

Network License 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® XP¹/Vista¹/Windows® 7³/Windows® 8³/Windows® 8.1/Windows® 10/Windows® 11⁴/
Windows® Server 2003²/Windows® Server 2008 R2³/Windows® Server 2012³/Windows® Server 2012 R2/
Windows® Server 2016/Windows® Server 2019⁴/Windows® Server 2022⁵.
 - ▶ **Analyzer PCs:**
Windows® XP¹/Vista¹/Windows® 7³/Windows® 8³/Windows® 8.1/Windows® 10/Windows® 11⁴.
- **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.

¹ These operating systems are only supported up to BrainVision Analyzer 2.2.0.

² These operating systems are only supported up to BrainVision Analyzer 2.2.1.

³ These operating systems are only supported up to BrainVision Analyzer 2.2.2.

⁴ These operating systems are only supported from BrainVision Analyzer 2.2.2.

⁵ These operating systems are only supported from BrainVision Analyzer 2.3.0.

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 **Legacy HASP HL technology**.

Sentinel Admin Control Center

Sentinel Keys Host Name: License Server Name

Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
Local	Brain Products GmbH (67635)		Reserved for New SL Key	SL	9.13		Fingerprint
Local	Brain Products GmbH (67635)		Sentinel HL NetTime 50	Driverless	4.60		Products Features Sessions Blink on

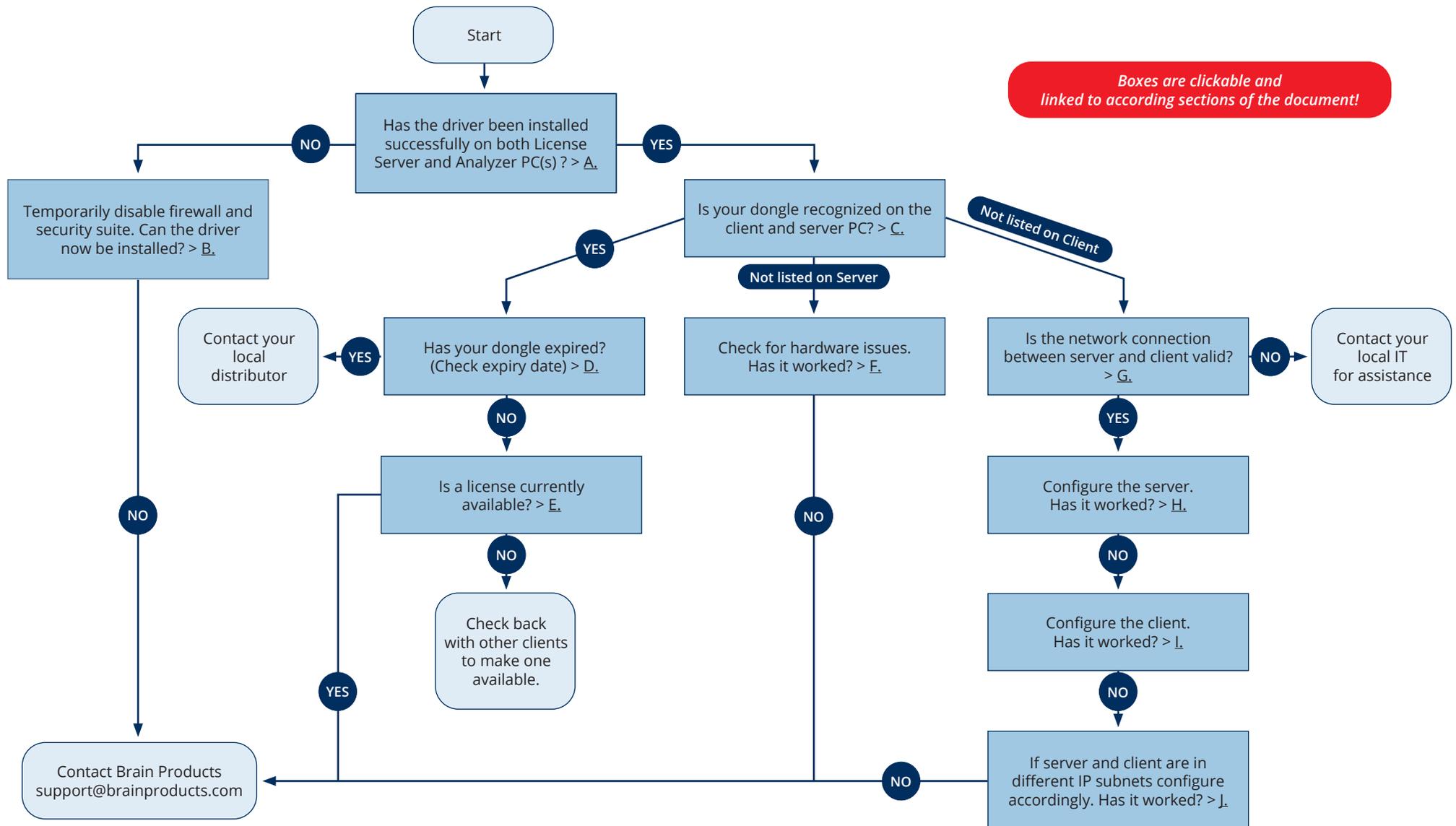
Figure 1: Finding the 'Products' button for Sentinel HASP technology dongles in Sentinel ACC.

▶ *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.

► *Please note: As of BrainVision Analyzer 2.3.0, the dongle driver (referred to as Sentinel Run-time Environment) will be automatically installed with the Analyzer installation. This means no separate installation is needed on Analyzer PCs.*

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](#).



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).

Sentinel Admin Control Center

Sentinel Keys Host Name: License Server Name

Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
Local	Brain Products GmbH (67635)		Reserved for New SL Key	SL	9.13		Fingerprint
Local	Brain Products GmbH (67635)		Sentinel HL NetTime 50	Driverless	4.60		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).

Sentinel Admin Control Center

Sentinel Keys Host Name: Analyzer PC Name

Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
Local	Brain Products GmbH (67635)		Reserved for New SL Key	SL	9.13		Fingerprint
License Server Name	Brain Products GmbH (67635)		Sentinel HL NetTime 50	Driverless	4.60	6	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. In order to make your license permanently valid, you need to update your dongle through our online customer portal. For more information [click here](#). If you have not been notified yet about the dongle update, 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.
 1. For Sentinel HASP dongles
 - ▶ Unlimited dongles show 'perpetual' for all features
 - ▶ Expired dongles show 'Expired' in red
 2. For Legacy 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.

Sentinel Admin Control Center												
Features Available Host Name: Analyzer PC Name												
Vendor	Key ID	Product	Feature	Location	Access	Counting	Logins	Concurrency	Detached	Restrictions	Sessions	Actions
Brain Products GmbH			0	License Server Name	Loc Net Display	Station	1	50		Perpetual	1	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	100 Analyzer 2 Base	License Server Name	Loc Net Display	Station	5	50		Perpetual	6	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	101 Analyzer 2 Professional	License Server Name	Loc Net Display	Station	2	50		Perpetual	2	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	102 Analyzer 2 Macros	License Server Name	Loc Net Display	Station	2	50		Perpetual		Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	103 Analyzer 2 Addins	License Server Name	Loc Net Display	Station	2	50		Perpetual	2	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	104 Analyzer 2 MR	License Server Name	Loc Net Display	Station	2	50		Perpetual	2	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	105 Analyzer 2 Video	License Server Name	Loc Net Display	Station	2	50		Perpetual	2	Browse
Brain Products GmbH	3	Analyzer 2 Professional MR	106 Analyzer 2 AddChannel	License Server Name	Loc Net Display	Station	2	50		Perpetual	2	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)

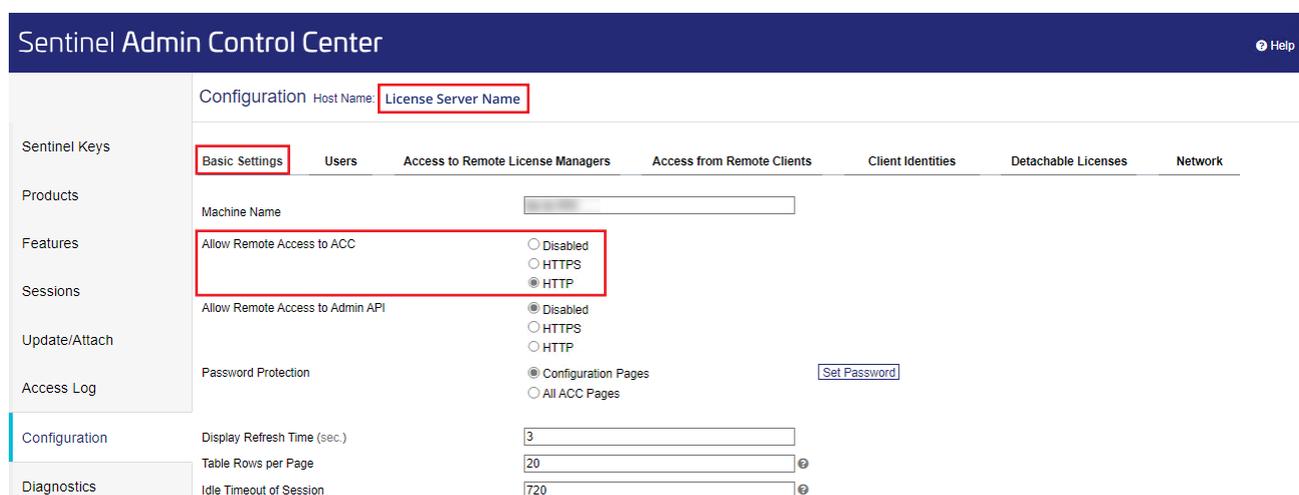


Figure 5: Allow remote access to the ACC on the License Server to allow the network connection to be tested. Please note that you might have to enable Password Protection if prompted.

- 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).

The screenshot shows the 'Sentinel Admin Control Center' interface. The 'Configuration' tab is active, and the 'Host Name' is set to 'License Server Name'. The 'Access from Remote Clients' sub-tab is selected. Under 'Allow Access from Remote Clients', the following options are visible:

- No one
- Identifiable clients only. Non-cloud licenses cannot be accessed.
- Cloud licenses require identity. Other licenses are accessible by all clients.
- All licenses are accessible without need of identity

A red box highlights the selected option and the following note: "Note: Regardless of the option selected, remote machines using a client identity cannot access non-cloud licenses." Below this, there are input fields for 'Public Address for Access With Identity and ACC', 'Trusted IP Address', and 'Public Port for Access With Identity'. There are also checkboxes for 'Listen for clients also on port 80' and radio buttons for 'Store Identity Secrets' (Plain text or Encrypted).

At the bottom, there is a 'Show Recent Client Access' link and a note: "The entries are evaluated in the order in which they are specified. As soon as a match is found, evaluation stops. allow=all is implicitly added to end of list." Buttons for 'Submit', 'Cancel', and 'Set Defaults' are at the bottom.

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).

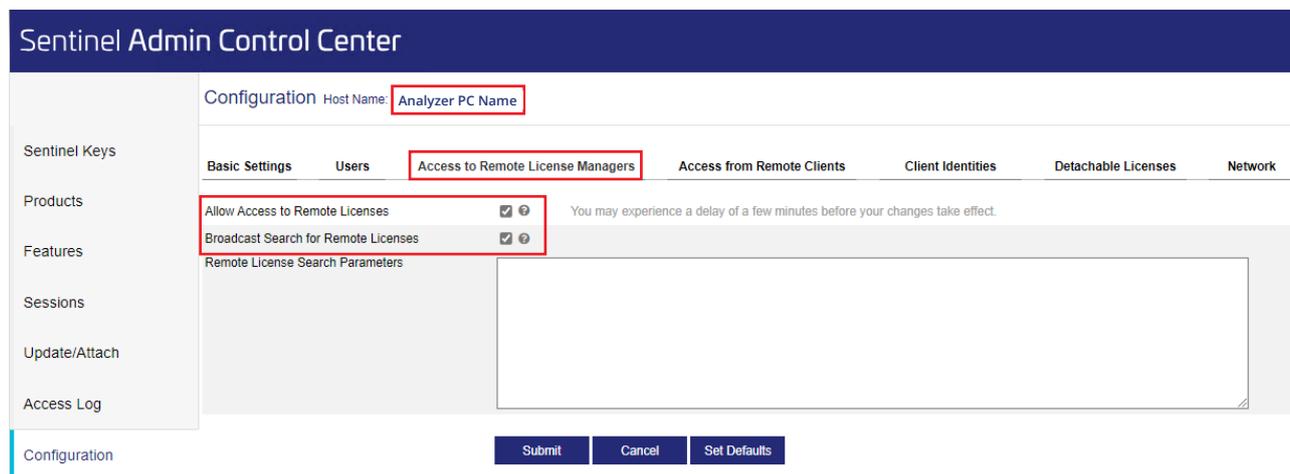


Figure 7: How to 'Allow Access to Remote License Managers' in the Sentinel ACC.



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).

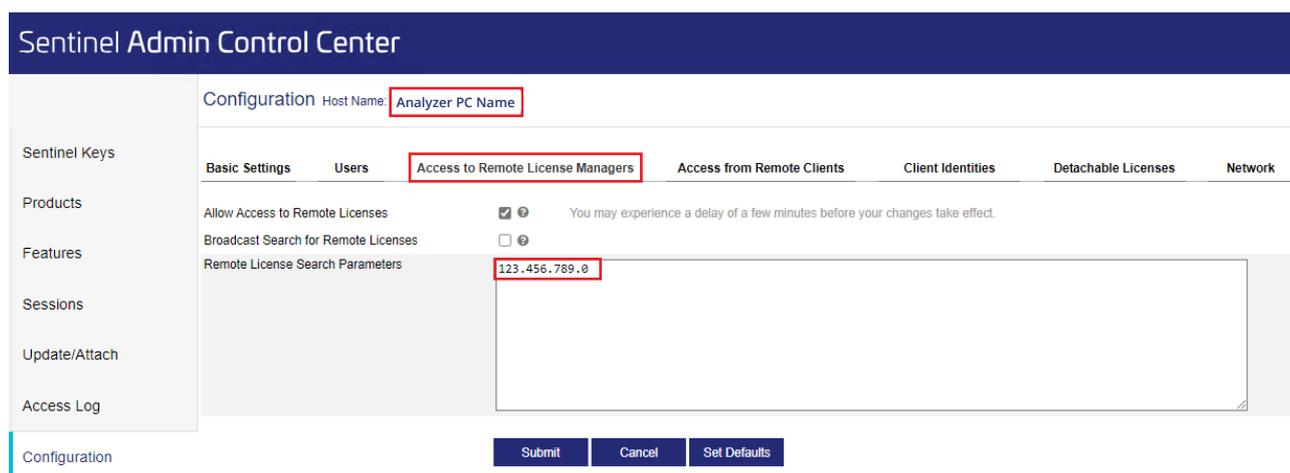


Figure 8: How to specify the IP address of the License Server in the Sentinel ACC.



2. For Legacy HASP HL dongles

In addition to configuring the Sentinel ACC as in point [J1](#), a separate configuration file is required which is provided upon request. Please contact us via support@brainproducts.com and we will guide you through the steps.