

## CONVAL LICENSING – HARDLOCK KEYS

**CONVAL can be used in conjunction with a license key only.** Without a valid license CONVAL 9 can be used in a DEMO mode within 14 days after the first program run.

CONVAL supports two designs of license keys: **Sentinel** LDK hardware and software keys and Aladdin **Hardlock** modules. This document applies to license keys of the type Hardlock only.

We differentiate between two different license key types for both designs:

- **Local, single-user license key**, which must be installed on the PC on which CONVAL is running.
- **Network license key**, which can be installed on any server or workstation computer in the network and which provides the maximum number of simultaneous CONVAL users.

### LOCAL, SINGLE-USER LICENSES

If you are using CONVAL with a local license key, you will have to install license module drivers on your PC. The CONVAL setup asks for the license and license key design and installs the license module drivers automatically. For a manual installation you find the license key drivers in the download section of our homepage [www.conval.de](http://www.conval.de).

### NETWORK CONCURRENT LICENSES

Communication with the CONVAL server (that is the computer, which contains the CONVAL network license key) is made over TCP/IP. The CONVAL server can be either a Windows workstation or a Windows server. Please ask our support team if you want to use other operating systems.

The installation of the CONVAL network license depends on the applied license type.

### HARDLOCK HARDWARE KEYS

If you use the green Network Hardlock modules of a previous CONVAL version, you must install the Hardlock Server on the CONVAL license server.

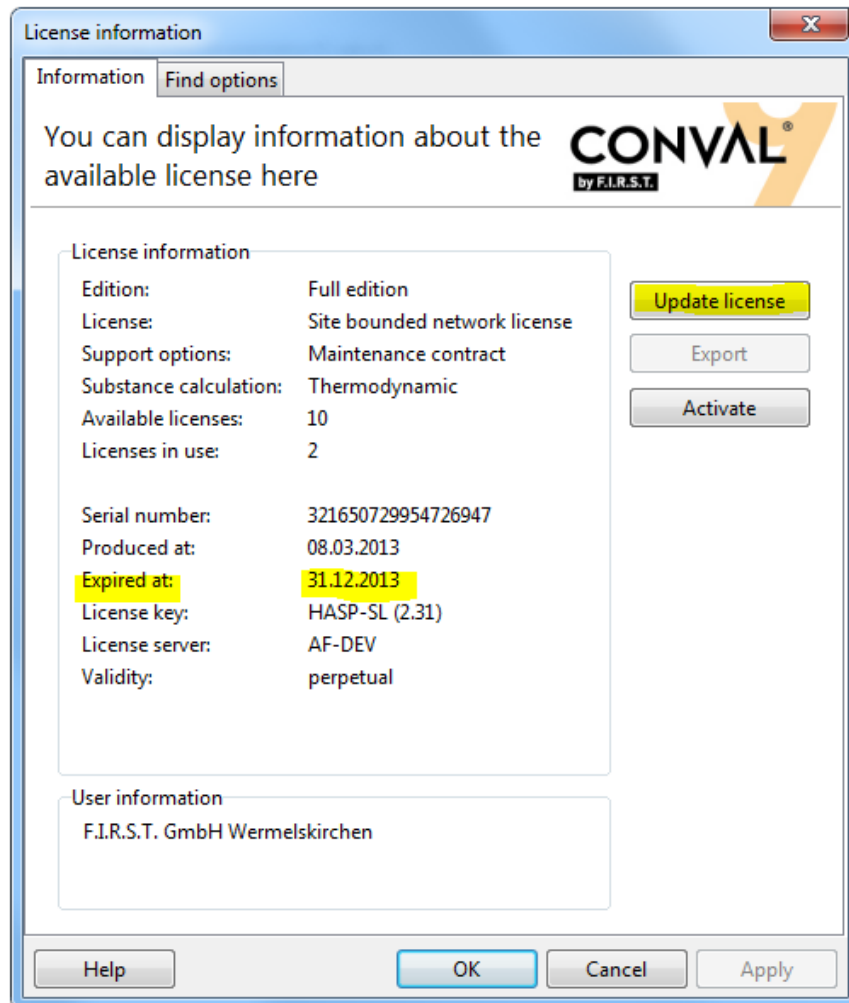
You can find the installation programs as well as other useful information in the download section of our homepage [www.conval.de](http://www.conval.de).

Please make sure, that after installation the **UDP** port 3047 is not blocked by a firewall and the Hardlock Server service is running.

## UPDATE LICENSE

If your CONVAL license has an expiration date you can update it with the license information update file \*.VTC which corresponds to the license serial number. The procedure is identical regardless of whether you use a local or a network license. No special rights are necessary on a license server are necessary.

To apply the license update open the CONVAL license information dialog, select the [Information] tab, click on the [Update license] button, and follow the instructions.



## LOCAL LICENSE KEY

If there are issues with the local Hardlock license key you should make sure to have the correct “Find options” in the CONVAL “License information” section and to have installed the recent versions of the CONVAL program and the license key driver. Both can be found on the download section of our homepage [www.conval.de](http://www.conval.de).

To achieve a clean installation, you should begin from scratch:

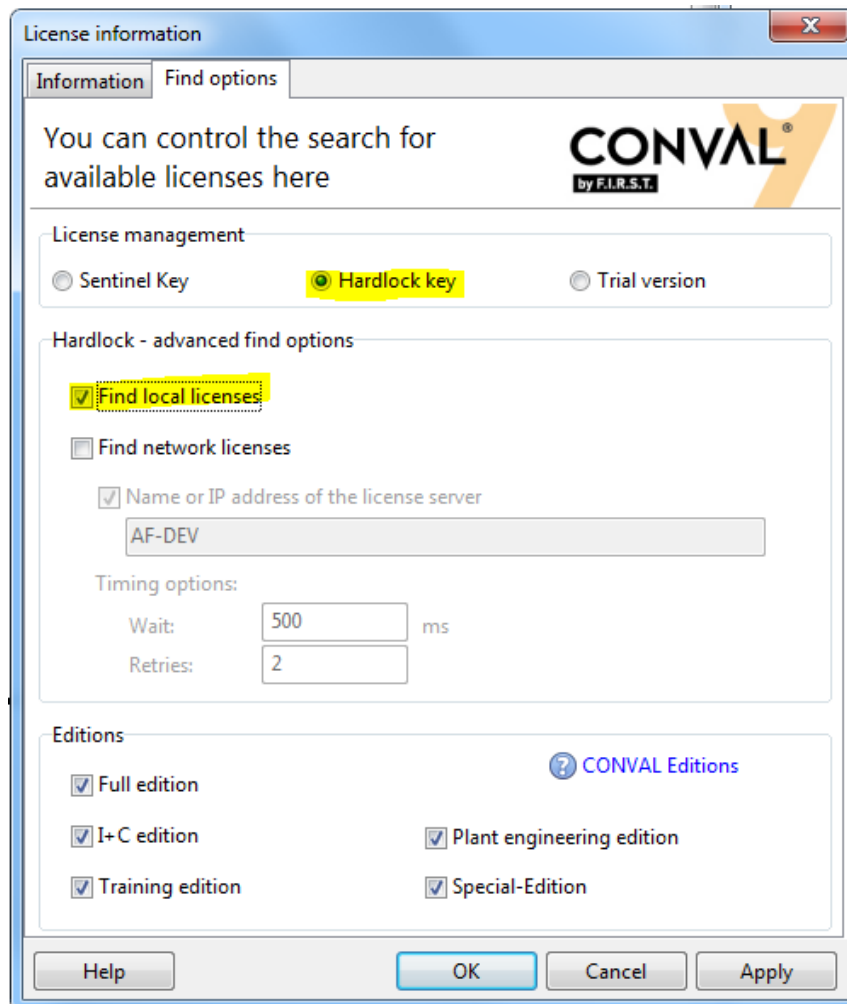
- You should uninstall all Sentinel and Hardlock Device Driver first.
- You should remove the Windows environment variable HL\_SEARCH if it is set.

After having installed the driver correctly, the red light of the USB license module should be always on, not flash. Otherwise the license module might be broken.

## FIND OPTIONS

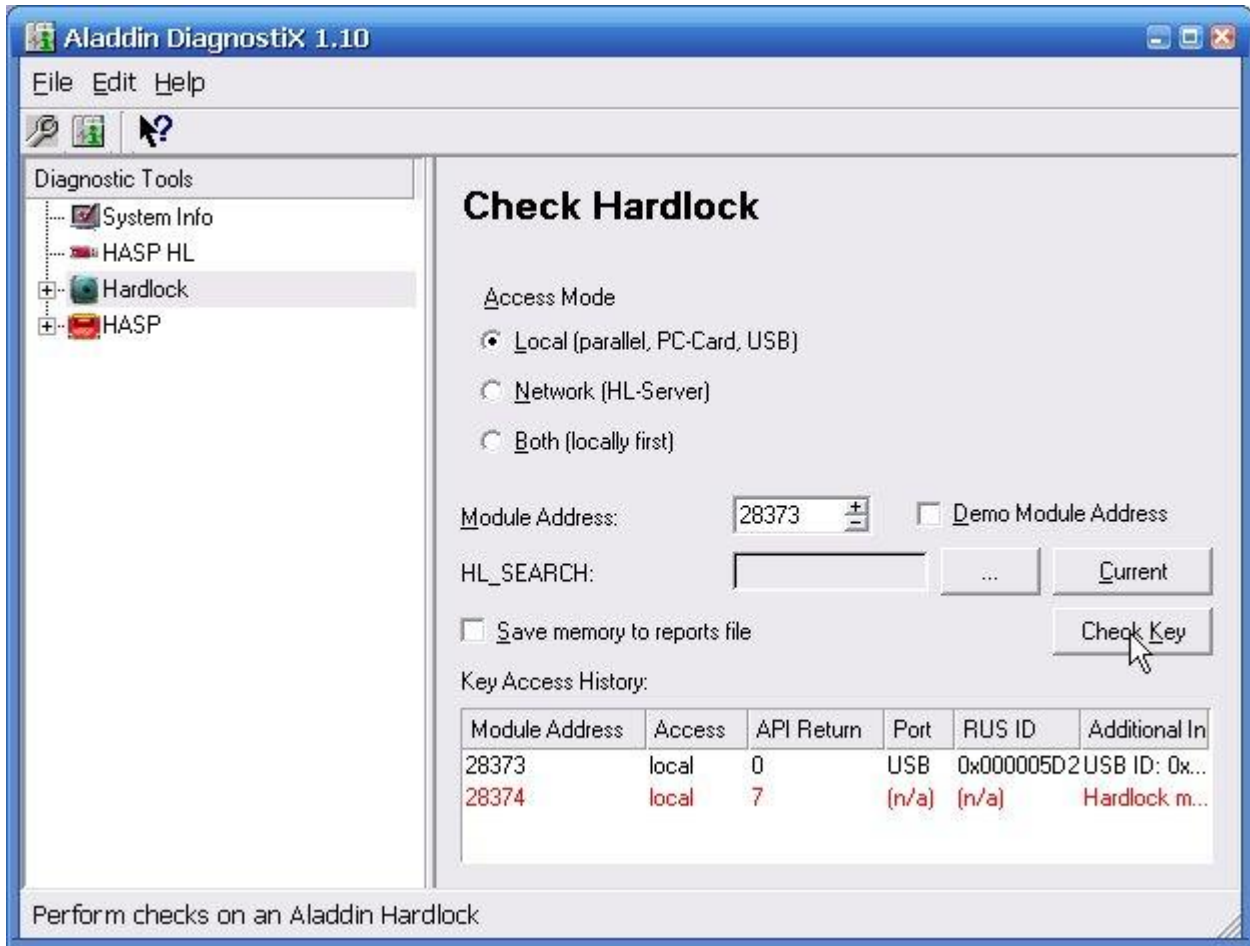
To optimize the access to the Hardlock module, you may select the following options:

- Please select “Hardlock-Dongle” in the “License management” section
- Please check the box “Search for local dongle” and the correct “Editions” settings



## HARDLOCK DIAGNOSTICS


If you still have problems, please install and run the Hardlock DiagnostiX program.



Please select Hardlock on the left hand, enter the module address **28373**, choose local access mode, and press the [Check Key] button.

Then create the report file using menu [Edit] and [Create report] and send both report files to our technical support team.

## NETWORK LICENSE KEY

 If there are issues with the network license module you should make sure to have the recent versions of all software parts on your computers. Therefore please download the CONVAL License Module Server and the License Monitor from the download section of our homepage [www.conval.de](http://www.conval.de).

## STEP BY STEP INSTALLATION

To achieve a clean installation, you should begin from scratch:

- On the computer, where the CONVAL network license module is mounted, you should uninstall all Hardlock related programs: CONVAL HL-Server, Hardlock Device Driver, Hardlock Server, Aladdin Monitor and Aladdin DiagnostiX.
- Additionally the CONVAL license information files should be deleted. Please search for all corresponding \*.ALF files on your computer and delete them.
- You should remove the environment variables **HL\_SEARCH** and **HLS\_IPADDR**, if they are set.
- Before you run the HL-Server setup you should un-mount the license module and deactivate any virus protection software. Later you will be asked to mount the license module while installing the CONVAL Hardlock Server.
- If you use a **FIREWALL** (activated by default under Windows XP SP2 and later) the **UDP** port **3047** (decimal) has to be opened.
- Then you should install the recent versions of the **CONVAL HARDLOCK SERVER** and **ALADDIN MONITOR**. The installation of the Hardlock Server needs local access to the computer. Therefore you must not run the setup in a **TERMINAL SERVER SESSION**.  
You should establish an internet connection, or you have to enter the disk with your CONVAL License Information, which corresponds to the serial number of the mounted Hardlock.

After having installed the CONVAL Hardlock Server the service *HL-Server* should be running.

## RUNNING THE HARDLOCK SERVER UNDER WINDOWS 64BIT

The manufacturer of the license module recommends deactivating the Data Execution Prevention (DEP) for the program *HLS32SVC.EXE*, if there are incompatibilities running under the 64bit operating systems.

### HOW TO CHANGE THE DATA EXECUTION PREVENTION SETTINGS

- Open System by clicking the *Start* button, right-clicking *Computer*, and then clicking *Properties*.
- Click *Advanced system settings*. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.
- Under *Performance*, click *Settings*.
- Click the *Data Execution Prevention* tab, and then click *Turn on DEP for all programs and services except those I select*.
- To turn off DEP for an individual program, select the check box next to the program that you want to turn off DEP for, and then click *OK*.
- If the program is not in the list, click *Add*. Browse to the folder *C:\Windows\SYSWOW64*, find the executable file for the program *HLS32SVC.EXE*, and then click *Open*.
- Click *OK*, click *OK* in the *System Properties* dialog box if it appears, and then click *OK* again. You might need to restart your computer for the changes to take effect.

**NOTE:** To turn on DEP for a program, clear the check box next to the program that you want to turn on DEP for, and then click *OK*.

Find more information at

<http://windows.microsoft.com/en-us/windows7/Change-Data-Execution-Prevention-settings>

## ALADDIN MONITOR

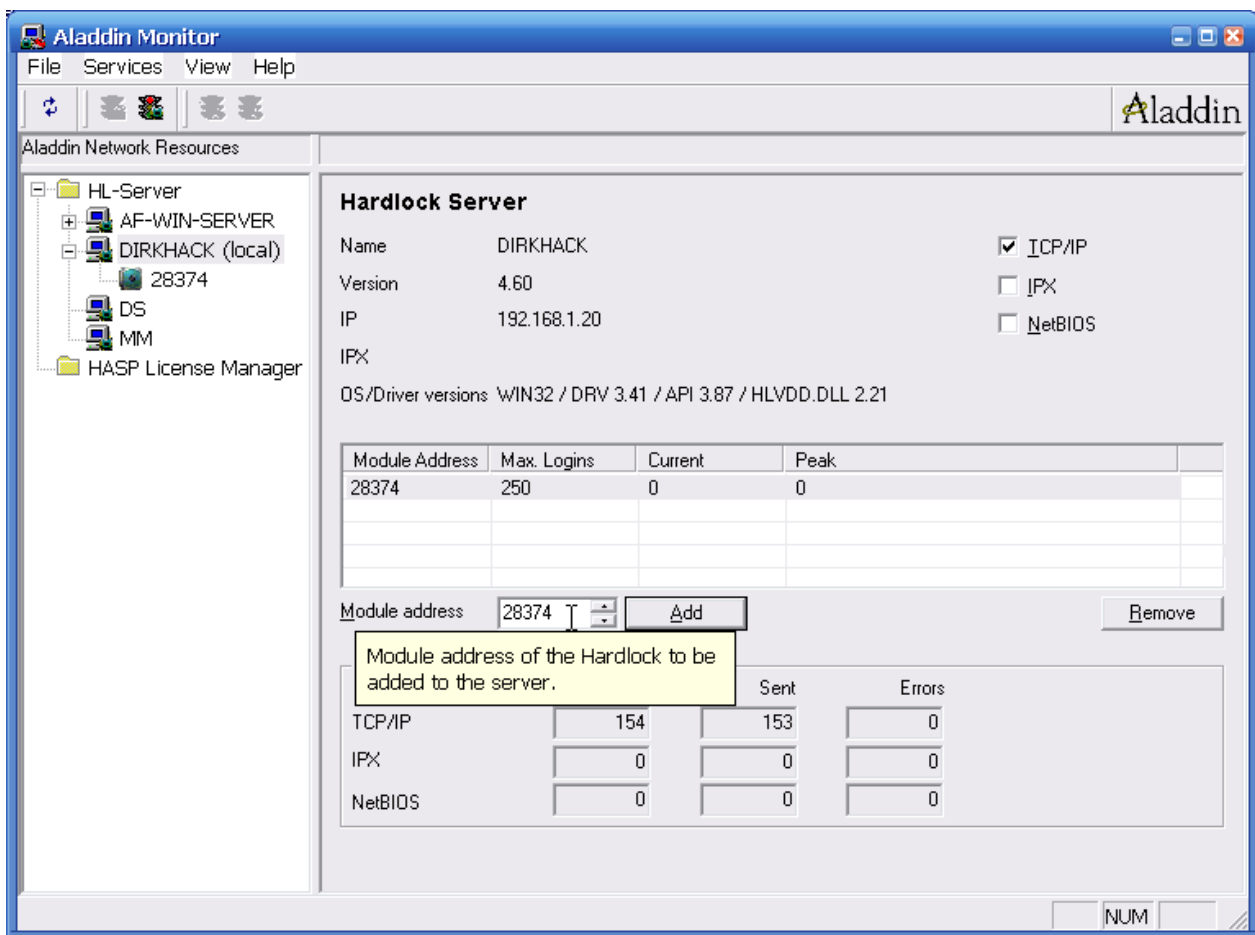
After having installed everything successfully please start the Aladdin Monitor.

### LICENSE MODULE ADDRESS

Please select the local computer in the tree-view on the left hand, enter the module address **28374** on the right hand, and press the [Add] button: The dongle can be found in the table above.

If you cannot find your local computer in the tree-view make sure that the **UDP** port **3047** (decimal) is not masked by your firewall and the Hardlock server service is started.

Now please double-click the local computer in the tree view and select the dongle-icon with the number **28374**.



## LICENSE INFORMATION

On the right hand you should see **TWO** tables, the license information and the login table. If you see only **ONE** table, the Hardlock Server has no access to the ALF license file. In this case you should remove the environment variable **HL\_LICENSEDIR**, if it is set, and restart the Hardlock Server setup.

The screenshot shows the Aladdin Monitor application window. The left pane displays a tree view of network resources under 'Aladdin Network Resources', including 'HL-Server', 'AF-WIN-SERVER', 'DIRKHACK (local)', '28374', 'DS', 'MM', and 'HASP License Manager'. The right pane is titled 'Hardlock Information' and displays the following details:

Module address: 28374    Port: 0xF002    RUS Id: 0x000005CD

License Information

Slot	Licenses	Used	Peak	Exp. Date	Counter	Max. Counter
0	250	0	0	31.01.2008		
1	1	0		-		
3	1	0		-		
5	1	0		-		
10	1	0		-		
58	1	0		-		
59	1	0		-		

Below the license table is an 'Update ...' button. Underneath is the 'Login table for Slot 0' with the following data:

No	Login ID	Task ID	Slot	Timeout	Login Time
1	-	-	-	-	-
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	-	-	-	-	-

At the bottom of the login table is a 'Delete Entry' button. The bottom right corner of the window shows a 'NUM' field.

If your CONVAL license has an expiration date (shown in the fifth column *Exp. Date*) you have to update your Hardlock with the license information update file **\*.VTC** which corresponds to the Hardlocks serial number.

Therefore click on the module with the right mouse button, select *Update* from the popup menu, open the VTC-file, and press the *Apply update* button.

After having done that you should restart your computer or stop and restart the Hardlock server service at least.

Alternatively you can perform the license update via internet with the CONVAL program as described in chapter *Update License* above.

## ACTIVE CONVAL USERS

You can use the Aladdin Monitor if you want to check who is currently using CONVAL. In the login table you find the IP addresses of the CONVAL users which are using the server license. Logging is not available.

## CONVAL CLIENT

If you start CONVAL, the network license module should be found automatically. If it is not, you can control the search in the up-popping dialog.

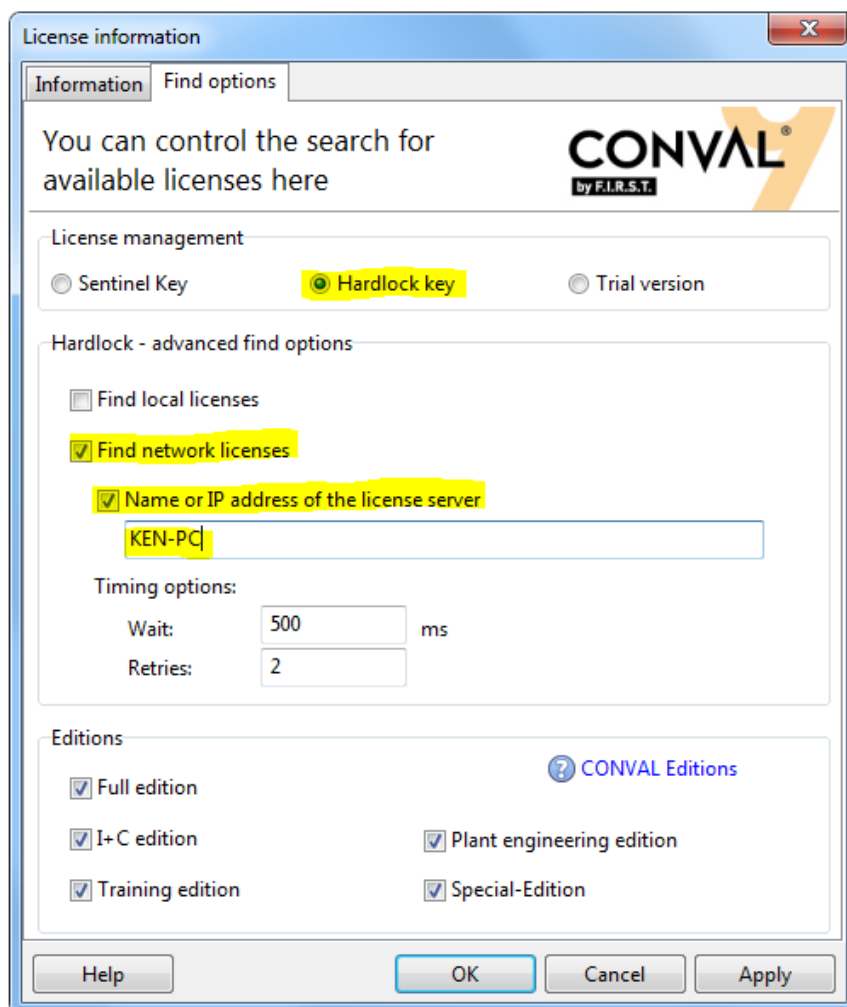
### LICENSE MODULE FIND OPTIONS

To optimize the access to the server Hardlock module, you may select the following options:

- Please un-check the box *Search for local dongle*
- Please check the boxes *Search for network dongle, TCP/IP, and IP addresses / computer name.*
- Enter the IP address or name of the CONVAL License Server.  
If you want to use CONVAL on the server itself, you have to enter „**LOCALHOST**“ or „**127.0.0.0**“

If the response time of your network is too long, you can change the timing options and enter a higher wait time (default: 1000 ms) and a higher number of retries (default: 5).

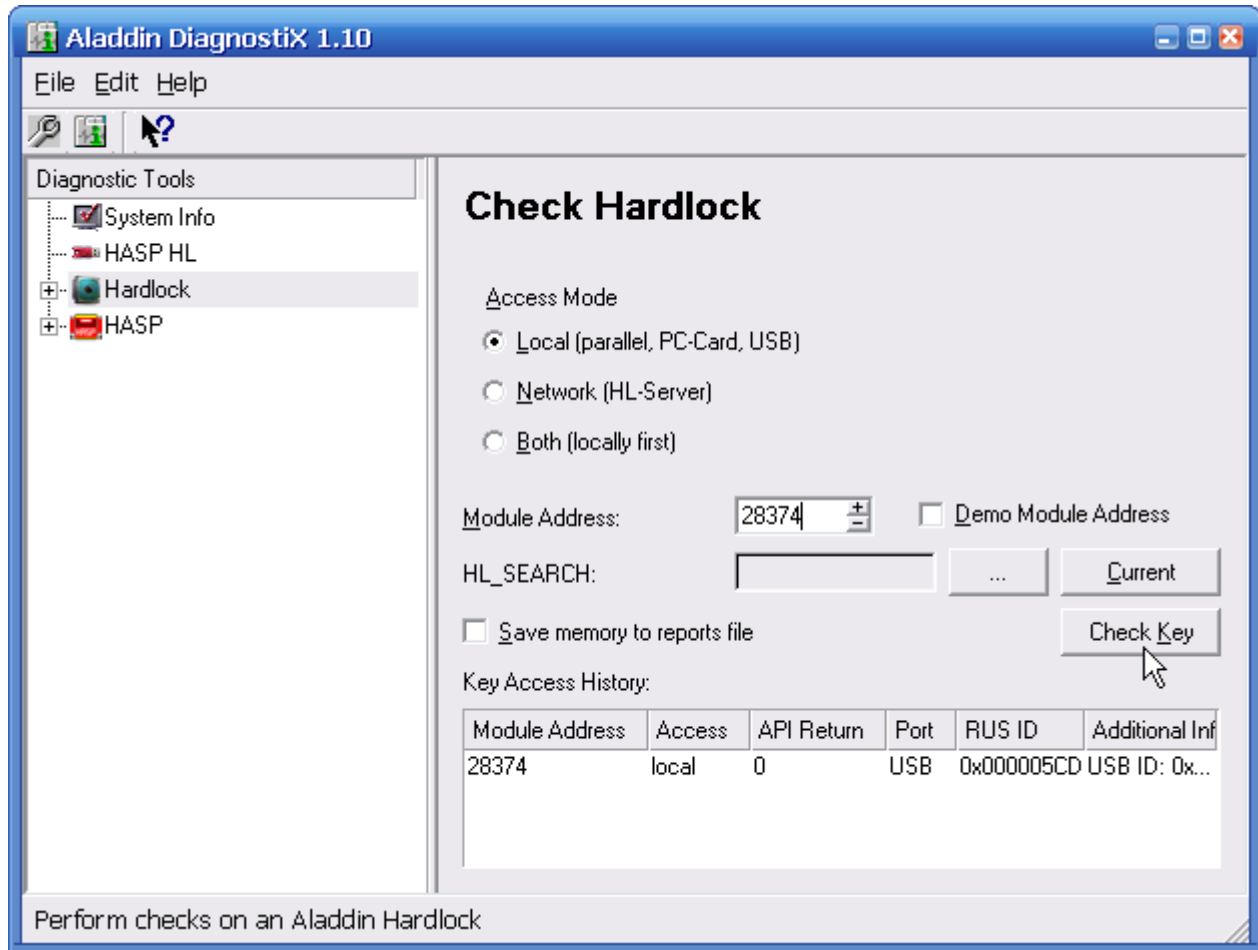
After having done that, press *OK* and restart CONVAL. The module should be found now.





## HARDLOCK DIAGNOSTICS

If you still have problems, please install and run the Hardlock DiagnostiX on both computers, the CONVAL license server and the CONVAL client.



Please select Hardlock on the left hand, enter the module address **28374**, choose local access mode, and press the *Check Key* button. Then switch to network access mode and press *Check Key* again.

Then create the report file using menu *Edit* and *Create report* and send both report files to our technical support team.

## SUPPORT

**F.I.R.S.T.** Gesellschaft für technisch-wissenschaftliche Softwareanwendungen mbH

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