

Network Dongle Troubleshooting Guide

Please see the installation ‘Quickstart’ guide (available [here](#)) for instructions on how to install your network dongle.

This troubleshooting guide is intended to help you when you run into problems that are not covered in the ‘Quickstart’ document.

The first part of this document covers general questions you might have in relation to Analyzer licenses. The second part covers specific scenarios where Analyzer can not be started and you might receive an error message instead.

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1. General Questions and Requirements

1.1 System requirements for network dongles

The following requirements should be met in order to setup and use an Analyzer network dongle:

- Operating systems: Only native 32-bit and 64-bit Windows systems are supported. For emulations, virtual machines, and other operating systems (Linux, Mac OS X, etc.) support cannot be provided.
 - ▶ **License Server**: Windows XP*/Vista*/Windows 7/Windows 8/Windows 10/
Windows Server 2003/Windows Server 2008 R2/Windows Server 2012/Windows Server 2016.
 - ▶ **Analyzer PCs**: Windows XP*/Vista*/Windows 7/Windows 8/Windows 10.
- USB port: The network dongle has to be plugged into a USB port on the **License Server**.
- Network card: The network card has to be active and connected to your network (LAN or WLAN).
- Firewall: During driver installation, the required ports are automatically opened in the Windows firewall. If you are using other third-party firewall software, ensure that port 1947 is open for TCP and UDP.

* These operating systems are only supported up to dongle driver version 7.54 and BrainVision Analyzer 2.2.0.

1.2 The Sentinel Admin Control Center (ACC)

The Sentinel ACC is a browser-based end-user license management utility that enables administration of multiple HASP License Managers and Sentinel HASP protection keys. See more at the [dongle manufacturer's website](#).

You can use the Sentinel ACC to check information about your dongle. We will often refer to it during the troubleshooting process. You can also find comprehensive help about the Sentinel ACC: <http://localhost:1947/> ▶ Help

The Sentinel ACC is only accessible when the dongle driver is installed. The Sentinel ACC is all that you require for configuring Sentinel HASP dongles, no other software is required.

1.3 Check for Dongle Technology

Before you start, make sure that only the Analyzer network dongle is plugged into the License Server.

On the License Server, open a web browser and go to <http://localhost:1947/> ▶ Sentinel Keys

This will open the “Sentinel Keys” page of the Sentinel ACC. All dongles that the computer has access to are listed in a table, where each line represents a dongle.

Look for the dongle listed as “Local” under column "Location" and see if the right-most column “Actions” contains a button “Products” (see Figure 1). If a button “Products” exists, the dongle is using the new Sentinel HASP technology, otherwise it is using the old HASP HL technology.

The screenshot shows the Gemalto Sentinel Admin Control Center. The main heading is "Sentinel Admin Control Center". Below it, there is a section titled "Sentinel Keys Available on" followed by a text input field labeled "License Server Name". On the left, there is a sidebar with "Options" including "Sentinel Keys", "Products", "Features", and "Sessions". The main content area contains a table with the following data:

#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	Local	67635	[REDACTED]	Sentinel HL NetTime 50	HASP	4.31	-	Products Features Sessions Blink on

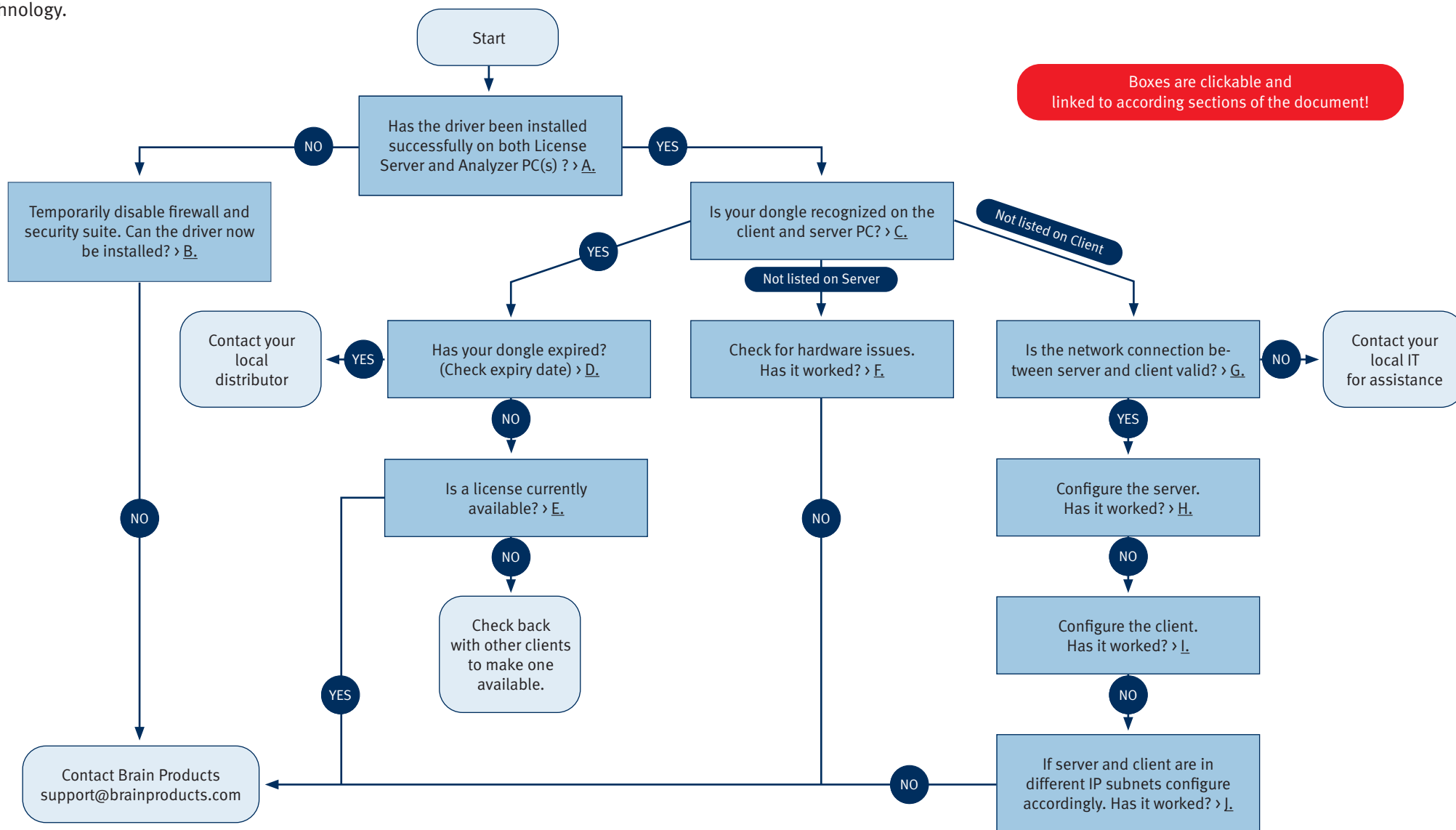
Figure 1: Finding the 'Products' button for Sentinel HASP technology dongles in Sentinel ACC

Please note: For more information about upgrading license dongles, please [click here](#).

The troubleshooting procedures differ slightly depending on the dongle technology. If additional steps need to be taken, you will find them explicitly mentioned under the corresponding section.

2. Troubleshooting

Use this part of the document when you have followed the installation “Quickstart” document but Analyzer won’t open. The decision tree below helps you to find the information to solve your problem. **Please note that from BrainVision Analyzer 2.2.1, only Sentinel HASP dongles are supported.** Refer to [section 1.3](#) for more information on how to check your dongle's technology.



2.1 Dongle Driver Installation

A. How do I check whether the dongle driver is installed correctly?

In order for Analyzer to access the network dongle the dongle drivers need to be correctly installed on both the **License Server** and the **Analyzer PC**.

Type the following into any web browser: <http://localhost:1947/> ▶ Sentinel Keys. This will open the Sentinel ACC. You should do this on both the **License Server** and the **Analyzer PC**.

If the Sentinel ACC does not open this means that your dongle driver is not installed. The latest driver version can be found on our website in the [download area](#).

B. What do I do when I get an error message trying to install the driver?

If you continue to have problems installing the driver and you are using a third party (non-Windows) firewall or security suite, please disable these temporarily during the installation process.

C. How do I check that my dongle is recognized by the computer(s)?

On the **License Server**, you will see the name of the server at the top of the page and your dongle will be listed as 'Local' under Location (see Figure 2).

#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	Local	67635		Sentinel HL NetTime 50	HASP	4.31	-	Products Features Sessions Blink on

Figure 2: How the Sentinel ACC looks on the License Server

On the **Analyzer PC**, your dongle will be listed with the name of your **License Server** PC under Location (see Figure 3).

#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	License Server Name	67635		Sentinel HL NetTime 50	HASP	4.31	3	Browse Net Features

Figure 3: How the Sentinel ACC looks on the Analyzer PC

2.2 The Dongle is listed in the ACC for both the License Server and the Analyzer PC but Analyzer still won't open

If the dongle is shown in the ACC for both the **License Server** and the **Analyzer PC**, but Analyzer still won't open, the problem could be that your license is not valid or that the license session limit of your dongle is reached.

D. How do I check whether my dongle license is valid?

License dongles are always time-limited when shipped. Dongles have to be unlocked to be permanently valid using an .exe-file sent to you by your distributor via email once the purchase is complete. If you did not receive this file, please contact your local distributor.

If you are not sure whether the file has been applied to your dongle you can check the validity by following these steps:

- Type the following into any web browser on the computer where the dongle is plugged in:
<http://localhost:1947/> ▶ Sentinel Keys
- Dongles are listed under 'Key ID' rather than the label on the dongle. Your dongle will be listed as 'local' and from the vendor '67635'.
- If your dongle is listed select 'Features' from the menu on the left of the screen
- The column called 'Restrictions' displays the expiry date of your dongle.
 - For Sentinel HASP dongles**
 - ▶ Unlimited dongles show 'perpetual' for all features
 - ▶ Expired dongles show 'Expired' in red
 - For HASP HL dongles**, an expiry is in most cases unlikely if they have been in use for a while. If you are in doubt, please contact us via support@brainproducts.com
- If the dongle is expired, please contact your local distributor. Find a list of our distributor contacts [here](#).

E. How do I check whether licenses are available?

You can use the Sentinel ACC to check that the number of licenses in use does not exceed the number of licenses available on your dongle (see 'Logins' column under 'Features', see Figure 4). If the limit is reached, no more instances of Analyzer can be opened until another instance is closed.

Options		Features Available on Analyzer PC Name											
#	Vendor	Key ID	Product	Feature	Location	Access	Counting	Logins	Limit	Detached	Restrictions	Sessions	Actions
1	67635		-	0	License Server Name	Loc Net Display	Station	1	50	-	Perpetual	1	<input type="checkbox"/> Browse
2	67635		3 Brain Products GmbH Product 3	100	License Server Name	Loc Net Display	Process	1	50	-	Perpetual	1	<input type="checkbox"/> Browse
3	67635		3 Brain Products GmbH Product 3	101	License Server Name	Loc Net Display	Process	1	50	-	Perpetual	1	<input type="checkbox"/> Browse
4	67635		3 Brain Products GmbH Product 3	102	License Server Name	Loc Net Display	Process	-	50	-	Perpetual	-	<input type="checkbox"/> Browse
5	67635		3 Brain Products GmbH Product 3	103	License Server Name	Loc Net Display	Process	1	50	-	Perpetual	1	<input type="checkbox"/> Browse
6	67635		3 Brain Products GmbH Product 3	104	License Server Name	Loc Net Display	Process	1	50	-	Perpetual	1	<input type="checkbox"/> Browse

Figure 4: How to check for available licenses in the Sentinel ACC

2.3 The Sentinel ACC opens but my dongle does not appear in the ACC on the License server.

This is most likely related to a hardware problem of the dongle itself or the License Server.

F. How do I check for hardware problems?

It could be that:

- The dongle is not plugged-in correctly
 - ▶ Unplug and plug-in the dongle again
- The currently used USB port is broken
 - ▶ This can be tested by another USB device or using a different USB port
- The USB adapter is not installed correctly
 - ▶ This can be checked in the Windows device manager
- The dongle hardware is broken
 - ▶ If you think the dongle is broken, please contact your local distributor



2.4 The Sentinel ACC opens but my dongle does not appear in the ACC on the Analyzer PC.

Sometimes it is necessary to check the network connection between the **Analyzer PC** and the **License Server**. Even when all of the correct installation steps have been performed there might still be a problem with communication between the **Analyzer PC** and the **License Server** if there are some local network restrictions. Make sure that your network connection is valid, the network license is distributed by the **License Server** and that the **Analyzer PC** is able to search for the network license. To do this you will need to configure the Sentinel ACC for both the **License Server** and the **Analyzer PC**.

G. How can I check the network connection between License Server and Analyzer PC?

Test the network by checking whether your **Analyzer PC** can communicate with the **License Server**.

- In order to do this, you will need to enable remote access to Sentinel ACC on the **License Server**:
- <http://localhost:1947/> ▶ Configuration ▶ Basic Settings ▶ Allow Remote Access to ACC and click 'Submit' (Figure 5; n.b. this can be changed back after the network connection has been checked)

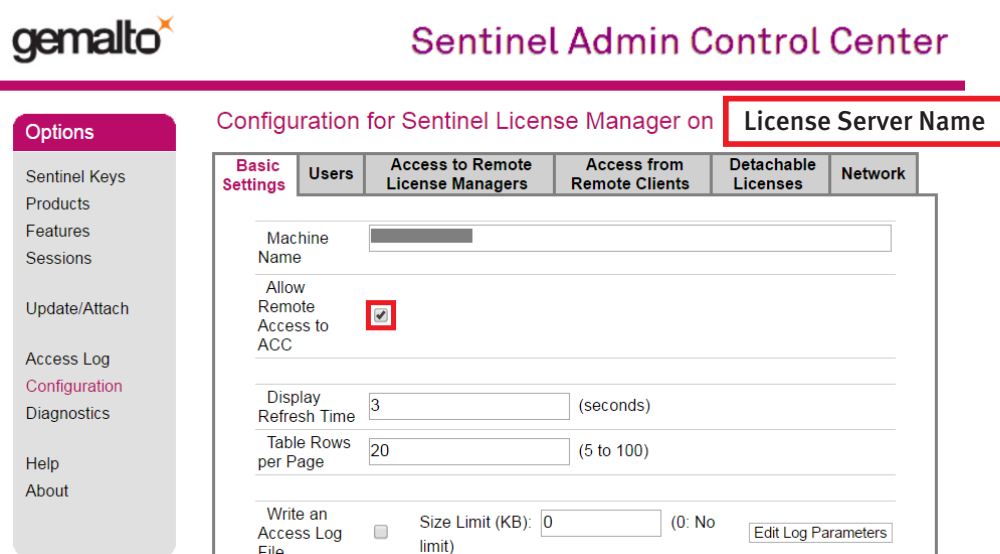


Figure 5: Allow remote access to the ACC on the License Server to allow the network connection to be tested

- You will then need to open the server's ACC from the **Analyzer PC**:
- Type the following in your web browser: <http://< IP address or name of your server>:1947> ▶ Sentinel Keys
- At the top of the page you will see 'Sentinel Keys Available on 'name of your server''. This means that a network connection has been successfully established.
- If the Sentinel ACC does not open, please check that you have specified the server IP/name correctly.
- If the server name is specified correctly and the Sentinel ACC still does not open, please contact your local IT support for further assistance with the local network.



H. How do I Configure the License Server?

Activate remote access on the **License Server** by going to the 'Configuration' in the Sentinel ACC and select the tab 'Access from Remote Clients' and check the box highlighted in Figure 6. Make sure that no 'Access Restrictions' are applicable to any of the **Analyzer PCs** (allow = all means no restrictions).

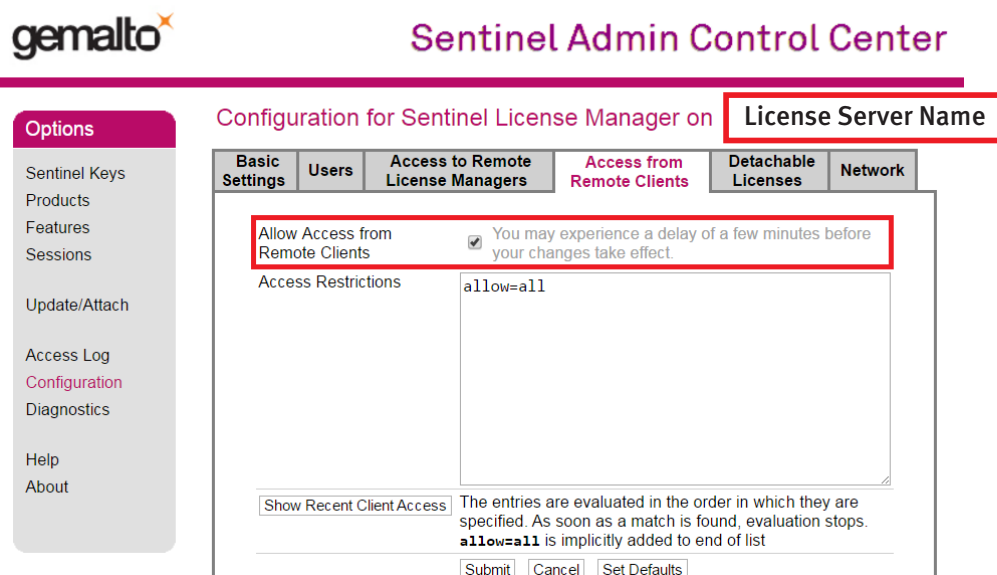


Figure 6: How to 'Allow Access from Remote Clients' in Sentinel ACC



I. How do I configure the Analyzer PC?

Open the Sentinel ACC on the Analyzer PC and go to Configuration and then to the 'Access to Remote License Managers' tab and check the boxes for 'Allow Access to Remote License Servers' and 'Broadcast search for Remote Licenses'. Don't forget to press 'Submit'. This will allow Analyzer to look for network licenses within the local IP subnet (see Figure 7).



Sentinel Admin Control Center

Configuration for Sentinel License Manager on **Analyzer PC Name**

Basic Settings	Users	Access to Remote License Managers	Access from Remote Clients	Detachable Licenses	Network
<p>Allow Access to Remote Licenses <input checked="" type="checkbox"/> You may experience a delay of a few minutes before your changes take effect.</p> <p>Broadcast Search for Remote Licenses <input checked="" type="checkbox"/></p> <p>Aggressive Search for Remote Licenses <input type="checkbox"/></p> <p>Remote License Search Parameters</p>					
<p>Submit Cancel Set Defaults</p>					

Figure 7: How to 'Allow Access to Remote License Managers' in the Sentinel ACC

J. What do I need to do if the Analyzer PC is in a different IP subnet to the License Server?

1. For Sentinel HASP dongles

You need to specify the IP address or name of the **License Server** in Sentinel ACC for the **Analyzer PC**. You can do this in the 'Access to Remote License Managers' tab by typing the specific IP address or name in the box for 'Remote License Search Parameters' and click 'Submit' (see Figure 8).



Sentinel Admin Control Center

Configuration for Sentinel License Manager on **Analyzer PC Name**

Basic Settings	Users	Access to Remote License Managers	Access from Remote Clients	Detachable Licenses	Network
<p>Allow Access to Remote Licenses <input checked="" type="checkbox"/> You may experience a delay of a few minutes before your changes take effect.</p> <p>Broadcast Search for Remote Licenses <input checked="" type="checkbox"/></p> <p>Aggressive Search for Remote Licenses <input type="checkbox"/></p> <p>Remote License Search Parameters 123.456.789.0</p>					
<p>Submit Cancel Set Defaults</p>					

Figure 8: How to specify the IP address of the License Server in the Sentinel ACC

2. For HASP HL dongles

Two steps of configuration are required:

- (a) Configure the Sentinel ACC the same way as described in point 1
- (b) Configure the nethasp.ini file by specifying the IP address of the License Server in the field “NH_SERVER_ADDR” under section [NH_TCPIP] (see Figure 9). Save the adapted file and place it under the Analyzer installation directory.

```
[NH_TCPIP]

;
; NetHASP does not support TCP/IP under DOS.
;

;
; Section-specific Keywords for the TCP/IP protocol.
;

NH_SERVER_ADDR = 123.456.789.0
; IP addresses of all the NetHASP
; License Managers you want to search.
; Unlimited addresses and multiple
; lines are possible.
;
; Possible address format examples:
; IP address:      192.114.176.65
; Local Hostname: ftp.aladdin.co.il
```

Figure 9: How to specify the IP address of the License Server in the nethasp.ini file

