

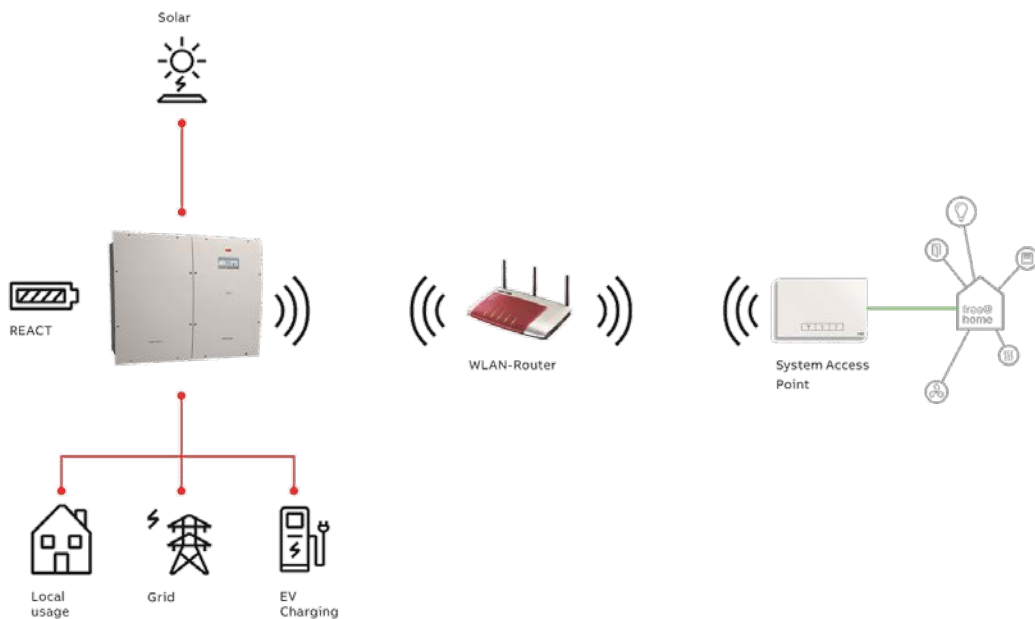


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SMART HOME

ABB-free@home[®] and REACT

Your energy breaks free

System integration



The integration of ABB REACT into *free@home* is carried out thanks to the integration of *free@home* protocol into REACT. The data of REACT is "compiled" and transmitted via the IP protocol to the *free@home* system access point, which in turn controls the other *free@home* devices.

Prerequisite for the integration of the REACT into *free@home* are:

- An ABB REACT (solar + storage inverter)
- A router
- An operable *free@home* system

Preparatory work

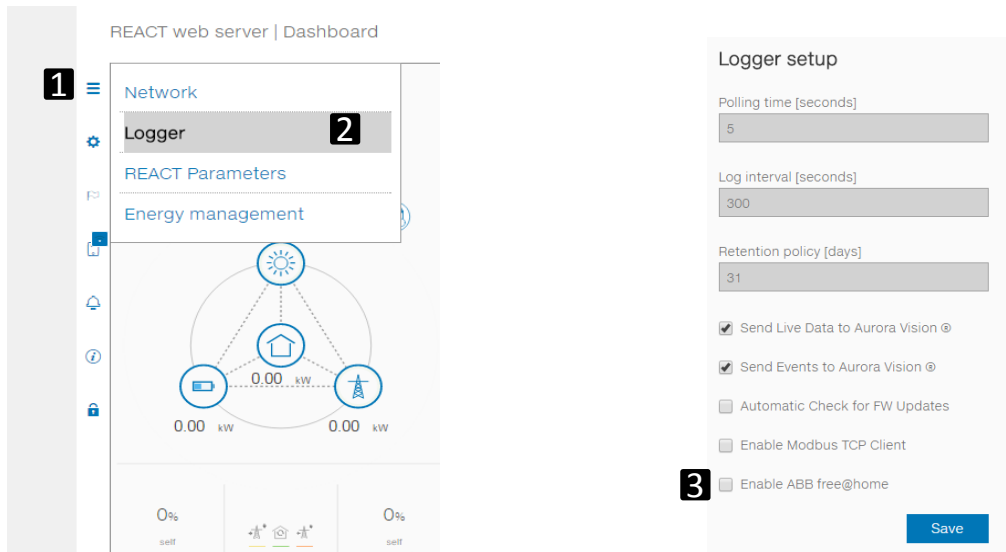
Commissioning of the *free@home* and of REACT system.

Both systems must be located in the same Local Area Network.

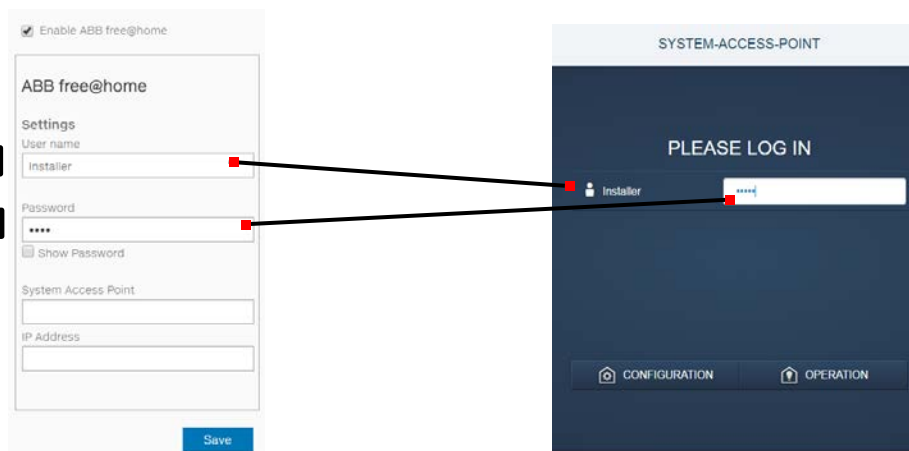
1. Carry out a firmware update of the *free@home* System Access Point to Version 2.1.4 or higher (via automatic update or manual update).
2. Carry out firmware update of REACT to version 2.2.1 or higher (check **REACT manual** for the procedure).

ABB REACT setup

1. Connect PC/Smartphone to the same network where the REACT has been provisioned
2. Open the Internet browser
3. Enter IP address of REACT in the address line of the browser. If the IP address is not known it can be seen on the REACT display entering in WiFi-logger → Information → IP Address.
4. Access as «administrator»
5. Click on hamburger icon [1], logger [2]



6. Enable «ABB free@home» protocol [3]
7. Insert *User name* and *password* [4] and [5]. Credentials must be the same for the *Free@Home System Access Point* log in.



8. «System Access Point» and «IP address» fields are required only if there are two or more Free@home System access points in the same network. Leave them blank if only one *System Access Point* is present in the network.

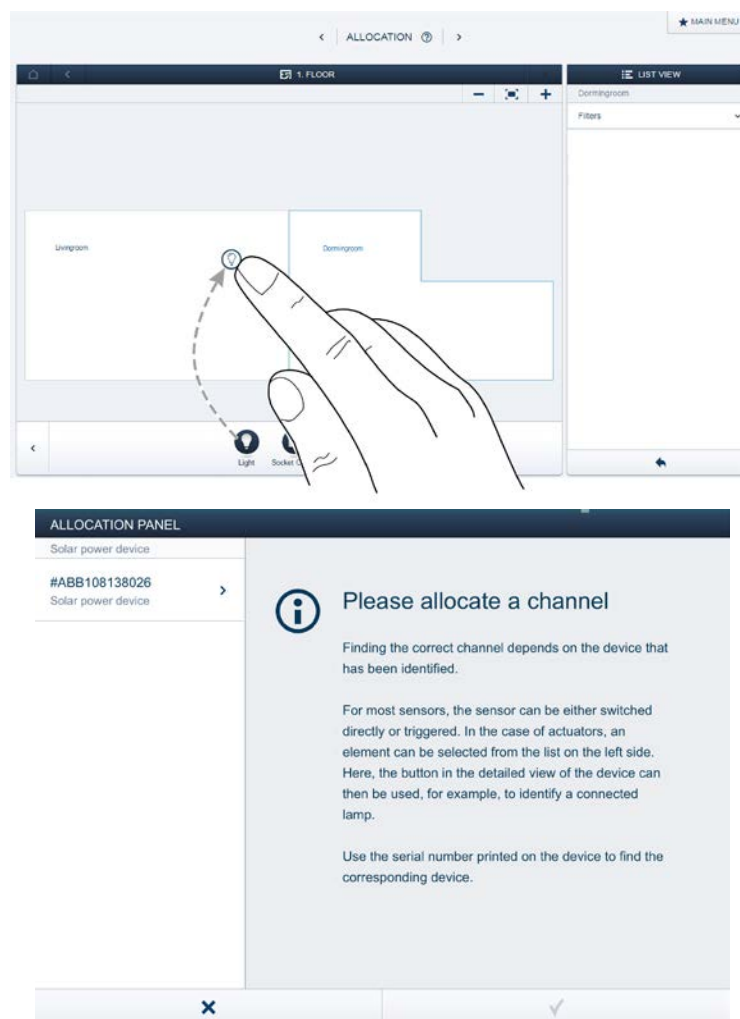
ABB Free@Home setup

Establish the connection to user interface of the System Access Point (see *ABB-free@home*® System Manual)

Allocating devices to rooms

In this step the devices connected to the system must be identified. For this they are allocated to a room according to their function and are given a descriptive name. The application that is actually available depends on the devices connected to the system. In the "Add device" bar only the devices/functions that are connected with the system are displayed. They remain in the bar until they are shifted onto the floor plan. This means that the list keeps getting shorter as the devices are being positioned.

- In the "Add devices" bar, select the desired application and pull it via drag and drop onto the floor plan.
 - A pop-up window opens which lists all the devices that are connected to the bus and suitable for the selected application.

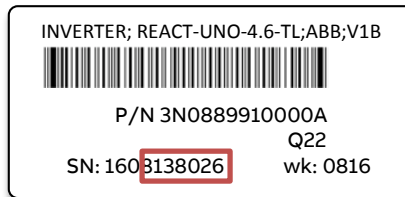


Identification

If after positioning on floor plan there are still several possible devices in the pop-up window for selection, the device which switches the desired function must be selected now.

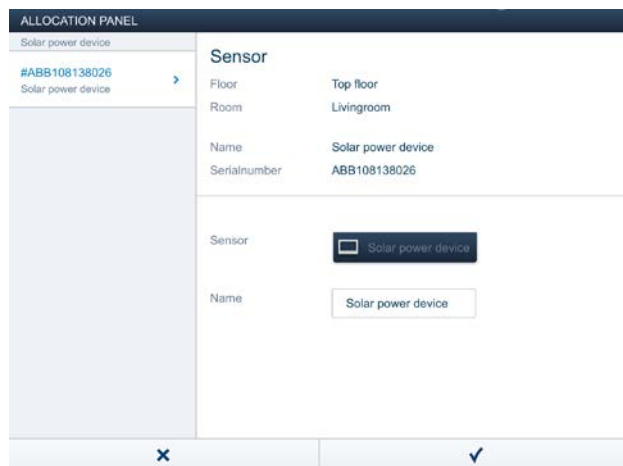
Identification via serial number

The device you are searching for can be found comparing the six Y digits of #ABBxxxYYYYYY (available on the device configuration – List view) with the six Y digit of SN aabbYYYYYY located on the label of the inverter unit (see image below).



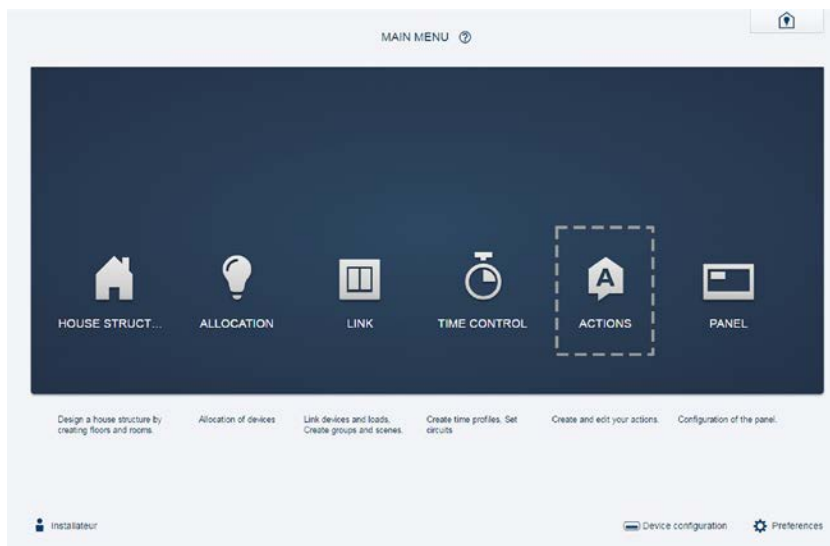
Specifying a name

- When the device has been found, enter a name that is easy to understand and under which the application is to be displayed later (e.g. "REACT").
- Press the tick at the bottom right to take over the entries.

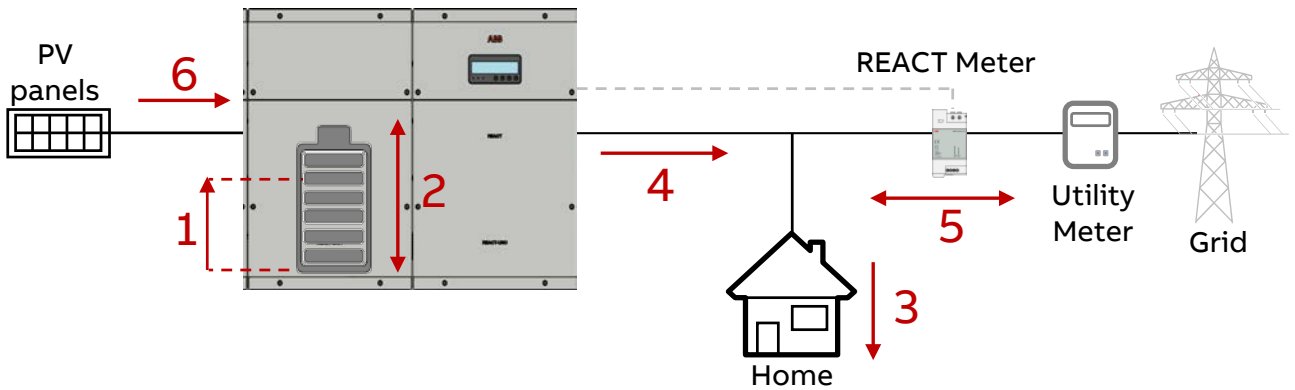








Actions

In menu "Actions" you can configure simple "When-then" relationships.



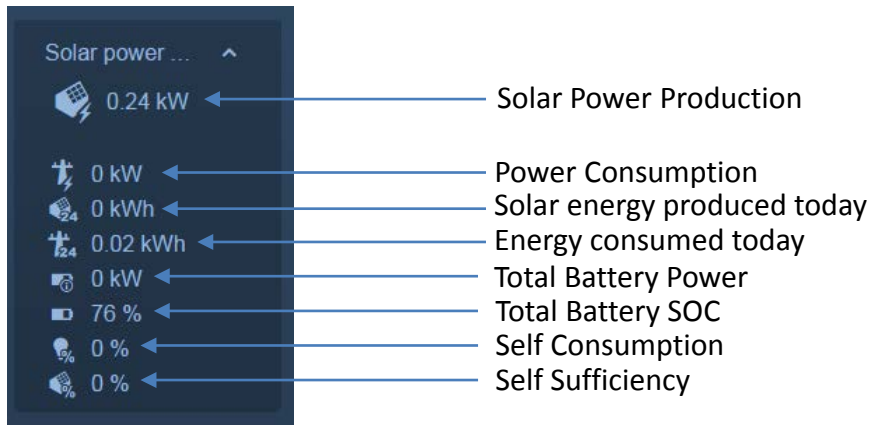
Event in case of REACT presence



Signal	Unit	Description
1 Battery level 	%	Battery state of charge
2 Battery power 	kW	>0 charging phase; <0 discharging phase
3 Home power consumption 	kW	>0; right now power consumption (both from grid and PV)
4 Inverter output power 	kW	Right now PV inverter output power
5 Power to grid 	kW	>0 power injection into the grid; <0 Power absorbed from the grid
6 Solar power production 	kW	Right now PV inverter power on the DC side

PV plant monitoring via display

It can be possible to monitor the most important energy flows in the house via *free@home* touch and/or *free@home* mobile app.



Troubleshooting

If the solar inverter is not visible on the *free@home* network please check the connection state on the inverter webserver UI page (see ABB REACT setup paragraph).

Connection state

Check

Connection State

Connection Failed: no ABB-free@home system access point discovered

If both systems (REACT and System access point) have been provisioned in the same network, router should support bonjour service for self-discovering process. If this is not the case, insert system access point name or system access point IP address in the REACT logger setting page.

Connection State

Connection Failed: ABB-free@home system access point username and/or password

If user name and/or password set on the REACT webserver are correct.