NetHASP (SCC network license) configuration

The NetHASP License Manager is a program developed and supported by Aladdin Knowledge Systems that allows multi-license keys to be used with just one USB key over the network.

SCC uses NetHASP to ensure that only clients with a valid license are able to use the program. If no local dongle is found, the application automatically searches the local network (via broadcasts) for a suitable License Manager host. If such a host is found (with at least one free license available), the application sends a license locking request to the License Manager and gets an encrypted access code in return, allowing the program to start up.

(Last updated 14/12/2020)

Installation

Make sure the PC on which the license server is running has a static IP address or network name which is visible to all client PCs that will be running SCC. Please install the NetHASP software elements before plugging your NetHasp Key into any USB port on your server. Cases have been reported where the plug-and-play driver automatically installed by the operating system prevented the HASP driver to be correctly installed later!

1. Download and run the current HASP driver http://www.atlas-files.com/HASPUserSetup.exe

2. Download and unzip http://www.atlas-files.com/scc-users/license-manager-dec-2018.zip From there run **lmsetup.exe.**

3. Download and unzip http://www.atlas-files.com/scc-users/Aladdin_Monitor_Installer.zip From there run **aksmon32_setup.exe**

Typical VPN configuration

For VPN setups you will typically need to create a file called **nethasp.ini** file in the **C:\Windows** folder of the remote PCs running SCC as shown below.

```
;
;       SCC Nethasp.ini file to go in the C:\Windows folder of PC running SCC
;
[NH_COMMON]
NH_TCPIP = Enabled
[NH_TCPIP]
NH_SERVER_ADDR = XX.XX.XX.XX     ⟵     Replace xx.xx.xx.xx with static IP address
```

```
NH_PORT_NUMBER = 475                    of the license server
NH_TCPIP_METHOD = TCP
NH_USE_BROADCAST = Disabled
```

Trouble shooting your NetHASP VPN configuration

- Make sure you have the license server and monitor software installed and running on your PC being used as a license server. On the monitor screen you should see something similar to the picture below. If you don't see the highlighted three entries either the license manager isn't running, the NETHASP dongle is not connected, or the HASP driver is not installed. To run the monitor software use **Start / Aladdin / AKS Monitor** If the license manager is installed as an application rather than a service it start it using **Start / Aladdin / HASP License manager**
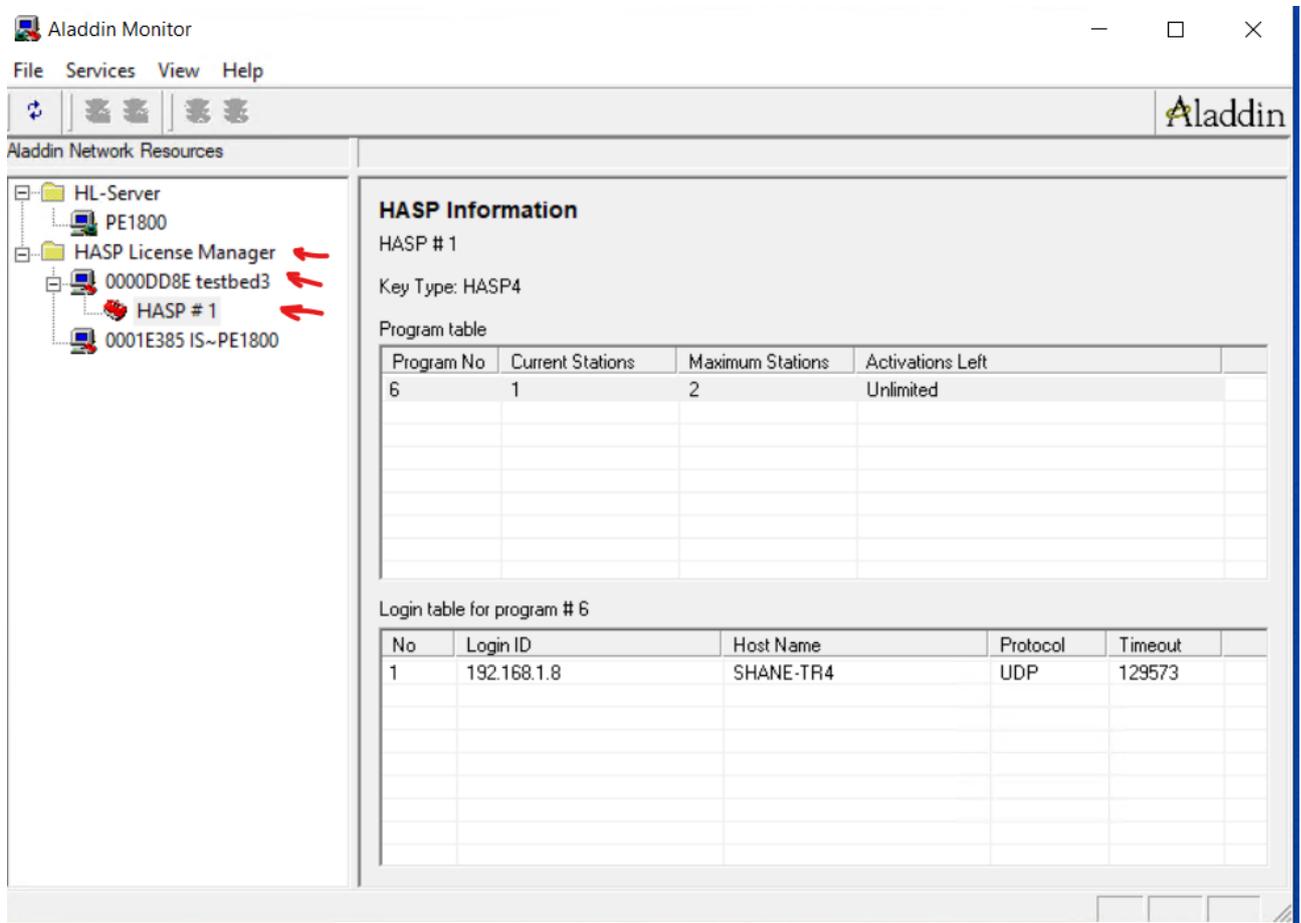
- Assuming the above is correct, check your IP address on the server PC by opening a command prompt and typing **ipconfig /all** which will give you your license servers IP address. This should be a static address.

- On the PC running SCC, open a command prompt and trying pinging that IP address. If you can't do this, your local PC is not connected via VPN to the license server. You should see something similar to the picture below;

- Check that you have a file called C:\Windows\nethasp.ini which contains the right IP address. In this case it would look like this

```
;
;    SCC Nethasp.ini file to go in the C:\Windows folder of PC running SCC
;
[NH_COMMON]
NH_TCPIP = Enabled
[NH_TCPIP]
NH_SERVER_ADDR = 192.168.1.7
NH_PORT_NUMBER = 475
NH_TCPIP_METHOD = TCP
NH_USE_BROADCAST = Disabled
```

- If this still is not working check your firewall on both sides is not blocking TCP port 475
- Make sure that you only have one copy of NETHASP.INI on your computers search path, e.g. you do not have a second copy in the C:\SCC folder.
- If this is still not working, check the monitor program on the server side to ensure that all licenses aren't already checked out

NetHASP configuration detail

Both the NetHASP License Manager and every client application use one central file, nhsrv.ini for the server and nethasp.ini for clients, in their installation folder for the configuration.
As a convention, all settings (in both files) must appear in so-called sections, denoted by special tags written in square brackets. Settings are written like this
SETTING_NAME = SETTING_VALUE;

Everything on a line appearing after a semicolon is discarded (as a comment).
Default configurations (NetHASP v8.31)

The default server configuration file contents (blank lines removed):

```
;********************************************************************************
;* NetHASP License Manager sample configuration file.
;*
;* boolean switches may have the values
;* 1, yes, true, enabled
;* 0, no, false, disabled
;*
;********************************************************************************


; ---------------------------------------------------------------------------
; global LM settings
; ---------------------------------------------------------------------------
[NHS_SERVER]
```

```
NHS_USERLIST = 250 ; maximum number of concurrent logins
; to this LM (default=250, max = 65520)
;NHS_SERVERNAMES = cad, test1, ; server names to match the name a client
; LM017, ; requests (max 6 names, max 7 chars/name)
; oefibla
NHS_HIGHPRIORITY = no ; run LM at high priority (default=no)


; ------------------------------------------------------------------------------
; settings for the IP protocol
; ------------------------------------------------------------------------------
[NHS_IP]
NHS_USE_UDP = enabled ; enabled or disabled (default: enabled)
NHS_USE_TCP = enabled ; enabled or disabled (default: enabled)
NHS_IP_portnum = 475 ; IP port number (default: 475 (IANA registered))
; CAUTION: clients must use the same port !

;NHS_IP_LIMIT = 10.24.2.18-99, 10.1.1.9/16, 10.25.0.0/24,
; 192.0.0.*, 194.0.*.*, 11.*.*.*,
; 10.24.7.8-12 /30, 10.24.2.17
; specifies the range of stations that are allowed to access the LM
; the LAST byte may be a range (e.g., 10-120)
; the 4th, the 4th and 3rd, or the 4th and 3rd and 2nd byte may be an asterisk,
; acting as wildcard (e.g., 10.*.*.*, but NOT 10.*.20.1)
; an additional bitmask can be specified as number of one-bits (e.g., 10.0.0.0/8)


; ------------------------------------------------------------------------------
; settings for the IPX protocol
; ------------------------------------------------------------------------------
[NHS_IPX]
NHS_USE_IPX = enabled ; enabled or disabled (default: enabled)
;NHS_addrpath = c:\temp ; pathname for haspaddr.dat (default: current dir)
NHS_AppendAddr = no ; append to haspaddr.dat (default: replace)
NHS_usesap = enabled ; enabled or disabled (default: enabled)
NHS_ipx_socketnum = 0x7483 ; IPX socket number (default: 0x7483)
; CAUTION: clients must use the same number !


; ------------------------------------------------------------------------------
; settings for the NetBios protocol
; ------------------------------------------------------------------------------
[NHS_NETBIOS]
NHS_USE_NETBIOS = enabled ; enabled or disabled (default: enabled)
;NHS_NBNAME = MyNBName ; use another than predefined NetBios name
; CAUTION: clients must use the same name !
;NHS_use_lana_nums = 3,0,7,2 ; default = all (automatic)


; ------------------------------------------------------------------------------
; end of file
;-------------------------------------------------------------------------
```

Most importantly, you can see that the default port (TCP+UDP 475) is used. If you wish to grant access to your License Manager (especially outside of your local network), make sure that any firewall installed on your NetHASP License Manager host allows incoming connections on that port for those additional IPs/networks.

Restricting access

Even without a firewall, it is a **very good idea** to restrict the access to your NetHASP LM, especially if you're using it on a host with a public IP address! To do so, you can of course install and configure a firewall on your system. However, there is already an access restriction implemented into NetHASP. Simply uncomment the NHS_IP_LIMIT setting in the file and make your settings as needed.

Client configuration

The client normally doesn't have to be configured at all. It simply uses a broadcast (into the local network) to find any service replying on port 475. It then checks all those who replied whether they offer a license for the application ID it uses. If found, it requests (and locks) one license from the License Manager, which is only released if the program terminates correctly.

This means: **if the application crashes, the license remains locked until the timeout is reached** (usually this is 36 hours). So it usually is a good idea to restart the application after a crash, even only so as to unlock the license by closing it again right afterwards.

In case your License Manager is not located in your local network zone, it probably cannot be reached with a broadcast (routers are usually configured to discard broadcast packages). You must then tell the application exactly where to find the NetHASP server:

```
-------------------------------------------------
[NH_COMMON]
NH_TCPIP = Enabled;


[NH_TCPIP]
NH_SERVER_ADDR = XX.XX.XX.XX;
NH_PORT_NUMBER = 475;
NH_TCPIP_METHOD = UDP; ;; if your router doesn't allow UDP, use TCP instead
NH_USE_BROADCAST = Disabled;
-------------------------------------------------
```

Simply put in the IP address of your License Manager instead of the XX.XX.XX.XX bit and save the file as nethasp.ini into the SCC installation folder.

Temporary node locked licenses

Should you ever encounter problems with your NetHASP installation (or your single-license dongle), feel free to contact our support staff support@atlascomputers.ie We can then look into the matter and, if we find you have a case there, will be able to grant you local node locked licenses until the matter is solved.

Testing the installation

To test the correct installation of your NetHASP License Manager, you can use telnet, a program (binary) available on all of the supported platforms.

To do so, open up a console on the machine where you want to run SCC on (for Windows, click on Start -> Run..., enter **cmd** and hit the key.

Then enter the command

·   *telnet XX.XX.XX.XX 475*

where you have to fill in your NetHASP License Manager's IP address for the XX.XX.XX.XX part.

```
C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.   All rights reserved.

C:\Users\ShaneAMD>telnet 137.120.92.207 475
```

The telnet program will now try to contact your license manager, printing the line

·   *Connecting to XX.XX.XX.XX...*

Once the connection has been made (on Windows the screen goes blank, on Linux/Macs you'll get a Connected to... message), you can test your license manager by simply hitting the key again, after which a line like this should appear in your telnet session (console window):

·   >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>Connection closed...

(the character might be a different one, dependent on the character set and language settings for your console).

When this line appears this means your License Manager is reachable and ready for SCC clients to connect and request a license.