AJAX System integration



AJAX Security system integration with FIBARO Home Center 3 series and NICE Yubii Home hubs

Version 2.0.0 (2025.06.30)

Integration scope

- Information about the system arming status for each group/zone and for night mode. Possibility to define any rules and reactions at FIBARO/Yubii side to changes in these states.
- Possibility to arm or disarm any group/zone, and grouped arming and disarming (similarly as using the SpaceControl remote control)
- Information about an alarm occurrence for a given group/zone
- Support for the AJAX operation with groups/zones and without groups (with one main zone and the Night zone)
- Information about the current status of alarm sensors (bistable and wired: including door/window sensors, sensors connected to Transmitter modules) with the possibility to define any reaction to a change in the status of each sensor
- Information about the violation of each alarm sensors, in particular sending critical alarms to mobile devices non-armable sensors (smoke, flooding, assault, etc.) and armable sensors (motion sensors, doors/windows etc.)
- Control and reading of states from switches, sockets, relay modules etc., with support for energy consumption (for outlets, wallplugs etc.)
- Information about the battery status of each AJAX device and for the hub
- Information about AJAX hub connection status (online/offline)
- Thermometers in the FIBARO/Yubii system for all AJAX devices reporting temperature
- Possibility to trigger actions and scenes on the FIBARO/Yubii side in response to the use of certain buttons or inputs without triggering the alarm state.

Compatibility

- FIBARO Home Center 3
- FIBARO Home Center 3 Lite
- Nice Yubii Home (PRO) and compatible
- FIBARO/Nice firmware version: 5.150, or newer
- AJAX hub with user admin access rights

Supported AJAX Devices (wired Fibra, wireless Jeweller, etc.)

- Motion sensors MotionProtect and VideoProtect series
- Combined motion and glass break sensors CombiProtect
- Opening sensors DoorProtect series, with support for connected external sensor
- Glass break sensors GlassProtect, with support for connected external sensor
- Flood sensors LeakProtect
- Smoke and gas sensors FireProtect series
- Alarm buttons and remotes

- Air condition sensor LifeQuality
- Sirens
- Water valve Water Stop
- Wired inputs Transmitter and MultiTransmitter modules
- Relay and MultiRelay modules
- MultiTransmitter IO (4x4) input-output module
- LightSwitch and LightSwitch Dimmer switches
- Socket outlets and Wallplugs

The QuickApp

Integration works via the AJAX cloud. QuickApp does not communicate with the AJAX hub directly (e.g. via the local network), so HC/Yubii unit does not have to be in the same network or location as the alarm system. In particular - it is possible to connect to AJAX system installed in summer houses, apartments for rent, on boats, etc.

The QuickApp supports English, German, Italian and Polish languages.

Installation

The QuickApp is delivered as an encrypted *fqax* file dedicated for single FIBARO Home Center or Nice Yubii hub with serial number provided by the buyer.

Fqax file shall be imported to your Home Center / Yubii Home hub at administration panel (accessed via Web browser): menu *Settings*, section *Devices*, button *Add*, tab *Other Device*, command *Upload File*.

NOTE: At the time of installation, the FIBARO HomeCenter or Yubii Home hub must be registered on the owner's FibaroID account and must be connected to the Internet (this is a general requirement for the installation of encrypted QuickApps)

Configuration

After installing the QuickApp, use Variables tab, to provide the login for the AJAX system (**ajaxUser**, which is usually an email address), and the password at **ajaxPassword** entry.

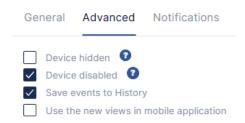
If more than one AJAX hubs are registered to the user account, you must provide the ID of the hub at **ajaxHubID**. That ID can be found in the AJAX mobile application or the AJAX Desktop program, in the hub properties (it is 8-character code containing characters and digits, usually starting with "00").

If you want to monitor more AJAX hubs at one FIBARO/Nice system, you must install a separate instance of QuickApp for each of them.

General Advanced	Notifications	Variables Edit & Preview
Variables		
VARIABLE	TYPE	VALUE
ajaxUser	String variable	
ajaxPassword	Secret variable	******
ajaxHubID	String variable	

Deactivation and activation

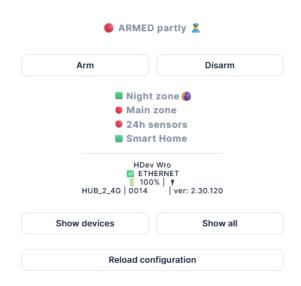
If for some reason you need to deactivate the QuickApp, you can set the **Device disabled** flag on the Advanced tab. Switching it back on will reactivate the QuickApp. When QuickApp is deactivated, it does not communicate with AJAX system and mark all its devices as dead.



User interface

The QuickApp user interface shows information about the operation state (startup, connection status, arming status, etc.).

When AJAX system is configured in group mode, the **Arm** and **Disarm** buttons operate on groups that have the **Arm if system armed** and **Disarm if system disarmed** options set to **Yes**. These buttons work in the same way as the arm/disarm buttons on the *SpaceControl* remote.



The list of alarm zones/groups displays information about the arming status. **Show Devices** and **Show All** buttons display a list of devices (respectively: alarm devices and all devices) assigned to groups. **Reload Configuration** button allows to synchronize the QuickApp configuration with the AJAX system configuration (description in next chapters)

Device availability

In case of no connection with the AJAX hub (when AJAX server is connected , but the hub is offline switched off or disconnected from network), QuickApp and all its child devices are marked as "dead device". For QuickApp, you can set notifications about unavailability on the Notifications tab.

General Advanced Notifications	Variables Edit & Preview		
Notify me about:			
STATUS	INTERVAL	CHANNEL	USERS
✓ Unavailable	Once per hour	Notification, Push 🗸	admin 🗸

If any of the AJAX devices is switched off (battery removed, switched off with the on/off switch, etc.) and is offline, the corresponding device in HC/Yubii is marked as "dead device".

Reload configuration

The **Reload configuration** button synchronizes devices on the HC/Yubii side with devices in the AJAX system. Changes made to the configuration on the AJAX side do not cause immediate changes on the HC/Yubii side, you must use the reload button. During synchronization QuickApp performs the following actions:

- adds new devices that are added at the AJAX side
- removes devices from HC/Yubii that have been removed from at AJAX side

- if the type of device has changed on the AJAX side, e.g. the input has changed its type of event from **Fire** to **Leakage**, then on the HC/Yubii side the sensor is removed and added again with the updated type and icon.

- adds and removes groups (alarm zones), updates their names

NOTE: activating or deactivating an external input in the DoorProtect sensor, activating/deactivating an input in the MultiTransmitter, etc. are considered as adding or removing a device on the AJAX side. Some AJAX devices are represented in HC/Yubii as multiple devices, depending on the configuration. Details are described below in the table with the list of supported devices.

Alarm zones (AJAX groups) and alarms

AJAX group mode



At the AJAX hub, you can define any number of groups and then assign alarm sensors and devices to them. Each group can be armed independently of the others. These groups are mapped to alarm

zones at HC/Yubii side. The arming status of the zone is synchronized with the AJAX group status. And of course, arming and disarming is possible on the HC/Yubii side.

In addition to the zones for AJAX groups, an additional **Night Zone** is created, for the AJAX Night mode.

The zone in HC/Yubii reports an alarm when it is armed and one of the sensors assigned to that zone is breached.

For the **Night Zone**, the alarm is triggered when Night Mode is active, and any of devices with **Arm in Night Mode** setting is breached.

Non-group mode

Two alarm zones are created at HC/Yubii side. The main one, for full arming of the whole system, and **Night Zone** the Night mode. The arming status of these zones is synchronized with the arming status at the AJAX side. Arming and disarming is possible also from the HC/Yubii side.

In non-group mode, it is not possible to arm both zones at the same time. The AJAX system has 3 arming states: Disarmed, Armed Night, Armed All.

The main zone reports an alarm when the system is armed and one of the sensors is breached.

For the **Night Zone**, the alarm is triggered when Night Mode is active, and any of devices with **Arm in Night Mode** setting is breached.

Other alarms

Flood, fire and similar alarms, which should be triggered regardless of the system arming, are not linked to alarm zones at HC/Yubii side. Appropriate sensors devices added on the HC/Yubii side generate critical notifications and alarm states themselves - it can used to trigger some scenes.

Panic alarms triggered from buttons and remote controls are treated similarly.

Supported devices

Note 1: thermometers built into all AJAX devices are visible in HC/Yubii as separated temperature sensors (also when the main device is not directly supported at HC/Yubii side, such as f.ex. keypad).

Note 2: all battery-powered AJAX devices show their battery status in HC/Yubii devices

	AJAX devices	Devices and actions at HC/Yubii side
AJAX	AJAX Hub	Binary Switch (PanicButton) to trigger Panic alarm at AJAX side Hub PB: Binary Sensor for states of batteries, with information about fault or low level of internal or external battery
		Other hubs : multi sensor device with battery SOC (0-100%) and fault information

	MotionProtect (different models)	Binary Sensor – sensor is triggered at HC/Yubii side only when alarm is triggered at AJAX side – so when group with sensor is armed or when sensor is set to Always Active .
	MotionCam (different models)	Binary Sensor – sensor is triggered at HC/Yubii side only when alarm is triggered at AJAX side – so when group with sensor is armed or when sensor is set to Always Active .
	DoorProtect (different models)	Binary Sensor - bistable sensor that always reports its state, regardless arming the system. But short breaches (under 5sec) can be missed by HC/Yubii when system and sensor is not armed, Tilt (in S series devices) and shock alarms are reported only in armed mode, as a breaching of the main sensor.
		Second Binary Sensor when External contact is activated. Reports its state, regardless arming the system. But short breaches (under 5sec) can be missed by HC/Yubii when system and sensor is not armed
-		The external contact works in NC configuration only.
-	GlassProtect (different models)	Binary Sensor – sensor is triggered at HC/Yubii side only when AJAX group with sensor is armed or when sensor is set to Always Active .
		Second Binary Sensor when External contact is activated. Reports its state, regardless arming the system. But short breaches (under 5sec) can be missed by HC/Yubii when system and sensor is not armed
		The external contact works in NC configuration only.
-	CombiProtect (different models)	Motion: Binary Sensor (optional, when Motion detector option is ON) – sensor is triggered at HC/Yubii side only when alarm is triggered at AJAX side – so when group with sensor is armed or when sensor is set to Always active .
zice		Glass sensor: Binary Sensor (optional, when Glass break detector option is ON) - sensor is triggered only when alarm is triggered at AJAX side – so when group with sensor is armed or when sensor is set to Always Active .
XALA	LeaksProtect Jeweller	Binary Sensor - always reports its state, regardless arming the system.
	FireProtect (different models)	Binary Sensor. Depending on the model, it signals all alarms toghether (smoke, steam, gas, CO, high temperature, temperature increase, etc.)

XALA	LifeQuality Jeweller	Multi sensor: CO2 concentration Multi sensor: temperature Multi sensor: humidity
	Siren (different models)	Binary Switch, to trigger a test signal (the siren goes on for 3 seconds). Note: the switch status does not change if the siren has been activated at AJAX side (current siren activity cannot be read)
0	SpaceControl Jeweller SpaceControlS	Binary Sensor – only when Panic option is enabled. Sensor is triggered by activating Panic alarm by the remote.
	Superior Button Jeweller Button Jeweller	Binary Sensor triggered when alarm is activated by the button For operation mode Panic and type of event set to Custom the button does not start loud alarm and allow to catch the usage at HC/Yubii side, ex. to trigger any scene Other events supported (with loud alarm at AJAX side): Intrusion , Fire, Auxiliary alarm, Panic, Gas, Leakage .
		Malfunction event type is not supported
	DoubleButton Jeweller	Binary Sensor triggered when the button is used and triggers alarm at AJAX side
	ManualCallPoint Jeweller (different colors)	Binary Sensor triggered when the button is used and triggers alarm at AJAX side Supported events: Fire, Auxiliary alarm, Panic, Gas, Leakage . For Malfunction event alarm sensor will get triggered only when breaching will last at least 5 seconds.
XAX	Relay	Binary Switch. Only Relay output mode is supported. Supports Pulse and Bistable modes, regardless of arming. When device input is used, short pulse or short switching in bistable mode (less than 5 sec) can be missed and not detected at HC/Yubii side.
	Superior MultiRelay Fibra	4x Binary Switch. Supports Pulse and Bistable modes, state is reported regardless of arming. For short pulse modes and short bistable activations (less than 5 sec), when action is initiated from AJAX side, the HC/Yubii may miss it.

	LightSwitch (2-gang) LightSwitch (2-gang, 2-way)	2x Binary Switch
	LightSwitch (1-gang) LightSwitch (2-way) LightSwitch Crossover	Binary Switch
1	LightSwitchDimmer	Multilevel switch with dimmer option (ON, OFF, set value 0-100%
	Water Stop Jeweller	Binary Switch
	Socket SocketOutlet (different models)	Binary Switch with power consumption reporting
	Transmitter	Binary Sensor. In Bistable mode it reports status regardless of arming, but without arming, short activation (for less than 5 seconds) may be missed by HC/Yubii.
		In Pulse mode, it is triggered <u>only</u> when the hub/group is armed or when device is set to Always active .
		NOTE: When Type of Event is set to Custom , device does not trigger the siren and does not put the AJAX hub into an alarm state. So for Always active mode all breaching are reported at HC/Yubii
	MultiTransmitter	18 wired inputs
-	Jeweller	Binary Sensor for each activated input.
		Supported settings: Input type: Sensor, Sensor mode: Detect alarms, all work modes
<i>p</i> .		Both for Bistable and Pulse mode sensor reports its state regardless arming state. But without arming, short activation (for less than 5 seconds) may be missed by HC/Yubii.
		NOTE: When Type of Event is set to Custom and Alert With Siren is OFF for alarms, device does not activate sirens and does not put the AJAX hub into an alarm state. Therefore, you can set Always Active for such type of event so as not to miss any activation.

Superior MultiTransmitter IO (4x4) Fibra	Inputs (4x) Binary Sensor for each activated input. Supports sensor mode Detect alarms. For Bistable operating mode sensor reports its state regardless arming state. But without arming, short activation (for less than 5 seconds) may be missed by HC/Yubii. For Pulse operating mode, it is triggered <u>only</u> when the hub/group is armed or when device is set to Always active . When Type of Event is set to Custom and Alert With Siren is OFF for alarms, device does not activate sirens and does not put the AJAX hub into an alarm state. Therefore, you can set Always Active for such type of event so as not to miss any activation. Outputs (2x Relay, 2x Logical output): Binary Sensor when output mode set to Blocking Element (so output works in read-only mode, cannot be changed from HC/Yubii side) Binary Switch for other modes (Electric Lock, Relay)
Keypads	[not supported]
DoorBell	[no supported, no possibility]
IndoorCam IPTV Cams	[no supported, no possibility]
Superior SeismoProtect G3 Fibra	[not supported]
Speakerphone	[not supported]