

A light blue silhouette of a world map is centered in the background of the page.

# CDEGS

**SES Software**  
**Standalone License Installation**  
**Version 17.1, 2022**

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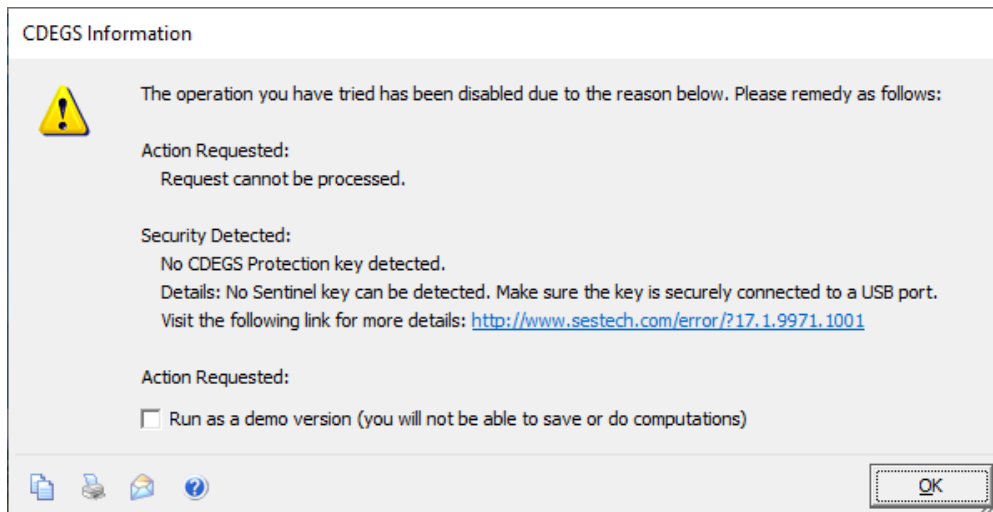
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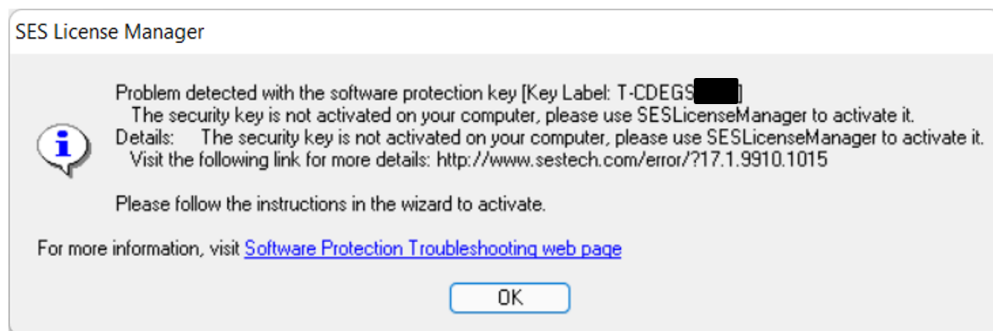
# Standalone License Management

## 1. Introduction

SES software packages require a license to operate. Two types of license management keys are available, namely, a software based one and a hardware based one, often called a dongle. In both cases, the keys and related tools must be installed on the target client personal computer that will be running SES software packages. The hardware key, when applicable, must also be plugged into a USB port of the target PC. Most SES software packages, tools and utilities will not function without the license management key and associated tools. If the license management kit (tools, hardware or software key) is not accessible, missing or defective, the following message is displayed if a protected software package, software tool or utility is accessed from a client PC.



If the license management key is available but, is outdated or not activated the following message is displayed. In both cases, you will be invited to install, update or activate the key as described in [Section 6](#).



The rest of this document is divided into six major sections dealing with the following topics. You can skip any of the sections if it does not apply to you. For example, if you have acquired the software package recently or if you are sure that the hardware standalone key is a Sentinel key, Sections 2 and 3 can be skipped entirely.

- [Section 2](#): **Important Information before Proceeding with the Installation.** This section presents a historical account about three types of USB hardware keys that were distributed by SES in the past. If you have the most recent Sentinel key type only, you can skip this section and Section 3. If you are not sure, read this section to determine what type of keys you have. If you have a HASP key, this section shows you how to determine if this key is upgradable to a Sentinel key or not. If the key is not upgradable, contact SES and we will send you a new Sentinel key.
- [Section 3](#): **How to Upgrade the HASP Key to a Compatible Sentinel Key.** This section shows you how to upgrade your HASP key to a fully compatible Sentinel key.
- [Section 4](#): **Installing a Hardware-Based Standalone License Management Tool.** If your key is a hardware-based USB key, you must read this section. You can skip Section 5 if you do not own a software based standalone key.
- [Section 5](#): **Installing a Software-Based Standalone License Management Tool.** You must read this section if you have software-based standalone license keys.
- [Section 6](#): **Using SESLicenseManager to Activate and Update a Client License.** This section explains how to install, configure and enable licenses on client PCs.
- [Section 7](#): **Important Support Information.** Finally, this section provides troubleshooting steps for resolving certain errors, as well as recommendations for protecting the license management key.

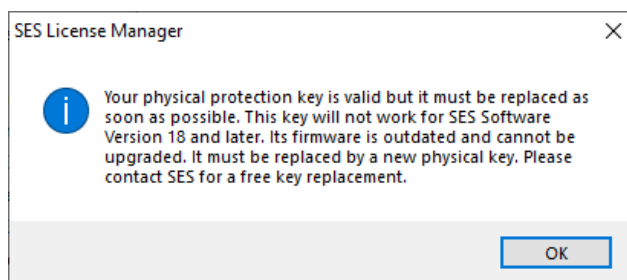
# Installing the Standalone License Management Tool

The following sections 2, 3, 4, 5 and 6 provide explanations and the steps for setting up a standalone license key, often referred to as a Sentinel HL or SL key.

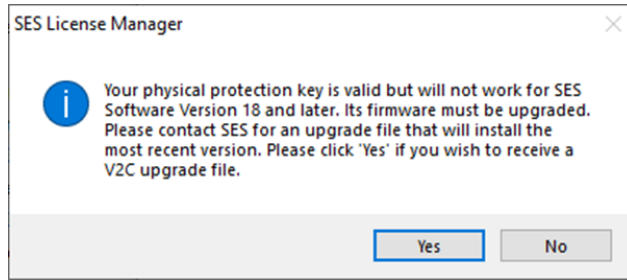
## 2. Important Information before Proceeding with the Installation

SES existing customers may have one or two different hardware-based standalone license keys, i.e., either HASP keys or Sentinel Keys. A HASP key is an older key manufactured by a company called Aladdin. A Sentinel key is a more recent key manufactured by Safenet. Both Aladdin and Safenet were recently purchased by the Thales Group.

Previous versions of SES Software are compatible with the HASP as well as the Sentinel keys (beginning with version 17.0). There are two types of HASP keys. An older type that is not upgradeable and a more recent one that can be upgraded to be fully compatible with the Sentinel keys. The older type will not work for SES software Version 18 and later. It must be replaced by a new Sentinel key. The newer HASP key firmware can be upgraded. SES will provide you with an upgrade file that will install the most recent (Vendor to Customer) V2C upgrade utility that will make the key fully compatible with the Sentinel HL key and future versions of the software. SESLicenseManager will detect the key and, if applicable, will ask you to read the “How to Upgrade Your HASP Key to a Compatible Sentinel Key” section if you wish to receive the V2C upgrade file. If it is an older HASP key, it will advise you to replace it at your convenience because it will not work for SES software Version 18 and later. The installation process will ask you to contact SES for a free key replacement. Typically, one of the two following messages appears if you have a HASP key when you start SESLicenseManager. The first message appears if your key cannot be upgraded.



If your HASP key can be upgraded to a Sentinel license, the following message appears when starting SESLicenseManager.

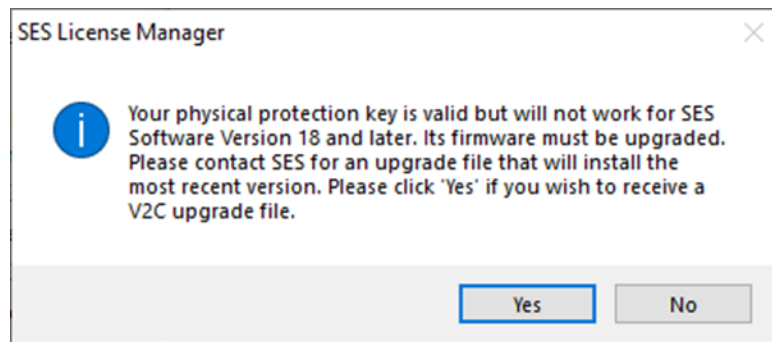


Regardless of your situation, i.e., whether you are an existing SES customer or a new customer, you must have a Sentinel HL compatible key or you must have replaced or converted your existing HASP key to a Sentinel HL key before proceeding with the installation. To upgrade your compatible HASP key, follow the procedures described in Section 3. Otherwise, skip this section and go to Section 4 or Section 5 to continue your installation.

### 3. How to Upgrade the HASP Key to a Compatible Sentinel Key

After receiving the C2V (Customer to Vendor) file of your key, SES will send you the V2C file to upgrade your key to a Sentinel one. Ensure that you upgrade your key by following the steps below:

1. Start **SESLicenseManager**, from the desktop shortcut, **SES Software > System > SESLicenseManager**.
2. Click **No** when the following message appears.



3. Click **OK** if any message box appears, click **Cancel** if **SES Protection Key Activation** wizard appears.
4. Click **File | Apply Sentinel License Update...**, select the V2C file that was sent by SES.
5. Click **File | Exit** to complete the Sentinel license upgrading process.

If **SESLicenseManager** fails to start or crashes, try the following workaround to apply the V2C file.

1. Go to page [http://localhost:1947/\\_int\\_/checkin.html](http://localhost:1947/_int_/checkin.html), click **Select File** to select the V2C file that was sent by SES.
2. Click **Apply File**.

## 4. Installing a Hardware-Based Standalone License Management Tool

Standalone SES software packages and License keys are installed on the client (end-user) personal computer. The installation process requires administrative rights. It is done according to the standard SES Software installation procedure described in Section 6. The installation is the same for a network or standalone client. The only difference occurs at the end of the process where one has to select between accessing a standalone or a network license key. Refer to Using SESLicenseManager to Activate and Update a Client License, Section 6.

### 4.1 Standalone License Key Installation

Normally, the **SES Software Setup** program will install and configure the software protection key automatically. Proceed as follows, if you need to install and configure it manually:

#### Check if the correct key driver is installed

Go to the page <http://localhost:1947/int/diag.html>. If the page is not found, or if the Run-time Installer is lower than 8.31, then install the Sentinel LDK Run-time Environment driver by running HASPUserSetup.exe from the **Tools\HASP\Install** folder on the SES Software distribution folder. The distribution folder should exist on your computer. By default, this folder is called Setup.xxyy and is located under the **SES Documents Folder**, which can be accessed by clicking the **Desktop\SES Software 17.1\Programs Folders\Documents Folder**, where xxyy is the build number of SES Software setup. For V17.1, the folder is C:\Users\Public\Documents\SES Software\17.1\Setup.9978. If the Setup.9978 folder is missing, run SES171.exe to generate it, otherwise rerun the full installation of SES Software to generate the distribution folder.

#### Set up your key

Follow the instructions given in [Section 6](#).

#### Troubleshooting

If *HASPUserSetup.exe* is unable to install the key driver for any reason, try following the steps below before contacting SES support.

1. Disable any antivirus software and disconnect your key. Go to C:\Users\Public\Documents\SES Software\17.1\Setup.9978\Tools\HASP\Commandline folder (or equivalent if the software has been installed on a different path).
2. Run RemoveHaspDriver.bat to remove the driver.
3. Reboot your PC.
4. Run InstallHASPDriver.bat to install the driver.

The Command-line Installer for the security key driver haspdinst.exe is located in the folder C:\Users\Public\Documents\SES Software\17.1\Setup.9978\Tools\HASP\Commandline.

## 5. Installing a Software-Based Standalone License Management Tool

As mentioned above, a Standalone license key can work with either a hardware (Sentinel HL) key or a software-based (Sentinel SL) key. This section provides steps for setting up a software-based (Sentinel SL) key. Note that while the key setup process is straightforward for either key type, a few additional steps are required to set up a Sentinel SL key. A hardware (Sentinel HL) key requires only the installation of a driver on the host PC, and then the connection of the key to a USB port. A Sentinel SL key, on the other hand, is a virtual key that resides in the secure storage area of the PC. Therefore, a **Fingerprint** file must be created for the PC. The overall setup process is described below.

### 5.1 Driver Installation

In order to setup a Sentinel SL key, the specific driver must be installed as well. If the driver was not made available to you yet, contact SES to get the specific driver (a zip file), extract all files if so prompted, and then run the command file, usually: InstallHaspDriver.bat.

### 5.2 Generating a Fingerprint and Updating the License Key

A Fingerprint of the PC is created as a C2V (Customer to Vendor) file via the Sentinel Admin Control Center. This fingerprint file is sent to SES, which then provides a V2C (Vendor to Customer) file used to update the license for the Sentinel SL key.

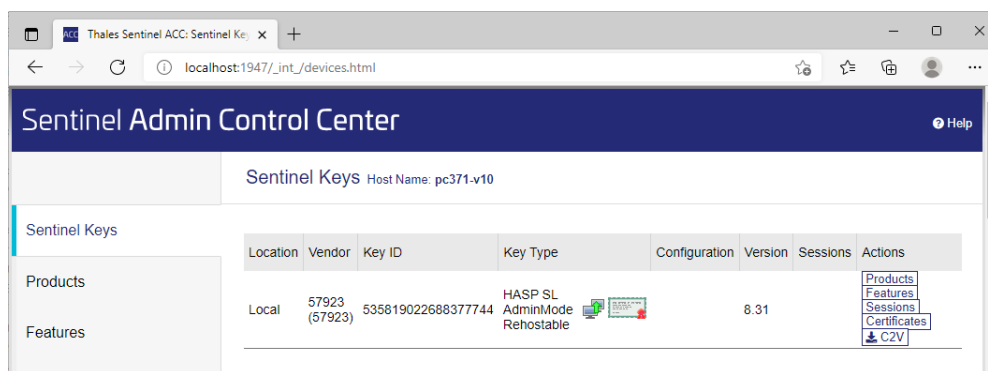
1. Create the Fingerprint

Start **SESLicenseManager** from the desktop shortcut, **SES Software 17.1 > System**, and then click the **Send** button to send us the **Key Diagnostic Report**. If you do not have an email account setup on your PC, **SESLicenseManager** may fail to send the email. If that is the case, the file **KeyDiagnostics.dat** that was created is located in the **SES Documents Folder** (click **SES Software | Program Folders | Documents Folder** to open Windows Explorer in that folder), please email us the file **KeyDiagnostics.dat** manually.

2. Receive the V2C file from SES and Apply Sentinel License Update

We will send you the V2C file once we receive the fingerprint C2V file of your PC. Start **SESLicenseManager** from the desktop shortcut, **SES Software 17.1 > System**, click the **File | Apply Sentinel License Update...** button to open the **Select the file to apply** dialog, select the V2C file from SES, and then click **OK** to apply it.

If successful, a new Sentinel SL AdminMode key with Vendor 57923 should be listed at this address [http://localhost:1947/\\_int\\_/devices.html](http://localhost:1947/_int_/devices.html), as shown in the image:



If the **Key Type** of the SL key is marked as **Rehostable**, which depends on the license you purchased from SES, you could use the steps below to rehost (transfer) the key to another computer, if applicable.

### 3. Moving the License Key to another PC

In some cases, it is desirable to move the license from a client PC to another client PC. In order to be able to transfer an active Sentinel SL key from one computer (source) to another (recipient), you need to have access to both computers. You will not be able to transfer your HASP SL if, for example, your old computer has been stolen or is no longer functional. You will also not be able to transfer the license once it has expired or when it has the "Cloned" status.

#### a. Collect Information About the Recipient Computer

On the recipient computer, run **SESLicenseManager**, click **File | Collect Information About the Recipient Computer...**, enter the file name. Copy the saved file to the source computer.

#### b. Generate the License Transfer File

On the source computer, run **SESLicenseManager**, click **File | Transfer License...**, browse the saved file as **Recipient Information File**, which is the file that was created on the recipient computer, and type a file name to identify the **License transfer file**. Once these steps are completed, the transferred key (Key ID) will no longer exist (be visible) on the source computer. It is therefore very important to keep the transfer file in a safe location until it has been successfully applied on the recipient computer. Otherwise, the transferred software key will be lost, and there is no way for SES to restore it.


c. Apply the License Transfer File

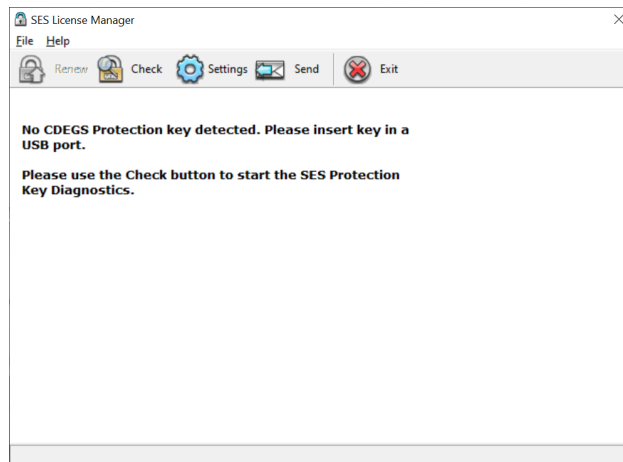
On the recipient computer, run **SESLicenseManager**, click **File | Apply Sentinel License Update...**, browse to the transfer file, which is the file that was created on the source computer. Go to [http://localhost:1947/\\_int\\_/devices.html](http://localhost:1947/_int_/devices.html). Now, you should see the transferred key (Key ID) on the recipient computer.

# Activating and Updating a Client License Management Key

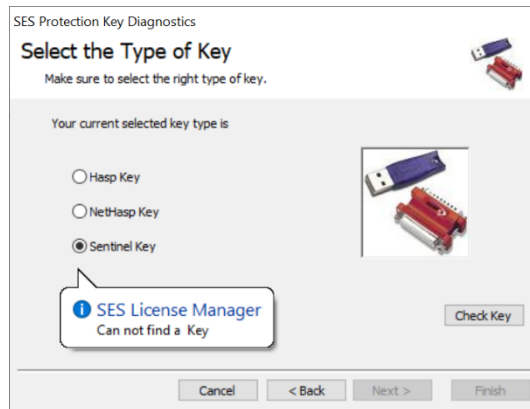
## 6. Using SESLicenseManager to Activate and Update a Client License

To protect SES users against the theft or loss of their license management keys, SES has introduced a timed license key, which, if stolen or lost, becomes ineffective after a short period. It is easy to maintain. Simply reinitialize it with the supplied SESLicenseManager tool. The procedure for activating and updating the protection key is described below. Please close all SES Software programs prior to updating your license management key. Make sure that you are running this procedure on the computer where the physical or virtual key is installed. Before you start, make sure the network key is setup properly. You will need a license file from SES (or a link to such a file) or the username and password of your support account.

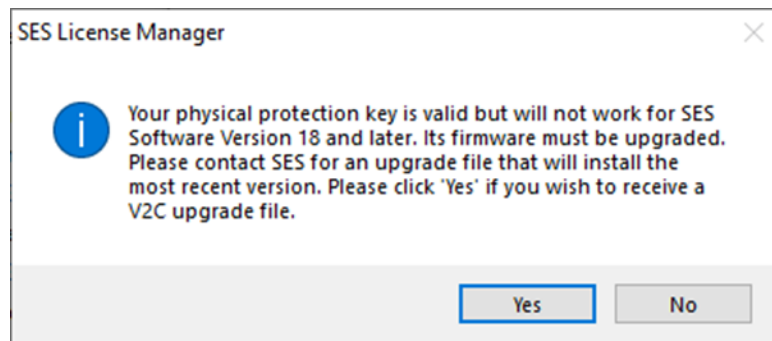
1. Click the **SES Software xx.x** icon on your desktop  where xx.x is the version number of SES Software.
2. Once you have opened the SES Software folder, click the **System** folder.
3. In the **System** folder, click on **SESLicenseManager**.
4. If you get the screen shown below, click the **Check** button. Otherwise, you should see one of the screens shown at [Item 7](#).



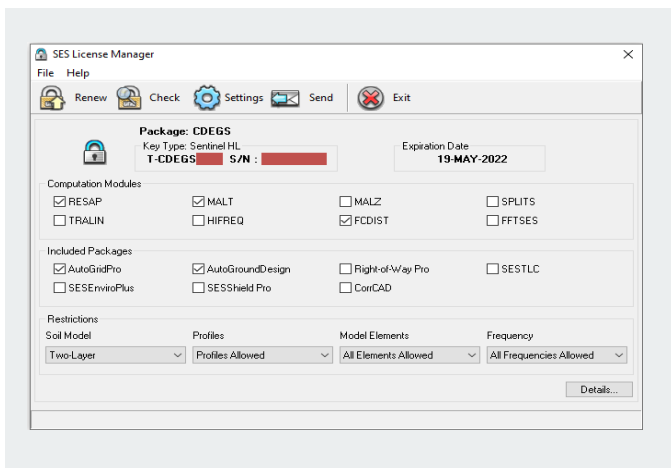
5. Select **Sentinel Key** and follow the wizard instructions.



6. If no Sentinel keys can be found as shown in the screen above and one of the HASP keys is compatible with a Sentinel key, you will be invited to upgrade your HASP key as shown in the following message screen (and as explained already in [Section 3](#)).



7. You will then see one of the two screens that follow:



The screen on the left shows a CDEGS package. The **Computation Modules** panel displays which modules are enabled by your software license protection key. The **Included Packages** panel displays the software packages included in your key.

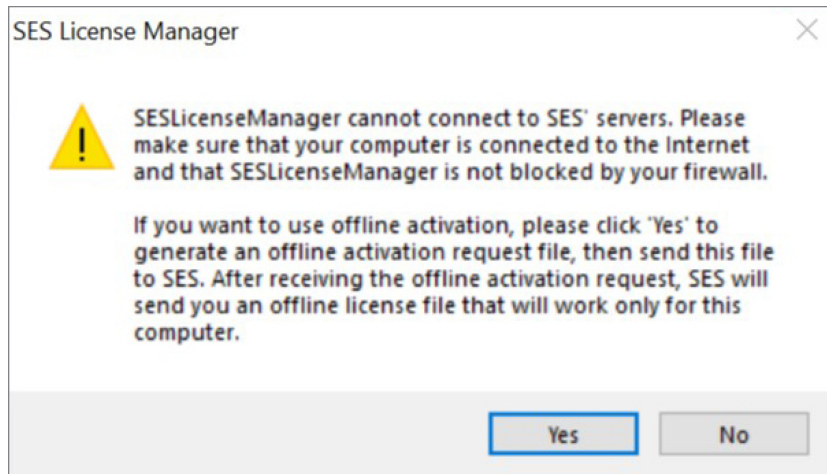
- The type of soil model that is allowed in the software package(s) is indicated at the left side of the Restrictions section, etc.
- The remaining panels show the type of license key detected and its expiration date.

- a. If you are presented with the screen above and you wish to activate or update the license terms, select **File | Activate License**, or click the Renew button on the toolbar to open the **SES Protection Key Activation Wizard**. The **Select License File** screen appears if a license protection key is detected, as shown below.
- b. Alternatively, you may be presented immediately with the **Select License File** screen:

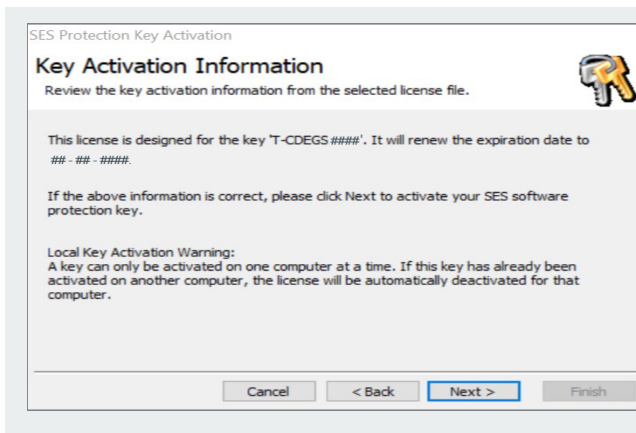
The **Select License File** screen allows you to select a license file to activate or update the license key. There are three options:

1. If you are under support, you can use your username and password to download your license file automatically.
2. You may also use a temporary link provided by SES to download a license file.
3. You can select a license file that has been provided by SES via email or other delivery methods.

8. Often, you will already have a license file. In this case, you should choose the last option, i.e., “**I have already received a license file**”, and click the Browse button to go to the directory where you have placed the license file to select it. It is a file named T- CDEGS####.lic, where #### represents the ID number of your key. If you do not have a license file, but have a link from SES or your support account username and password, then use these instead. Click on **Next**.
9. SESLicenseManager must connect to SES's server over the internet while activating or updating the license key. The software will attempt to communicate with SES via the internet. The Sentinel Run-time Environment uses port 1947 for communications. Please ensure that port is open and that the program itself is allowed through the firewall. If this process fails or if internal policies do not allow you to open this port, you will be offered the option to use offline activation with the following message, during the latter part of the activation process.



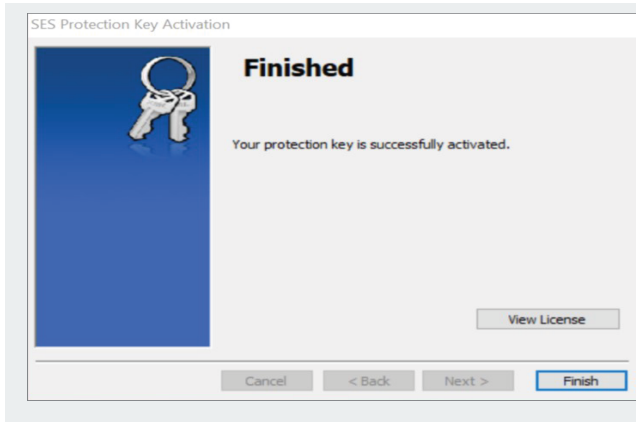
10. If you want to use offline activation, please send SES the offline activation file by answering “Yes” and following the wizard.
11. After receiving the offline activation request, SES will send you an offline license file that will work only for the computer that generated the offline activation request. Follow the ensuing instructions to obtain an offline license file dedicated to the computer you are activating and start the activation process again with the offline license file, when you receive it.



The **Key Activation Information** screen shows the information in your selected license file. If the license file only contains expiration data, it will display only the new expiration date.

The example shown here is for CDEGS key **T-CDEGS####** and assumes that the SES Protection Key Activation wizard was launched to reactivate the key until the given date.

12. Read the information on the **Key Activation Information** screen. If you see anything wrong, then contact SES. Click on **Next**.



Once your license key is activated, the message “Your protection key is successfully activated” will be shown in the Finished step when the license file has been accepted.

You may use the **View License** button to examine the license information. At this point simply click on the **Finish** button and the window will close. The software is now ready to be used.

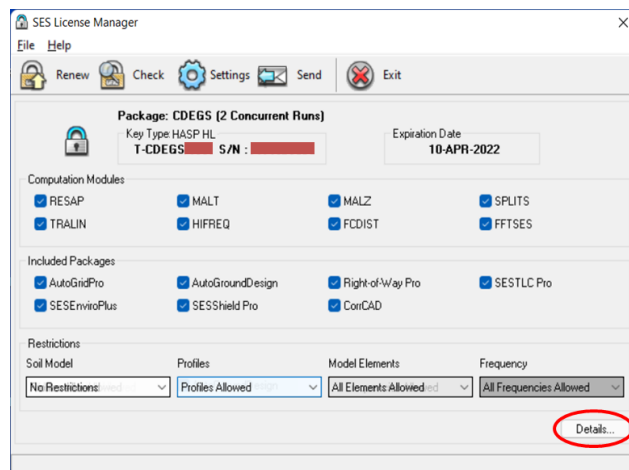
## 6.1 Automatic Installation

By default, SESLicenseManager will automatically send the activation report file KeyVerify.dat to SES by email. Under certain circumstances (e.g., firewall settings, absence of an email account, etc.), the file is not sent. If this occurs, a notification will typically appear on your screen requesting that you email the activation report to SES manually at [keysupport@sestech.com](mailto:keysupport@sestech.com). The file, KeyVerify.dat, is found in the SES Documents Folder, which can be accessed by clicking the **Desktop\SES Software xx.x\Programs Folders\Documents Folder**, where xx.x is the version number of SES Software.

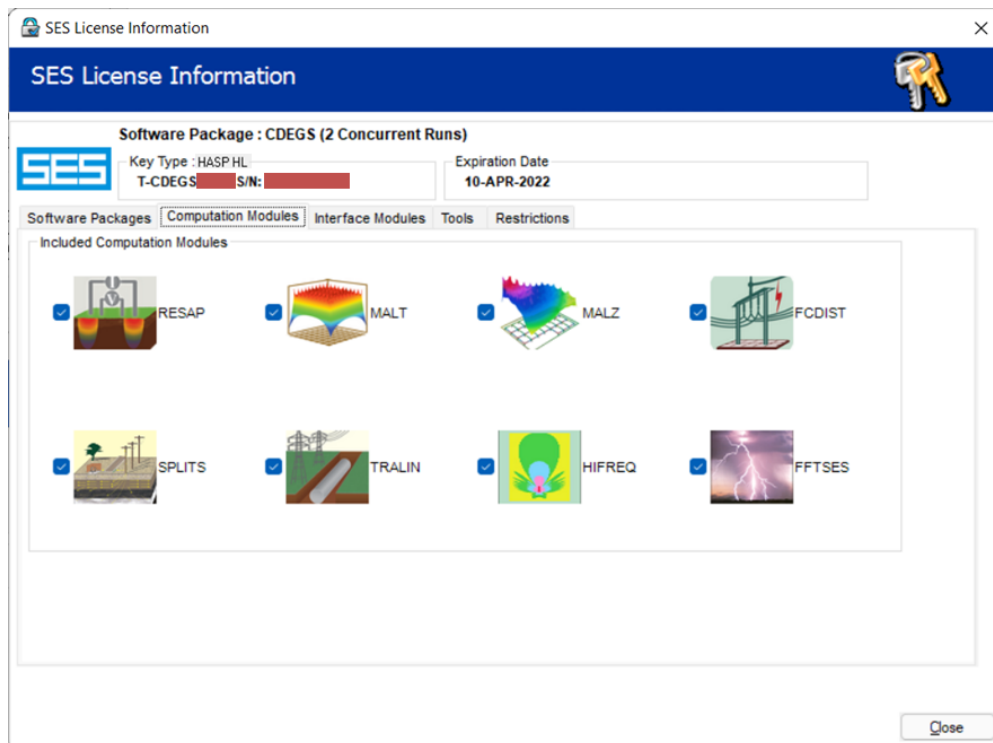
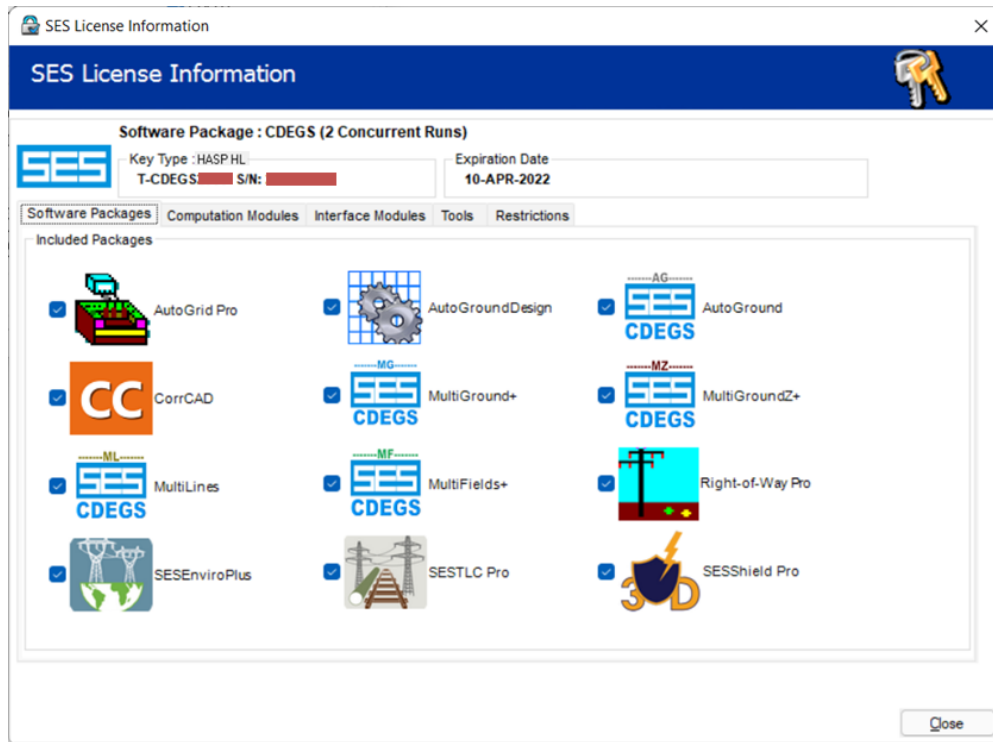
You may also notice other files in this folder, for example *KeyDiagnostics.dat*, which is a diagnostic report that is sent to SES when the **Send** button is clicked from the SESLicenseManager main screen. *KeyOARquest.dat* contains the offline activation request that would be generated and sent to SES if off-line activation was requested.

## 6.2 Checking the Installation

Once the installation is completed, SESLicenseManager will display the following screen.



Clicking the **Details...** button brings the following information screen that has five tabs. Clicking these tabs brings the following screens.



SES License Information

Software Package : CDEGS (2 Concurrent Runs)

Key Type : HASP HL  
T-CDEGS S/N: [REDACTED] Expiration Date : 10-APR-2022

Software Packages Computation Modules **Interface Modules** Tools Restrictions

Included Interface Modules

<input checked="" type="checkbox"/> CDEGS	<input checked="" type="checkbox"/> ROWCAD	<input checked="" type="checkbox"/> SESCAD	<input checked="" type="checkbox"/> SESFodist
<input checked="" type="checkbox"/> FFTSES	<input checked="" type="checkbox"/> SESResap	<input checked="" type="checkbox"/> SEStralin	<input checked="" type="checkbox"/> SESCircuitSimulator

Close

SES License Information

Software Package : CDEGS (2 Concurrent Runs)

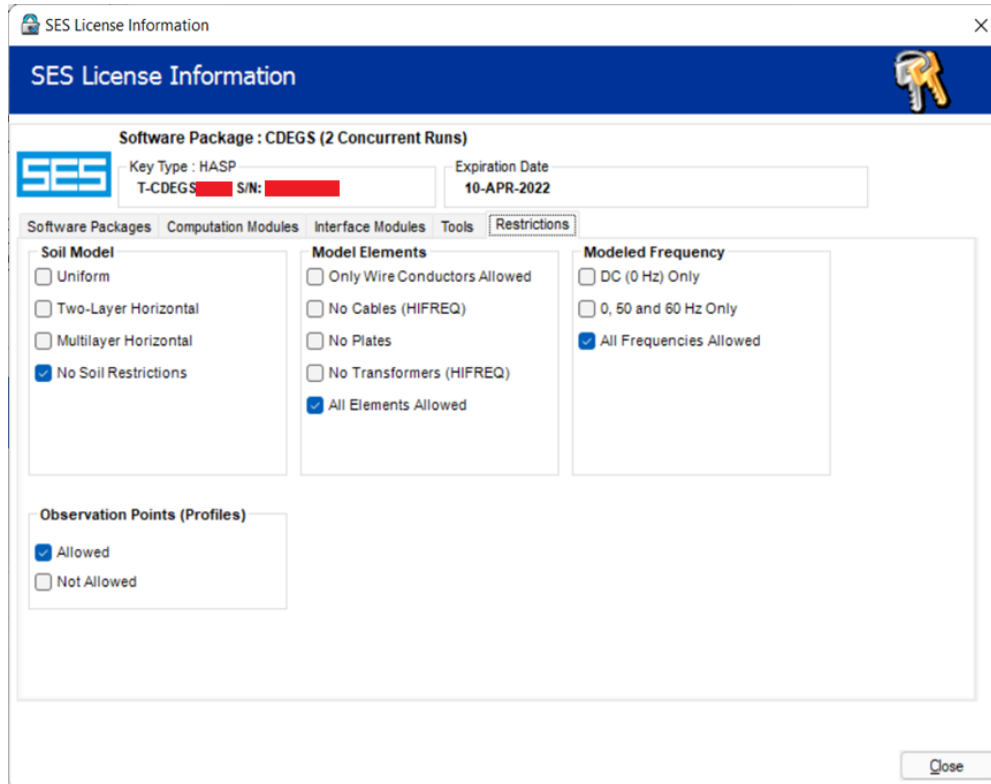
Key Type : HASP HL  
T-CDEG S/N: [REDACTED] Expiration Date : 10-APR-2022

Software Packages Computation Modules Interface Modules **Tools** Restrictions

Included Tools

<input checked="" type="checkbox"/> AutoTransient	<input checked="" type="checkbox"/> CETU	<input checked="" type="checkbox"/> SESAmpacity	<input checked="" type="checkbox"/> SESResultsViewer	<input checked="" type="checkbox"/> TransformerDataEditor
<input checked="" type="checkbox"/> GRServer	<input checked="" type="checkbox"/> GRSplits	<input checked="" type="checkbox"/> SESLibrary	<input checked="" type="checkbox"/> SESCrossSection	<input checked="" type="checkbox"/> SESThreshold
<input checked="" type="checkbox"/> SESBat	<input checked="" type="checkbox"/> SESGSE	<input checked="" type="checkbox"/> GRSPLITS-3D	<input checked="" type="checkbox"/> SESTextEditor	<input checked="" type="checkbox"/> SESEnviroPlot
<input checked="" type="checkbox"/> SESScript	<input checked="" type="checkbox"/> SESCurveFit	<input checked="" type="checkbox"/> SESeBundle	<input checked="" type="checkbox"/> SESConverter	<input checked="" type="checkbox"/> SoilModelManager
<input checked="" type="checkbox"/> SESShield	<input checked="" type="checkbox"/> GraRep	<input checked="" type="checkbox"/> SESImpedance	<input checked="" type="checkbox"/> SESPlotViewer	<input checked="" type="checkbox"/> SESsystemViewer
<input checked="" type="checkbox"/> SESTransient	<input checked="" type="checkbox"/> FFT21Data	<input checked="" type="checkbox"/> TransposIT	<input checked="" type="checkbox"/> SoilTransfer	<input checked="" type="checkbox"/> SESConductorDatabase
<input checked="" type="checkbox"/> SICLCommand				

Close



You need to verify that all information is accurate and corresponds to the software packages you ordered from SES.

## 7. Important Support Information

### 7.1 Possible Problems and Solutions

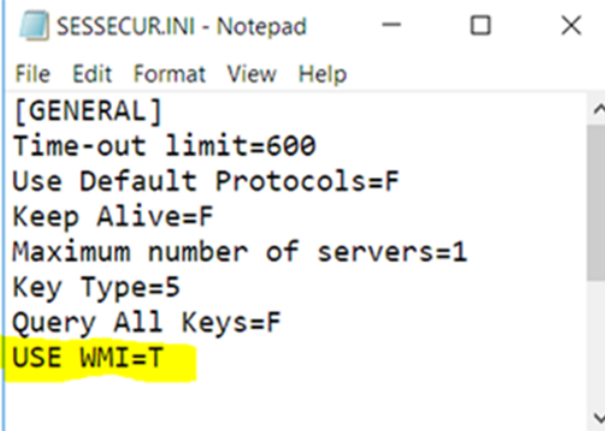
If you run into problems or if you get error messages, you should proceed as recommended in the following.

1. Antivirus or Antimalware

If during the installation, one or more programs (e.g., SESLicenseManager.exe) are quarantined by an antivirus or antimalware utility on your computer, you need to temporarily disable it or follow up with that utility to restore the SES Software-related quarantined programs, as well as whitelist the programs folder (e.g., c:\Program Files (x86)\SES Software\17.1).

2. Programs and activation not working but license is recognized (change from API to WMI method)
  - a. Close all SES applications on the Client PC.

- b. Browse to the SES Software documents folder via the folder shortcut, **SES Software 17.1 > Program Folders > Documents Folder**, on the desktop (e.g., %Public%\Documents\SES Software\17.1).
- c. Locate the **SESSECUR.INI** file in this folder and open it in Notepad or similar tools.



```
SESSECUR.INI - Notepad
File Edit Format View Help
[GENERAL]
Time-out limit=600
Use Default Protocols=F
Keep Alive=F
Maximum number of servers=1
Key Type=5
Query All Keys=F
USE WMI=T
```

- d. Add the following line to the [GENERAL] section of the file (see screenshot above): **USE WMI=T**.
  - e. If the line **AutoActivate=T** exists, change it to **AutoActivate=F** to disable the automatic activation.
  - f. Restart SESLicenseManager.
3. The license cannot be found

Carry out this typical checklist:

- a. The computer should have, at least, Sentinel Runtime V8.31 installed. The setup program can be found in a Client PC in the SES Software documents folder via the program shortcut, **SES Software 17.1 > Program Folders > Documents Folder**, under the subfolder, **Setup.9978\Tools\HASP\Install**. Alternatively, it can be downloaded from <https://www.sestech.com/public/haspusersetup.exe>. Run HASPUSERSETUP.EXE and follow the dialogs to complete the installation.
- b. Check that, the computer has the correct key installed, it is functioning properly, and it is identified with the vendor ID, 57923. See the Sentinel Keys panel in Sentinel Admin Control Center: <http://localhost:1947/int/devices.html>.
- c. A standalone license key is only available to access if it is connected locally, which cannot be accessed by SES Software when it is connected via USB over IP. A network license is required if you want to access the license remotely.

## 7.2 Protecting the License Key

Any new license management key, whether software-based or hardware-based, as shipped, is valid for a limited time only. The long-term license file to renew the license key will be sent a few days later by email.

It is very important to secure the license management key at all times, and highly recommended to have it insured. SES offers an insurance service that protects your investment and, in case of loss or theft, ensures the prompt replacement of your key. If you have an active support service, then you automatically have this insurance. If you have any questions, please contact SES.

It is imperative to communicate with SES prior to transferring a software-based license key to another server or returning to SES a hardware-based license key for any reason (upgrade, replacement, etc.), and to use an approved courier service, such as Federal Express or UPS, for the shipment.



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