). On Windows, this server can be started as a system service or as an application.

The license server is a computer with the CodeMeter Runtime software installed and is additionally running the CodeMeter Runtime Server process. CodeMeter Runtime License Server is protocol based (TCP/IP), so it requires TCP/IP support of the network and a proper installation of TCP/IP on the server and all client machines. Port 22350 must be opened for TCP and UDP use. The client machine is a computer on which AAA runs. The client machine and the license server can be the same machine if AAA were to run locally.

The number of licenses can be increased or decreased in a simple fashion by contacting DARcorporation. No new hardware is needed; a file can be exchanged via Internet or e-mail to change the CodeMeter license contents.

We recommend reading through the complete document first and then following the installation steps of Section 2.

2   Upgrade Procedure

You must have existing CodeMeter and AAA software installed before proceeding with the following steps:

STEP 1   Close any programs that are running on the computer where the software is being installed.

STEP 2   If you have not installed CodeMeter, please use this link https://tinyurl.com/7us7s493 to download and install CodeMeter Runtime. For details, please refer to *AAA and License Installation* PDF Steps 3 and 4.

STEP 3   Save the *.WibuCmRaU file to the computer hosting your license. This CodeMeter license update file *.WibuCmRaU is provided by DARcorporation via e-mail. Please contact DARcorporation at support@darcorp.com if you are under license maintenance and have not received the CodeMeter license update file.

STEP 4   Launch CodeMeter Control Center. Then drag and drop the saved *.WibuCmRaU file on the CodeMeter Control Center window (See Figure 2.1).
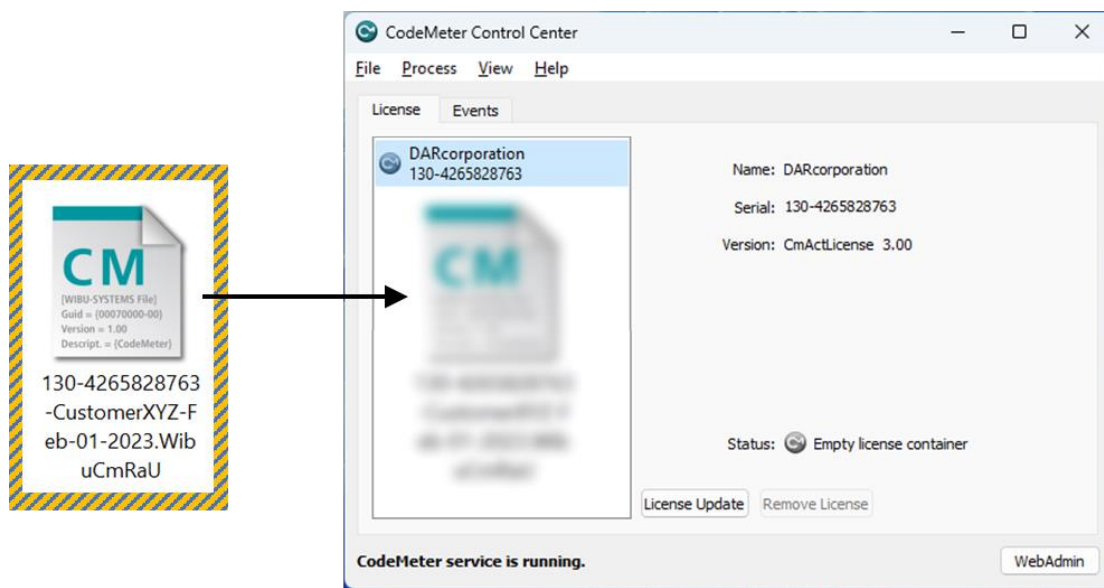

Figure 2.1 Load CodeMeter License Update into CodeMeter Control Center

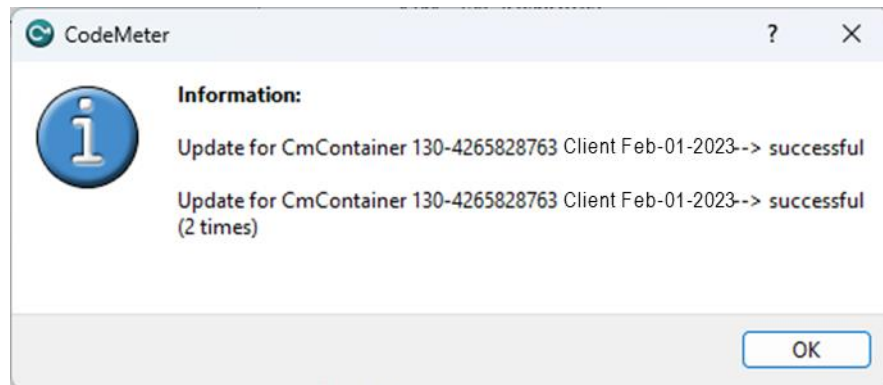STEP 5   A message will indicate the license has updated successfully (See Figure 2.2).

Figure 2.2 CodeMeter License Container successfully updated

STEP 6   Download AAA software update using the link (via e-mail) and run the installer with right-click Run as Administrator option.

STEP 7   During AAA software installation, please select **Anyone who uses this computer (all users)** option when prompted (See Figure 2.3).
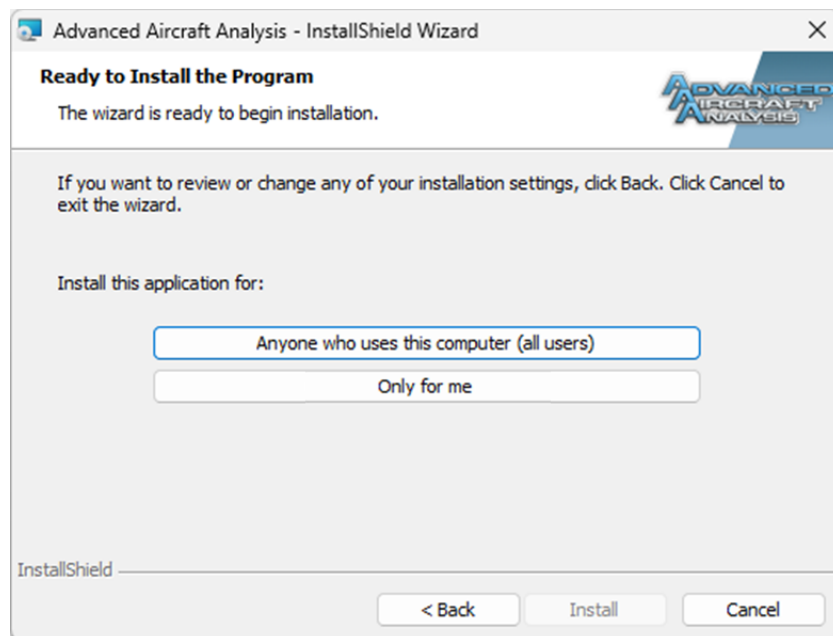

Figure 2.3 AAA Installation Option

STEP 8   Launch CodeMeter Control Center and click on WebAdmin button. There should be an entry with the line 6002280 Design, Analysis and Research Corporation. Under that entry, a Product Code, Name along with License Quantity are displayed (See Figure 2.4).
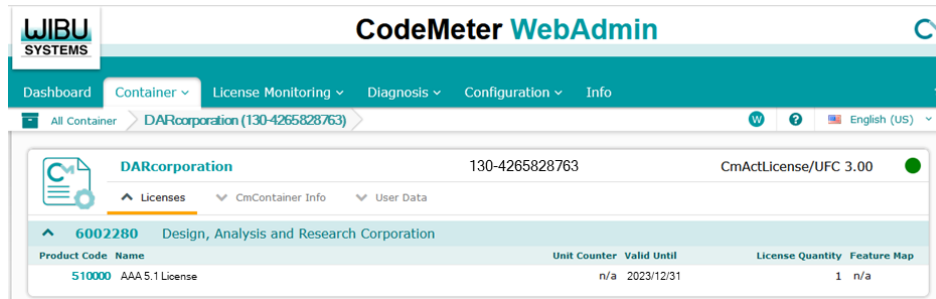

Figure 2.4 CodeMeter WebAdmin Window

STEP 9   With CodeMeter Runtime installed, install and run AAA. Install CodeMeter Runtime and AAA on any client computer if used on a computer network.

Note: AAA uses a working directory to create temporary working files. This directory is normally C:\Users\AccountLoginName\AppData\Local\Temp\working. To use another directory other than the default, change the shortcut to AAA on the Desktop from:

```
AAA51.exe
```
 to
```
AAA51.exe "%1" "new working directory location\working"
```

Be sure to include the %1 and to include the directory name working.

STEP 11   When AAA starts for the first time, the dialog window in Figure 2.5, along with the online Registration Form on www.darcorp.com in a web browser, will be displayed requesting information used to set up the software configuration.

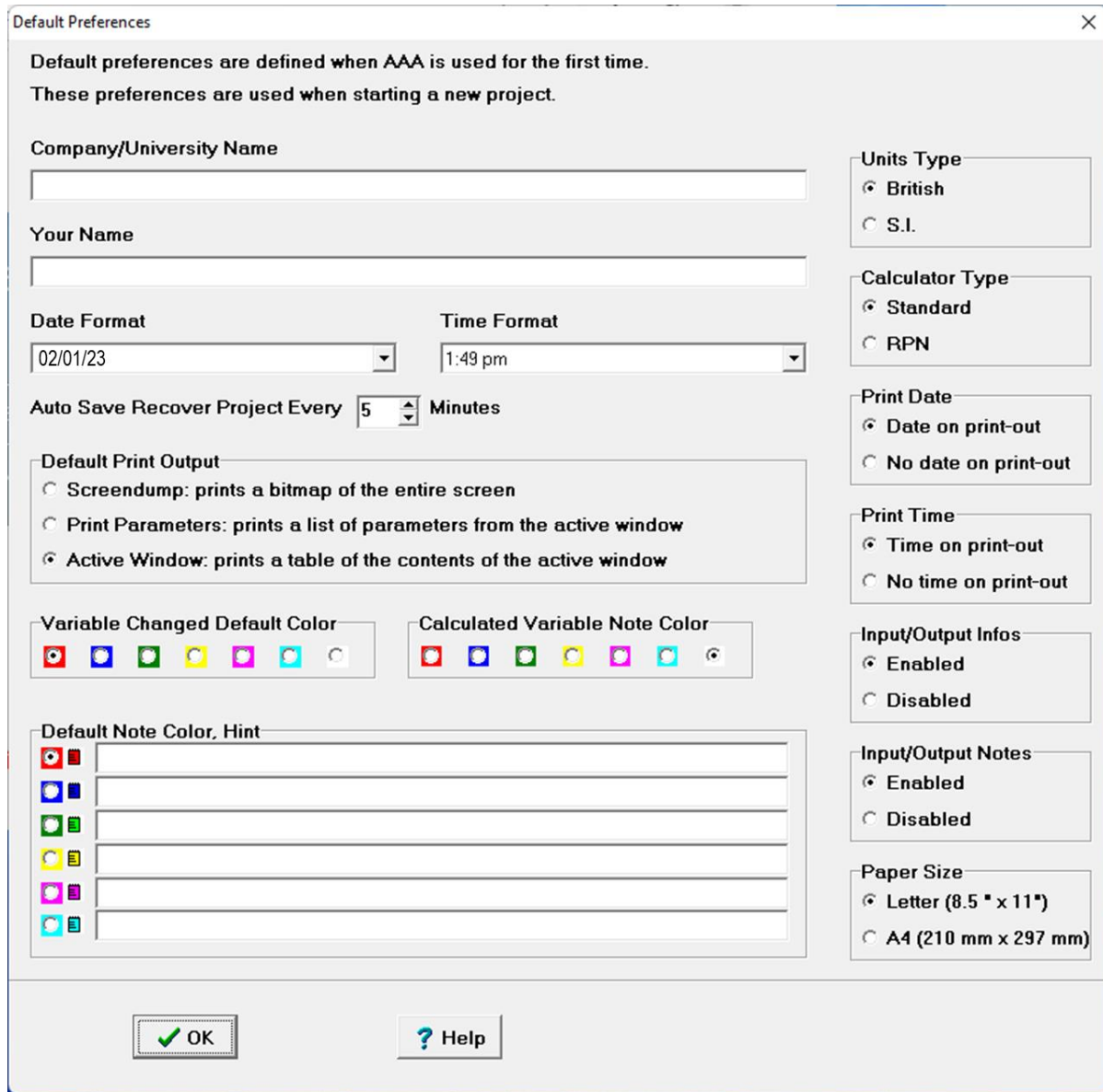*Figure 2.5 Program Options Window*

The following information is requested:

- Company name: This name will be displayed in the status bar while running the software.

- Your Name: The name will be saved in the software configuration file.

- Date Format: Default format of date displayed on status bar.

- Time Format: Default format of time displayed on status bar.

- Units Type: The software supports both S.I. and British units.

- Calculator Type: The software calculator supports standard and RPN mode.

- Print Date: The date can be displayed on each printout.

- Input/Output Infos: A button can be displayed on each input/output element allowing the user to directly access help about that info. Default is 'enabled'.

- Input/Output Notes: A button can be displayed on each input/output element allowing the user to keep notes about the parameter. Default is 'enabled'.

- Print Time: The print time can be displayed on each printout.

- Paper Size: Specify the paper size for printouts.

- Auto Save Recovery: Specify the time interval for auto save.

- Variable Change Color: Specify the default color to display with calculated values change.

- Default Note Color: Specify the color of a note, and a description of what the note color represents.

- Default Printer Output: The default hardcopy output type can be defined (see AAA 5.1 User's Manual, Part I, Chapter 4).

After clicking the OK button on the Program Options screen, AAA is ready for user input.

3   CodeMeter Software

When the CodeMeter Control Center software is installed on the server or client computer, a program icon is added to the Windows Start Menu. This icon executes the CodeMeter Control Center software.

The program shows the contents of the CodeMeter license (see Figure 3.1), CodeMeter service status (lower left corner) and the option to launch the WebAdmin user interface.
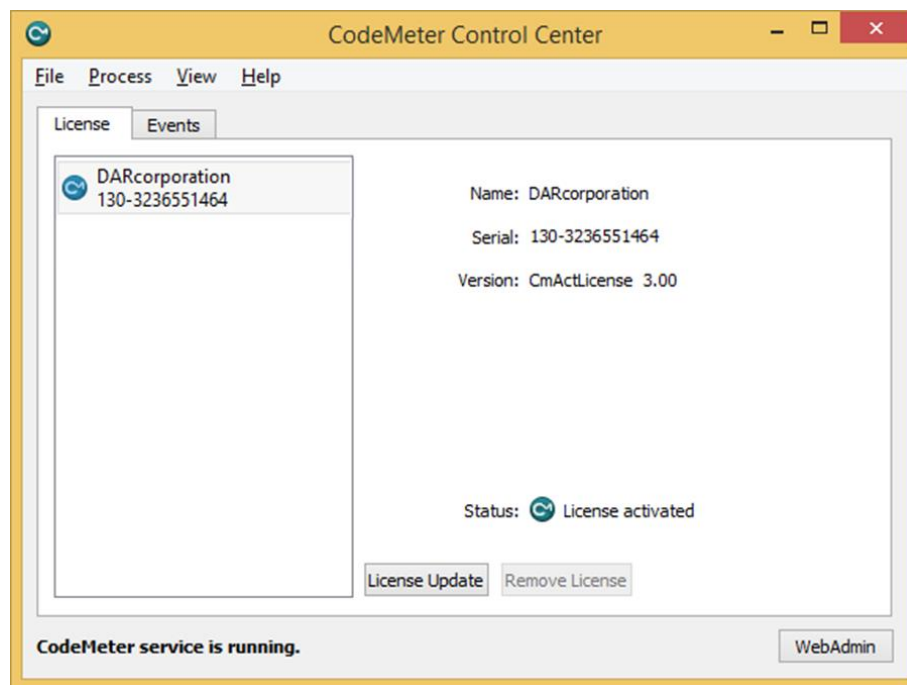
Figure 3.1 CodeMeter Control Center

After the CodeMeter service has started, the Events tab can be displayed showing network activity (see Figure 3.3).
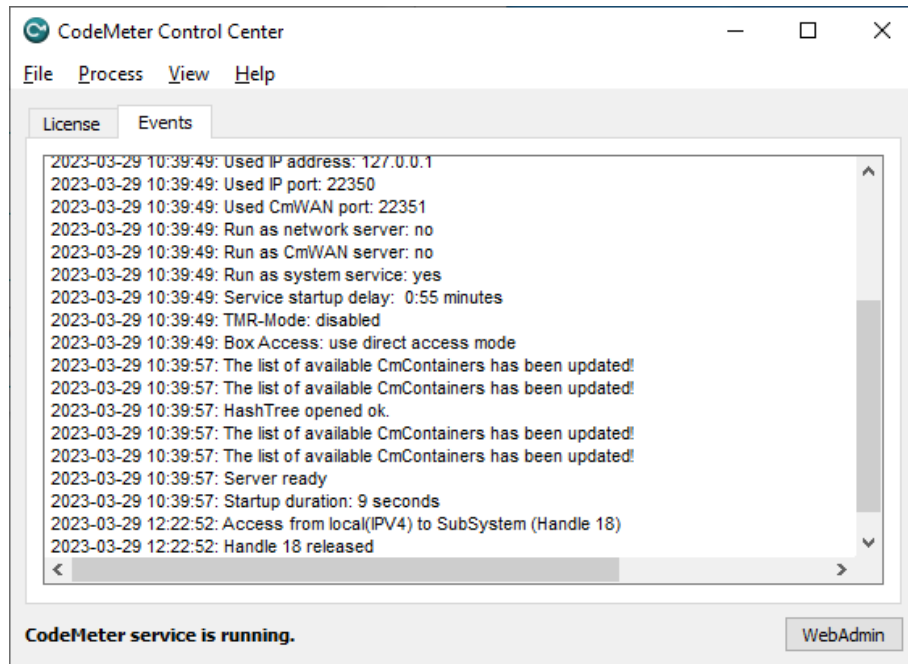
Figure 3.3 CodeMeter License Server Network Activity Log

Normally, no special configuration changes are needed on the client side to access CodeMeter Runtime License Server. Click on the WebAdmin button to launch the WebAdmin browser user interface. CodeMeter WebAdmin is based on HTML code including Javascript. A client computer browses the local network or local computer for a suitable CodeMeter server. For AAA the "Configuration | Basic Configuration | Server Search List" tab is important. On the Basic Configuration Server Search List (see Figure 3.4) a specific license server name or IP address can be added. Under "Configuration | Advanced Configuration | Extra" tab (see Figure 3.5), the default TCP/IP port 22350 can be changed, if this number conflicts with port numbers used by other TCP/IP applications. Changing the port number must be done by the CodeMeter Control Center on the server side and on all clients where a CodeMeter license server access is desired.
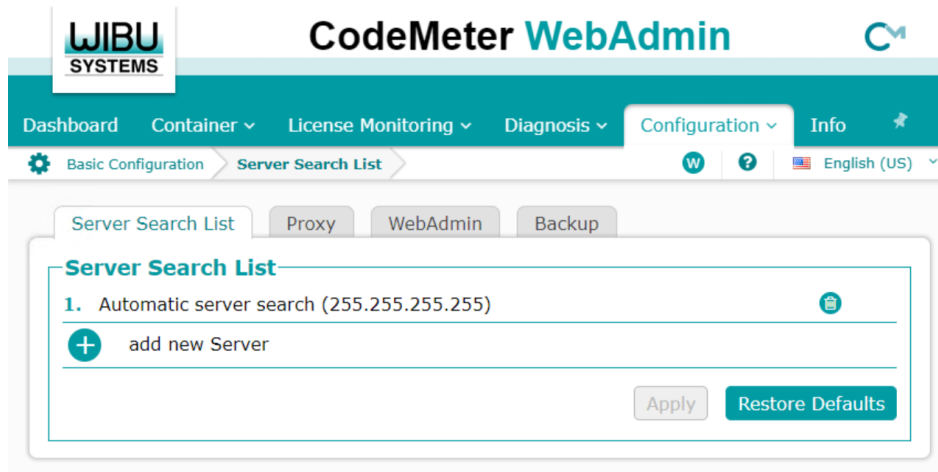
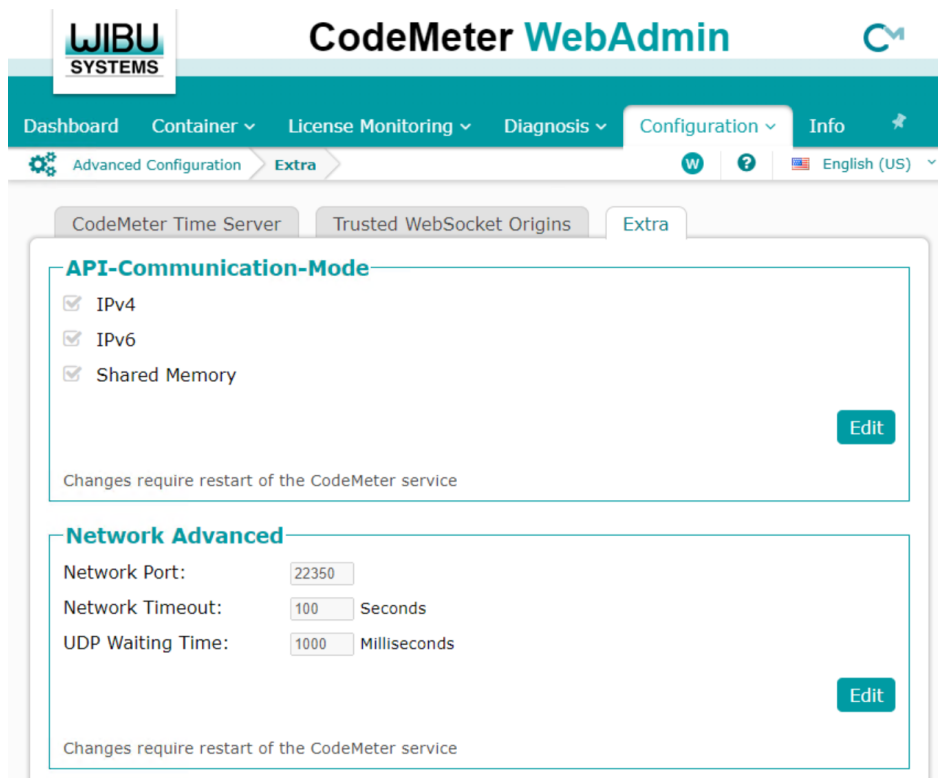*Figure 3.4 CodeMeter WebAdmin Basic Configuration*

Figure 3.5 CodeMeter WebAdmin Advanced Configuration

As part of the CodeMeter software installation, CodeMeter WebAdmin (see Figure 3.6) is included to monitor AAA activities with CodeMeter.
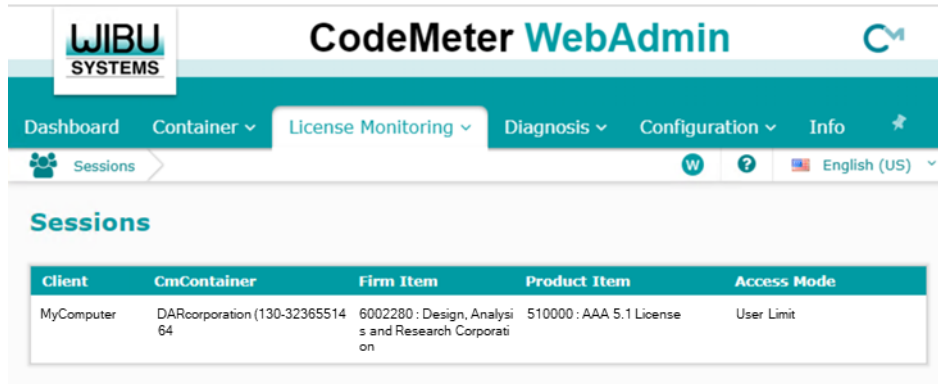
Figure 3.6 CodeMeter License Monitoring

Launch CodeMeter WebAdmin from CodeMeter Control Center and click "License Monitoring | Sessions" to launch the CodeMeter License Monitoring.

3   Troubleshooting

The CodeMeter software has an extensive help system built-in. Select the help from:

    Windows Start > CodeMeter > CodeMeter User Help

The help has an FAQ with common questions and problems. Other common problems are:

Problem: Cannot Open Database Files.

Solution: When attempting to execute the software, this message indicates several possible problems:

1. Another program is already running which is using the software databases. The other program could be any other DARcorporation airplane design and analysis software. Close any DARcorporation airplane design and analysis applications that are currently running, and try to start the software again. If the message appears again and there is no other program running using the software databases, then go to number two.

2. If the software or another DARcorporation airplane design and analysis program exits abnormally due to a program or system crash, or by using Windows to kill the program, the database engine may not reset itself. This problem can occur in all versions of Windows. To reset the database engine,

exit completely and restart Windows.

3. No read rights in the darcorporation\aaa51\database directory.

4. No read\write rights in the Users\LoginName\AppData\Local\Temp\working directory.

5. A file PDOXUSRS.NET is created by the BDE with no rights to access it. AAA does not need this file. To fix this, go to Program Files\Common Files\Borland Shared\BDE, there should be a program called bdeadmin.exe. Please run this program. Double click on drivers and select Native then select Paradox. On the right hand side it should show the properties for Paradox. Please delete the directory (pathname) listed next to NET DIR. Then save your settings and exit bdeadmin.exe. If you use the BDE for any other applications, please be sure that they still work. If you have another application that uses the BDE, instead of deleting the pathname, set the directory name to a directory the user has access rights to.

Problem: Program is Already Running.

Solution: Only one instance of the software can be run at one time. Switch to the currently running program.

Problem: Working database or system database is read only.

Solution: If the file attributes of any files in the **Database** folder in the folder where the software is installed are set to "read only", the program cannot execute. Refer to the Windows documentation for instructions for setting file attributes.

Problem: AAA locks up, cannot open database.

Solution: Check if the Users\AccountLoginName\AppData\Local\Temp\working directory is empty. Delete any files in the working directory when AAA is not running.

Problem: Unable to access CodeMeter WebAdmin page

Solution: Go to Windows > Start > CodeMeter to launch CodeMeter Control Center and then click on WebAdmin button to open CodeMeter WebAdmin page

Problem: Unable to access software license on CodeMeter

Solution: Verify the license server IP address is listed at the bottom of CodeMeter WebAdmin page

Problem: CodeMeter License Server not available

Solution: Check if the CodeMeter service is running on CodeMeter Control Center

Problem: AAA keeps looking for a CodeMeter license but cannot find it.

Solution: Check if the license server name/IP address is correct in the CodeMeter WebAdmin page. Change the server name into the actual IP address of the license server in the WebAdmin page. Restart the CodeMeter service in CodeMeter Control Center on the server and client computer.

4   Reporting Software Errors

We at DARcorporation want to know about potential errors in the software so that we may correct them as soon as possible. If you feel that you have encountered an error in the software user interface, license manager, module calculations or module calculation methods, software errors can be reported to the software support department at:

Phone: (785) 832-0434
E-mail: support@darcorp.com
Internet: www.darcorp.com
Mailing address: DARcorporation
                    910 E 29th St,
                    Lawrence, KS 66046-4926
                    USA