Sentinel key troubleshooting for JMatPro®

1) The Sentinel software installer fails:

This error is likely being caused by a conflict with an antivirus software. Try the following steps:
1. Disable any antivirus protection before installing the Sentinel drivers.
2. Go to the JMatPro® installation folder, and browse to the subdirectory "Sentinel-HL-Keys > Graphic Installer".
3. Run the file "HASPUserSetup.exe" to install the drivers.

## 2) Sentinel key monitoring and control:

The key can be controlled and monitored by using the Sentinel Admin Control Centre (ACC) Open a web browser and access:
http://localhost:1947

2.1) Configuration

In the left part of the ACC choose *Configuration*. This will allow to configure how keys are accessed.

Every computer on your network could be a server or a client. What defines the server is that it hosts the key, the clients are then computers who will need access to the key.
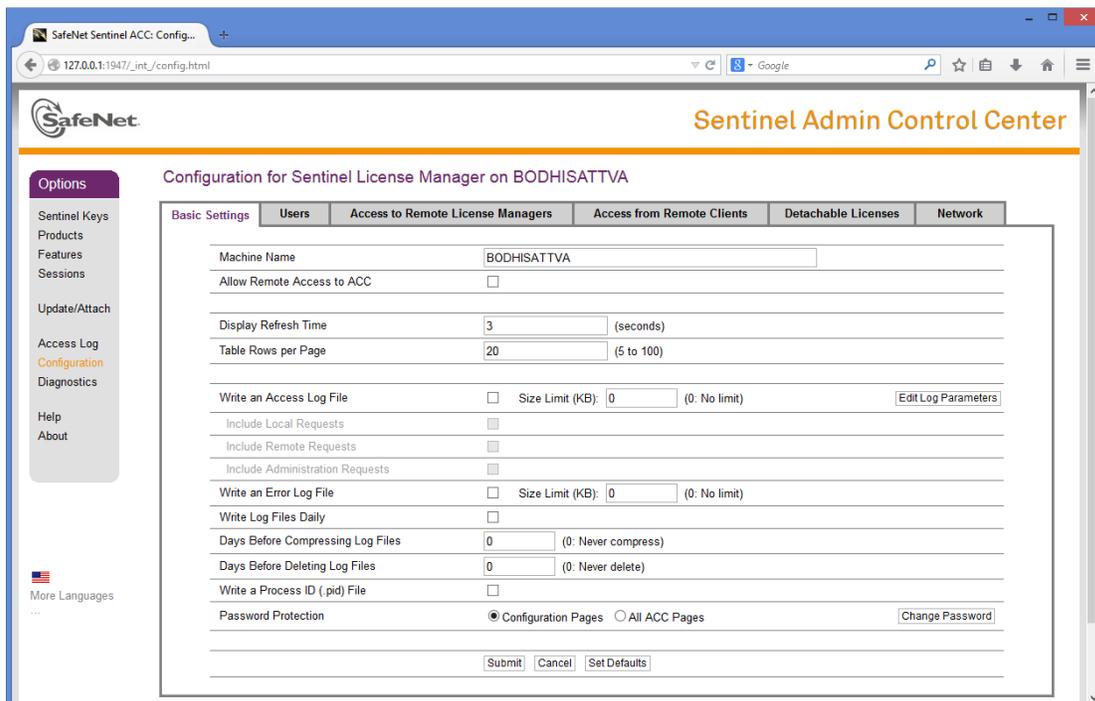
- *Access to Remote License Managers*:
This is the most important tab for Configuration. When the ACC is run on the CLIENT, it is used to modify settings on how the client looks for a key on a server.

Other tabs are:
  - *Access from Remote Clients*:
This will modify settings for the server when the ACC is run on the server. By default, it cannot change server settings when run from the client (unless allowed in basic settings). This should be set from the server with allow=all as default, if this is changed it may create restricted access to certain users and this may create an error 53. We advise not to modify this if not required.
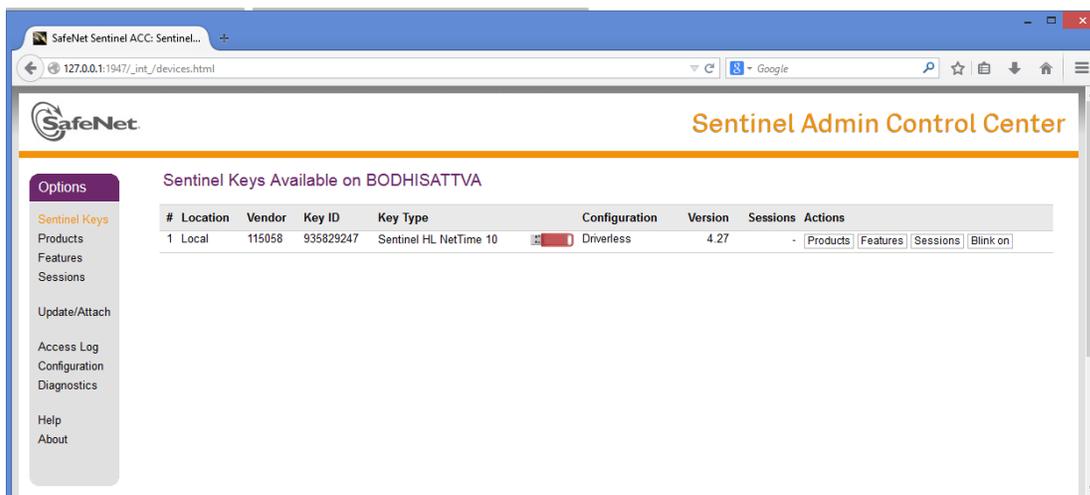- *Basic Settings*:
if you are on the server, if allow remote access to ACC is *not* checked (by default it is not) then it is not possible to change the settings from a client computer. We advise not to modify this if not required.
- *Users:*
  The setting should be allow=all@all by default. We advise not to modify this if not required.

2.2) Monitoring:

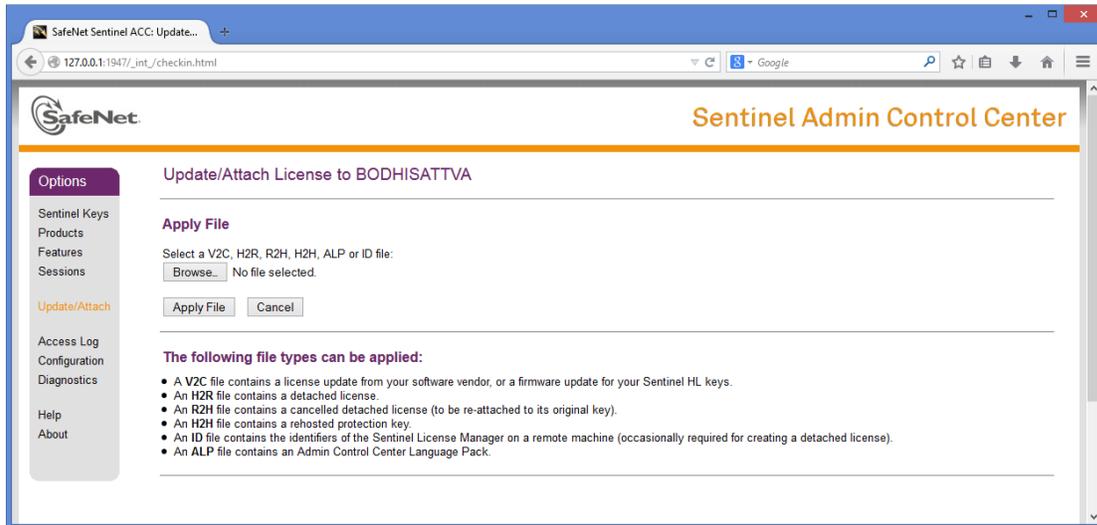In the left part of the ACC choose *Sentinel Keys*. This will allow monitoring of connected keys.

2.3) Updating of key

Keys can be updated from JMatPro® in the menu *Utilities->Update license* but alternatively it can be done from the ACC by choosing *Update/Attach*.

Press *Browse* to locate the v2c file which has been sent to you and press *Apply File* to apply the update.

3) Error 27

This error comes from failed remote desktop connections. It can be fixed by a simple key update code. Let us know that you need this update and we will e-mail you the code. When you receive the update file:

1. Insert your key and then open JMatPro® without using a remote connection.
2. Select Utilities.
3. Select Update license.
4. Select the update file to complete the update.
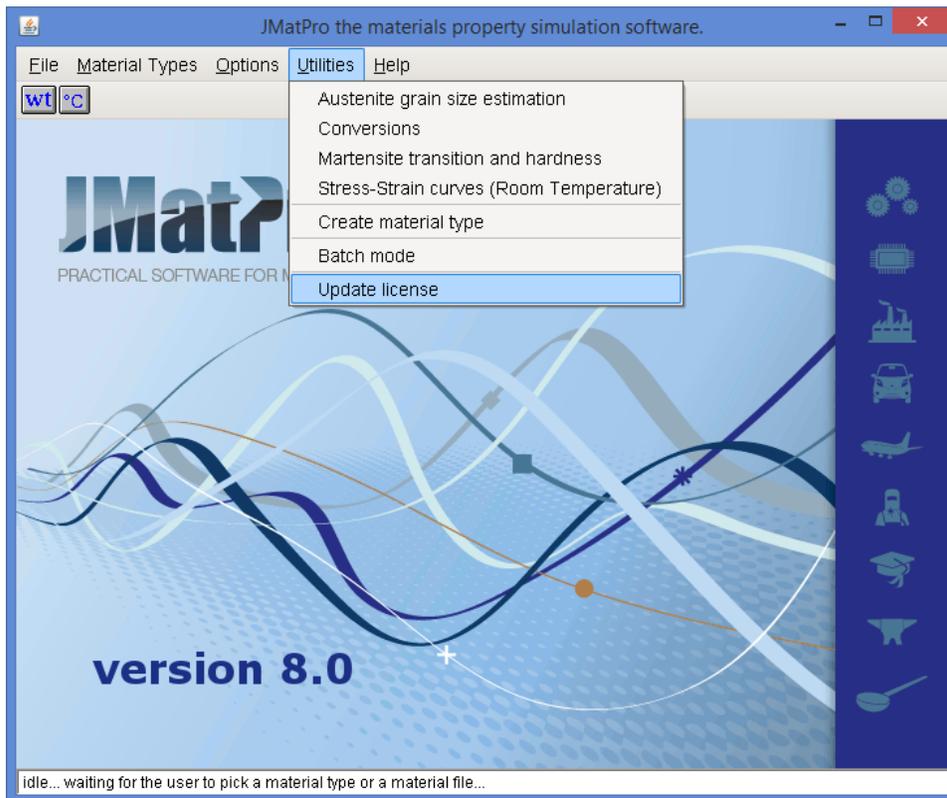
INSTALLATION CASES

Case 1: **JMatPro® is installed and used on a single computer on which the dongle is present.**

No additional set-up is needed, the key should be found without any problem.

Case 2: **JMatPro® is installed on a client computer, the key is on a server.** (This is the advised set-up for network use)

The Sentinel software needs to be installed on the client for this. It is installed by default by the JMatPro® installer after JMatPro® itself is installed.

If server and client are on a simple network within the same subnet, in principle no further action is required, and the key should be found without any further settings.

If the key is not found, first ensure that the TCP/UDP port 1947 which is used by Sentinel for the client/server communication is open and not blocked, for instance by a firewall.

If the key is still not found edit the "configs/system.def" file in the JMatPro® installation folder on the client and add the server name or IP address after the following field: *[ContactServer]=*

If the network is large and in particular if different subnets are involved, some additional settings may be required. Try the following steps on the CLIENT computer:
1. Open a web browser and follow the following link to access the Sentinel Admin Control Center:
http://localhost:1947/_int_/config_to.html
2. Make sure the option "Allow Access to Remote Licenses" is checked.
3. Uncheck the option "Broadcast Search for Remote Licenses", and check the option "Aggressive Search for Remote Licenses".
4. Under "Specify Search Parameters", enter the name or address of the license server.
5. Click "Submit".
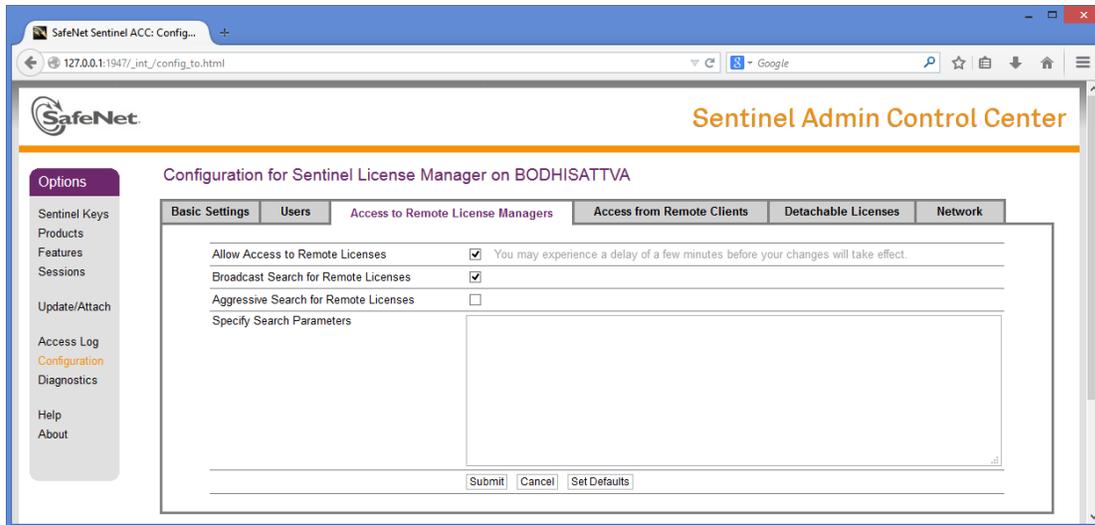
Case 3: JMatPro® is installed on a server also hosting the key, JMatPro® is run on a client through links.

JMatPro® is installed on one computer (the server) and the JMatPro® folder is shared over the network. This allows users to access JMatPro® from remote machines (the clients) and, for instance, create a shortcut to the remote executable on their desktop. When the shortcut is clicked, even though the server is being accessed remotely, the program is actually executed locally, not on the server. In this case, JMatPro® would only work when either a) there is a key connected to the client, or b) the client can reach a key over the network, which requires the installation of the Sentinel drivers, otherwise the client computer does not know how to look for keys.

a) We recommend that you install the Sentinel software on the clients. Go to the JMatPro® installation folder on the server, and browse to the subdirectory "Sentinel- HL-Keys -> Graphic Installer". The file "HASPUserSetup.exe" can be copied and used to install the drivers on the client. Then follow advice given for case 2 above.

b) Alternative solution (not recommended but possible)
If the Sentinel software cannot be installed on the clients, it may be possible to get the same result by adding a configuration file on the client computer,

This file should be called "hasp_115058.ini" and be located on the client as follows:

In Windows XP:
%UserProfile%/Local Settings/Application Data/SafeNet Sentinel/Sentinel LDK/hasp_115058.ini
In Windows Vista/7/8
%LocalAppData%/SafeNet Sentinel/Sentinel LDK/hasp_115058.ini

This "hasp_115058.ini" file should contain the following 3 lines:
[NETWORK]
broadcastsearch = 0
serveraddr =

Then add your server address in two files:
- in "hasp_115058.ini" after *serveraddr =*
- in the "configs/system.def" file in the JMatPro® installation folder. After the following field: *[ContactServer]=*
Make sure that the address used is the same in both files.

Finally, ensure that the TCP/UDP port 1947 which is used by Sentinel for the client/server communication is open and not blocked, for instance by a firewall.

Case 4: JMatPro® is installed on a server computer which also hosts the key. JMatPro® is accessed by clients through remote connection.

JMatPro® is installed on a server and an SSH-like program is used to establish a remote connection from client to server (for instance, Microsoft Remote Desktop, "mstsc.exe"). In this case, users login to the server remotely and have predefined restrictions (or not) on what they can do. Once logged in, it is as though they are sitting in front of the server, and whatever command they issue is executed there. Running JMatPro® in this way does not require anything to be installed on the client, other than the application used to establish the client/server connection.

If this fails, check that:
- the installed JMatPro® folder is open to full access for all users connecting
- the Sentinel drivers (on the server) are not blocked and have not stopped working due to insufficient user permissions (this can be checked on the list of services running).

Case 5: Still not working

Here is how to generate diagnostic files to help us understand your issue. Please provide the following files/information:
1. Admin Control Centre diagnostic file on the **server**. In order to get this, open a browser and follow the link http://localhost:1947/_int_/diagnostics.html and then press "Generate Report" and save the page.
2. Admin Control Centre diagnostic file on **client** machine that had the Sentinel drivers installed (repeat step 1 on client).
3. Network configuration, i.e., whether the server and client are on the same subnet, and whether the server is accessed through Terminal Server from Microsoft or another software.