FireVibes Studio

Configuration software

User manual

Evolving Protection

INTRODUCTION

This is a guide for the configuration and management of FireVibes wireless systems through the **FireVibes Studio** software configuration tool.

Another way to configure FireVibes systems is by acting manually on the keyboard / display interfaces present on the **EWT100**, **IWT100** and **XWT100** network devices.

SYSTEM COMPATIBILITY

Analogue control panels using the Inim Electronics's protocol are generally compatible with **EWT100** modules; nevertheless, check if the control panel you are using for your fire protection system implements the Inim protocol extension commands for FireVibes systems.

EWT100 is fully compatible ONLY with **Previdia** family control panels.
Instead, other Inim Electronics fire control panels, like Smartloop or Smartlight, will provide limited system functionality and less compatibility.

OVERVIEW OF FIREVIBES WIRELESS FIRE ALARM SYSTEMS

In order to let the control panel to detect the radio devices, **EWT100** will generate one virtual serial number for each radio device enrolled .
The virtual serial number will be build on the **EWT100** serial number and FireVibes "Loop Address" (as explained later).

You will obtain the device serial number this way:

1. Convert device loop address in hexadecimal notation.
2. Remove the last 2 digits from the EWT100 serial number.
3. Merge the modified EWT100 serial number with the hexadecimal loop address

The EWT100 will use this virtual serial number to present device on loop.

For example, if EWT100 serial number is "0182AB81" and the device loop address is "45":
1. 45 (dec) => 2D (hex);
2. 0182AB81 => 0182AB
3. The virtual serial number will be 0182AB2D

In this way the control panel will be able to address the radio device with a logical address.

FireVibes systems are always composed by one central node device (a **EWT100** or a **IWT100**), a certain number of field devices (detectors, call points, sounders, etc.) and, if the wireless coverage area needs to be extended, one or more expansion nodes (**XWT100**).

The model of the central node is selected by the installer depending upon the type of the control panel; if the control panel is based on the Inim Electronics's protocol, the **EWT100** model has to be chosen; if the control panel is conventional, the choice must fall on the **IWT100** model.

The wireless communication ranges of the wireless devices are limited, therefore, in order to cover the required protection area of the fire security system, **XWT100** nodes must be added.

Maximum number of network devices	16	1 **EWT100** or **IWT100** 15 **XWT100**s max
Maximum number of **XWT100**s in cascade connection	8	
Maximum number of field device linkable to a single network device	32	
Maximum number of field device linkable to a single system for a system with **EWT100**	128	Please mind that your installation standards may limit the maximum number of fire security devices per single wireless system
Maximum number of field device linkable to a single system for a system with **IWT100**	32	

Table 1 Field devices are assigned and linked to **EWT100**, **IWT100** and **XWT100** network devices.

Purpose of the installation process is to integrate the wireless system to the control panel, whether analogue or conventional.

SOFTWARE INSTALLATION AND RUNNING

1) Double-click on the **FireVibes Studio** installer file.

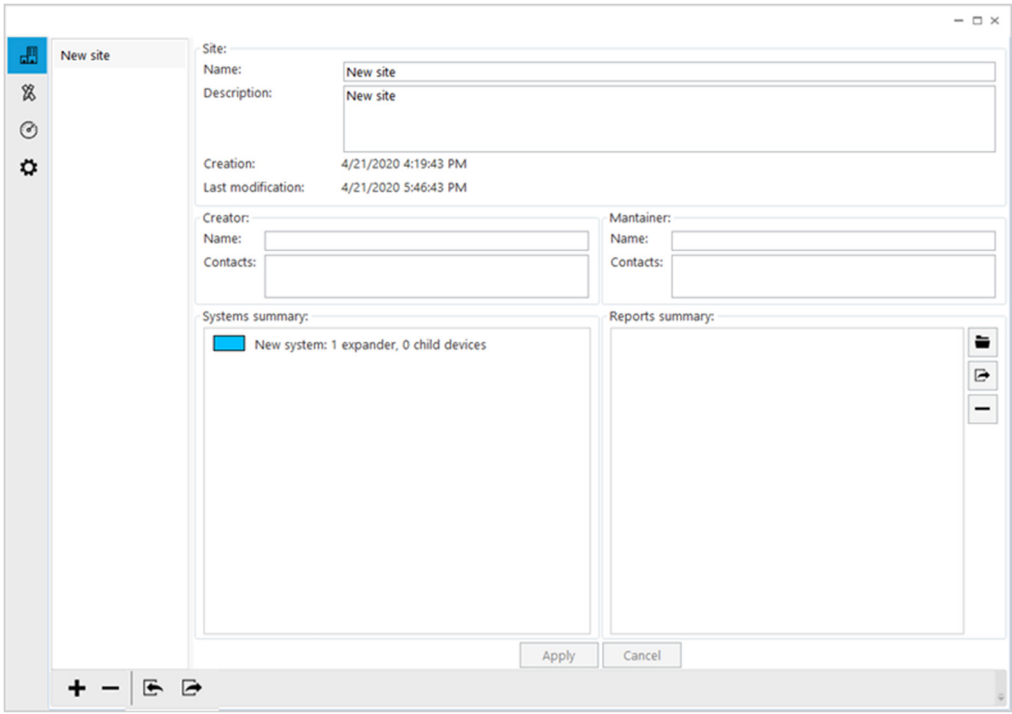
2) Follow the installation instructions.

3) You will be asked if you want to install the USB drivers: accept the license agreement (USB drivers are a third party software) and follow the installation instructions for this supplementary installation. To complete the driver installation, please connect a **EWT100** (or **XWT100** or **IWT100**) to the PC using an USB cable before launching **FireVibes Studio** the first time.

4) Launch the **FireVibes Studio** software.

CREATE THE VIRTUAL INSTALLATION SITE

Following the launch of the software, the main window appears on the screen as follows:



Picture 1

The tab page, indicated by the icon is the first to appear.
This page keeps track of one or more of the virtual installation sites created with the installed **FireVibes Studio** software.

To create a new virtual site:

1) Click the icon.

“New site” is created and visualized in the leftmost panel of the tab page; this is the **site collection panel**. You can create as many sites as required.

The remainder of the page is covered by an area giving specific information about a single site; this is the **site detail area**.

For recalling the details of a single specific installation:

1) Click on one site name in the site collection panel.

Previously inserted information about the selected site will be visualized in the site detail area.

Information fields in the site detail area are explained in table 2.

Information written in the site detail area can be either made permanent or discarded; this choice is made possible by the two buttons at the bottom of the site detail area:

- **Apply**: saves the information you have inserted or modified.
- **Cancel**: cancels the inserted or modified information; you will be asked for confirmation before this operation is actually executed.

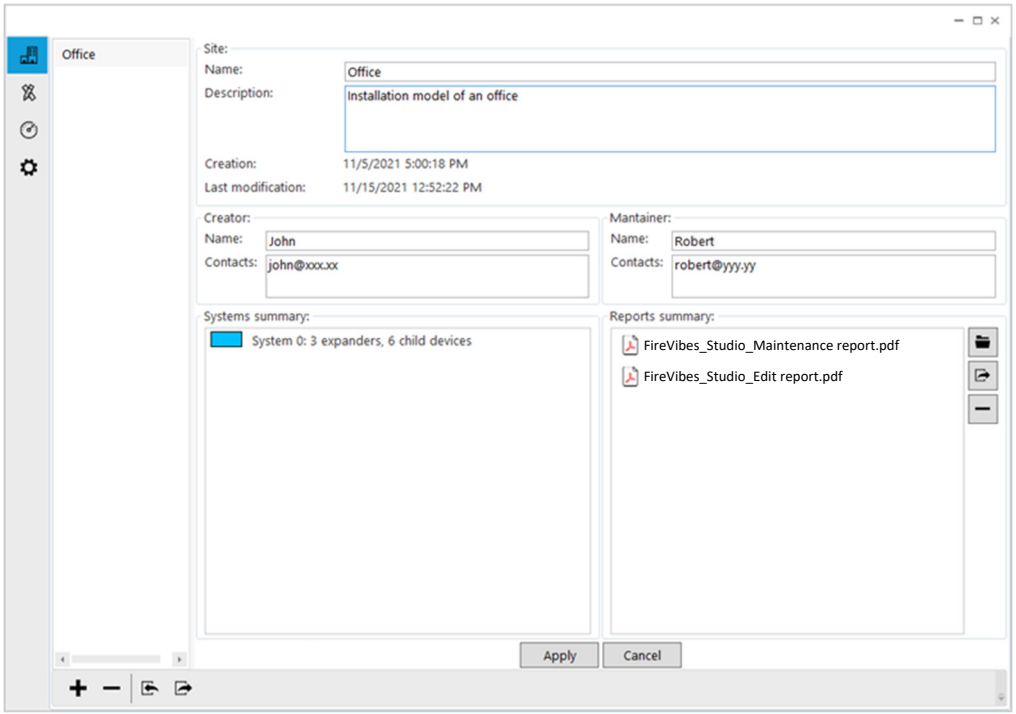
Site detail area data field	Description
Name	The name of the site. This is the same name that is visualized in the site collection panel; by modifying this field, you modify the name of the site visualized in the site collection panel.
Description	A detailed description of the site.
Creation	The date and time of creation of the virtual site. This field cannot be directly edited.
Last modification	The date and time of the last modification of the virtual site. This field cannot be directly edited.
Creator / Name	The name of the person who created the virtual site.
Creator / Contacts	The contact data (e-mail, telephone number...) of the person who created the virtual site.
Maintainer / Name	The name of the person responsible of the maintenance of the installation site.
Maintainer / Contacts	The contact data (e-mail, telephone number...) of the person responsible of the maintenance of the installation site.
Systems summary	The list of the FireVibes systems present in the site. One site can have more than one system.

Table 2

Virtual installation sites can be removed from the site collection panel:

1) Click on the ▬ icon.

You will be asked for confirmation before this action is effectively performed.

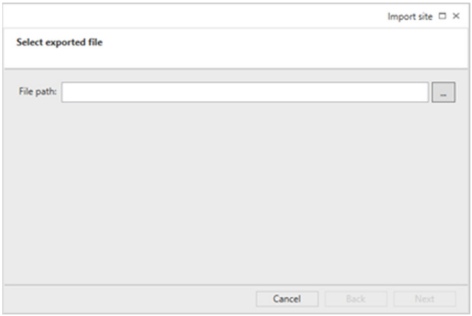


Picture 2

SITE IMPORT

It is possible to import a site previously saved clicking the  icon.

The “Import site” window pops up

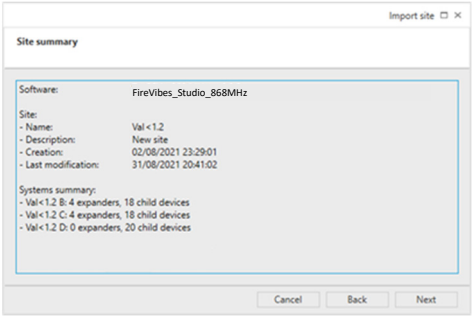


Picture 3

Select the file path clicking the  icon.

- **Next** to continue.
- **Cancel** to give up the site import.

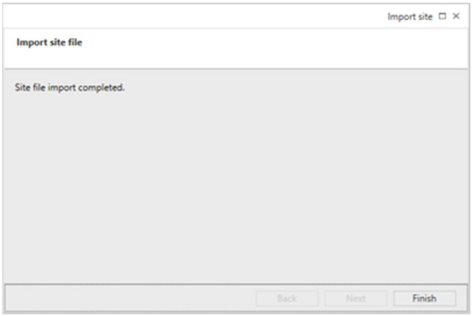
The “Site summary” window pops up



Picture 4

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the site import.

Having clicked “Next” in the previous window, the site will be imported in a few seconds:



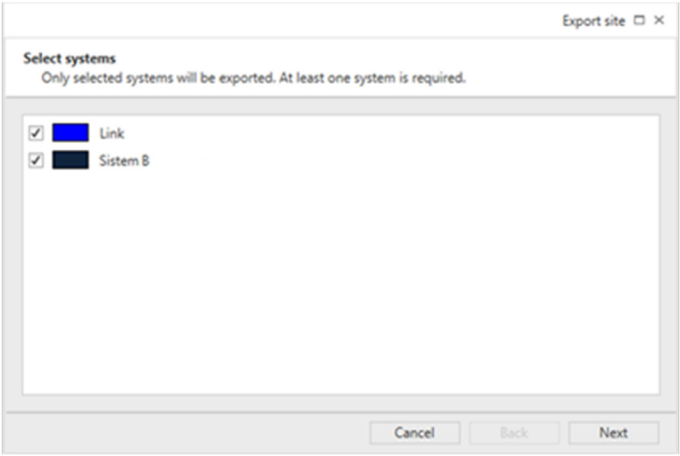
Picture 5

The site imported will appear in the drop down list box in the leftmost panel of the page.

SITE EXPORT

It is possible to export a site selecting it and clicking the icon.

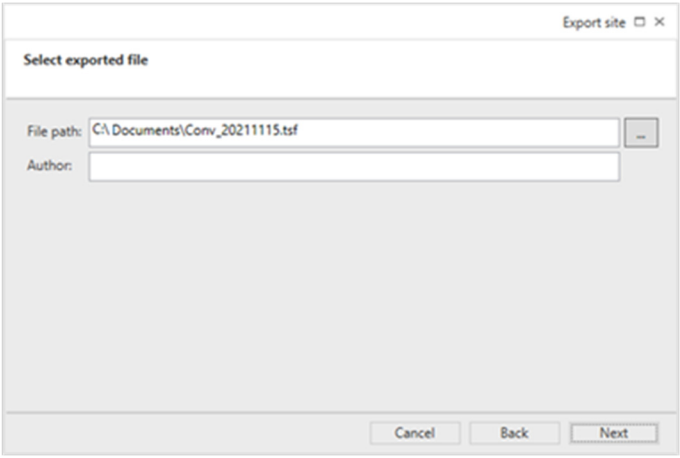
The “Export site” window pops up



Picture 6

Check that the systems that you want to export are selected: only selected systems will be exported.

- **Next** to continue.
- **Cancel** to give up the site export.

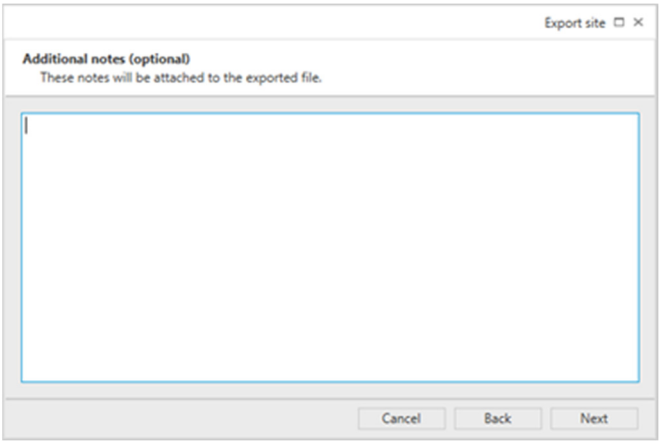


Picture 7

You will be asked to specify where the file, the site exported will be saved on the PC and its name.
You will be also asked the name of the person responsible of the site design (presumably your name).

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the site export.

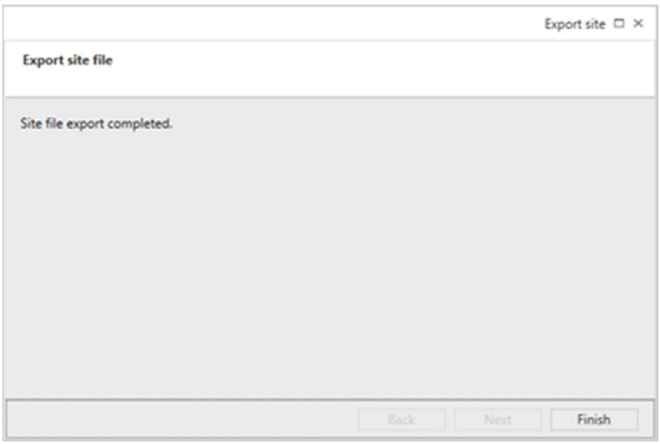
With the “Export site - Additional notes (optional)” window you can add notes you want to append to the exported site:



Picture 8

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the site export.

Having clicked “Next” in the previous window, the site will be exported in a few seconds:



Picture 9

CREATE THE VIRTUAL SYSTEM

The installation site requires one or more systems.

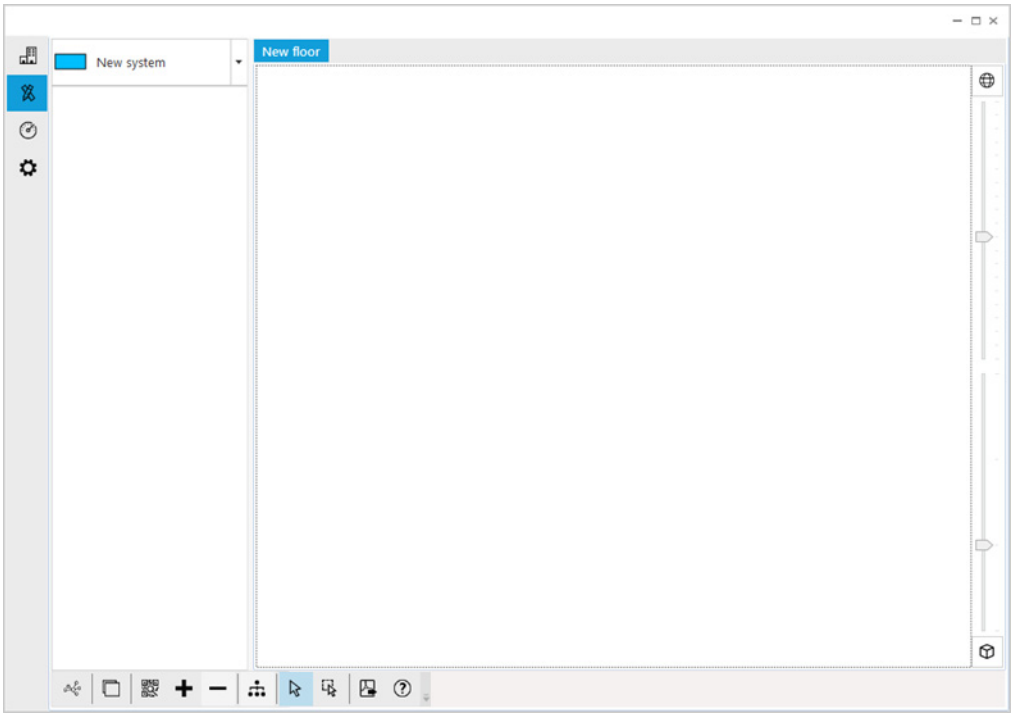
When a site is created, a new system is automatically generated.

The system editor tab window is used to:

- configure the virtual system;
- add new virtual systems;
- program the real system or systems.

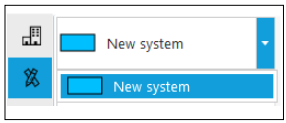
1) Click the tab page tabbed with the icon.

The main window turns on the following page:



Picture 10

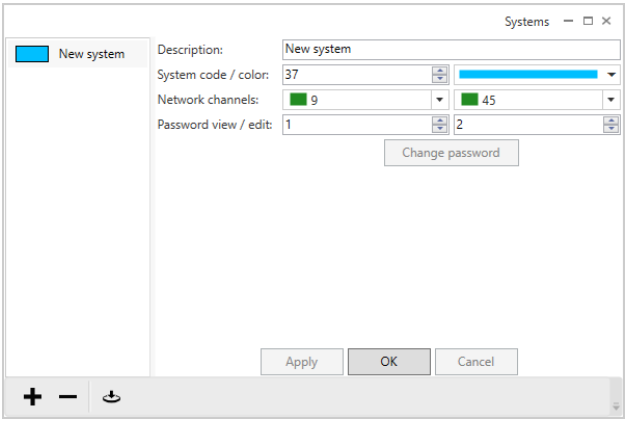
The leftmost panel of the page contains a drop down list box: if you click the arrow at its right, a list with all the systems of the site will appear.



Picture 11

1) Select the system you need to manage, if not already done.
2) To manage / edit the virtual system's properties click on the icon.

The “Systems” window appears.



Picture 12

This window allows you to edit the system’s properties:

System editor property’s field	Description
Description	Edit this field to change the name to the currently selected system.
System code	This code identifies univocally the FireVibes system. Since in a site there can be more than one system, it is mandatory to univocally identify it. Two FireVibes systems will not work if they have the same system code.
System colour	Permits to distinguish one system from another at design time in **FireVibes Studio**.
Network channels	The system’s global wireless channels are selected with these two fields. All wireless channels are combined in default fixed pairs. Since channels are paired, a selection change in one field changes the selection in the other field automatically. In this manual, the channel system is described just before the linking section. A list of the available wireless channels, their intended usage specialization and their standard pairing is given in appendix B.
Password view / edit	Edit these two fields to set a combination of two values protecting your system from unauthorized modification. Each of the two values range from 0 to 9999. Default values are 1 and 2.

Table 3

Different systems within a site must have different system codes.
Two or more systems will not work if they have the same system code.

The “Systems” window permits the following further actions:

Table 4

Icon	Functionality
	Add a new system. A new system is added to the system’s list.
	Remove the selected system. The selected system will be cancelled; you will be asked for confirmation.
	Acquire a system from the connected central node. If you are connected with the computer to a **EWT100** or a **IWT100**, you can import its FireVibes system onto the **FireVibes Studio** software.

If the imported system and a pre-existing system in FireVibes Studio have the same system code, you can either overwrite the existing one in FireVibes Studio or create a new imported instance.

You will be prompted if you want to overwrite or generate a new imported instance.

Be careful not to confuse the two systems.

Properties written in the system’s editing window can be either made permanent or discarded; this choice is made possible by the two buttons at the bottom of the window:

- **Apply**: saves the properties you have inserted or modified.
- **Cancel**: cancels the inserted or modified properties; you will be asked for confirmation before this operation is actually executed.

ADDING NEW DEVICES

To manually add new devices:

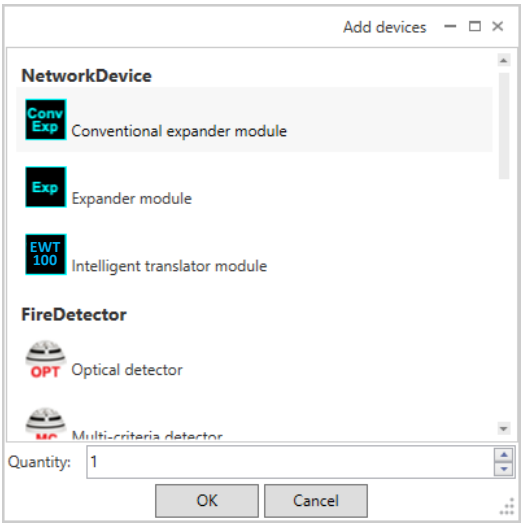
1) Click the tab page tabbed with the icon.

You can:

- add a device manually from a predefined list ;
- add a device through the QR code labelled on each FireVibes product ;
- remove a device .

ADDING NEW DEVICES: MANUAL OPERATION

1) Click the icon; the following list appears:



Picture 13

2) Select the device you want to add.

3) Select the quantity of the selected device type you want to add.

- **OK**: adds to the application the specified quantity of the specified device type.
- **Cancel**: nothing is added to the application and the “Add devices” window is closed.

The virtual devices will be added to the leftmost panel of the screen under the system’s drop down list box (picture 14); we will indicate this panel area as the **warehouse**.

ADDING NEW DEVICES: QR CODE ACHIEVEMENT OPERATION

You can add devices to **FireVibes Studio** by scanning the QR code labelled on every FireVibes device. For this functionality, the personal computer requires a webcam or a barcode reader connected to the PC in keyboard emulation mode.

1) Click the icon; QR code acquisition screen appears

Picture 14

2) Select the input method

3) Expose the device’s QR code to the webcam or read it using the scanner depending on the input method selected.

If the device is achieved, the virtual device is added to the leftmost panel of the screen under the system's drop down list box (picture 15); we will indicate this panel area as the **warehouse**.

If the device is not achieved due to an error, a warning pop-up window appears stating the nature of the error.

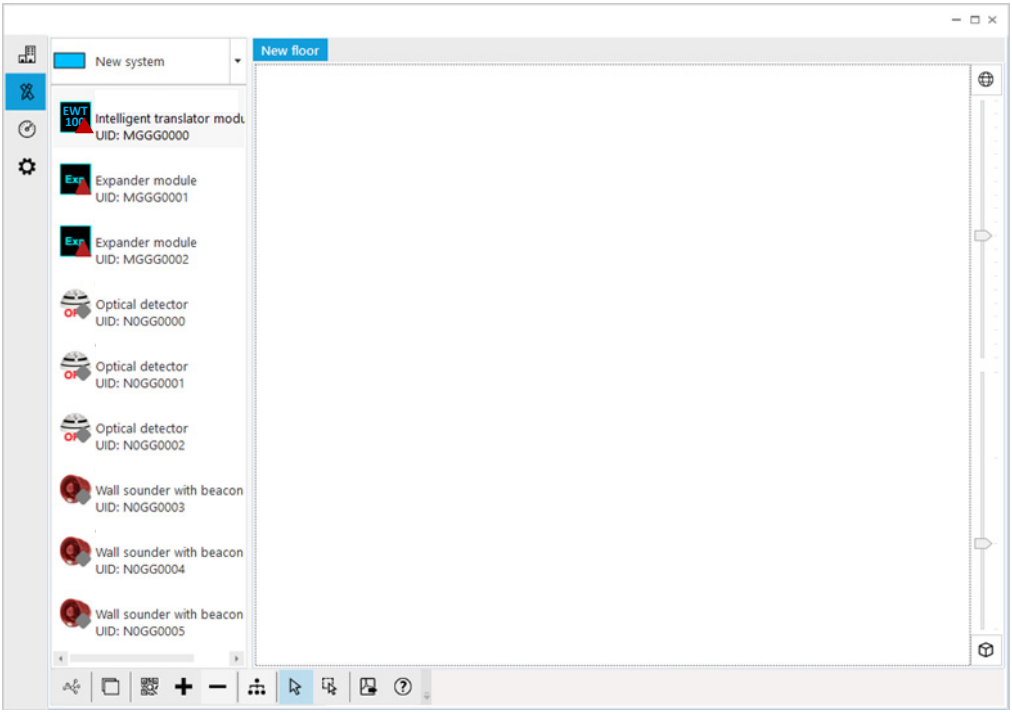
4) Close the acquisition window when completed to scan the device QR codes.

REMOVING DEVICES FROM THE "WAREHOUSE"

1) Select the virtual device you want to remove; **this operation applies only to those devices that are in the warehouse area.**

2) Click the ▬ icon.

You will be asked for confirmation before the operation is done.



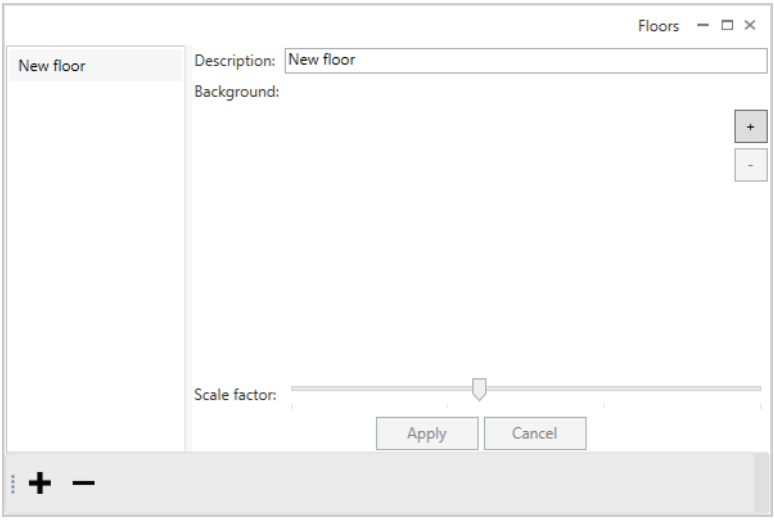
Picture 15

ADDING AND EDITING SITE'S FLOORS

Devices added into **FireVibes Studio** have to be placed onto virtual floors.
Using floors simplifies system design.
It is possible to apply an image representing a floor layout to a virtual floor.

1) Click the tab page tabbed with the icon.
2) Click the icon.

The "Floors" editor window appears:



- Edit the "Description" field to change the name of the floor (e.g. first floor, basement and so on).
- Click the + icon in the "Background" area to import a floor plan image to be superimposed over the virtual floor.
- Click the - icon in the "Background" area to cancel the imported floor plan image.
- Click the + icon to add a new virtual floor to the floor list (leftmost panel).
- Click the − icon to cancel the selected virtual floor; you will be requested for confirmation.
- **Apply**: saves the changes made.
- **Cancel**: cancels the changes made; you will be asked for confirmation.

Close the window when finished.

Floor editing produces results like the example in picture 17: above the central panel of the page you have two select table tab pages, each of them representing a floor in the installation site; you can now place the virtual devices onto them.

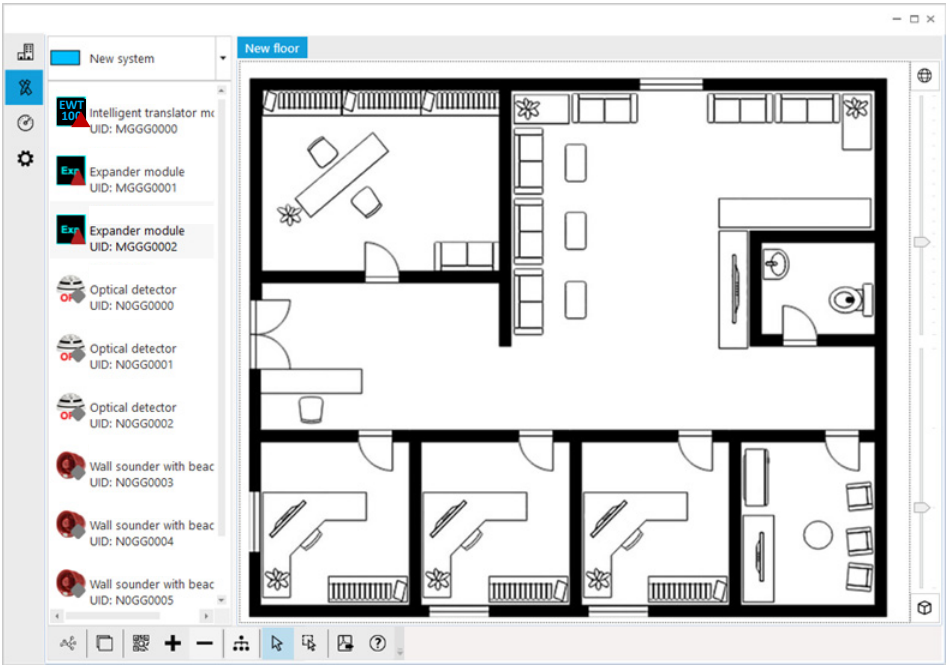
ADDING THE DEVICES TO THE VIRTUAL FLOORS

In order to add a device to the system, you need to add the device to its planned floor.

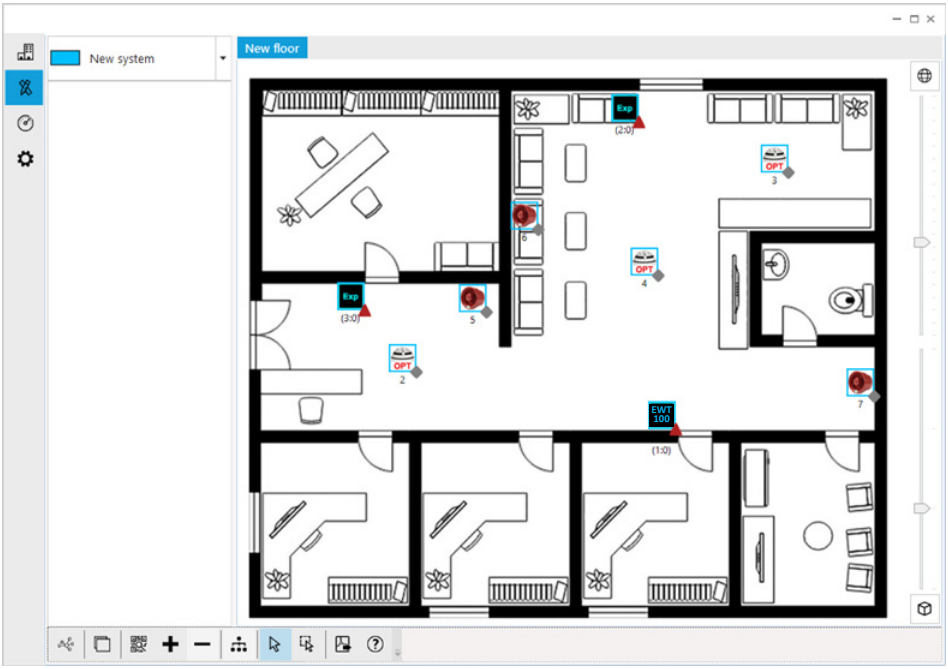
1) Select the floor tab page on which you require to place the desired virtual devices.
2) With the mouse pointer, drag and drop the devices from the warehouse panel to the floor tab page.

   If the "move also field device" icon is selected, when you drag and drop a network device also its already virtually assigned field devices are moved from the warehouse to the virtual floor and placed below the network device in the destination floor.
   This option makes placing a system faster when field devices are already virtually assigned to network devices (i.e. after acquiring an already built system).

3) Repeat steps 1 and 2 until all devices are placed on the various floors (picture 18).



Picture 17



Picture 18

ZOOMING THE DEVICES AND THE FLOOR PLAN

To enlarge / shrink the icons of the devices placed on a floor level (picture 11):

1) Move the cursor under the icon.

To zoom-in / zoom-out the floor plan (picture 11):

1) Move the cursor under the icon.

Double-click on the / icons to restore their default values.

ACCESSING AND MANAGING DEVICE'S SETUP PROPERTIES

1) Click on a device located on a virtual floor.

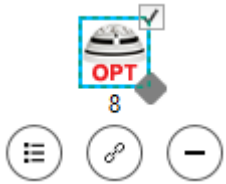
A number of icons will appear under the device's icon (picture 12).

2) Click the icon.

A property edit window will appear.

Device specific properties, explained in appendix A, can be set / updated.

- **OK**: sets the properties and closes the edit window.
- **Apply**: applies the properties.
- **Cancel**: cancels the changes made; you will be asked for confirmation.



Picture 19

WIRELESS CHANNELS

The FireVibes system has a total of 66 wireless channels or frequency ranges that can be used for communicating data.

Wireless channels in **FireVibes Studio** and on network device's LCD displays are indicated by decimal numbers.

These channels are paired in fixed predefined patterns (see appendix B in this manual for a list of them).

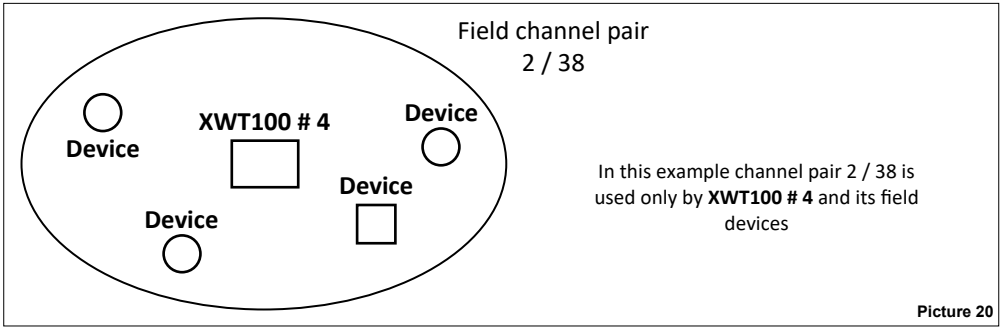
Channel pairs are specialized in:

- **Field channels**: used by network devices (**EWT100**, **IWT100** and **XWT100**) for communicating with their field devices (detectors, call points, etc.).
- **Network channels**: used by network devices (**EWT100**, **IWT100** and **XWT100**) to communicate between each other.

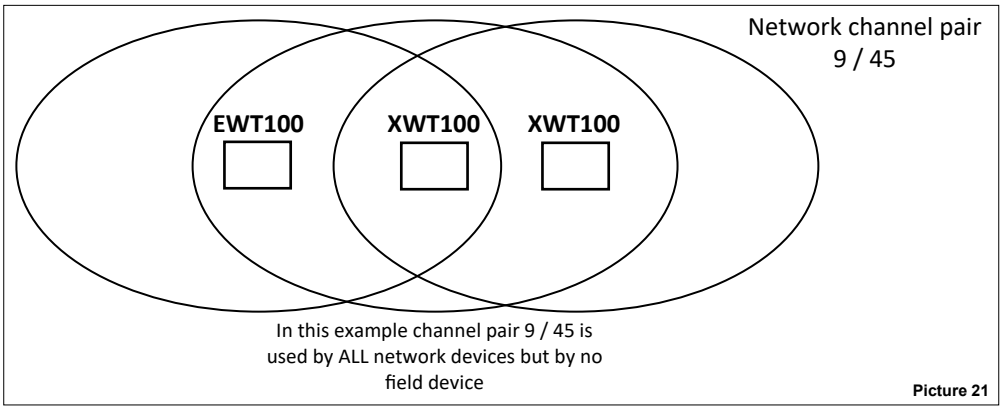
All field devices use a **local** field channel pair.

All network devices use a **local** field channel pair and a **global** network channel pair.

The reason for this channel's pairing system policy stems from the necessity to grant wireless connection security by having a "spare channel" in case the other one fails.



Picture 20



Picture 21

THE UNIQUE IDENTIFIER

The unique identifier is a 8 alphanumeric character sequence that univocally identifies every FireVibes device that comes out of the factory; it is written in every device's permanent memory.

Unique identifier can be indicated in **FireVibes Studio**'s captions as "UID" or "Unique ID".

It is labelled below the QR code on each FireVibes device and it is encoded in the QR code itself.

When you add the device through a QR scan, the device is added to the **FireVibes Studio** "warehouse" panel together with the unique identifier; if you add the device manually (i.e. not through QR scan), you will be compelled to insert the specific unique identifier manually through keyboard successively.

CREATING WIRELESS SYSTEMS WITH ONLY THE CENTRAL NODE

When a system with only a central node (**EWT100**, **IWT100**) is created, the central node requires just the programming of the system parameters (i.e. system code, global channel pair, etc).

This programming operation can be done through **FireVibes Studio**.

CREATING WIRELESS SYSTEMS WITH THE CENTRAL NODE AND EXPANDERS - THE DISCOVERY OPERATION

When a system with a central node and one or more expanders is created, two distinct operations have to be performed:

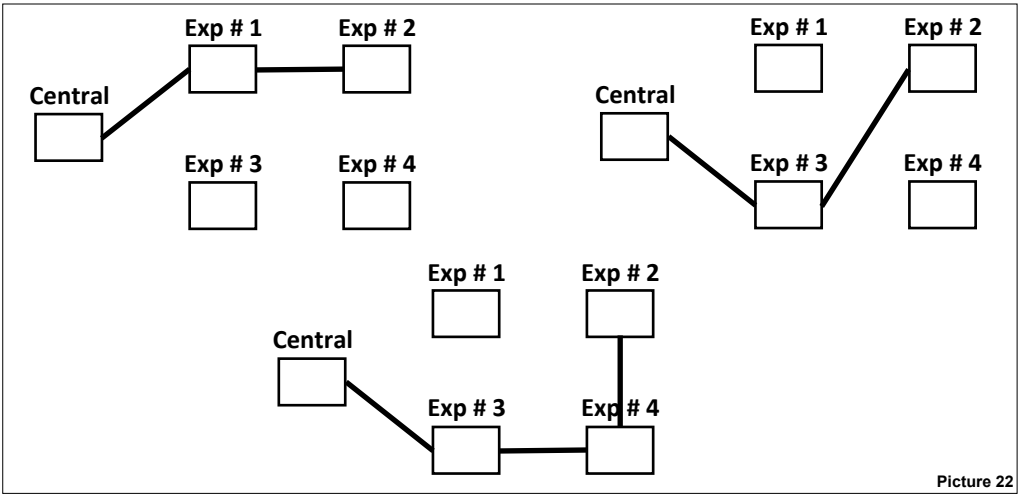
- a programming operation of the system's parameters (i.e. system code, global channel pair, etc) on all network devices.
- The discovery of all possible routes of the messages travelling throughout the system.
  This operation is called "**discovery**".

All **XWT100**s must be set in discovery mode from their local keyboard; the operation is then triggered from **FireVibes Studio**.

Message routing path definition is done automatically by the system; the user can only disable automatically-discovered routes.

ROUTING

Examples of possible message routing paths between Expander # 2 and the central node can be as the following:



Picture 22

- Certain possible routes will not be used depending on the radio visibility of certain intermediate node devices.
- Routes can use one or both channels of the system's channel pair. As an example: a segment of the route can use channel 1, another segment can use the channel 2 and a further other segment can use channel 1 and 2 alternatively.
- Messages are sent through routes in either direction.
- The user cannot establish routes directly in any way.
- The user can disable all, except one, automatically discovered routes; at least a route must exist.

FIELD DEVICE ASSIGNMENT

When using **FireVibes Studio**, field devices must be virtually assigned to their “parent” network devices.

This operation is called assignment.

This is done before any real wireless linking takes place.

Field devices’ assignment is always carried out by the user.

FIELD DEVICES LINKING

Field device’s linking is the action of bonding a detector, call point, sounder, etc. to a parent network device (**EWT100**, **IWT100**, **XWT100**).

Field device will communicate exclusively with the parent network device.

Field devices and their parent device have in common one field channel pair (two wireless channels).

Through **FireVibes Studio** you can link field devices:

- one field device at a time;
- all field devices altogether; this is called “wake-up” linking.

FIELD DEVICES ONE-BY-ONE LINKING

You can link the devices to the system one-by-one.

With this method you make the central node search for a field device, then you manually trigger the linking operation from the single field device itself.

FIELD DEVICES WAKE-UP LINKING

“Wake-up” is a particular way of linking ALL field devices of a FireVibes system to their network devices in a single operation.

This operation is similar to the discovery operation used for the network devices.
All field devices are manually set into a “wake-up” state, then their linking is started from **FireVibes Studio** through a single operation.

DEVICES' STATUS TAGS

In **FireVibes Studio**, status tags are graphic circles / discs located on the bottom-right area of every device icon.

Their meaning changes whether the system design or the system diagnostic tab-page (mode) is active.

DESIGN MODE

Network device	Meaning
	- Requires discovery - Without Unique Identifier
	**EWT100** / **IWT100** only: no **XWT100**s in warehouse panel or virtual floors. - Not programmed - Without Unique Identifier
	- Programmed - With Unique Identifier
	- Requires discovery - With Unique Identifier
	- Requires updating - With Unique Identifier

Table 5

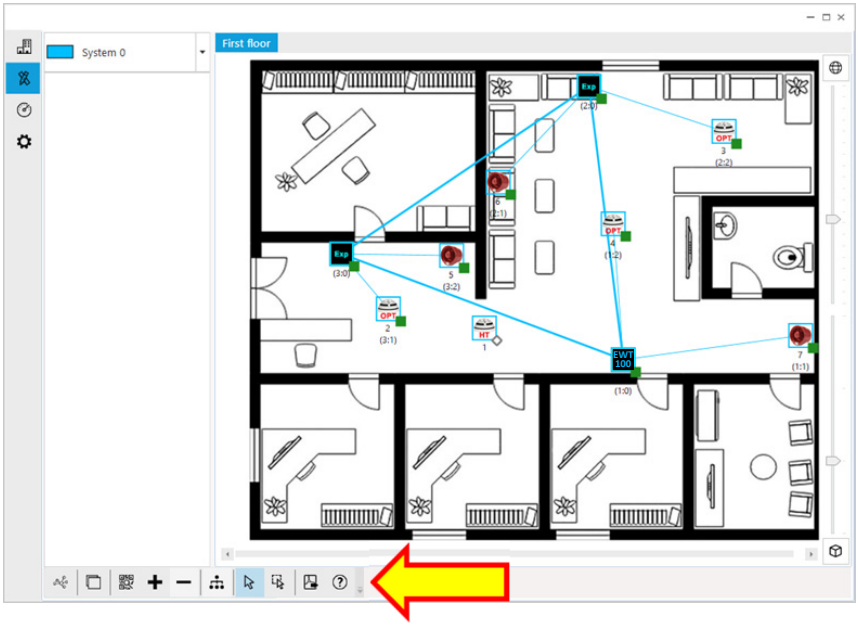
Field device	Meaning
	- Not virtually assigned to a parent network device - Without Unique Identifier
	- Not virtually assigned to a parent network device - With Unique Identifier
	- Virtually assigned to a parent network device - Programmed - With Unique Identifier
	- Virtually assigned to a parent network device - Requires linking - With Unique Identifier
	- Virtually assigned to a parent network device - Requires linking - Without Unique Identifier
	- Requires updating - With Unique Identifier

Table 6

DIAGNOSTIC MODE

See the table in the diagnostic mode paragraph, further on in this manual.

Click the function button at the bottom of the design tab window to see the help about the design tags.



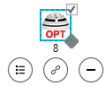
Picture 23

ASSIGNING A FIELD DEVICE TO A NETWORK DEVICE

A) Single selection mode

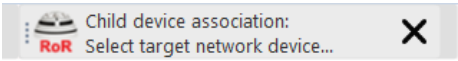
1A) Click on the icon if not already selected

2A) Click on a field device located on a virtual floor.
The box in the icon up-right corner is checked an a number of icons will appear under the device's icon.



3A) Click the icon. A box like the one illustrated in picture 24A appears at the bottom of the screen.

You can give up assigning by clicking the icon.



Picture 24A

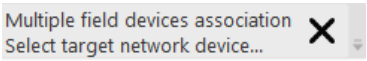
B) Multiple selection mode
In multiple selection mode you have the possibility to assign/unassign more than one device at a time.

1B) Click on the icon if not already selected. The two icons appears

2B) Click on a field device located on a virtual floor. The box in the icon up-right corner is checked. Repeat for all the field devices you want to assign to the same network device

3B) Click the icon. A box like the one illustrated in picture 24B appears at the bottom of the screen.

You can give up assigning by clicking the icon.



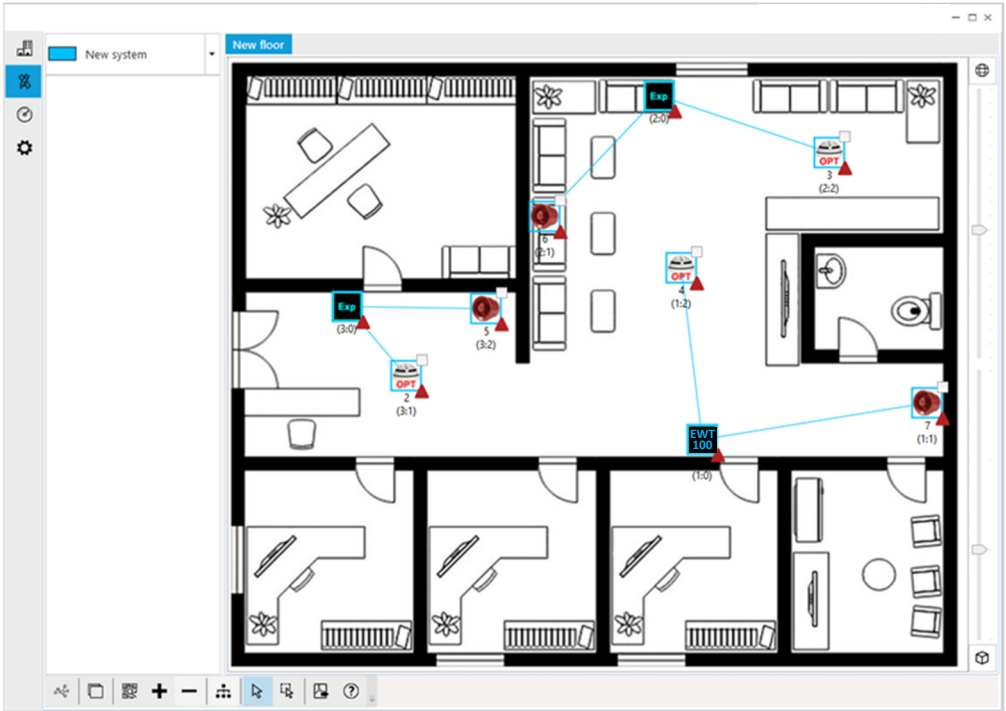
Picture 24B

C) Select target network device
1C) Click the network device icon (**EWT100**, **IWT100**, **XWT100**).

2C) A icon appears under the network device. Click it to complete the virtual linking.

Repeat the activity until every field device is assigned to its designed network device.

As a result of these operations you will have a situation similar to the one presented in picture 25.



Picture 25

BUILDING UP THE SYSTEM

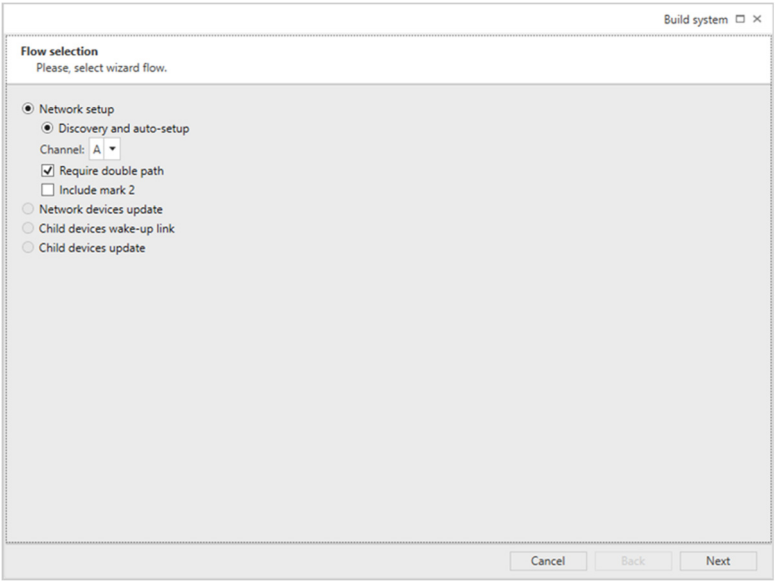
To build up the system:

1) Select the design tab page .
2) Connect your personal computer to the FireVibes central node (**EWT100**, **IWT100**) through the supplied USB cable.
3) See that all **EWT100** / **IWT100** and **XWT100**s all have their Unique Identifications memorized into their **FireVibes Studio** icons.
4) Set all **XWT100** expanders in discovery mode; use their keyboard / display interfaces.
5) Click on the central node device icon (**EWT100** or **IWT100**).
6) Amongst the functional icons, this one appears: ; click it.

Remember to set all XWT100 in discovery mode !

EWT100 / IWT100 do not require any particular keypad / display operation for discovery.

The following window pops-up:



Picture 26

5) "Network setup" option should be already selected by default; check it is so.
6) "Discovery and auto-setup" option should be already selected by default; check it is so.

This option is used to program the whole system and discover its various messaging routing paths.

7) "Channel" drop down option list prompts you whether to use channel A, B or C for discovery. Use the less congested / relatively free channel: if channel A gives problems use B; if B gives problems use C.

   Preferably, use the **EWT100-TESTER** survey kit to diagnose channel A, B and C.

   Make sure you specify the same discovery channel on the **XWT100**s.

8) The network devices with signal strength less or equal than mark 2 are not considered, by default, in the calculation of the path routes proposed during the discovery phase and therefore could result as "not found" at the end of the process. If you want that also mark 2 links are included in the path route calculation select the "Include mark 2" box. Please note that the recommended minimum level for links is mark 3, so use this option only for troubleshooting and make sure that at the end of the commissioning phase all the links are at least mark 3.

Remember to set the discovery channel on all XWT100 when setting the discovery mode !

FireVibes Studio and XWT100s discovery channels must coincide !

EWT100 / IWT100 do not require any particular keypad / display operation for discovery.

9) It is suggested to have the "Require double path" check box checked.

If an expander does not have an alternative second route for sending and receiving messages to and from the central node and the "Required double path" option is checked, a warning is issued requesting you whether you want to continue or not.
It is suggested to have a double path.

If the “Require double path” option is selected but there is no alternative wireless route and a warning is issued then:

a) abandon the build system procedure;

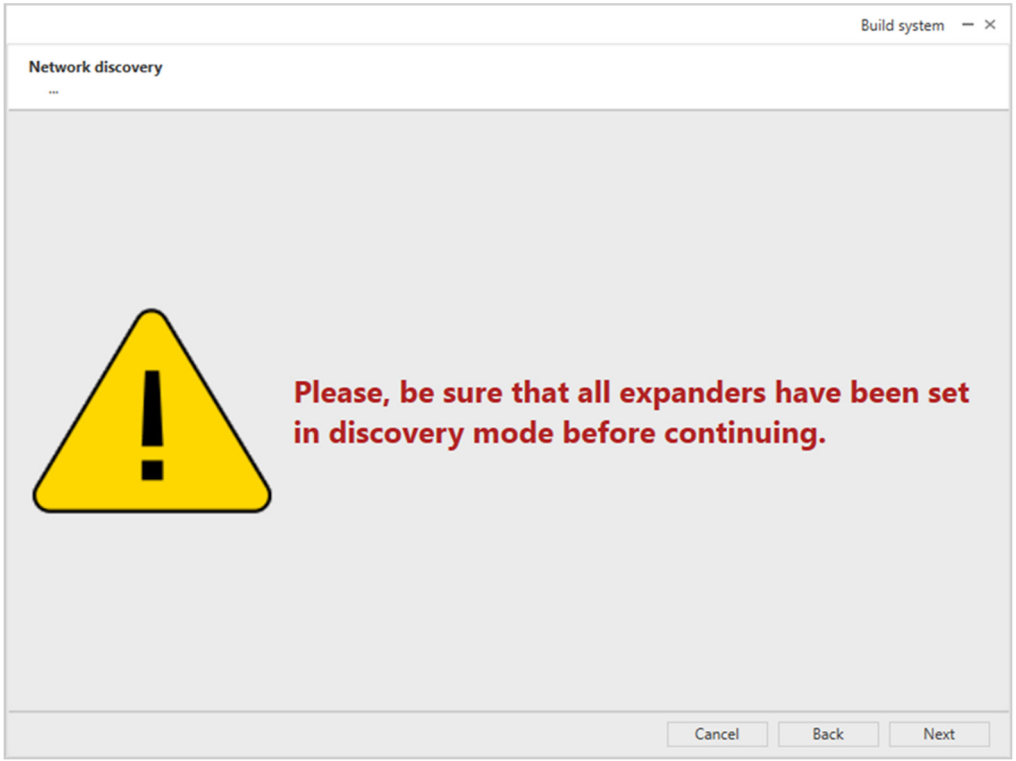
b) add to the system one or more extra **XWT100** or change the position of the devices;

c) restart the build system procedure.

8) Either click:

- **Next** to continue or
- **Cancel** to abandon.

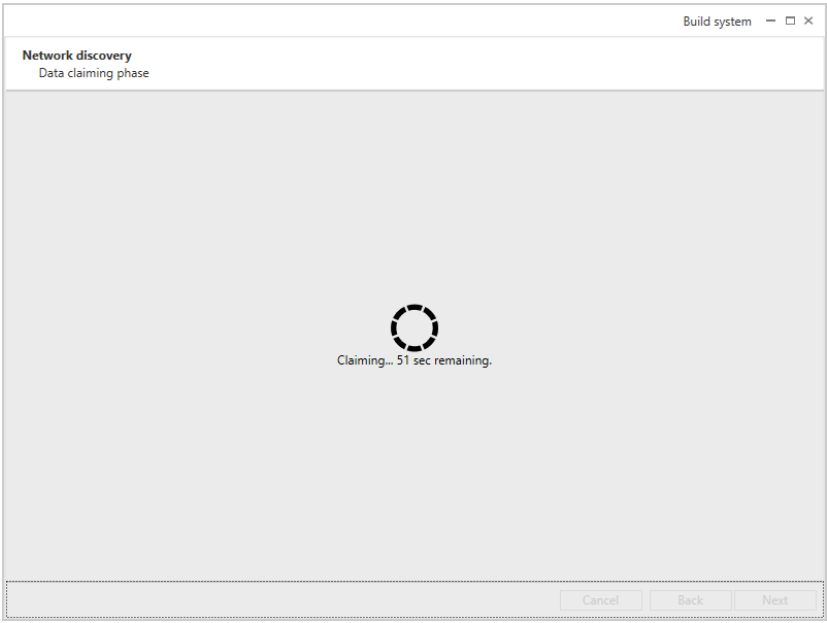
The “Network discovery” window appears, requiring you to set all **XWT100**s in discovery mode, if not already done:



Picture 27

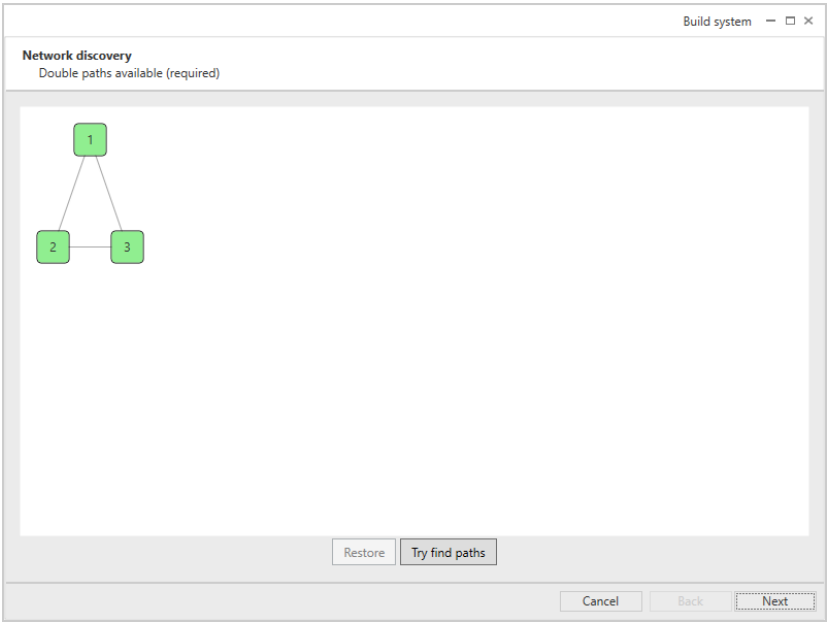
- **Next** to continue.
- **Back** to step back.
- **Cancel** to quit.

Network detection starts:



Picture 28

At the end of the network detection phase, the following window appears:



Picture 29

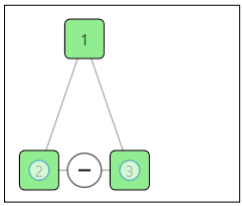
These are the possible path routes where the messages can run to and from the central node.

You can click on a segment and an encircled "-" icon appears as illustrated in picture 30.

By clicking the "-" icon, the underlying path segment is cancelled.

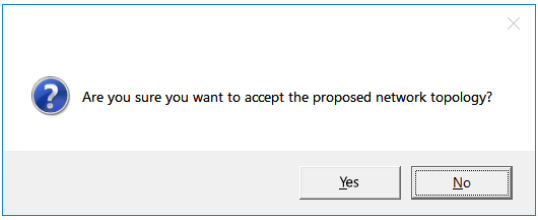
On this window you can:

- **Try find paths** to perform another path routes discovery;
- **Restore** to restore path segments previously deleted;
- **Next** to continue.



Picture 30

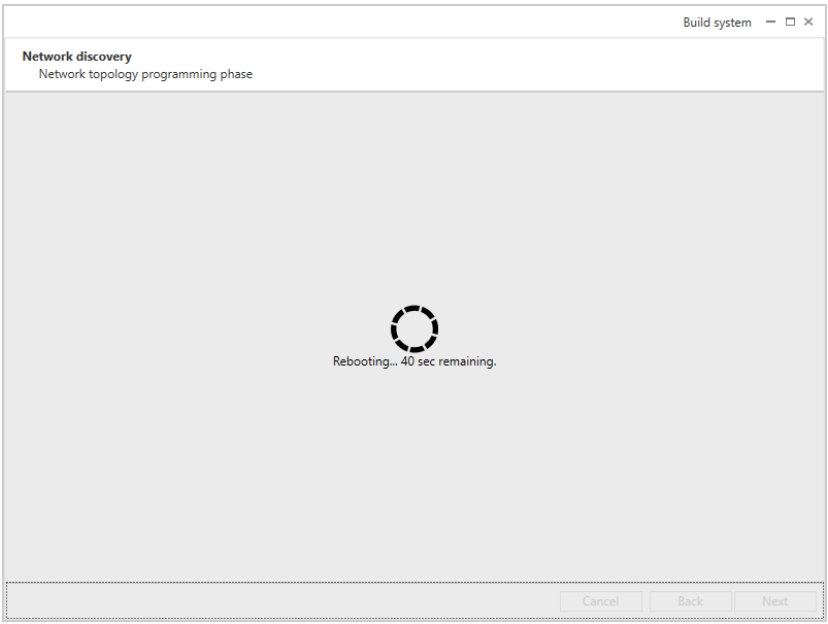
After clicking the **Next** button you will be asked if you accept the discovered messaging route scheme:



Picture 31

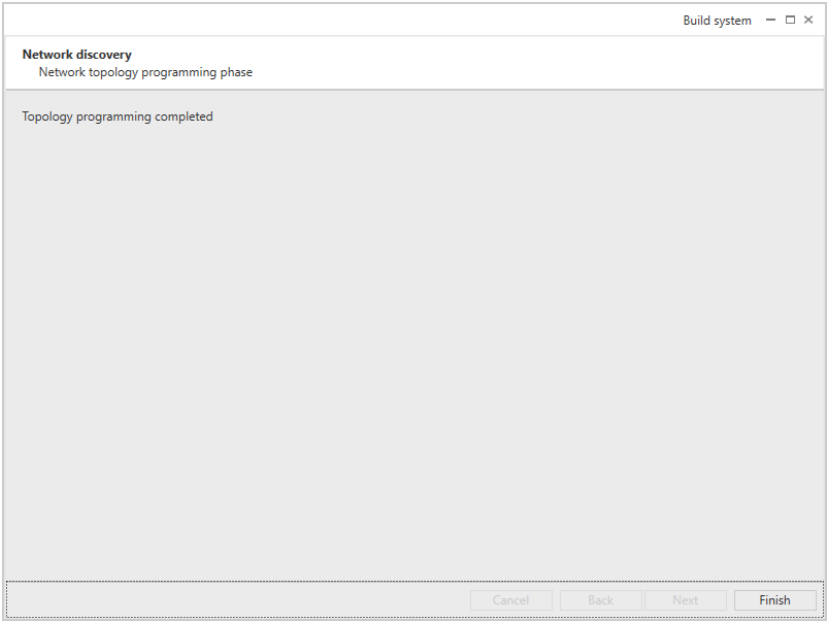
- **No** to remain in the previous screen.
- **Yes** to continue.

After having accepted the proposed network topology, its programming starts…



Picture 32

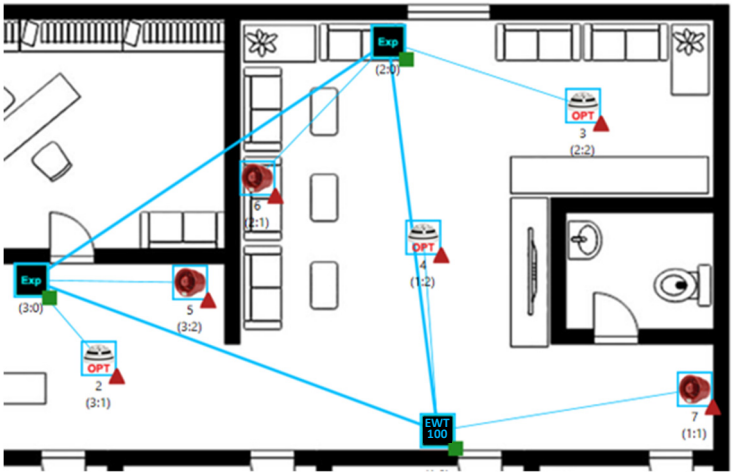
Network topology programming comes to completion; the following window appears:



Picture 33

- **Finish** button to complete the discovery and the automatic setup of the FireVibes network system.

At the end, on the design tab page we have the following scenario:



Picture 34

Where:

- All network devices are programmed and discovered.
- All network devices are joined by a thick-lined message routing network (line's colour corresponds to the user defined system's colour).
- All field devices are not yet programmed.

FIELD DEVICES' WAKE-UP LINKING PROCEDURE

Remember to set all field devices in wake-up mode !

Having created the system's network:

1) Power-up all field devices.
   Consult their installation manuals.

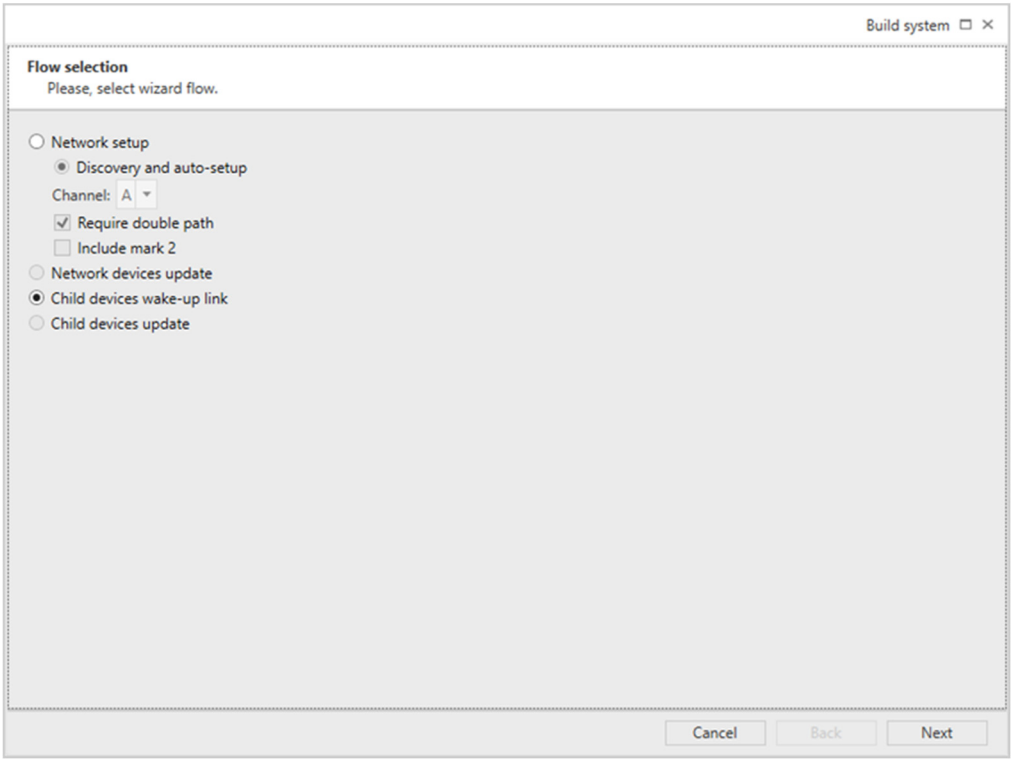
2) Set ALL involved field devices in wake-up mode: push their programming switch to the position OPPOSITE to "ON".
   Consult their installation manuals.

3) Check that you are on the design tab page .

4) Click on the central node device icon (**EWT100** or **IWT100**).

5) Amongst the functional icons, this one appears: ; click it.

The following window appears:

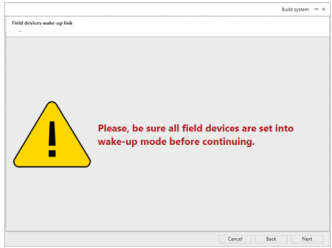


Picture 35a

6) If it is not already selected, click the "Field devices wake-up link" option.

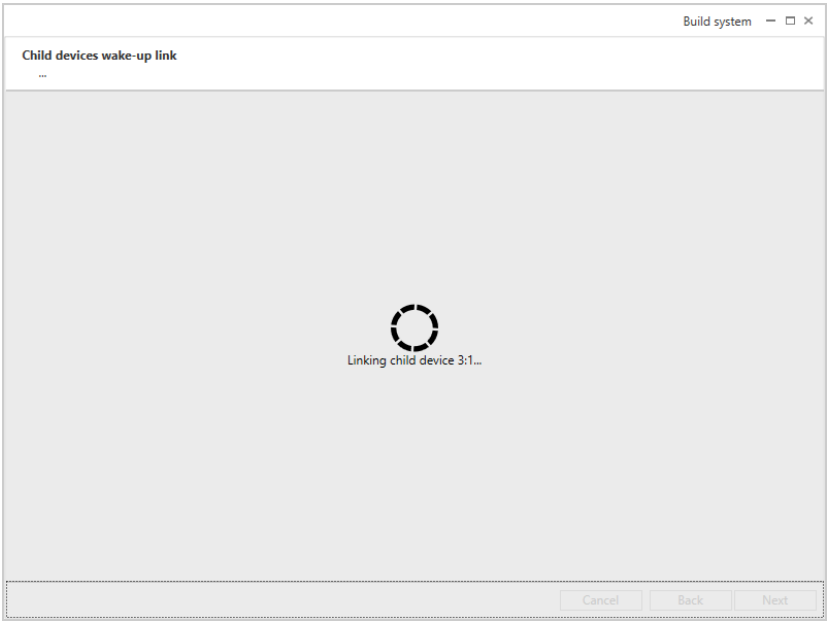
7) Click:

- **Cancel** to abandon the operation.
- **Next** and the warning message of picture 35b appears. Press **Next** to start operation.



Picture 35b

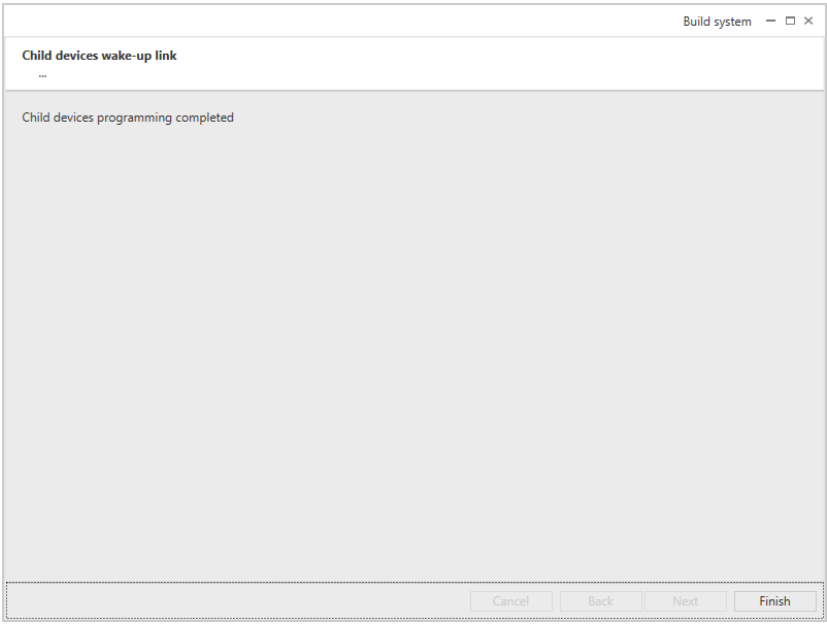
Wake-up linking starts:



Picture 36

Process will take up to several minutes; time amount depends on the number of field devices in the system.

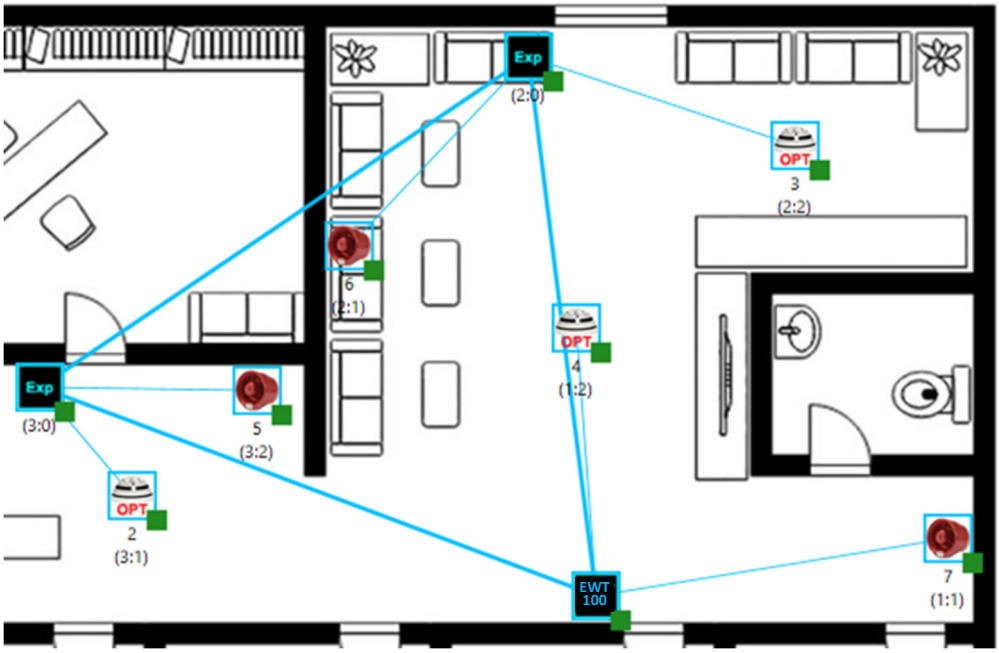
Linking will terminate:



Picture 37

- **Finish** to end.

At the end, on the design tab page we have the following scenario:

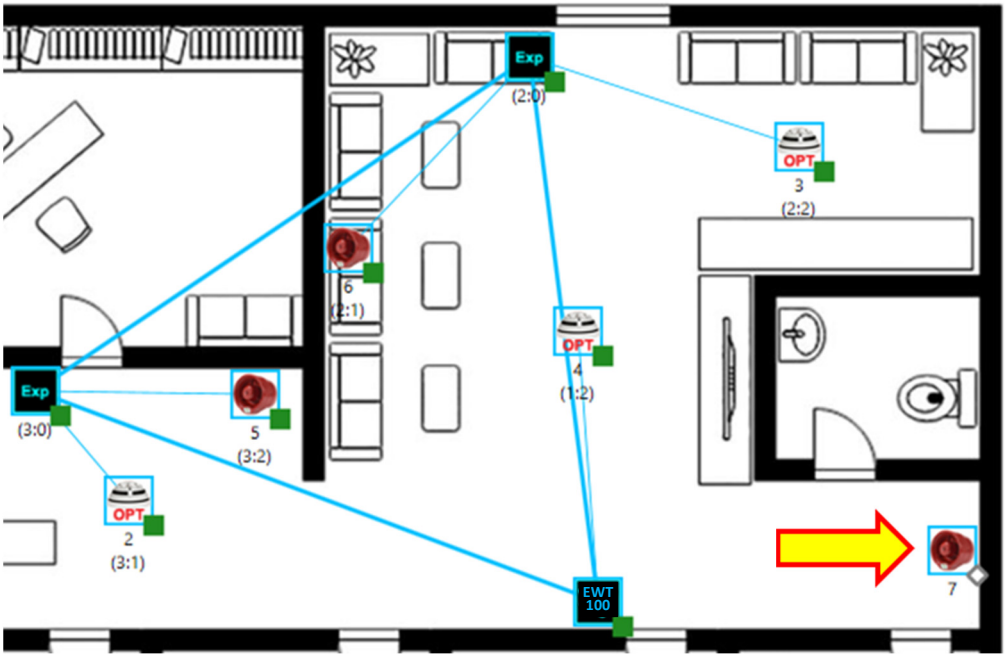


Picture 38

Where:

- All field devices are programmed and have the Unique Identification Code.

FIELD DEVICES ONE-BY-ONE LINKING PROCEDURE



Picture 39

Suppose we have the following installation system scenario:

Notice the **WS2010RE, WS2020RE** with analogue address 7:

- This field device is not assigned to a “parent” device.
- This field device is not programmed.
- It has no Unique Identifier assigned.

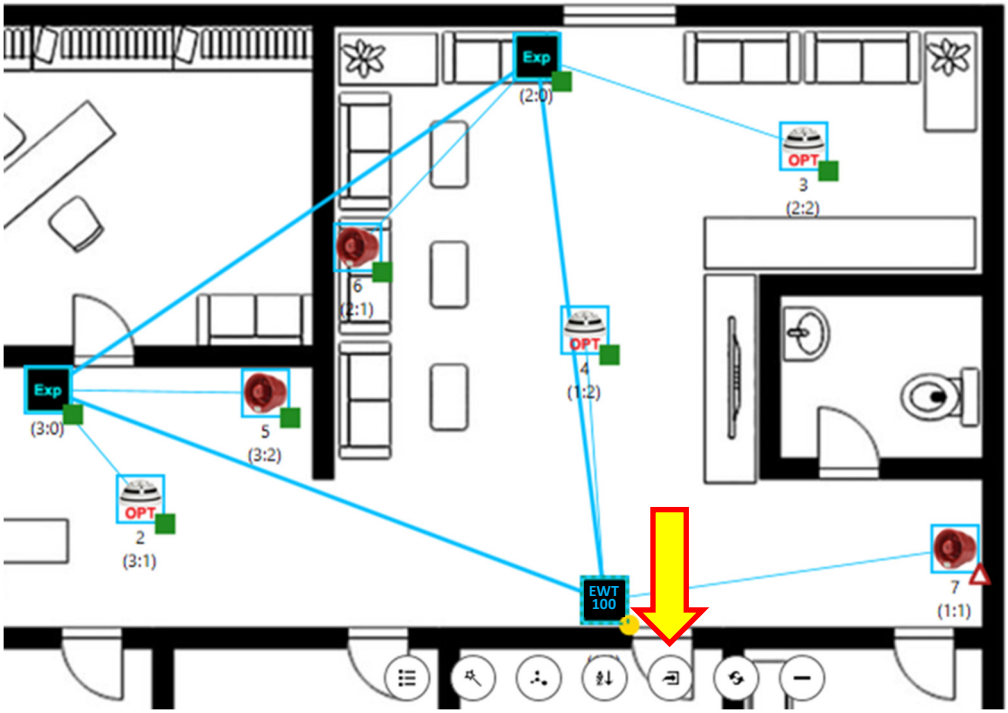
If linking the single devices one by one, you don’t necessarily need to have their Unique Identifier inserted.

If linking the single device, you don’t necessarily need to have the Unique Identifier inserted in the virtual device.

1) Be sure to have your personal computer connected to the central node (**EWT100** or **IWT100**).

2) Assign the device to its parent node (in this example the **EWT100**).
Follow the field device assignment procedure explained previously in this manual.

You have the scenario illustrated in picture 40.



Picture 40

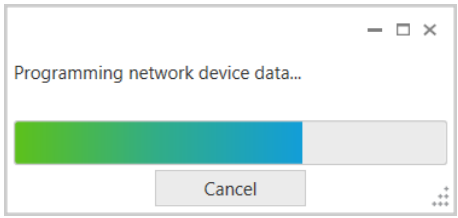
- The field device is assigned.
- The field device is not programmed.
- The field device doesn't have a Unique Identification code yet.
- The "parent" device needs updating.

3) Click the parent device (in this case the **EWT100**).

A set of command icons appear under the parent device icon.

4) Click the "Program device (local)" command icon (highlighted in picture 40).

The following dialog box appears:

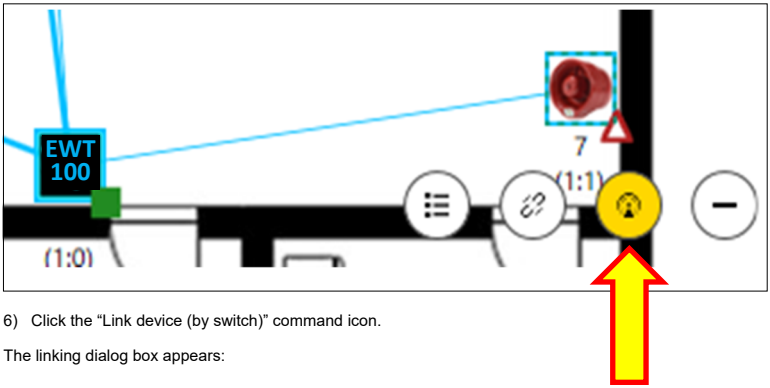


Picture 41

The parent node is now programmed.

5) Click on the field device that has to be linked.

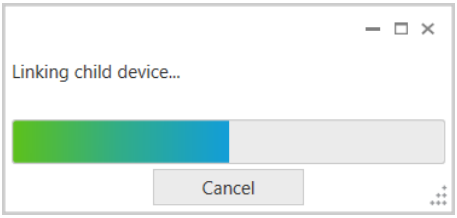
The “Link device (by switch)” command icon now appears:



Picture 42

6) Click the “Link device (by switch)” command icon.

The linking dialog box appears:

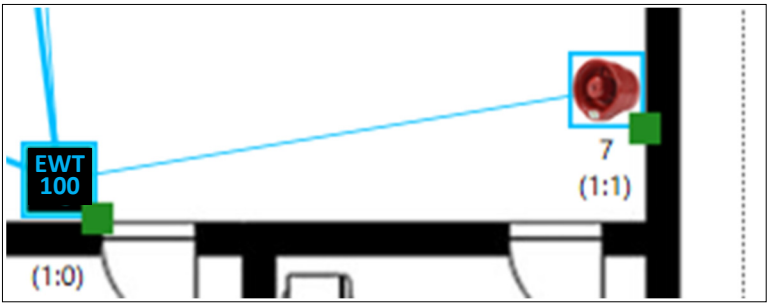


Picture 43

7) Power-up the field device you want to link.
Consult its installation manual.

8) Trigger linking from the field device: push its programming switch to the position OPPOSITE to “ON”.
Consult its installation manual.

At the end you will have this scenario:



Picture 44

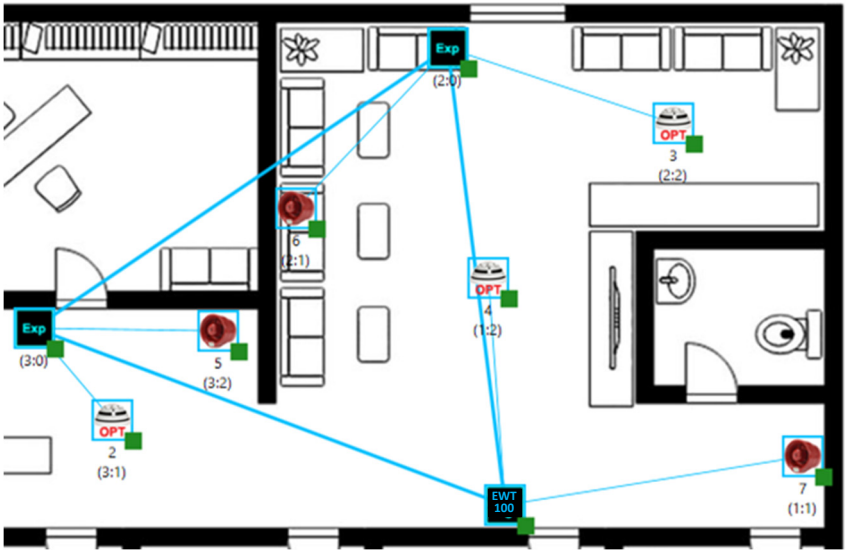
Where:

- The field device is linked to its parent device.
- The field device is programmed.
- The field device has its Unique Identifier code inserted automatically into its virtual model.

VARIATING AND UPDATING - LOCAL NETWORK DEVICES

It is possible to variate the properties of the network devices, locally connected through cable to the personal computer.

Suppose you have the following scenario:



Picture 45

1) Make sure your personal computer is connected via cable to the **EWT100**.

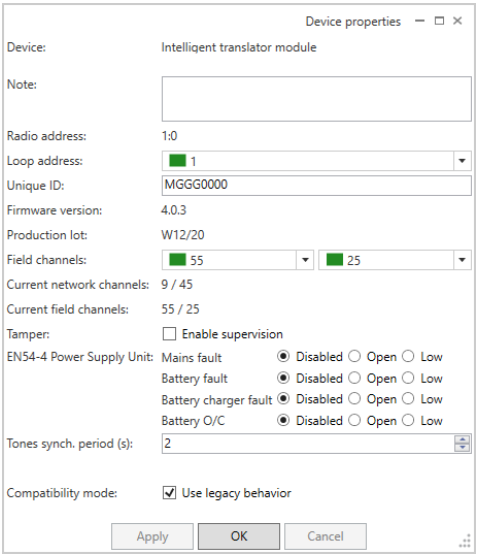
2) Click on the “EWT100” icon.

A series of command icons appear under the “EWT100” icon.

3) Click the icon.

Keep in mind that this procedure can be applied to IWT100s and XWT100s too.

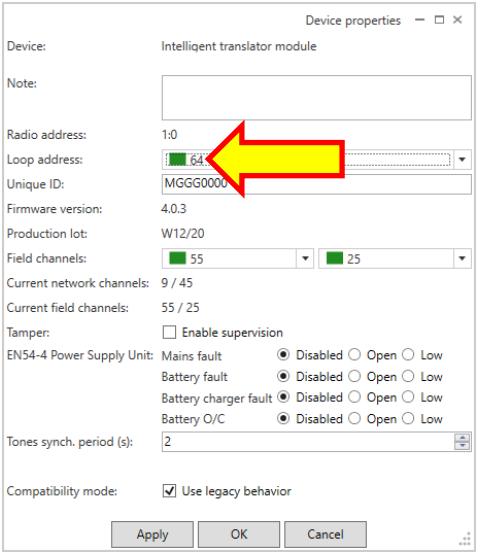
The following properties window appears:



Picture 46

4) Try to change the “Loop address” parameter:

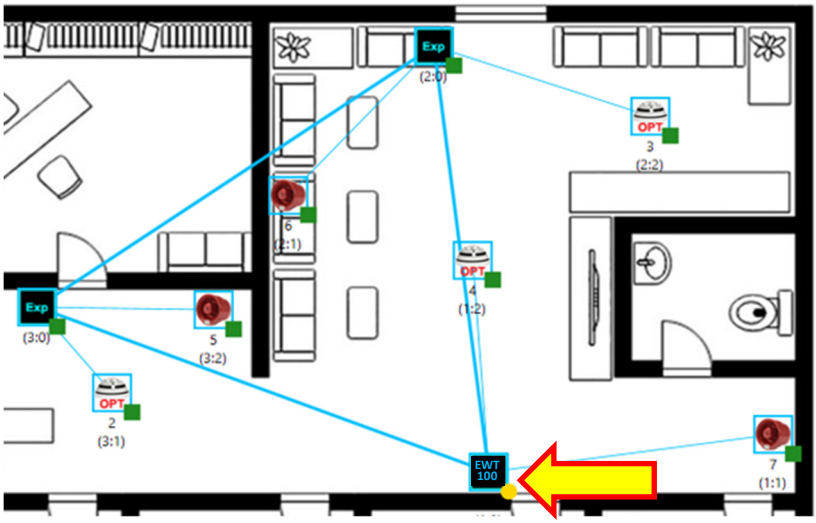
Keep in mind that some parameters cannot be changed, once the device is virtually deployed.



Picture 47

- **OK** to apply the change and close the window.
- **Apply** to simply make the changes effective.
- **Cancel** to abandon the operation and the changes.

The central node results in need of programming:

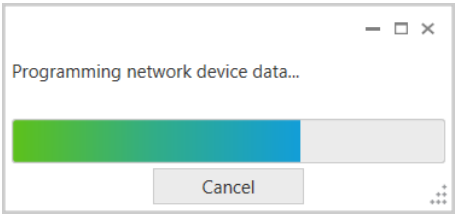


Picture 48

5) Click on the “EWT100” icon.

6) Click the “Program device (local)” icon.

The following progress window appears:



Picture 49

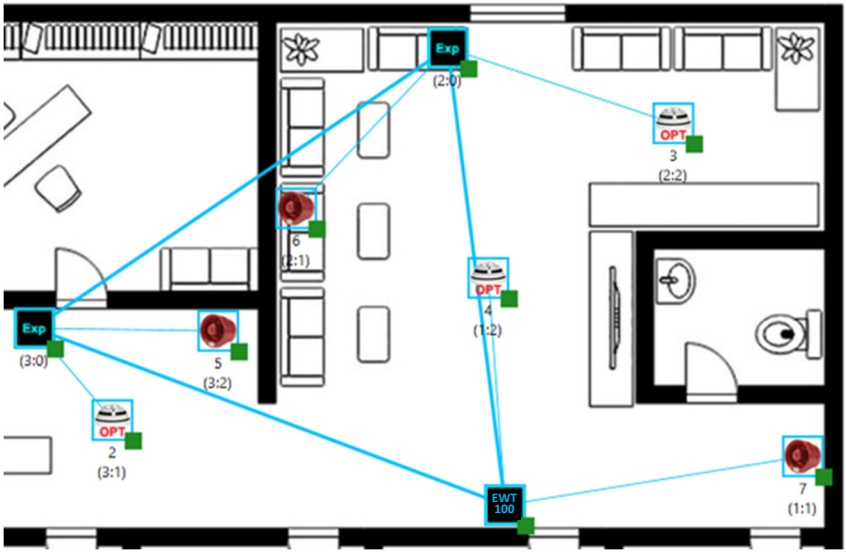
- **Cancel** to abandon the operation.

Central node is updated.

VARIATING AND UPDATING - REMOTE NETWORK DEVICES

It is possible to remotely variate the properties of the network devices; the personal computer just needs to be connected through a cable to the central node (**EWT100** / **IWT100**).

Suppose you have the following scenario:



Picture 50

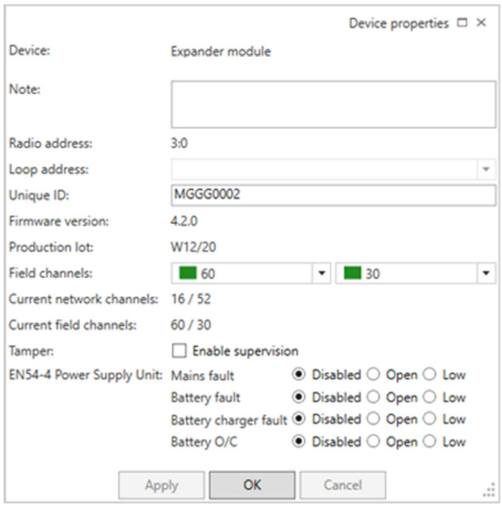
1) Make sure your personal computer is connected via cable to the **EWT100**.

2) Click on one “Exp” icon.

A series of command icons appear under the chosen “Exp” icon.

3) Click the icon.

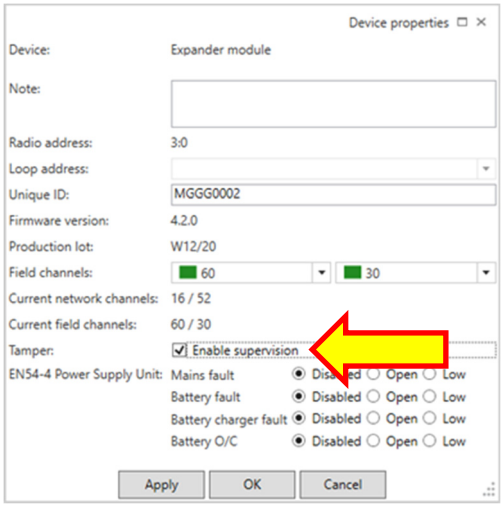
The following properties window appears:



Picture 51

4) Try to check the “Enable supervision” parameter:

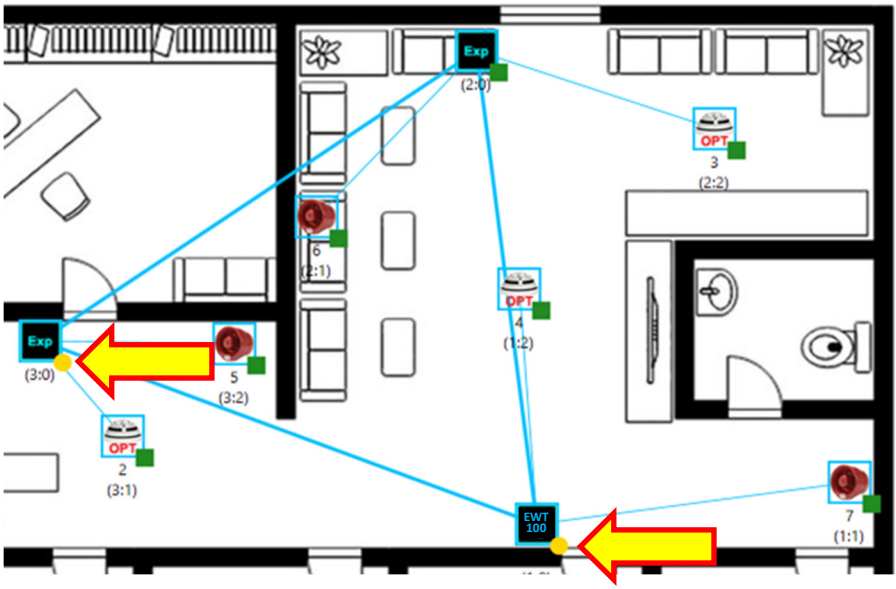
Keep in mind that some parameters cannot be changed, once the device is virtually deployed.



Picture 52

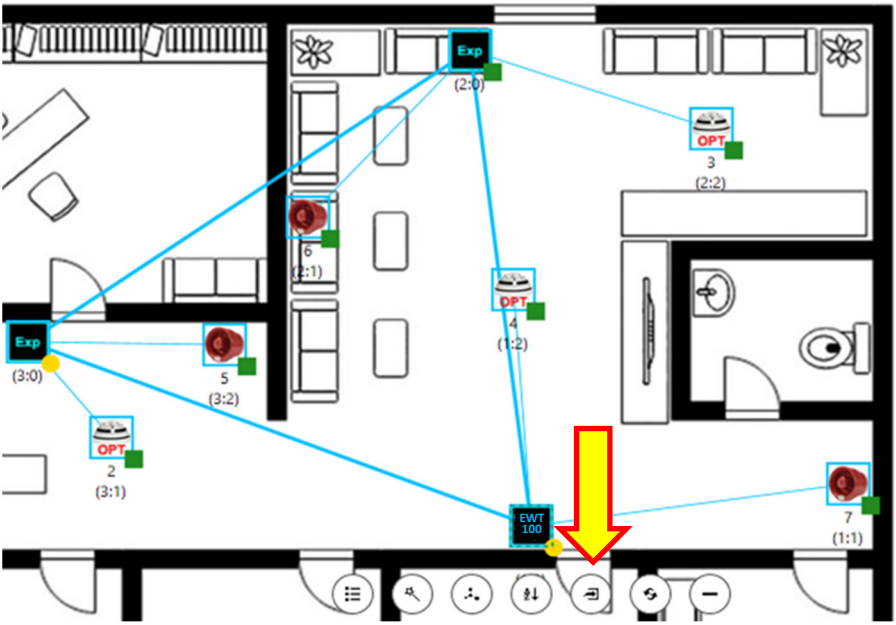
- **OK** to apply the change and close the window.
- **Apply** to simply make the changes effective.
- **Cancel** to abandon the operation and the changes.

The expander and central node results in need of updating:



Picture 53

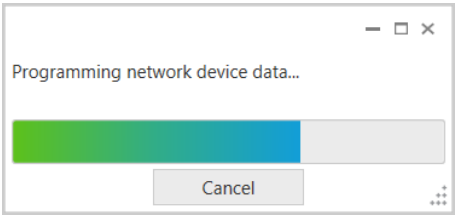
5) Click on the “EWT100” icon:



Picture 54

6) Click the “Program device (local)” icon.

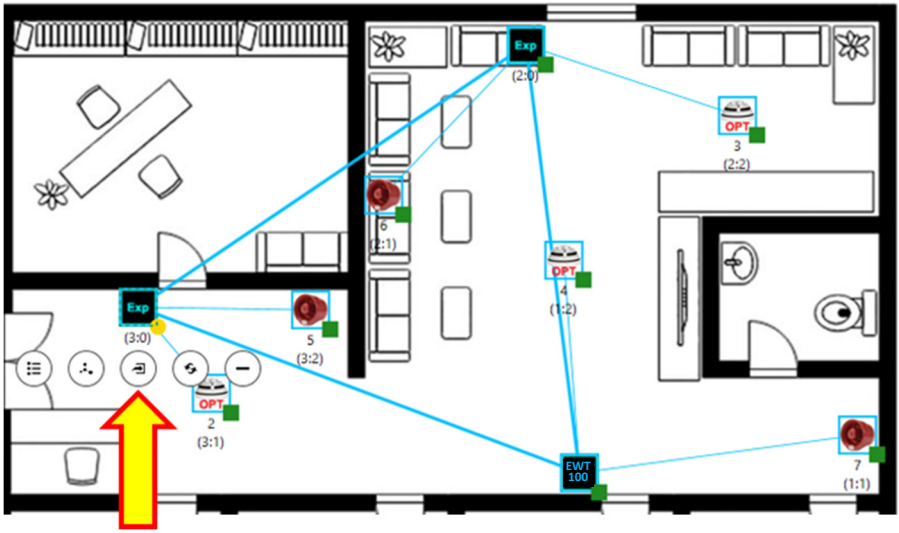
The following progress window appears:



Picture 55

- **Cancel** to abandon the operation.

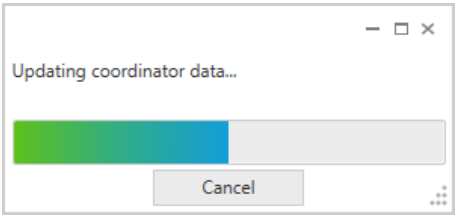
7) Click on the “Exp” icon.



Picture 56

8) Click the “Program device (remote)” icon.

The following progress window appears:



Picture 57

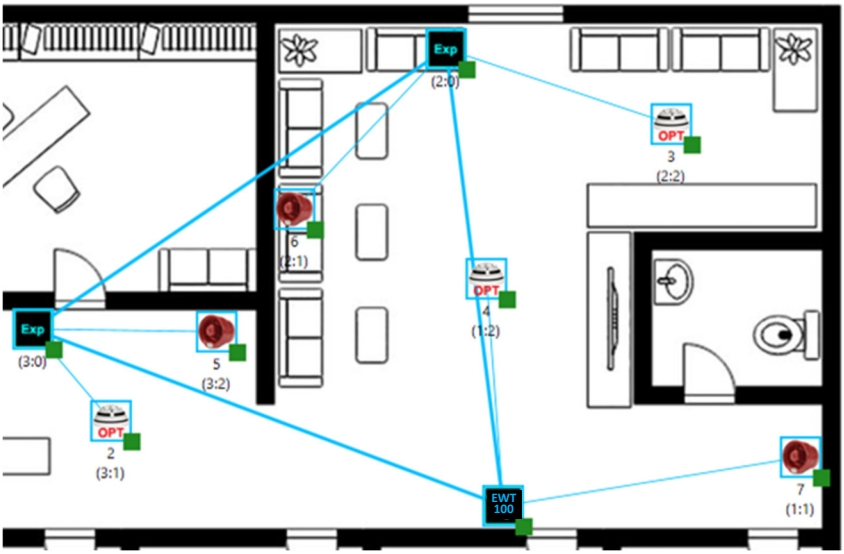
- **Cancel** to abandon the operation.

Expander node is updated.

VARIATING AND UPDATING - FIELD DEVICES

It is possible to variate the properties of the field devices; the personal computer just needs to be connected through a cable to the central node (**EWT100** / **IWT100**).

Suppose you have the following scenario:



Picture 58

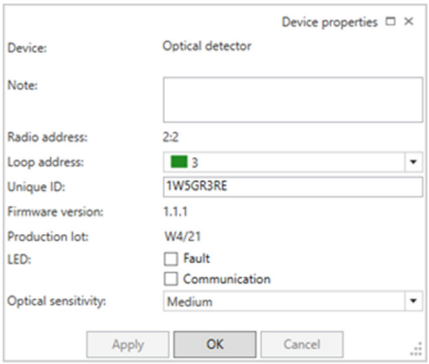
1) Make sure your personal computer is connected via cable to the **EWT100** / **IWT100**.

2) Click on one “OPT” icon.

A series of command icons appear under the chosen “OPT” icon.

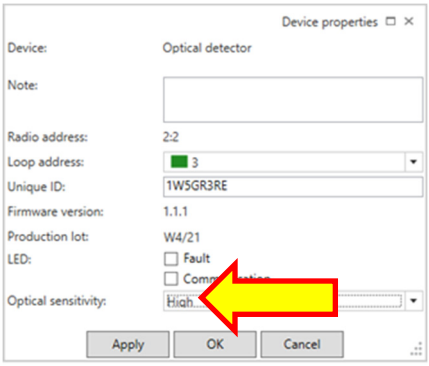
3) Click the icon.

The following properties window appears:



Picture 59

4) Try to change the “Optical sensitivity” parameter:

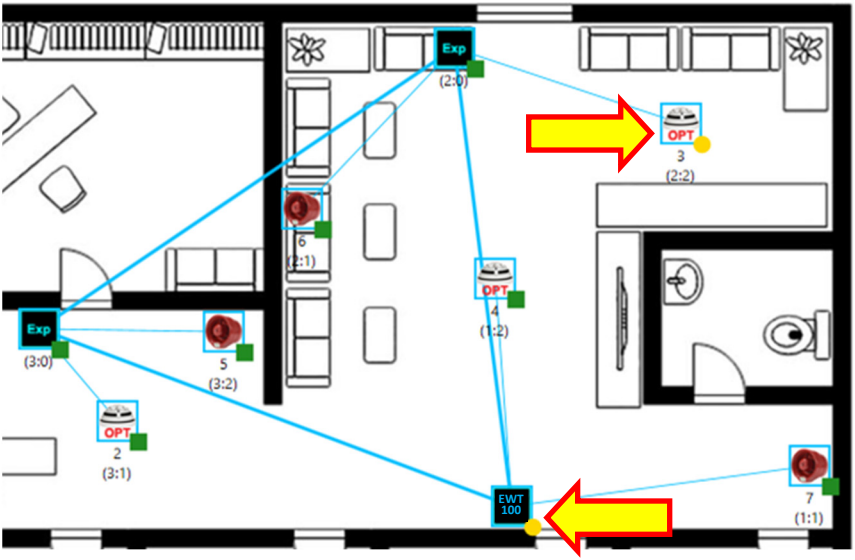


Picture 60

Keep in mind that some parameters cannot be changed, once the device is virtually deployed.

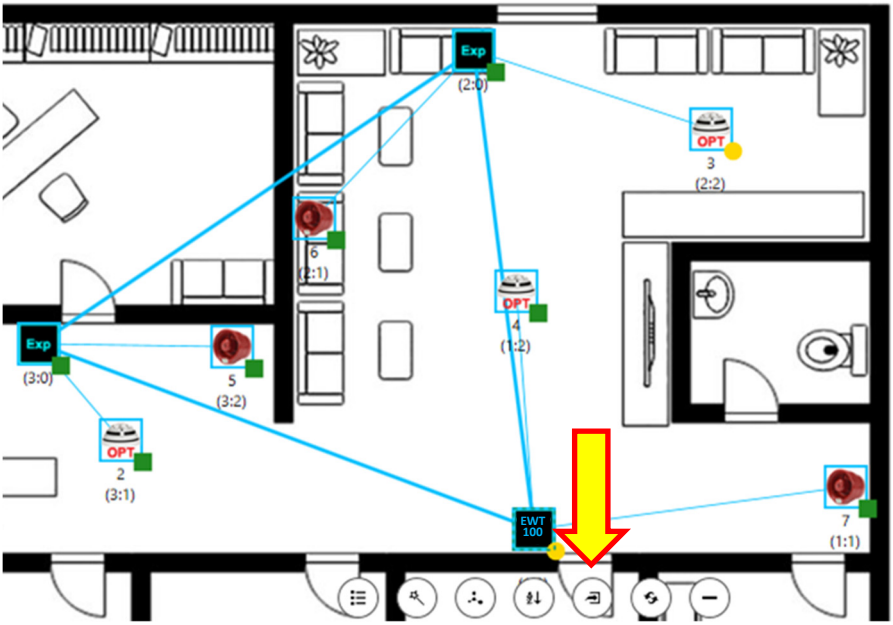
- **OK** to apply the change and close the window.
- **Apply** to simply make the changes effective.
- **Cancel** to abandon the operation and the changes.

Central node and chid device results in need of updating:



Picture 61

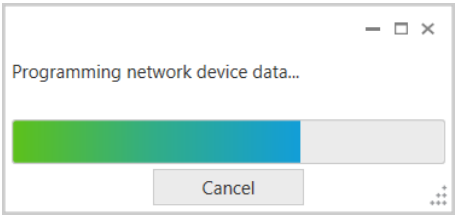
5) Click on the “EWT100” icon:



Picture 62

6) Click the  “Program device (local)” icon.

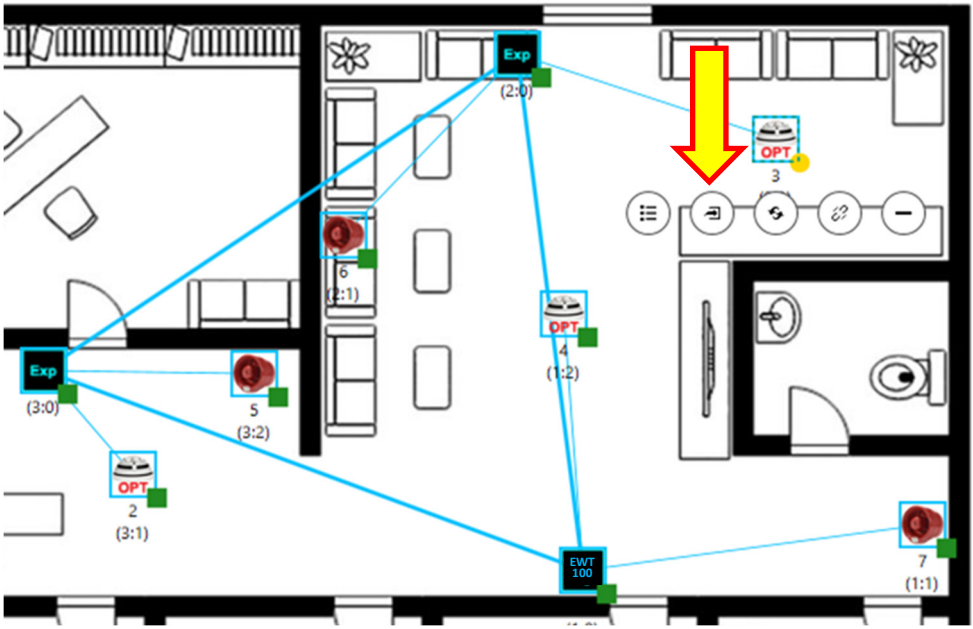
The following progress window appears:



Picture 63

- **Cancel** to abandon the operation.

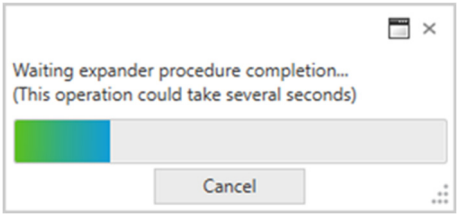
7) Click on the “Opt” icon:



Picture 64

8) Click the “Program device (remote)” icon.

The following progress window appears:



Picture 65

- **Cancel** to abandon the operation.

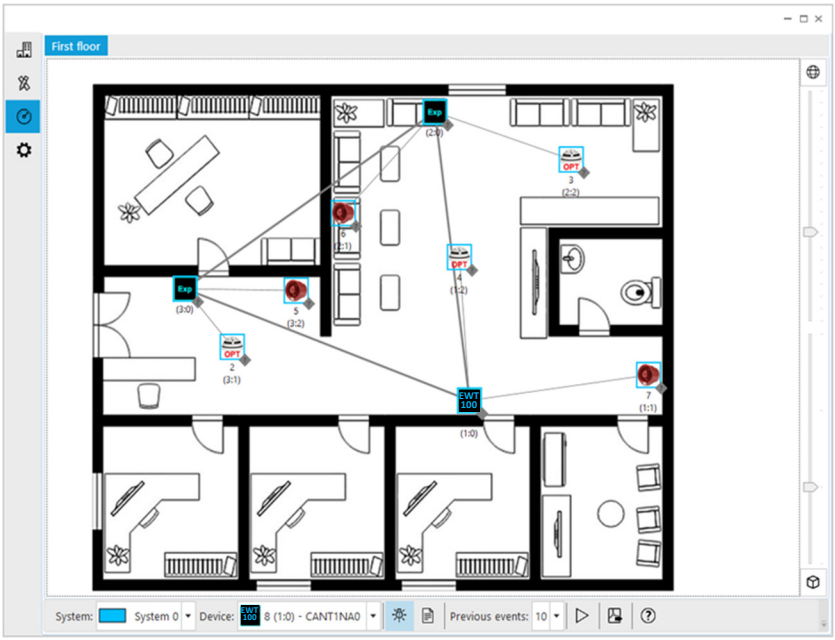
Field device is updated.

Keep in mind that the modification of certain parameters requires the programming of the network devices.

SYSTEM DIAGNOSTICS - LINK STATUS AND DEVICE CONDITION

FireVibes Studio features a diagnostic function for the created wireless system.

1) Make sure that all devices of the FireVibes system are all programmed.
2) Click the tab-page icon to visualize the diagnostic page:



Picture 66

3) Make sure that your PC is connected to the central node (**EWT100** / **IWT100**).
4) Make sure that the icon is highlighted.
5) Click the icon on the lower part of the window; clicking this icon starts the diagnostic mode and the PC will query continuously the wireless system for data.
6) The lines connecting the devices of the **FireVibes Studio** model will start changing colour according to table 7.
7) The status tags of the devices will start changing colour according to table 8.

Link graphic colour	Mark	Meaning
	?	No link quality information
	4	Excellent link quality
	3	Good link quality (Minimum recom-mended)
	2	Poor link quality
	1	Bad link quality

Table 7

Network / field device	Meaning
?	No information
4	Ok / standby The number is the link mark
4	Alarm (field devicesonly) The number is the link mark
4	Fault The number is the link mark

Table 8

Click the function button at the bottom of the status tab window to see the help about the status tags.

8) Click the icon to stop the diagnostic mode.

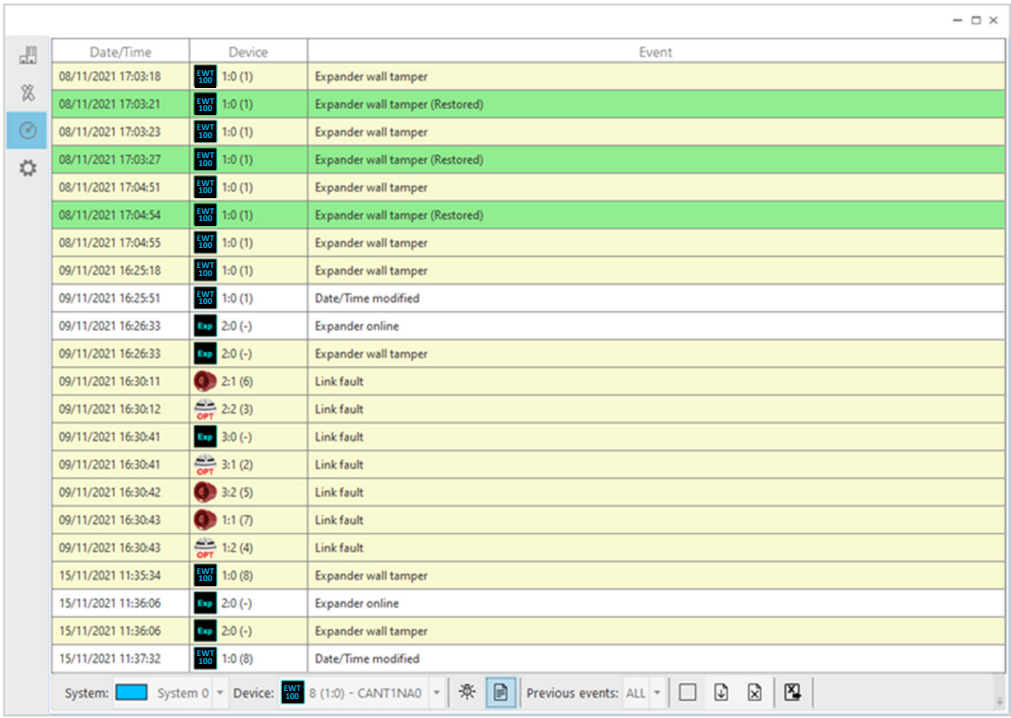
SYSTEM DIAGNOSTICS - EVENTS

FireVibes Studio features a event query and visualization functionality for the created wireless system; events are recorded by the network devices and need to be downloaded from them.

1) Make sure that all devices of the FireVibes system are all programmed.
2) Click the tab-page icon to visualize the diagnostic page.
3) Make sure that your PC is connected to the central node (**EWT100** / **IWT100**).
4) Click the icon.

The event reporting page appears.

5) Click the icon on the lower part of the window; clicking this icon starts the diagnostic mode and the PC will query continuously the wireless system for data.
6) Event rows will start appearing on the page as soon as they happen:



Picture 67

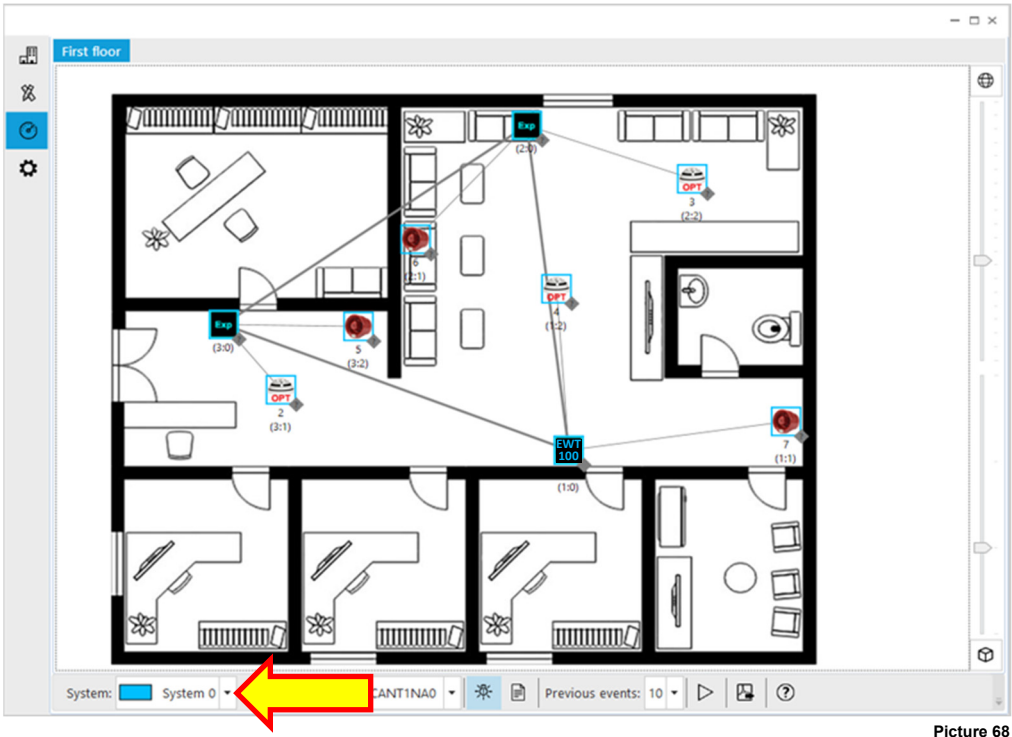
7) Click the icon to stop the diagnostic / event-recordings-gathering mode.

SYSTEM DIAGNOSTICS - SYSTEM SELECTION

More than one FireVibes system can coexist in a single installation site.

It is therefore possible to choose which system has to be queried for diagnostic data.

1) Select the wireless system you want to query from the drop down list box in the low - left part of the window:



Picture 68

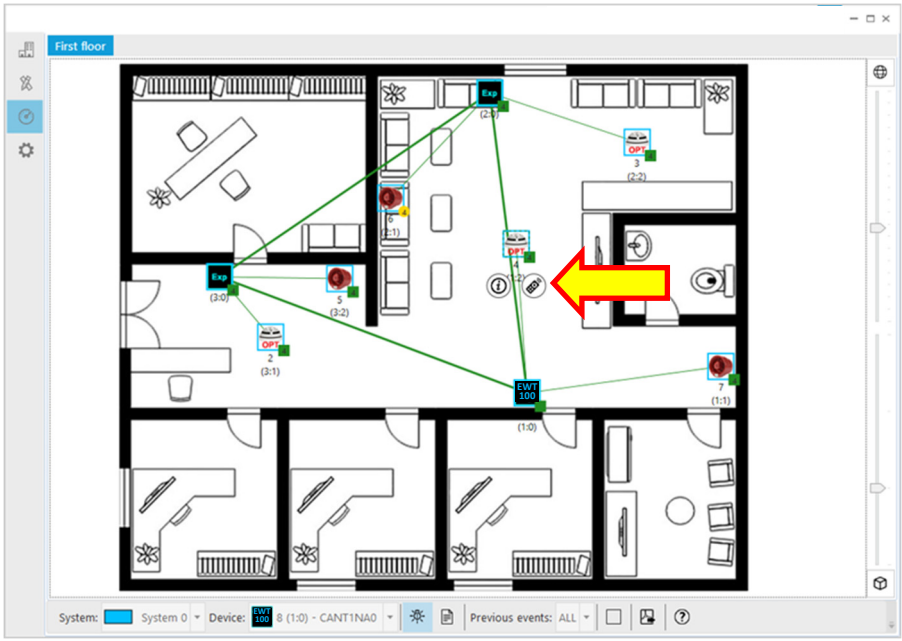
2) Perform the necessary diagnostic procedures as explained in the present manual.

Be aware that it is not possible to select the system while FireVibes Studio is already querying and actively diagnosing a system.

SYSTEM DIAGNOSTICS - SENDING COMMANDS

FireVibes Studio gives the opportunity to send commands to the single field devices of a system. As an example:

1) Make sure that all devices of the FireVibes system are all programmed.
2) Click the tab-page icon to visualize the diagnostic page.
3) Make sure that your PC is connected to the central node (**EWT100** / **IWT100**).
4) Click the icon on the lower part of the window; clicking this icon starts the diagnostic mode.
5) Click on the field device; option icons appear under it.



Picture 69

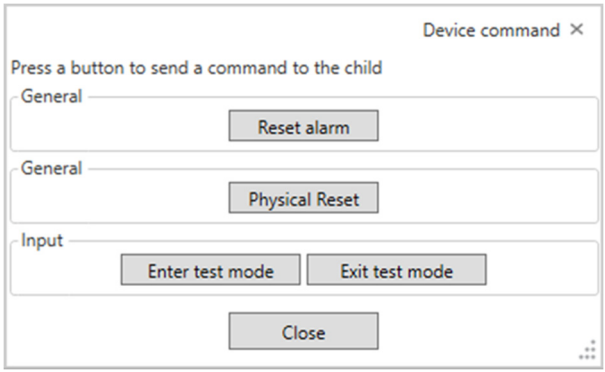
6) Click the icon.

"Device command" window appears.

7) Click on the command buttons you need.

8) Click **Close** when you have finished.

9) Click the icon to stop the diagnostic mode.



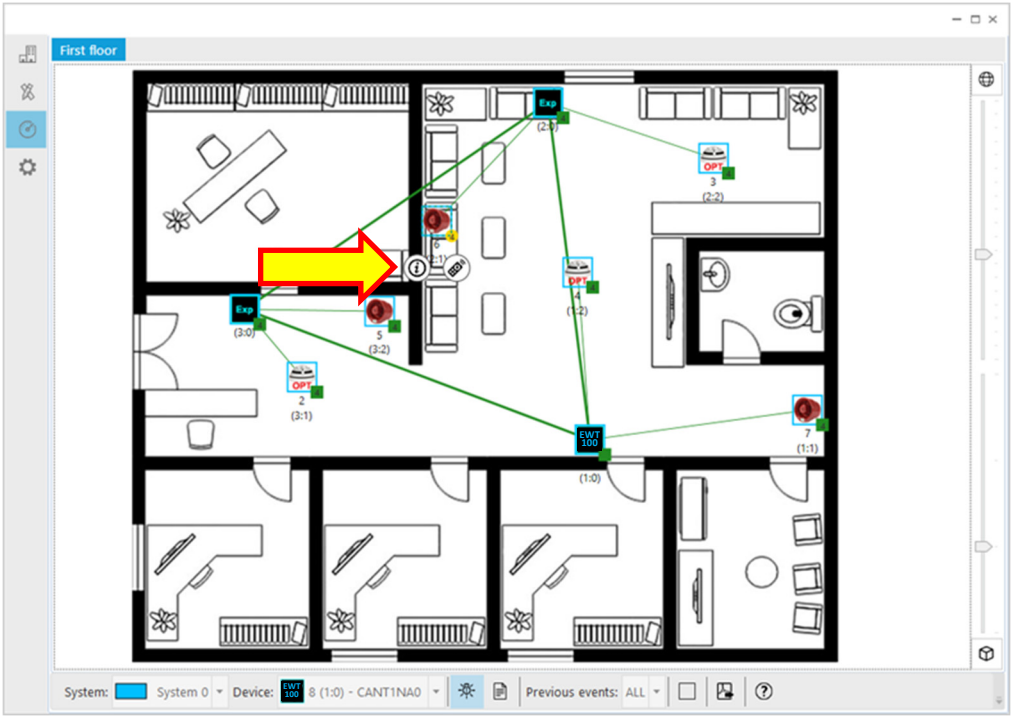
Picture 70

SYSTEM DIAGNOSTICS - CHECKING THE STATUS OF THE DEVICES

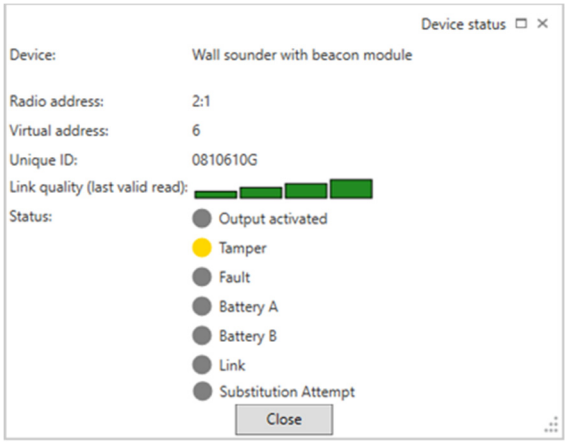
FireVibes Studio software gives the opportunity to check the status of a network or a field device while in diagnostic mode.

1) Make sure that all devices of the FireVibes system are all programmed.
2) Click the tab-page icon to visualize the diagnostic page.
3) Make sure that your PC is connected to the central node (**EWT100** / **IWT100**).
4) Click the icon on the lower part of the window; clicking this icon starts the diagnostic mode.
5) Click on the field device; option icons appear under it.

Picture 71



6) Click the icon.
7) “Device status” window pops-up.
8) Check the status of the device.
9) Click **Close** when you have finished.
10) Click the icon to stop the diagnostic mode.

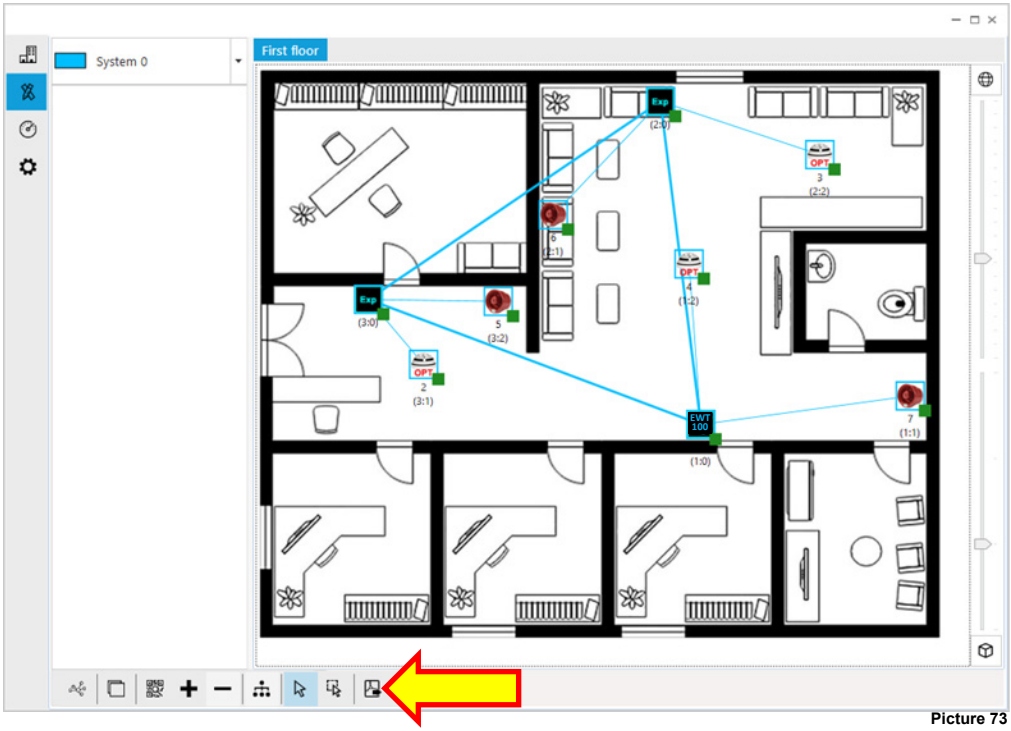


Picture 72

REPORT GENERATION - THE EDIT REPORT

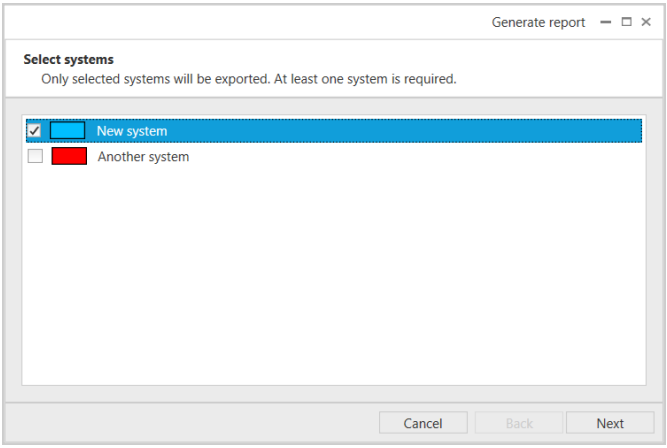
The edit report can be generated from the edit tab page ( ).

Click on the “Generate report” icon in the command bar at the bottom of the tab page:



Picture 73

The following window pops up, permitting you to choose the wireless system to which the report refers:

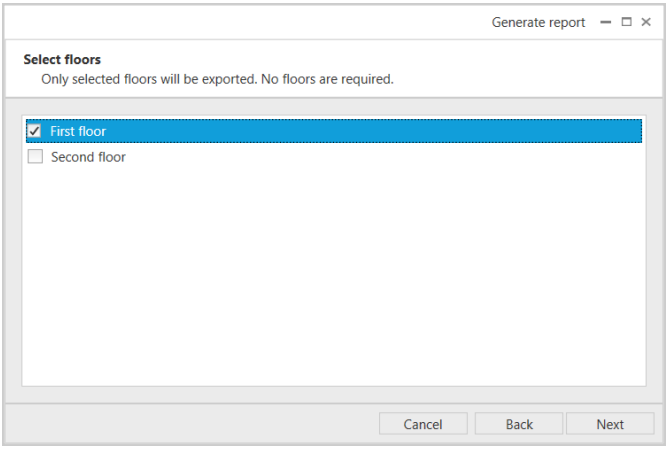


Picture 74

You can choose more than one systems.

- **Next** to proceed.
- **Cancel** to abandon the operation.

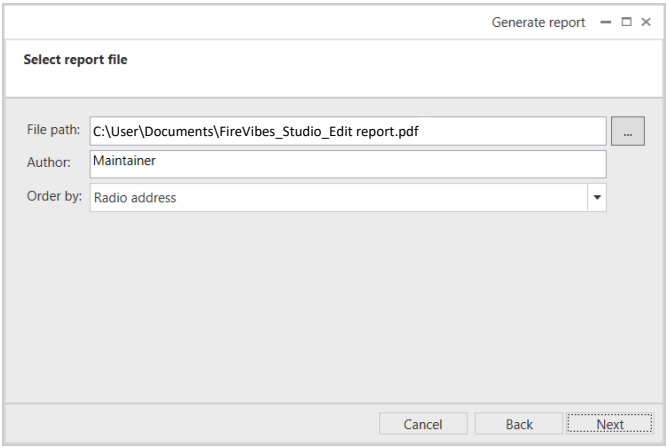
Next step consist in selecting the installation's floor or floors that will be considered in the report that will be generated. It is possible to select one or more floors through the check boxes of the "Generate report - Select floors" window:



Picture 75

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report's generation.

The "Generate report - Select report file" window pops up.



Picture 76

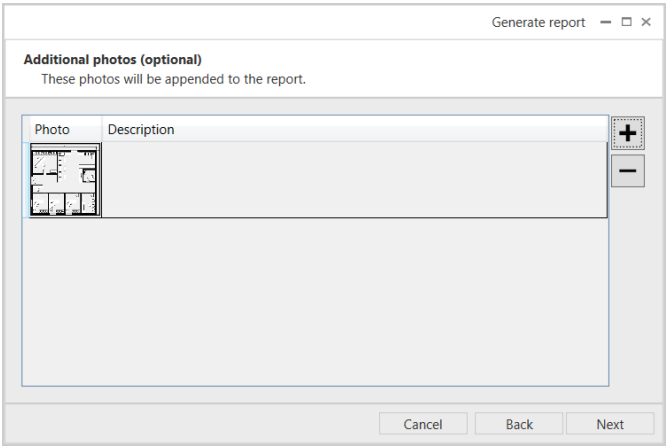
You will be asked to specify where the file, the report document will be saved on the PC and its name.
You will be also asked the name of the person responsible of generating the report (presumably your name); this name will be on the generated report.
The devices of the FireVibes system will be listed on the report in the order given by the third option of this window:

Radio address Address given by the network device and field device numbers combined; e.g. expander 3 and field device 1.

Virtual address / Loop address Sequential virtual number if the FireVibes system stems from a **IWT100** or the sequential analogue / intelligent loop number if the FireVibes system stems from a **EWT100**.

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report's generation.

With the “Generate report - Additional photos (optional)” window you can add photographs / images you want to append to the generated report:



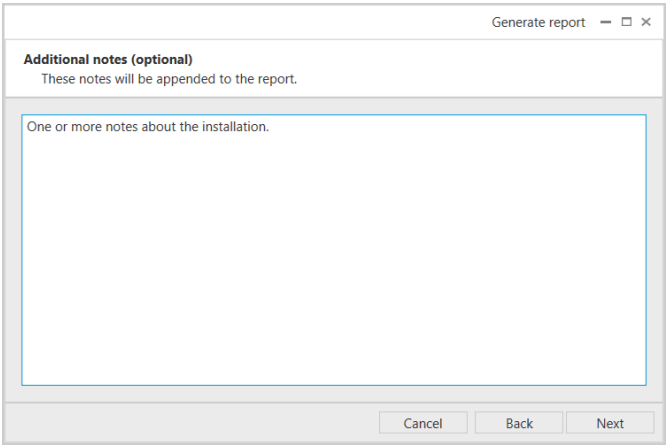
Picture 77

+ To add a photo / image.

- To remove a photo / image (photo / image must be selected on the list).

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report’s generation.

It is also possible to add your own notes the report that will be generated. This is the purpose of the following window:

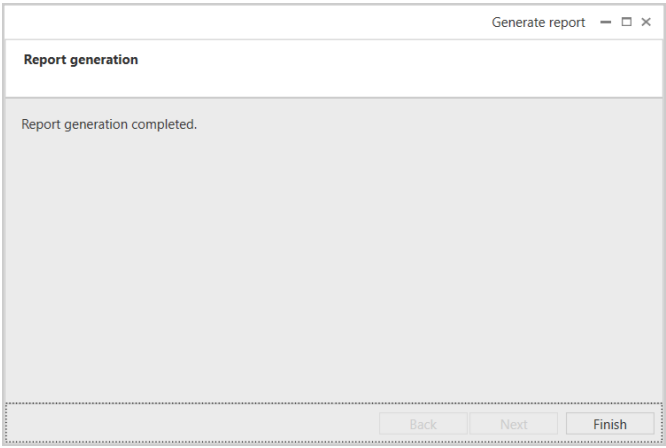


Picture 78

Edit the additional text in the central text box. Then:

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report’s generation.

Having clicked “Next” in the previous window, the report generation starts, then completes after a few seconds:



Picture 79

- **Finish** to close the “Generate report-Report generation” window.

The generated edit report contains the following:

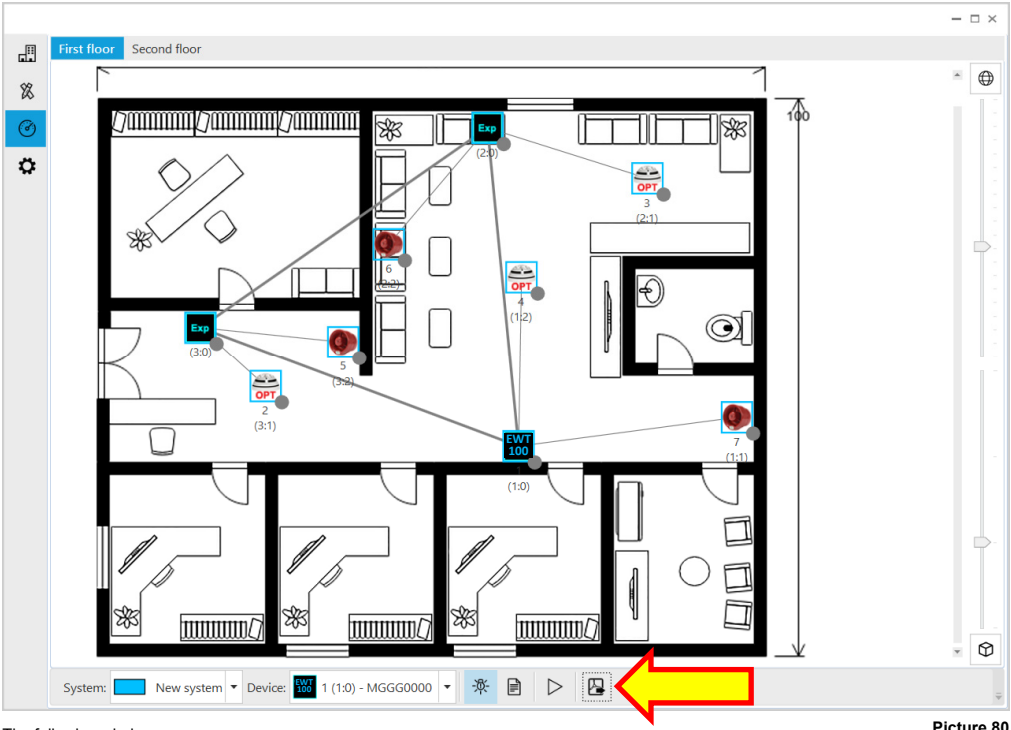
- Installation site data.
- Person responsible for generating the current report.
- Software and PC’s operating system data.
- The floorplan (or the floorplans) complete with the FireVibes system (as rendered on the FireVibes Studio edit window).
- A description of the system, the field devices and their settings in tabular form.
- A list of all devices of the system, in aggregate, summed-up form.
- The additional photos you “uploaded” before.
- The additional notes you wrote before.

REPORT GENERATION - THE DIAGNOSTIC REPORT

To generate the diagnostic report:

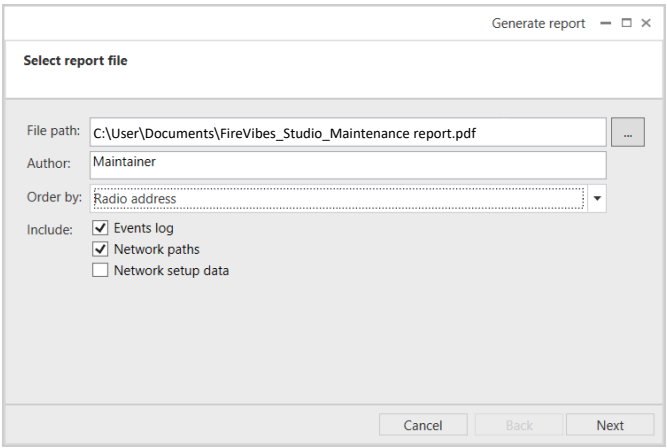
1) Click the tab page icon.

2) Click the “Generate report” icon on the command bar at the bottom of the tab page.



Picture 80

The following window pops up:



Picture 81

You will be asked to specify where the file, the report document will be saved on the PC and its name.
You will be also asked the name of the person responsible of generating the report (presumably your name); this name will be on the generated report.
The devices of the FireVibes system will be listed on the report in the order given by the third option of this window:

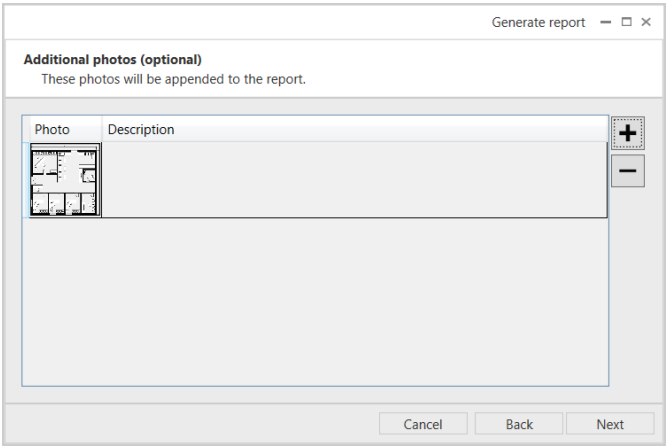
Radio address	Address given by the network device and field device numbers combined; e.g. expander 3 and field device 1.
Virtual address / Loop address	Sequential virtual number if the FireVibes system stems from a **IWT100** or the sequential analogue / intelligent loop number if the FireVibes system stems from a **EWT100**.

In the report you can specify whether to include:

Events log	The events log is included in the report.
Network paths	The diagrams of all possible network routes are included.
Network setup data	Communication performance between the network devices is included.

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report's generation.

With the "Generate report - Additional photos (optional)" window you can add photographs / images you want to append to the generated report:



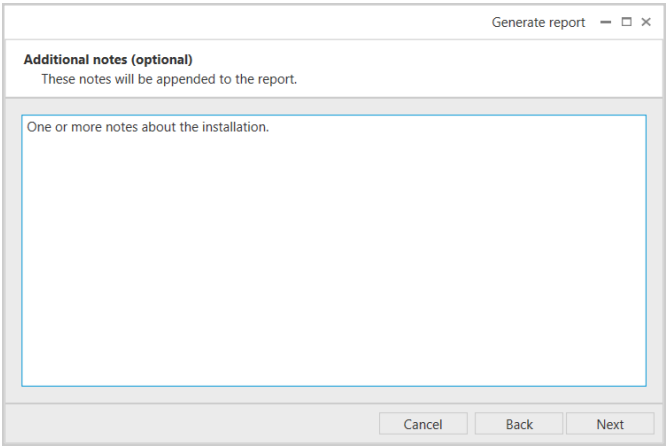
Picture 82

+ To add a photo / image.

- To remove a photo / image (photo / image must be selected on the list).

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report's generation.

It is also possible to add your own notes the report that will be generated. This is the purpose of the following window:

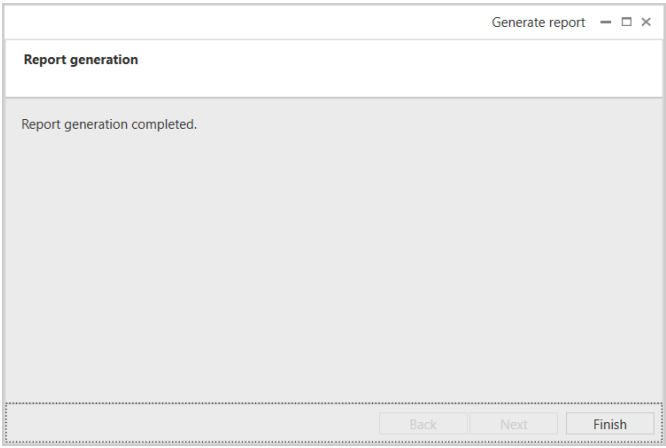


Picture 83

Edit the additional text in the central text box. Then:

- **Next** to continue.
- **Back** to return to the previous step.
- **Cancel** to give up the report's generation.

Having clicked "Next" in the previous window, the report generation starts, then completes after a few seconds:



Picture 84

- **Finish** to close the "Generate report-Report generation" window.

The generated diagnostic report contains the following:

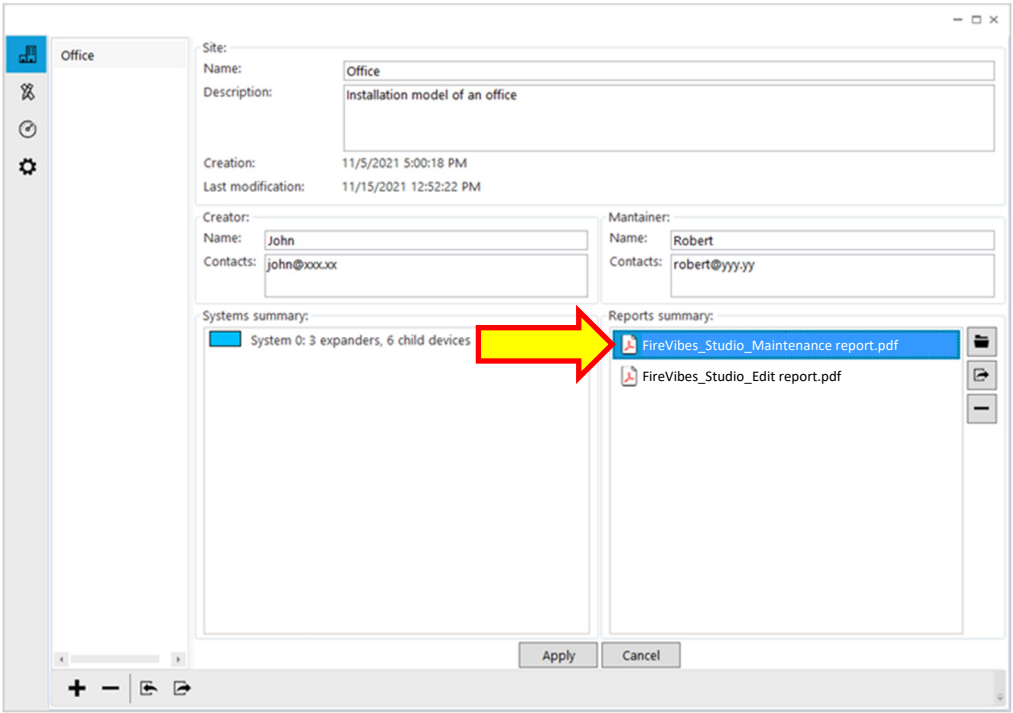
- Installation site data.
- Person responsible for generating the current report.
- Software and PC's operating system data.
- The floorplans complete with the FireVibes system (as rendered on the **FireVibes Studio** edit window).
- A description of the system, the field devices and their settings in tabular form.
- A list of all devices of the system, with their fault / alarm activation indications and environmental value readings at the moment of the generation of the report.
- The event log messages.
- The diagrams of all possible network routes.
- Communication performance between the network devices.
- The additional photos you "uploaded" before.
- The additional notes you wrote before.

REPORT MANAGEMENT

Reports are created in the file path you choose when you generate them (the default path points to the "Documents" system folder) and a copy is saved in a software's hidden folder. Through **FireVibes Studio** you can open, copy and delete the reports from this hidden folder.

Report management area is located in the sites tab page ( ).

1) Click the sites tab page:



Picture 85

Depending on the site selected, the “Report summary” panel visualizes the site’s specific reports (if previously created).

Possible actions you can take with the reports are the following:


Visualize a selected report on the computer screen.

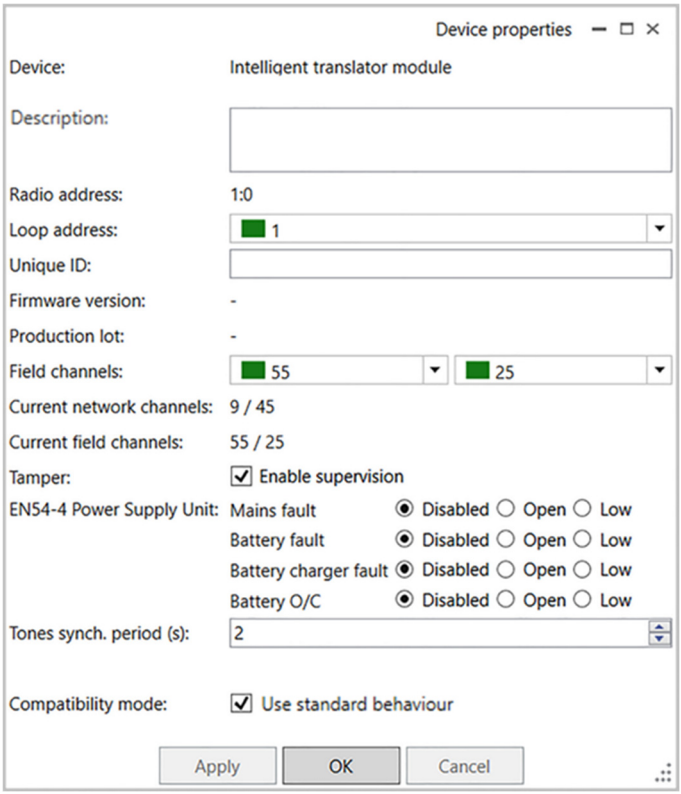

Export, save the report in the location of the PC you specify.

Delete the report.

APPENDIX A - SETUP PROPERTIES FOR THE FIREVIBES DEVICES

In this appendix section it is given a description of the various setup options for the FireVibes devices.

EWT100 - INTELLIGENT TRANSLATOR MODULE

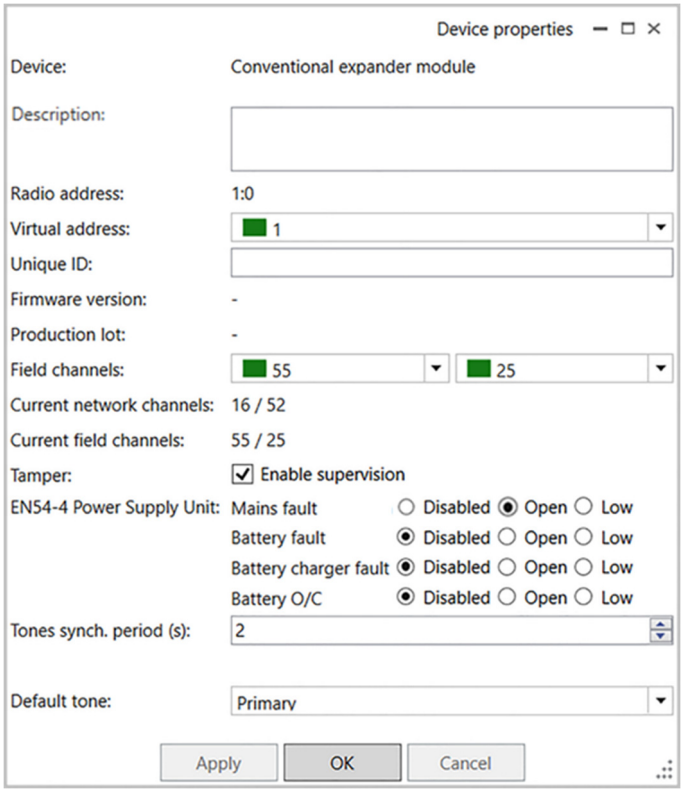


Picture 86

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	The version of the firmware of the device.
Production lot	The year and week of production of the device.
Field channels	User selectable wireless channels that are used for exchanging data with the field devices. FireVibes wireless devices always exchange communication data through two distinct channels. Channels are identified by numbers and come always in pairs. By changing those selectable two fields you can select the channel pair you require. Keep in mind that these are the channel pairs dedicated to field devices. A selection change in one field changes the selection in the other field automatically.
Current network channels	Network channels that are currently set for this device.
Current field channels	Field channels that are currently set for this device.
Tamper - Enable supervision	Enables the supervision of the tamper switch.
EN 54-4 power supply unit - Mains fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a mains’ power supply malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery charger fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery charger malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery O/C	The device signals a fault when its EN 54-4 compliant power supply unit signals an open battery circuit. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
Tones synch. period (s)	Timespan value used for the purpose of synchronizing the output of the sounders. Refer to the tables in appendix C to obtain the correct value to insert in this field.
Compatibility mode - Use standard behaviour	By checking this option, the FireVibes translator module can be used with analogue control panels that do not implement the FireVibes’ extended protocol commands.

Table 9

IWT100 - CONVENTIONAL EXPANDER MODULE

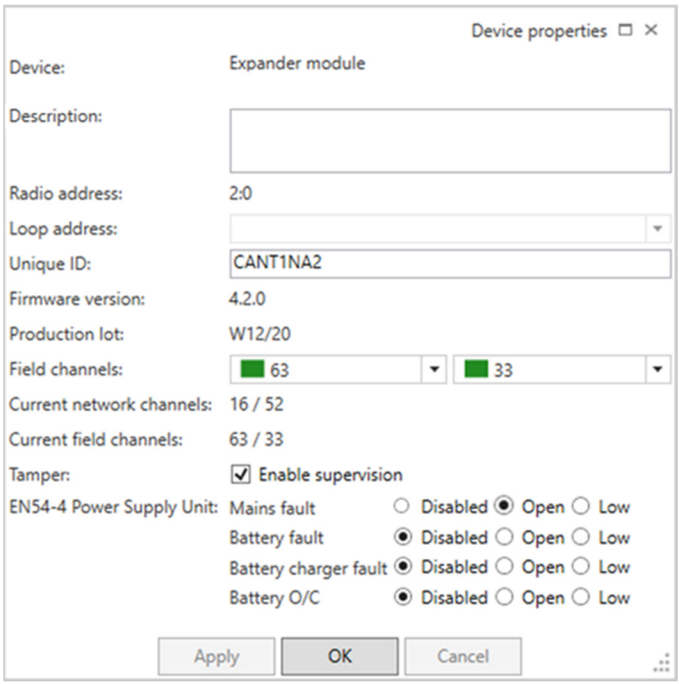


Picture 87

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	The version of the firmware of the device.
Production lot	The year and week of production of the device.
Field channels	User selectable wireless channels that are used for exchanging data with the field devices. FireVibes wireless devices always exchange communication data through two distinct channels. Channels are identified by numbers and come always in pairs. By changing those selectable two fields you can select the channel pair you require. Keep in mind that these are the channel pairs dedicated to field devices. A selection change in one field changes the selection in the other field automatically.
Current network channels	Network channels that are currently set for this device.
Current field channels	Field channels that are currently set for this device.
Tamper - Enable supervision	Enables the supervision of the tamper switch.
EN 54-4 power supply unit - Mains fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a mains’ power supply malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery charger fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery charger malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery O/C	The device signals a fault when its EN 54-4 compliant power supply unit signals an open battery circuit. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
Tones synch. period (s)	Timespan value used for the purpose of synchronizing the output of the sounders. Refer to the tables in appendix C to obtain the correct value to insert in this field.
Default tone	Indicates, in case of sounder devices activation, whether the primary or secondary tone set is used.

Table 10

XWT100 - EXPANDER MODULE

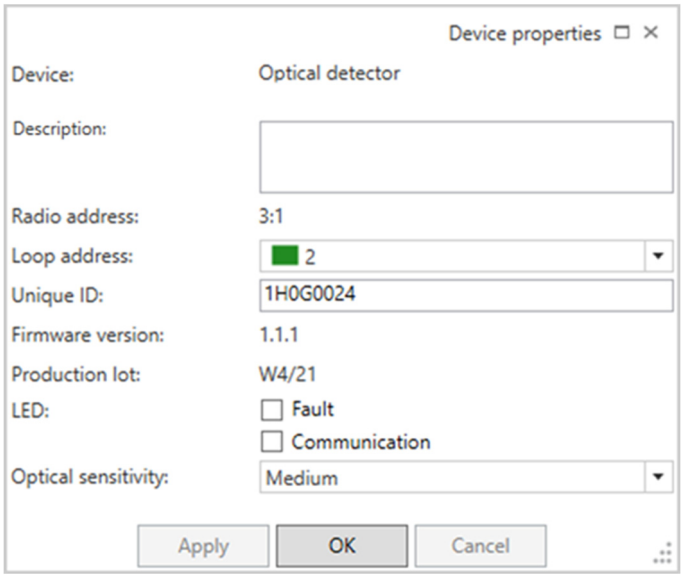


Picture 88

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	The version of the firmware of the device.
Production lot	The year and week of production of the device.
Field channels	User selectable wireless channels that are used for exchanging data with the field devices. FireVibes wireless devices always exchange communication data through two distinct channels. Channels are identified by numbers and come always in pairs. By changing those selectable two fields you can select the channel pair you require. Keep in mind that these are the channel pairs dedicated to field devices. A selection change in one field changes the selection in the other field automatically.
Current network channels	Network channels that are currently set for this device.
Current field channels	Field channels that are currently set for this device.
Tamper - Enable supervision	Enables the supervision of the tamper switch.
EN 54-4 power supply unit - Mains fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a mains’ power supply malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery charger fault	The device signals a fault when its EN 54-4 compliant power supply unit signals a battery charger malfunction. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.
EN 54-4 power supply unit - Battery O/C	The device signals a fault when its EN 54-4 compliant power supply unit signals an open battery circuit. Disabled: no fault check; Open: fault raised when input signal is in high impedance; Low: fault raised when input signal is in a low state.

Table 11

WD100 - OPTICAL DETECTOR

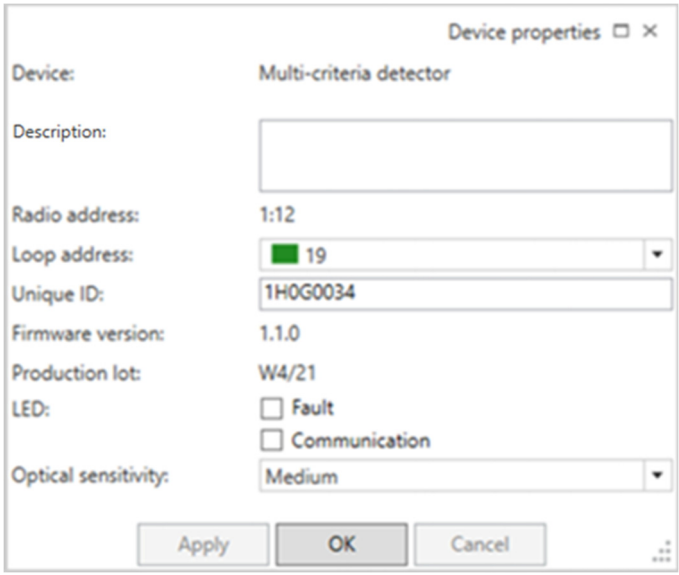


Picture 89

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.
Optical sensitivity	Alarm’s smoke density threshold level setting for this device.

Table 12

WD300 - MULTI-CRITERIA DETECTOR

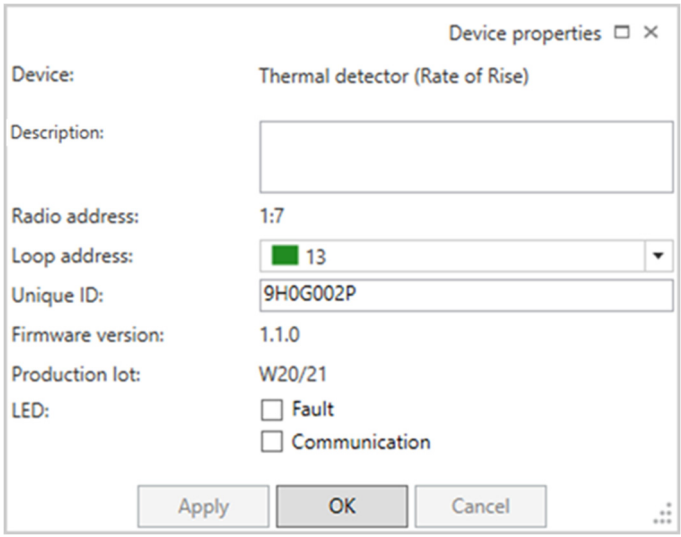


Picture 90

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.
Optical sensitivity	Alarm’s smoke density threshold level setting for this device.

Table 13

WD200 - THERMAL DETECTOR (RATE OF RISE)

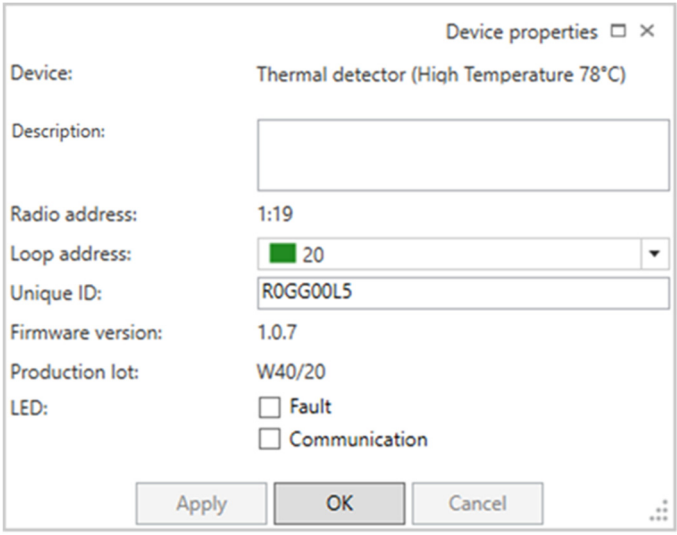


Picture 91

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 14

WD200 - THERMAL DETECTOR (HIGH TEMPERATURE 78 °C)

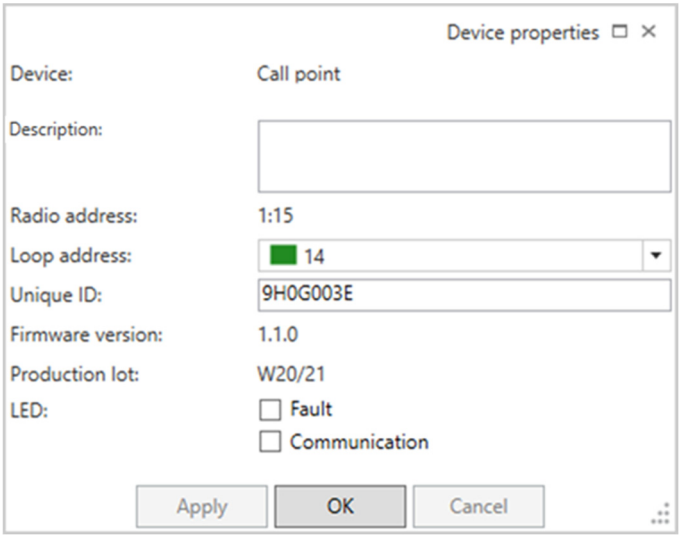


Picture 92

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 15

WC0010 - CALL POINT

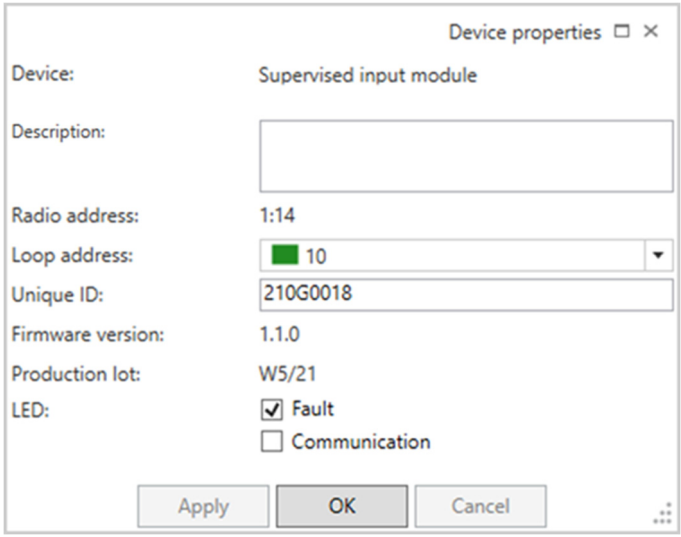


Picture 93

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 16

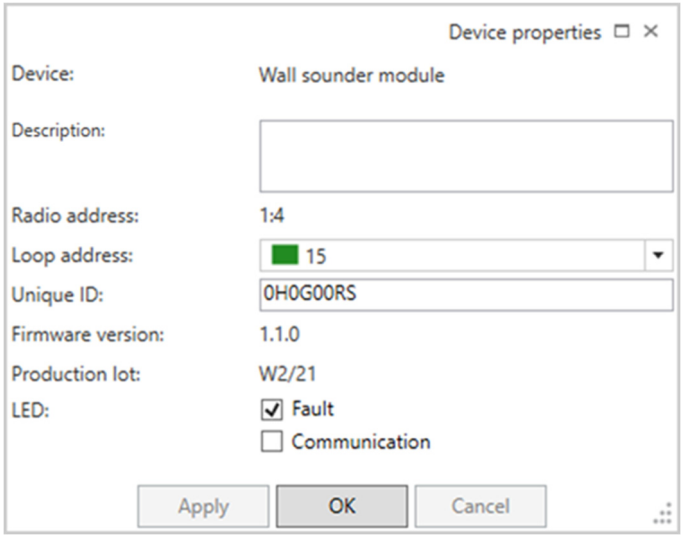
WM110 - SUPERVISED INPUT MODULE



Picture 94

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 17

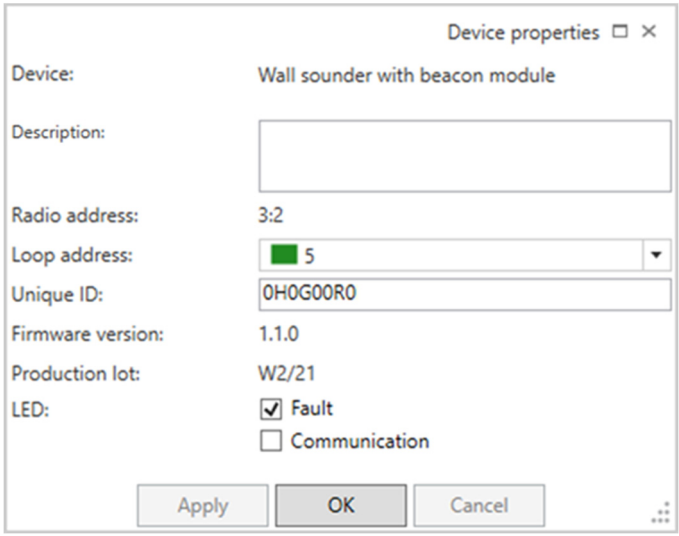

Device properties
Device:
Wall sounder module
Description:
Radio address:
1:4
Loop address:
15
Unique ID:
0H0G00RS
Firmware version:
1.1.0
Production lot:
W2/21
LED:
Fault
Communication
Apply
OK
Cancel

Picture 95

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 18

WS2010RE, WS2020RE - WALL SOUNDER WITH BEACON MODULE

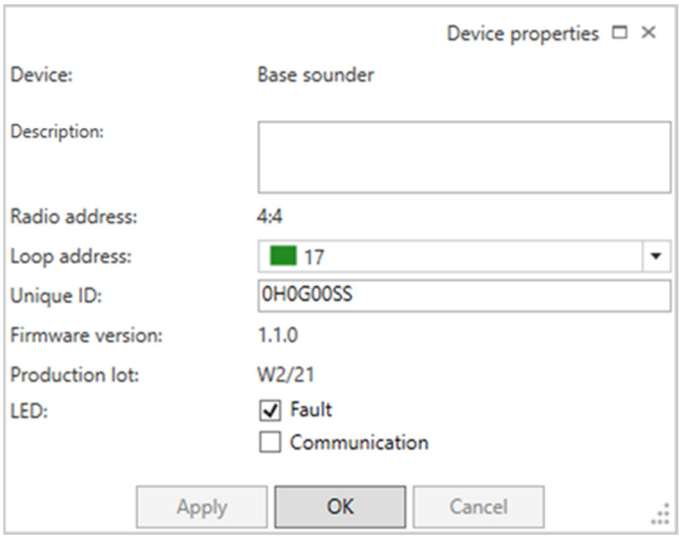


Picture 96

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 19

WSB1010 - BASE SOUNDER

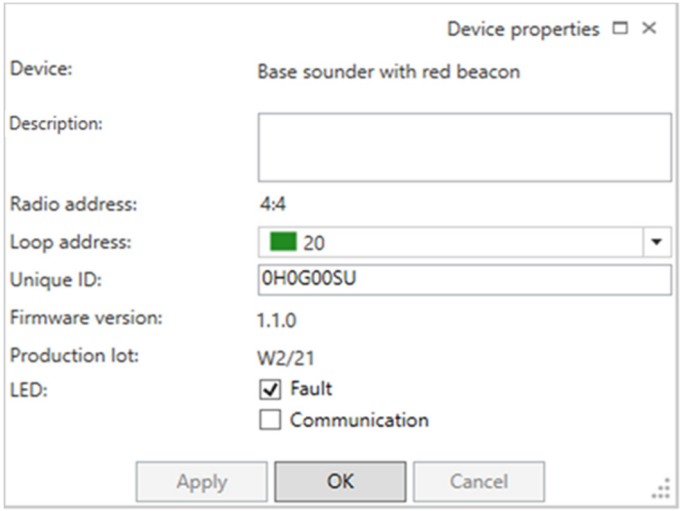


Picture 97

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 20

WSB1021- BASE SOUNDER WITH RED BEACON

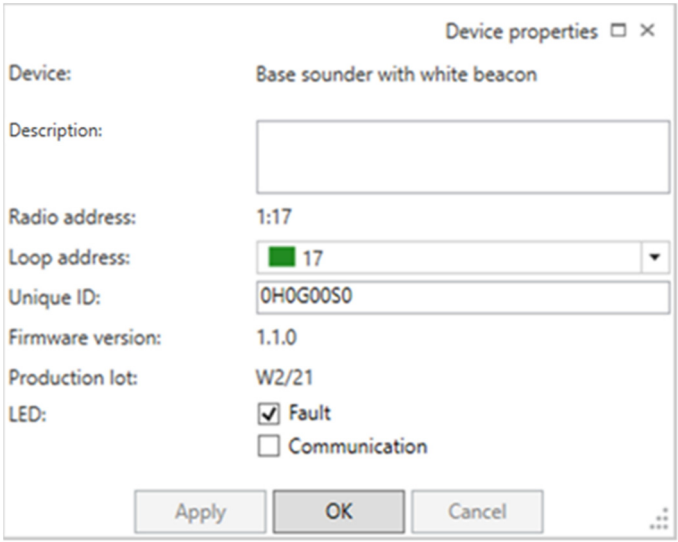


Picture 98

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 21

WSB1020 - BASE SOUNDER WITH WHITE BEACON

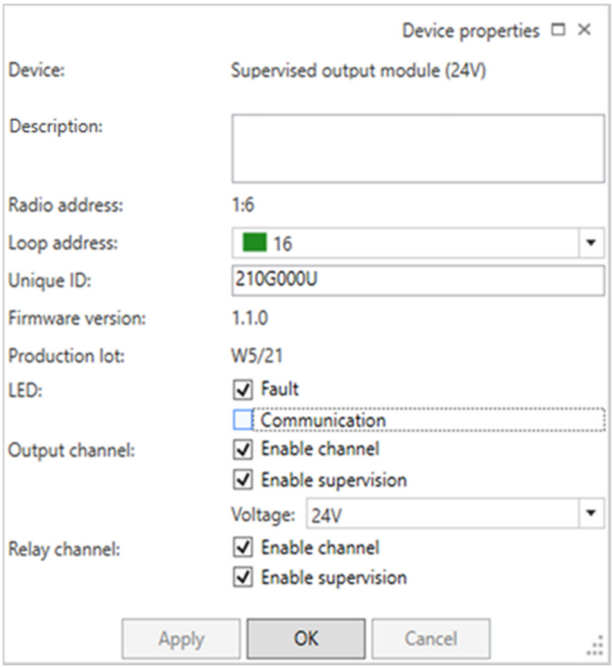


Picture 99

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.

Table 22

WM202SR - SUPERVISED OUTPUT MODULE (24 V)



Picture 100

Setting	Description
Device	Product code and its description.
Description	Add any useful note, if needed.
Radio address	The wireless address in the “Network device number: Field device number” format.
Loop address	This is the radio loop address. Do not confuse it with wired loop logical address. It will be used to generate the device serial number.
Virtual address	Indicates a numeric sequential address. Similarly to analogue addresses, virtual addresses are used in conventional expander based systems.
Unique ID	Alphanumeric set of characters that univocally and unequivocally identifies a single FireVibes device.
Firmware version	Firmware version of the device.
Production lot	The year and week of production of the device.
LED - Fault	Activates the device’s LED in the event of a generic fault.
LED - Communication	Activates the device’s LED every time there is a communication with its parent network device.
Output channel - Enable channel	If checked, the output channel is enabled.
Output channel - Enable supervision	If checked, the supervision of the output channel is enabled.
Output channel - Voltage	Sets the voltage level of the output channel.
Relay channel - Enable channel	Enables the relay-type output channel.
Relay channel - Enable supervision	Enables the supervision of the relay-type output channel.

Table 23

APPENDIX B - STANDARD CHANNEL PAIRS

In this appendix section you can find the lists of the standard channel pairs used by the FireVibes system.

- 868 MHz band

Field channel pairs (868MHz)	
1	37
2	38
3	39
4	40
5	41
6	42
7	43
8	44
17	53
18	54
55	25
56	26
57	27
58	28
59	29
60	30
61	31
62	32
63	33
64	34
65	35
66	36

Table 24

Network channel pairs (868MHz)	
9	45
10	46
11	47
12	48
13	49
14	50
15	51
16	52

Table 25

Not used channels (868MHz)
19
20
21
22
24

Table 26

Discovery / Link channel (868MHz)	
Discovery A	23
Discovery B	63
Discovery C	3
Link channel	23

Table 27

- 916 MHz band

Field channel pairs (916Mhz)	
6	42
7	43
8	44
17	53
18	54
37	1
38	2
39	3
40	4
41	5
55	25
56	26
57	27
58	28
59	29
60	30
61	31
62	32
63	33
64	34
65	35
66	36

Table 28

Network channel pairs (916MHz)	
45	9
46	10
47	11
48	12
49	13
50	14
51	15
52	16

Table 29

Not used channels (916Mhz)
19
20
21
22
24

Table 30

Discovery / Link channel (916Mhz)	
Discovery A	23
Discovery B	63
Discovery C	3
Link channel	23

Table 31

APPENDIX C - "TONES SYNCH. PERIOD (S)" OPTION SETTING

The following table is valid for the **WSB1010**, **WSB1021**and **WSB1020**:

Tone	Tone designation	Tone pattern description	DIP switch	Sync period
0	Silent	No sound	11111	**2**
1	Warble Tone	800Hz for 500ms, then 1000Hz for 500ms	11101	**2**
2	Continuous tone	970Hz continuous tone	01011	**2**
3	Slow Whoop (Dutch)	500-1200Hz for 3500ms, then off for 500ms	10101	**4**
4	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	**2**
5	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	**2**
6	Alternative warble	800Hz for 250ms, then 960Hz for 250ms	11110	**2**
7	Alternative warble	500Hz for 250ms, then 600Hz for 250ms	11100	**2**
8	Analogue sweep tone	500-600Hz swept every 500ms (2Hz)	10100	**2**
9	Australian Alert (intermittent tone)	970Hz for 625ms, then OFF for 625ms	10001	**2 (*)**
10	Australian Evac (slow whoop)	500-1200Hz sweep for 3750ms, then OFF for 250ms	10110	**4**
11	FP1063.1-Telecom	800Hz for 250ms, then 970Hz for 250ms	00001	**2**
12	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	**2**
13	HF Back up interrupted tone	2800Hz for 1s, then OFF for 1s	11011	**2**
14	HF Back up interrupted tone – fast	2800Hz for 150ms, then OFF for 150ms	11001	**6**
15	HF Continuous	2800Hz continuous	01001	**2**
16	Interrupted tone	800Hz for 500ms,then OFF for 500ms	01111	**2**
17	Interrupted tone medium	1000Hz for 250ms, then OFF for 250ms	01101	**2**
18	ISO 8201 LF BS5839 Pt 1 1988	970Hz for 500ms, then OFF for 500ms	01110	**2**
19	ISO 8201 HF	2850Hz for 500ms, then OFF for 500ms	01100	**2**
20	LF Back up Alarm	800Hz for 150ms, then OFF for 150ms	11010	**6**
21	LF Buzz	800-950Hz swept every 9ms	01010	**2 (*)**
22	LF Continuous tone BS5839	800Hz continuous	11000	**2**
23	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	**6**
24	Siren 2 way ramp (short)	500-1200Hz rising for 250ms, then falling for 250ms	00010	**2**
25	Swedish all clear signal	660Hz continuous	00100	**2**
26	Swedish Fire signal	660Hz for 150ms, then OFF for 150ms	00110	**6**
27	Sweep tone (1 Hz)	800-900Hz swept every 1000ms	10111	**2**
28	Sweep tone (3 Hz)	800-970Hz swept every 333ms (3Hz)	10011	**2**
29	Sweep tone (9 Hz)	800-970Hz swept every 111ms (9Hz)	01000	**2**
30	US Temporal Pattern HF	(2900Hz for 500ms ON, 500ms OFF) x3, then 1500ms OFF	00011	**2 (*)**
31	LF Sweep (Cranford tone)	800-1000Hz swept every 500ms (2Hz)	10000	**2**

Table 32

(*) The devices, playing this tone, cannot be acoustically synchronized.
On the contrary, the visual signals can be synchronized, always (**WSB1021**and **WSB1020**).

The following table is valid for the **WS2010RE** and the **WS2020RE**:

Tone	Tone designation	Tone pattern description	DIP switch	Sync period
1	Warble Tone	800Hz for 500ms, then 1000Hz for 500ms	11101	**2**
2	Continuous tone	970Hz continuous tone	01011	**2**
3	Slow Whoop (Dutch)	500-1200Hz for 3500ms, then off for 500ms	10101	**4**
4	German DIN tone	1200-500Hz swept every 1000ms (1Hz)	00111	**2**
5	Alternate HF slow sweep	2350-2900Hz swept every 333ms (3Hz)	10010	**2**
6	Alternative warble	800Hz for 250ms, then 960Hz for 250ms	11110	**2**
7	Alternative warble	500Hz for 250ms, then 600Hz for 250ms	11100	**2**
8	Analogue sweep tone	500-600Hz swept every 500ms (2Hz)	10100	**2**
9	Australian Alert (intermittent tone)	970Hz for 625ms, then OFF for 625ms	10001	**2 (*)**
10	Australian Evac (slow whoop)	500-1200Hz sweep for 3750ms, then OFF for 250ms	10110	**4**
11	Alternative warble	990Hz for 250ms, then 665Hz for 250ms	00001	**2**
12	French tone AFNOR	554Hz for 100ms, then 440Hz for 400ms	00101	**2**
13	HF Back up interrupted tone	2800Hz for 1s, then OFF for 1s	11011	**2**
14	HF Back up interrupted tone – fast	2800Hz for 150ms, then OFF for 150ms	11001	**6**
15	HF Continuous	2800Hz continuous	01001	**2**
16	Interrupted tone	800Hz for 500ms,then OFF for 500ms	01111	**2**
17	Interrupted tone medium	1000Hz for 250ms, then OFF for 250ms	01101	**2**
18	ISO 8201 LF BS5839 Pt 1 1988	970Hz for 500ms, then OFF for 500ms	01110	**2**
19	ISO 8201 HF	2850Hz for 500ms, then OFF for 500ms	01100	**2**
20	LF Back up Alarm	800Hz for 150ms, then OFF for 150ms	11010	**6**
21	LF Buzz	800-950Hz swept every 9ms	01010	**2 (*)**
22	LF Continuous tone BS5839	800Hz continuous	11000	**2**
23	Silent	No sound	11111	**2**
24	Siren 2 way ramp (long)	500-1200Hz rising for 3000ms, then falling for 3000ms	00000	**6**
25	Siren 2 way ramp (short)	500-1200Hz rising for 250ms, then falling for 250ms	00010	**2**
26	Swedish all clear signal	660Hz continuous	00100	**2**
27	Swedish Fire signal	660Hz for 150ms, then OFF for 150ms	00110	**6**
28	Sweep tone (1 Hz)	800-900Hz swept every 1000ms	10111	**2**
29	Sweep tone (3 Hz)	800-970Hz swept every 333ms (3Hz)	10011	**2**
30	Sweep tone (9 Hz)	800-970Hz swept every 111ms (9Hz)	01000	**2**
31	US Temporal Pattern HF	(2900Hz for 500ms ON, 500ms OFF) x3, then 1500ms OFF	00011	**2 (*)**
32	LF Sweep (Cranford tone)	800-1000Hz swept every 500ms (2Hz)	10000	**2**

Table 33

(*) The devices, playing this tone, cannot be acoustically synchronized.
On the contrary, the visual signals can be synchronized, always (**WS2020RE**).