

SPC Wave Integrator Manual

Introduction

SPC Wave integrator is a software that connects Vanderbilt SPC intrusion panels with Hanwha Wisenet Wave VMS.

Versions exists for Windows, Linux x64 and Linux ARM.

Installation

Windows installation is done by downloading the installer from the [ArrivalNet](#) site in the downloads section. Installation is very straightforward, just follow the messages on screen. Installation from Linux can be done with opening a terminal window and execute this command:

Install command for x64 server:

```
sudo apt install -y curl && curl -s https://www.arrivalnet.se/linux/install_spcwaveintegrator.sh | sudo bash
```

Install command for ARM64 server:

```
sudo apt install -y curl && curl -s https://www.arrivalnet.se/linux/install_spcwaveintegrator_arm.sh | sudo bash
```

We recommend using Ubuntu 22.04 or later but any Debian based distribution should work.

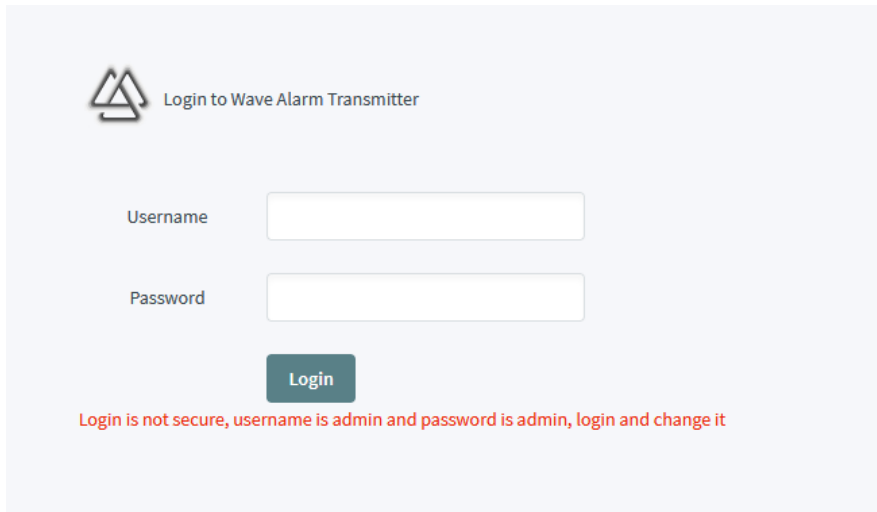
After the installation is done all configuration is done from a web browser on the default port 8010. <http://localhost:8010>



Configuration

The configuration is done with the config web interface. Here is an explanation for the different settings.

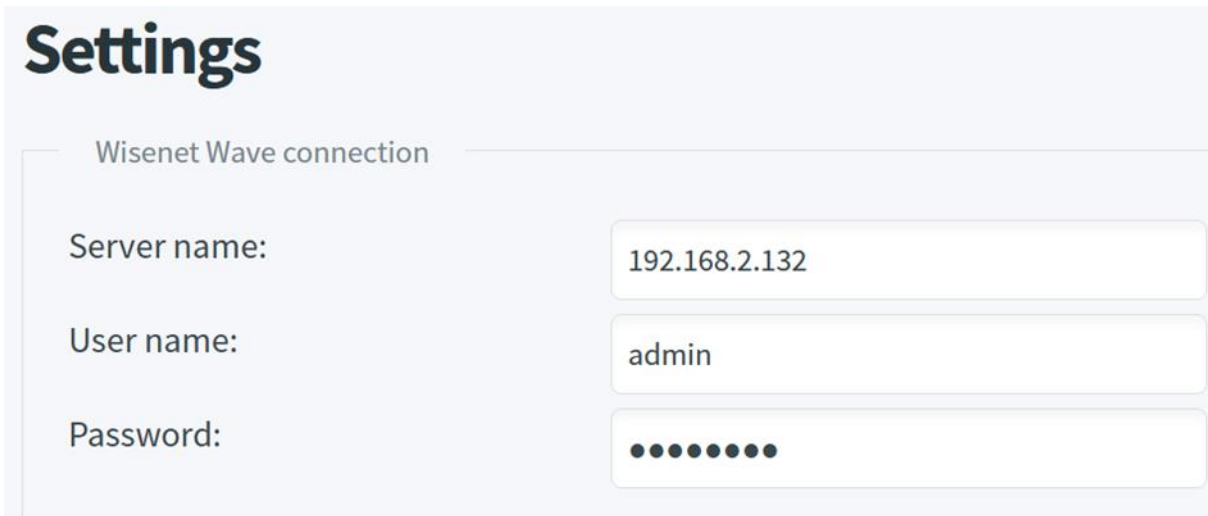
At first login the default password is admin and username are also admin, it is highly recommended to change the password after logging in.



The screenshot shows a login page for the Wave Alarm Transmitter. At the top left is a logo consisting of three overlapping triangles. To the right of the logo is the text "Login to Wave Alarm Transmitter". Below this, there are two input fields: "Username" and "Password". The "Username" field is empty, and the "Password" field is also empty. Below the input fields is a dark green button with the text "Login". At the bottom of the form, there is a red warning message: "Login is not secure, username is admin and password is admin, login and change it".

After logging in you will be taken to the general settings:

Wave Settings



The screenshot shows a web interface titled "Settings". Under the heading "Wisenet Wave connection", there are three input fields:

- Server name: 192.168.2.132
- User name: admin
- Password: (represented by 10 dots)

In the first section of the general settings give the IP or Wave cloud ID, username and password. You can see the status of the connection once you have entered the correct information and saved it.

SPC connection settings


Decryption key will be generated for you, copy this key and save it in the SPC panel, if you already have a decryption key from the panel you can paste that key in here instead.

RCT ID has to be the same in the panel as it is here.

Panel user and password is default FlexC/FlexC. If you change it in the panel you also need to change it here.

Panel port is by default 52000 same as the default settings in the SPC panel, this is the port the panel will use to connect to this software, you need to make sure it is opened in the firewall of the server where this software is installed.

After you save the settings and have done the corresponding settings in the SPC panel, the panel will try to connect to the plugin and you can see the status of the connection.

SPC connection	
Decryption key	<input type="text" value="0908D9073B3A691F927A6BA3F8C6FCA2B0€"/> 
RCT ID	<input type="text" value="9999"/>
Panel User	<input type="text" value="FlexC"/>
Panel Password	<input type="password" value="•••••"/>
Panel Port	<input type="text" value="52000"/>




Settings

Password: This is the password you use to login to the configuration web-interface, please make sure to change it to a secure password.

Web port: This is the port the web-interface is using, and this port is also used when creating rules in Wisenet Wave. In most cases you never have to change this port, only in rare conditions if another service in the same server is using this port.

Hardware ID: This is a unique code for your system and to get a license if you don't have an internet connection you need to send this with the customer license document you receive from your distributor after purchase to get the license key.

License: This is the license key you get after purchasing one from the distributor.

General settings	
Hardware ID	<input type="text" value="AB2D088368EA4220A38772FD0FF62A76582"/> 
License key	<input type="text" value="OPAEd7s1x0pPKLJZ1ILObtAwoimuu9ml1C-"/> License is valid
App Port	<input type="text" value="8010"/> 
App Password	<input type="password" value="•••••"/> 

Rules creation

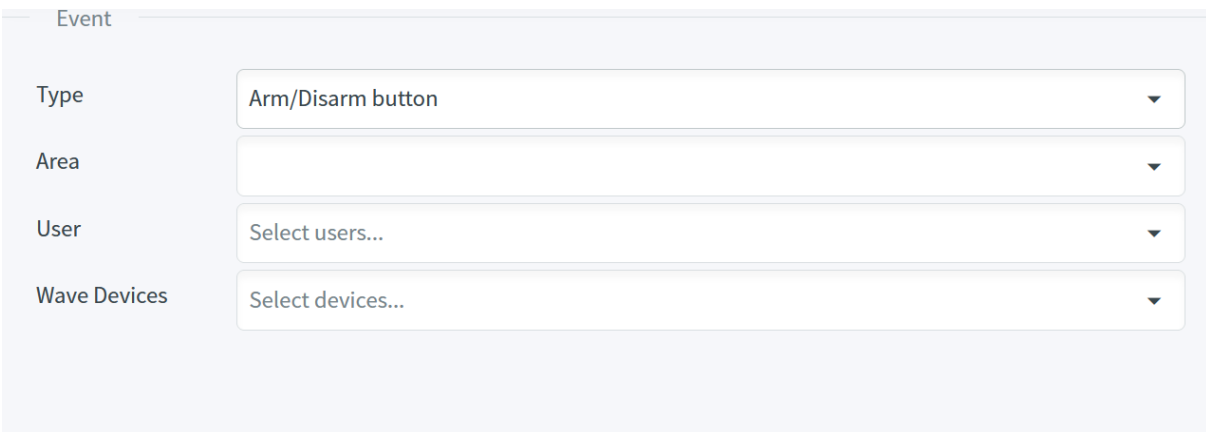
A rule consists of two parts, event and action. In the event part you can choose from the Type list what you want to trigger the rule.



The screenshot shows a configuration window titled "Event". It contains two dropdown menus. The first is labeled "Type" and has "Area in Alarm" selected. The second is labeled "Area" and has a list of options: "Area in Alarm", "Area armed", "Area part armed 1", "Area part armed 2", "Area arming", and "Area disarmed". The "Area in Alarm" option is currently selected and highlighted in a dark teal color.

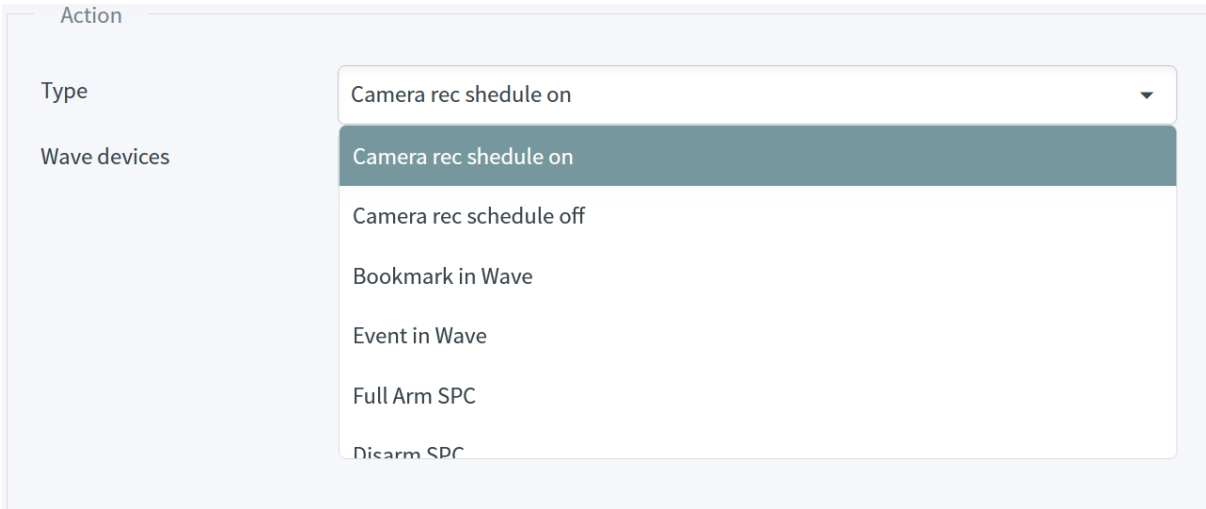
You can select from various statuses coming from the SPC panel, depending on the type you select you will get some options. For example Area in Alarm also requires you to select what area you like to get an alarm message from.

The special event Arm/Disarm button requires you to select some options, after this rule is saved you will get a toggle button overlay on the video tile of the selected camera. When you press the button it will arm or disarm the area in the SPC panel



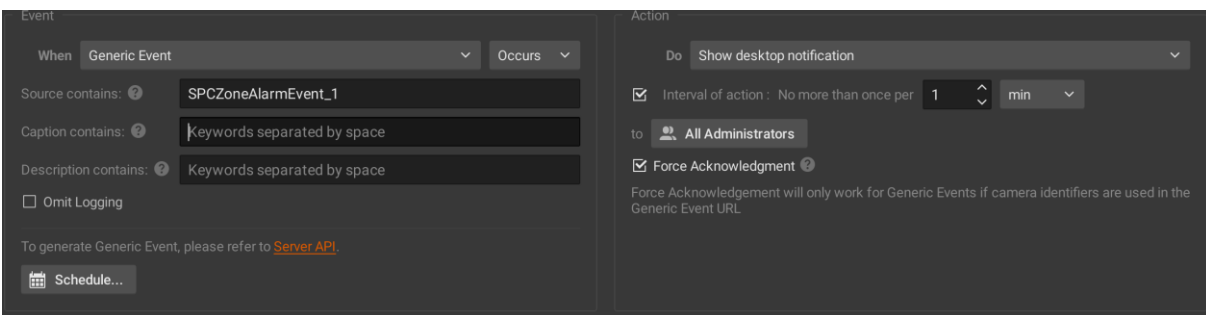
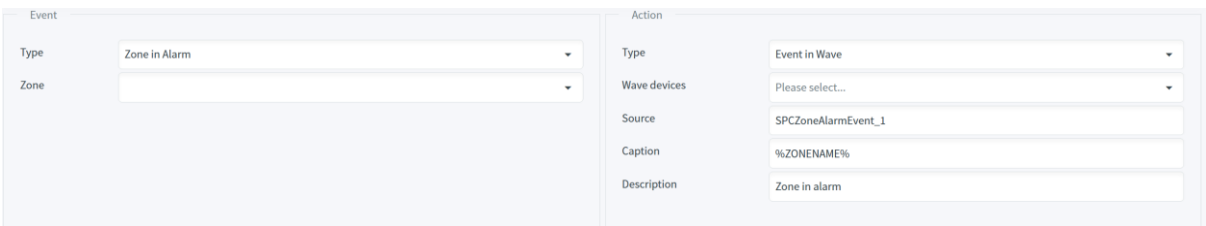
The screenshot shows the "Event" configuration panel with "Arm/Disarm button" selected in the "Type" dropdown. Below it are four more dropdown menus: "Area" (empty), "User" (with "Select users..." text), and "Wave Devices" (with "Select devices..." text). Each dropdown menu has a small downward arrow on its right side.

The action part is similar to the event part in that you select an action and then an option to that action.



For example Bookmark in Wave requires you to also give some details of what information you like to have in the bookmark.

The Event in Wave action can also be configured to reset the panel from Wisenet Wave if the matching generic event has the "Force Acknowledgment" parameter enabled. For example, the following configuration will trigger a notification in the Wave client that must be acknowledged by a user. Once it has been acknowledged and a comment has been entered, the alarm in the panel will be reset. To ensure this works correctly, the time on the client acknowledging the alarm must be synchronized with the server time.



Many texts, for example a bookmark caption, can also have the following special texts:

- %AREANAME%**
- %ZONENAME%**
- %MAPPINGGATENAME%**

Having that in a rule text will when the action is created be replaced with the name of the Area, Zone or Mapping Gate that was used to trigger the rule.

For example:

Action	
Type	Bookmark in Wave
Wave devices	Please select...
Source	%ZONENAME%
Description	Zone in alarm
Tag	%ZONENAME%

Setting a bookmark action like this will have the Zone triggering the alarm in the Source and Tag of that bookmark, this means you don't need to create one rule for every Zone to have the specific zone name in the bookmark.

When mapping gates are used to trigger an event be aware that you have to enable mapping gate reporting in the SPC panel:

Hardware System Inputs Outputs Areas Calendars Change own PIN Advanced
Cause & Effect Verification License
Cause & Effect Configuration Triggers **Mapping Gates** Virtual Zones Cause & Effect List

Mapping Gate - List

Gate	Description	Local	Report	Quick Key
1	MG 1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None v
2	Test MG	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None v

Save **Add**



Custom commands from Wave

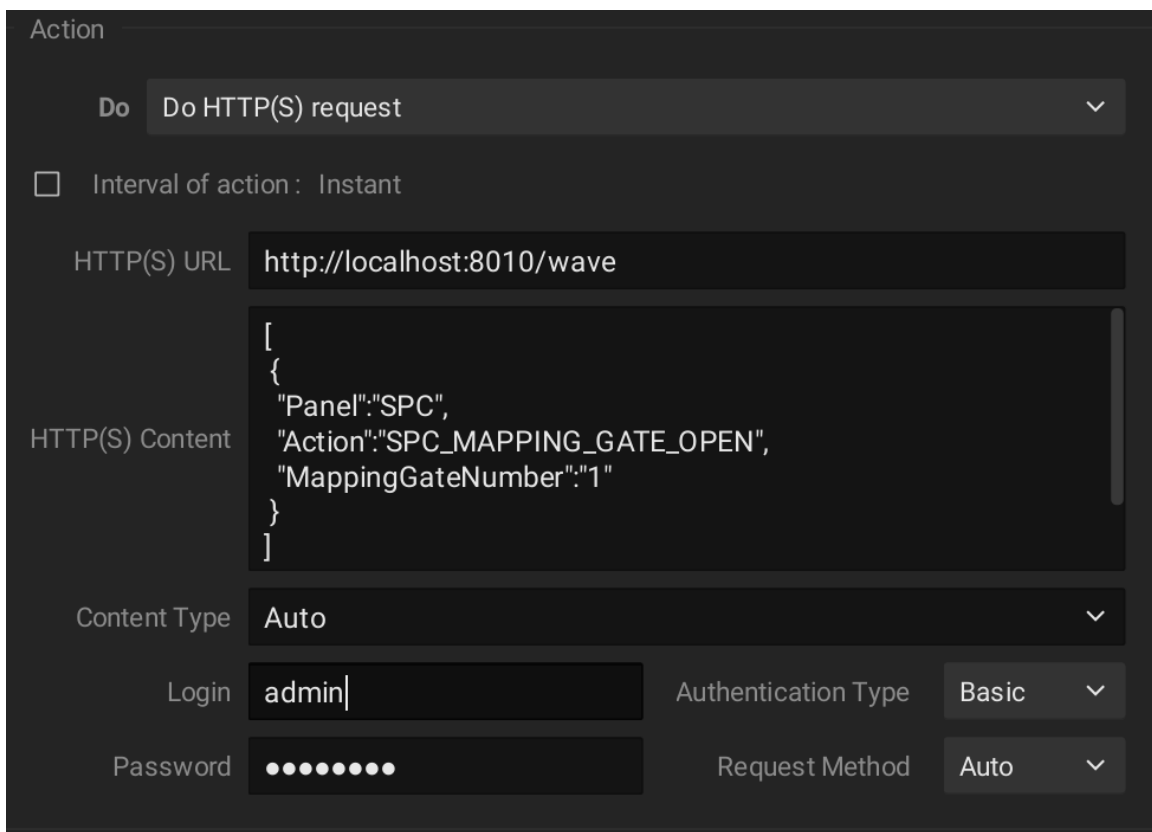
If you want to control the SPC panel from any event in Wave, for example a video analytic event from a camera to set a Mapping gate open, you need to create a special rule in Wave.

First create a rule in Wave with the event you want. As an action for that rule select "Do http command".

Set the HTTP URL to: **http://<Wave ServerIP>:8010/wave** (<WaveServerIP> can be localhost if the SPCWaveIntegrator is installed on the wave server.

HTTP Content should look something like this:

```
[
  {
    "Panel":"SPC",
    "Action":"SPC_MAPPING_GATE_OPEN",
    "MappingGateNumber":"1"
  }
]
```



Action

Do Do HTTP(S) request

Interval of action : Instant

HTTP(S) URL http://localhost:8010/wave

HTTP(S) Content

```
[
  {
    "Panel":"SPC",
    "Action":"SPC_MAPPING_GATE_OPEN",
    "MappingGateNumber":"1"
  }
]
```

Content Type Auto

Login admin| Authentication Type Basic

Password Password masked Request Method Auto

Panel should always be SPC

Action can be one of the following:

```
SET_SPC_AREA_OFF
SET_SPC_AREA_ON
RESET_SPC_AREA
SPC_MAPPING_GATE_OPEN
SPC_MAPPING_GATE_CLOSE
```

The additional info about area number or mapping gate number is:

```
AreaNumber
MappingGateNumber
```

And set the corresponding area number or the mapping gate number as the parameter.

Finally set Authentication type to Basic and give the same username and password that you used when adding the Wave server to the plugin settings.

If you want to do more than one action it can be done by separating the command by a comma sign, remember not to add a comma to the last command, see example here:

```
[
  {
    "Panel":"SPC",
    "Action":"SPC_MAPPING_GATE_OPEN",
    "MappingGateNumber":"1"
  },
  {
    "Panel":"SPC",
    "Action":"SPC_MAPPING_GATE_OPEN",
    "MappingGateNumber":"2"
  }
]
```

This will set mapping gate 1 and 2 to open state. The commands will be sent to the SPC panel in the order you create them in the rule.



Backup of settings

All rules in this plugin are created in Wisenet Wave so doing a backup of the settings in Wave also backs up your rules.

We do recommend that you save your license key as it will not be backed up in the Wave database.

Logs

You can find logs on the logs tab in the configuration web interface.

You can also find logs in C:\ProgramData\SpcWaveIntegrator or if you are using Linux the logs will be saved at /var/logs/SpcWaveIntegrator the log will save the last 15000 events.

Licensing

In the configuration tool you can also find the Hardware ID needed to get a license. You can order the license from an authorized reseller found at www.arrivalnet.se

You can activate your license online directly from the web-interface.

If online activation is not possible you need to send the hardware ID with the order to order@arrivalnet.se when it is processed you will get a license code, you need to paste that into the License textbox and press Save.

If the license is valid, you will get a message next to the License textbox under the General settings.

