
ASPEN

SL Key Administration Program User's Manual



Advanced Systems for Power Engineering, Inc.

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1.1 ASPEN SL Key Administration Program

The *ASPEN SL Key Administration Program* is designed to help you manage software keys.

Functionally, a software key is the same as a network key in the form of a USB device. Both software and USB network keys can hold authorization for one or more ASPEN programs, and for each program, one or more concurrent seats.

IMPORTANT NOTE: SL keys are created from the unique fingerprint of the host computer's hardware. If the host computer's fingerprint becomes different due to hardware update or modification, SL keys on that host can acquire a "Cloned" status and become lost permanently. To avoid this problem you should transfer all SL keys to another machine for temporary storage before making any change in the host computer hardware. Steps to re-host SL keys from one machine to another are described in section 3 of this manual.

This *Administration Program* is designed to help you:

- Install a software key for the first time.
- Move a software key from one computer to another.
- Update a software key to change the ASPEN software and/or the number of seats that it authorizes.

These three operations are explained in detail in Section 2, 3 and 4.

1.2 Glossary

First, a glossary of terms that will be used in this document:

- **Hosting:** Installing an SL key for the first time.
- **Key Admin Program:** Short for the ASPEN SL Key Administration Program.
- **Host PC:** The physical or virtual PC on where the key will be installed or modified. See Sections 2.1 and 4.2 for more information.
- **Rehosting:** Moving an SL key from one computer to another.
- **Runtime:** The Sentinel Admin Control Center software that facilitates communication between the SL keys and ASPEN software.
- **SL key:** A software key.

- Virtual PC: A virtual machine that is running in a virtualization environment such as VMWare and Microsoft Hyper-V.

SECTION 2

HOSTING A SOFTWARE KEY

2.1 Introduction

The first-time installation of an SL key has to be done on the physical or virtual PC where the key will reside. The host computer need not be a server. It can be any PC that is connected to the network and is reachable with an IP address or a host name.

In the following we will use the term “Host PC” to refer to the computer on which the installation is performed.

The person installing the key must have Windows administrative privileges to install software.

There are three steps to install an SL key for the first time:

- Step 1: Install the SL Key Admin Program on the Host PC.
- Step 2: Run the SL Key Admin Program to get the Host PC’s fingerprint. Send the fingerprint file to ASPEN Tech Support. ASPEN will return to you a license file.
- Step 3: Run the Sentinel Admin Control Center to apply the license file.

2.2 Hosting An SL Key

STEP 1: TO INSTALL THE SL KEY ADMIN PROGRAM ON THE HOST PC:

1. Run the setup program.

ASPEN will send you an installation program to install the software necessary to administer the SL key. The installation program will create a folder under Program Files, copy the executable file SLAdmin.exe there, and create shortcuts under All Programs. In addition, it does the following:

- Installs the key’s runtime, which is the software that facilitates communication between the SL key and the programs on the network.
- Installs the MS Visual Studio 2013 Redistributable, software that enables the Key Admin Program to run under Windows.
- Copies the file haspplib_42254.dll to the computer. This dynamic-linked library contains logic to host, rehost and update the key.

STEP 2: TO GET THE HOST PC'S FINGERPRINT:

1. **At the Host PC, start the Key Admin Program.**
2. **Execute the Hosting | Get Host PC Fingerprint command.**

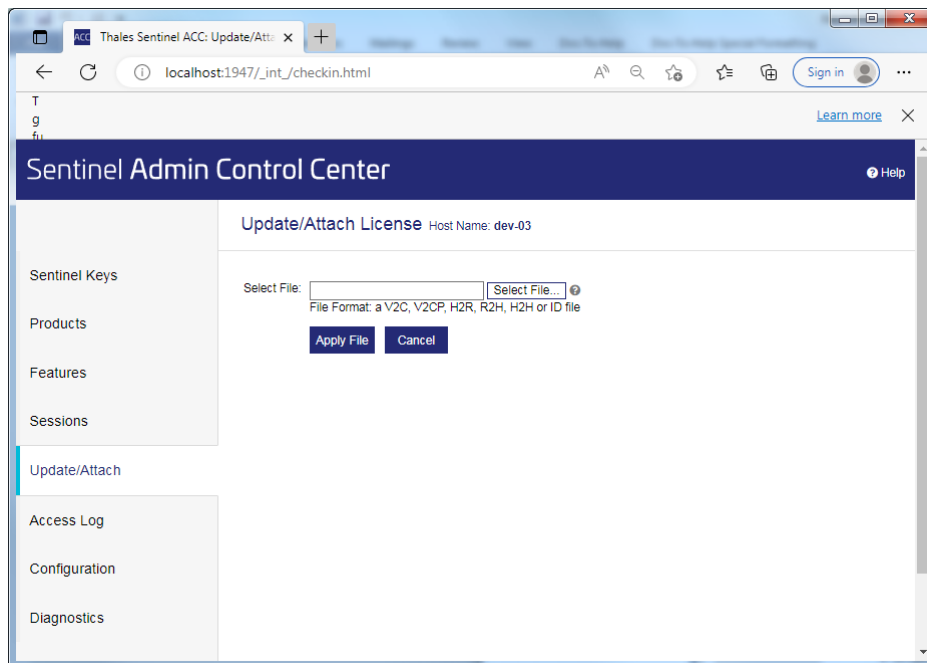
When prompted by the program, save the xml file and eMail a copy of this file to support@aspeninc.com.

ASPEN will return to you a license file with v2c extension ("v2c" is short for Vendor to Customer).

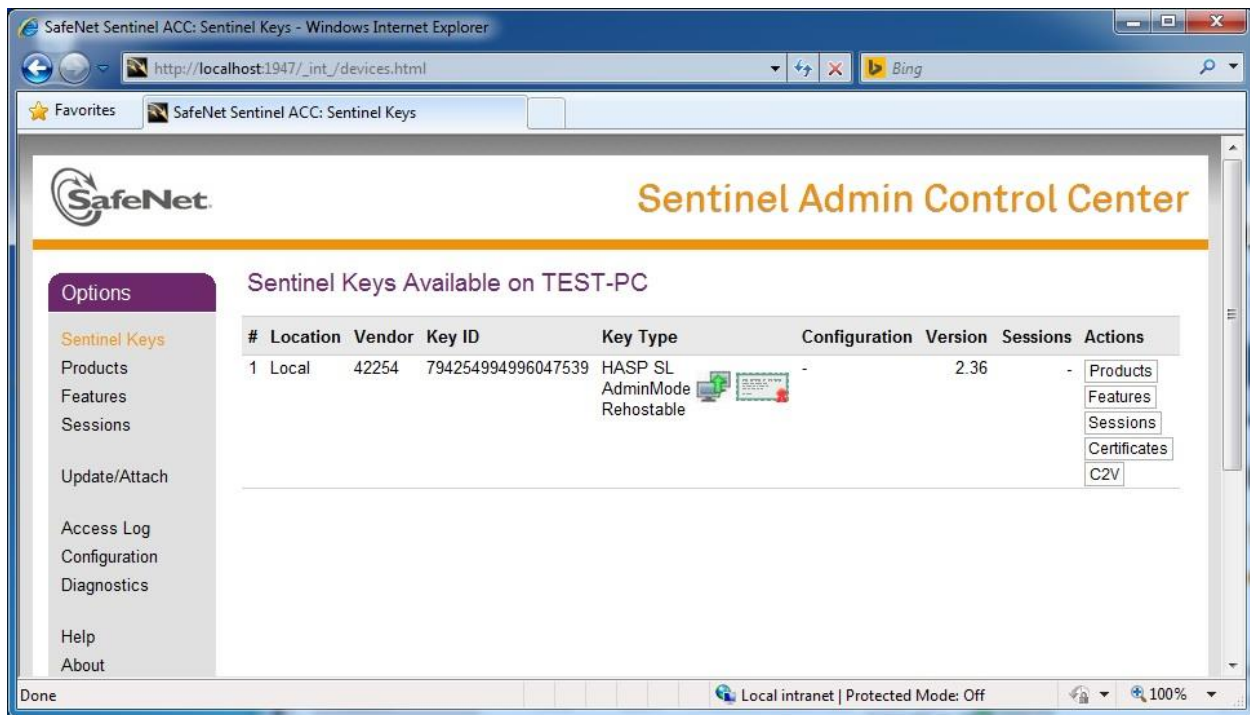
STEP 3: TO APPLY THE LICENSE FILE:

1. **At the Host PC, open your internet browser**
2. **Enter** `http://localhost:1947`
3. **Press Update/Attach in the left panel.**
4. **Press Browse to locate the .v2c file you received.**
5. **Press Apply File.**

You should see a window with the title "Sentinel Admin Control Center". See picture below.



You can verify the existence of the SL key using the runtime interface, by pressing "Sentinel Keys" in the left panel. A screen will appear showing all the Sentinel Keys on your network (including hardware USB keys). Look for a key with Location of "Local", Vendor of 42254 and Key Type of "HASP SL AdminMode Rehostable". That is the key you just installed! See picture below.



You can view the programs authorized by the SL key by pressing the Features button to the right. In the Features screen (not shown), the first feature with number 0 is for administrative purposes only. The rest of the features are ASPEN programs, such as OneLiner, Power Flow and DistriView. For each program, the column with heading of Limit shows the maximum number of concurrent log-ins.

Now, you can run ASPEN software with the SL key. Please see Appendix A for details.

2.3 Controlling Access to An SL Key

The runtime gives the key administrator full control over who can access the key. The default is “All”, which means everybody on your local area network can access the key.

To restrict access, first open your internet browser and enter the URL: <http://localhost:1947>

In the home page of the runtime interface, click on Configuration in the gray Options area on the left. In the Configuration page, click on the “Access from Remote Clients” tab. Within this tab you can restrict access of the SL key to only a set of IP addresses, for example. Also, in the “Basic Settings” tab, you can set a password so that the users will not be able to change the access limits.

Information on how to use the runtime software is available by click on “Help” in the left panel.

SECTION 3 REHOSTING A SOFTWARE KEY

3.1 Introduction

From time to time, you may wish to move the SL key from one computer to another. The SL key is end-user-rehostable, meaning that you can move the SL key with tools in this Key Admin Program.

We define two additional terms for the purpose of rehosting: The Originating PC and the Destination PC. The Originating PC is where the SL key currently resides. For a virtual system, this can be any PC that is running a virtual session in the originating server.

The Destination PC is the new home of the SL key. For a virtual system, this can be any PC that is running a virtual session in the destination server. There are four steps to rehosting an SL key:

- Step 1: Install the Key Admin Program on the Destination PC.
- Step 2: At the Destination PC, run the Key Admin Program to get the Destination PC's location information.
- Step 3: At the Originating PC, run the Key Admin Program to detach the SL key. With the destination information you gathered in step 2, the program will generate for you a host-to-host file.
- Step 4: At the Destination PC, apply the host-to-host file to establish a new key.

3.2 Rehosting An SL Key

STEP 1: TO INSTALL THE KEY ADMIN PROGRAM ON THE DESTINATION PC:

1. Run the setup program.

The installation program will create a folder under Program Files, copy the executable file SLAdmin.exe there, and create shortcuts under All Programs. This is same as Step1 of hosting an SL key (Section 2).

STEP 2: TO GET THE DESTINATION PC'S LOCATION INFORMATION:

1. At the Destination PC, start the Key Admin Program.

2. Execute the Rehost | Get Destination Host Info command.

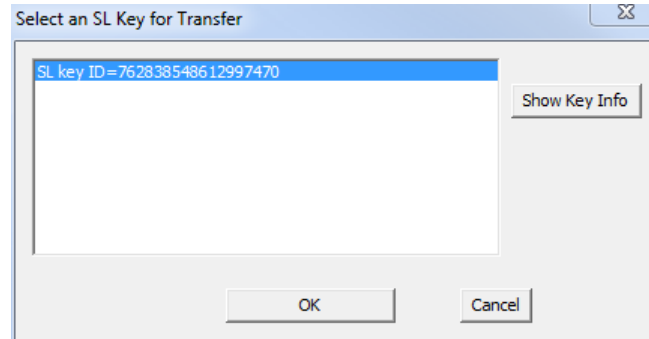
When prompted by the program, save the xml file to the hard disk.

Please make a note of the name and location of this file because you will need it in the next step.

STEP 3: TP DETACH THE LICENSE FROM THE ORIGINATING PC:

1. **At the Originating PC, start the Key Admin Program.**
2. **Execute the Rehost | Detach Existing License command.**

A dialog box will appear asking you to select an SL key.



In this dialog box, only SL keys issued by ASPEN on the Originating PC are shown. Each key is identified by its manufacturer ID number.

You can see what is in each key by highlighting it in the list box and pressing the Show Key Info button on the right.

Highlight the key that you wish to detach and press OK.

Next, a standard file-open dialog box will appear asking you for the Destination Host information file you generated in step 2.

Locate the xml file and press Open.

Next, a standard file-save dialog box will appear asking you to name the H2H (short for host-to-host) file that will be created.

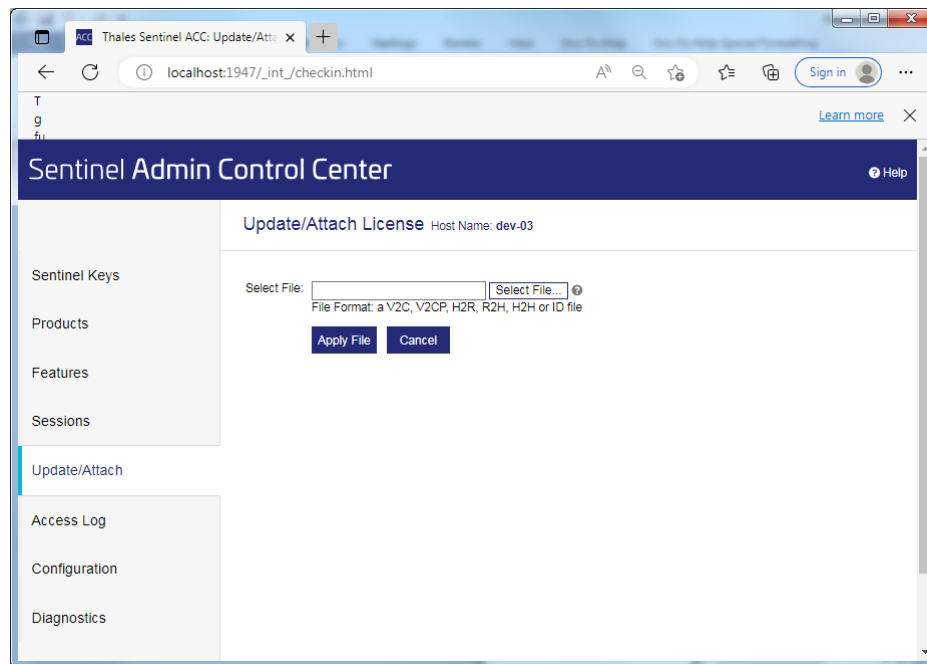
Enter a name and press Save.

Please make a note of the name and location of this .H2H file because you will need it in the next step.

STEP 4: TO APPLY THE HOST-TO-HOST FILE TO THE DESTINATION:

1. **At the Destination PC, open your internet browser**
2. **Enter** `http://localhost:1947`
You should see a window with the title “Sentinel Admin Control Center”.
3. **Press Update/Attach in the left panel.** You should see the screen below.
4. **Press Browse to locate the .H2H file you created in Step 3.**
5. **Press Apply File.**

The program will inform you that the license has been applied successfully.



You can verify the re-location of the SL key using the runtime interface by pressing press “Sentinel Keys” in the left panel. A screen will appear showing all the Sentinel Keys on your network. You should see that the SL key has been moved from the Originating PC to the Destination PC.

SECTION 4

UPDATING A SOFTWARE KEY

4.1 Introduction

An SL key can be reprogrammed to change the ASPEN programs it authorizes, the number of concurrent seats, or the end date of a lease. The update procedure is very simple, and it is described in Section 4.2.

4.2 Updating an SL Key

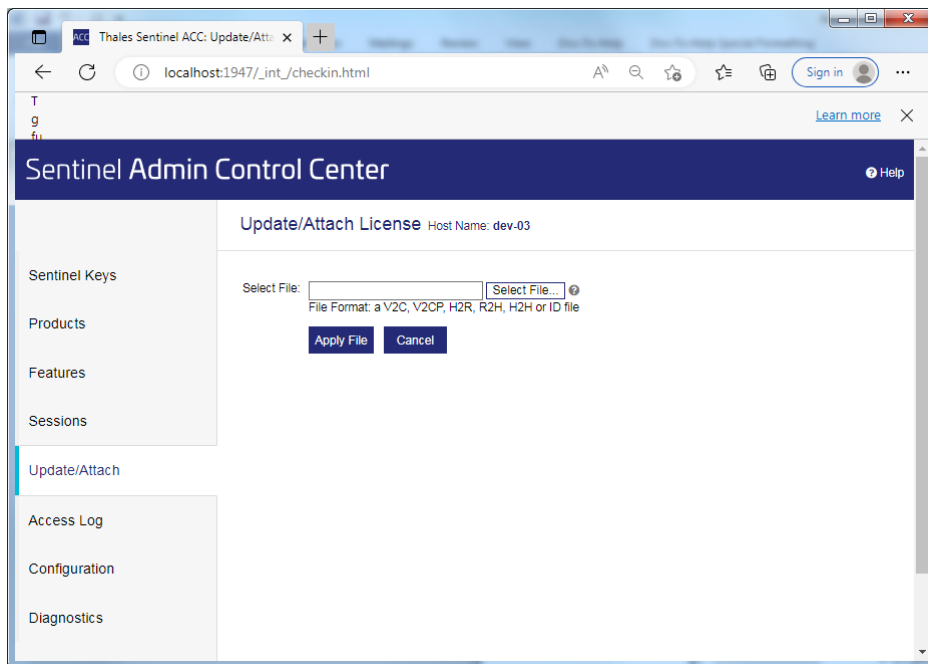
ASPEN will send you a v2c file when there is a need to change the programs that the key authorizes or the number of concurrent seats.

The update has to be done at the computer where the key resides. On a virtual system, the installation can be done on any PC – local or remote – that is running a virtual session. We will refer to this computer as the Host PC.

TO UPDATE AN SL KEY:

1. **Open your internet browser**
2. **Enter** `http://localhost:1947`
You should see a window with the title “Sentinel Admin Control Center”.
3. **Press Sentinel Keys in the left panel. You should see a key with ASPEN’s vendor code of 42254.**
4. **Press Update/Attach in the left panel. You should see the screen below.**
5. **Press Browse to locate the .v2c file you received.**
6. **Press Apply File.**
The Sentinel Admin Control Center will inform you that the key has been updated.

You can verify the new state of the SL key by clicking on “Sentinel Keys” in the left panel.



APPENDIX

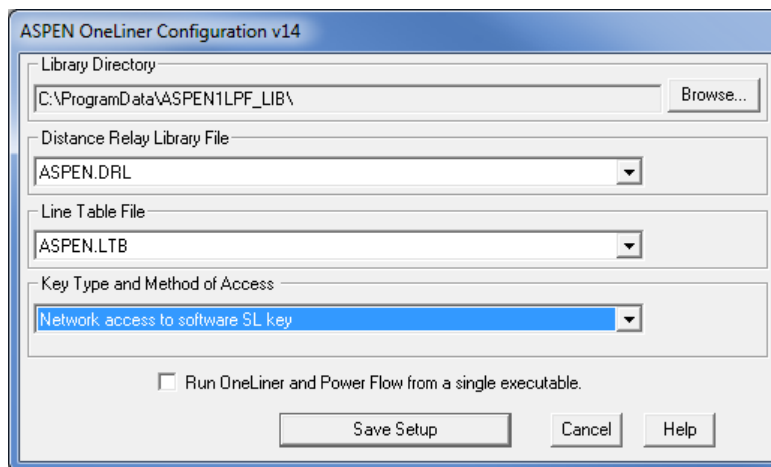
APPENDIX A: ACCESSING A SOFT KEY

A.1 ASPEN PROGRAM CONFIGURATION

The following ASPEN programs work with SL keys:

- ASPEN OneLiner and Power Flow version 12.6, dated November 13, 2015 or later.
- ASPEN DistriView version 10.3 or later.

Within the Configuration Program for OneLiner, Power Flow and DistriView, there is a drop-down list box that lets you specify the “key type and method of access”. The OneLiner Configuration Program is shown below.



To use an SL key, you need simply select the entry “Network access to software SL key” in the drop-down list and press Save Setup.

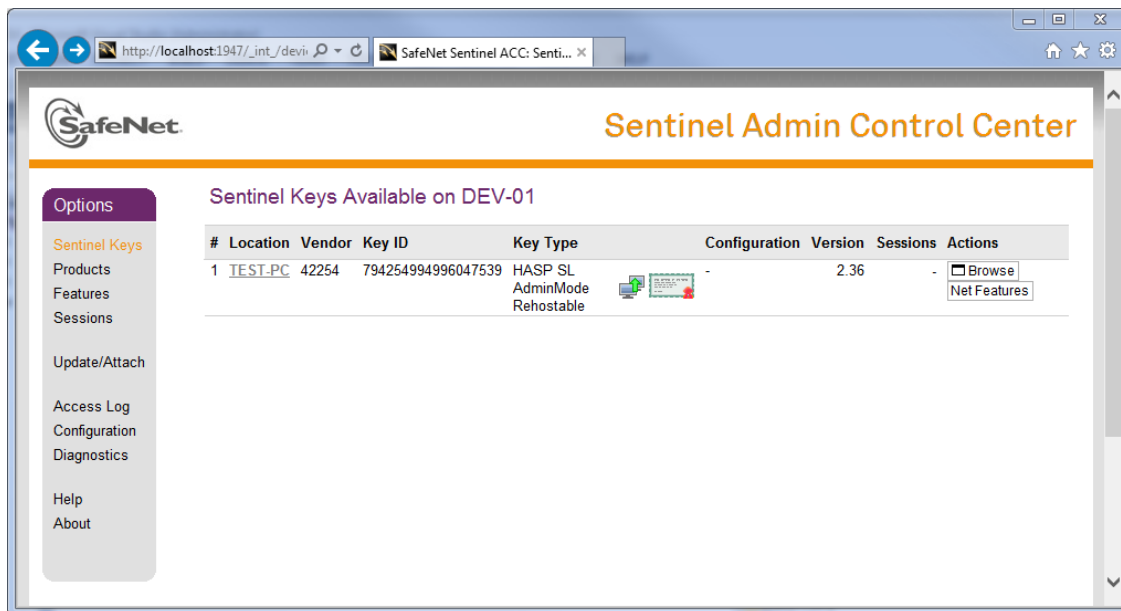
It is important to note that you need to make this change at *every* client workstation that accesses the SL key.

A.2 CONFIGURING ACCESS TO REMOTE SL KEYS

You can omit reading this section if your ASPEN programs find the SL key with no problems. Otherwise, please read on.

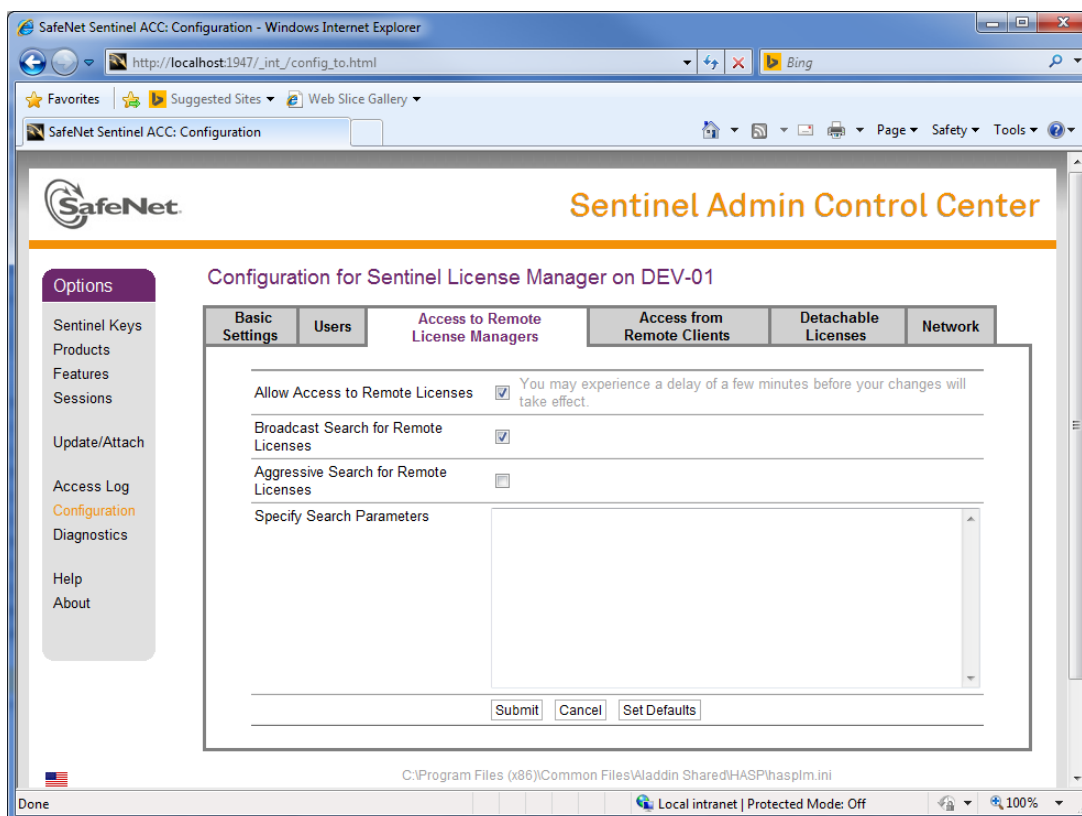
The runtime interface is available at every workstation that has OneLiner, Power Flow or DistriView installed. You can call up the runtime by entering the URL <http://localhost:1947> in your internet browser.

When the runtime interface opens, click on Sentinel Keys in the gray Options box on the left. You should be able to see the SL key in the list. (See picture below.) The keys for ASPEN software have the vendor ID of 42254. By pressing the Net Features button on the right, the interface will show you the name of the programs that are authorized by the key.



If you do not see the SL key listed on this screen, then you will have to make some adjustment in the key-search parameters, as follows.

First, click on Configuration in the gray Options box on the left. The "Access to Remote License Manager" tab in the Configuration page, which looks like this:

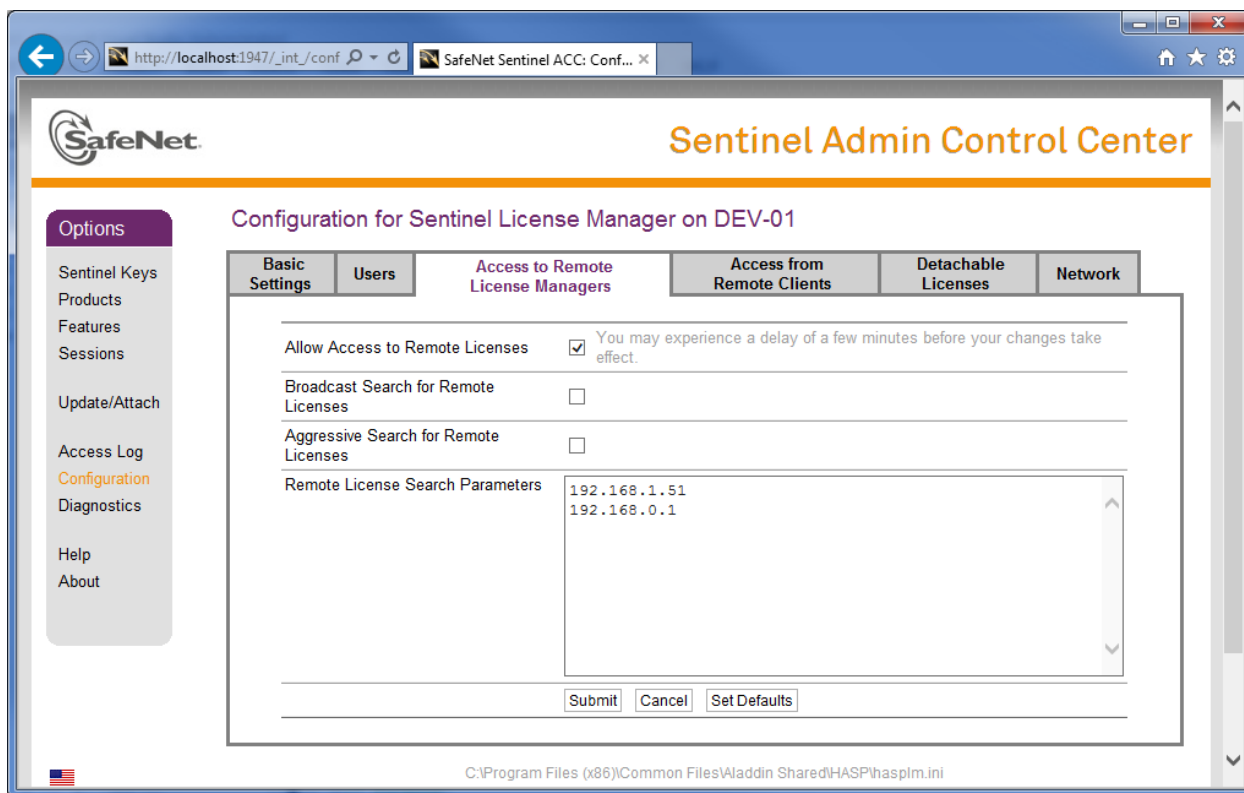


By default, the first two items, “Allow Access to Remote Licenses” and “Broadcast Search for Remote Licenses”, are checked.

We suggest you do the following:

- Remove the check mark from “Broadcast Search for Remove Licenses”, and
- In the “Specify Search Parameters” box, enter the IP address or the name of the computer that hosts the SL key. If the computer that hosts the SL key is in another sub-unit, enter *both* the IP address of the computer and the IP address of the gateway. (An example screen is shown below.)

After making these changes, press the Submit button to put the new settings into effect.



Wait a few minutes, and then press the Sentinel Key button in the Options box on the left and check to see if the SL key is listed. If so, the problem is solved.

