BAB TECHNOLOGIE GmbH

ESMO60020 – Secoris KNX Package:

APPMODULE KNX + ABUS Secoris KNX Connect Documentation

Version 1.7.6
ABUS Secoris KNX Connect 1.0.1
Article No. APP: **BAB-113**
Abus Article No.: ESMO60020
BAB Technologie Article No.: 10495

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EN

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1 APPMODULE

Thank you for buying the APPMODULE. The APPMODULE is a unique integration server that you can customise using the apps from the BAB APPMARKET. This documentation will help to familiarise you with the product and facilitate implementation.

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Figure 1: APPMODULE KNX

Product name:	APPMODULE
Intended use:	KNX - Ethernet gateway for integration of non-KNX devices
Design:	Modular device (REG)
Item number:	BAB-113; 10495 (KNX)

1.1 FUNCTIONAL OVERVIEW

The **APPMODULE Abus Secoris Edition** (hereinafter referred to as “APPMODULE”) creates a connection between the building automation system and third-party applications that otherwise have no connection to the building control system. The connection is created by the corresponding Smart Home App (hereinafter also referred to as “App”), which can be installed on the APPMODULE.

On the “Abus Secoris Edition” you will already find the Smart Home App “Abus Secoris KNX Connect” to connect your Secoris to a building automation system.

Additional smart home apps can be combined as required and purchased individually in the BAB APPMARKET (https://www.bab-appmarket.de/de/).

1.2 APPMODULE FUNCTIONAL PRINCIPLE

The “Abus Secoris KNX Connect” APP is pre-installed on the APPMODULE on delivery. Additional smart home apps for the APPMODULE can be purchased and downloaded from the BAB APPMARKET. This requires an APPMARKET user account and an APPMODULE registered in the BAB APPMARKET.
In addition to downloading the purchased applications, it is also possible to integrate them into the terminal configurator, including the purchase of a smart home app.

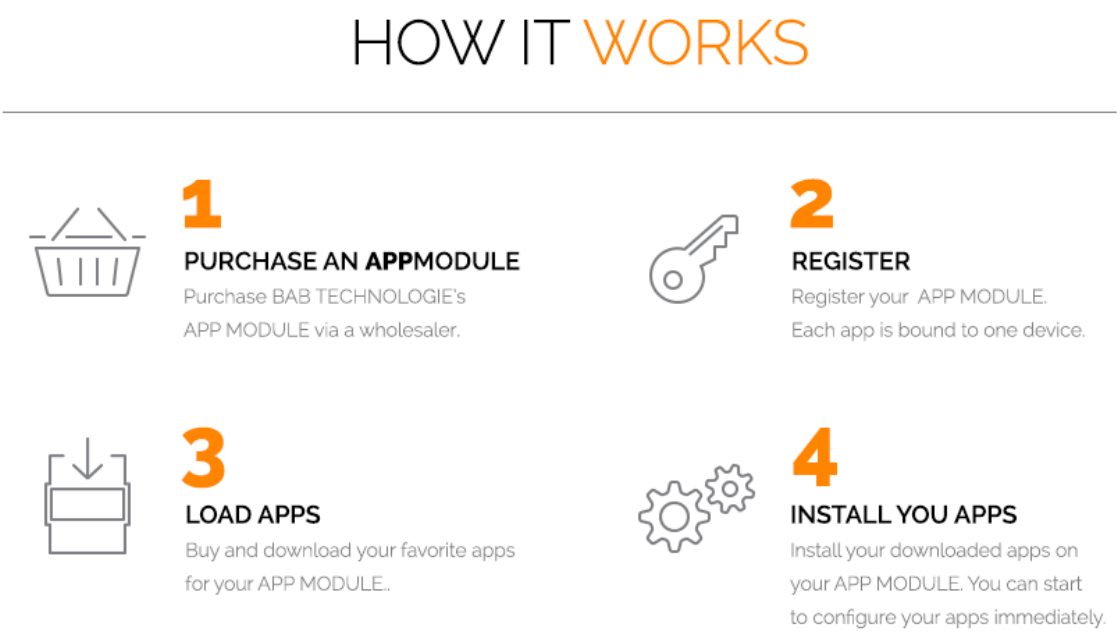


Figure 2: APPMODULE – How it works

You can find the APPMARKET on https://www.bab-appmarket.de/

1.3 TECHNICAL DATA

Article No.: 10495 (KNX)

- Operating voltage: 12-32V DC
- Typical power consumption 300 mA at 12V DC
- Power consumption: <= 5 W
- Connection: Power supply via screw-type terminal
- Resistant to climate: EN 50090-2-2
- Ambient temperature: -5 to +35 °C
- Rel. humidity (non-condensing): 5% to 80%

Mechanical data

- Assembly: Modular device (REG) housing 4 TP
- Dimensions (W x H x D) in mm: 70 x 90 x 63
- Housing: Plastic
- Degree of protection: IP20 (according to EN 60529)

Interfaces:

- Ethernet over RJ-45 female connector
- KNXconnection

Specific features

- A wide range of different smart home apps can be combined on one device
- SDK available for manufacturers and developers
- A steadily growing app portfolio available in the BAB APPMARKET (bab-appmarket.de)

Software requirements

- Operating System independent
- Communication: Network interface
- Browser: current standard browser

1.4 SCOPE OF DELIVERY AND INTERFACES

The scope of delivery of APPMODULE includes the following content:

- 1x APPMODULE Abus Secoris Edition
- 2x plug-in screw terminal for KNX bus connection and power supply

A power supply unit for the device is NOT included in the scope of delivery!

In addition to the connection for the power supply (12-32 V DC), the APPMODULE has the following interfaces:

- 1 x RJ 45 Ethernet 100Mbit/s Full Duplex
- KNX® / TP connection

FACTORY SETTING ON DELIVERY:

IP address: 192.168.1.224
Host name: appmodule.local
Username: admin
Password: admin

SERIAL NUMBER / REGISTRATION KEY

The Serial Number (SN) and Registration Key are required to register the APPMODULE. You will find both as stickers on the packaging, in the quick start guide and as well on the backside of your device.

1.5 UPDATES

We reserve the right to provide free firmware updates for the APPMODULE Abus Secoris Edition.
We will inform you of a new firmware version via our newsletter or Internet pages. The update files are available in the download area on the websites of BAB TECHNOLOGIE GmbH and ABUS Security Center GmbH & Co. KG websites.

www.bab-tec.de or www.abus.com

1.6 IMPORTANT INFORMATION ON THE OPERATING INSTRUCTIONS

We reserve the right to make technical and formal changes to the product in the interests of technical progress. The information in this documentation may therefore not necessarily be up to date.
Information about the current APPMODULE firmware and also about these operating instructions ("ESMO60020 - Secoris KNX Package: APPMODULE KNX + ABUS Secoris KNX Connect Documentation ”) can be found on the websites of BAB TECHNOLOGIE GmbH and ABUS Security Center GmbH & Co. KG.

1.7 FUNCTIONAL SAFETY

If there are certain requirements to minimize risks for people or objects (functional safety), additional measures are obligatory, which must be considered during planning and implementation. When using the APPs in the APPMODULE, there are interactions with many devices/connections (e.g. Internet) in the system, which may lead to risks. Especially failure of individual devices or functions or connections can lead to malfunction of the system. There are different ways to minimise the risks. That depends on the system and customer requirements.

These measures must always have the required independence from the operation of the system (APP MODULE with APP) and must always be available.

2 ASSEMBLY

The device shown here is the APPMODULE (form factor identical for all models), REG housing 4 TE. Dimensions (width x height x depth): 70 x 90 x 63 mm

- In order to ensure easy connection of the power supply, remove the screw plug-in terminals (see figure below).
- The power supply cables are now connected to the screw terminals (see illustration below). Please observe the permissible operating voltage and polarity!
- Now, you can re-plug the screw plug-in terminals into the APPMODULE.

- In the next step, snap the device onto the mounting rail according to DIN EN 60715.

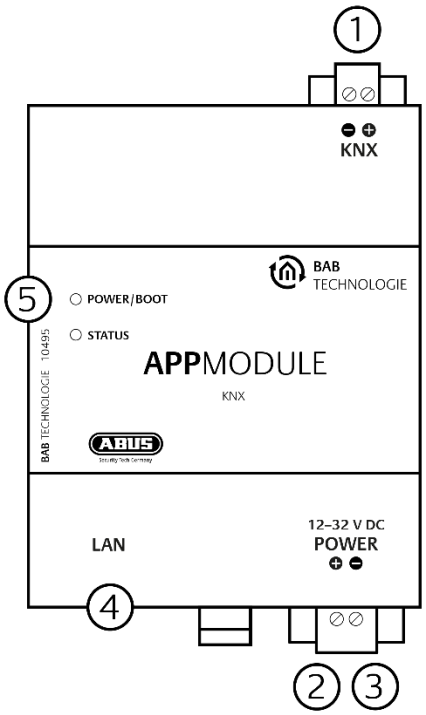


Figure 3: APPMODULE connection diagram

	APPMODULE features
(1)	KNX connection (type 10495) via screw plug-in terminal
(2)	Power supply via screw plug-in terminal 12-32V DC
(3)	USB connection (is not activated)
(4)	RJ-45 female connector for Ethernet LAN
(5)	Signal LED

2.1 LED STATUS

The APPMODULE has two DUO LEDs ("Power/Boot" and "Status"). Each DUO LED has a green and a red LED.

POWER / BOOT LED

LED display	Status
OFF	The device is not ready for operation. No operating voltage is supplied.
GREEN	The device is ready for operation.
FLASHING ORANGE	The device is booting.

STATUS LED

LED display	Status
OFF	The device is booting.
FLASHING GREEN	The device has been started; the LED simulates a "heartbeat". The flashing interval increases depending on the device utilisation.
FLASHING RED	Communication takes place via KNX.

Explanation:

The green "Power/Boot" LED lights up as soon as the APPMODULE is supplied with power. Two to three seconds after the power supply has been switched on, this LED also starts to flash red (flashing orange) until the booting process has been completed. Then the LED is permanently illuminated green, while the "Status" LED flashes green (simulates a "heartbeat"). The flashing frequency increases depending on the device utilisation.

It takes approx. 2 minutes to start the APPMODULE.

2.2 INITIAL OPERATION

If the APPMODULE has been mounted and started as described in chapter "Assembly", commissioning can now be continued as specified below.

Factory setting on delivery:

IP address	192.168.1.224
Host name	appmodule.local
Subnet mask	255.255.255.0
Username	admin
Password	admin
Device Name	APPMODULE

Note: The password must be changed immediately when logging in for the first time. If the password is lost, the device cannot be reset!

LANGUAGE

Web interface
The language used for the APPMODULE Web interface is based on the language set in the browser. German and English are currently available in the APPMODULE. If the browser is set to a language other than German or English, English is displayed in the APPMODULE interface.

SYSTEM REQUIREMENTS

- Current browser (e.g. Mozilla Firefox, Google Chrome, Microsoft Edge, Safari etc.)
  Do not use Internet Explorer
- If applicable, an app from the APPMARKET (https://www.bab-appmarket.de/de/)

ESTABLISHING CONNECTIONS

In order to configure the APPMODULE, a current browser and a network connection to the device are required. If the device is in the condition of delivery, it can be accessed at the above-mentioned IP address and the network settings must be adjusted to the address range, where necessary. Please follow the information given in the chapter "*Adjusting the network settings of your computer*" for this purpose.

Call APPMODULE web interface with IP Adress or Host name
The APPMODULE is configured via its web interface so that it can be configured via each web browser. The "EnOcean Editor" layers are Java applications and also require a Java Virtual Machine (JVM) or the BAB STARTER (see "*Establishing connections*").

In order to call up the web interface, please proceed as described below:

- Open a browser and enter the IP address or the Host name of the APPMODULE into the address line (Information about the factory settings can be found in chapter "*Initial Operation*")

Tip: Besides calling the APPMODULE web interface via the IP address, the web interface can also be called via a host name.
To do this, enter the assigned “APPMODULE” device name in the address line of the web browser, followed by " .local ".
Example: The device name on delivery is "APPMODULE". Thus, the web interface of the APPMODULE can also be called as follows instead of the IP address:

appmodule.local

Figure 4: APPMODULE start page

- You will reach the APPMODULE start page. The “Login” unlocks the “Configuration” Functions whereas “Information” shows general system information.

- Use the user data to log in to the web interface: "Log In". (Information on the authorisation settings can be found in chapter "*Initial Operation*")

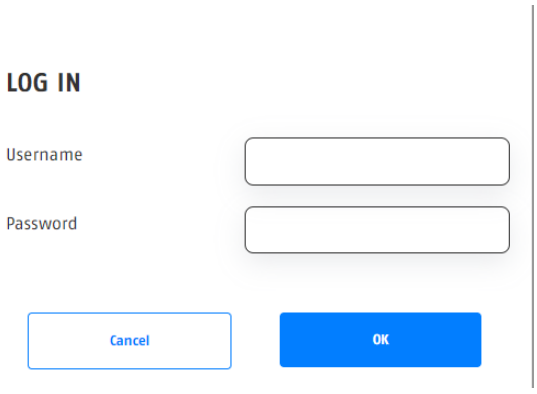


Figure 5: Logging in to the web interface

- You can then also access the "Configuration" menu item. See chapter "*Configuration*"

Figure 6: "Configuration" menu item

- To return to the main menu, just click on “Start” or on the product name.

Figure 7: Back to the homepage

Adjusting the network settings of your computer
In order to adjust the network settings of your computer and establish a connection to the device, please proceed as described below:

- Open the IP address settings (under Windows 7):
- Click "Start Button" --> "Control Panel" --> "Network"
- Select "Network Connection", then "LAN Connection" ("Intel PRO1000 GT" in the figure below).

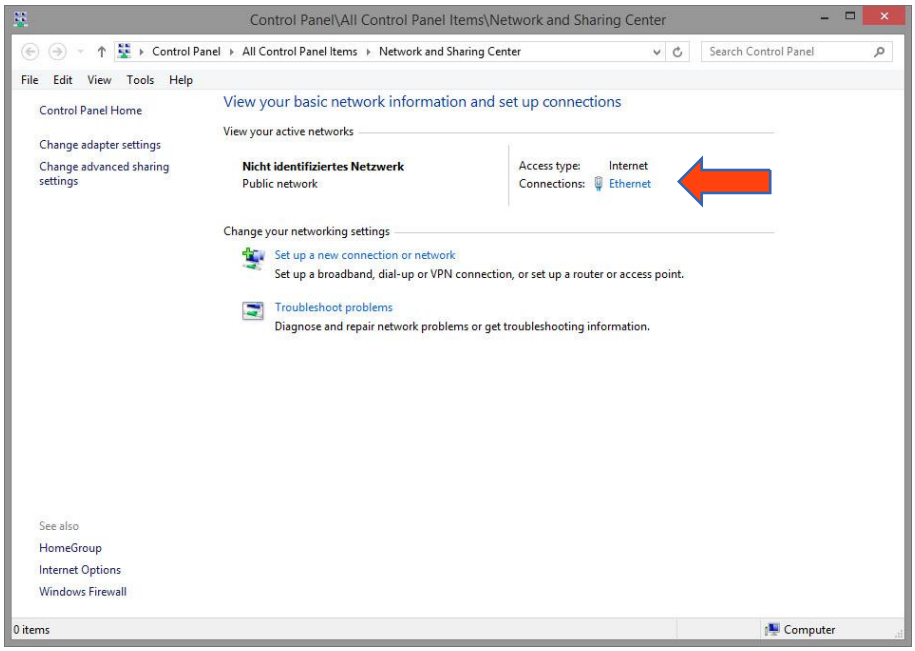


Figure 8: Windows Network and Sharing Center

- Then click "Properties":

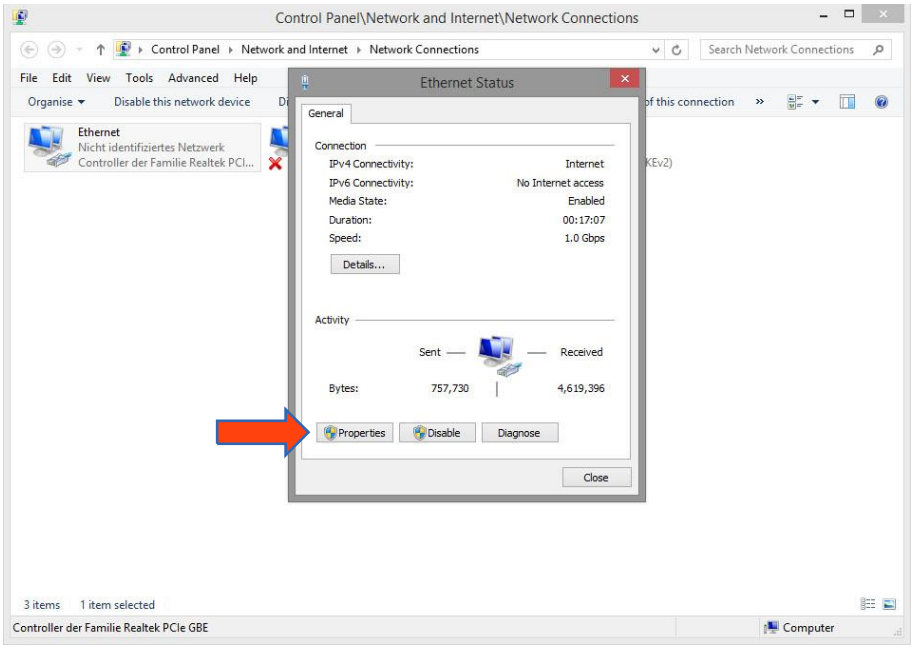


Figure 9: "Ethernet" status

- Select "Internet protocol Version 4 (TCP/IPv4)" and click "Properties" again:

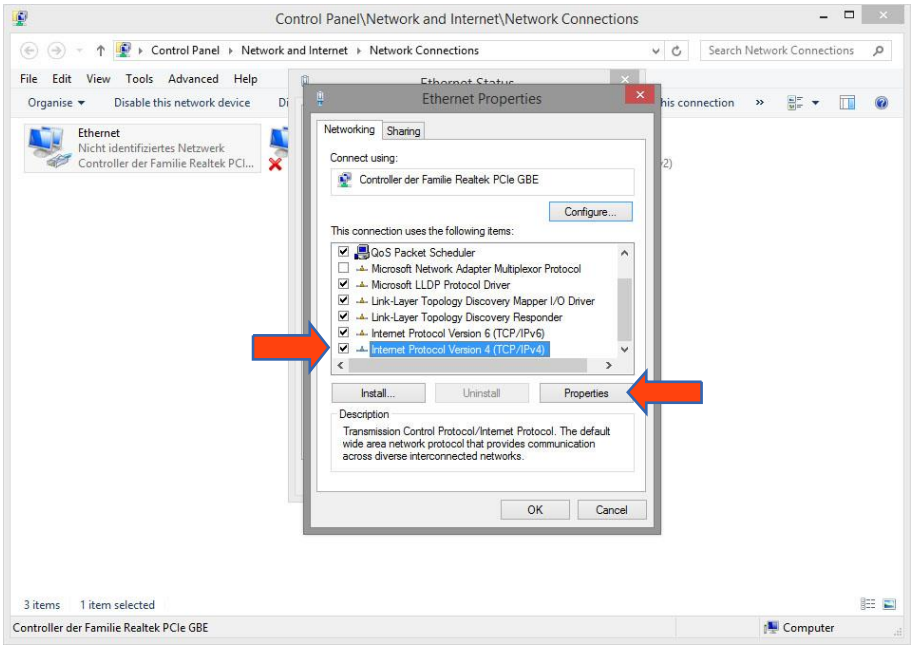


Figure 10: Properties of the LAN connection

- Now note down the current IP address settings or take a screenshot in order to ensure that you can reset the IP address setting following the configuration of the APPMODULE.
- Now change the IP address settings (IP address and subnet mask) as required:

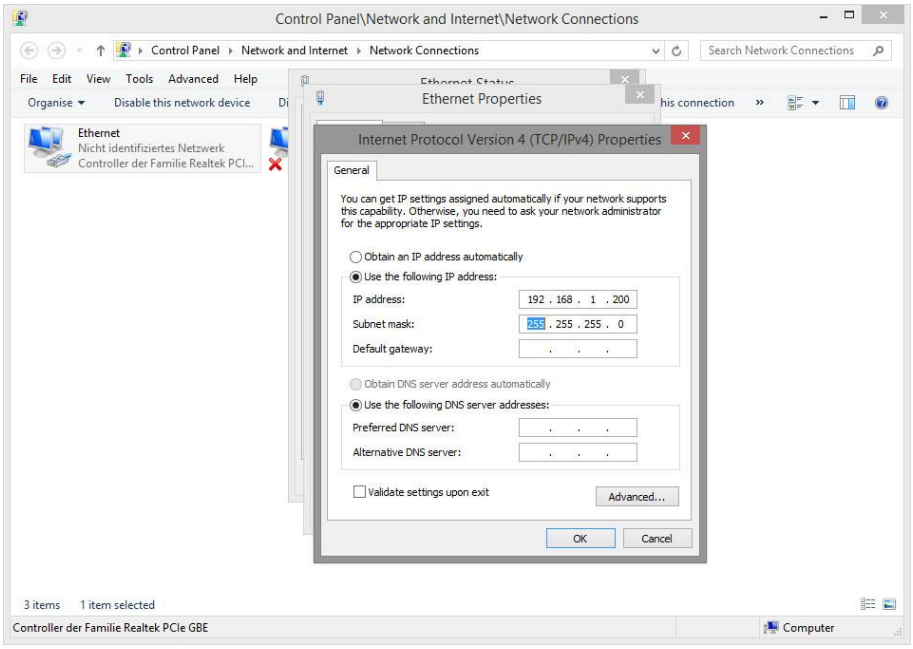


Figure 11: TCP/IPv4 properties

Example of a valid configuration for the factory settings of the APPMODULE:

- Free IP address: 192.168.1.228
- Subnet mask: 255.255.255.0
- Now confirm your input with "OK".
- Close all windows until the "Windows Network and Sharing Center Settings" window is shown.

Thus, you have adjusted the network settings of your PC to those of the APPMODULE. You can access the web interface of the APPMODULE by means of the browser. Restore the original network settings of your PC by following the steps described above as soon as you have configured the APPMODULE correspondingly.

If the IP address of your PC and your APPMODULE are in the same network mask, you can continue with the configuration.

Adjusting the network settings of the APPMODULE
If the network prerequisites have been created, you can now access the configuration of the APPMODULE in order to adjust the network settings to the local requirements there. To do this, please proceed as described below:

- Enter the IP address of the APPMODULE in the address line of your browser (for factory settings: 192.168.1.229).

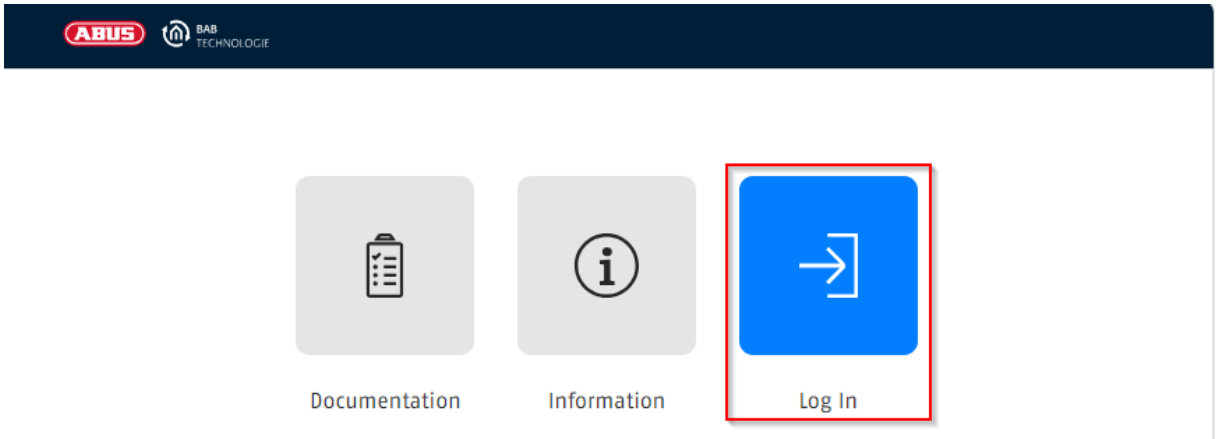


Figure 12: APPMODULE Webinterface

- The start page of the APPMODULE opens up. Click "Log In".
- A login dialog appears. For factory settings, the login data is as follows:

Username: **admin**
Password: **admin**

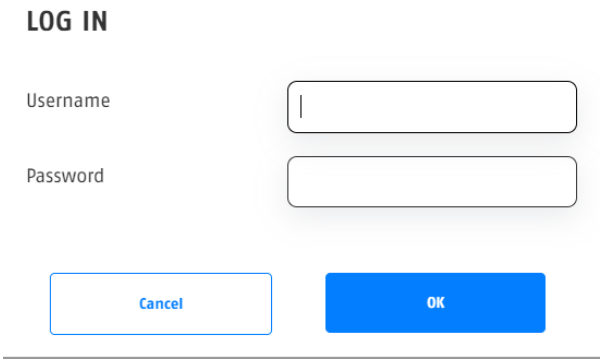


Figure 13: Login dialog

Note: The password must be changed immediately when logging in for the first time. If the password is lost, the device cannot be reset!

Note: Logging in only works if the browser is authorised to save cookies!

- The view on the start page changes. You can now access the following levels:
  - App Manager
  - Configuration
  - Information
  - Log Out

- In order to change the IP address of the APPMODULE, please click "Configuration"

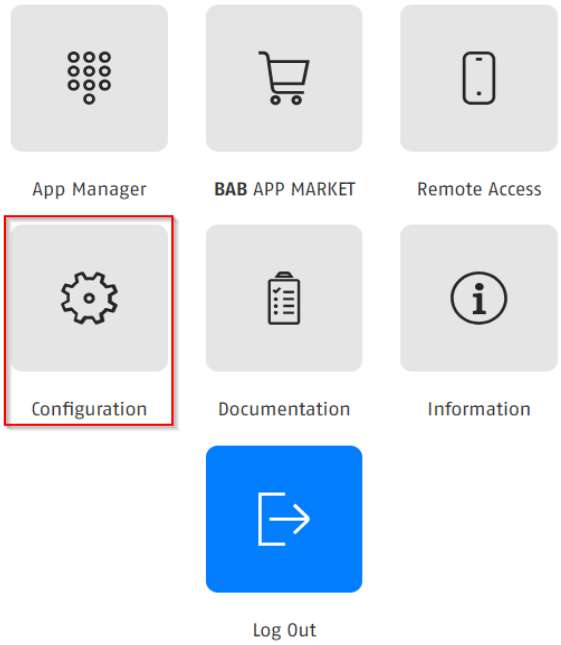


Figure 14: APPMODULE – Main Menu

The configuration menu opens up. You can make the following settings in the "Network" menu item:

DHCP:	If the DHCP service is enabled, the device will automatically obtain the network settings. The DCHP service assigns the IP address, the network mask and the default gateway to the APPMODULE. Therefore, a DHCP server, in private networks mostly the router, must be available in the local network. Note: If the DHCP service fails, the APPMODULE gets that with and is then reachable under the default IP address, network mask and standard gateway.
IP address / subnet mask / gateway:	Field for the static assignment of IP addresses. Please make also sure that the subnet mask (often 255.255.255.0) and the gateway entry are correct. (Often the IP address of the WLAN router). Note: Without a correct gateway entry, the device will not be able to communicate with the Internet.
DNS server:	DNS is the abbreviation for Domain Name System. The DNS server converts Internet addresses, for example "www.bab-tec.de" into the IP address "85.214.89.170" and vice versa. Without a valid DNS entry, NTP-, weather- or UPnP services do not work.
NTP server:	NTP is a free service for synchronising the system time of Internet-compatible devices. If it is not possible to establish the connection to an NTP-Server, the system time must always be checked and adjusted manually (see menu "*General*") NTP-Server list: e.g. http://www.pool.ntp.org/zone/europe

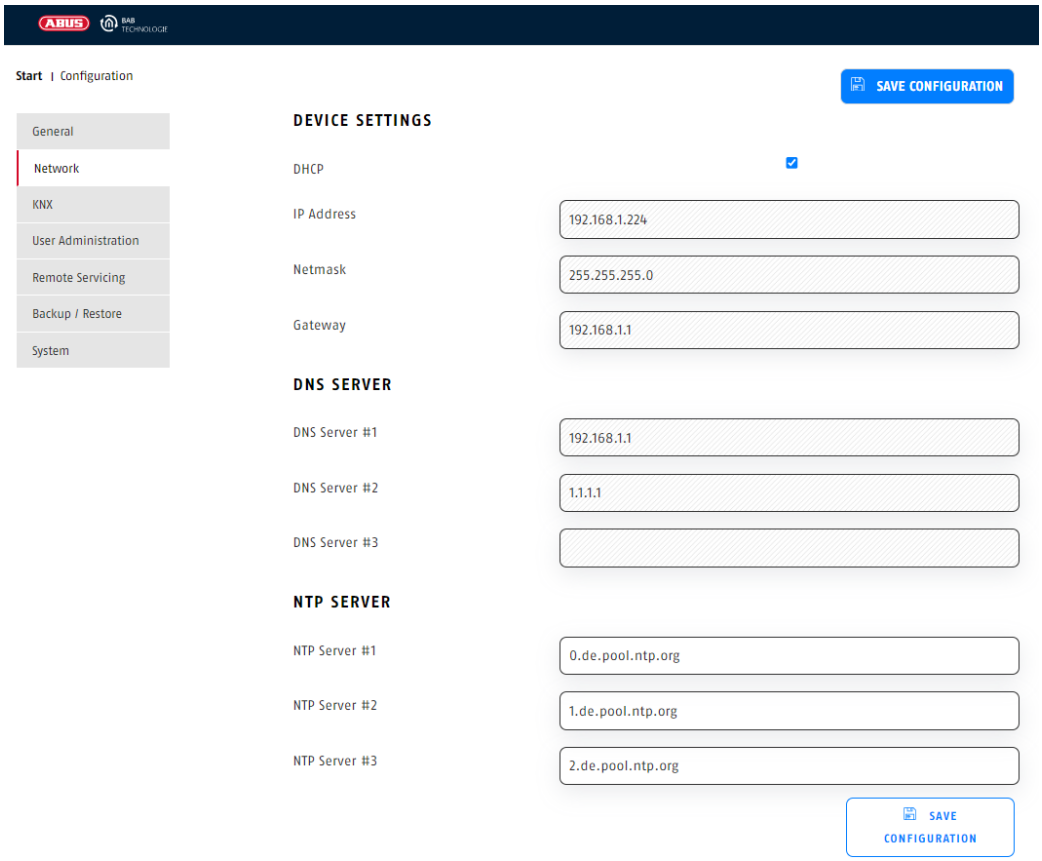


Figure 15: APPMODULE Network configuration

Change the IP address settings as required. In order to save the settings made, click "Save Configuration". The server in the device is restarted, the browser automatically connects to the new IP address if possible.

Note: Please bear in mind that you might have to reset the IP address of your computer to the initial value in order to be able to access the APPMODULE after the change has been made.

Specialty when activating DHCP
If you have activated DHCP for the APPMODULE according to the steps mentioned above, please use the BAB STARTER like depicted in the chapter “Network” to find out the current IP-address.

3 APPMODULE ABUS EDITION

ABUS SECORIS KNX CONNECT

Once you have installed and commissioned the APPMODULE, you will find the pre-installed app „Abus Secoris KNX Connect" in the web interface under the „App Manager“ menu item.

The “Abus Secoris KNX Connect” application connects the Secoris intruder alarm system with KNX and brings all the benefits of the world of building automation directly into the alarm system.

Communication with other smart home systems and the KNX bus is based on internal and external group addresses, as described in the chapter „KNX addressing“.

The app itself includes help texts for all relevant menu items. Simply hover your mouse over a menu item for a few seconds to display a description.

3.1.1CONFIGURATION

The configuration of the „Abus Secoris KNX Connect“ app is done via the connection data. Subsequently, the partitions, zones and outputs configured in the alarm panel can be selected and linked to KNX group addresses.

The process is divided into four sections:

1. Enter the connection data for the ABUS Secoris system
2. Select the required partitions and link them to the KNX group address
3. Select the zones and link them to the KNX group address
4. Select the outputs and link them to the KNX group address

Note:
Before you create an instance, please create a „**GMS user**“’ in your Secoris (see user manual).
You will need the **user code** and the **remote password** to create the instance.

3.1.2 CREATE INSTANCE

To be able to communicate with the ABUS Secoris alarm panel, you must first create an instance in the “Abus Secoris KNX Connect” app in the APPMODULE.
Only one instance is required to link your APPMODULE to a Secoris alarm panel.

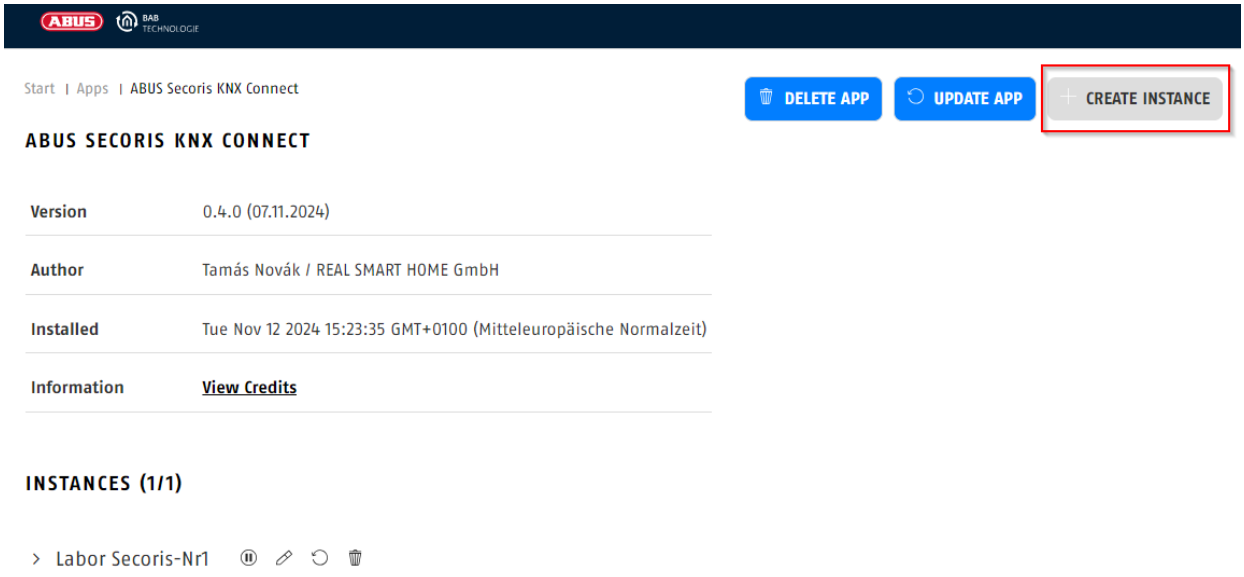


Figure 16 : APPMODULE - ABUS Secoris KNX Connect: Create instance

Create the instance by clicking on the „+ Create instance” button in the top right-hand area. The “ABUS Secoris KNX Connect” configuration interface then opens.

If an instance has already been created, the field becomes inactive.

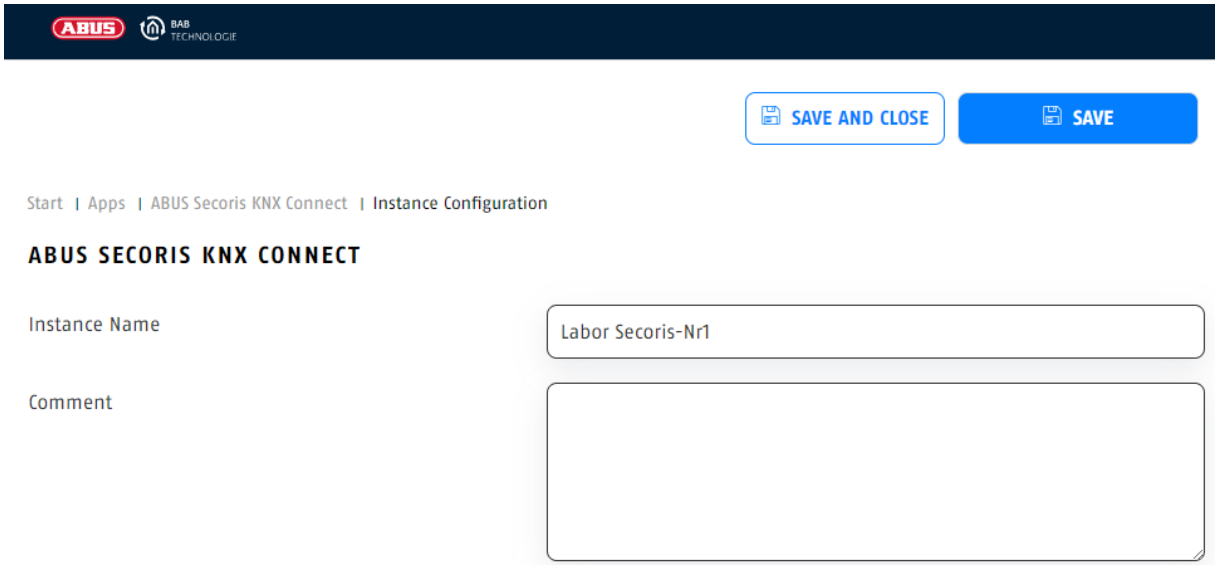


Figure 17: APPMODULE – ABUS Secoris KNX Connect: Name instance

Enter any name in the **„Instance name“** field and, optionally, a short description of the instance in the „**Comment**“ field.

3.2 CONNECTION

To establish a connection to ABUS Secoris, the connection parameters and access data of the GMS user are required.
Enter the IP of the Secoris panel, the access code and remote password and press “Save”. You can then use the „Test connection“ button to check whether your Secoris alarm control panel can be reached via the APPMODULE.

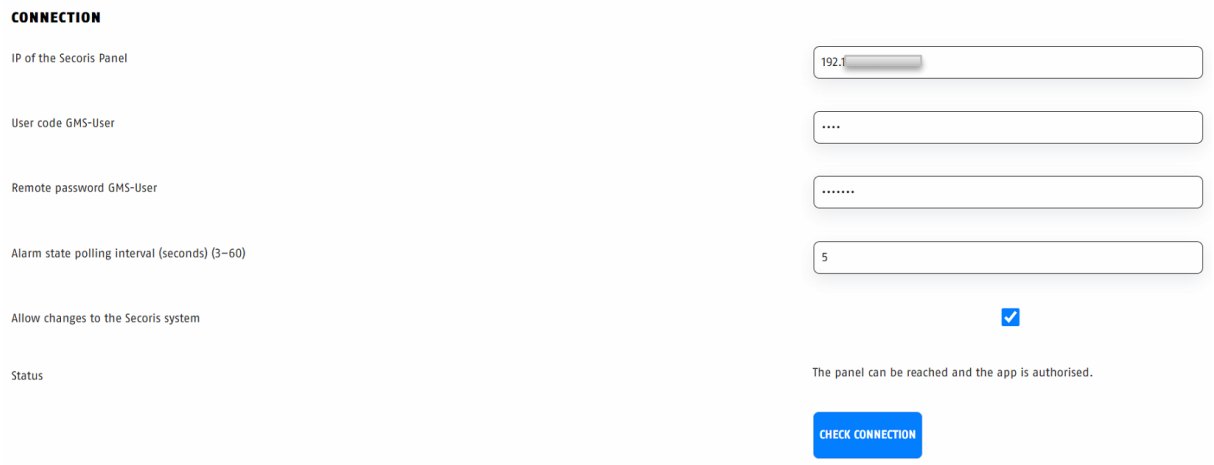


Figure 18: APPMODULE – ABUS Secoris KNX Connect: Establishing a connection

PARAMETER

IP of the Secoris centre:	Enter the IP address of the alarm centre here.
Access code GMS-User:	Enter the access code of the GMS-User of the Abus Secoris alarm panel here.
Remote password GMS- User:	Enter the remote password of the GMS-User of the Abus Secoris alarm panel here.
Alarm state polling interval	With this option, you specify the interval at which the Abus Secoris should be queried for alarms and faults. A very short interval can delay access from other IP-services to the Secoris.
Allow changes to the system?	Use this option to determine whether changes to the Secoris alarm panel are allowed via KNX (via the Abus Secoris KNX Connect app).
Status:	This line indicates whether the Abus Secoris KNX Connect app is authorised or not. The check can be triggered manually using the button below.

RETROACTIVE EFFECT

In this section, the function of retroactive access via the KNX group addresses to selected functions of the Secoris alarm panel unit is activated or deactivated.
A retroactive function can be found in the areas „Partitions“, „Zones“ and „Outputs“. These are described in more detail in the corresponding sections.

The retroactive effect can be activated or deactivated using the „Allow changes to the Secoris system“ checkbox.

Checkbox selected	= Retroactive effect activated
Checkbox deselected	= Retroactive effect deactivated

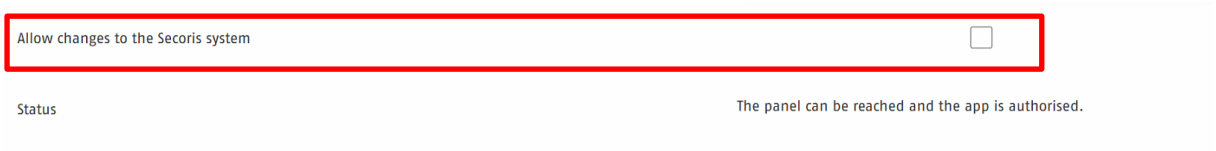


Figure 19: APPMODULE – ABUS Secoris KNX Connect: Activating feedback

Default settings: checkbox is deselected = feedback disabled
When feedback is disabled, no more commands are sent to control the Secoris from the APPMODULE.

If the effect is activated, a pop-up message appears with the note:

‘<<ATTENTION: When this function is activated, this Secoris alarm panel no longer corresponds to the selected security level! (see Secoris installation manual chapter ‘Retroactive effect’)

Would you like to allow retroactive effect from your KNX building automation system to Secoris?

Yes|No>>’.

Depending on the option selected, further configuration fields are displayed or hidden in the sections.

Attention:
If the user deactivates the feedback, a pop-up message appears with the note:

‘<<ATTENTION: If you deactivate this function, you will lose all data points linked to the retroactive effect! (see Secoris installation manual chapter ‘Retroactive effect’)

Would you like to cancel the retroactive effect from your KNX building automation to the Secoris?

Yes|No>>’

KNX REPRESENTATION OF THE STATES

In this section, the type of KNX representation of the states is selected.

Select whether multi-value states such as alarm types should be represented as a natural number on a group address or as 1 or 0 on separate group addresses.

The possible values of the natural numbers can be found in the tooltip of the group addresses. The display in the other configuration sections „Partitions“, „Zones“ and „Outputs“ changes according to the possible selection options.

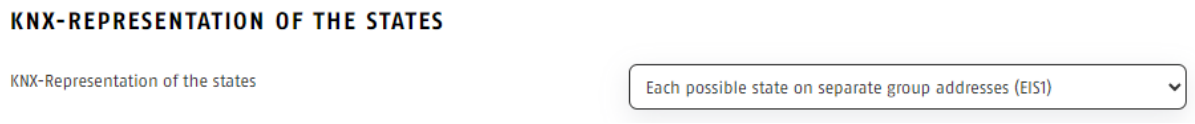
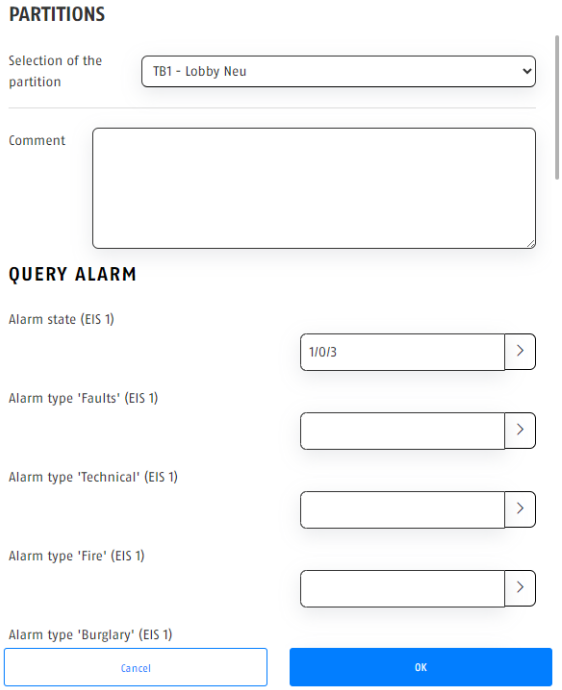


Figure 20: APPMODULE – ABUS Secoris KNX Connect: Selecting the representation of the states

<u>You can choose between two types of representation:</u>

Each possible state on separate group addresses (EIS1)



Natural number at a group address (EIS14)

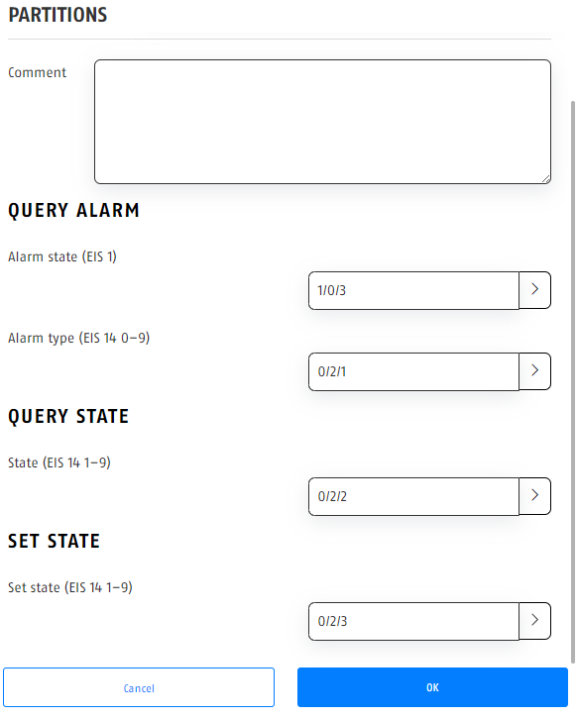


Figure 21: APPMODULE – ABUS Secoris KNX Connect: representation types

<u>Note: The default setting is to have each possible state on separate group addresses (EIS1).</u>

Example „Partitions“

Every possible condition on separate group addresses (EIS1)	Natural number at a group address (EIS14)
Each possible alarm type is output to a separate group address via the states 1 or 0.	Each possible alarm type is output to the selected group address via a natural number 0-9. The possible telegram values are described in the following chapters.

3.3 PARTITIONS

The partitions are managed in this section. The alarm state and alarm type can be sent to the KNX bus for each partition via an individual KNX group address.
In addition, a state can be output to the KNX bus and a state can be set via the KNX bus.

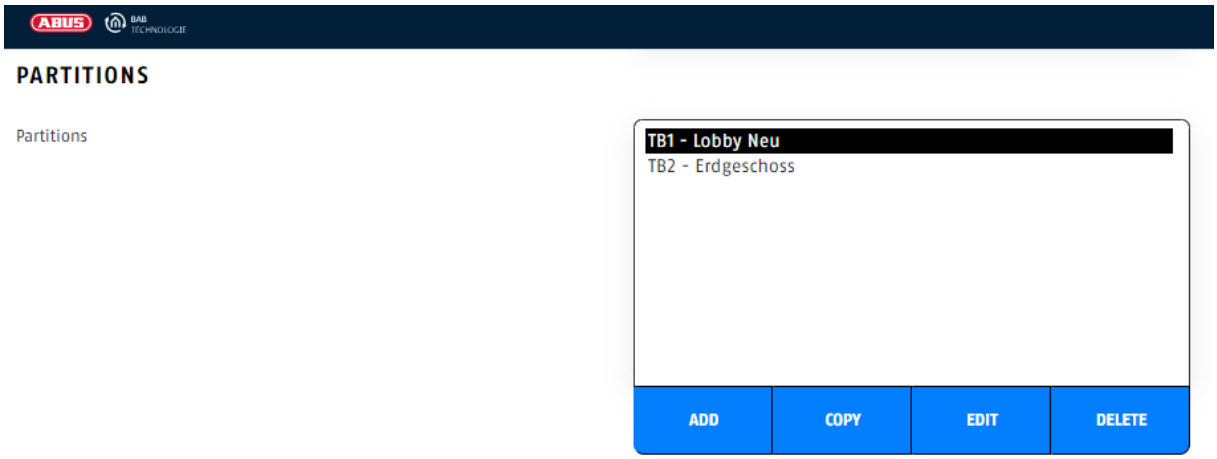


Figure 22: APPMODULE – ABUS Secoris KNX Connect: Partition configuration

PARAMETERS

Selecting the partitions: The desired section can be selected from a list.

Comment field: Additional labeling option for differentiation in the overview.

Query Alarm

state of alert (EIS1): Enter the group address at which you would like to receive the alarm status of the zone. In the event of an alarm, it outputs the currently present alarm type with the highest priority.

State of alert (EIS1) The alarm type is output to the KNX bus as 0 or 1 via the respective KNX group address entered.

or

(EIS14 (0-9)): The alarm type is output to the KNX bus as an integer number via the KNX group address entered here (possible telegram values [1]).

[1]) Possible telegram values:

0 – no alarm
1 – fault
2 – technical
3 – fire
4 – burglary
5 – unoccupied
6 – medical
7 – panic
8 – social
9 – inactivity

Query Fault

Fault state	Enter the group address via which you would like to receive the fault status of the zone. In the event of a fault, a 1 is output, otherwise a 0.
Fault description (EIS 15 14Byte Text)	Enter the group address via which you would like to receive a description of the pending fault, if available. This message can be displayed on KNX visualizations, for example.

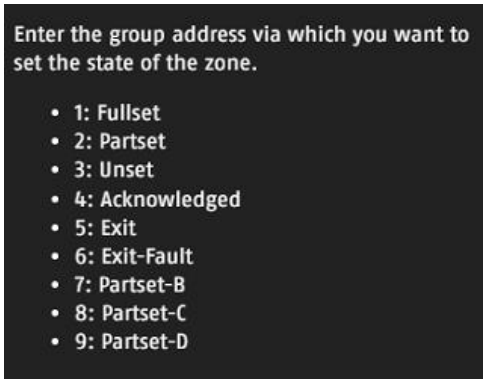
Query State

State (EIS1):	The state of the partition is output to the KNX bus as 0 or 1 via the respective KNX group address entered.
or	
(EIS14 (0-9)):	Enter the group address via which you would like to receive the status of the partition. The current set status is reported to the KNX bus via this KNX group address (possible telegram values[2])

Set state [retroactive function]

State (EIS1):	The state is set by the KNX bus as 0 or 1 via the respective KNX group address entered.
or	
(EIS14 (0-9)):	Enter the group address that you want to use to set the state of the partition. If allowed, the state can be set via the KNX group address entered here (possible telegram values[3])

Possible values



The following is the configuration of a partition with the assigned KNX group addresses:

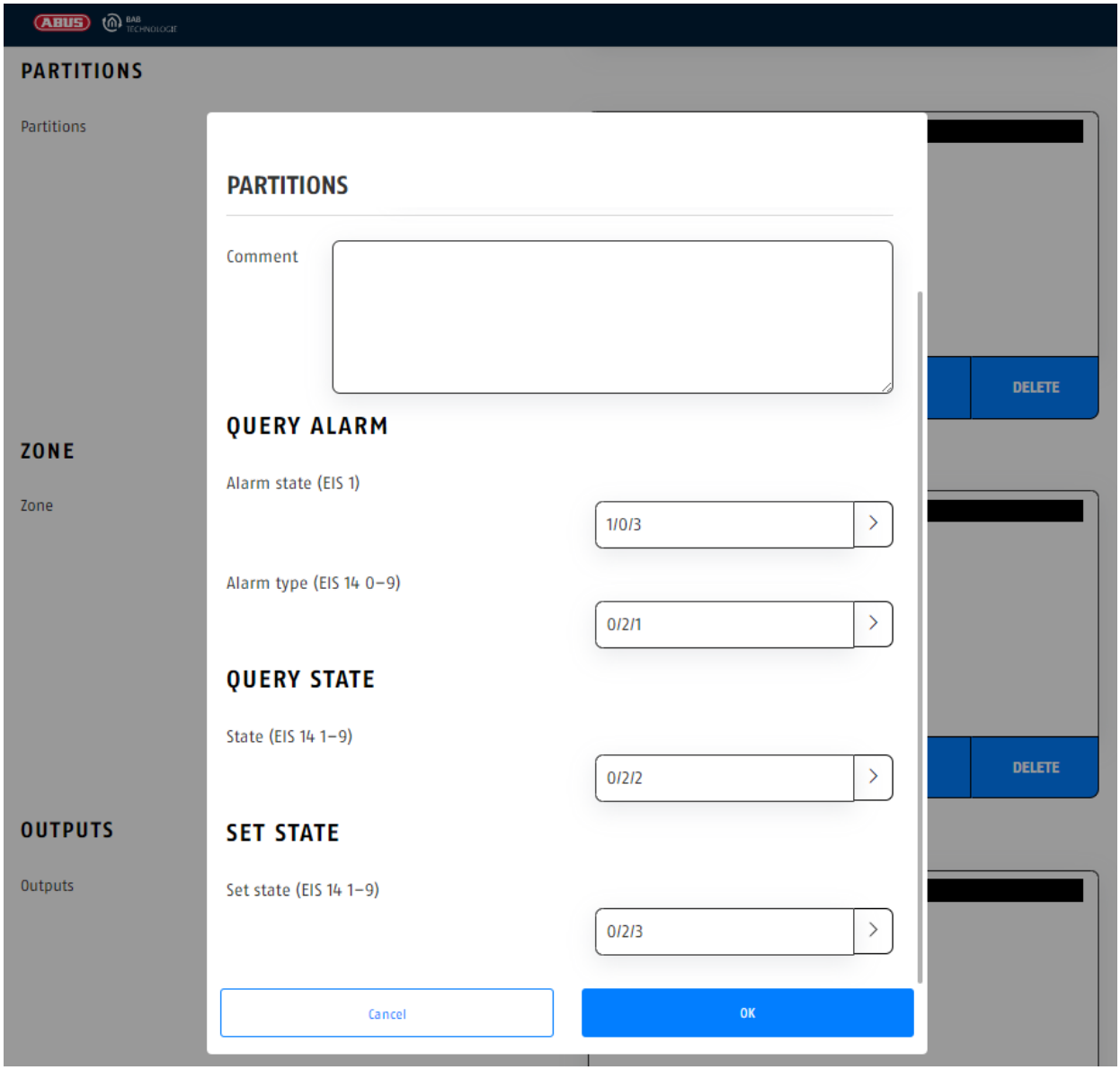


Figure 23: APPMODULE – ABUS Secoris KNX Connect: example of a partition configuration

3.4 ZONES

The status of the zone configured in the ABUS Secoris system can also be sent to the KNX bus.

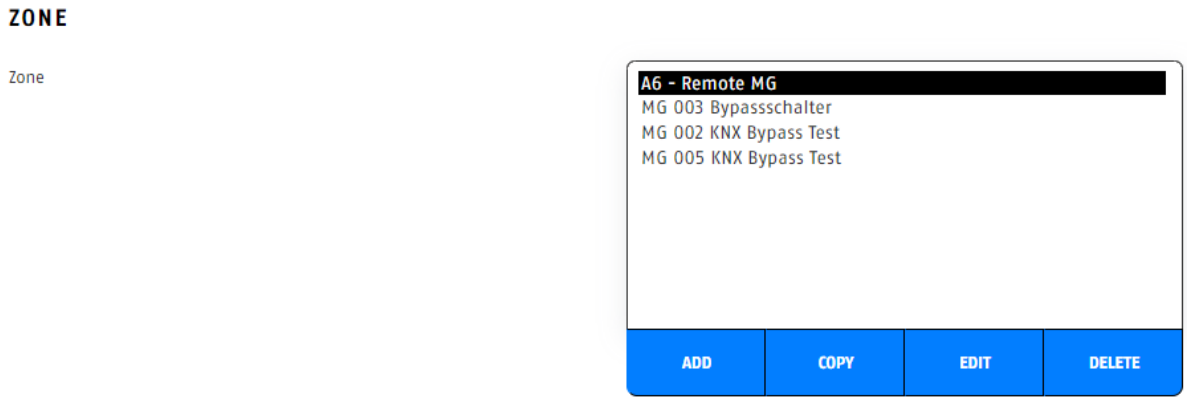


Figure 24: APPMODULE – ABUS Secoris KNX CONNECT: Configuration of zones

PARAMETER

Selecting the detector group	The desired zone is selected from a list of the zones present in the alarm panel.
Comment field:	Additional labelling option for differentiation in the overview.
Status Open (EIS1):	If the Zone is closed, a 1 is output to the KNX bus via the KNX group address entered in each case.
Status Closed (EIS1):	If the Zone is open, a 1 is output to the KNX bus via the KNX group address entered in each case.
Status Tamper (EIS1):	If the zone is tampered, a 1 is output to the KNX bus via the KNX group address entered in each case.
Status Omitted Zone (EIS 1)	Enter the KNX group address via which you want to activate the omission.
or	
Status (EIS14 (0-2)):	The alarm state is output to the group address given here. Possible telegram values: 0 Open 1 Closed 2 Manipulated
Status of Omitted (EIS 1)	Enter the KNX group address at which the omit status of zone is transmitted.
Status Omitted Zone (EIS 1)	Enter the KNX group address via which you want to activate the omission.

This is where you can see the configuration of the KNX group address for a selected zone:

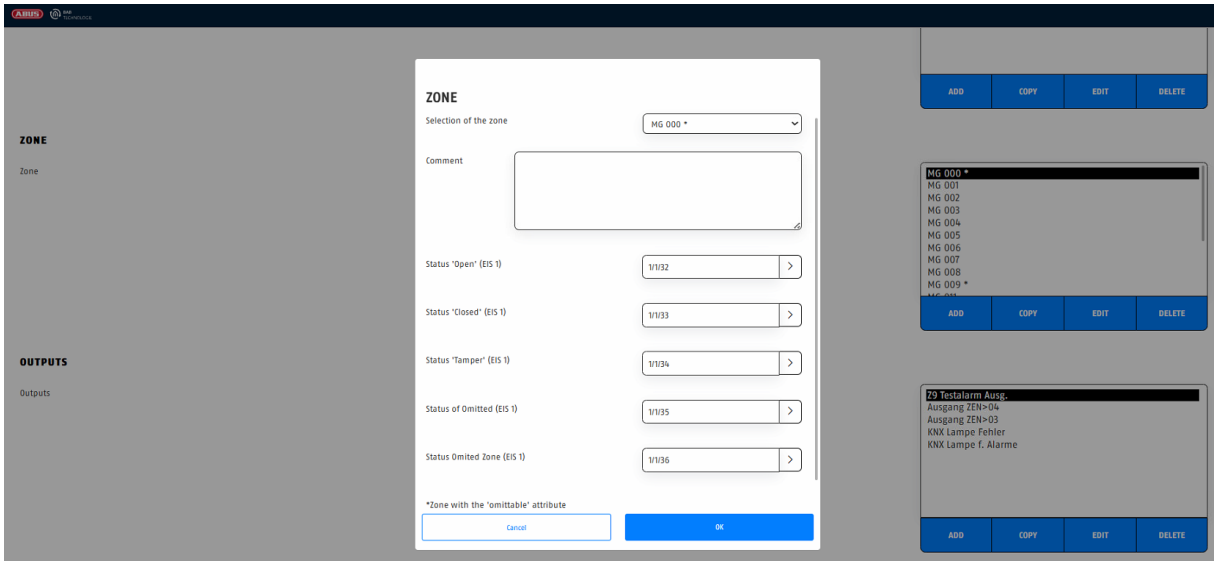


Figure 25: APPMODULE – ABUS Secoris KNX Connect: Example of zone configuration

3.5 OUTPUTS

In the Outputs section, the outputs available in the alarm panel can be linked to KNX group addresses.
In addition to controlling the outputs and reporting the status back to the KNX bus, an event can also be configured.
Here you can define whether an action should be triggered on the KNX bus when the output goes ON or OFF.

Figure 26: APPMODULE – ABUS Secoris KNX Connect: Output configuration

PARAMETER „OUTPUTS“

Selecting the output: The desired zone is selected from a list of the zones present in the alarm centre.

Comment field: Additional labelling option for differentiation in the overview.

Output status (EIS1): The current state of this output is reported via the entered KNX group address. Possible telegram values
0 Open
1 Closed

[retroactive function]

Switch output (EIS1): This output is switched via the KNX group address entered here. Possible telegram values
0 Open
1 Closed

„EVENT CONFIGURATION' PARAMETER"

When „**ON**" Control address:	The KNX group address entered here is triggered when the selected output on the alarm panel is switched on.
Select data point	The KNX data point type is selected here for the specified telegram value. (possible data point types [2])
Value to send:	The telegram value is entered here according to the previously selected data point type.
When „**OFF**" Control address	The KNX group address entered here is triggered when the selected output on the alarm panel is switched to OFF.
Select data point	The KNX data point type is selected here for the specified telegram value.
Value to send:	The telegram value is entered here according to the previously selected data point type.

[1]) possible data point types:

1 – EIS1: 1 bit 0 and 1

2 – EIS5: 2-byte floating point number

3 – EIS6; 1 byte (0%...100%)

4 – EIS9: 4-byte floating point number

5 – EIS10s: 2 bytes (-32,768...32,767)

6 – EIS10u: 2 bytes (0...65,535)

7 – EIS11s: 4 bytes (-2,147,483,648...2,147,483,647)

8 – EIS11u: 4 bytes (0...4,294,967,295)

9 – EIS14u: 1 byte (-128...127)

10 – EIS14: 1 byte (0...255)

11 – EIS15: 14 bytes of text (14 characters)

(For more information on data point types, see appendix)

This is how you configure the KNX group address for an output:

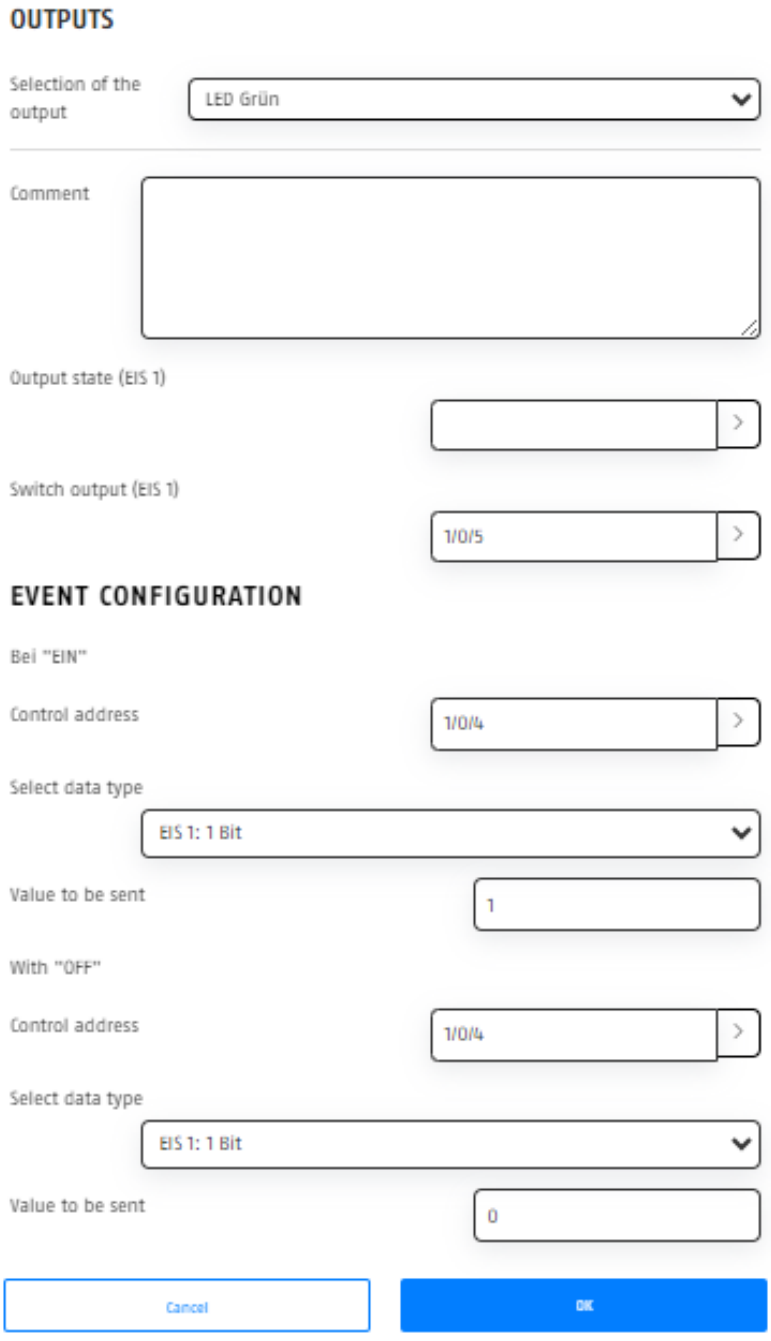


Figure 27: APPMODULE - ABUS Secoris KNX Connect: Example of outputs configuration

3.5.1 SAVE CONFIGURATION

As soon as the desired parameterisation has been carried out, the configuration can be accepted with the ‘Save and close’ button. This closes the view and opens the instance overview.

By clicking “Save”, however, the changes are also applied, but the view is not closed.

After a successful save, the instance is activated and working.

Note:

! Do not leave the instance configuration without saving first!

! All changes will be lost in this case!

4 ETS PROJECT IMPORT

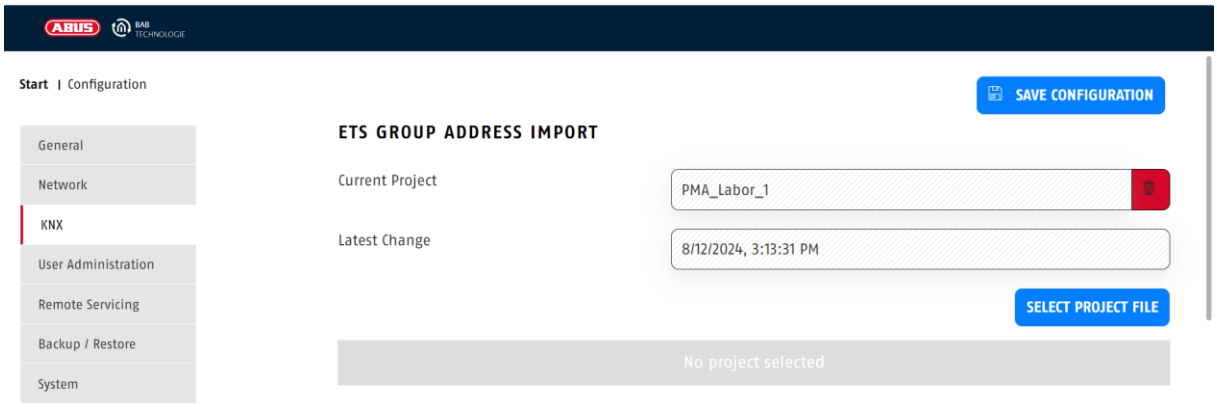


Figure 28: ETS Project Import

- Current Project: Shows the current imported ETS project.
- Last Changed: Shows the time when the currently imported project was last changed with the ETS.

The imported ETS project is then available in the App configuration.

USE ETS PROJECT

After the installation of an app for the **APP**MODULE the ETS project is available to you. Click with the left mouse button to the right of the input field for the group address.

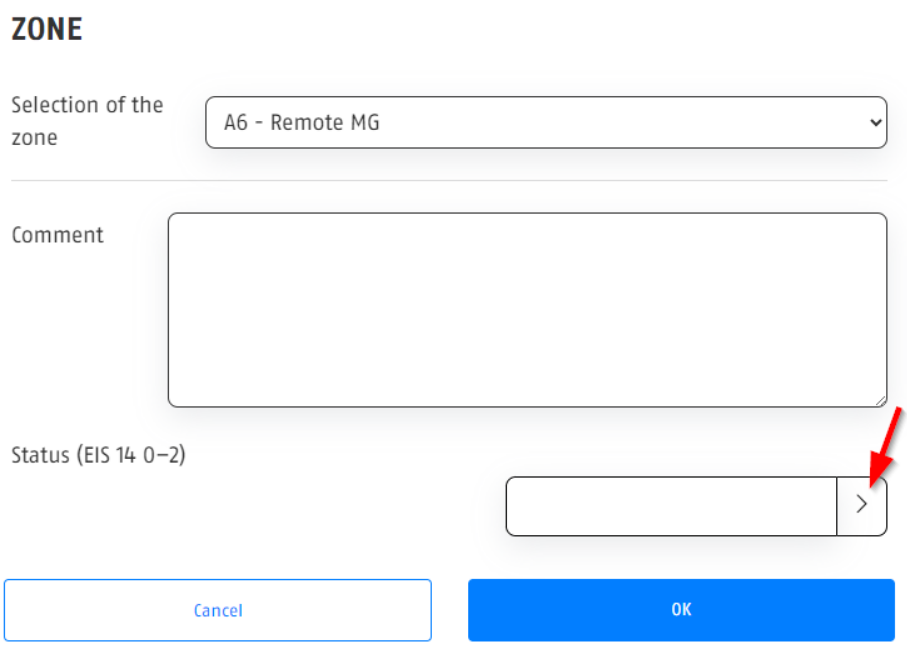


Figure 29: Open the "Group Address Selection" window

The window "Group Address Selection" opens, here you find the imported ETS project.

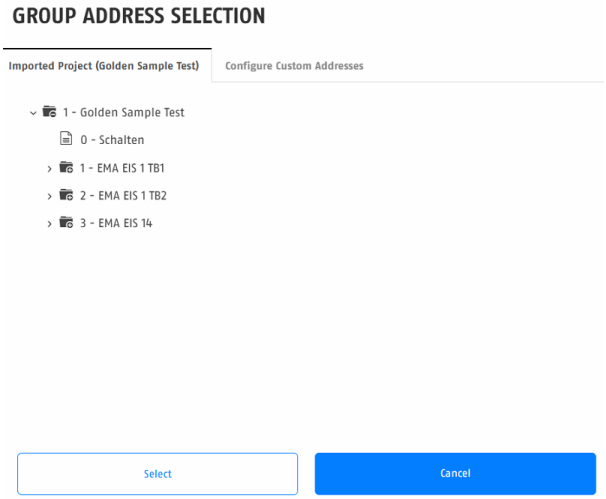


Figure 30: Group address selection

Navigate here like in a file browser. Click on a main group with the left mouse button. All middle groups of this main group are displayed. Click again with the left mouse button on a main group to close it again.
Click with the left mouse button on a middle group. All group addresses of this middle group are displayed. Click again with the left mouse button on a middle group to close it again.
You can transfer a group address to the group address field in two ways. Mark the group address with a click of the left mouse button and then press the "Select" button or double-click the group address with the left mouse button. In both cases, the group address is transferred to the group address field.

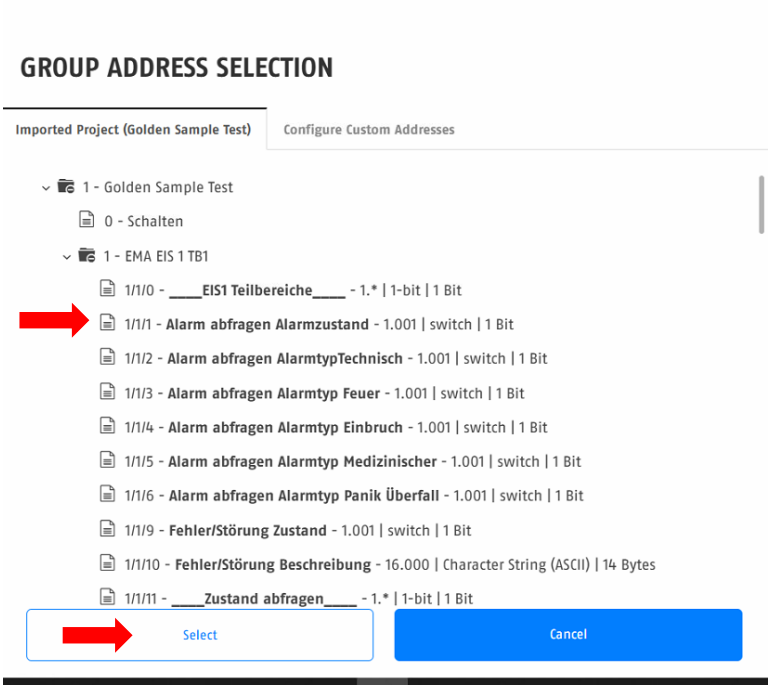


Figure 31: Assign group address

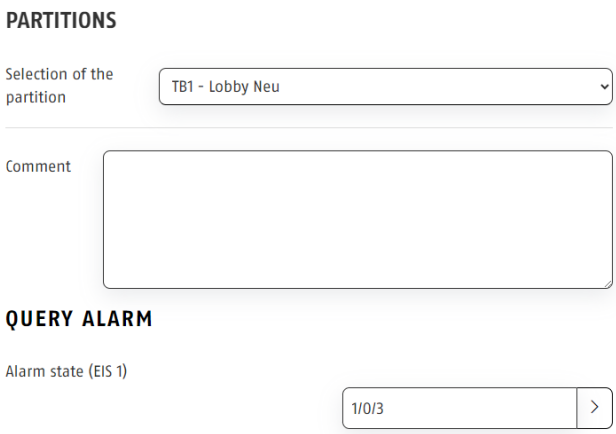


Figure 32: Group addresses assigned

CONFIGURE CUSTOM ADDRESSES

Group addresses can be added manually in the " Group Address Selection " window. To do this, switch to the "Configure manual addresses" tab.

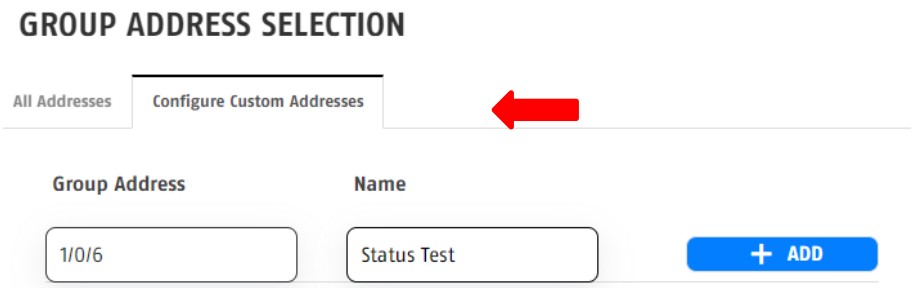


Figure 33: Configure Custom Addresses

Enter the group address and the name here. The group address can be entered as a 2-digit or 3-digit group address. The 2-digit group address is automatically converted into a
3-digit group address. With the button "Add" the group address is added to the input field for the group address. With a click on Save the group address is saved in the APPMODULE.

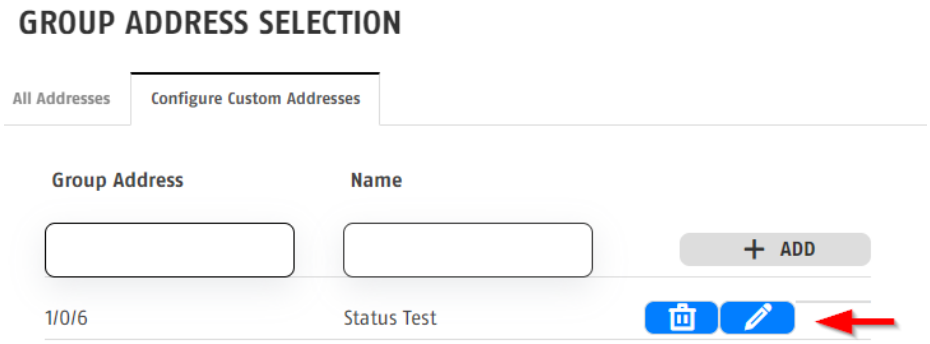


Figure 34: Select group addresses

Note: If group addresses and the corresponding data points are greyed out in an imported ETS project, these data points are currently not implemented in the APPMODULE and are not required by any app.

5 APP MANAGER

You can install and manage apps under the menu item “App Manager”. In order to manage an App or to change functions/instances, just click on the corresponding App.

You can find the functions of each APP on the homepage of BAB APPMARKET (https://www.bab-appmarket.de/de/) or from the ToolTips of the corresponding application.

1. Please call up the web interface of your APPMODULE:
2. Click on the menu item „App Manager”, here highlighted red.

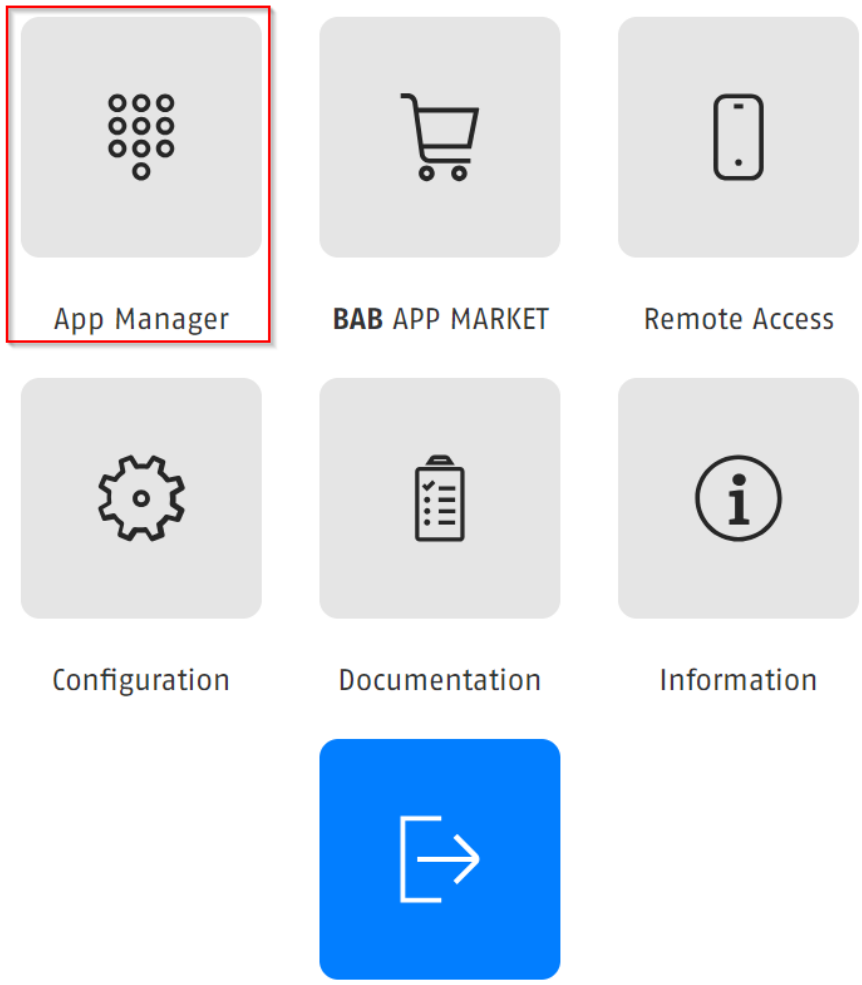


Figure 35: APPMODULE Start menu

3. You have entered the menu, where a list of all on the device already installed Apps are shown. In order to install another App, click on " Install App". See figure below, highlighted red.

Figure 36: Install APP

Click on “Select app” and a window will open. Select the app that you previously loaded from the APPMARKET and click “OK”. See “*APPMODULE functional principle*” for information on purchasing apps.

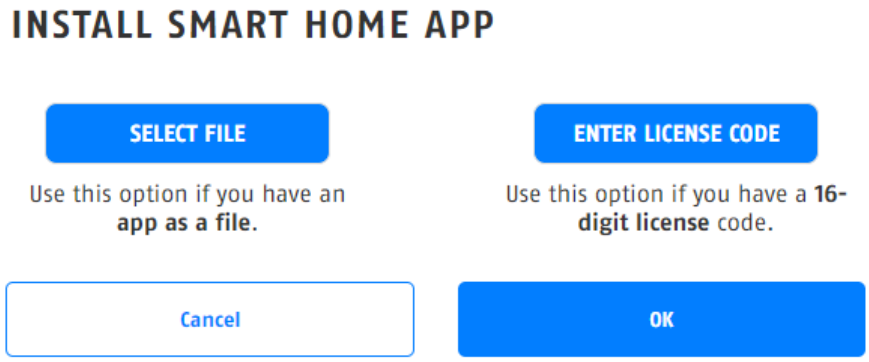


Figure 37: Select APP

4. As soon as the next window opens, the installation was successful. Now, click on "OK" and parameterise your APP.

Figure 38: Installation successful

5.1 INSTANCE

As soon as the App is installed, you can create so called “Instance”. An Instance is one of several objects of the same class.

In order to create an instance, click on the following symbol "Create Instance".

Figure 39: Create Instance

With the icons on our site, you can start instances, edit parameters, display the LOG, copy or delete instances.

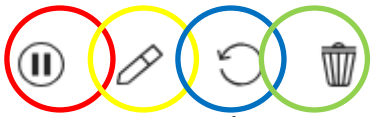


Figure 40: Instance functions

Colour	Function
Red	Start instance
Yellow	Edit parameter
Blue	Display log
Orange	Delete instance

5.1.2 NOTATION OF GROUP ADDRESSES

The group addresses in the APPMODULE can either be displayed in 2-digit notation ([XX/XXXX]) or 3-digit notation ([XX/X/XXX]). The APPMODULE *always* converts the group addresses into 3-digit display, no matter in which way they were entered.

Note: Virtual group addresses (16... 31) can be used internally to control interoperations between the apps. The virtual group addresses are not sent to the bus.

5.2 AUTOMATIC SMART HOME APP UPDATE

As of firmware 1.4.0, you no longer need to check the BAB APPMARKET for updates for installed apps. In the App Manager you can set if you want to search for updates automatically or if you want to trigger the search manually.
Open the App Manager and click on the button with the gear symbol.
Activate the automatic Smart Home App updates here. If the automatic app updates is deactivated, click on the Check for updates button to start a manual search.
If the automatic app update is activated, you can optionally use the Indicator Address (EIS 1) to display in a visualization, for example, that an app update is present (if a 0 is sent to the group address, no update is present, if a 1 is sent, one or more updates are present).

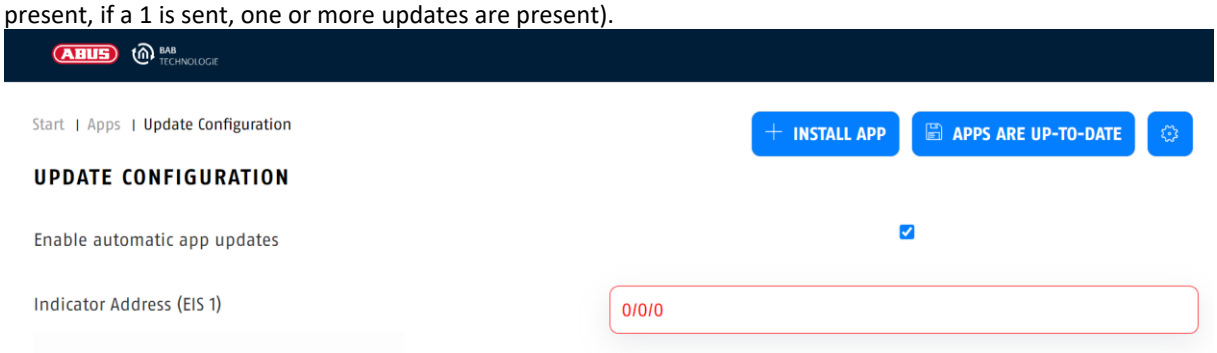


Figure 41: Update Configuration

If the Automatic App Update is activated, the APPMODULE checks for updates once a day. The time of the search depends on the last boot process of the APPMODULE and is determined automatically. The time cannot be set. If the automatic search is activated, the APPMODULE searches for updates directly after activation.
If an update is available for an installed Smart Home App, this is displayed in the App Manager.

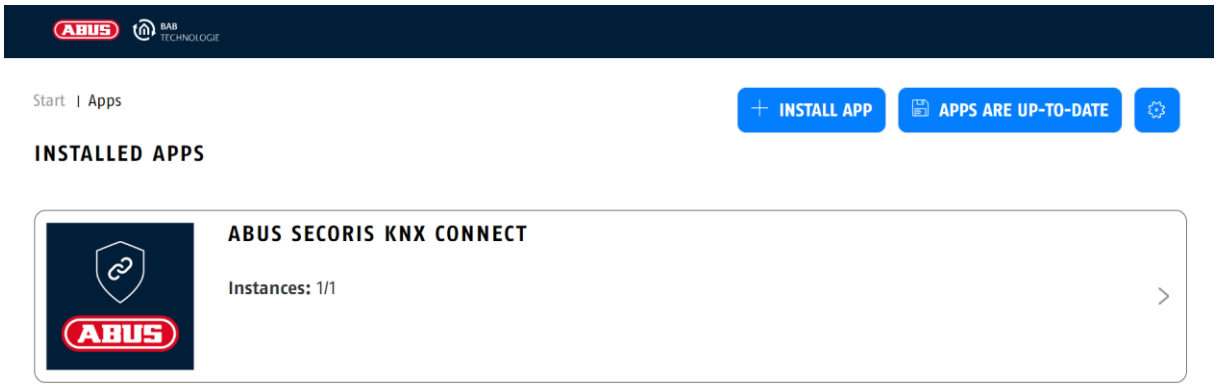


Figure 42: Smart Home App Update available

Click on the button "Update available". A window opens with the "ChangeLogs" of the APP.
All changes between the currently installed Smart Home App version and the App version provided for the update are displayed.

Start the update with "Update now". The update will now be performed. Wait until the update is finished.

The update of the app does not overwrite existing group addresses. Individual group addresses can be given If deleted, if the function to which the group address belonged is omitted. New functions must be assigned a new group address.

After the update, check the configuration of the Smart Home App.

6 CONFIGURATION

6.1 SAVING THE CONFIGURATION

As soon as you have applied changes, such as on the name and the IP address of the APPMODULE and want to save them, click on the button "Save configuration".

6.2 GENERAL

Click on “Configuration” to make changes to the general settings.

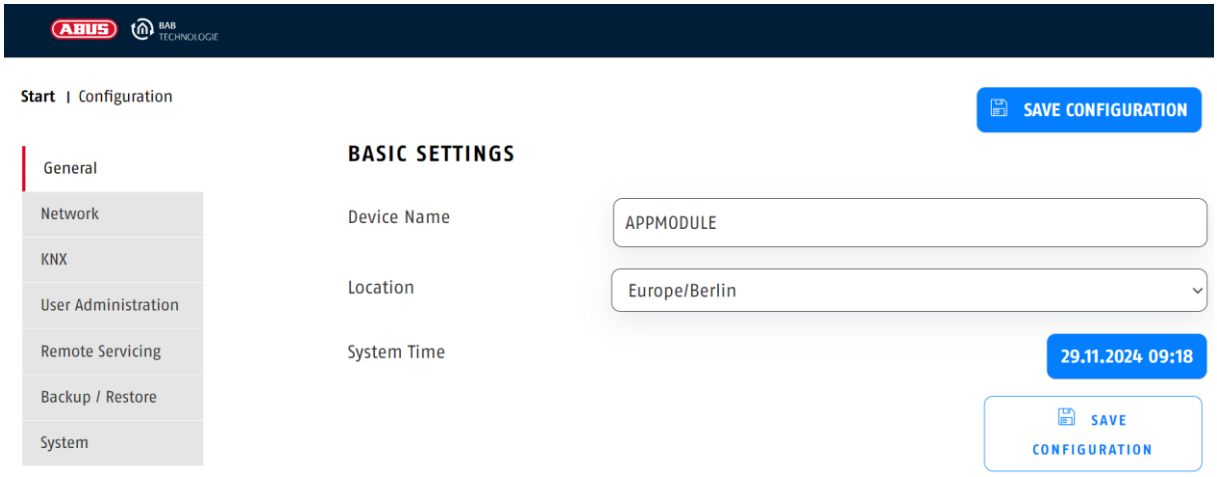


Figure 43: General configurations

Device name: Here, you can assign an individual device name for your APPMODULE. This name is then displayed in the “Discovery Tool” and BAB STARTER and used as the host name.
This means that the web interface can also be accessed via the host name (instead of the IP address).

Location: Edit the installation site so that the correct time zone can be set.

System time: The current system time of the device is shown. Clicking the button synchronises the system time of the device with that of the local PC. To synchronise the system time automatically, please use the NTP service. See “ Network”.

Note: The system time must be correct for the software to run properly. Please make sure that the system time is always correct. If synchronisation with NTP is not possible, correct the system time manually.

6.3 NETWORK

DHCP: If DHCP is active, the device automatically obtains the network settings. A DHCP server must be available in the local network.

IP address / network mask / gateway: If DHCP is not active, the network settings must be carried out statically. In case of doubt, contact your network administrator as to which settings are to be carried out. Please note that an IP address may never be assigned twice!

DNS server: DNS is the abbreviation for Domain Name System. The DNS server converts Internet addresses, for example "www.bab-tec.de" into the IP address "85.214.89.170" and vice versa. Without a valid DNS entry, NTP-, weather- and UPnP-service do not work.

NTP server: NTP is a free service for synchronising the system time of Internet-compatible devices. If time synchronisation is not possible, please correct the system time manually. See "*General*".
NTP server list: e.g. http://www.pool.ntp.org/zone/europe

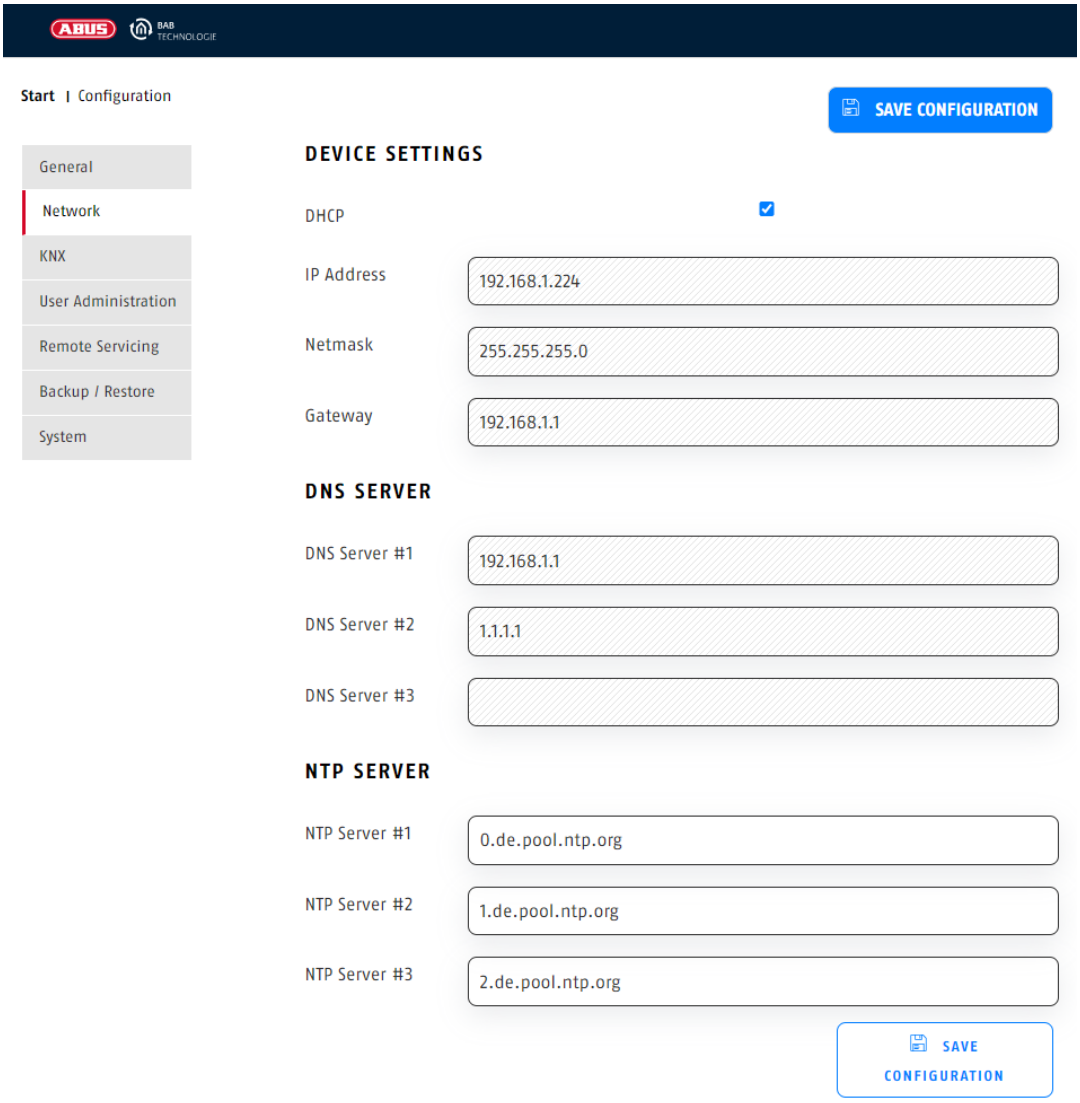


Figure 44: APPMODULE – Network settings

6.4 KNX

The “KNX” configuration menu is used to configure the KNX parameters and for the ETS project import. The KNX parameters are relevant for the APPMODULE variant. For further information, please refer to the “APPMODULE ABUS Editon” chapter!

The ETS project import is available for all APPMODULE variants KNX (10495), IP (10491) and APPMODULE Easywave (14501).

If you want to implement the APPMODULE in your ETS project, use the “Dummy Application for ETS” on APPMODULE - KNX IoT mit Alexa, SONOS, Philips hue, DoorBird & mehr (bab-technologie.com).

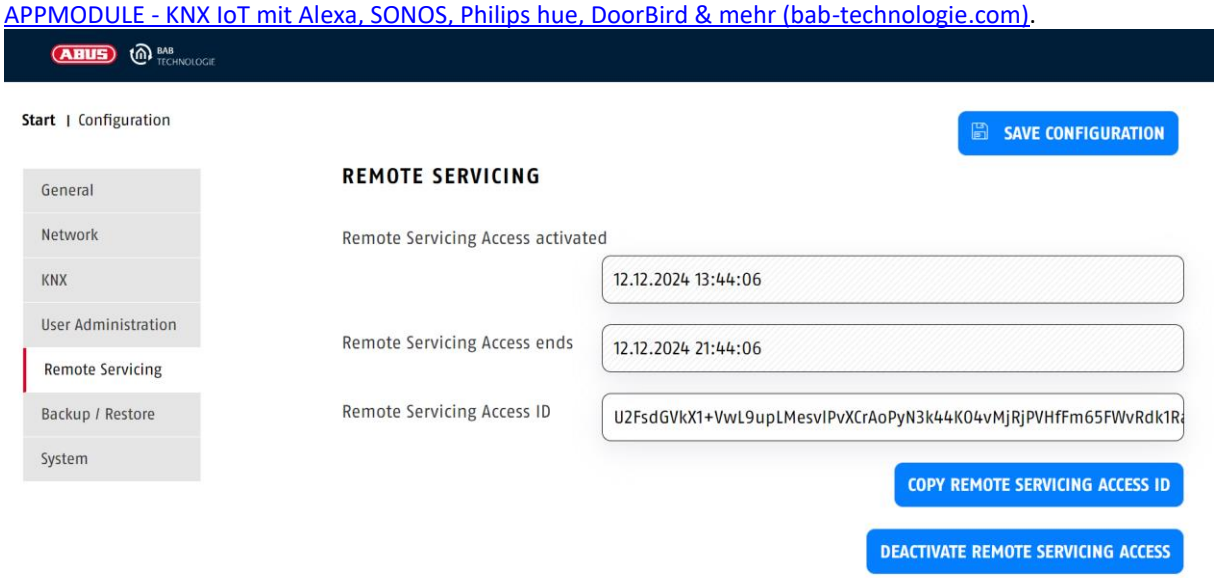


Figure 45: KNX

6.5 USER ADMINISTRATION

The user data required to access the APPMODULE Web interface is managed here. This user data is also requested when you access the EnOcean Editor from BAB STARTER. To change or add users, click “User administration” in the “Configuration” menu item.

Note: Make sure that you always assign secure passwords and follow standard password guidelines.

DISABLE PASSWORD RECOVERY

If this option is selected, the password cannot be reset and the device must be sent in if you lose the password.

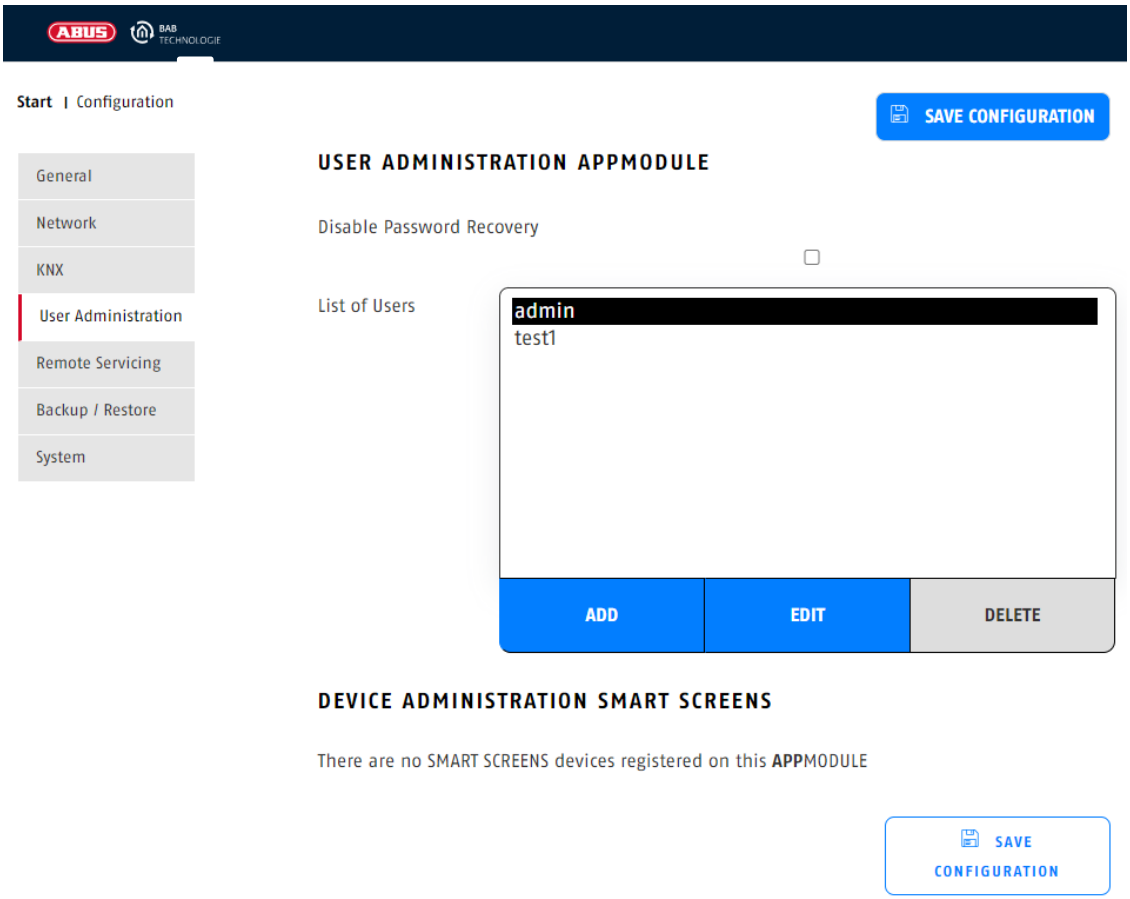


Figure 46: User administration

SMART SCREENS

The displayed device names here are used to inform which devices have been registered via the Smart Screens function. You haven’t influence to this login procedure and the stored credentials yourself. The registration is required for the synchronization of the mobile devices. If a mobile device should no longer be used, this device can be deleted and for memory released.

The functionality of the Smart Screen is described in a separate documentation.

6.6 REMOTE SERVICING (BAB TECHNOLOGIE)

Remote Servicing is available as of firmware version 1.3.7.

Activate the Remote Servicing Access of the APPMODULE. Select a time between 2-12 hours after which the Remote Servicing Access is automatically closed. Remote Servicing Access is also deactivated again if the APPMODULE is restarted, this is independent of the set time. Remote Servicing Access can be deactivated at any time by clicking on "Deactivate Remote Servicing Access".

Activate the Remote Servicing Access by clicking on "Activate Remote Servicing Access".
Remote Servicing access is started. This process takes a few seconds, and the Remote Servicing Access ID is displayed. Copy the ID and send it to info@bab-tec.de.

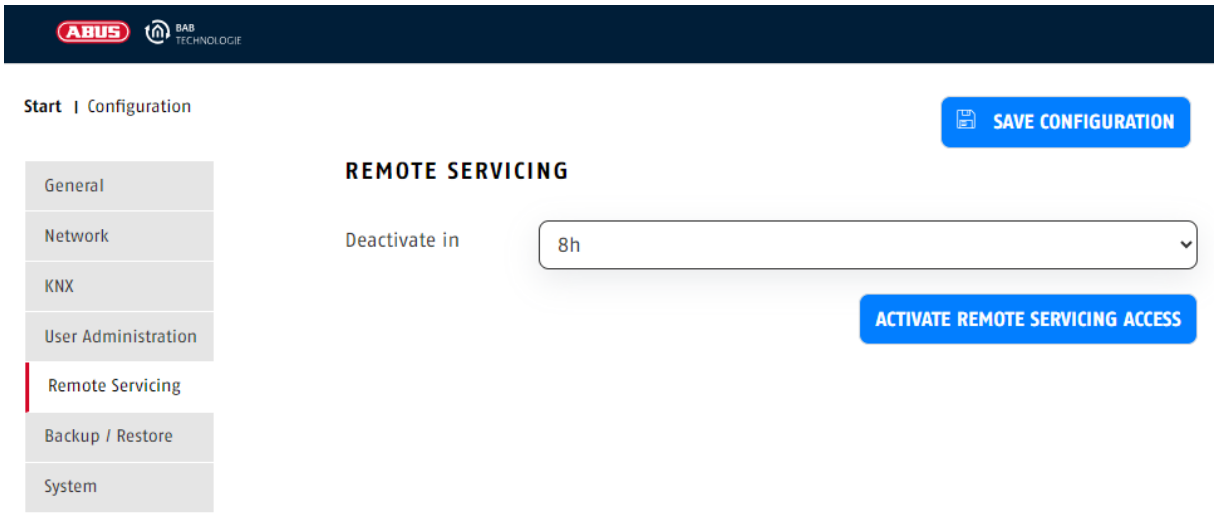


Figure 47: Remote servicing

Note: Before you activate Remote Servicing Access, contact Support of BAB Technologie GmbH!

6.7 BACKUP THE SETTINGS

The configuration data of the APPMODULE should be backed up at regular intervals in order to ensure that the current configuration status can be restored at any time.

Note: Please note that apps and app instances must be saved separately. This is particularly important before a firmware update.

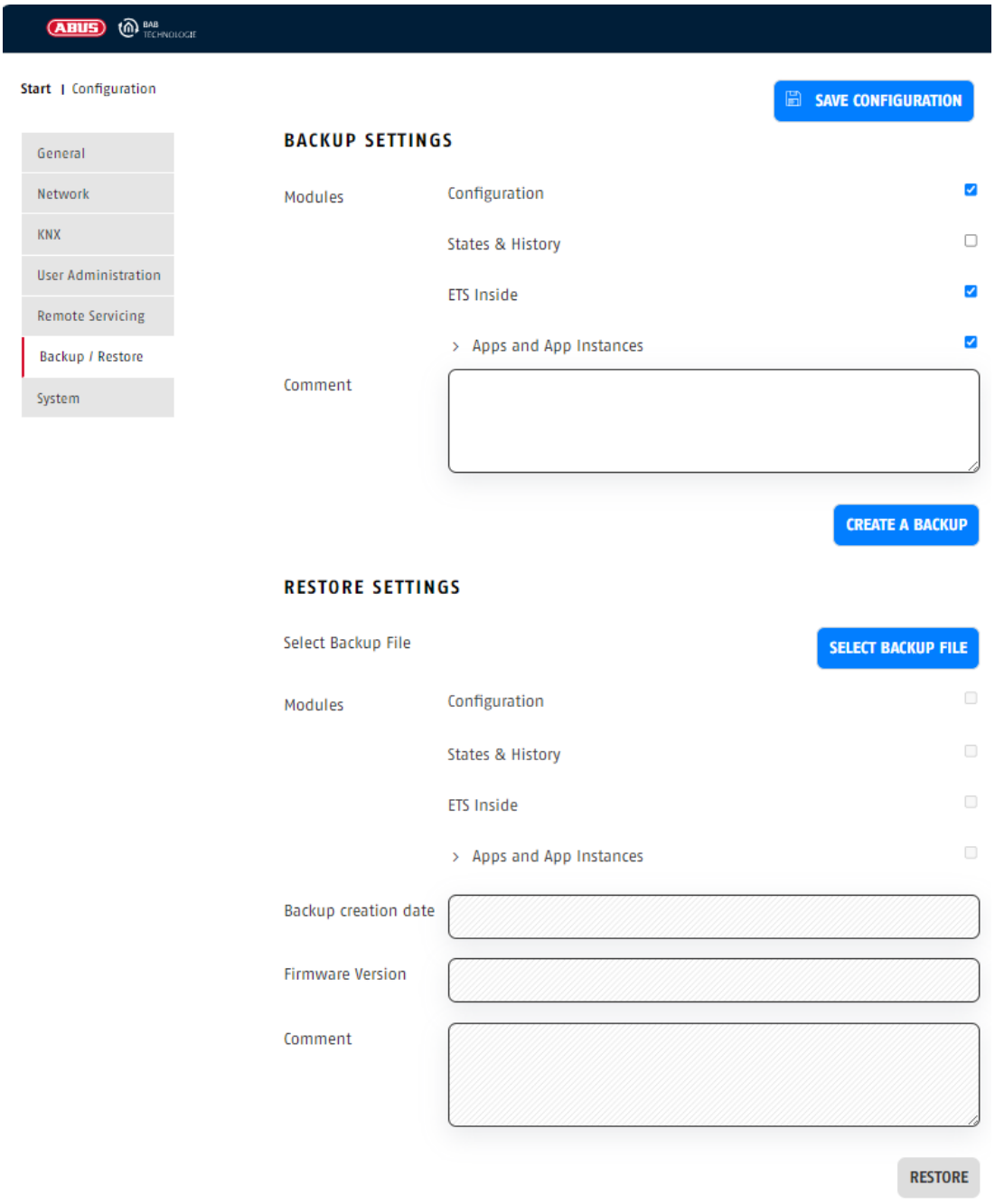


Figure 48: Backup / Restore

CREATING A BACKUP

Select the checkboxes under “Modules” to set which configuration data is to be backed up.

- *Configuration:* All configuration data except for app configuration data.

Note: The network settings are not backed up; these are separate from the backup data.

- *Statuses & logging:* The address status table and logging table are backed up. This is important, as it ensures that the status information can also be restored.
  Otherwise, status information will be established on the basis of the current telegram communication.
- *Apps and app Instances:* Backs up all app-related data. Individual apps and instances can be selected for backup from the drop-down menu.

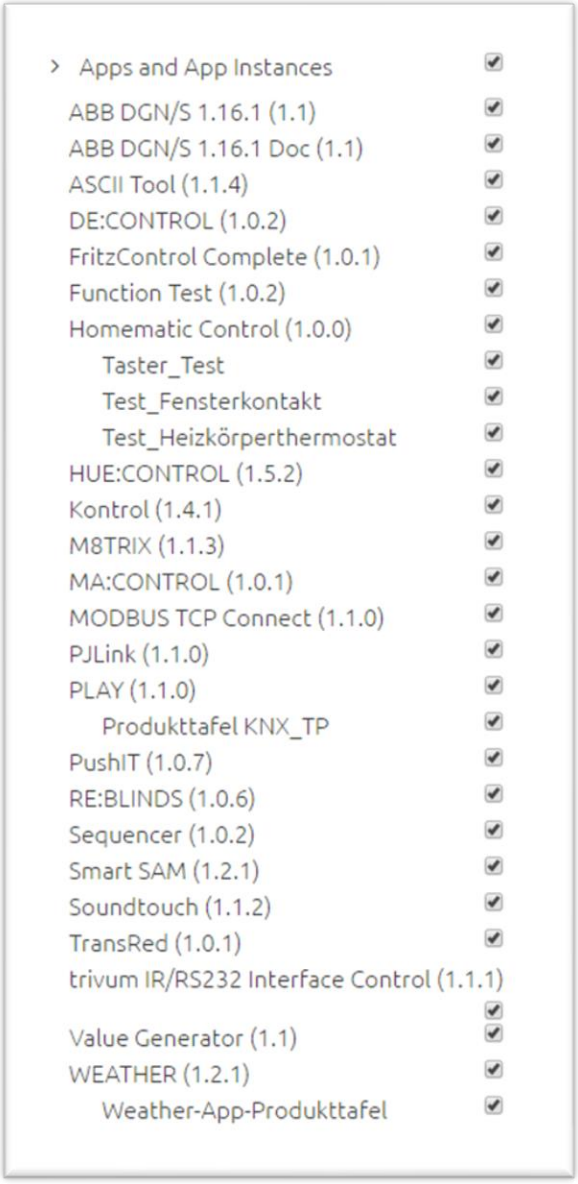


Figure 49: Selecting apps and app instances for backup

Comments regarding the backup can be added in the “Comments” field.

- Click on “Create backup” to launch the backup process.
- The backup file is generated by the system and provided automatically for download using the browser download dialogue.

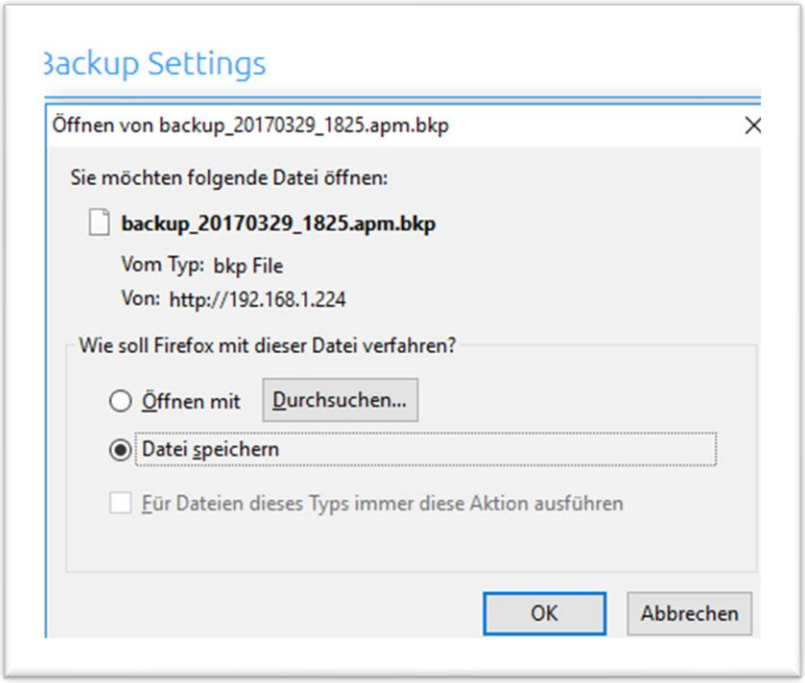


Figure 50: Downloading backup

RESTORING A BACKUP

- Select an APPMODULE backup file using the “Select backup file” button. The files have the extensions “*.apm.bkp”.
- Information for the selected file is displayed in the “Backup created on”, “Firmware version” and “Comments” fields.
- The “Modules” field shows which modules are available in the selected backup file. You can also use the checkboxes to select which modules are to be restored.
- *Configuration:* All configuration data except for the app configuration data.

Note: The network settings are not part of the backup file.

- *Statuses & logging:* The address status table and logging table are restored. This is important, as it ensures you can access the status information in the apps after restore.
- *Apps and app instances:* Restores the app-related data. Individual apps and instances can be selected for restore from the drop-down menu (see figure above).

6.8 SYSTEM / FIRMWARE UPDATE

SERVICE

Here, you can restart the control software for the apps and the apps (“Restart software”), or the entire device (“Restart device”).

FIRMWARE UPDATE

Each APPMODULE can be updated. The firmware update is free of charge. The current firmware files can be found on the BAB homepage. Proceed as follows to update the device:

- Download the current firmware image from the download area www.bab-tec.de or www.abus.com
- Unpack the file to any folder.

Note: Generate a new backup including all apps and app instances before you launch the update (see “*Backup the settings*”). The update process restores the factory settings.

- Open “Configuration” – “System”.

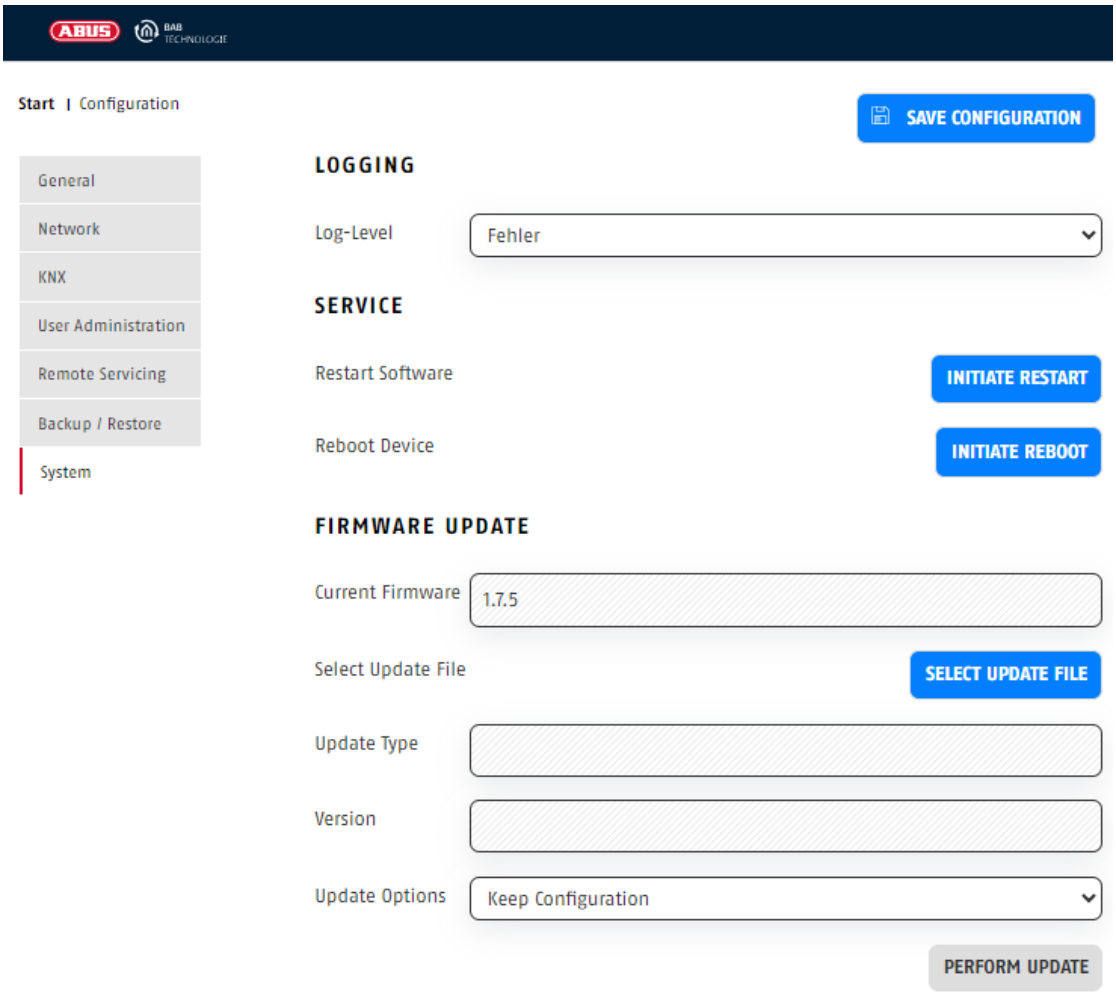


Figure 51: Configuration – System

- Select the firmware image file (*.bin extension) using the “Select update file” dialogue. Update type and version are displayed.

- Please choose one of the update options

1. *Keep Configuration:* All settings, apps and instances will be preserved
2. *Keep Network Settings:* Only the network settings will be preserved.
   Caution: all other settings as well as all your apps and their instances will be deleted
3. *Reset Configuration:* The device will be reset to factory defaults during the update.

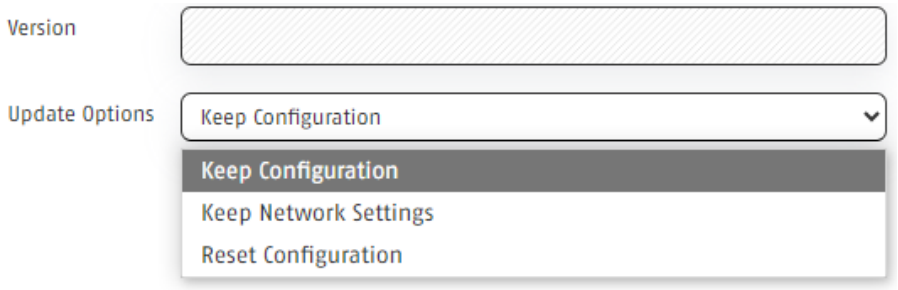


Figure 52: Keep network settings

Note: If the “Keep network settings” checkbox is not selected, the APPMODULE can be accessed at the default IP address after the update.
(For factory settings, see “*Initial Operation*”)

- Launch the update by clicking on “Perform Update”.

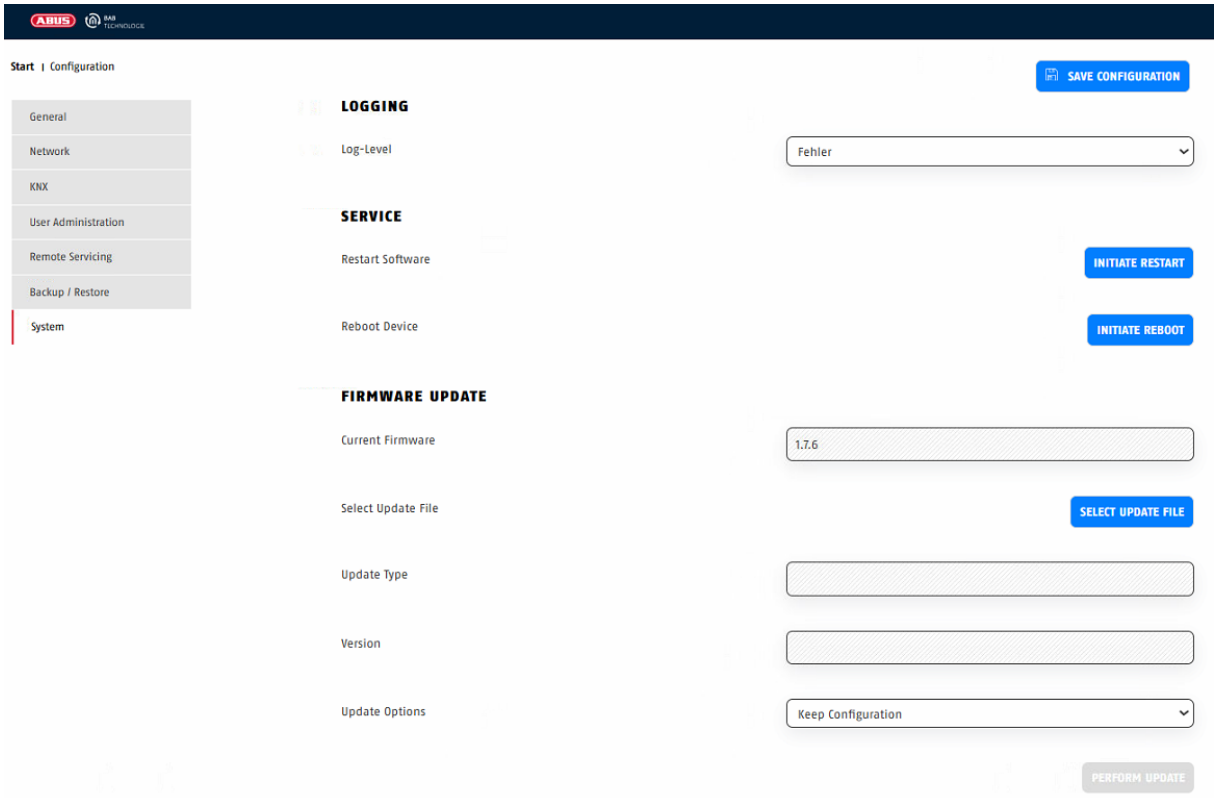


Figure 53: Perform update

- Wait until the update is complete. The Web interface is updated automatically once the process has been successfully completed.
- The update restores the device factory settings (except for the network settings; see above). Individual settings are only loaded again when you restore a backup (see “*Backup the settings*”).

7 REMOTE ACCESS - PLUG & PLAY VPN

In the menu item "Remote Access" there is the function from firmware version 1.7.0 to use the APPMODULE as a HOOC gateway in order to establish a secure VPN connection to your building control.

The integrated VPN solution eliminates the need to purchase and install costly additional hardware. The HOOC CONNECT E Gateway in the APPMODULE connects to the HOOC Cloud via an encrypted and secured VPN connection. It forms the heart of the HOOC VPN solution and offers a comprehensive user administration as well as many additional features such as a KNX bus monitor or alarm messages with push function.

Further instructions on setting up, configuring and using the Plug & Play VPN solution can be found in the separate document: "Documentation-HOOC".

More information at https://bab-technologie.com/hooc/?lang=en

The HOOC Gateway Manager Configuration menu is located on the APPMODULE webinterface under the “Remote Access” menu.

1. Please call up the web interface of your APPMODULE:

   <IP address APP MODULE>

2. Click on the menu item “Remote Access”, here highlighted red.

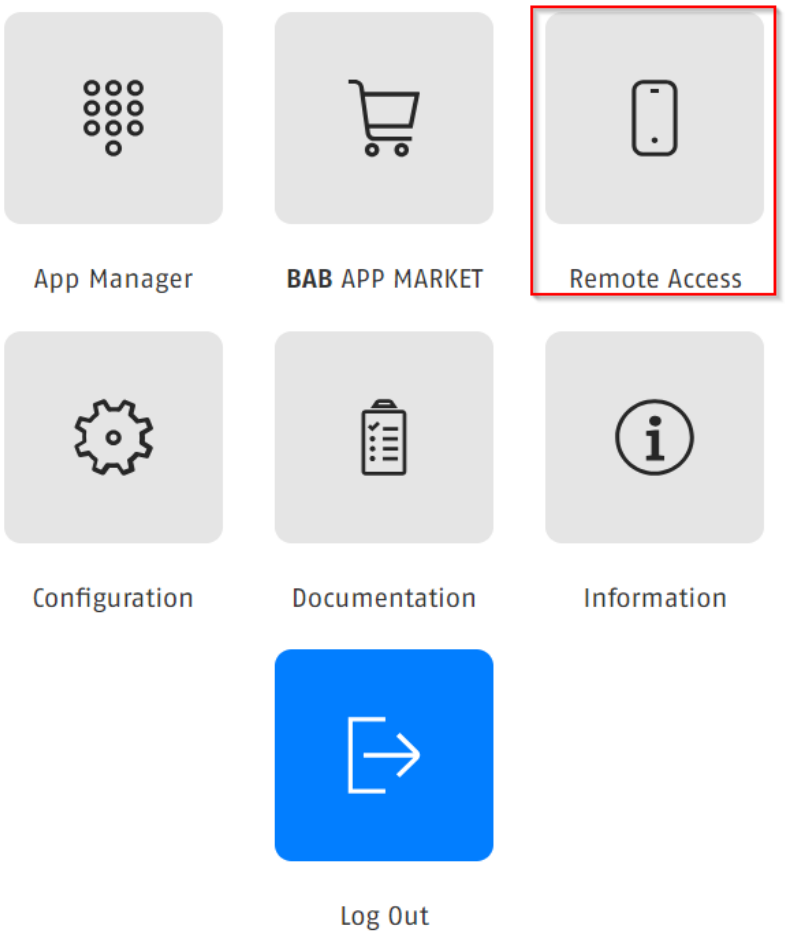


Figure 54: APPMODULE - Remote Access HOOC

8 INFORMATION

8.1 SYSTEM INFORMATION

Important information on the APPMODULE can be found here. Please have this information ready if support is required.

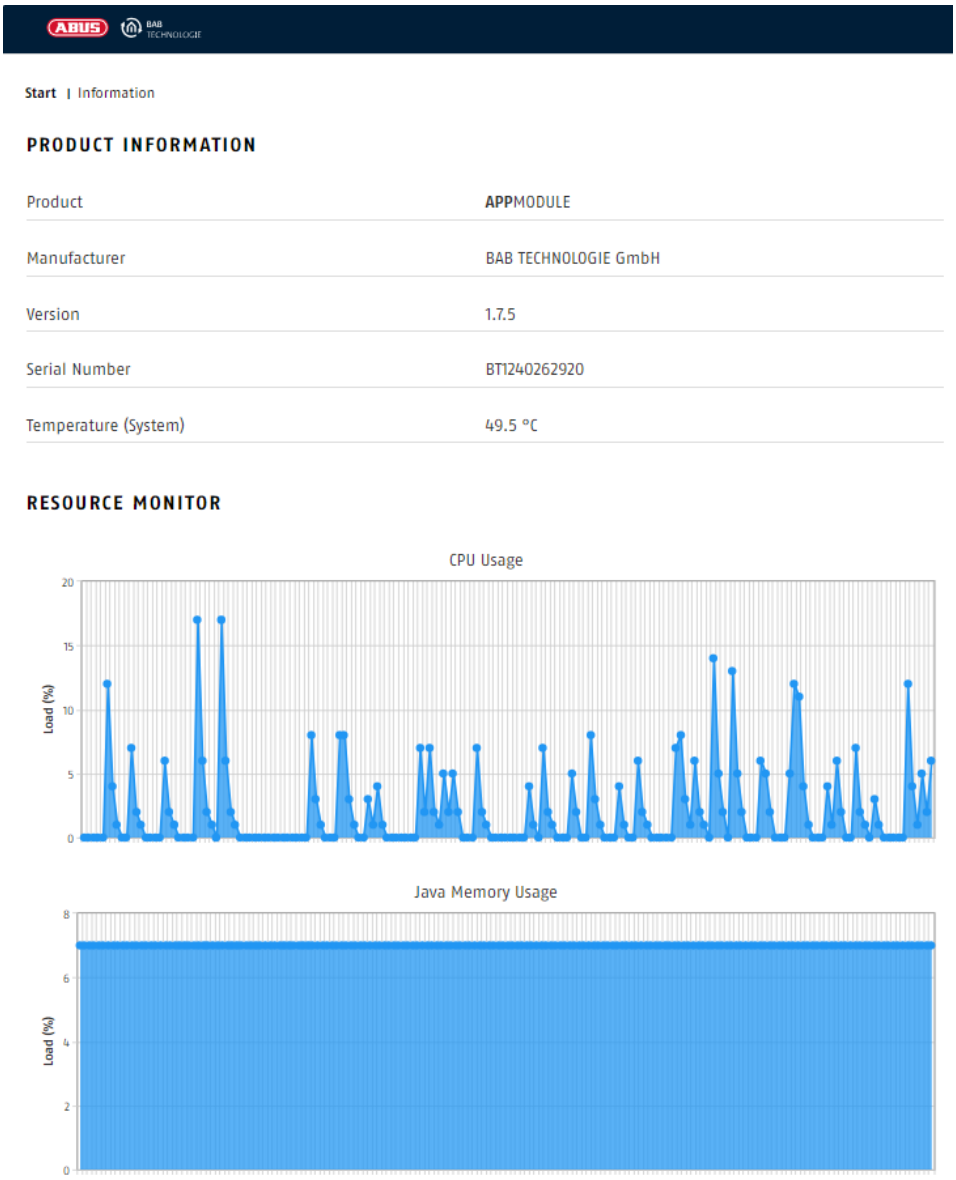


Figure 55: System Information

8.2 CONFORMITY

BAB TECHNOLOGIE GmbH hereby declares that the device APP MODULE KNX 10495 complies with the requirements of Directives 2014/30/EU and 2014/35/EU.
The full text of the EU Declaration of Conformity is available upon request from BAB TECHNOLOGIE GmbH, Hafenpromenade 1–2, 44263 Dortmund, Germany.

8.3 DISPOSAL INSTRUCTIONS

Old appliances must not be disposed of with household waste! Dispose of old appliances via a collection point for electronic waste or via your specialist dealer. Dispose of the packaging material in the collection containers for cardboard, paper and plastics.

9 ATTACHMENT

Function	EIS type	Data point type	Typical value	Data	Identifier
Switching	EIS 1	DPT 1.yyy	[0] = Off | FALSE; [1] = On | TRUE	1 Bit	1-bit
Relative Dimming	EIS 2	DPT 3.yyy	„Dimming steps“: [[0],[2…7]] Darker [2, 4, 8, 16, 32, 64] -Steps and [[1],[2…7]] Brighter [2, 4, 8, 16, 32, 64]-Steps „Start/Stop Diming“: [0,8] Stop; [1] Darker und [9] Brighter	4 Bit	4-bit
Time	EIS 3	DPT 10.yyy	hh:mm:ss	3 Byte	Time
Date	EIS 4	DPT 11.yyy	dd:mm:yyyy	3 Byte	Date
Floating point number (short)	EIS 5	DPT 9.yyy	-671 088,64 … 670 433,28	2 Byte	2-byte float value
Percent, Position, Brightness, …	EIS 6	DPT 5.yyy	0 … 100%	1 Byte	8-bit unsigned value
Blinds Drive/adjust	EIS 7	DPT 1.yyy	[0] = up; [1] = down When driving [0,1] = stop	1 Bit	1-bit
Priority	EIS 8	DPT 2.yyy	[0], [1] Switch on, off; [3] = Forced off; [4] = Forced on	2 Bit	1-bit controlled
IEEE Floating point number (long)	EIS 9	DPT 14.yyy	4-Octet float value; IEEE 754	32 Bit	4-byte float value
Counter 16 Bit Unsigned	EIS 10u	DPT 7.yyy	0 … 65.535	16 Bit	2-byte unsigned value
Counter 16 Bit Signed	EIS 10	DPT 8.yyy	-32.768 … 32.767	16 Bit	2-byte signed value
Counter 32 Bit Unsigned	EIS 11u	DPT 12.yyy	0 … 4.294.967.295	32 Bit	4-byte unsigned value
Counter 32 Bit Signed	EIS 11	DPT 13.yyy	-2.147.483.648 … 2.147.483.647	32 Bit	4-byte signed value
Access control	EIS 12	DPT 15.yyy	Access data	4 Byte	Entrance access
ASCII Character	EIS 13	DPT 4.yyy	Char	1 Byte	Character
Counter 8 Bit Unsigned	EIS 14u	DPT 5.yyy	0 … 255	8 Bit	8-bit unsigned value
Counter 8 Bit Signed	EIS 14	DPT 6.yyy	-128 … 127	8 Bit	8-bit signed value
String	EIS 15	DPT 16.yyy	14 Characters	14 Byte	Character string

EIB/KNX devices exchange fixed prescribed data formats with each other. These are defined in types.

Note:
The old designations of the types are EIS (EIB Interworking Standard). The new designations are DPT (Data Point Type)