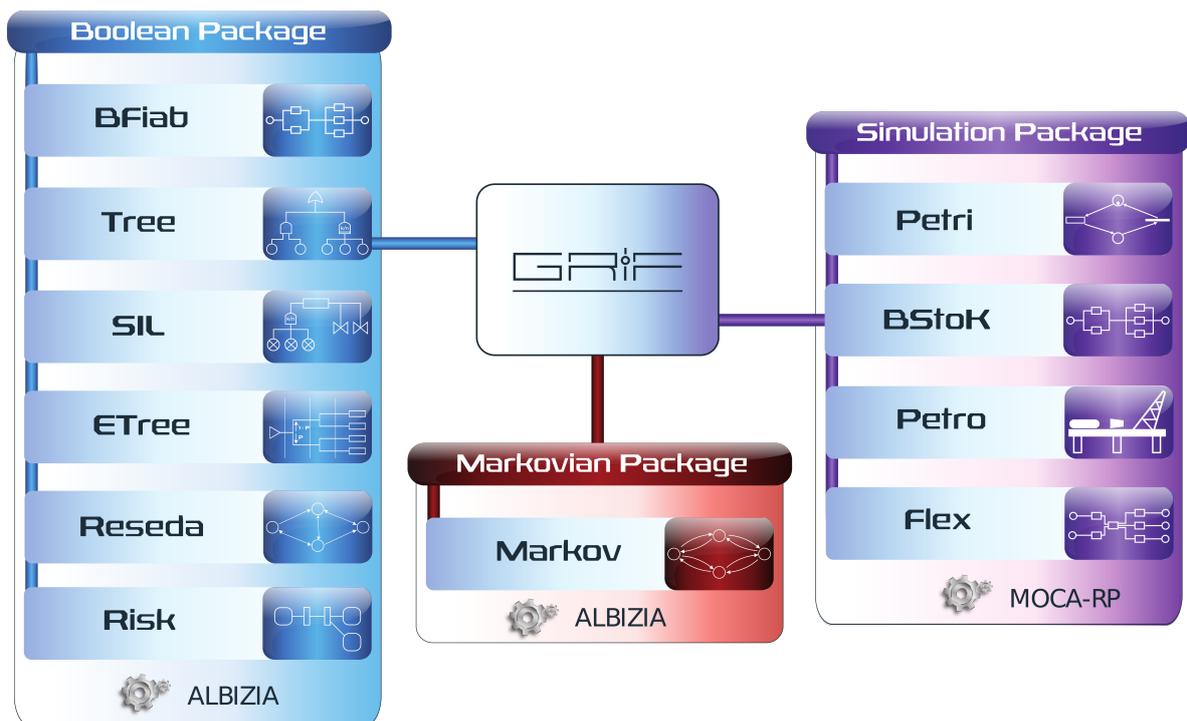




TotalEnergies

# GRIF 2022

## GRIF



## *Installation guide*

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Version 6 Mai 2022

## **Abstract**

This document describes the procedures for installing GRIF Workshop software, for updating the Sentinel key standalone (green) and network (red) USB dongles, for installing GRIF "software" licenses on workstations which cannot use USB dongles, and how to network licenses

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# 1. Installing the software

## 1.1. Requirements

Minimum configuration required for installing GRIF:

- Supported operating systems (64-bit):
  - Microsoft Windows Windows 7, Windows 8, Windows 10;
  - MacOS X 10.14;
  - Ubuntu, Debian.
- Java 8;
- 1 GB available RAM (for 32 bits version) and 4 GB (for 64 bits version);
- 500 MB of storage on the installation disk.

## 1.2. Downloading the software

The commercial version of GRIF includes all the modules. You can download it here: <http://grif-workshop.fr/telechargements/version-commerciale/>

Depending on the Windows version you are using, you have to download either the 32-bit or the 64-bit version.



To know which operating system is installed on your computer, use this keyboard shortcut .

The operating system information is also accessible via **Control panel / System and security / System**

## 1.3. Using an installer



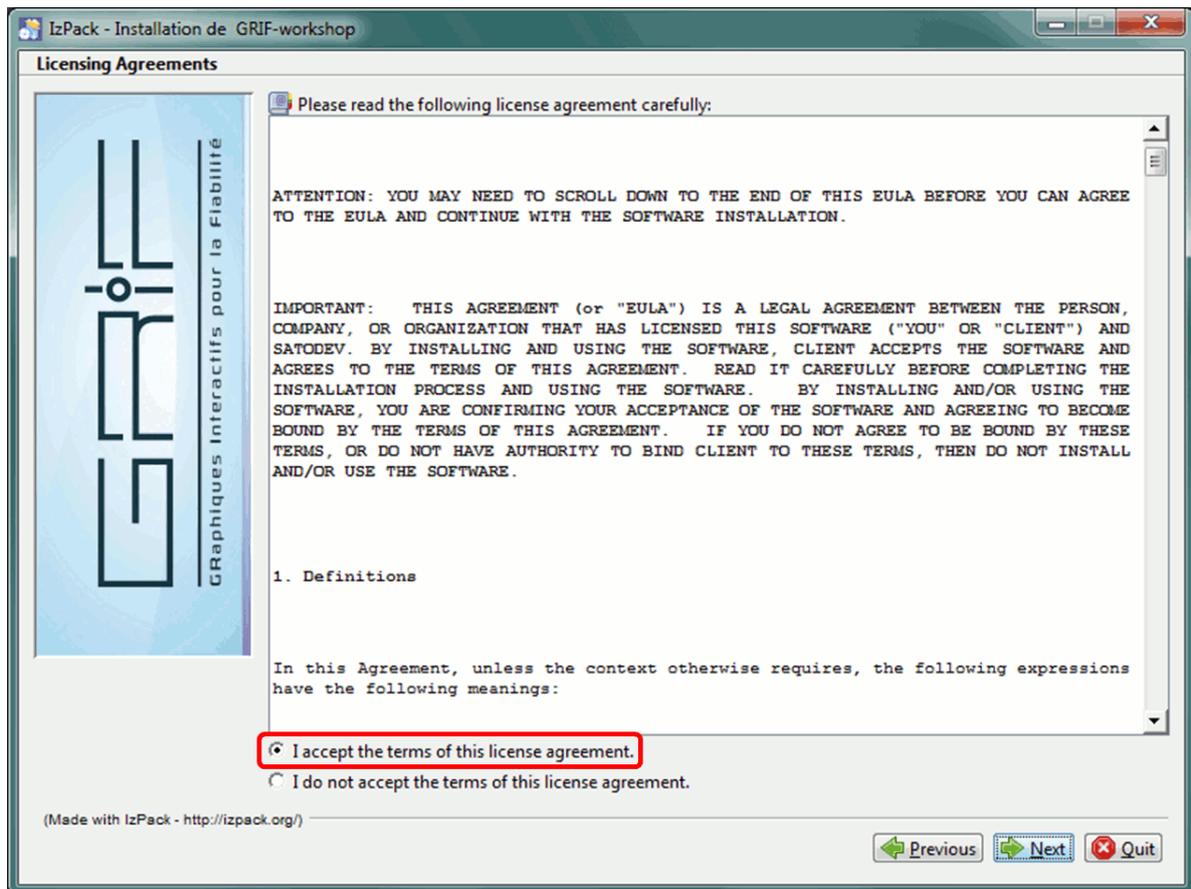
Some antivirus (McAfee for example) considers GRIF software as malicious and by consequence doesn't execute it.

In this case, deactivate your anti-virus software to be able to execute the GRIF software.

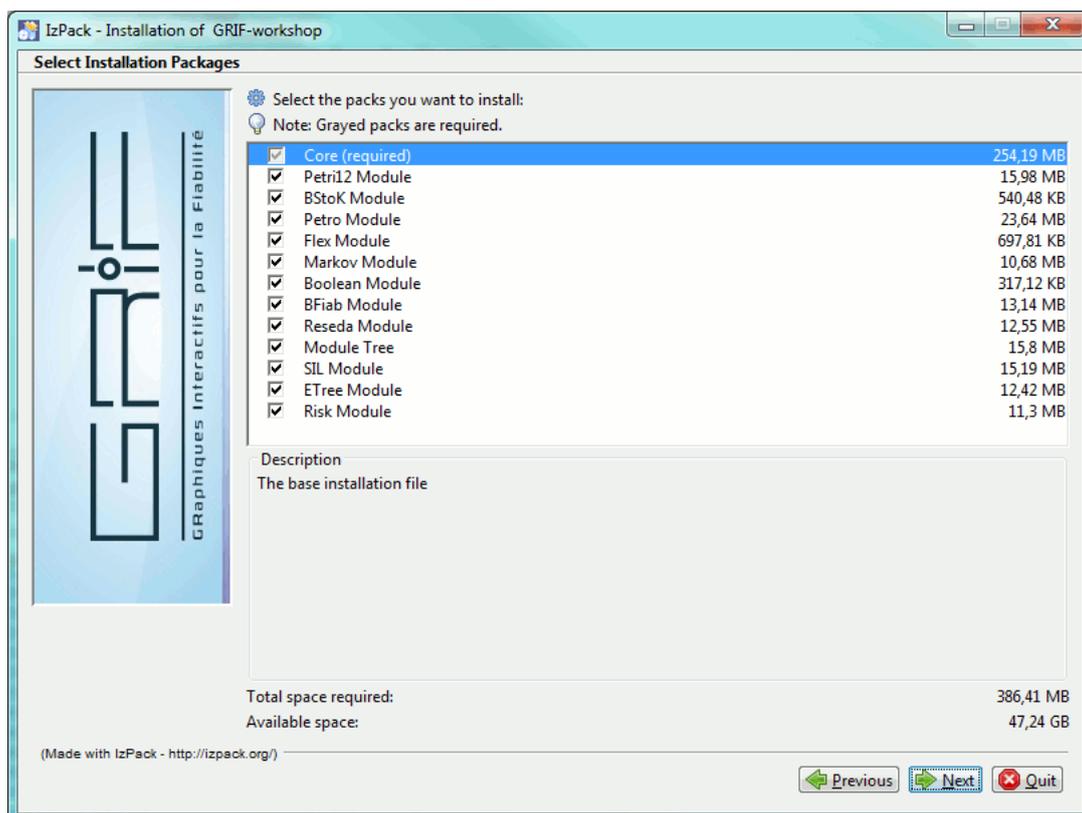
Once you'll have downloaded the software, install it following the instructions below:

- Double click on the software installer **GRIF 20222022.xx-Install64.exe**;

- Follow the instructions and accept the license agreement to continue;



- Choose the modules to install:



By default, all the modules are selected. Once the software is installed, the modules can be run in evaluation mode.

Icons will be created on your desktop and in the **Start** menu to start the modules.

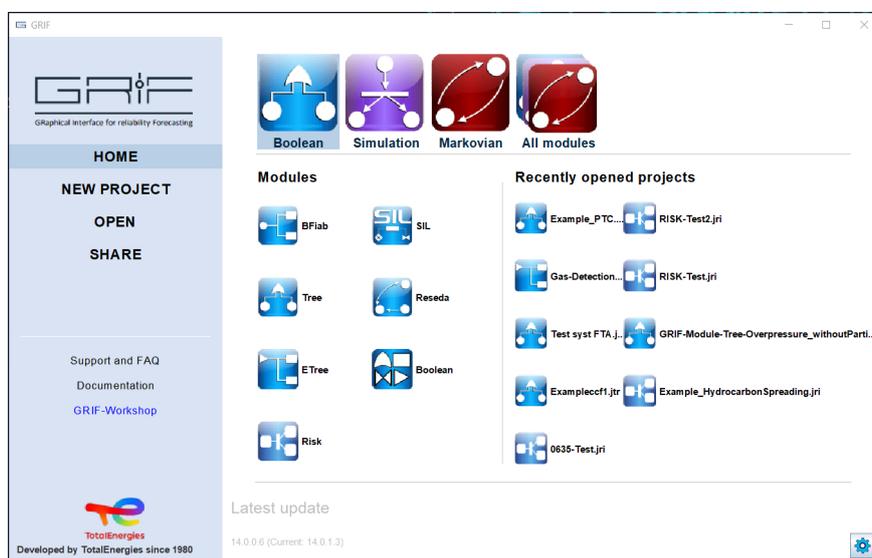
## 1.4. Installing without an installer

A portable version with no installation program is now available. You can download it on GRIF Workshop [<http://grif-workshop.fr/telechargements/version-commerciale/>].

After having downloaded the file, extract **all** of the compressed files in the desired folder.

lock	01/04/2022 16:35	Dossier de fichiers
Bin	01/04/2022 16:34	Dossier de fichiers
Boolean	01/04/2022 16:34	Dossier de fichiers
Examples	01/04/2022 16:34	Dossier de fichiers
Markov	01/04/2022 16:34	Dossier de fichiers
Simulation	01/04/2022 16:34	Dossier de fichiers
GRIF.exe	01/04/2022 16:34	Application

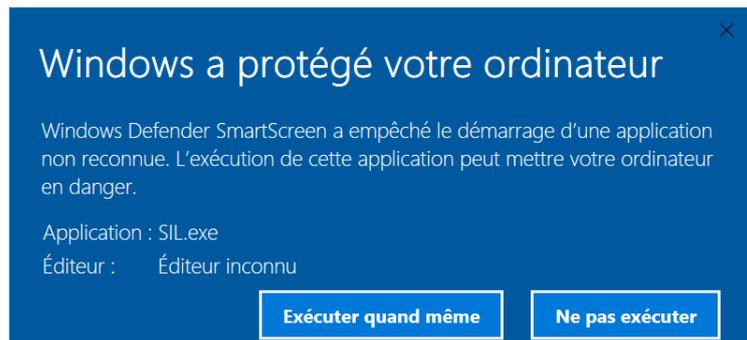
then, select the GRIF launcher executable. GRIF launcher GRIF opens and enables to select the desired module :



GRIF launcher GRIF is detailed below. It is possible to select the package you want and start the program by double clicking on the icon of the module you want to run:

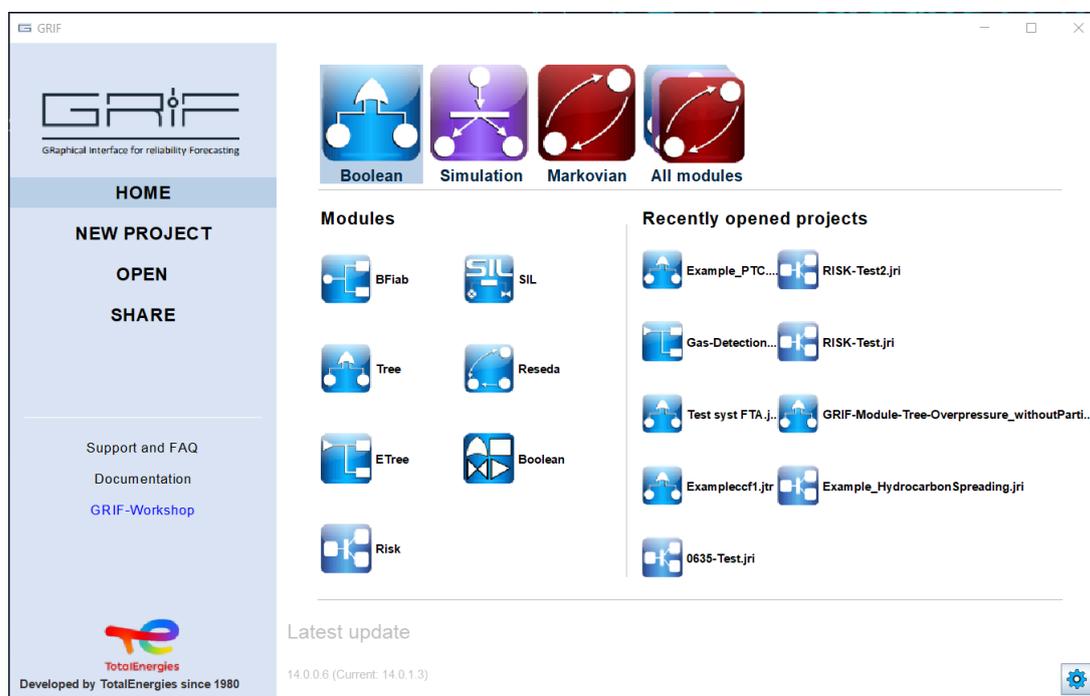
Nom	Modifié le	Typ
 BFIab.exe	20/02/2018 11:31	Appl
 Bool.exe	20/02/2018 11:31	Appl
 ETree.exe	20/02/2018 11:31	Appl
 Reseda.exe	20/02/2018 11:31	Appl
 Risk.exe	20/02/2018 11:31	Appl
 SIL.exe	20/02/2018 11:31	Appl
 Tree.exe	20/02/2018 11:31	Appl

Depending on the operating system and the anti-virus software installed, an error message might be displayed (click OK), such as the one below:



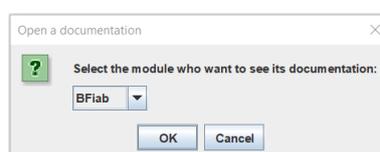
## 1.5. GRIF launcher presentation

GRIF launcher GRIF is in the installation root.



GRIF launcher GRIF is divided into several parts :

- "Home" part : this part present all available GRIF module and enables to launch it by clicking on module icon. This part also lists recently opened projects.
- "New project" part : this part enables to create new project of a GRIF module by clicking on his icon.
- "Open" part : this part enables to search and open a specific project of a GRIF module.
- "Share" part : this part enables to select a GRIF project and share by email. After clicking on the name of project file, the email used by default opens automatically and enables to send the selected file.
- "Support and FAQ" part : this part enables to send to SATODEV any questions on GRIF software. The email used by default opens automatically and enables to send any question to "software.maintenance@satodev.fr".
- "Documentation" part : this part enables to open all documentation of GRIF. The following screen of selection opens :



The documentation desired of GRIF is made by scrolling menu with all available GRIF module. The selected documentation, updated with the latest GRIF version, opens in a PDF document.

- "GRIF-Workshop" part : this part enables to go to the GRIF-Workshop internet site of SATODEV.
- "Last update" part : this part enables to know the last update version of GRIF installed in the computer.
- "License update" part in the lower right corner : this part enables to update the GRIF license. This part is detailed in chapter **Finalizing the installation and Updating the License (with or without USB dongle)**.

## 1.6. Linux version

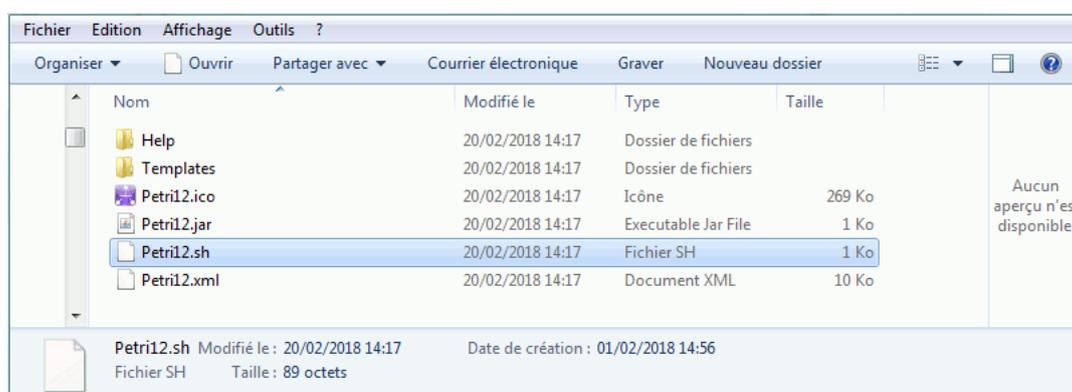
GRIF can run in a Linux operating environment.

Only the portable version (without installation) is available for download on <http://grif-workshop.fr/telechargements/version-commerciale/>.

This version runs with Java8-oracle minimum.

Once you've downloaded and extracted the file select the package you want and start the executable module.

- 📁 Check that you have execute permission on the .sh file.



## 1.7. Finalizing the installation

### 1.7.1. File association

You can finalize the installation

- by the GRIF Launcher GRIF and with the **License Update - Configuration** part.
- in the **? - Configuration** of one of the different module.

In this menu you can associate the files used by GRIF (under Windows).

- 📁 You will have to accept the edit register warnings.



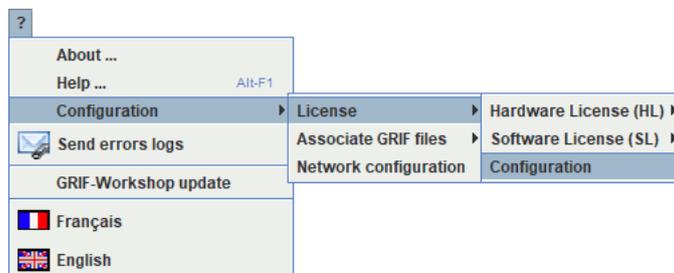
### 1.7.2. License setup

In order to be 100% operational, the software needs to be run with a USB protection dongle -maintenance updated-, which is provided when purchasing a license or when renewing maintenance. If the license is not up-to-date the software will run in Demo mode.

- If you already have a dongle: Please refer to install section (cf. Section 3, “Updating the license (with or without USB dongle)”).
- Contact your vendor if you do not have a USB dongle. They will provide a physical key which, once plugged in, will unlock the application.

There are two types of licenses:

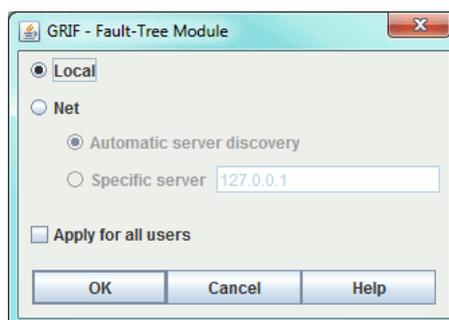
- local licenses, which run using a green dongle that needs to be plugged in before starting GRIF;
- network licenses.



Which can be configured by clicking **? - Configuration - Licence - Configuration** This enables you to:

choose what type of dongle you want to use: Local or network;

configure the server on which you want to install the network licenses.



---

## 2. Installing a Sentinel USB standalone dongle

There are 2 versions:

- Driverless Sentinel LDK Key: This new type of key does not require a driver.



- Sentinel Hasp SRM Key:



This type of key requires manually-installed drivers. You can download them here: <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utills.zip>.

Execute the batch file `sentinel-runtime.bat` after having unzipped the folder, if required

## 3. Updating the license (with or without USB dongle)

The licenses contained in the dongles are specific to each version of GRIF. This way, to execute a GRIFXY, you need a license dating from at least year XY. For instance, GRIF2017 can be used with a license from 2017, 2018, etc



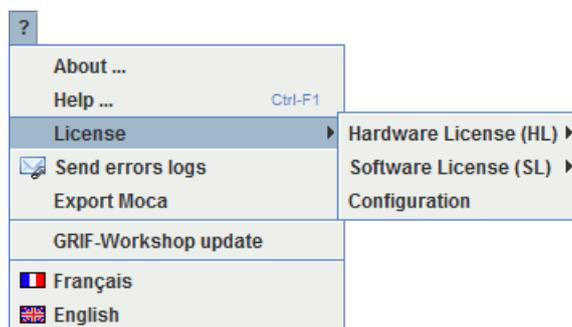
The procedure has to be conducted on the workstation in which the dongle is plugged in.

There are 2 steps to the update: the information regarding the current license is sent to SATODEV and then the application of the new information sent back/returned by SATODEV.

### 3.1. Sending license information to SATODEV

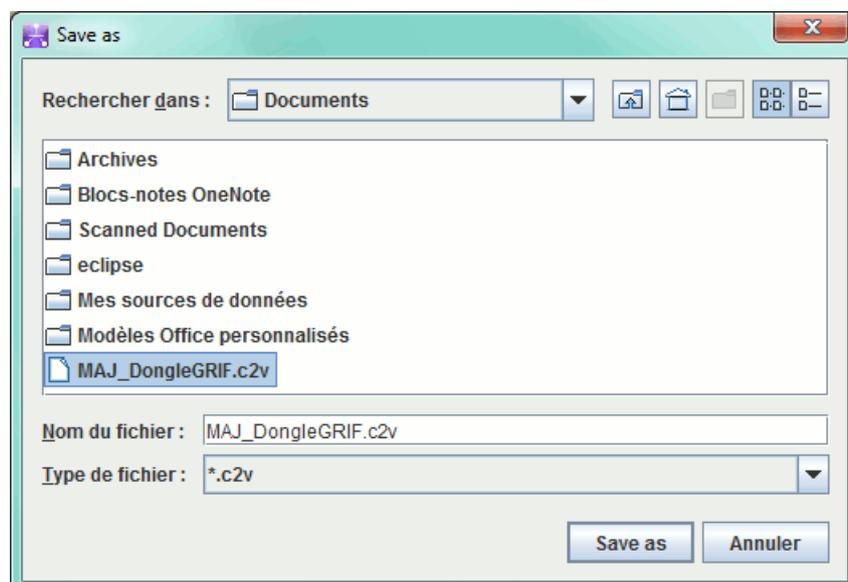
#### 3.1.1. Via GRIF

In the bar menu of one of the GRIF modules, click ? and then select **License**.



Choose the license type (hardware means with USB dongle and software without USB dongle) and click **Générez c2v**.

Save the generated file.



Email the c2v file to [contact@satodev.fr](mailto:contact@satodev.fr) and you will receive a return file for updating the software

### 3.1.2. From the license server

License information can be generated directly from the license server.

To do so, the license server must be installed, if it is not yet installed, please run `sentinel-runtime.bat` (you can download this file from <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utils.zip>).

Go to `http://localhost:1947` and check the version of the license manager in the **About** menu. It should be Sentinel License Manager 19.0.1.64256 or newer.

You can generate the information file in the Admin Control Center interface by clicking on the button **C2V**.



To enable the C2V button, in the **configuration** menu check the box **Generate C2V file for HASP key** and then click on **submit**.

**Options**

Sentinel Keys

Products

Features

Sessions

Update/Attach

Access Log

**Configuration**

Diagnostics

Help

**About**

### Sentinel Keys Available on CVINUESA01

#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	<a href="#">SATODEV-DEV2</a>	89115 (89115)	1662524725	HASP HL Net 10	-	3.25	-	<input type="checkbox"/> Browse   <input type="checkbox"/> Net Features
2	<a href="#">CFOLLEAU03</a>	89115 (89115)	275876750671392215	HASP SL AdminMode Rehostable	-	2.36	-	<input type="checkbox"/> Browse   <input type="checkbox"/> Net Features
3	Local	89115 (89115)	808480921	HASP HL Net 10	-	3.25	1	<input type="checkbox"/> Products   <input type="checkbox"/> Features   <input type="checkbox"/> Sessions   <input type="checkbox"/> Blink on <input type="checkbox"/> <b>C2V</b>

### 3.1.3. From `sentinel-usb-dongle-update.exe`

It is possible to update the dongle even if the software and the license server is not installed. For that, it is necessary to download the utility in the file in `sentinel-runtime-2022`, which can download in <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utils.zip>.

When the file is downloaded, it is enough to launch `sentinel-usb-dongle-update.exe` and then to click on **Collect information**.

## 3.2. Updating the dongle

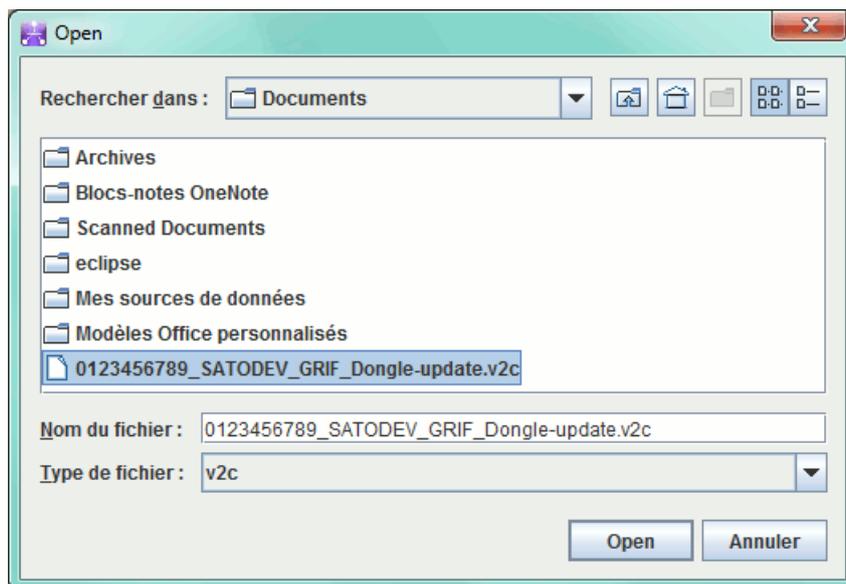
### 3.2.1. Via GRIF software

SATODEV will return a file with the following name format:

**N°Dongle\_SOCIETE\_GRIF\_Dongle-update.V2C.**

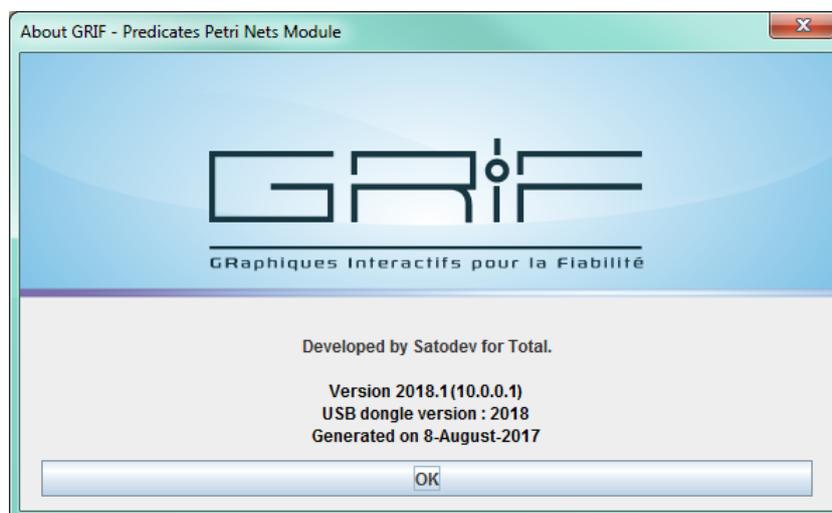
To apply this update open the GRIF workshop module, and then under the ? menu select **License - Hardware (or Software) license - Apply v2c**.

Open the file returned by SATODEV.



The update takes several seconds and the following message is displayed when the update is completed: UPDATE SUCCESSFUL.

You can then use GRIF and check the update in the ? - **About...** menu.



### 3.2.2. From license server

To apply v2c file, go on <http://localhost:1947>.

Then, in the **Update/Attach** menu and select **Choose a file** to search v2c file send by SATODEV.

Select your file and click on **Apply file**.

**Options**

- Sentinel Keys
- Products
- Features
- Sessions
- Update/Attach
- Access Log
- Configuration
- Diagnostics
- Help
- About

### Sentinel Keys Available on CVINUESA01

#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	SATODEV-DEV2	89115 (89115)	1662524725	HASP HL Net 10	 -	3.25	-	<input type="button" value="Browse"/> <input type="button" value="Net Features"/>
2	CFOLLEAU03	89115 (89115)	275876750671392215	HASP SL AdminMode Rehostable	 -	2.36	-	<input type="button" value="Browse"/> <input type="button" value="Net Features"/>
3	Local	89115 (89115)	808480921	HASP HL Net 10	 -	3.25	1	<input type="button" value="Products"/> <input type="button" value="Features"/> <input type="button" value="Sessions"/> <input type="button" value="Blink on C2V"/>

 This procedure is valid as well for USB standalone dongle (green) that server dongle (red).

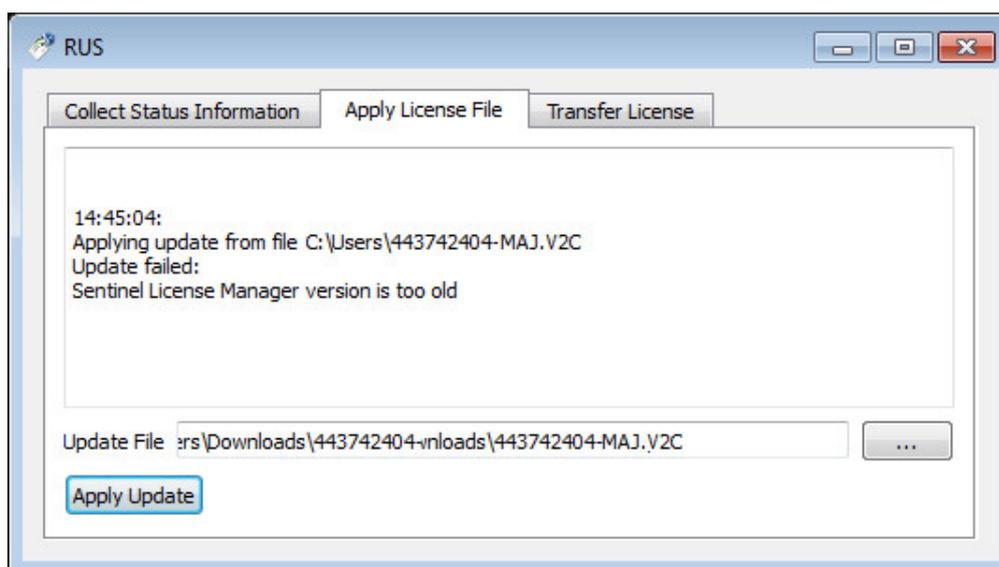
### 3.2.3. From sentinel-usb-dongle-update.exe

As for collect information, v2c file can be apply using **sentinel-usb-dongle-update.exe** which can be download through the following link <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utils.zip>.

To update the dongle, it is necessary go to **Apply License File** tab, search v2c file send by SATODEV using  button and click on **Apply Update**.

## 3.3. Updating issues

If the following error message appears while updating the dongle:



Start the file `sentinel-runtime.bat` which can be found here `C:\Programmes\Total\GRIF 2022.XX\Key`.

## 4. Using network licenses

### 4.1. Operation

In this section, we explain how to use network licenses.

Network licenses are used with a Sentinel dongle (red USB key) which needs to be plugged into your server workstation. No dongle is needed on the client workstations. GRIF can be installed on as many PCs as you want; licenses are used on the server only when a user starts a GRIF session. The maximum number of simultaneous users corresponds to the number of licenses installed on the server.



In "SL" license mode (without a USB dongle), the server needs an activation key (€136 in 2018) which acts like a "token container". There must be as many tokens (€155 in 2018) as there are licenses. The activation keys and the tokens are associated to a single workstation via the Gemalto Sentinel HASP SL protection system.

If you change servers, you have to transfer the license. If the server is Out of Order, tokens will have to be purchased for the new server. There is no need to purchase a new license.

The license has to be transferred even if the server is virtual. Moving the license to a cloned virtual server can be detected and will render the license unusable.

### 4.2. Installing the license server

You can use a client workstation as a license server. GRIF does not have to be installed on the server.

You must install the License Manager/Dongle Driver on the server. You can download it here: <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utils.zip>

Unzip the archive and run the batch file `sentinel-runtime.bat`. When installation is finished, in case of SL licence mode, you have to retrieve the `haspvlb_89115.dll` that is in SL folder of the zip file. For windows x64 versions, the DLL should be copied into the `%CommonProgramFiles(x86)%\Aladdin Shared\HASP\` directory. For Windows x86 versions, the DLL must be copied into the `%CommonProgramFiles%\Aladdin Shared\HASP\` directory.

To verify the installation of the server, connect in your browser to the url `http://localhost:1947` The Admin Control Center interface should appear.

### 4.3. Generating Server fingerprint for SL Licenses

This section is only for SL License, if you bought a HL licence (Hard Lock : USB dongle) go to checking section.

SL licenses don't need USB dongle, there are linked to a server. To link a license to your server, SATODEV needs the (\*.c2v) footprint of your server. For fingerprint generation you can use GRIF thanks to the **!/Configuration/License/Software Licence(SL)** menu, in any GRIF module that is start without license.

#### 4.3.1. From GRIF (If installed on server)

For fingerprint generation you can use GRIF :

- by GRIF Launcher GRIF and after with **License update - Configuration**.
- or by **!/Configuration/License/Software Licence(SL)** menu, in any GRIF module that is start without license.

GRIF will then offer to record the footprint c2v file that you must send to the address : contact [AT] satodev.fr When SATODEV will have received your c2v file, you will receive a v2c file that you can apply to use : Section 3.2, "Updating the dongle".

### 4.3.2. From sentinel-usbdongle-update.exe (on windows)

On Windows servers, if GRIF is not on the server (which is highly probable), you can use the Hasp RUS tool which is named sentinel-usb-dongle-update.exe in GRIF InstallationFolder/bin/key or here : <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utils.zip>. Then when this tool is started, check "Installation of new protection key" in "Collect Status Information" tab, then press "Collect information" button and send the C2V file to SATODEV.

### 4.3.3. From Admin Control Center

On Admin Control Center, you first have to enable the C2V file generation by checking the button displayed below.

Options

Sentinel Keys

Products

Features

Sessions

Update/Attach

Access Log

Configuration

Diagnostics

Help

About

English

русский

Deutsch

日本語

中文

Français

Español

Italiano

Configuration for Sentinel License Manager on

Basic Settings	Users	Access to Remote License Managers	Access from Remote Clients	Detachable Licenses	Network
Machine Name	<input type="text"/>				
Allow Remote Access to ACC	<input checked="" type="checkbox"/>				
Allow Remote Access to Admin API	<input checked="" type="checkbox"/>				
Display Refresh Time	<input type="text" value="3"/>	(seconds)			
Table Rows per Page	<input type="text" value="20"/>	(5 to 100)			
Idle Timeout of Session	<input type="text" value="720"/>	(Min. minutes: 10. Max. minutes: 720)			
Write an Access Log File	<input checked="" type="checkbox"/>	Size Limit (KB): <input type="text" value="5000"/>	(0: No limit) <a href="#">Edit Log Parameters</a>		
Include Local Requests	<input checked="" type="checkbox"/>				
Include Remote Requests	<input checked="" type="checkbox"/>				
Include Administration Requests	<input type="checkbox"/>				
Write an Error Log File	<input type="checkbox"/>	Size Limit (KB): <input type="text" value="0"/>	(0: No limit)		
Write Log Files Daily	<input type="checkbox"/>				
Days Before Compressing Log Files	<input type="text" value="0"/>	(0: Never compress)			
Days Before Deleting Log Files	<input type="text" value="0"/>	(0: Never delete)			
Days Before Deleting H2R files	<input type="text" value="90"/>	(Min. days: 30 Max. days: 9999)			
Write a Process ID (.pid) File	<input type="checkbox"/>				
Password Protection	<input type="radio"/> Configuration Pages <input checked="" type="radio"/> All ACC Pages			<a href="#">Change Password</a>	
Generate C2V file for HASP key	<input checked="" type="checkbox"/> Enable this option only if recommended by your software vendor.				
<input type="button" value="Submit"/> <input type="button" value="Cancel"/> <input type="button" value="Set Defaults"/>					

Then in **Sentinel Keys** you can generate the fingerprint by clicking on **fingerprint** (the first time) or **C2V** button. If you have several key, SATODEV vendor code is 89115.

Warning: if another software is already installed, the "Installation of new protection key" button is disabled. In this case, SATODEV needs the ID file that you can download from your server at this adress : [http://localhost:1947/\\_int\\_/download/my.id](http://localhost:1947/_int_/download/my.id) or in the "Admin Control Center", in "Diagnostics" -> Create ID File. Please provide this ID file to SATODEV.

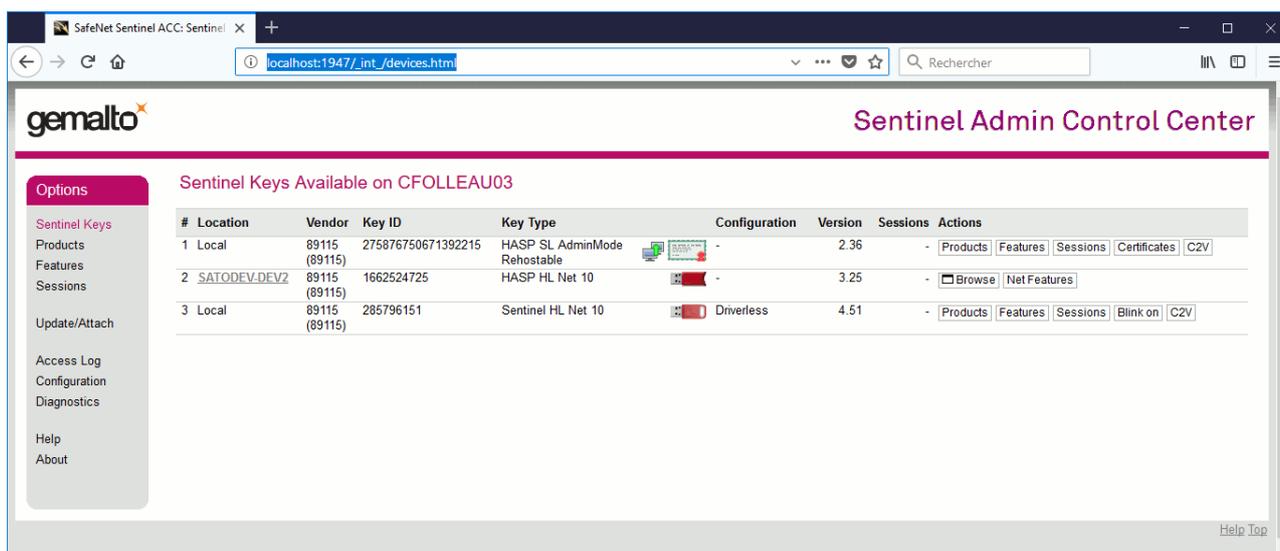
If you have several licenses on your server, only the ones with 89115 vendorID are related to GRIF.

## 4.4. Checking the installation

To check if the server is properly configured, use a browser to connect to server port 1947:

- Either from the server: <http://localhost:1947>
- or from the client: <http://addresseduserveur:1947> (only works if remote access has been previously authorized in the server's configuration interface Configuration / Allow Remote Access to ACC)).

The configuration interface server is displayed below.



If nothing appears on screen, re-install the license server.

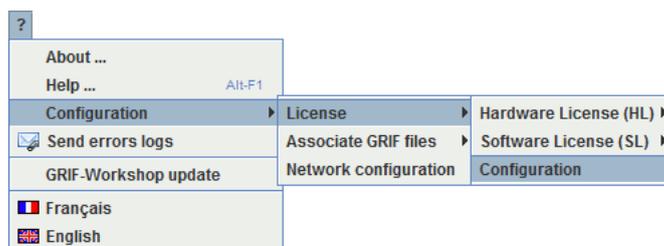
For more information about the license manager (license checking, session monitoring, allowed users/PC ...), see: [https://docs.sentinel.gemalto.com/ldk/LDKdocs/SPNL/LDK\\_SLnP\\_Guide/Distributing/Admin\\_Control\\_Center/100-Admin\\_Control\\_Center.htm](https://docs.sentinel.gemalto.com/ldk/LDKdocs/SPNL/LDK_SLnP_Guide/Distributing/Admin_Control_Center/100-Admin_Control_Center.htm)

## 4.5. Configuring the client workstations

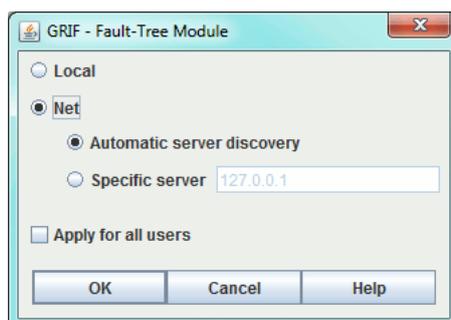
When the license manager is installed on your server, you must configure your client workstations.

To do so, install GRIF and run the configuration utility on the client workstation

- by GRIF Launcher GRIF and after with **License update - Configuration**.
- or under the ? menu and then **Configuration - Licence - Configuration**



- If your client workstation is on the same network, select **Automatic server detection**
- If the client workstation is on a different network, enter an IP address or the name of your license server in the field **Specific server**.



This configuration generates a setup.ini file in the directory GRIF-Launcher. When deployed, the setup.ini file can be copied without having to use the configuration utility.

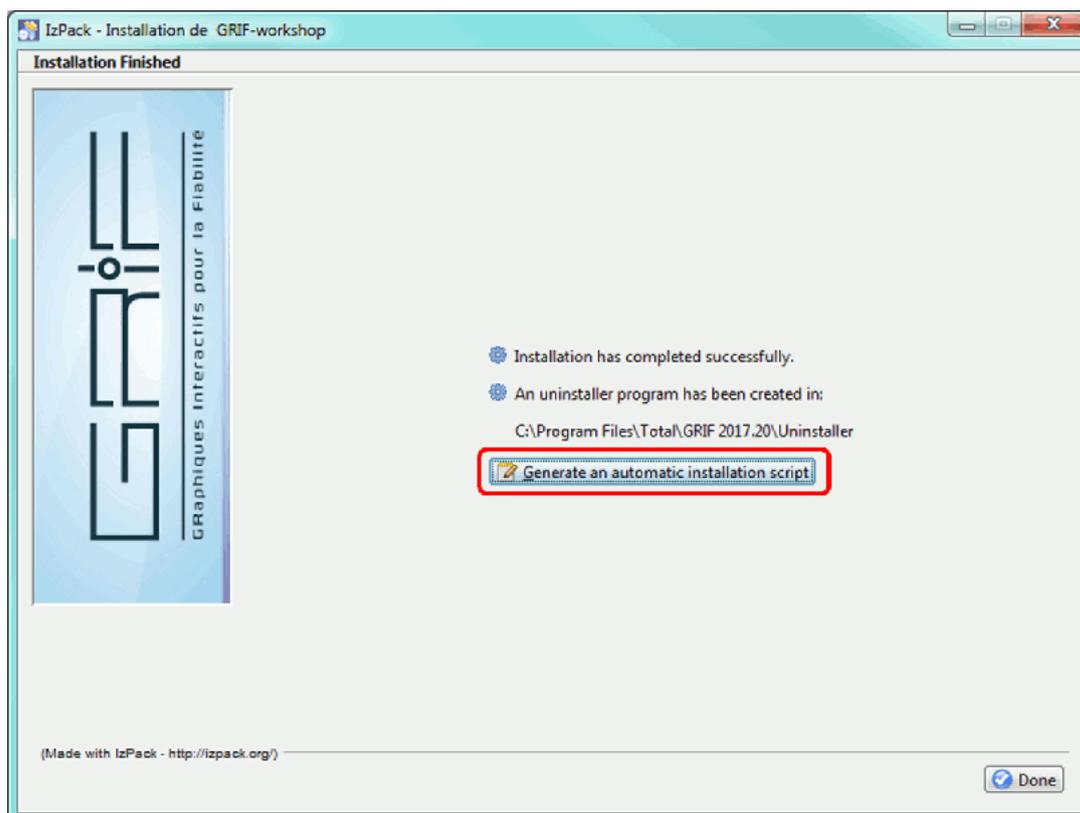
In both cases, change your router and firewall to allow communications through the '1974' ports (UDP and TCP). When a GRIF module is launched, the hasp .ini configuration file will be created: `/user/AppData/Local/ SafeNet Sentinel/Sentinel LDK/hasp_89115.ini`

## 4.6. Software deployment

GRIF does not require an .msi file to be deployed on several user workstations. There are 2 ways of deploying it.

### 4.6.1. Silent setup

First, install GRIF on a PC. Assuming GRIF has been installed in `install-grif-dir`. Finally click to generate an automatic-installation script.



The generated file is named `auto-install.xml`.

Once GRIF is installed, start the configuration utility as explained in the previous section. This generates a file named `install-grif-dir » /GRIF- Launcher/setup.ini`. This `setup.ini` file indicates how to obtain a license.

Then, on each new workstation:

1. Start the command line: **GRIF201X-Install.exe auto-install.xml** with `auto-install.xml` and the automated setup script.

This step installs GRIF and creates a shortcut in the user's start menu. This step can be replaced by copying and pasting `install-grif-dir` if the user shortcuts are unnecessary.

2. Finally, duplicate the file **install-grif-dir /GRIF-Launcher/setup.ini** on the client workstation (in the same place).
3. (optional) To link GRIF files with the GRIF platform, run the following batch file: **install-grif-dir** in `/GRIF-Launcher/GRIF-File-Association.bat`

### 4.6.2. Portable version

The portable version can be copied and pasted in the chosen directory.

---

## 4.7. Deployed version setup

You can setup manually by modifying the `setup.ini` file in the directory `c:\Program Files\GRIF2017\GRIFLauncher\setup.ini` (or the directory in which GRIF was deployed).

The following changes must be made:

```
Options.Netkey=true
Options.NetIpAuto=false
Options.NetIp=127.0.0.1
```

Which means:

1. True if using network license  
false if standalone (green dongle)
2. True if the license server is automatically detected on the local network (not recommended)
3. Enter the name or IP address of the license server

## 4.8. Managing license remotely

The aim of the procedure is to update the red USB-dongle. This procedure needs to be run on the PC where the red USB-dongle is plugged after following instructions of chapter 3.1.2. or 3.1.3. Once the update is applied on the USB-dongle, it can be used on any PC or server where the license manager is installed. The url for connecting to sentinel-admin-control-center-web-page is `localhost:1947`, but if the connection from remote computer in the configuration part is allowed (pay attention to click on "submit" button to validate any action), it will be able to access this web page from any PC with : `http://nameOfTheServer:1947`

## 5. Transfer a sentinel SL license

GRIF licenses are based on SafeNet Sentinel HASP technology. We make use of both Sentinel HL hardlock and Sentinel SL (softlock) keys. Moving a license from one computer to another for Sentinel HL is simple. You install the HASP driver on the new computer and plug in the Sentinel HL USB key. For Sentinel SL keys this is a bit harder because the Sentinel SL key resides somewhere on the old computer and is based on a fingerprint of that computer. Fortunately, there are tools available to help you transfer the Sentinel SL license key to a new computer.

This document attempts to explain how to transfer a HASP softlock license for GRIF 2022 to a new computer.

### 5.1. Before we start

In order to be able to transfer an active Sentinel SL license key from one computer to another, you need to have access to both computers. These do not need to be connected to each other. You will not be able to transfer your HASP softlock license if your old computer is for example broken or stolen. You will also not be able to transfer the license when it has expired or has the "Cloned" status.

GRIF SL license keys can be installed on Windows and Linux systems.

### 5.2. Basic principle

Sentinel SL license keys use a fingerprint collected from the computer to prevent unauthorized copying. To be able to transfer a Sentinel SL license key to a new computer we need to provide a fingerprint of the new computer to the license manager on the old computer. The license manager on the old computer will then disable/remove the license on the old computer and generate a H2H (host to host) file that can be used to install the license on the new computer.

### 5.3. Tasks to be performed

- Installing the license server on the new computer
- Get a fingerprint of the new computer (.id)
- Create a host to host transfer file (.H2H)
- Install license on the new computer

#### 5.3.1. Installing the license server on the new computer

This procedure is described in chapter Section 4.2, "Installing the license server".



Do not forget the part concerning the installation of the SATODEV specific HASP driver.

Theoretically at this stage, there should be no visible license for the SATODEV provider. In order to check this, open the ACC (Admin Control Center) in a browser (<http://localhost:1947>). Open the **Sentinel Keys** tab and validate that there is no license for Vendor ID 89115. This unique identifier is the one assigned to SATODEV.

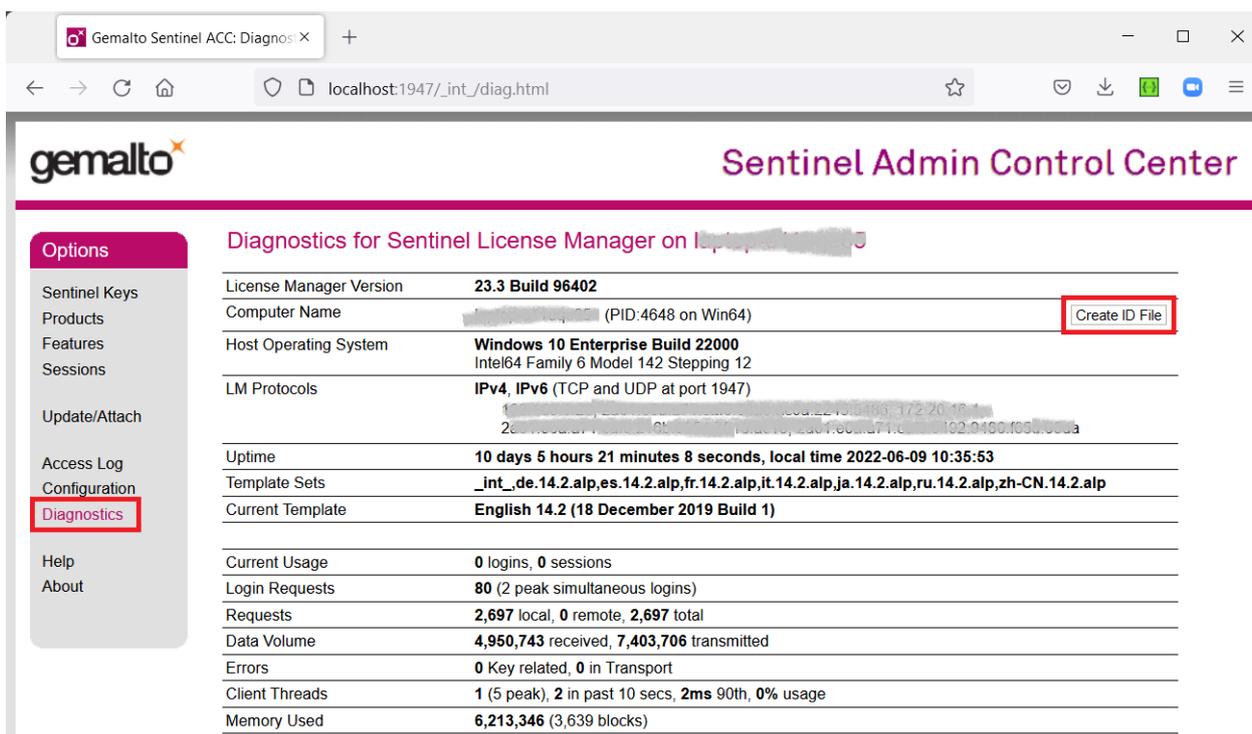
#### 5.3.2. Get a fingerprint of the new computer

To obtain the fingerprint of the new computer, the simplest solution is to directly use the graphical interface of the license server. However, if this is not possible, there is an alternative for windows workstations via the HASP RUS utility (sentinel-usb-dongle-update.exe) available here [<https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utills.zip>]



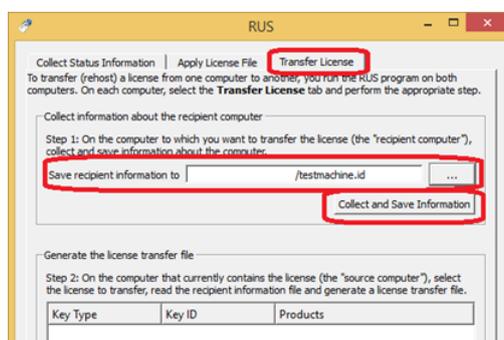
The procedures above provide a more complete .id file than the procedures described in the Section 4.3, "Generating Server fingerprint for SL Licenses" section. Thank you for respecting one or the other of the solutions below.

### 5.3.2.1. Solution with Admin Control Center

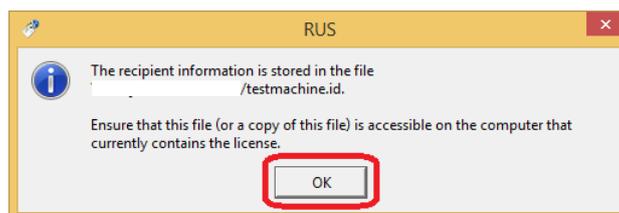


From the administration interface of the new server, open the **Diagnostics** tab, then click on the **Create ID File** button

### 5.3.2.2. Solution with HASP RUS utility (windows only)



From the new computer, in the HASP RUS utility, go to the **Transfer License** tab, fill in the **Save recipient information to** field and click on **Collect and Save Information**. This will display the following popup message:

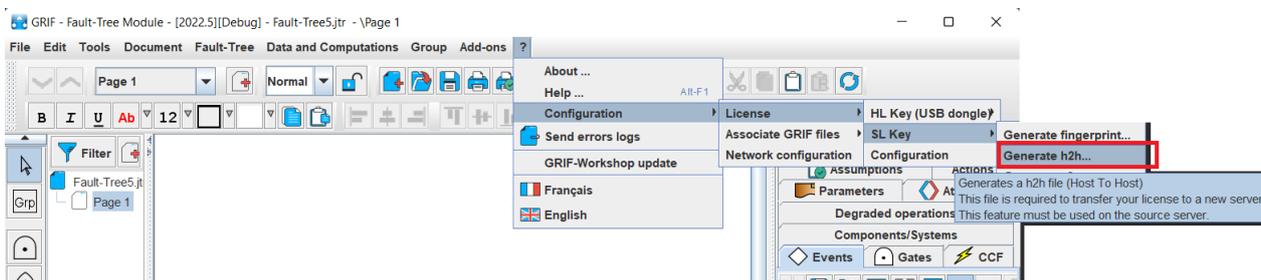


### 5.3.3. Create a host to host transfer file (.h2h)

Now that we have a fingerprint of the new computer, it's time to generate a Host-to-Host Transfer (.H2H) file on the old computer. Here again 2 alternatives are possible, you can if your old computer is under Windows use the utility HASP RUS already mentioned. If your old computer is under linux or mac-os, you will have to go through GRIF.

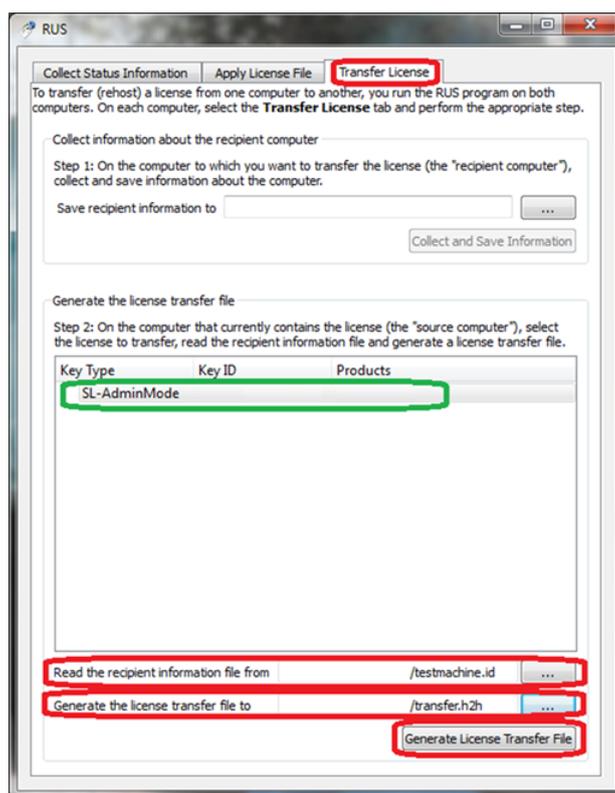
### 5.3.3.1. Solution with GRIF

This solution requires a version of GRIF >= 2022.5 able to open a GRIF module and configure to use the old license server.

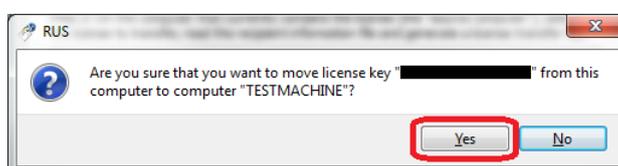


From one of the GRIF modules, open the menus **Configuration/License/SL Key/Generate h2h....** A confirmation window then opens and indicates the license number used which will be transferred. After validation, select the fingerprint .id file created in the previous step. Finally select a path to save the .h2h file that will be generated. This results in another dialog box that displays the location of the host-to-host transfer file. In your old licence server [http://localhost:1947/\\_int\\_/products.html](http://localhost:1947/_int_/products.html) you can see that the licensed products are no longer available on the old computer. You must now close GRIF which, in the absence of a license, risks no longer functioning correctly.

### 5.3.3.2. Solution with HASP RUS utility (windows only)



From the old computer, in the HASP RUS utility, navigate to the **Transfer License** tab. You will see the license key listed in the **Generate the license transfer file** section. If you see multiple keys, select the one you want to move. In the **Read the recipient information file from** box, select the fingerprint file (.id) created on the new computer. In the **Generate the license transfer file to** area, specify the name of the new .h2h file to generate. Click on **Generate License Transfer File** There will be a dialog to confirm the license transfer. Click Yes.



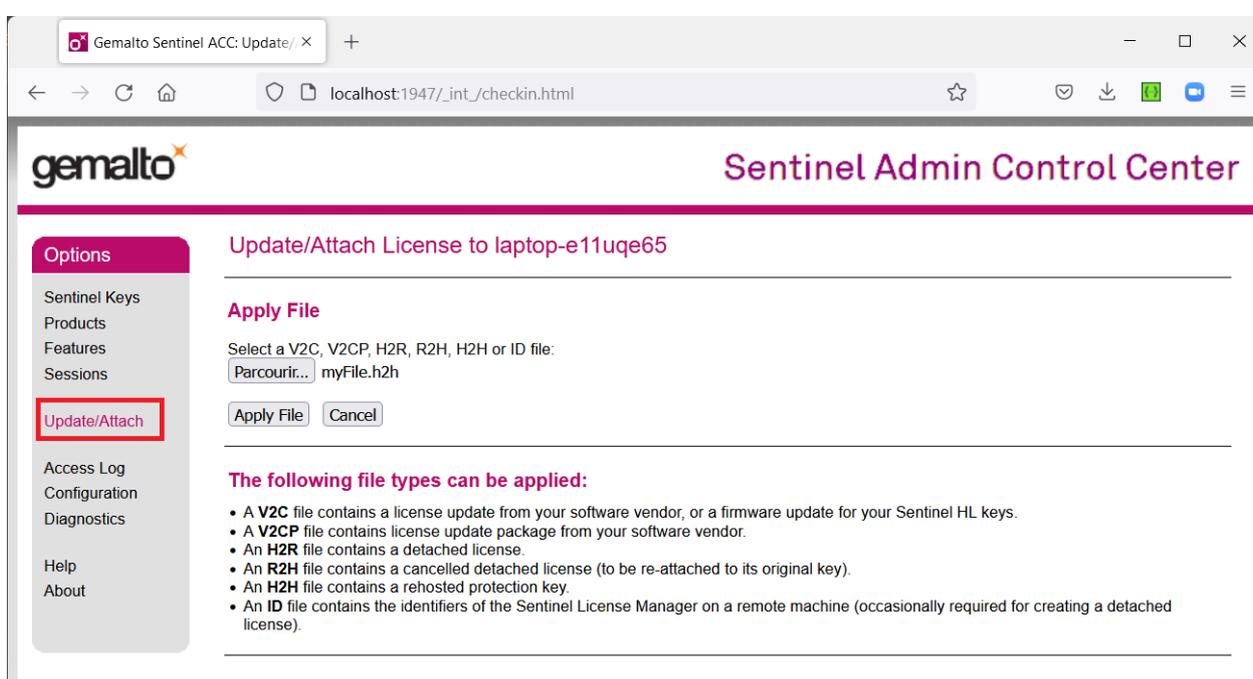
This results in another dialog box that displays the location of the host-to-host transfer file.

In Sentinel Admin Control Center [http://localhost:1947/\\_int\\_/products.html](http://localhost:1947/_int_/products.html) you can see that the licensed products are no longer available on the old computer.

### 5.3.4. Install license on the new computer

Now that we have the host-to-host (.H2H) file with the license details we can install this on the new computer. Once again, 2 solutions are possible, the HASP RUS utility for windows workstations, or directly via the ACC interface.

#### 5.3.4.1. Solution with Admin Control Center



From the administration interface of the new server, open the **Update/Attach** tab, Then select your h2h file with the **Parcourir...** button then click the **Apply File** button. Now the license transfer is complete. We perform a final check to confirm that the license is available. Navigate to **Sentinel Keys**, as you can see, the product license is now available.

### 5.3.4.2. Solution with HASP RUS utility (windows only)

Start again the utility HASP RUS utility on the new computer. This time go to the **Apply Licence File** tab.



At the bottom, in the **Update File** area, select the host-to-host transfer file (.h2h) generated on the old computer, then click on **Apply Update**. In the white space in the middle of this dialog you will see the progress of the license installation as shown above. Now the license transfer is complete. We perform a final check to confirm that the license is available. Navigate to [http://localhost:1947/\\_int\\_/products.html](http://localhost:1947/_int_/products.html). As you can see, the product license is now available.

## 6. What if?

### 6.1. ... the software starts in demo mode with a standalone green dongle

The software may sometimes start in demo mode, in which case the following points must be checked:

- In one of the modules, go to the ? - **About ...** menu and check the dongle version year in **License version**. If the license version is oldest than the software version, read section GRIF update method to update your protection key.
- When the dongle is plugged in on a USB port, does the indicator light appear? If there is no light, either the USB port is out of order (try another one), or the Sentinel driver has not been installed.
- Check that the Sentinel driver is installed by logging onto <http://localhost:1947/>. A 16xy or higher revision window **Admin Control Center help** appears. The green dongle must appear in the **Sentinel Keys** menu.



To make sure you are not using another software protection key, check that SATODEV's vendor code (89115) is displayed.

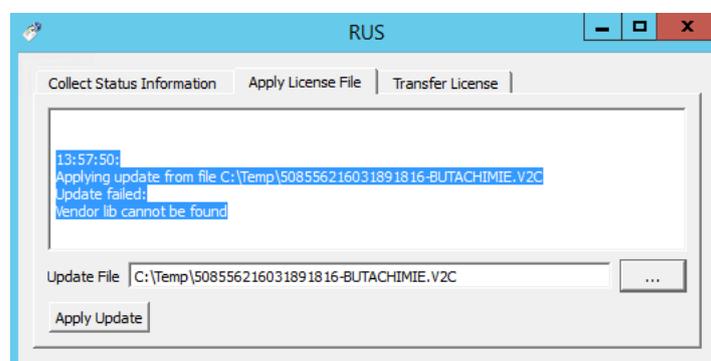
- If the dongle is not displayed, reinstall the driver. To do so, first run the file **remove.bat** and then run **sentinel-runtime.bat** (download here <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utills.zip>).



If after having checked all these points the problem persists, please email us at: [software.maintenance@satodev.fr](mailto:software.maintenance@satodev.fr)

### 6.2. ... an error message shows after applying the v2c

When applying the v2c file, the following error message may appear:



In that case, perform the following operations:

1. Download the latest version of the sentinel driver: <https://download.grif.totalenergies.com/public/SENTINEL/Sentinel-Licenses-Utills.zip>;
2. Run **sentinel-runtime.bat**;
3. Rerun **sentinel-usb-dongle-update.exe**.

### 6.3. ... to transfer the license server (SL)



It is impossible to clone a virtual workstation using an SL license. They must be transferred.

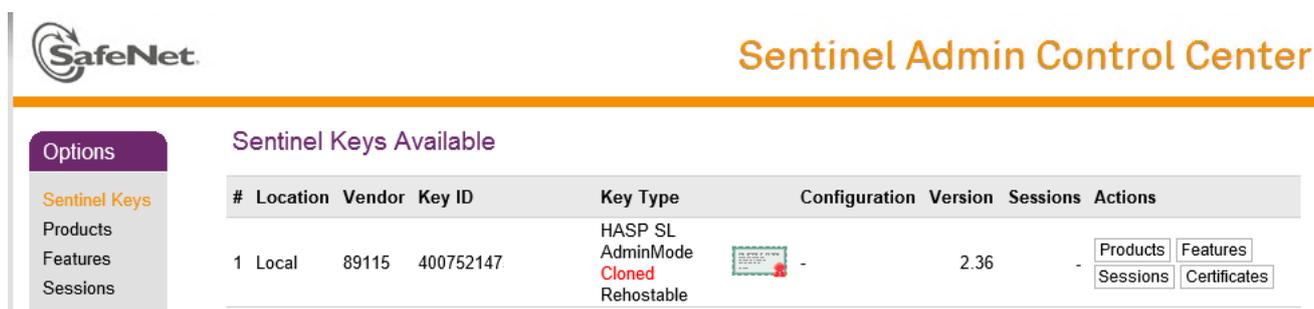
In the following procedure, the **source** is the workstation with the operating license and the **destinataire** the workstation receiving the license.

1. On the recipient machine, launch the **Remote Update System (RUS)** tool.
2. Go to the **Transfer License**

3. In the option labeled **Step 1**, browse to the location where you want to save the recipient information and type in the file name (.id file).
4. Click on **Collect and Save information** and copy the created file to Source machine.
5. Now on the source machine, launch the RUS tool.
6. Go to the **Transfer License** tab.
7. In the option labeled as **Step 2**, select the SL license to be re-hosted.
8. Read the "Recipient information file" (.id file) created earlier on recipient machine.
9. Generate the license transfer file (h2h file).
10. Now on the recipient machine, apply the license transfer file using the **Apply License file** tab.

## 6.4. ... to reset a cloned server key

If before the transfer the virtual workstation has been cloned, despite the restriction, the following message will appear in GRIF:



#	Location	Vendor	Key ID	Key Type	Configuration	Version	Sessions	Actions
1	Local	89115	400752147	HASP SL AdminMode Cloned Rehostable		-	2.36	-

In this case, it is necessary to inform SATODEV indicating that you meet a problem of cloned license and to send us c2v file associated with the concerned license.

SATODEV will send back a new v2c file v2c to apply.

## 6.5. ... during update, error 50 occurs



This error message means that no USB key is detected.

2 reasons :

- You have not install the USB protected drivers;
- USB key is not connected to the computer that you are updating.

## 6.6. ... an out of memory message is displayed

As any computation software, GRIF needs a memory. By default 32-bit version is limited to 1024 MB, while 64-bit version is limited to 4096 MB (it is MX parameter of JAVA).

For 64-bit version on PC having more than 5 GB of memory, if you start the software with ".bat" or ".sh" files it may be useful to increase this MX (max memory) value. To do so, you can modify JAVA\_MX in GRIF-Commons.bat (for windows) ou .sh (for Linux) that is in "The directory where GRIF is installed"/Bin/GRIF-Launcher/. It will have an effect only when you start the module with "themoduleyouwant".bat (or .sh for Linux). It doesn't work with the .exe files (the one started in your "Start" menu).

If your operating system is Windows, and you start GRIF with the shortcuts created during installation process, you use the .exe files that are in "The directory where GRIF is installed"/Simulation or "The directory where GRIF is installed"/Boolean or "The directory where GRIF is installed"/. In this case, for modifying the memory used for Tree.exe (it is an example, it works for any module), you have to add a "Tree.l4j.ini" next to Tree.exe un Boolean

directory. This "Tree.l4j.ini" file has to contain only : `-Xmx8G` if you want to use 8 GB of RAM. Obviously the value should be set according to the available memory on the PC.

If you want to check the modification, start the module and check the log file in `C:/users/yourlogin/GRIF/YEAR/Tree/log/` and look for the line starting with "CONFIG: Max memory : XXXX MB" that in the first 10 lines.

If despite of this modification a message says that the software can't allocate more memory (in boolean modules), and the JAVA process do not use the maximum memory specified, it means you have to change Albizia engine configuration. To setup albizia you have to edit "The directory where GRIF is installed"/`Bin/Tools/Albizia/AlbiziaBDDManager.config` . You can delete everything inside and copy the contents of `AlbiziaBDDManager.config.6GB` (that is next to `.config` file) and then Albizia will use 6 GB. Caution, Albizia must use less memory than the MX value used by Java, pay attention, otherwise GRIF will bug.

## 6.7. ... StackOverFlow message is displayed with `comput_rec` method

Like any scientific computation software, GRIF sometimes performs recursive calculations. It can happen on very big models that the recursion exceeds the limits accepted by default by Java.

For the 64-bit version, if you run the software with a ".bat" or a ".sh", it is sometimes necessary to increase the maximum value of the execution stack size To do this, it is possible to modify the `JAVA_XSS` value in the `GRIF-Commons.bat` (for windows) or `.sh` (for linux) which is located in the "installation directory"/`Bin/GRIF-Launcher/`. This will only impact the software if it is launched from a `.bat` (or `.sh` for Linux) with the module name. Since version 2022.15, the value is automatically set to 8 mega on 64bit versions. Increasing this value to 16 mega may solve some stack size problems but it will have to be done on a machine with at least 64GB of RAM and having set the MX to 32G

Under windows, for the launching with the exe files, the parameter setting is done in the "module".l4j.ini file as explained for the memory size. This "module".l4j.ini file should contain: `-Xss16m` to use a battery size of 16 mega.

## 6.8. ... GRIF doesn't detect all CPU of my server

GRIF uses Java to detect the number of CPU at start. With dual socket servers, Windows server starts Java on only N CPU of one socket. So you can use only half of computer power. The way to solve this issue is to modify the `.ini` file. It is in "installation directory"/`bin/module/module.ini` if you never started GRIF, or in "user home"/`GRIF/"version"/"module"` when you did. In this `.ini` file you can specify `Compute$CPUDetected=n` with "n" the number of CPU you want to use.

## 7. How to contact SATODEV in case of problem

When the message **Contact your retailer** appears, first respect the following procedure:

1. When problem is due to the software, the email contact is <software.maintenance@satodev.fr>
2. Please specify the version you use (see "?" / "About").
3. Send error logs files which correspond to the last manipulations made with the software. To send it, you just have to go the menu ? - **Send errors logs**. The software opens automatically your e-mail box with the address of SATODEV



It is also possible to find these files in the following folder C:\Users\UserName\GRIF\2022\Module\log

4. If it is possible, please join the model file. In this case, you can use **Send by mail** feature in the menu **File** and move the model enclosed in the previous mail.



To respect the model confidentiality, it is possible to anonymise the model thanks to the function **Anonymise** in **File** menu. Caution, this manipulation is irreversible.

5. Finally, in the e-mail, describe how the problem happened, and give us your phone-number so we can have a phone call if needed.