Installing/Updating a License (Applying V2C Files) Application Note

Installing/Updating a License (Applying V2C Files)

Introduction

After sending a C2V or fingerprint file to Stromasys Orders Administration and receiving one or more V2C files from Stromasys, the file(s) must be installed on the emulator host system or the license server. This document describes the different ways in which this task can be performed:

For recent product versions, the license update can be performed without interrupting the operation of the Charon instance. Please refer to the release notes of your product version to determine if this applies to your version. Charon will normally recognize the updated license at the next periodic license check and start to use it.

> In most cases, the update of the V2C file(s) will be performed on the system where the license is to be installed. However, the license update for a **hardware license** can be performed on any system where the license drivers (standalone or as part of a Charon emulator product) are installed. After the license update, the USB dongle can be moved to the target system. This is **not possible** for software licenses.

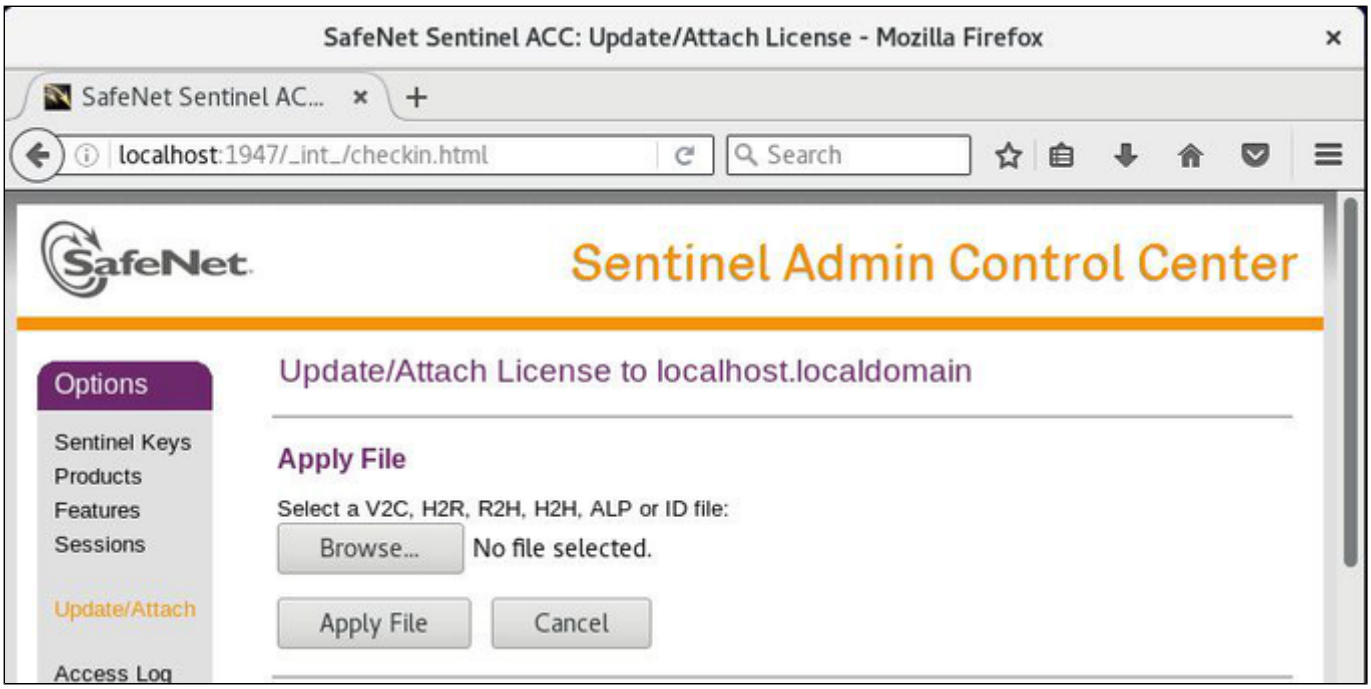
> Before continuing with the steps below, make sure the relevant V2C file(s) are stored on the filesystem of the system where the license will be installed or updated.

> If a hardware USB key is to be updated, you will have received **two** files: a ***_fmt.v2c** file and a ***.v2c** file. The *_fmt.v2c file formats the dongle and the *.v2c file contains the updated license data.
>
> In such cases the ***_fmt.v2c file** must be applied **first**.

Installing/Updating a License with Sentinel ACC

To use the Sentinel ACC on the local system to apply V2C files, open the URL **http://localhost:1947/_int_/checkin.html** (this is the link for the option **Update/Attach**).

The page displayed will be similar to the one in the following image, which shows the Sentinel ACC on Linux:



Click on the button **Browse** (called **Choose File** on some products/versions) and select the appropriate file in the file browser window that opens.

Click on **Apply File** to apply the V2C file. If you received two files, start with the *_fmt.v2c file and repeat the step for the second .v2c file.

> You can also use this method to update a license connected to a different system. To do this, use the name of the target system instead of localhost in the URL.
>
> - The V2C file(s) must be located on the system on which you start the browser.
> - Remote access to the Sentinel ACC of the target system must be enabled (this is described in detail in the Licensing Handbook).
> - The firewall settings must allow access to the Sentinel ACC of the target system over the network (TCP port 1947 must be open).

Installing/Updating a License with Linux Tools

In addition to the Sentinel ACC, the command **hasp_update** can be used on Linux to apply V2C files.

The following example shows the use of the **hasp_update** command:

```
# hasp_update u /path/filename.v2c
```

If you received two V2C files, perform this command for both files (remember to **first** apply the *_fmt.v2c file).

The full paths to the command are listed in the following table:

Charon emulator product	Path to Commands
Charon-AXP/VAX, standalone license drivers	`/opt/charon/bin/hasp_update`
Charon-SSP	`/opt/charon-agent/ssp-agent/utils/license/hasp_update`
Charon-HPA	`./Sentinel_HASP_Linux_Run-time_Installer_script/hasp_update` under the installation directory

> The commands described in this section also work for Charon-SSP. However, the Charon-SSP emulator product has its own GUI, the Charon-Manager, which also includes a license update tool that can apply a V2C file. Please refer to full Licensing Handbook for more information.

Installing/Updating a License with Windows Tools

This step is performed using the License Update Utility.

The license update utility (also called HASPRUS) is started in different ways depending on the Charon product used.

Starting the License Update Utility for the Standalone License Driver Installation

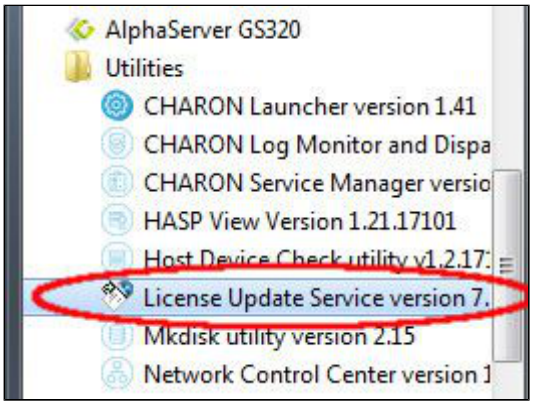
Log in as *Administrator*. Navigate to the folder where the Sentinel license driver utilities were installed and double-click on the program **RUS_OQEDC** or start the command from a command window.

Starting the License Update Utility for Charon-AXP/VAX/PDP

On versions **before** Charon-AXP/VAX/PDP version 4.8 this utility is called License Update Service. On versions 4.8 and higher it is called License Update Tool.

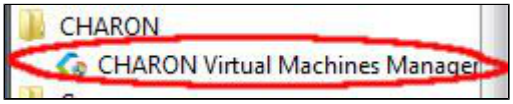
Charon-AXP/VAX/PDP Version 4.7

The license update utility is started via **Start** -> **Charon** -> **Utilities** -> **License Update Service**:

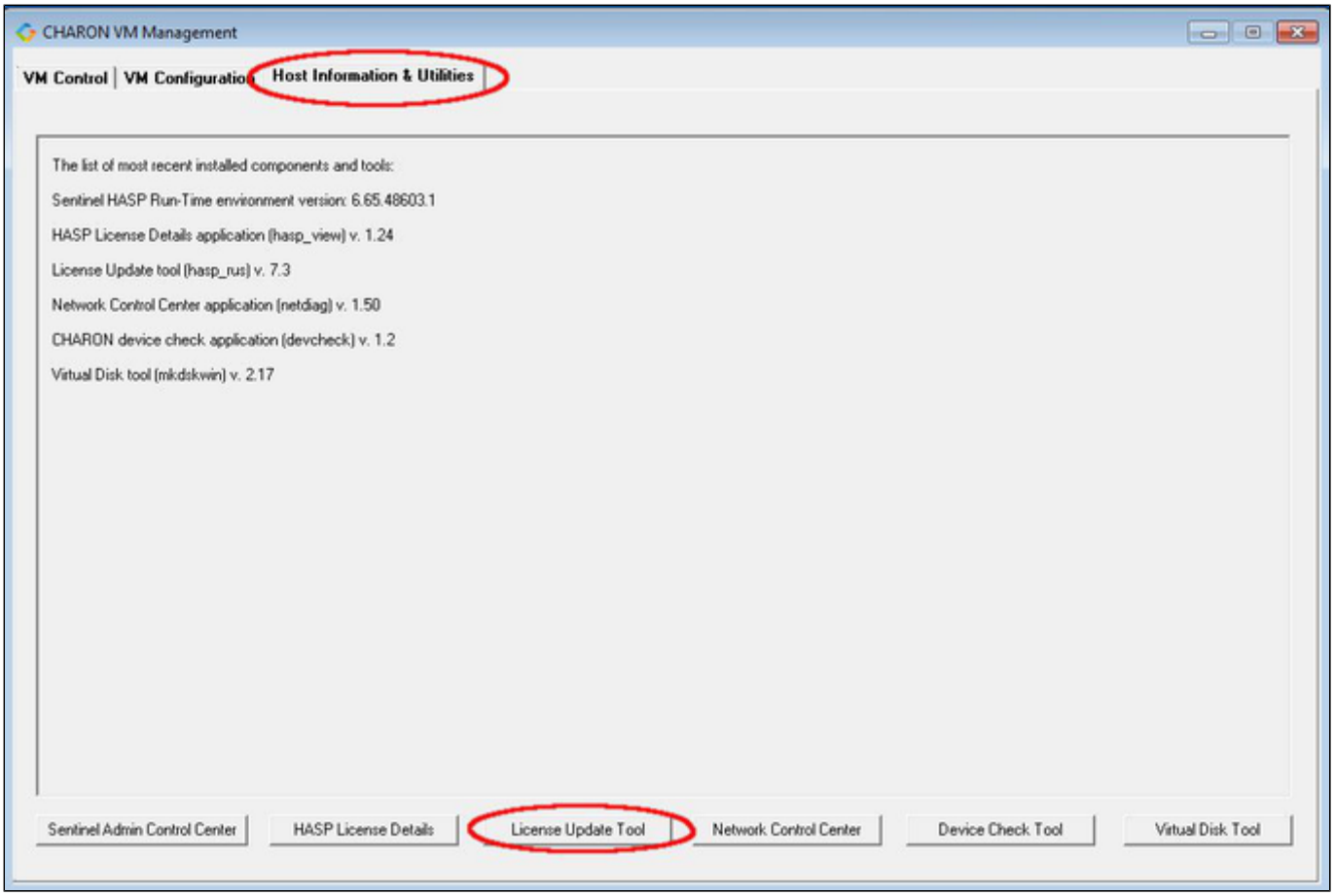


Charon-AXP/VAX/PDP Version 4.8

The license update utility is started from the **CHARON Virtual Machines Manager**. The CHARON Virtual Machines Manager is started either via the **desktop icon** or from the **start menu**:

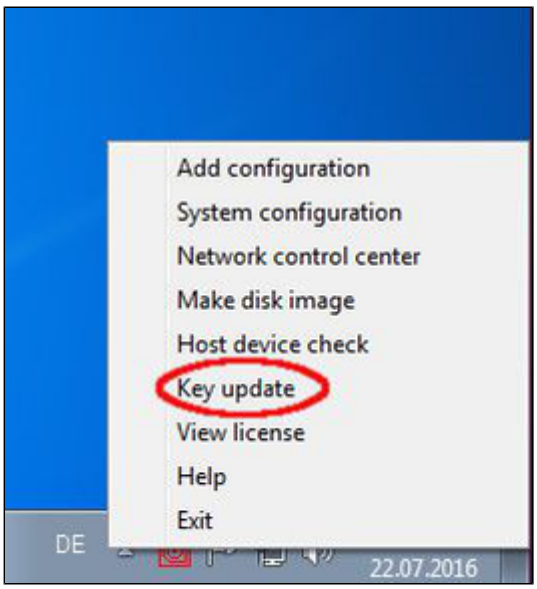


Once the CHARON Virtual Machines Manager has been started, go to the **Host Information & Utilities** tab and click on the **License Update Tool** button:



Starting the License Update Utility for Charon-AXP/SMA

The license update utility is started via the the system tray icon. Clicking on the icon will open a menu similar to the following:



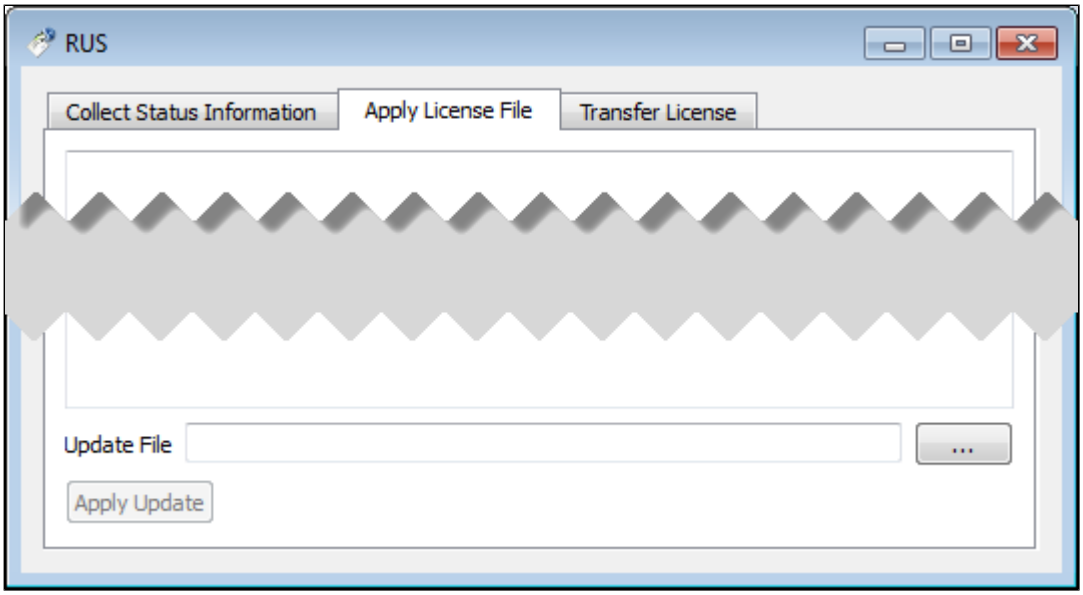
Click on the **Key update** menu item to start the utility.

Installing the V2C File(s)

After receiving the V2C file(s) from Stromasys, copy the file(s) to the system where the license needs to be installed, start the license update utility as described above, and install the new license.

> If a hardware USB key is to be updated, you will have received **two** files: a ***_fmt.v2c** file and a ***.v2c** file. The *_fmt.v2c file formats the dongle and the *.v2c file contains the updated license data.
> In such cases the ***_fmt.v2c** file must be applied **first**.

1. To install the V2C file(s) for hardware **and** software licenses, select the option **Apply License File**.



2. Press the **"..."** button next to the **Update File** field. This will open a file browser.

3. Select the V2C file to be applied.

4. Click on **Apply Update** to complete the operation.

If you received two V2C files, perform these steps for both files (remember to **first** apply the ***_fmt.v2c** file).

Verifying the License

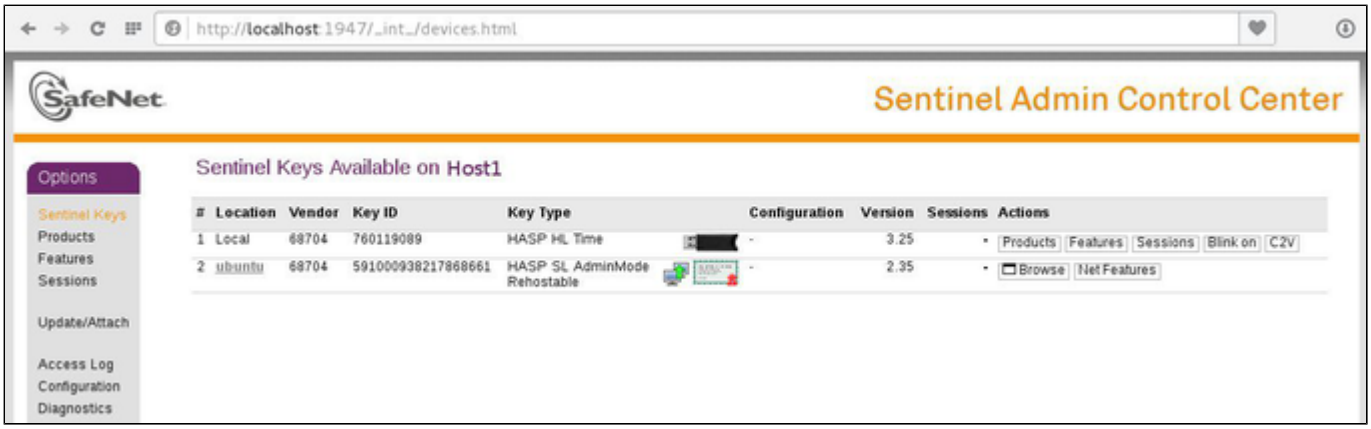
Licenses can be viewed using two tools:

- Sentinel ACC: shows important information, but not the product specific license parameters.
- Operating system specific tools: show all product details contained on the license. Can only be run from a local connection for local hardware licenses.

Viewing a License with Sentinel ACC

To view available licenses using Sentinel ACC, start the web interface as described above.

To get to the Sentinel Keys screen, click on the corresponding menu item or access the URL **http://localhost:1947/_int_/devices.html** directly. A screen similar to the following will open and display the available license keys:



This page displays important information about the available licenses, including

- **Location**: Shows whether the license is local or remote. If the license is a network license, the hostname of the remote system is specified. By clicking on the hostname, the license manager of this system is accessed.
- **Key ID**: The unique identification of the license.
- **Key Type**: Hardware keys are marked by the abbreviation HL (hardware license) and a picture of the license dongle. Software licenses are marked by the abbreviation SL (software license). *Rehostable* indicates that this license is a software license that can be transferred to a different computer.
- **Sessions**: Shows the number of active sessions opened for the specific key.

The buttons on the right-hand side can be used to retrieve more information about the license or to extract the C2V file for a license update. A C2V file can only be extracted if the license in question is local to the current license manager (in the example above, the network license on a different host does not have the option to create a C2V file).

> The option to create a C2V file is not available in older versions of the Charon emulator software.

The menu options *Products*, *Features* and *Sessions* on the left-hand side provide the same information as the buttons. However, they show the information for all licenses.

Viewing a License with hasp_srm_view on Linux

On Linux, the license content is displayed using the **hasp_srm_view** command. For displaying the license, the following parameters are relevant:

- Display the default license: run the command without options or with **`-l`**
- Display all licenses: run the command with the option **`-all`**
- Display a license with a specific ID: run the command with the option **`-key`**

> Local hardware licenses can only be displayed from a local connection to the system, for example via the console. If you are connected via a remote connection, for example via **ssh**, the **hasp_srm_view** command will return an error. Network licenses do not have this problem.
>
> A workaround is described below.

Workaround when logged in via a remote connection:

When connected to the system via a remote connection, the command to display a local hardware license will return an error. As a workaround, you can display the license contents with the following command (adapt the path of the command if your installation location is different):

```
$ ssh localhost /opt/charon/bin/hasp_srm_view
```

The following shows sample output of the **hasp_srm_view** command on Linux (to display all available licenses, use the **`-all`** parameter):

```
$ hasp_srm_view
License Manager running at host: host1.example.com
License Manager IP address: 127.0.0.1

The Physical KeyId: 760119089
CHARON Sentinel HASP License key section
Reading 4032 bytes
The License Number: 1000.639
The License KeyId: 760119089
The Master KeyId: 2131943932
Release date: 09-JUN-2016
Release time: 14:33:59
Update number: 6
End User name: Stromasys - User1
Purchasing Customer name: Stromasys SA
Virtual Hardware: AlphaServer_DS10, AlphaServer_DS10L, AlphaServer_DS15, AlphaServer_DS20
Instances allowed: 5
Product Name: CHARON-AXP
Product Code: CHAXP-470xx-WI-LI
Major Version: 4
Minor Version: 7
Maximum Build: 99999
Minimum Build: 1
Host CPU supported: X64
Host Operating System required: WINDOWS, LINUX
CPU's allowed: 32
Maximum virtual memory: 65536MB
Released product expiration date: 12-Jan-2017
--- output truncated ---
```

Viewing a License with the Licence Viewing Utility on Windows

Starting the HASP View Utility on a System with Standalone License Drivers

On a Windows system with the standalone license drivers installed, the license **hasp_view** command must be started from the installation folder.

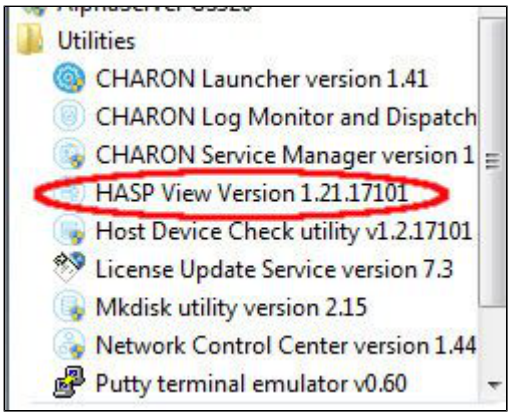
Proceed as follows to display the license content:

- Log in as a user with administrator rights.
- Navigate to the installation folder and select either the **x86** or the **x64** subfolder depending on the architecture of the system.
- Double-click on the **hasp_view** program.

Starting the HASP View Utility on Charon-AXP/VAX Version 4.7

To display the license content, proceed as follows:

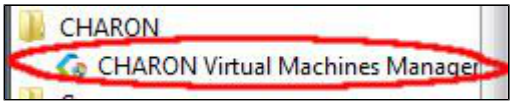
- Open the start menu.
- Select the menu entry **Charon**, then **Charon-AXP** or **Charon-VAX/PDP**.
- Select the **Utilities** subfolder in the menu.
- Click on the **HASP View** utility as shown in the following image.



Starting the HASP View Utility on Charon-AXP/VAX Version 4.8

To display the license content, proceed as follows:

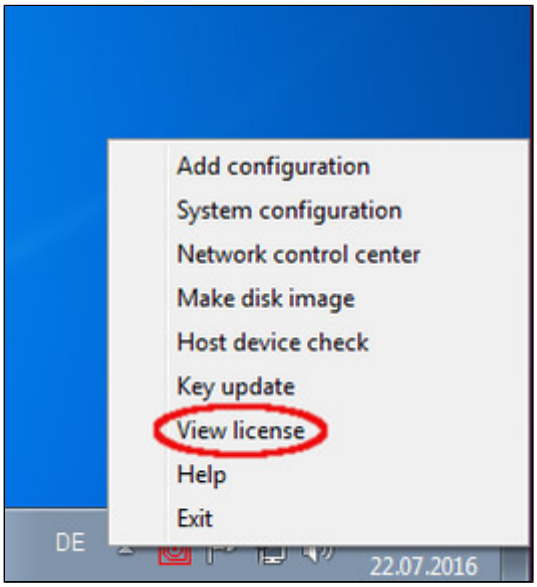
Open the **CHARON Virtual Machines Manager** via the corresponding **desktop icon** or the **start menu**:



Once the CHARON Virtual Machines Manager has been started, go to the **Host Information & Utilities** tab and click on the **HASP License Details** button.

Starting the HASP View Utility on Charon-AXP/SMA

To display a license, right-click on the Charon icon in the system tray. This will open the management menu as shown in the following image:



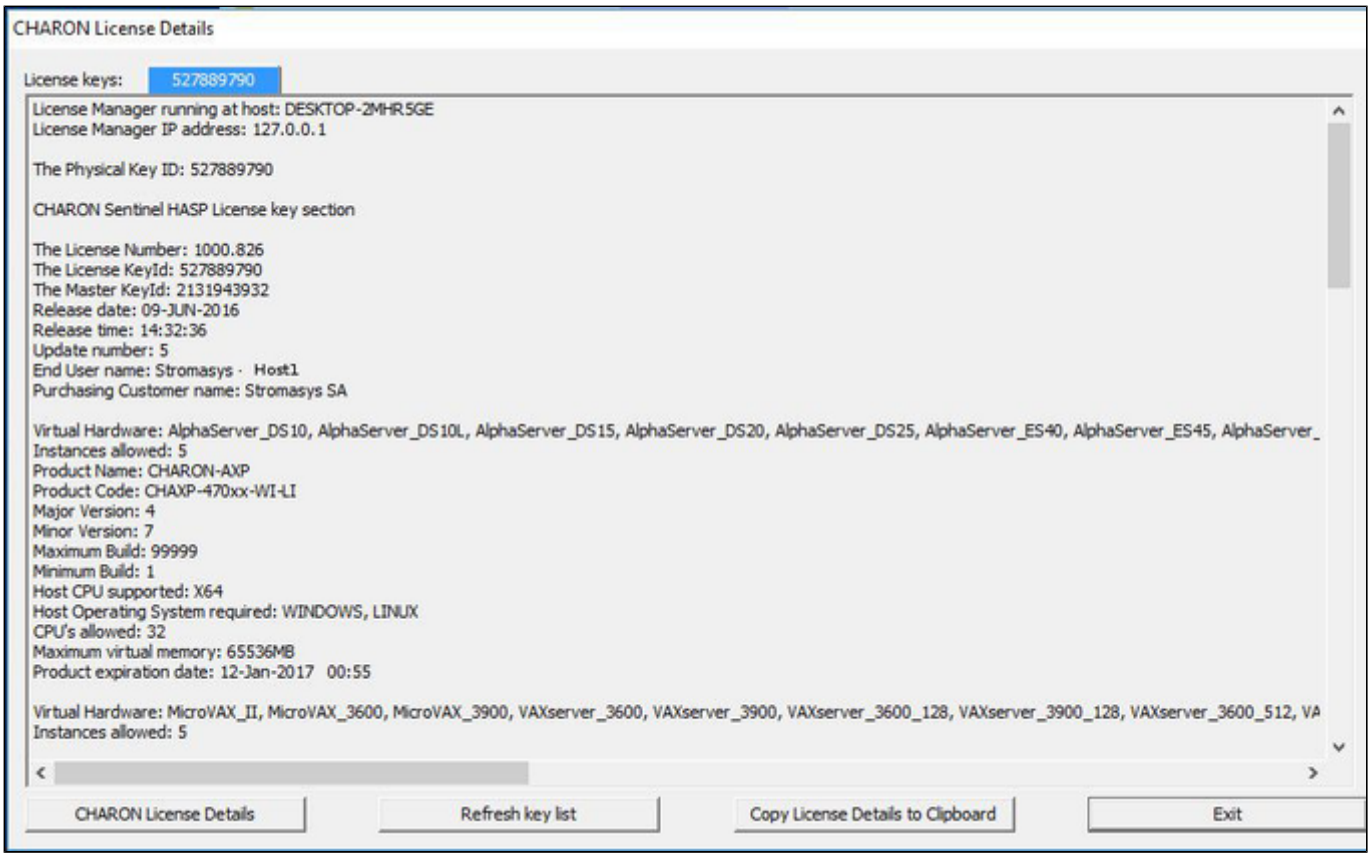
Selecting *View License* from this menu will open the license viewer window.

Viewing the License Content

To view available licenses using the license viewing utility, start the program as described above.

> A local hardware key cannot be read via a remote connection (e.g., via RDP). One possible workaround is described in detail in the document How to read a HASP key over RDP on Windows. It shows, how to setup a scheduled task for this purpose.

The following image shows sample output:



The buttons at the bottom of the window provide additional functions:

- **Charon License Details** (re-)queries the selected license key (the highlighted tab) and displays the contents**.**
- **Refresh** the key list. This is useful if a key has just been added or removed.
- Copy license details to **clipboard**, for example to paste into a support e-mail.
- **Exit** from the utility.

If there is more than one license, the data for each license is shown on a separate tab. The image below provides an example: