

WirelessProfessional

Setup and Operation Manual



WirelessProfessional

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1 How to use this manual

Please keep this manual for future reference!

1.1 Technical terms

All technical terms used in this manual are explained in the glossary at the end of the document.

1.2 Formatting conventions

- Terms used by the WirelessProfessional software are set in bold type, e.g. "The **General** tab is part of the tab bar with the **General**, **Alarm List**, **Groups** and **Maps** tabs."
- Software buttons are displayed with a grey background in this manual, e.g. "Select **Login** and enter the installer password."

1.3 WirelessProfessional software basics

The WirelessProfessional software can be operated using a touchpad, a mouse or a touchscreen.

1.3.1 Tabs

Fig. 1 shows the currently selected tab and the tab bar with the **General**, **Alarm List**, **Groups** and **Maps** tabs. The **General** tab is currently selected. In order to select a different tab, use the left mouse button to click on the tab in the tab bar or touch the tab on the touchscreen.

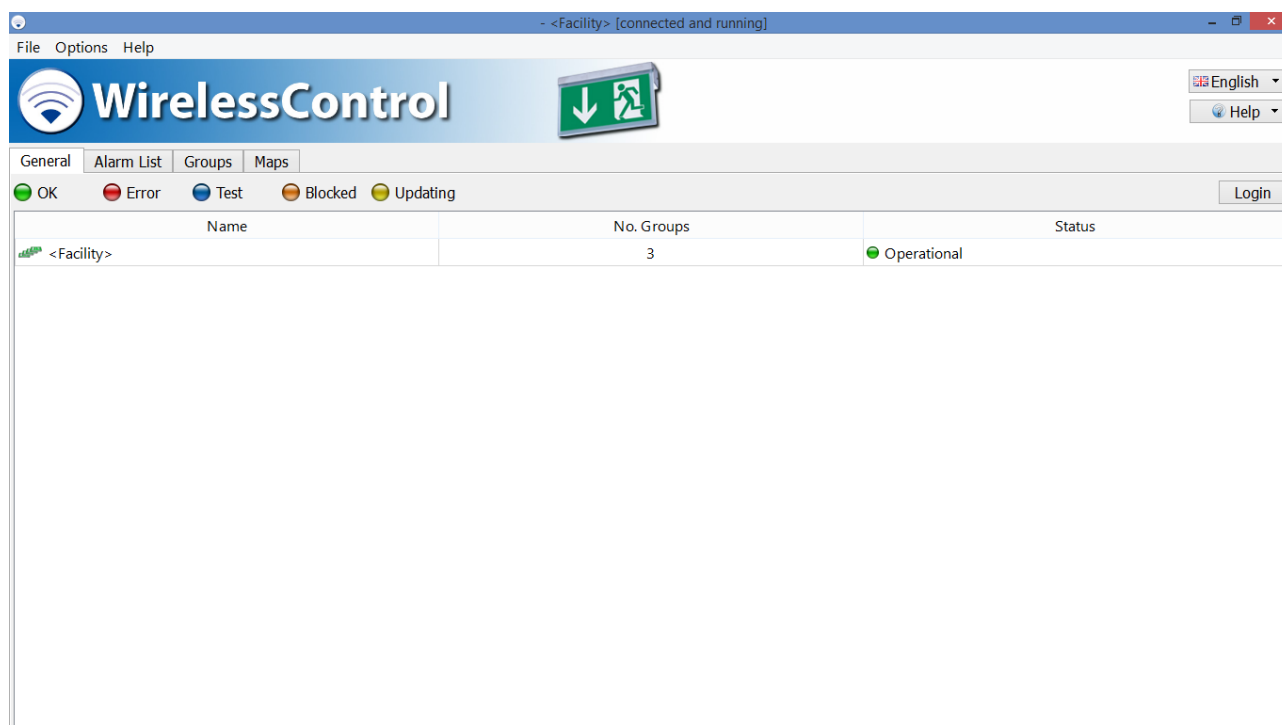


Figure 1: General tab

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1.3.2 How to select items

To select a single item, click on it with the left mouse button or touch the item on the touchscreen. (Fig. 2).

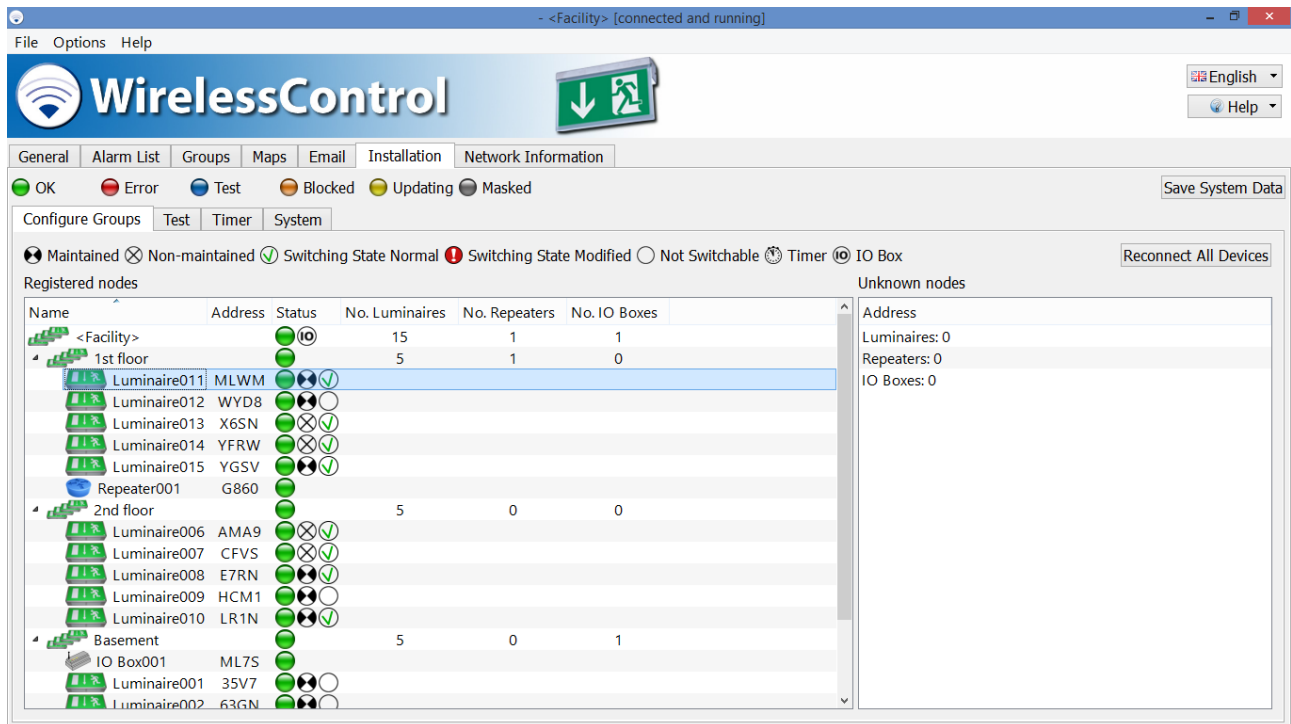


Figure 2: single selected item

To select multiple non-consecutive items, press and hold down the Strg key and then individually click on the items you wish to select or touch them on the touchscreen (Fig. 3). (The Strg-keys are located at the bottom left and bottom right of the keyboard (Ctrl-keys on keyboards with an English layout).)

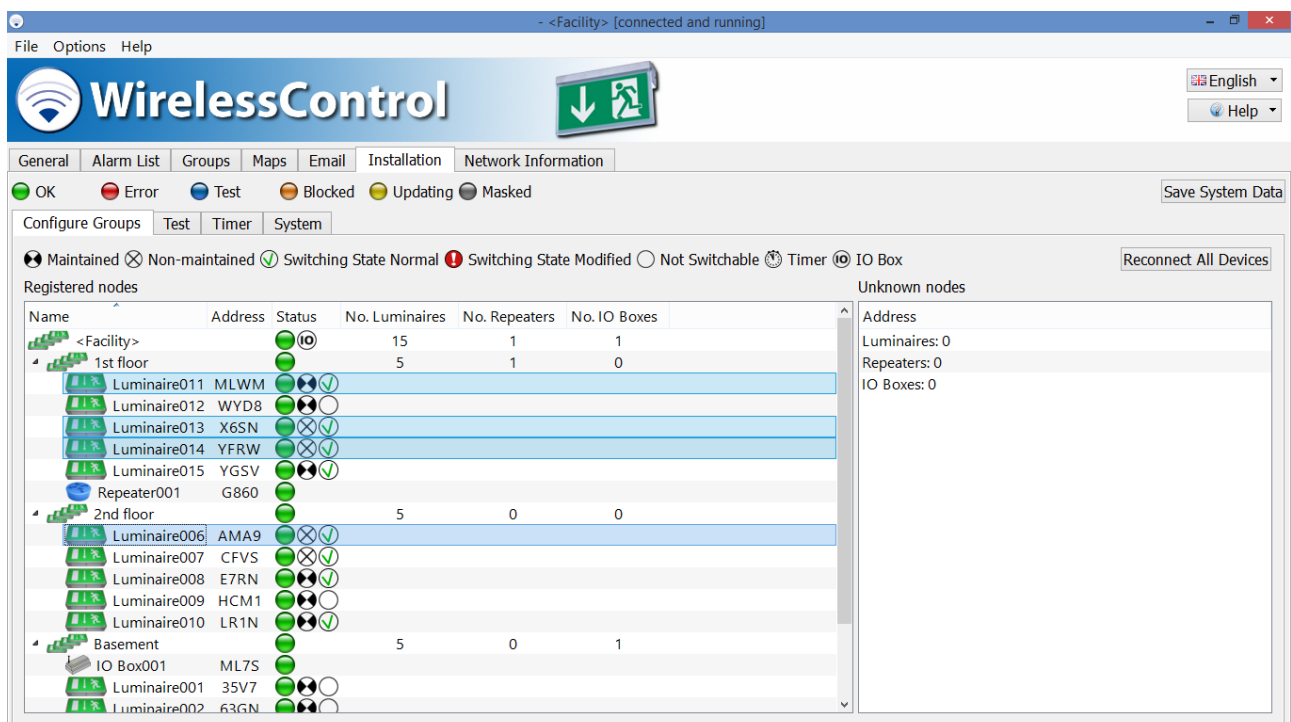


Figure 3: multiple non-consecutive selected items

To select multiple consecutive items, click on the first item or touch it on the touchscreen, press and hold down the Shift key and then click on the last item or touch it on the touchscreen (Fig. 4).

To select all items from a list, click inside the list with the left mouse button or touch the touchscreen within the list and then press the Strg and A keys together.

Not all tabs in the WirelessProfessional software support all methods mentioned to select items.

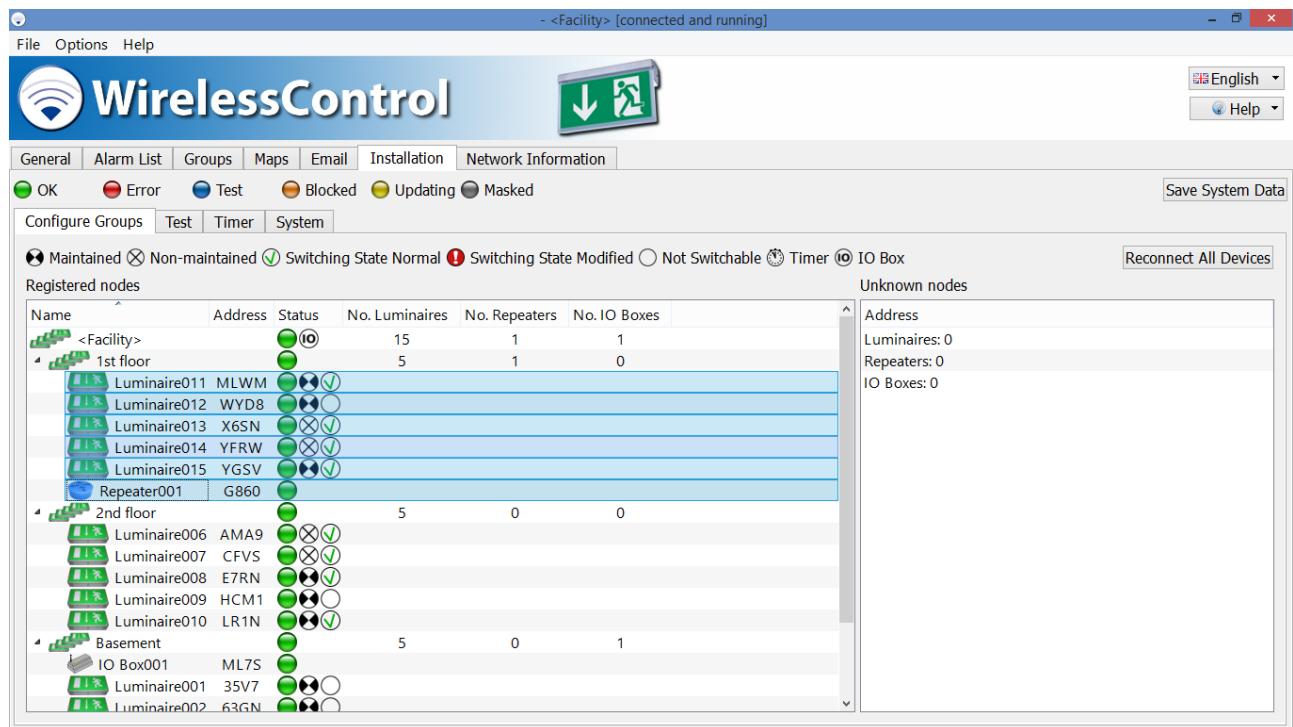


Figure 4: multiple consecutive selected items

1.3.3 How to drag items

To drag items select the items you want to drag, then click on the selected items with the left mouse button and hold the mouse button down. Drag the items to their new location and release the mouse button.

To drag items using the touchscreen, touch the selected items and move them to their desired location using your finger, (Fig. 5) then remove your finger from the screen.

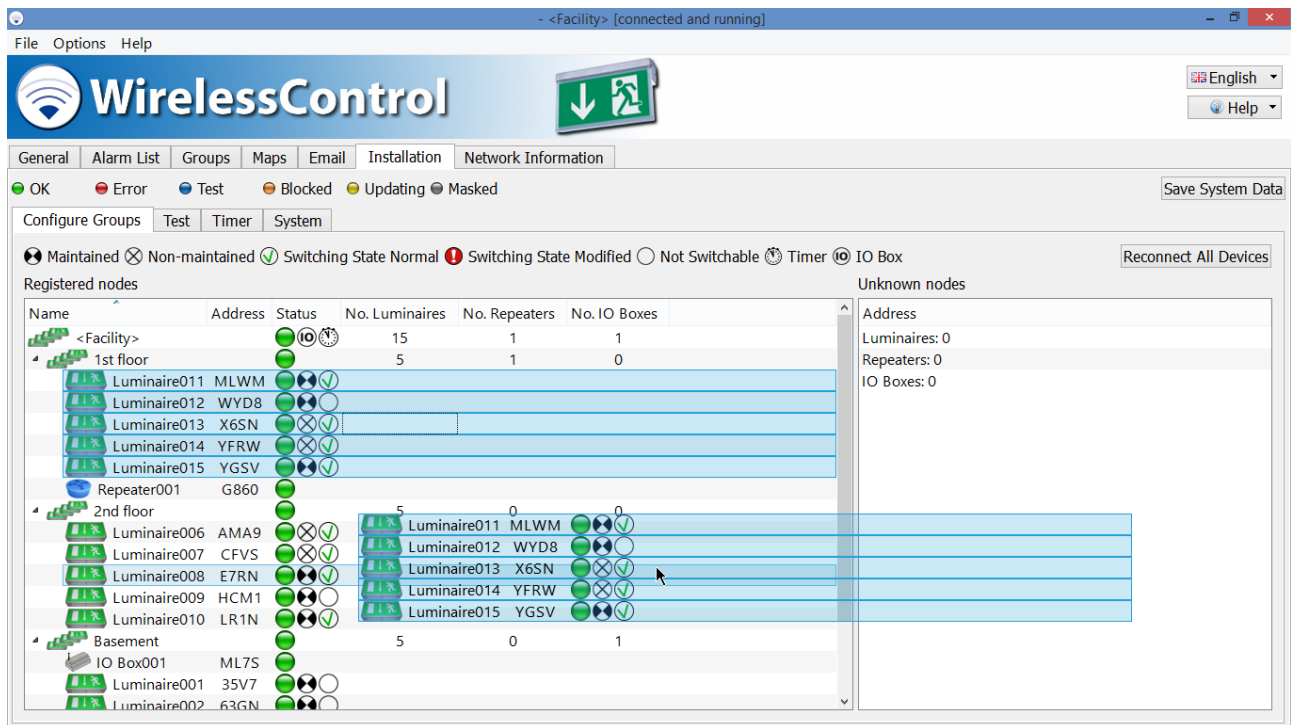


Figure 5: Dragging multiple items

1.3.4 Context menu

To open an item's context menu, click on the item with the right mouse button (Fig.Fig. 6).

To open an item's context menu using the touchscreen, touch the item and hold your finger down until a small square is displayed. The context menu will open once you have removed your finger from the screen.

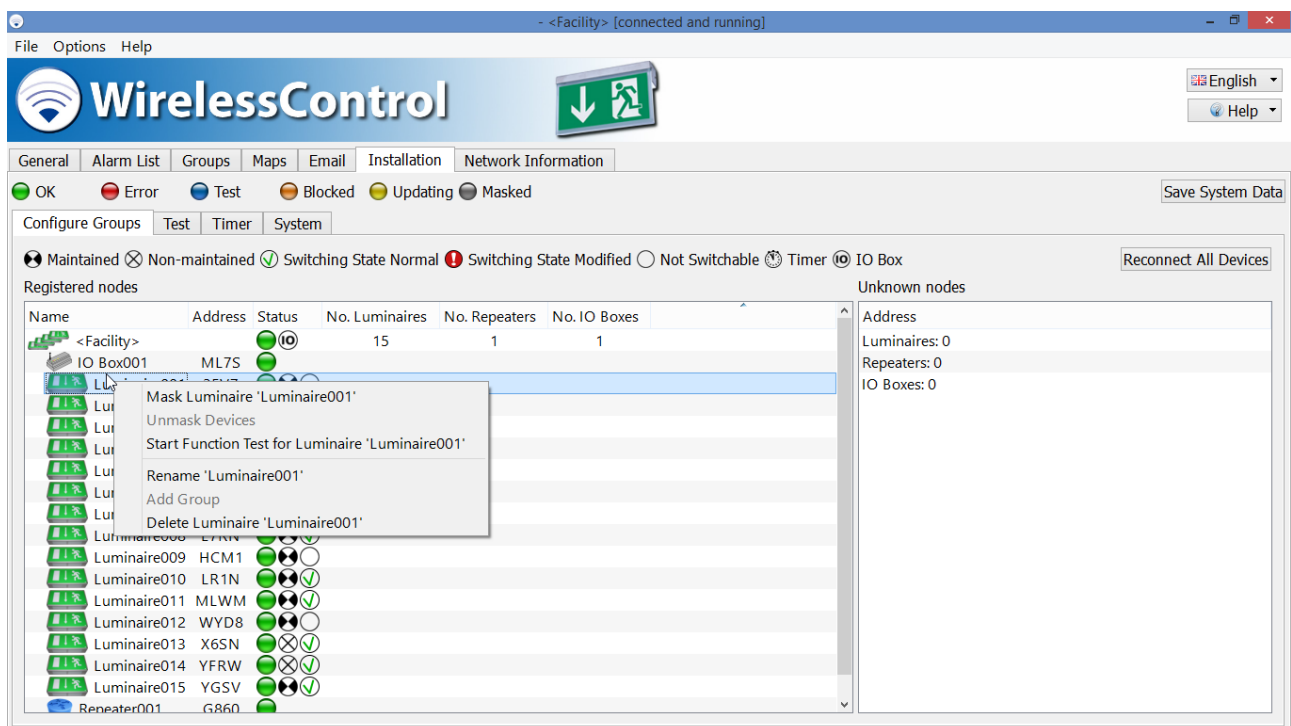


Figure 6: device's context menu

2 Introduction to the WirelessProfessional system

The WirelessProfessional system is an automatic test system (ATS) for emergency escape lighting. The system complies with EN 62034:2012.

Fig. 7 Fig. 7 shows the constitution of a WirelessProfessional system. The emergency luminaires as well as other devices set up a wireless network that is used to communicate with the automatic test system. The automatic test system is composed of a computer with the WirelessProfessional software (fig. Fig. 7 no. 4) and the USB-Koordinator (fig. Fig. 7 no. 3). The USB-Koordinator links up the computer with the wireless network. The wireless network's frequency is 868 MHz.

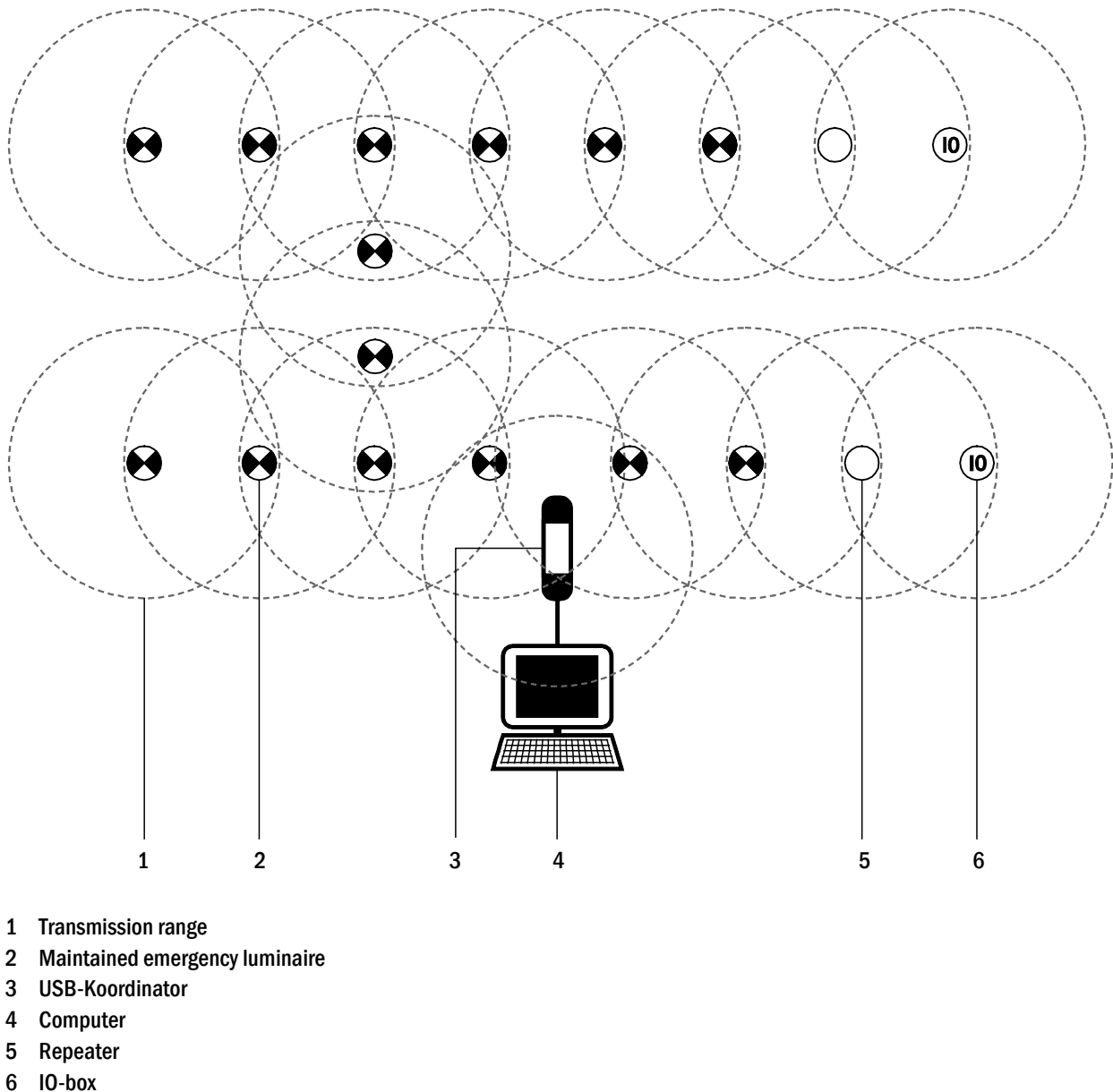


Figure 7: Constitution of a WirelessProfessional system

Each device within the wireless network can communicate with other devices within its range (Fig. 7 no. 1). The minimum range of WirelessProfessional devices is 30 m inside of buildings. The range can be larger depending on the attenuation in the building.

In order for data to be transmitted between adjacent devices, a device must be located within the range of the other. All devices must be linked with the automatic test system by a chain of devices that are in range and can pass on data. Fig. 8 shows a system with a

broken connection to the three devices shown in red. All other devices in the figure are linked with the automatic test system by chains of devices that are in range and can thus communicate with the ATS.

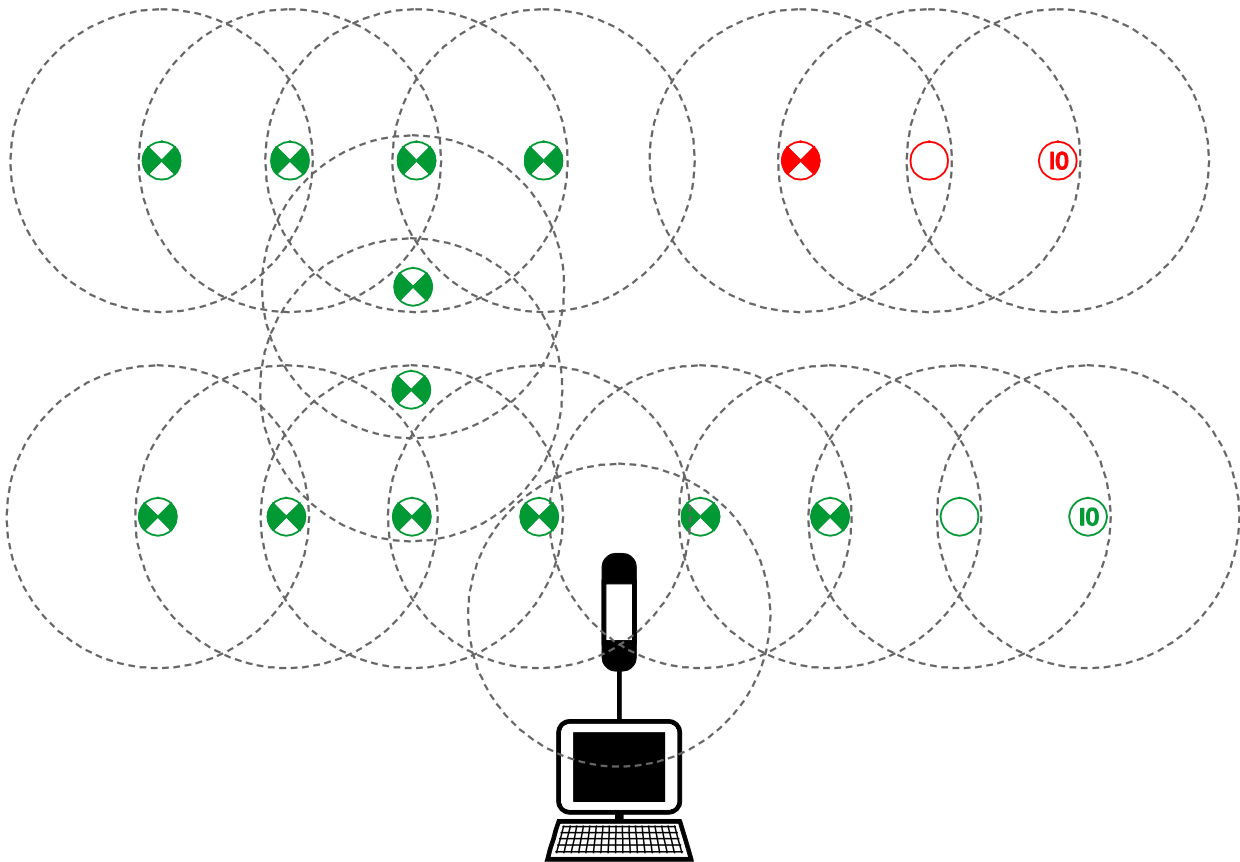


Figure 8: devices connected to the ATS (green) and disconnected devices (red)

Table 1 lists devices that are available for WirelessProfessional systems. Only the devices listed here can be used in WirelessProfessional systems.

Device	Function
Maintained emergency luminaire	Luminaire in which the illuminant is lit at all times when normal or emergency lighting is required
Non-maintained emergency luminaire	Luminaire in which the illuminant is lit only in operation when the mains power supply to the general lighting fails
IO-Box	Device with digital inputs/outputs. The device can switch outputs according to system status and external sources can trigger system functions
Repeater	Used to bridge the gap between two devices if the devices are out of range

Table 1: devices for WirelessProfessional systems

Every WirelessProfessional device has a unique alphanumeric four-digit address. The address is marked on all WirelessProfessional devices. In a WirelessProfessional system the address is used to identify a device and to relate the installation location. A WirelessProfessional system can comprise up to 240 devices. A larger number of devices can be split up into multiple WirelessProfessional systems.

2.1 Start-up after a supply failure

In the event of a supply failure the emergency luminaires change over to emergency mode. After the supply is restored, the computer must be restarted with the on/off-button in order to put the automatic test system back into operation. Login to the Windows user account and start-up of the WirelessProfessional software take place automatically.

2.2 Conducting a duration test

A duration test of the WirelessProfessional emergency luminaires can only take place if the last supply interruption (supply failure, fuse failure, duration test) occurred at least 20 hours previously.

2.3 Processor-controlled emergency luminaires

The battery charge in several WirelessProfessional emergency luminaires is controlled via a microprocessor. If the battery is not charged according to the required end of charging voltage, a functional or duration test cannot take place. Luminaires with this feature are described as “processor-controlled emergency luminaires” or as luminaires with “integrated SelfProfessional monitoring” in the respective attached instructions.

3 Installation

3.1 Prior to automatic test system start-up

Prior to start-up of the automatic test system, all emergency luminaires and other devices should be assembled in the building and their addresses should be registered in the floor plan. All devices that will be added to the WirelessProfessional system must be mains-operated during system setup.

EN 62034 requires a complete duration test to be carried out at automatic test system start-up. The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for the duration test to take place. Ensure that all the emergency luminaires have been mains-operated for at least 20 hours before the first duration test on the automatic test system is started.

3.2 Operation of the WirelessProfessional software

If you are not familiar with operating the WirelessProfessional software, it is essential that you read section 1.3 concerning the basics of operating the software before start-up begins.

3.3 Computer and USB-Koordinator connection

- Connect the computer's power supply to an outlet and connect the computer to the power supply.
- Connect the USB-Koordinator to an unused USB port.

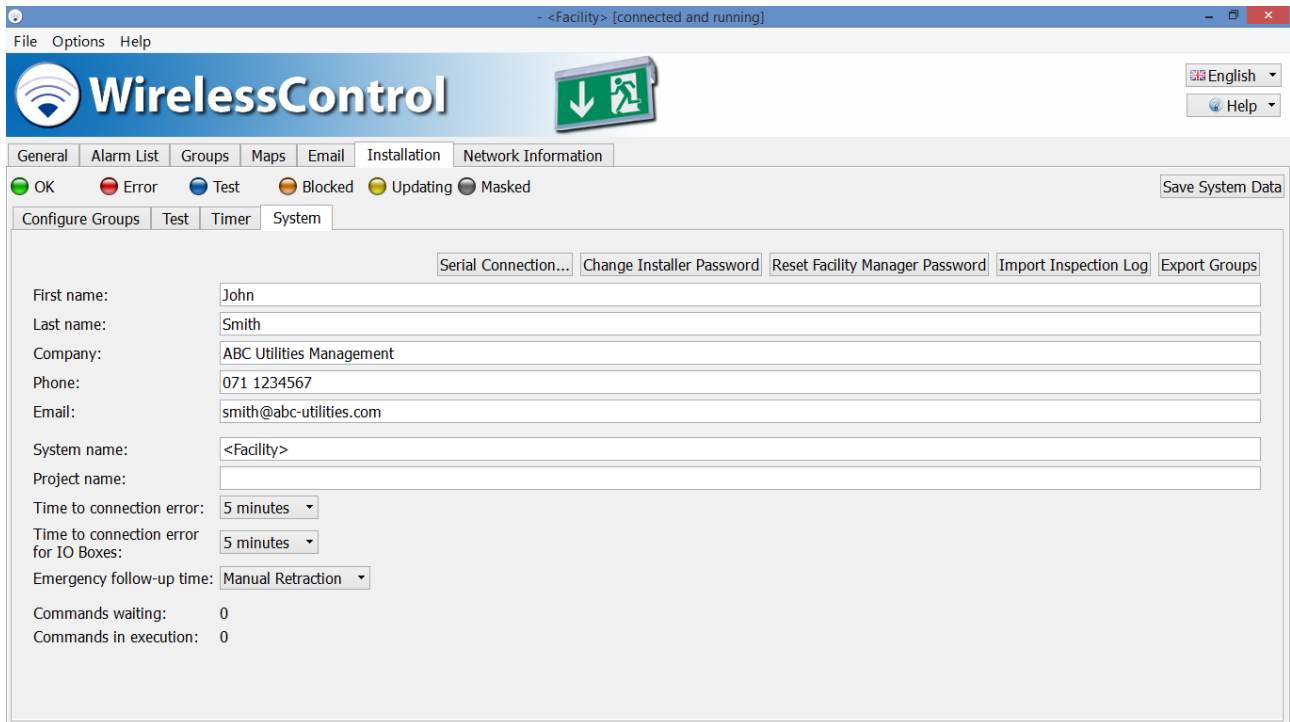
Important: Use the USB cable included in the delivery to connect the USB-Koordinator with the computer. Do not connect the USB-Koordinator via a USB hub.

- Start the computer with the on/off button.

Login to the Windows user account and start-up of the WirelessProfessional software take place automatically. The software will connect to the USB-Koordinator and the text in the title bar changes from **[not connected]** to **[connected and running]**. If the software does not connect to the USB-Koordinator automatically, a manual setup of the serial port as described in section 5.11.4 is necessary.

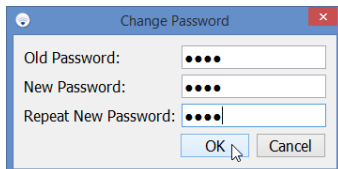
3.4 Changing the password

- Press **Login** and enter the installer password. The installer password is factory-set to **2222**.
- Select the **Installation** tab. Select the **System** tab from the lower tab bar. Click the **Change Installer Password** button.



The screenshot shows the WirelessControl software window. The title bar indicates the facility is connected and running. The menu bar includes File, Options, and Help. The main toolbar has tabs for General, Alarm List, Groups, Maps, Email, Installation, and Network Information. Below the tabs are status indicators for OK, Error, Test, Blocked, Updating, and Masked, along with a Save System Data button. The System configuration tab is active, displaying fields for First name (John), Last name (Smith), Company (ABC Utilities Management), Phone (071 1234567), Email (smith@abc-utilities.com), System name (<Facility>), Project name, Time to connection error (5 minutes), Time to connection error for IO Boxes (5 minutes), Emergency follow-up time (Manual Retraction), Commands waiting (0), and Commands in execution (0). Buttons for Serial Connection..., Change Installer Password, Reset Facility Manager Password, Import Inspection Log, and Export Groups are visible at the top of the configuration area.

- Enter the factory-set installer password. Enter a new password, re-enter the new password. Write down the new password.



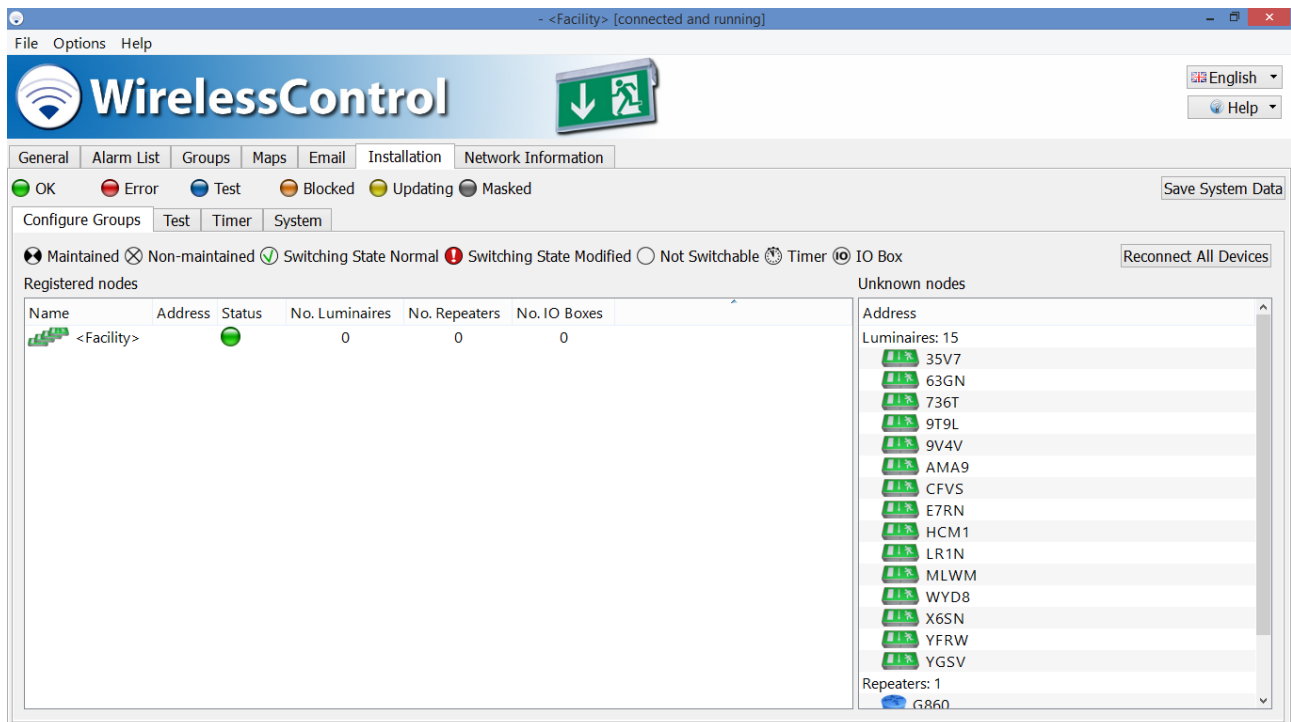
The screenshot shows a 'Change Password' dialog box with three input fields: Old Password, New Password, and Repeat New Password. Each field contains four dots representing masked characters. At the bottom are OK and Cancel buttons.

3.5 Entering contact details and the system name

- Enter your contact details into the **First Name**, **Last Name**, **Company**, **Phone** and **Email** fields.
- Fill in the **System Name** field.
- Click on **Save System Data** to complete the setup.

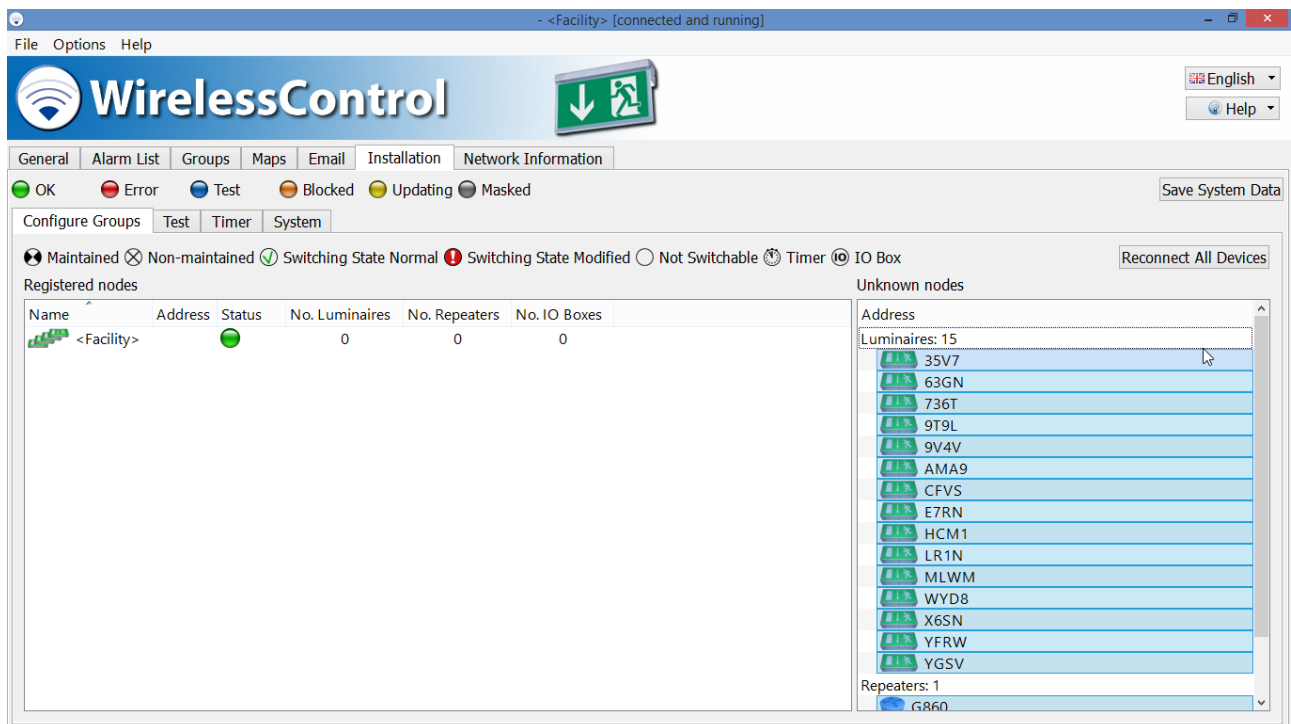
3.6 Registering devices in the system

- Select the **Installation** tab. Select the **Configure Groups** tab from the lower tab bar. The **Unknown nodes** section shows the devices that are connected to the automatic test system, but are not yet registered in the system. Make sure that all devices installed in the building are connected to the power supply and wait until all the devices are listed in the **Unknown nodes** section.



- To register all devices in the system, click into the **Unknown nodes** section, select all devices and drag them into the **Registered nodes** section.

Caution! During registration of the devices in the system, the USB-Koordinator should be positioned such that less than 50 devices are in direct range of it (refer to section 5.12, Network Information tab).



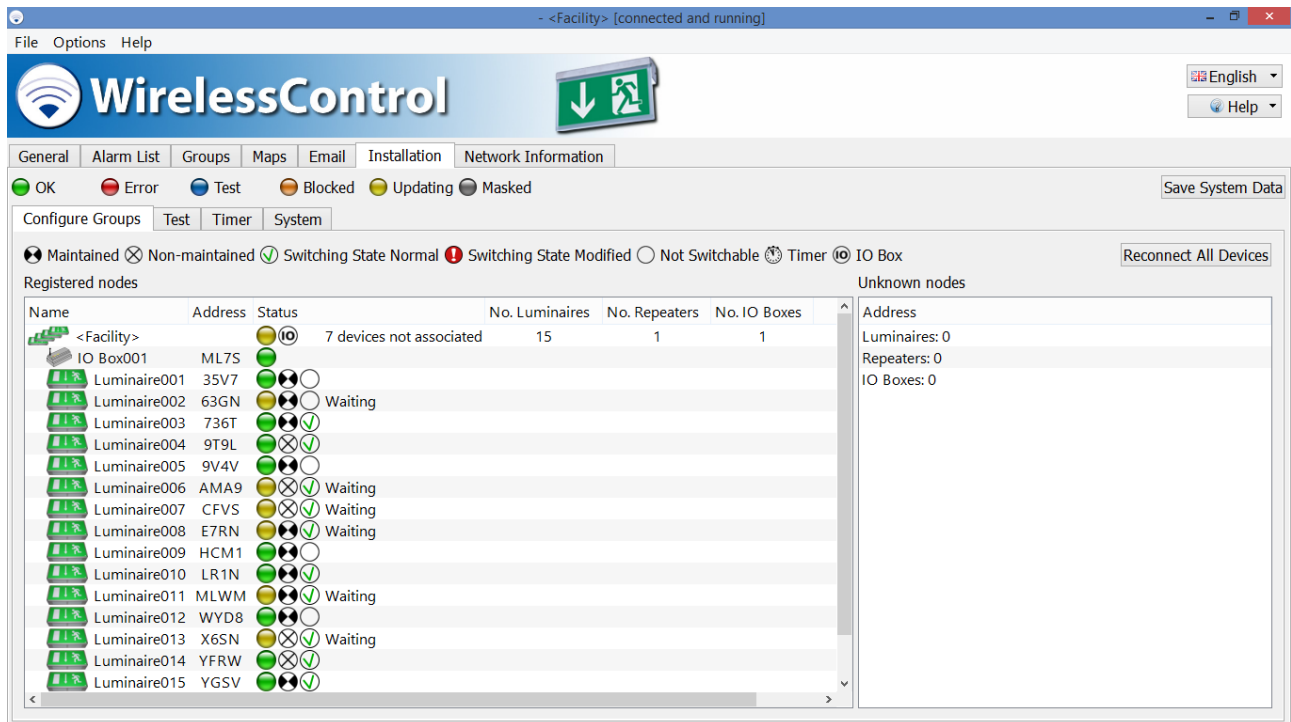
Note: If not all the devices in the **Unknown nodes** section are to be registered in the system: Hold down the Strg key and select the devices you want to register in the system by clicking on them. Drag the selected devices into the **Installed nodes** section.

WirelessProfessional

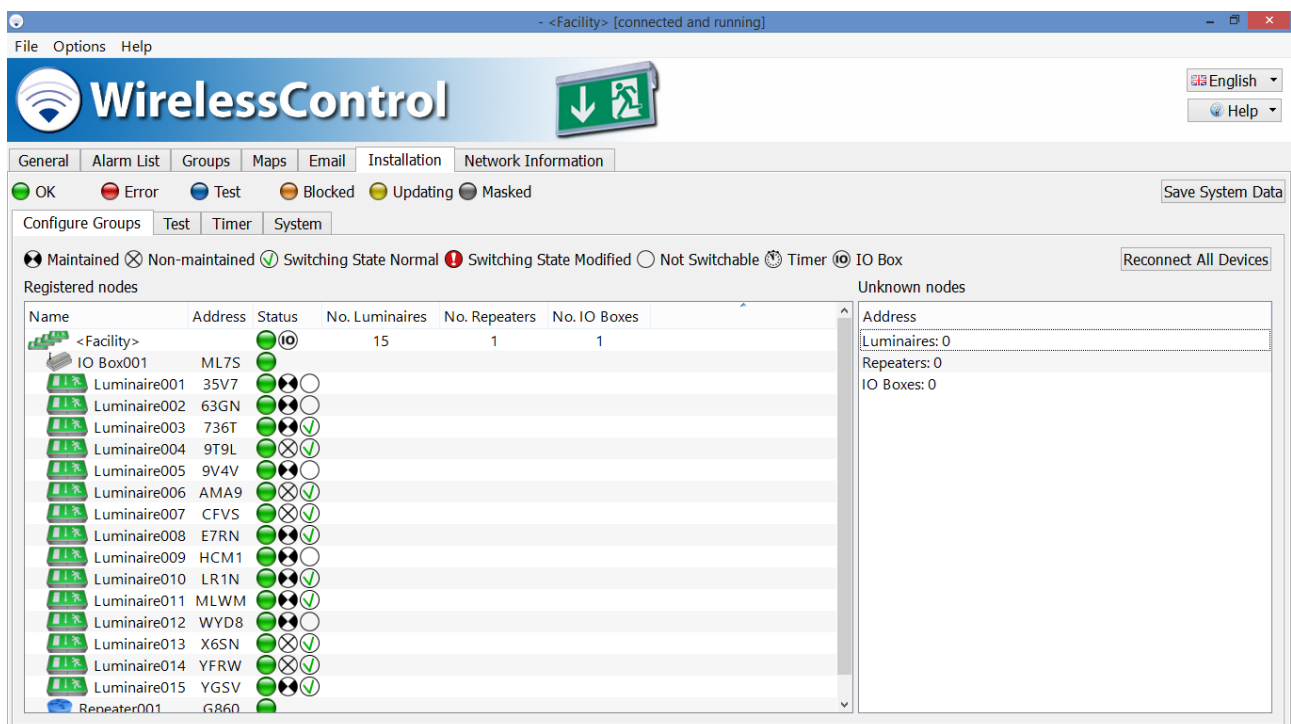
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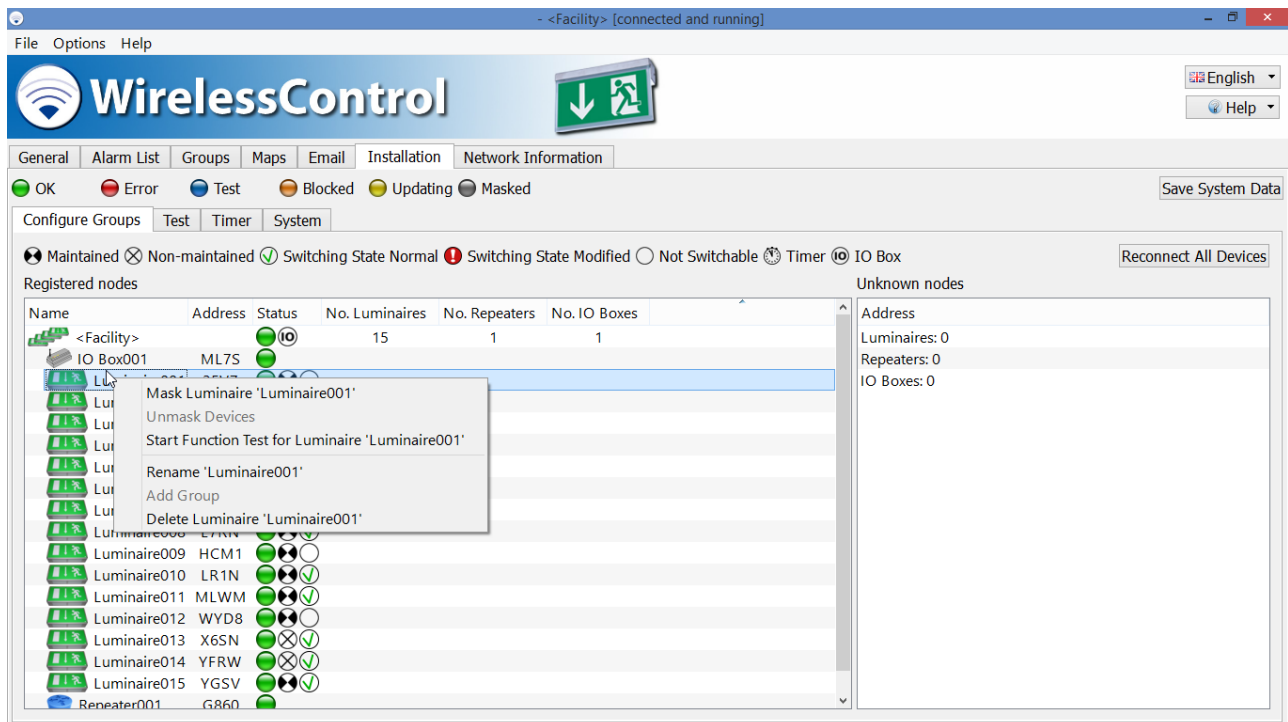
- The WirelessProfessional software will now register the devices in the system. The first row in the **Unknown nodes** section shows the number of devices that are still to be registered (**x devices not associated**). The time needed to register the devices into the system varies according to the layout of the devices in the wireless network and the progress of the registration process. The time for registration can vary from seconds to minutes for a single device.



- After all devices have been successfully registered in the system, the first row in the **Registered nodes** section shows the number of emergency luminaires, repeaters and IO-boxes registered in the system.



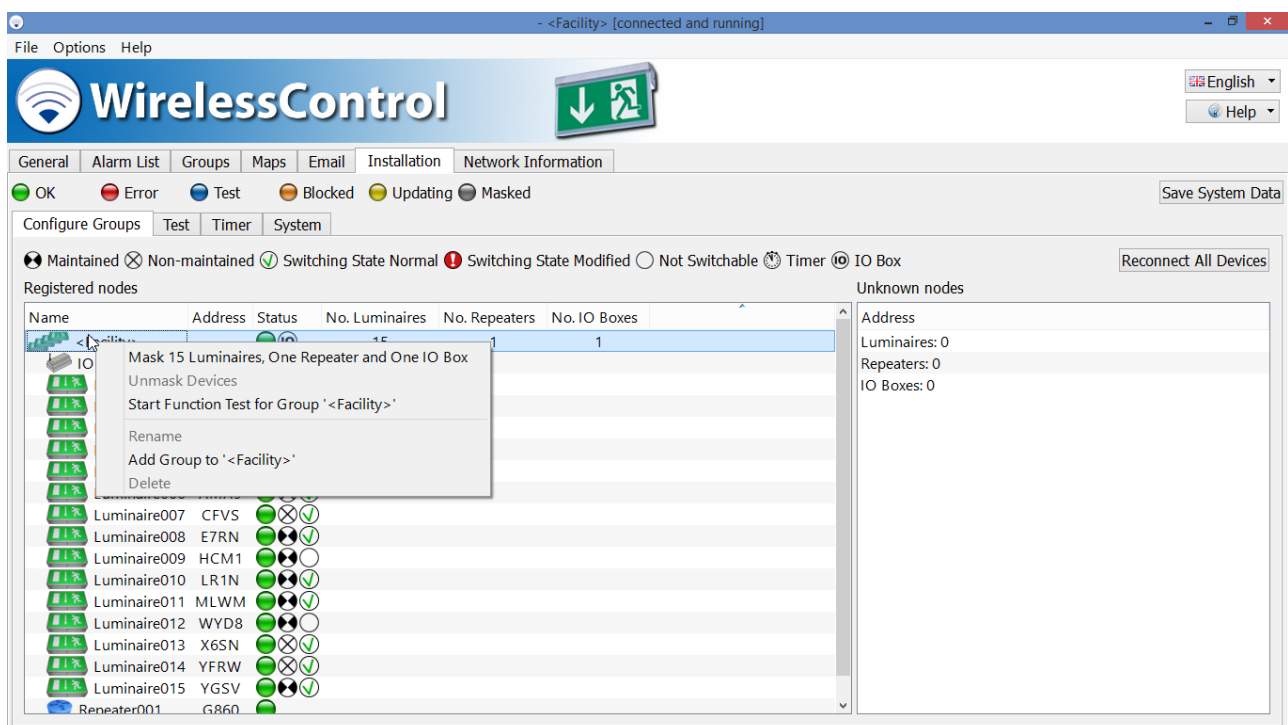
- To change the name of a registered device, open the context menu of the device in the **Registered nodes** section and select **Rename 'LuminaireXXX'**.



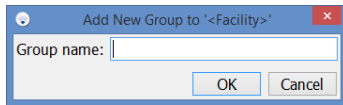
- To change a luminaire's mode of operation between maintained and non-maintained, open the luminaire's Device Details window in the **Registered nodes** section by double-clicking with the left mouse button on the name of the luminaire or by touching the name twice (see also section 5.15.1).
- Click on **Save System Data** to complete the registration of the devices in the system.

3.7 Dividing devices into groups

1. If you wish to divide the devices into several groups, open the system's context menu (first row in the **Registered nodes** section) and select **Add group to '<system>'**.

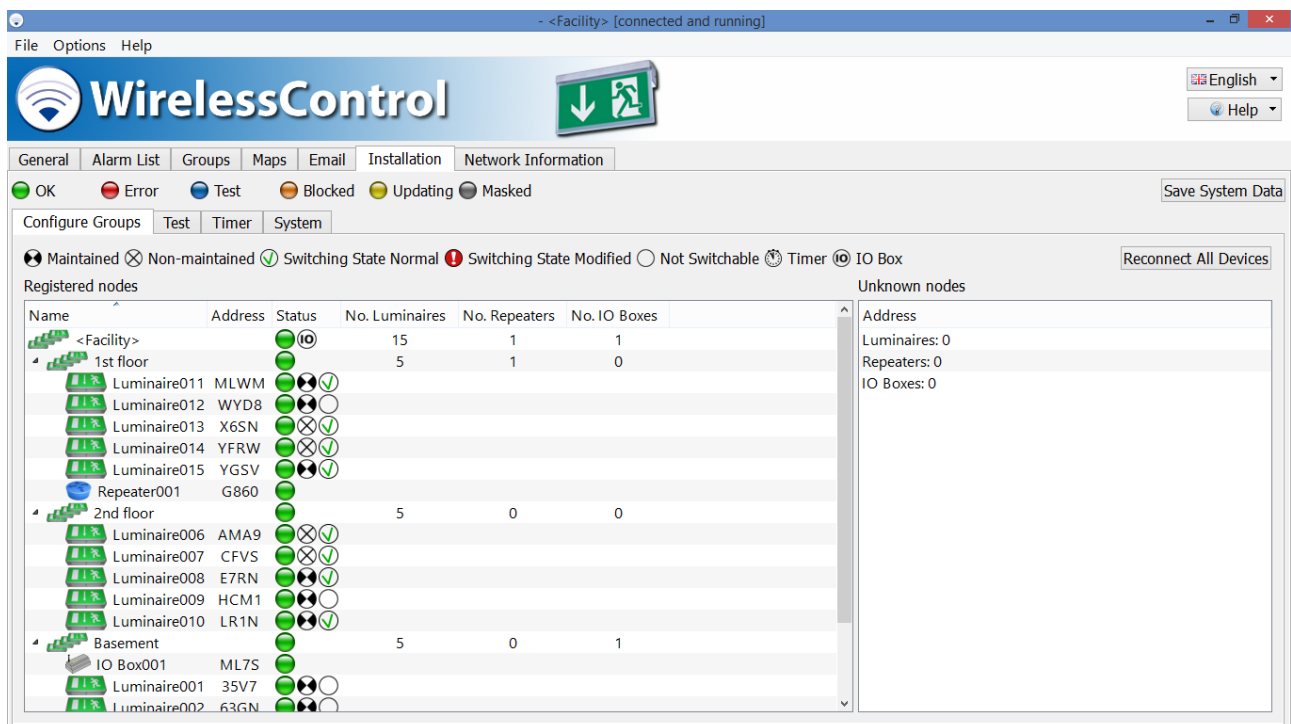


- Enter the group's name in the **Add New Group to '<system>'** window and click on **OK**.



The new group will be added to the list in the **Registered nodes** section. This list is sorted into alphabetical order which may mean that the added group is not shown in the list's section currently displayed.

- Press and hold down the Strg key and select all devices from the list that you want to add to the new group. Drag the selected devices into the new group. If the new group is not shown in the list's section currently displayed, drag the selected elements to the upper or lower border of the **Registered nodes** section in order to scroll through the list.



- Repeat steps 1 – 3 until all devices are divided into groups.
- Click on **Save System Data** to complete the division of the devices into groups.

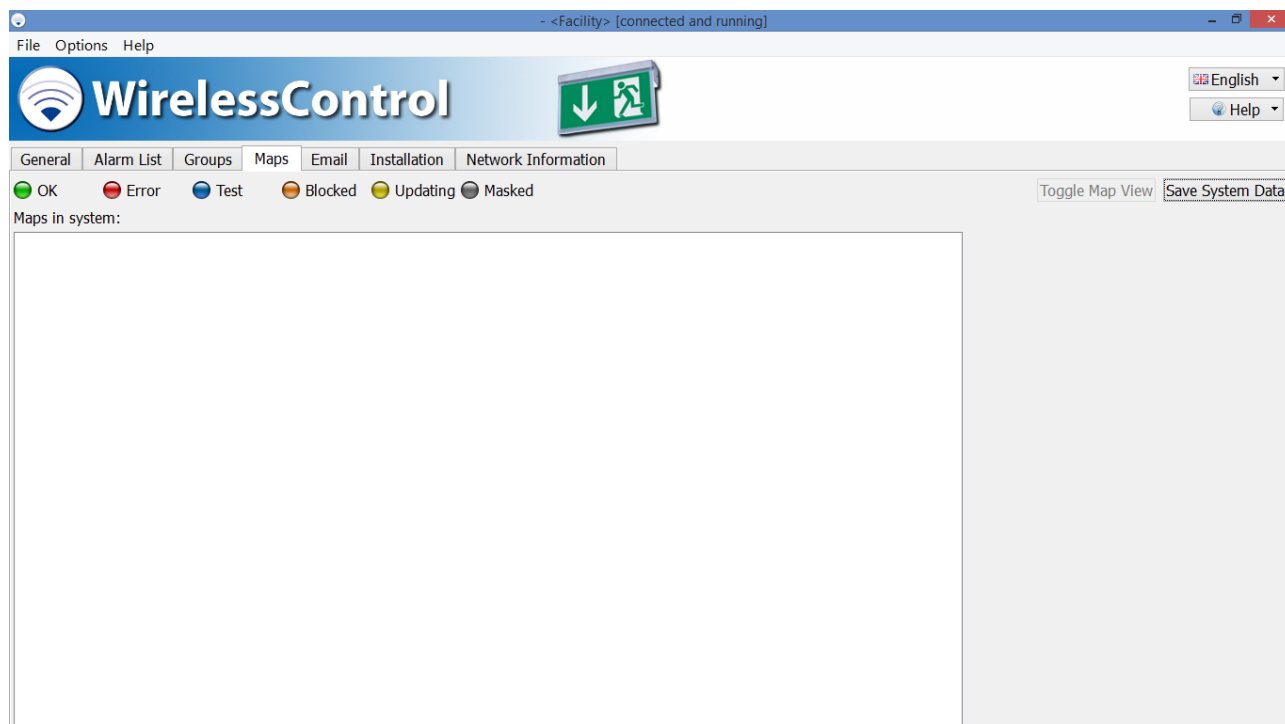
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3.8 Floor plans

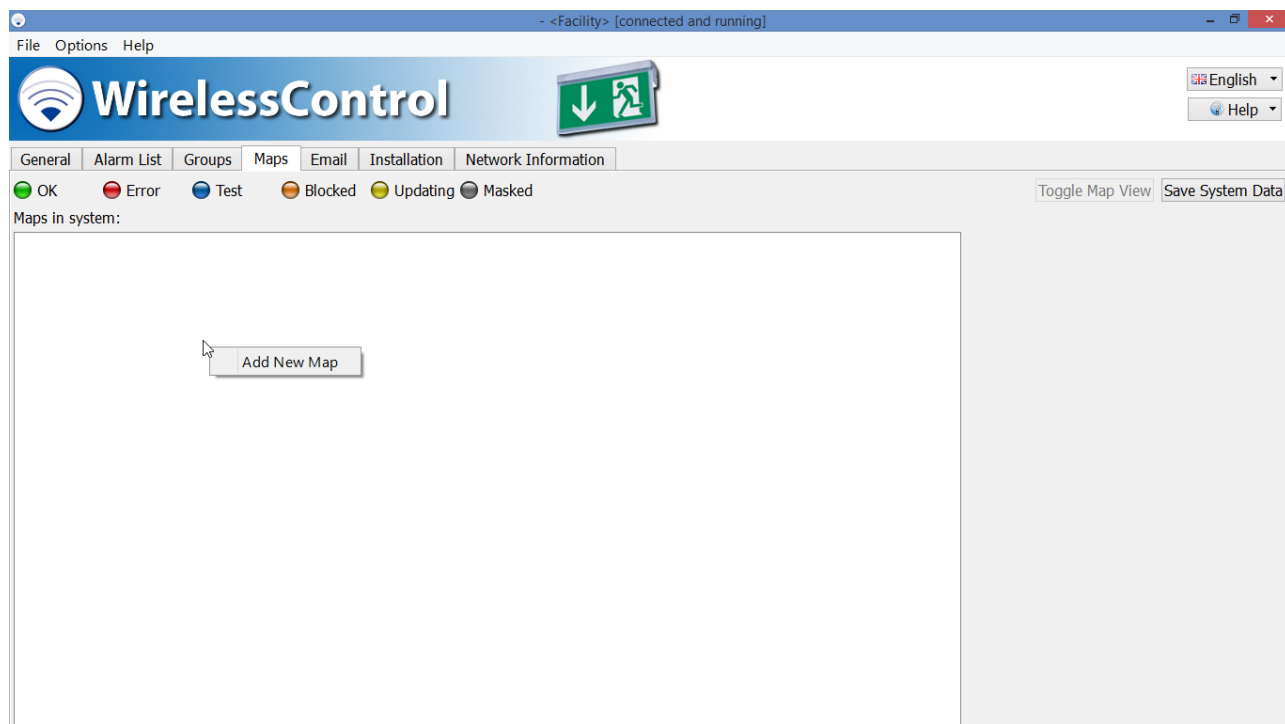
Floor plans can be loaded into the WirelessProfessional software and the registered devices can be placed on the floor plans. In this way the device's installation location can be identified in the software. The floor plans must be in .png, .bmp or .jpg format. The maximum size of the floor plan is 10 megapixels. Floor plans larger than this cannot be loaded into the WirelessProfessional system.

Loading floor plans

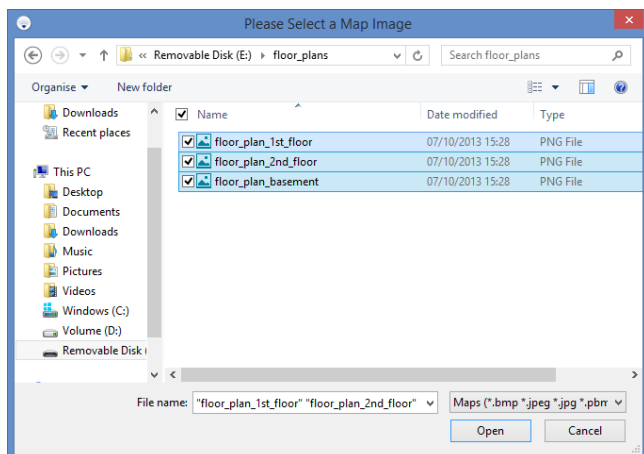
1. Select the **Maps** tab.



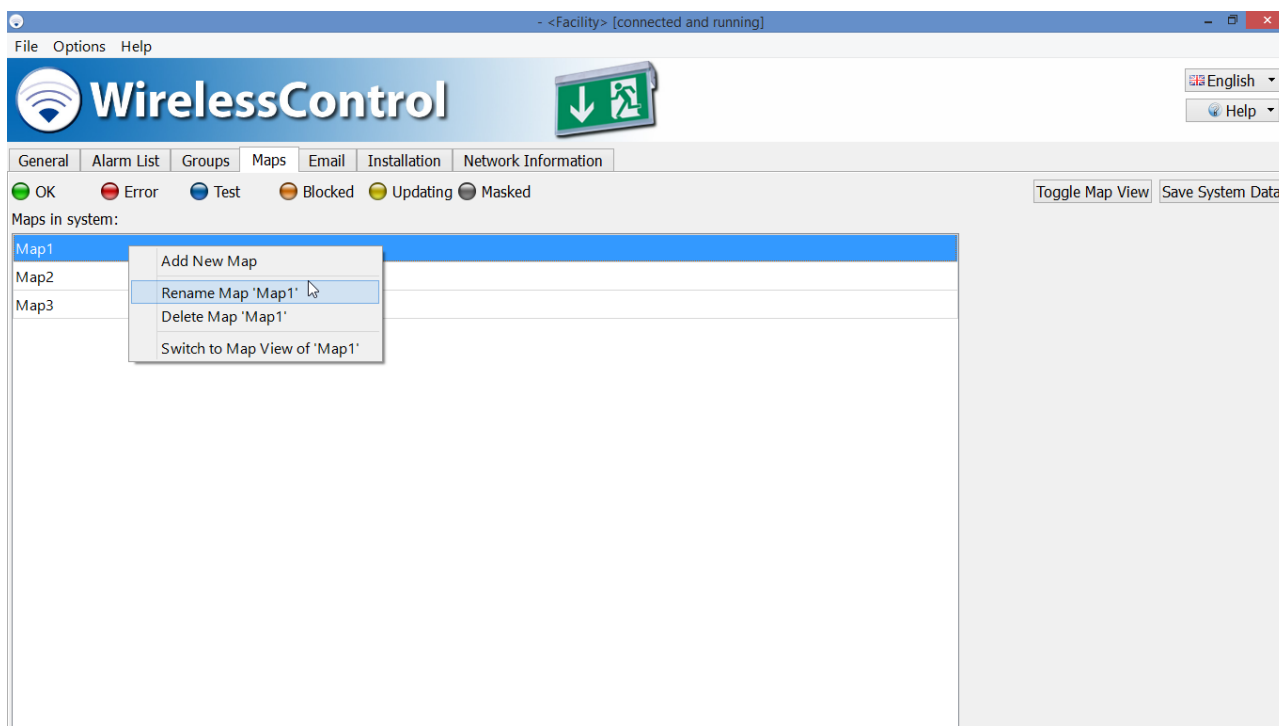
2. Open the context menu in the **Maps in system** section and select **Add New Map**.



3. Select the storage medium your floor plans are stored on in the **Select a Map Image** dialogue window. Select all the floor plans you wish to add and click on **Open**.



4. Open the context menu of one of the added floor plans and select **Rename Map '<name>'**.

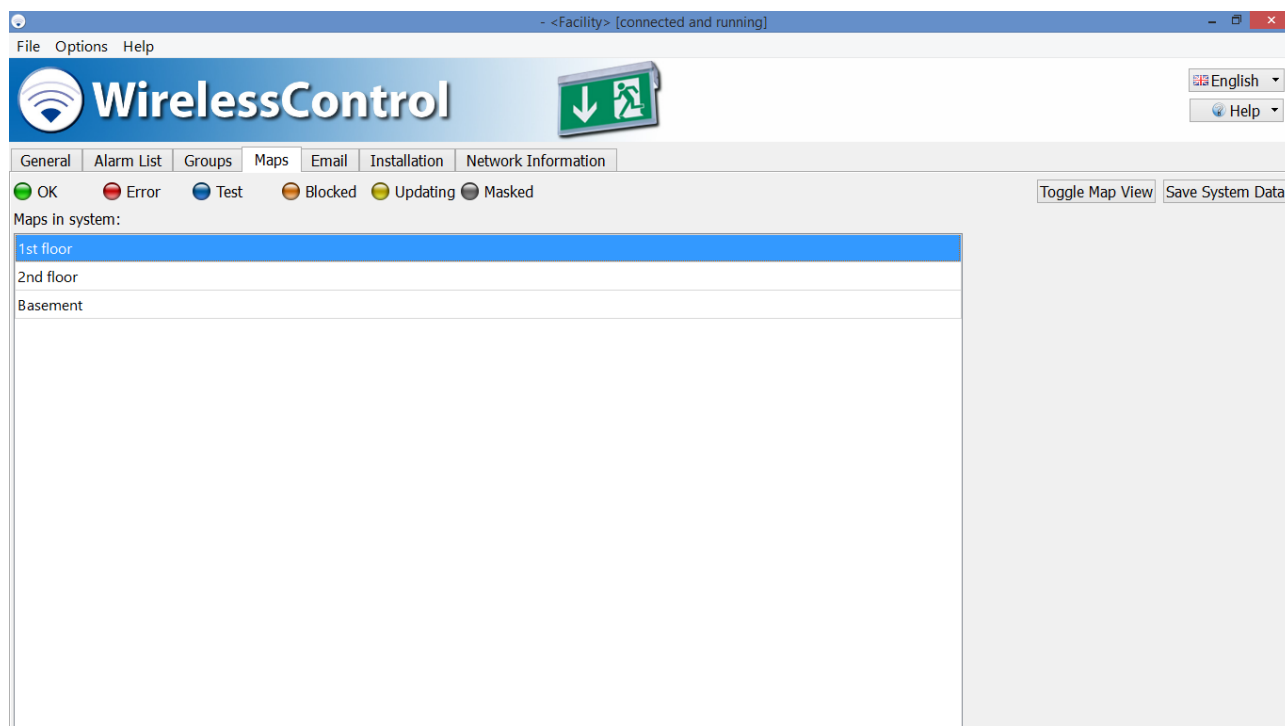


5. Enter a meaningful name for the floor plan and click on **OK**.
6. Repeat steps 4 and 5 for all the floor plans.

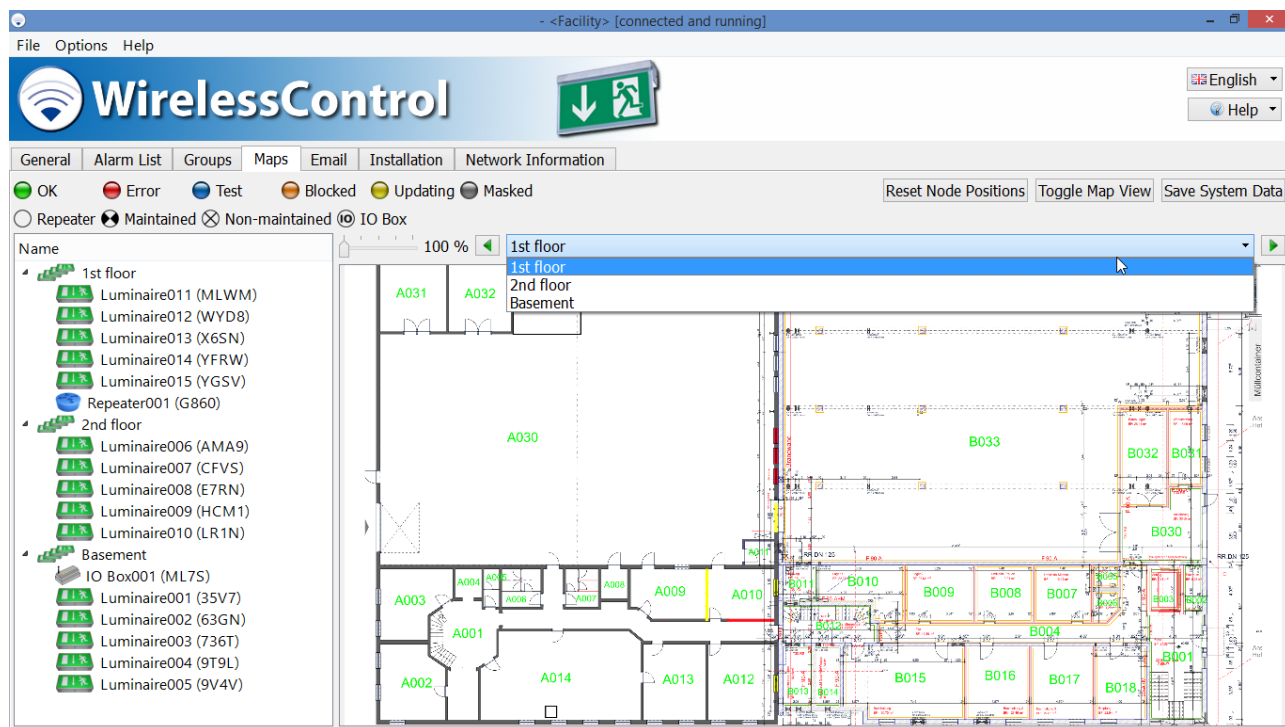
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3.8.1 Placing devices on the floor plans

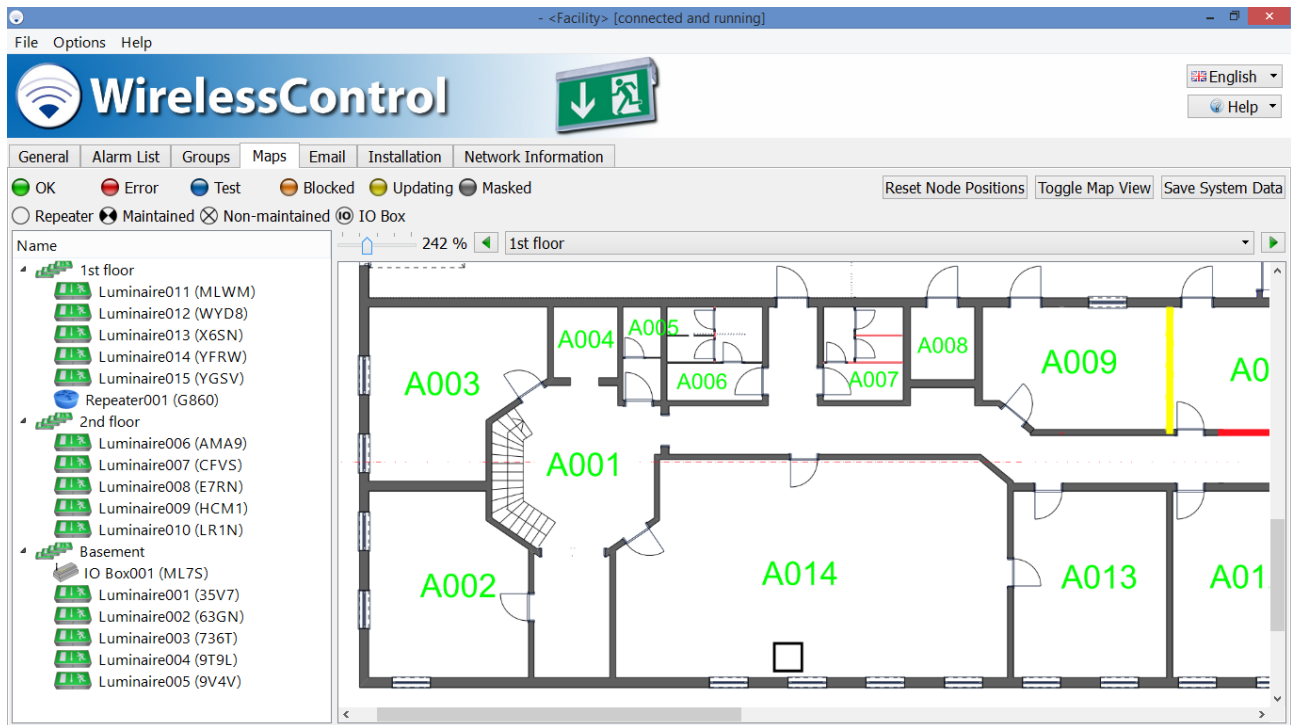
- Click on **Toggle Map View**.



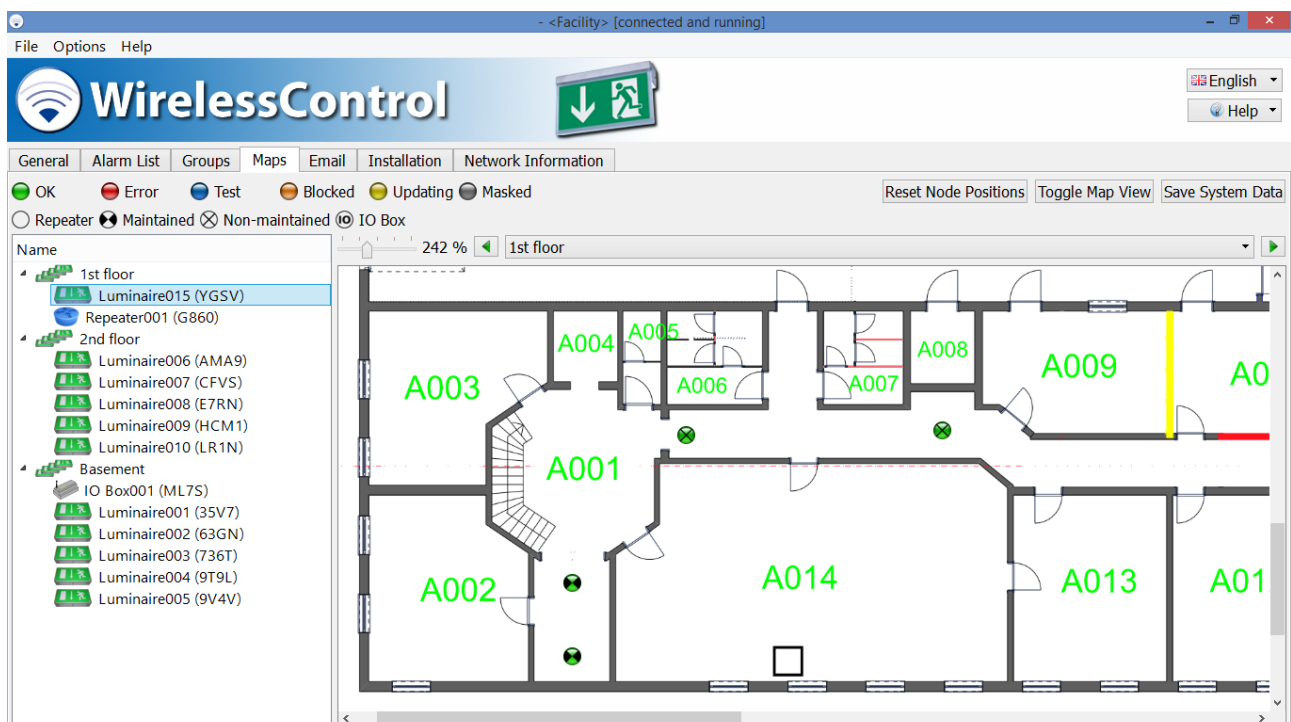
- Select the floor plan you wish to place devices on from the drop-down list.



2. Use the slider to adjust the magnification and use the scroll bars to select the displayed floor plan detail.



3. Drag the devices from the left section and place them on the floor plan.



4. Repeat steps 1 – 3 until all the devices are placed on the floor plans.
5. Click on **Save System Data** to complete placing the devices on the floor plans.

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3.9 Automatic test setup

- Select the **Installation** tab. Select the **Test** tab from the lower tab bar.
- Select the test interval for duration tests from the drop-down list **Interval** in the **Capacity test** section. EN 62034 requires a maximum interval of one year between automatic duration tests.
- Enter the duration test's start time in the **Time** field. Pick a time when the building is not occupied. If the building can be occupied at any time, EN 62034 allows a manual initiation of the duration test. In this case, select **Manually** from the **Interval** drop-down list.
- Select a date for the next duration test from the calendar. The date should not be more than one year ahead.
- Likewise, select the test interval for functional tests from the drop-down list **Interval** in the **Function test** section. EN 62034 requires a maximum time interval of one month between automatic functional tests.
- If the selected test interval is **Weekly**, choose a day for the functional test from the **Weekday** drop-down list.
- Click on **Save System Data** to complete the automatic test setup.

The screenshot shows the WirelessControl software interface. The top menu bar includes File, Options, and Help. The main window has a title bar with "< Facility > [connected and running]". Below the menu bar is a toolbar with icons for OK, Error, Test, Blocked, Updating, and Masked. The main content area is divided into two sections: Capacity test and Function test.

Capacity test section:

- Interval: Yearly
- Time: 3:00 VORM.
- Part 1:
- Part 2:
- Interval between parts: 24 h
- Start date: A calendar for June 2015 is displayed, showing the dates 22 through 27. The date 27 is highlighted.
- Next capacity test: 6/14/15 3:00 AM

Function test section:

- Interval: Weekly
- Time: 8:00 VORM.
- Weekday: Sunday
- Next function test: 6/14/15 8:00 AM

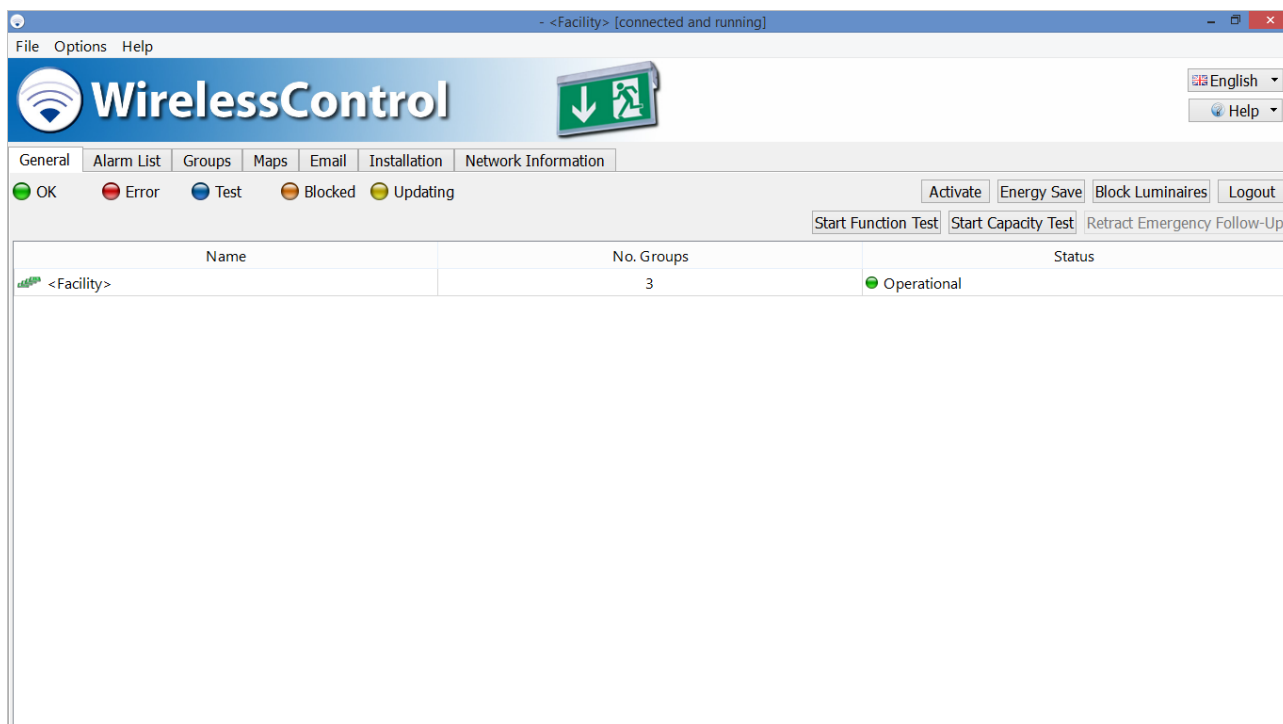
At the bottom right of the interface is a button labeled "Save System Data".

3.10 Duration test at initial start-up

EN 62034 requires a complete duration test to be carried out at automatic test system start-up. The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for the duration test to take place (refer to sections 2.2 and 2.3).

- Select the **General** tab.
- Click on the **Start Capacity Test** button.

In the event of battery failure, repeat the duration test after a second charging cycle (min. 20h).



4 Software installation

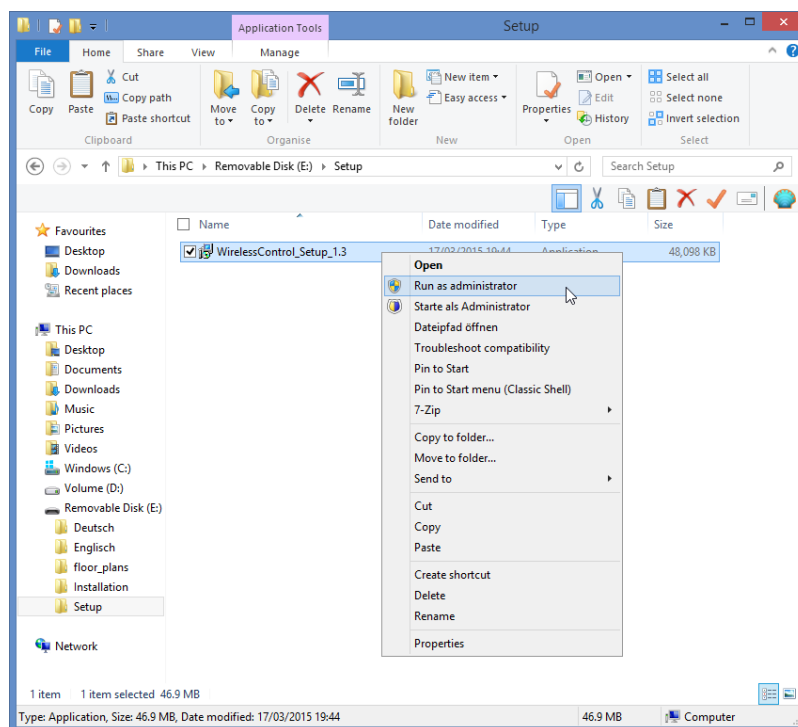
This section applies to systems delivered without a computer. On systems delivered with a computer, the WirelessProfessional software is preinstalled.

4.1 System requirements

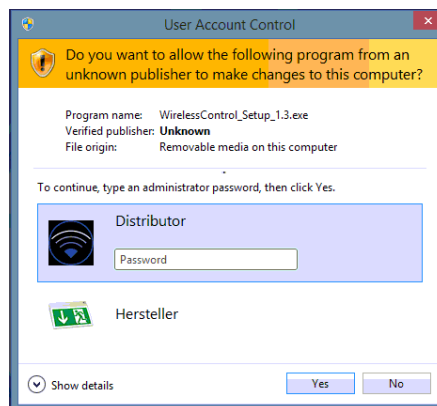
Component	Minimum requirement
Processor	Intel Atom N455 1,6 GHz
RAM	1024 MB DDR3-RAM
HDD	32 GB SSD
Display	25,7 cm (10,1") screen diagonal, 1024x600 pixel resolution
Graphics	Intel GMA 3150
Ports	2 x USB 2.0
Operating system	Windows 7, 32- or 64 bit

4.2 Installation

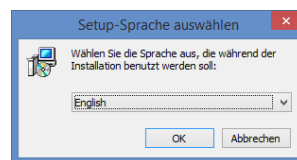
- Open the **WirelessProfessional_Setup_x.x.exe** file's context menu (x.x is the software version) and select **Run as administrator** to start the installation process.



- Enter the password for the administrator account in the user account control dialogue window and click on **Yes**.



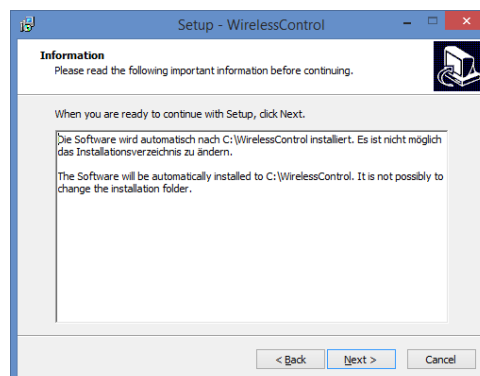
- Select the language to be used for the software setup and click on **OK**.



- Click on **Next** in the setup wizard window.

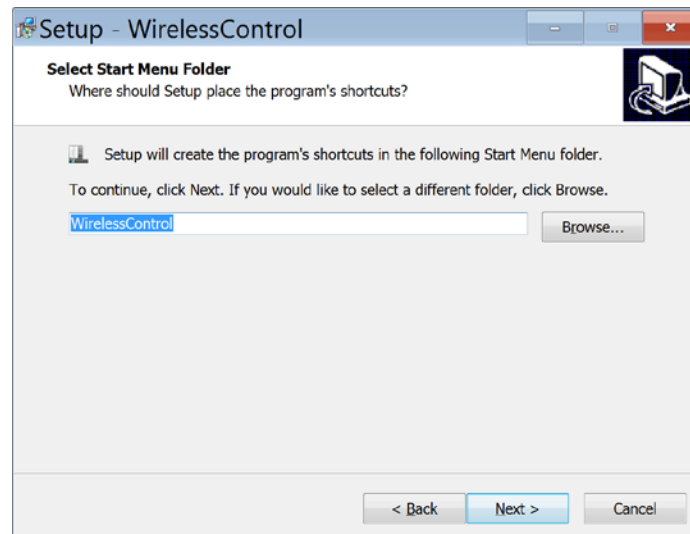


- Read the information regarding the installation folder and click on **Next**.

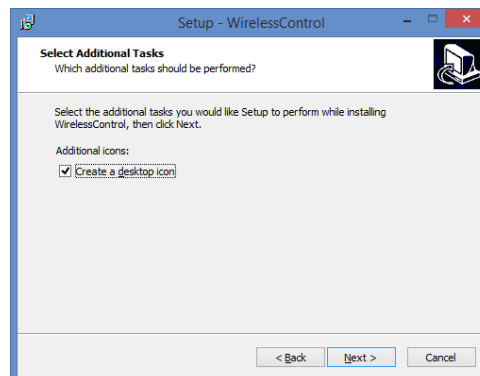


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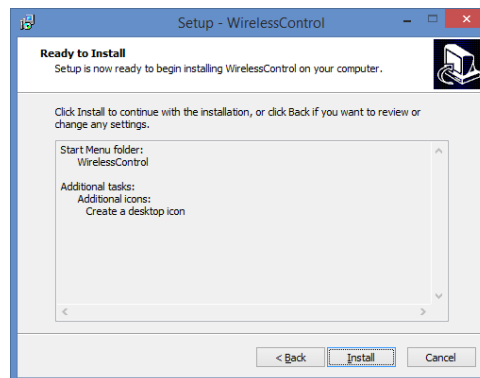
- Change the start menu folder's name if you wish to and click on **Next**.



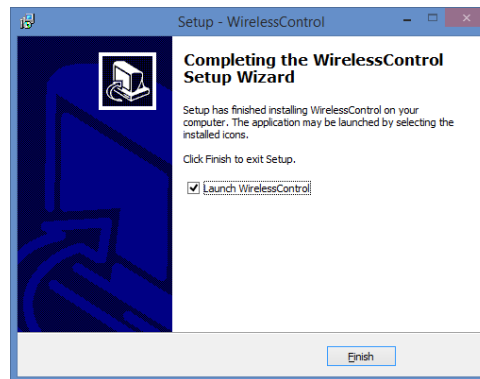
- Select **Create a desktop icon** if you wish to and click on **Next**.



- Click on **Install**. The software and all necessary drivers will be installed.



- Click on **Finish** to complete the setup wizard. The WirelessProfessional software will be started.









5 Software reference

5.1 Symbols

This section explains the symbols used in the WirelessProfessional software.

5.1.1 Colour symbols

Table 2 shows the colour symbols and the status they indicate. If more than one status applies to a device or a group, the highest priority status colour symbol will be displayed. If for example a group is comprised of emergency luminaires with errors (red symbol, priority 3) and the luminaires in this group are currently being tested (blue symbol, priority 4), the blue symbol will be displayed because of its higher priority. Exceptions to this rule are communication errors that occur during a test: a red symbol is shown in this case to draw attention to the error.

Symbol		Priority	Status
	Yellow	5	Status is being updated
	Blue	4	Emergency luminaire is tested
	Red	3 ¹	Error(s)
	Orange	2	Remote inhibiting mode
	Green	1	No errors
	Grey	-	Emergency luminaire is masked

¹ Communication errors that occur during a test are displayed with higher priority than the test.

Table 2: colour symbols

5.1.2 Operating mode symbols







Symbol	Operating mode
	Maintained emergency luminaire
	Non-maintained emergency luminaire
	Maintained emergency luminaire: emergency lighting illuminant is on Non-maintained emergency luminaire: emergency lighting illuminant is off
	Maintained emergency luminaire: emergency lighting illuminant is off Non-maintained emergency luminaire: emergency lighting illuminant is on
	Group/system is linked with the input/output of an IO-box
	Group/system is linked with a timer

Table 3: operating mode symbols

5.2 Operating modes

Table 4 shows an overview of operating modes. The operating modes are explained in detail in the glossary (section 8).

Operating mode	Non-maintained emergency luminaires ¹	Maintained luminaires ¹	Functional/ Duration test	Emergency mode
Energy Save	Off	Off	Yes	Yes
Activate	Off ¹	On	Yes	Yes
Fire alarm	On	On	No	Yes
Remote inhibiting mode	Off	Off	No	No

¹ The **Activate** function does not toggle switchable non-maintained emergency luminaires. Luminaires that are turned off stay off and luminaires that are turned on stay on.

Table 4: operating modes

5.3 Status messages

Table 5 lists and explains the status messages of the WirelessProfessional software.

Status message	
Starting system	Communication with all devices is checked
Updating	Message is shown while a device status is updated
Device not associated	Device is still to be registered in the system
Blocking x luminaires	x luminaires are still to be set to remote inhibiting mode
Unblocking x luminaires	Remote inhibiting mode is still to be terminated on x luminaires
Emergency state is expiring	The follow-up time has passed and the emergency luminaires are being turned off
Operational	At least one switchable emergency luminaire is turned on
Ready to activate	All switchable emergency luminaires are turned off OR the system is only comprised of non-switchable emergency luminaires.
Error on x devices	Error messages for x devices have accumulated
Emergency state is activated by IO-box	Fire alarm at the fire alarm input of an IO-box. All switchable emergency luminaires are turned on.
Emergency state is in follow-up time	The fire alarm has ended. The follow-up time is running. Switchable emergency luminaires stay turned on until the end of the follow-up time.
Starting test on x devices	A test on x devices is being started
Test running	Status message while a test is running
Finishing test on x devices	A test has finished and the results are being transmitted from the emergency luminaires
x luminaires are blocked	x emergency luminaires are in remote inhibiting mode

Table 5: status messages

5.4 Error messages

Table 6 lists, explains and gives possible causes for the error messages of the WirelessProfessional software.

Error message	Possible causes	
Device invalid	The device has an unknown device type ID	<ul style="list-style-type: none"> • The device firmware is more up to date than the WirelessProfessional software
Connection lost	The wireless communication with a device is broken	<ul style="list-style-type: none"> • Device operates in emergency mode • Radio transmission failure
Battery error	The battery voltage is out of range	<ul style="list-style-type: none"> • Battery is not connected • Wrong battery type connected • Battery deeply discharged • Battery damaged
Last test failed: connection error	The wireless connection was broken while testing or after the test had finished	<ul style="list-style-type: none"> • Wireless communication error
Last test failed: battery error	Battery error while testing	<ul style="list-style-type: none"> • Battery is not connected • Wrong battery type connected • Battery was not fully charged • Battery deeply discharged • Battery damaged
Last test failed: illuminant error	Illuminant failure while testing	<ul style="list-style-type: none"> • Illuminant not connected • Defective illuminant • Defective changeover device • Illuminant current too small

Table 6: Error messages

5.5 User levels

Access rights to functions of the WirelessProfessional system are divided into several user levels. Table 7 lists the user levels and their specific access rights. The **facility manager**, **installer** and **distributor** user levels are password protected against unauthorised access. The WirelessProfessional software starts with the **anybody** user level.

User level	Access rights
Anybody	Read only, no authorisation to make changes
Facility manager	Switch devices, initiate functional/duration tests
Installer	Register devices, define groups and automatic tests, add floor plans, reset facility manager password
Distributor	Set service interval, reset the installer password, change logo

Table 7: user levels and their access rights

5.6 General tab

To view the **General** tab, click on the **General** tab in the tab bar.

The **General** tab shows the system's name, the number of groups in the system and the system's status. Fig. 9 shows the **General** tab on the **facility manager** or **installer** user level. On the **anybody** user level, the buttons **Activate**, **Energy Save**, **Block Luminaires** etc. are missing. Section 5.1 describes the colour symbols in the **Status** column. If a red symbol indicates that error messages have accumulated, the **Alarm List** tab can be opened with a click with the left mouse button or a touch on the red colour symbol. Clicking into or touching the **No. Groups** opens the **Groups** tab.

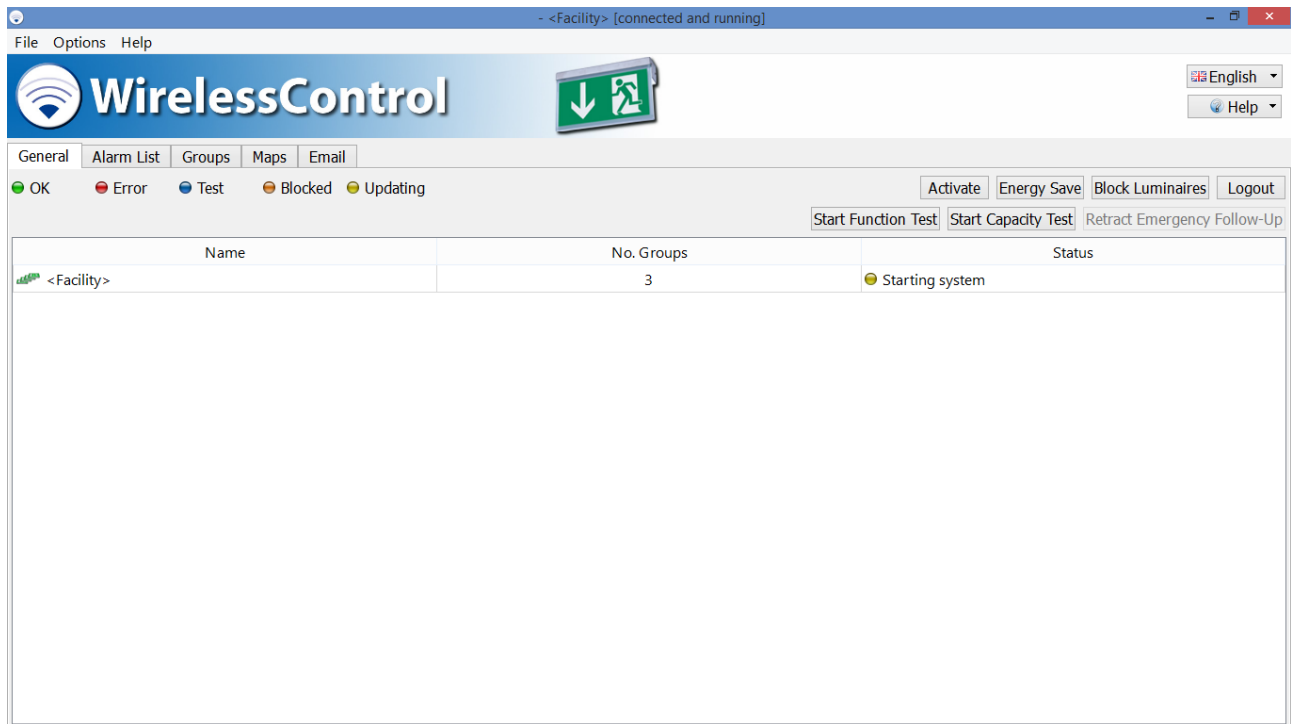


Figure 9: General tab, facility manager or installer user level

Table 8 lists the functions that can be accessed from the **General** tab with the buttons.

Button	Function	User level
Activate	Turns all switchable maintained emergency luminaires on	Facility manager, installer
Energy Save	Turns all switchable emergency luminaires off	Facility manager, installer
Block luminaires	Switches all emergency luminaires into remote inhibiting mode	Facility manager, installer
Logout	Sets the user level back to anybody	Facility manager, installer
Start Function Test	Starts a functional test on all emergency luminaires	Facility manager, installer
Start Capacity Test	Starts a duration test on all emergency luminaires	Facility manager, installer
Retract Emergency Follow-Up	Terminates the follow-up time after a fire alarm. This button is only active when a fire alarm has been detected and the follow-up time is running.	Facility manager, installer

Table 8: functions accessible from the **General** tab

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

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5.7 Alarm List tab

To view the **Alarm List** tab, click on the **Alarm List** tab in the tab bar.

The **Alarm List** tab shows all devices that report an error. The defective devices are arranged into groups. The alarm shows the device's name, its address and its status (colour symbol and plain text). Section 5.1 describes the colour symbols in the **Status** column. Section 5.4 gives an overview of the WirelessProfessional system's error messages. Fig. 10 shows the **Alarm List** tab on the **facility manager** or **installer** user level. On the **anybody** user level, not all of the shown buttons are available.

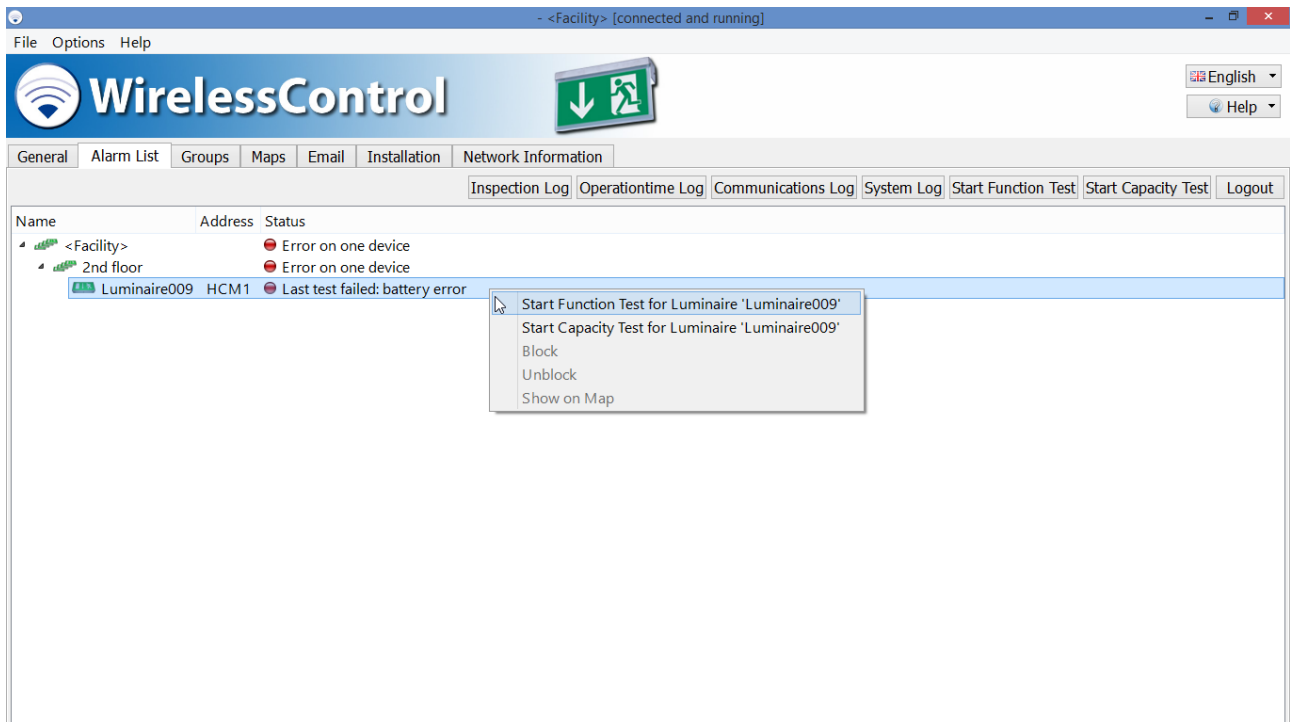


Figure 10: Alarm List tab, facility manager or installer user level

The error list's context menu(Fig. 10)offers the functions listed in Table 9.

Menu item	Function	User level
Start function test for luminaire '<name>'	Starts a functional test on this emergency luminaire	Facility manager, installer
Start capacity test for luminaire '<name>'	Starts a duration test on this emergency luminaire	Facility manager, installer
Block luminaire '<name>'	Turns this luminaire into remote inhibiting mode	Installer
Deblock	Terminates the remote inhibiting mode	Installer
Show on map	Shows the emergency luminaire on the floor plan	Anybody

Table 9: functions of the error list context menu

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

Table 10 lists the functions that can be accessed from the **Alarm List** tab with the buttons.

Button	Function	User level
Inspection Log	Opens the inspection log (see section 5.7.1)	Anybody
Operation Time Log	Not implemented	Anybody
Communications Log	Opens the communications log (see section 5.7.2)	Anybody
System Log	Opens the system log (see section 5.7.3)	Anybody
Start Function Test	Starts a functional test on all emergency luminaires	Facility manager, installer
Start Capacity Test	Starts a duration test on all emergency luminaires	Facility manager, installer
Logout	Sets the user level back to anybody	Facility manager, installer

Table 10: functions accessible from the **Alarm List** tab

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

5.7.1 Inspection log

The inspection log records the results from functional and duration tests as well as other messages. The inspection log is opened with the **Inspection Log** button on the **Alarm List** tab. Fig. 11 shows a screenshot of the inspection log.

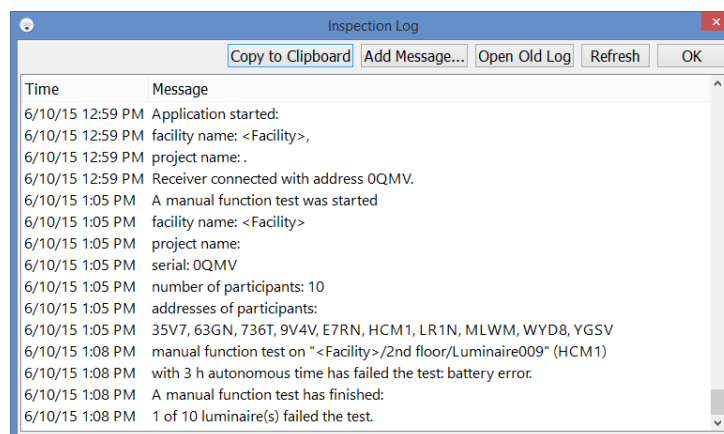


Figure 11: Inspection Log

The inspection log is stored in the **inspection_log.txt** file. If the size of this file exceeds 4 MB, the file name is changed to **inspection_log_<date>.txt** and a new **inspection_log.txt** file is created.

Table 11 lists the functions that can be accessed from the **Inspection Log** with the buttons.

Button	Function	User level
Copy to clipboard	Copies the selected entry to the clipboard	Anybody
Add message	Enter a message manually. After the message has been entered, click on the Refresh button to display the new entry in the log. Messages entered in the log cannot be deleted.	Anybody
Open old log	Opens an archived inspection log	Anybody
Refresh	Updates the log window	Anybody
OK	Closes the Inspection Log window	Anybody

Table 11: functions accessible from the inspection log

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5.7.2 Communications log

The communications log records messages from the wireless network. Other events stored in the communications log include the start date of the WirelessProfessional software and the USB-Koordinator connection. Fig. 12 shows a screenshot of the communications log.

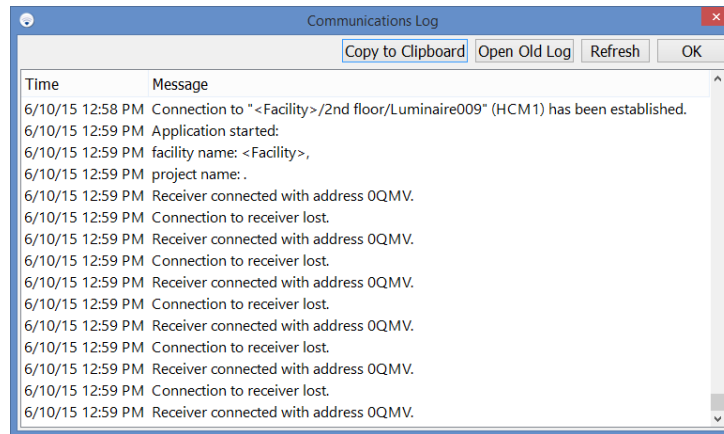


Figure 12: Communications log

The communications log is stored in the **communication.log** file. If the size of this file exceeds 4 MB, the file name is changed to **communication_<date>.log** and a new **communication.log** file is created.

Table 12 lists the functions that can be accessed from the **Communications Log** with the buttons.

Button	Function	User level
Copy to clipboard	Copies the selected entry to the clipboard	Anybody
Open old log	Open an archived inspection log	Anybody
Refresh	Updates the log window	Anybody
OK	Closes the Communications Log window	Anybody

Table 12: functions accessible from the communications log

5.7.3 System log

The system log records all the system configuration and status changes. Fig. 13 shows a screenshot of the system log.

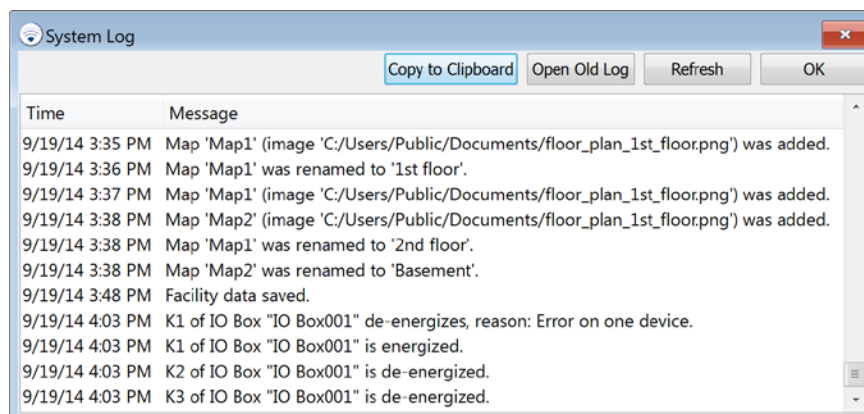


Figure 13: System log

The system log is stored in the **system.log** file. If the size of this file exceeds 4 MB, the file name is changed to **system_<date>.log** and a new **system.log** file is created.

Table 13 lists the functions that can be accessed from the **System Log** with the buttons.

Button	Function	User level
Copy to clipboard	Copies the selected entry to the clipboard	Anybody
Open old log	Opens an archived inspection log	Anybody
Refresh	Updates the log window	Anybody
OK	Closes the System Log window	Anybody

Table 13: functions accessible from the system log

5.8 Groups tab

To view the **Groups** tab, click on the **Groups** tab in the tab bar.

The **Groups** tab shows the groups in the system and the devices within each group. Fig. 14 shows a screenshot of the groups tab.

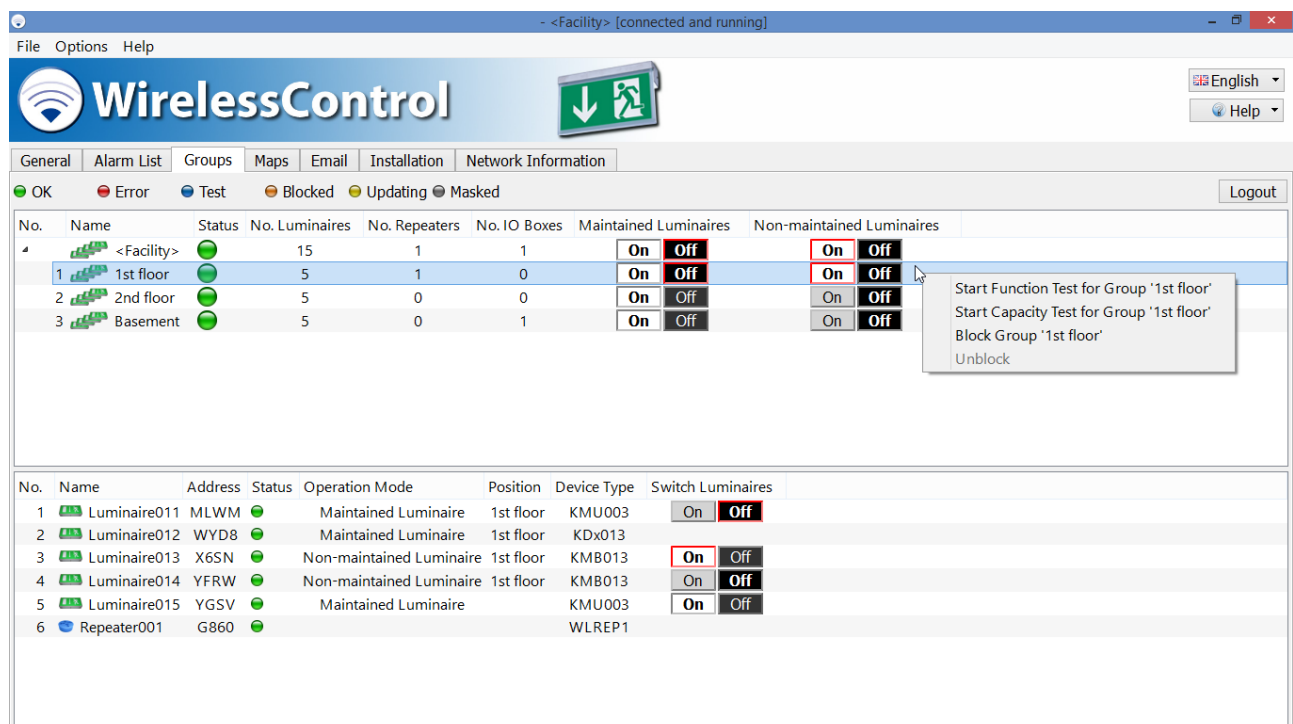


Figure 14: Groups tab, facility manager or installer user level

The upper section in the groups tab shows the groups in the system. The columns show the group's name, its status and the number of emergency luminaires, repeaters and IO-boxes. Section 5.1 describes the colour symbols in the **Status** column. The **OnOff** buttons in the columns **Maintained Luminaires** and **Non-maintained Luminaires** allow the luminaires to be turned on or off. This function is only available on the facility manager and the installer user levels and only if switchable emergency luminaires are present in the system. A red frame around the **OnOff** button indicates a non-maintained emergency luminaire that is turned on or a maintained emergency luminaire that is turned off.

The group list's context menu (Fig. 149 offers the functions listed in Table 14. The functions affect all luminaires within the group.

Menu item	Function	User level
Start function test for group '<name>'	Starts a functional test for all emergency luminaires in this group	Facility manager, installer
Start capacity test for group '<name>'	Starts a duration test for all emergency luminaires in this group	Facility manager, installer
Block group '<name>'	Turns all emergency luminaires in this group into remote inhibiting mode	Facility manager, installer
Deblock	Terminates the remote inhibiting mode	Facility manager, installer

Table 14: group list context menu

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

The lower section in the **Groups** tab shows the devices in the group that is selected in the upper section (see Fig. 15). The lower section shows the device name, its address, status, the operation mode, its position and the device type. The **OnOff** buttons in the **Switch Luminaires** column allow the luminaires to be turned on or off. This function is only available on the facility manager and the installer user levels and only if the emergency luminaires are switchable. A red frame around the **OnOff** button indicates a non-maintained emergency luminaire that is turned on or a maintained emergency luminaire that is turned off.

The screenshot shows the WirelessControl software interface. The top section displays a summary for the selected group '<Facility>'. It includes a status bar (OK, Error, Test, Blocked, Updating, Masked) and a Logout button. Below this is a table with columns: No., Name, Status, No. Luminaires, No. Repeaters, No. IO Boxes, Maintained Luminaires, and Non-maintained Luminaires. The table shows three rows for the facility: 1st floor, 2nd floor, and Basement. Each row has On/Off buttons for both maintained and non-maintained luminaires. The bottom section is a detailed list of devices. It includes columns: No., Name, Address, Status, Operation Mode, Position, Device Type, and Switch Luminaires. The list shows six devices: Luminaire011, Luminaire012, Luminaire013, Luminaire014, Luminaire015, and Repeater001. A context menu is open for the first device, 'Luminaire011', showing options: Start Function Test for Luminaire 'Luminaire011', Start Capacity Test for Luminaire 'Luminaire011', Block Luminaire 'Luminaire011', Unblock, and Show Luminaire 'Luminaire011' on Map.

Figure 15: Groups tab, facility manager or installer user level

The devices' context menu (Fig. 15) offers the functions listed in Table 15.

Menu item	Function	User level
Start function test for luminaire '<name>'	Starts a functional test on this emergency luminaire	Facility manager, installer
Start capacity test for luminaire '<name>'	Starts a duration test on this emergency luminaire	Facility manager, installer
Block luminaire '<name>'	Turns this luminaire into remote inhibiting mode	Facility manager, installer
Deblock	Terminates the remote inhibiting mode	Facility manager, installer
Show on map	Shows the emergency luminaire on the floor plan	Anybody

Table 15: device list context menu

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

5.9 Maps tab

To view the **Maps** tab, click on the **Maps** tab in the tab bar.

The **Maps** tab allows floor plans to be added and emergency luminaires that are registered in the system to be placed on the floor plans, so that the installation location of a device can be looked up at any time. The functions of the **Maps** tab can only be used on the installer user level. On the anybody and facility manager user levels, the floor plans can only be viewed.

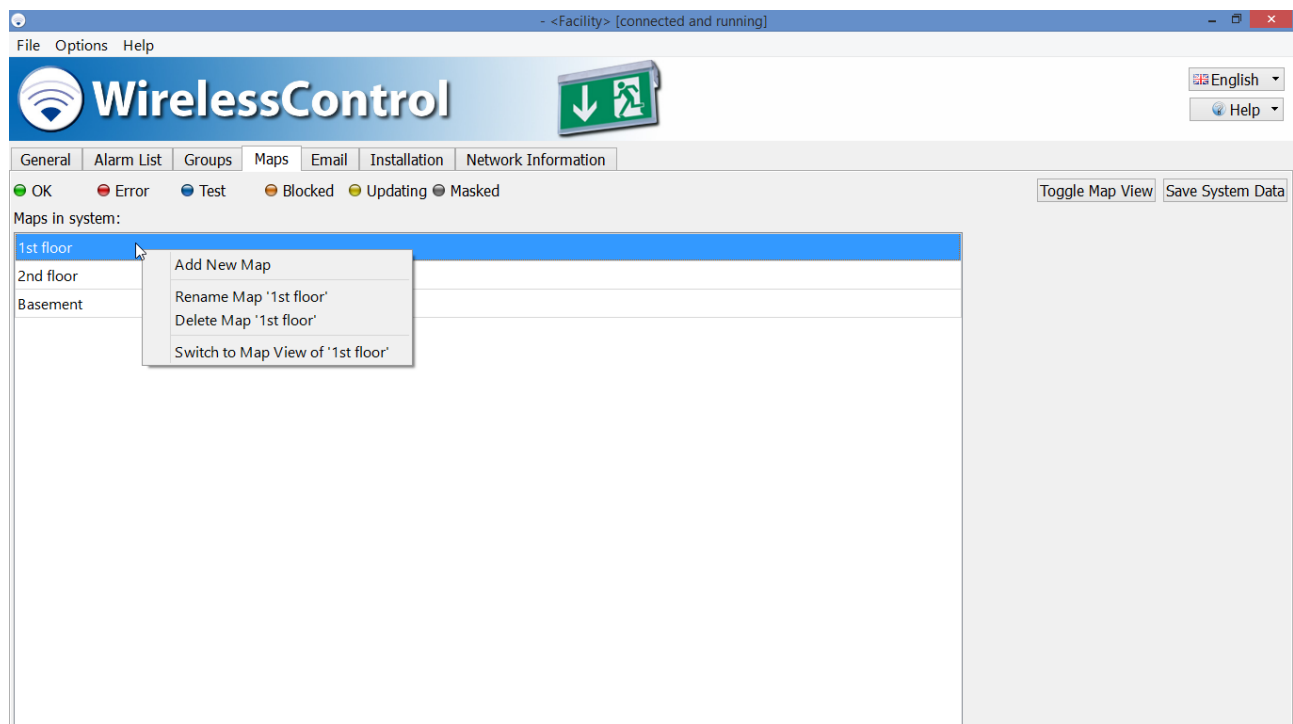


Figure 16: Maps tab, installer user level

The maps tab has two views: the list of floor plans (view 1, Fig. 16) and the view on the floor plan with the luminaires placed (view 2, Fig. 18). You can switch between these two views with the **Toggle Map View** button.

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5.9.1 Maps tab, view 1

To add a floor plan, open the context menu in the **Maps in system** section (Fig. 16) and select **Add new map**. Select the storage medium your floor plans are stored on in the **Select a Map Image** dialogue. Select all the floor plans you wish to add and complete the selection with **Open**. The floor plans must be in .png, .bmp or .jpg format. The maximum floor plan size is 10 megapixels. Larger floor plans cannot be loaded in the WirelessProfessional system.

You can drag a floor plan to a new position within the list in order to rearrange the list.

The context menu of the floor plans in the **Maps in system** section offers the functions **Add new map**, **Rename map '<name>'**, **Delete map '<name>'** and **Switch to Map View of '<name>'**.

Open the context menu on the right section of the **Maps** tab and select **Add new building logo** to add a picture of the building. Select the storage medium the picture is stored on in the **Select a Building Logo** dialogue. Select the picture and complete the selection with **Open**. The picture must be in .png, .bmp or .jpg format.

Double click or touch twice on an entry in the list of floor plans to open it and change to view 2.

If you make any changes to the floor plans, select **Save System Data** to save the changes.

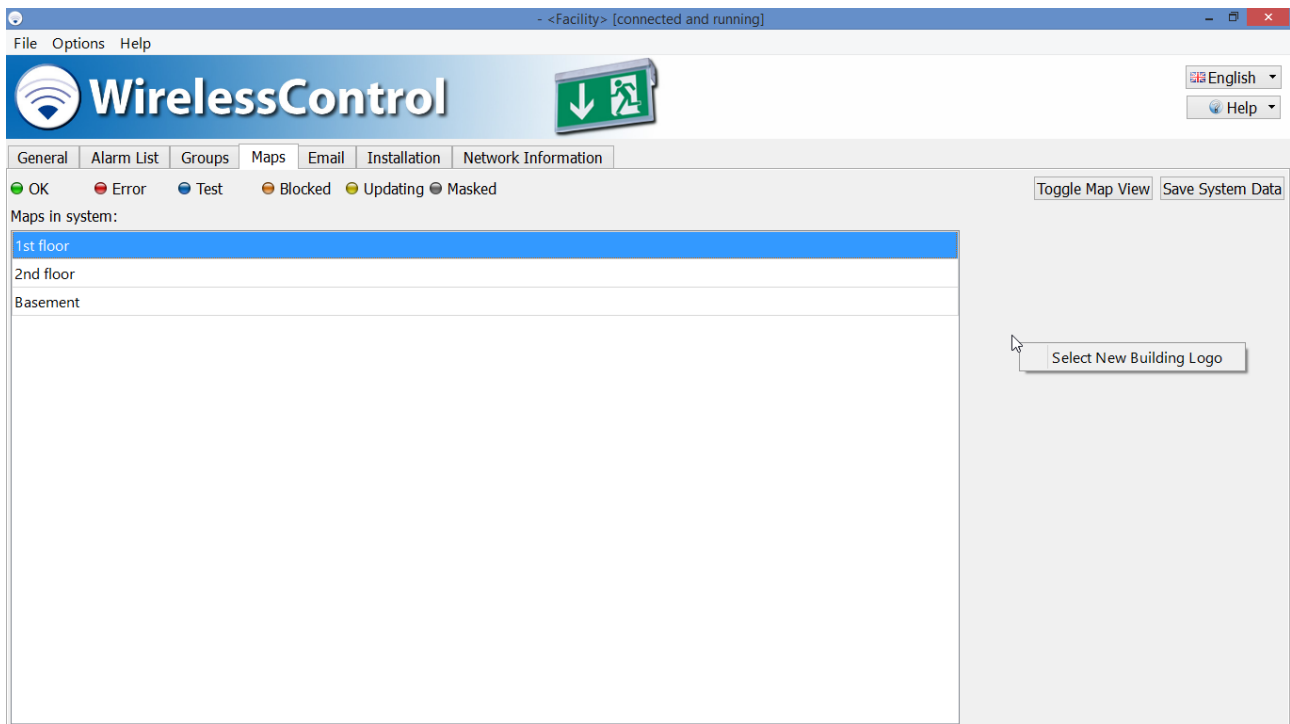


Figure 17: Maps tab, installer user level

5.9.2 Maps tab, view 2

View 2 of the maps tab allows the registered luminaires to be placed on the floor plans. Fig. 18 shows a screenshot of the maps tab in view 2.

To change to view 2, click on the **Toggle Map View** button or double click/touch twice on an entry in the list of floor plans.

The left section shows the groups and devices of the system. To place a device on the floor plan, select the device in the left section and drag it to the location it is installed at on the floor plan. Devices placed on the floor plan will automatically be removed from the left section.

The floor plan currently displayed can either be selected in the drop-down list above the floor plan or with the arrow buttons located to the left and right of the drop-down list.

Use the slider to adjust the magnification and use the scroll bars to control the displayed floor plan detail.

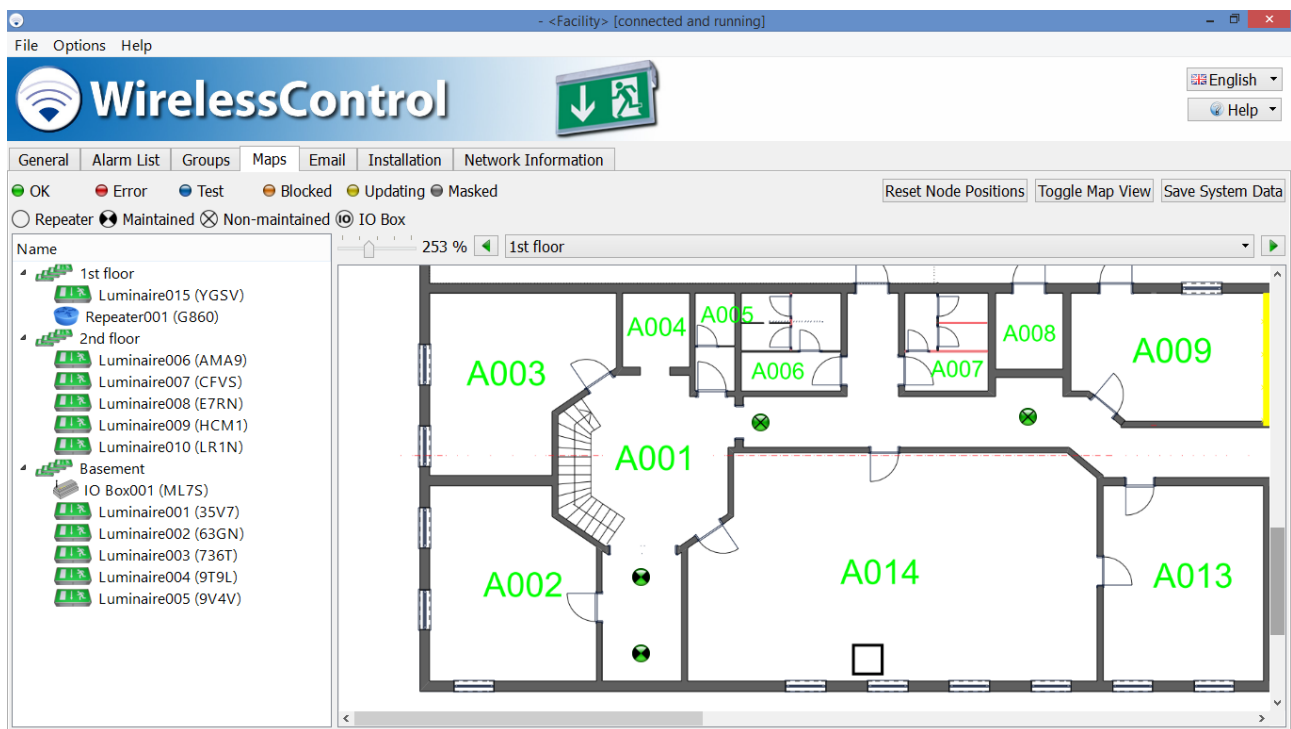


Figure 18: Maps tab, installer user level

Table 16 lists the functions that can be accessed with the buttons in view 2 of the **Maps** tab.

Button	Function	User level
Reset Node Positions	Removes all devices from the floor plan	Installer
Toggle Map View	Changes between view 1 and view 2	Anybody
Save System Data	Saves changes	Installer

Table 16: functions in view 2 of the maps tab

If you make any changes in the **Maps** tab, select **Save System Data** to save the changes.

5.10 Email tab

To view the **Email** tab, click on the **Email** tab in the tab bar. The **Email** tab is only available on facility manager and installer user levels.

The screenshot shows the WirelessControl software interface. The top bar includes the title "<Facility> [connected and running]" and standard window controls. Below the title bar is a menu bar with "File", "Options", and "Help". The main interface features a "WirelessControl" logo and a green exit button. A tab bar at the top of the main content area includes "General", "Alarm List", "Groups", "Maps", "Email", "Installation", and "Network Information". The "Email" tab is currently selected. In the top right corner of the main content area, there are three buttons: "Change Facility Manager Password", "Send Test-Mail", and "Save System Data". The "Email" configuration section contains the following fields and options:

- Sender: utility1.wcontrol@abc-utilities.com
- Subject: WirelessControl email notification
- Email address: smith@abc-utilities.com
- SMTP server: smtp@abc-utilities.com
- SMTP server login: wcontrolutility1
- SMTP server password: (masked with dots)
- Port: 0
- Wait time: 5 minutes
- ☒ Radio fault
 - Number of necessary radio faults: 1
- ☒ Battery fault
- ☐ Also report temporary faults
- Mail delivery on function test: All tests
- Mail delivery on capacity test: All tests
- ☐ Blocking luminaire
- ☐ Emergency status change
- ☐ Installer login
- Logout time: 1 h

Figure 19: Email tab, facility manager or installer user level

The WirelessProfessional software offers the option to send an email to a predetermined address if certain events take place. To use this function, you need an email account to send the emails from and the computer must be connected to the internet. Fig. 19 shows a screenshot of the email tab.

Table 17 lists the fields on the email tab and explains their function.

Field	Function
Sender	Sender email address
Subject	Entry in the email's subject field
Email address	Receiver email address. If the email should be sent to multiple receivers, separate the addresses with a comma, e.g. receiver1@domain1.com, receiver2@domain2.com ...
SMTP server	SMTP server the email is being sent from
Port	The port for the connection with the SMTP server (port 25, 587 or 465 in most cases)
SMTP server login	SMTP server login
SMTP server password	SMTP server password. Only SMTP servers with password authentication are supported by this software.
Wait time	Time taken from an event until an email is sent. If additional events occur during this time span, multiple events can be reported with one email.
Radio fault	Email is sent in the event of a radio fault
Battery fault	Email is sent in case of a battery fault
Also report temporary faults	Tick this box to have emails sent even if the fault is fixed before the wait time is over
Mail delivery on function test	You can choose from <ul style="list-style-type: none"> • email after all functional tests (all tests) • email after functional test with errors (failed tests) • never send an email after a functional test (never)
Mail delivery on capacity test	You can choose from <ul style="list-style-type: none"> • email after all duration tests (all tests) • email after duration test with errors (failed tests) • never send an email after a duration test (never)
Blocking luminaire	Send email if emergency luminaires are turned into remote inhibiting mode
Emergency status change	Send email if the fire alarm signal at an IO box input is turned on or off
Installer login	Send email if a user logs in as an installer
Logout time	Users logged in as facility manager or installer are automatically logged off after the logout time if no user activity is being detected during this time. This function's purpose is to automatically log off users that forget to log of.

Table 17: fields on the email tab

Table 18 lists the functions that can be accessed with the buttons on the email tab

Button	Function	User level
Change facility manager password	Change the facility manager password	Facility manager, installer
Send test email	Send a test email	Facility manager, installer
Save System Data	Save changes	Facility manager, installer

Table 18: functions in the email tab

If you make any changes in the email tab, click on **Save System Data** to save the changes.

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5.11 Installation tab

To view the **Installation** tab, click on the **Installation** tab in the tab bar. The **Installation** tab is only available on the installer user level.

The **Installation** tab is subdivided into the **Configure Groups**, **Test**, **Timer** and **System** tabs.

5.11.1 Configure Groups tab

To view the **Configure Groups** tab, click on the **Configure Groups** tab in the lower tab bar on the **Installation** tab.

New devices can be registered in the system and groups can be created and edited in the **Configure Groups** tab. Fig. 20 shows a screenshot of the **Configure Groups** tab.

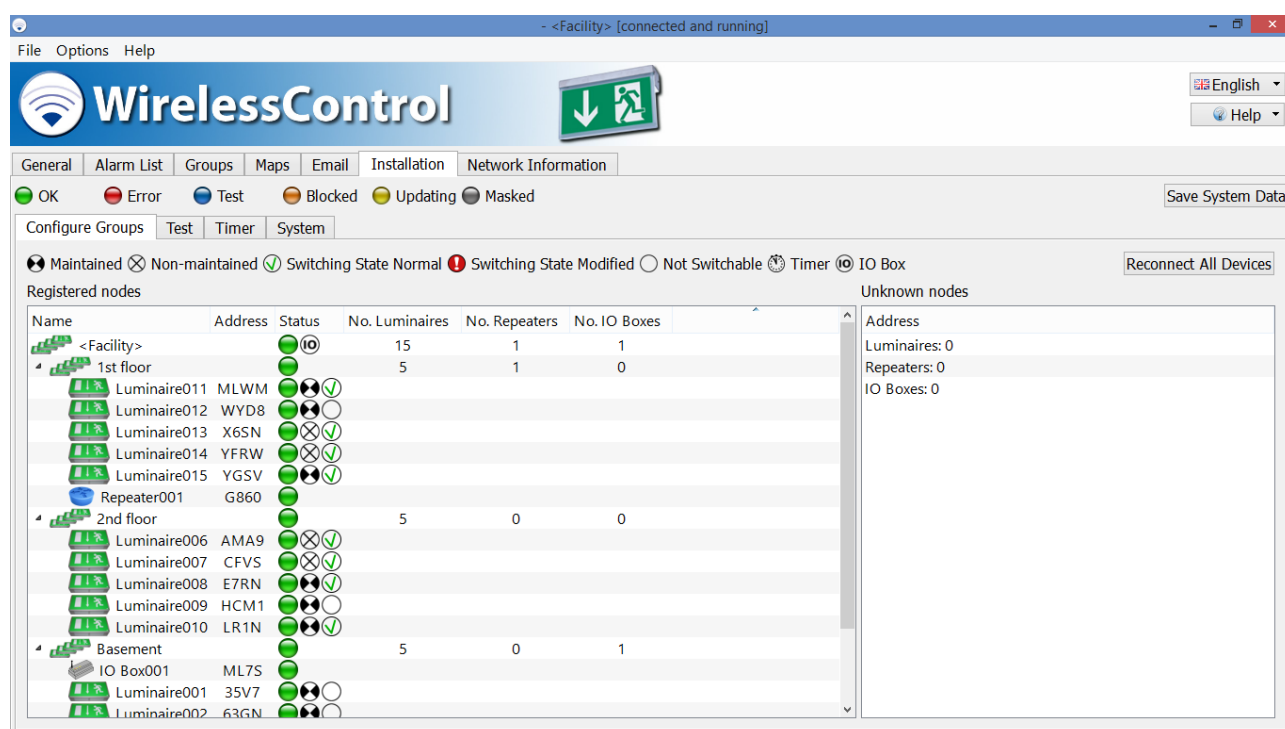


Figure 20: Configure Groups tab, installer user level

The first row in the **Registered nodes** section shows the name and the properties of the system. The system's groups and the devices within the groups are shown below. Click on or touch the triangle to the left of a group to expand the group and show the devices within the group or click on the triangle again to close the group.

The columns in the **Registered nodes** section show the group's or the device's name, the status and the number of emergency luminaires, repeaters and IO-boxes in the group. Section 5.1 describes the symbols in the **Status** column.

The context menu of the **Registered nodes** section (Fig. 21) offers the functions listed in Table 19. The entries in the context menu vary, depending on whether a group or a device is selected.

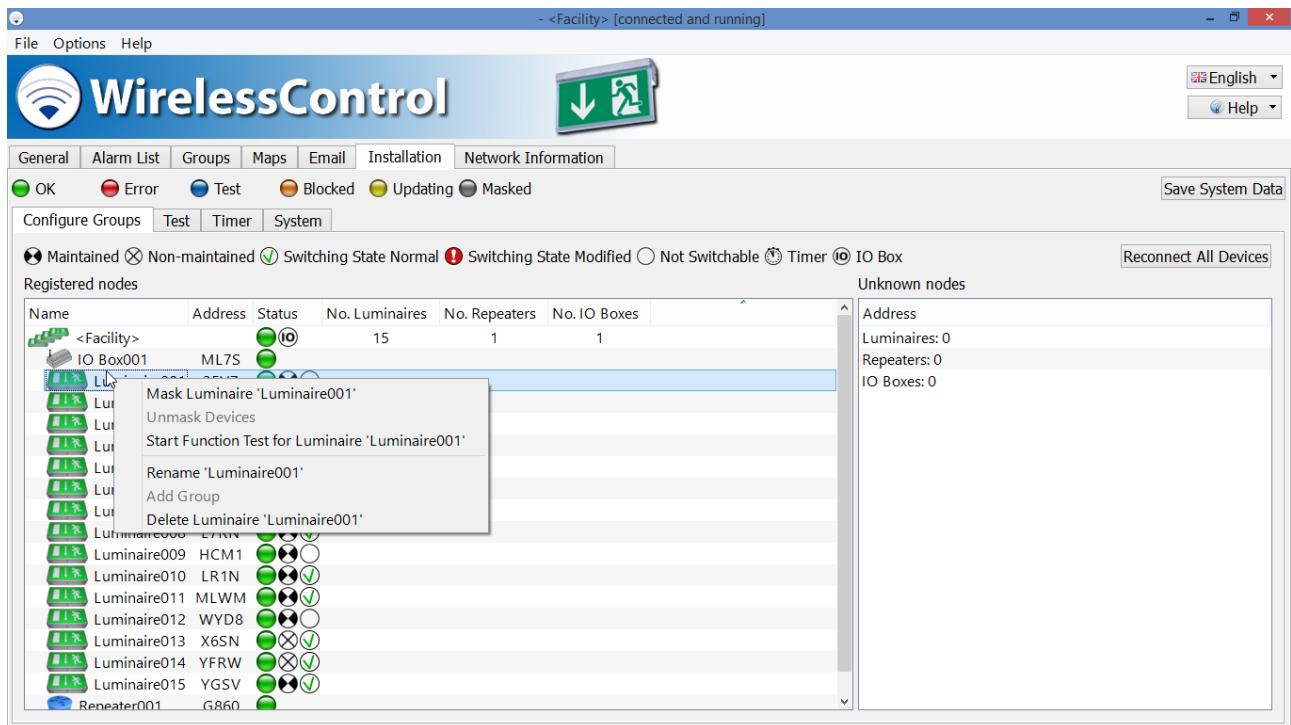


Figure 21: Configure Groups tab, installer user level

Menu item	Function	User level
Mask x luminaires, x repeaters and x IO-boxes/Mask luminaire '<name>'	Devices will be masked (device errors will not be displayed)	Installer
Unmask Devices	Removes the masking	Installer
Start function test for luminaire/group '<name>'	Starts a functional test for this luminaire /this group	Installer
Rename Luminaire/Group '<name>'	Rename the luminaire / the group	Installer
Add group	Adds a group to the selected group or the system. This function is available only if a group or the system is selected	Installer
Delete Luminaire/Group '<name>'	Deletes the luminaire /the group from the system	Installer

Table 19: context menu functions

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

The **Unknown nodes** section to the right shows devices, which are not registered in the system, but are in range of the wireless network. The list is divided into luminaires, repeaters and IO-Boxes. Devices that are not supported by the installed version of the WirelessProfessional software show up in the **Unknown nodes** section as **Unknown Device**. If a device's wireless connection is broken for more than 15 minutes, the device will be removed from the **Unknown nodes** section.

To register devices from the **Unknown nodes** section in the system, select the devices (Fig. 22) and drag them onto the **Registered nodes** section. The devices will then be registered one after the other. The first row in the **Registered nodes** section shows the remaining number of devices to be registered. The registration time can vary from seconds to minutes for a single device.

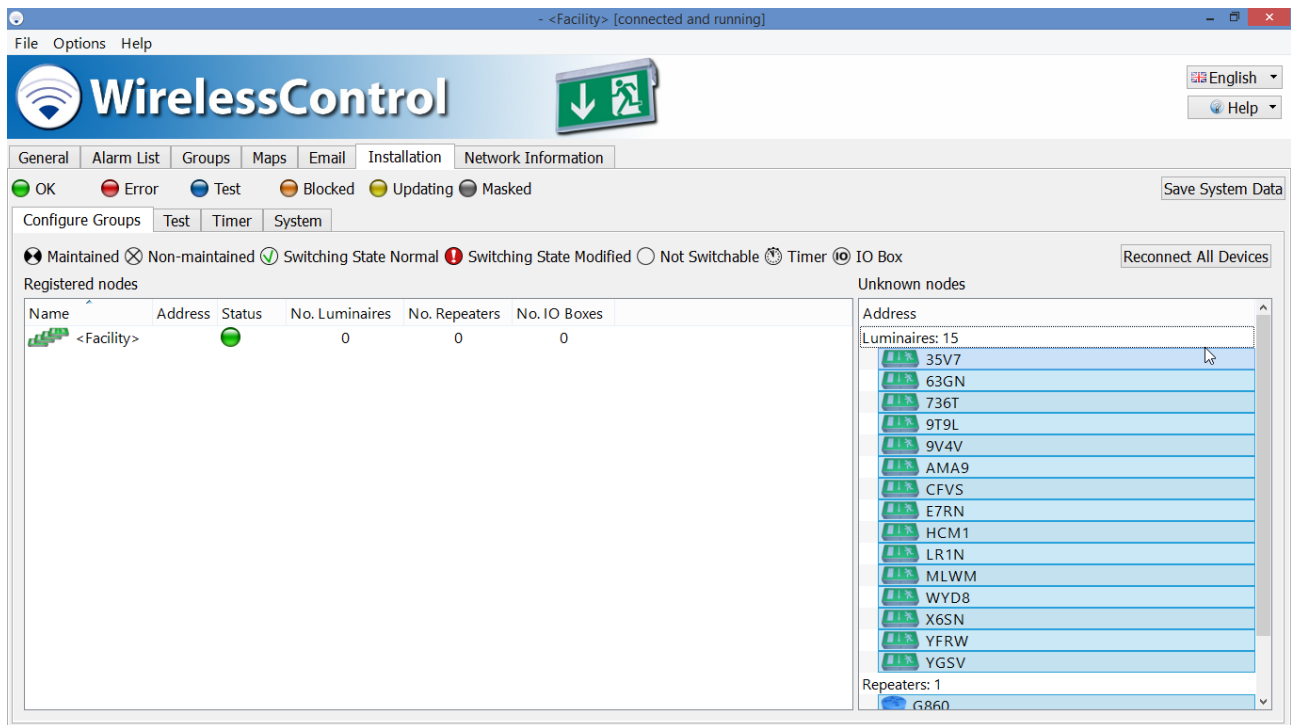


Figure 22: Configure Groups tab, installer user level

Caution! During registration of the devices in the system, the USB-Koordinator should be positioned such that less than 50 devices are in direct range of it (refer to section 5.12, Network Information tab).

Following registration in a system, devices will only forward the data packets in the wireless network that originate from the system they are registered in. If single devices are added individually to the system, the following situation can occur: If the single device that is supposed to be added to the system is located far away from the USB-Koordinator and the devices in between that are needed for the wireless communication are not yet registered in the system, then the device located far away cannot be accessed. For this reason devices should always be selected in the **Unknown nodes** section and dragged to the Installed nodes section together.

The context menu of the entries in the unknown nodes section (Fig. 23) offers the functions listed in Table 20.

The **Add New Luminaire**, **Add New Repeater** and **Add New IO-Box** functions allow devices to be added manually to the **Unknown nodes** section without the need for a wireless connection. With this function, emergency luminaires can be registered in the system even if the installer is not located at the installation site or if the luminaires are not yet installed. The devices' addresses must be known in order to add them manually. Just as normal devices, manually added devices can be registered in the system by dragging them into the **Installed nodes** section. The colour symbol for manually added devices stays yellow until a wireless connection with the device can be established and then it changes to green.

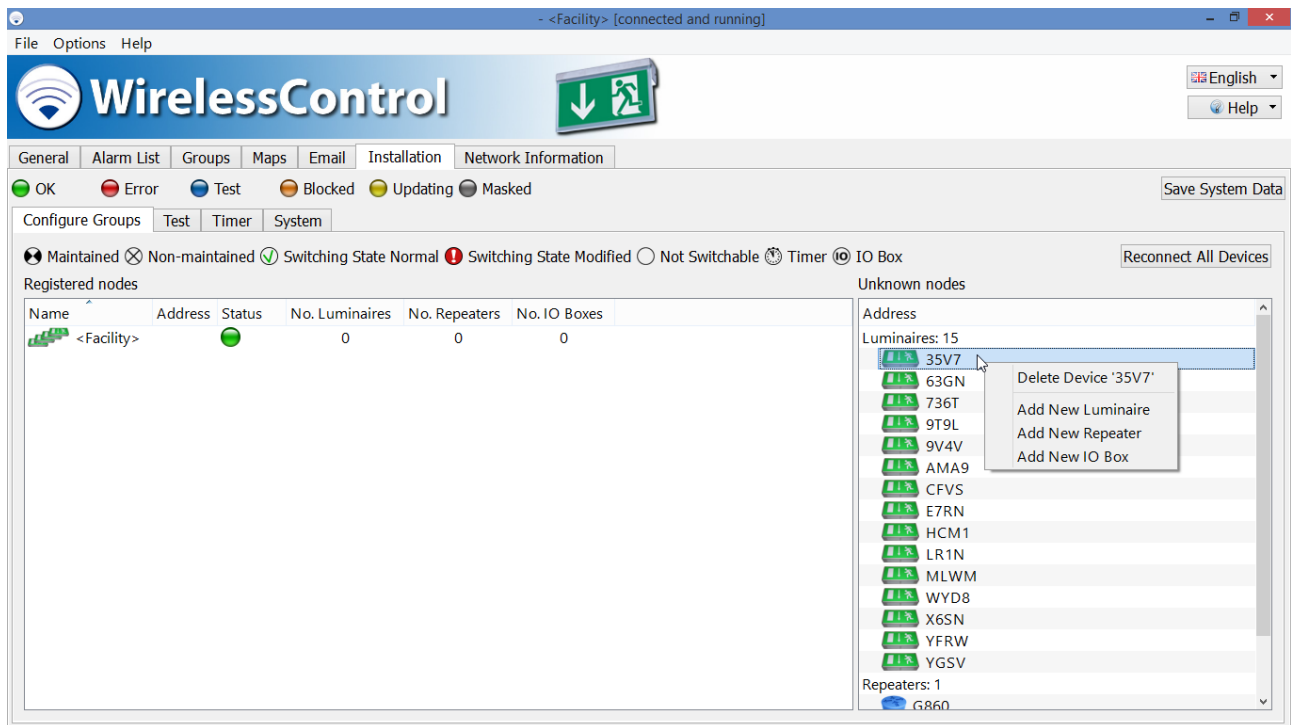


Figure 23: Configure Groups tab, installer user level

Menu item	Function	User level
Delete Device '<u><name></u>'	Deletes the device from the Unknown nodes section	Installer
Add new Luminaire	Adds an emergency luminaire manually	Installer
Add new Repeater	Adds a repeater manually	Installer
Add new IO Box	Adds an IO-Box manually	Installer

Table 20: context menu functions

If an installation is disrupted or if the system's USB-Koordinator is replaced, the system-ID must be rewritten to all devices. Rewriting the system-ID is initiated with the **Reconnect All Devices** button. During this process, the registration of the devices in the system is temporarily deleted. The devices will however still be displayed in the **Installed nodes** section. Devices registered in other systems, which are in range of the system's wireless network, will temporarily be displayed in the **Unknown nodes** section.

Caution! The function **Reconnect All Devices** will not only affect the system it is initiated from, but all the other systems within range of the system's wireless network. Due to the high traffic load in the wireless network, it can take up to several hours for the process of reconnecting devices to complete.

If you make any changes in the **Configure Groups** tab, select **Save System Data** to save the changes.

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5.11.2 Test tab

To view the **Test** tab, click on the **Test** tab in the lower tab bar on the **Installation** tab.

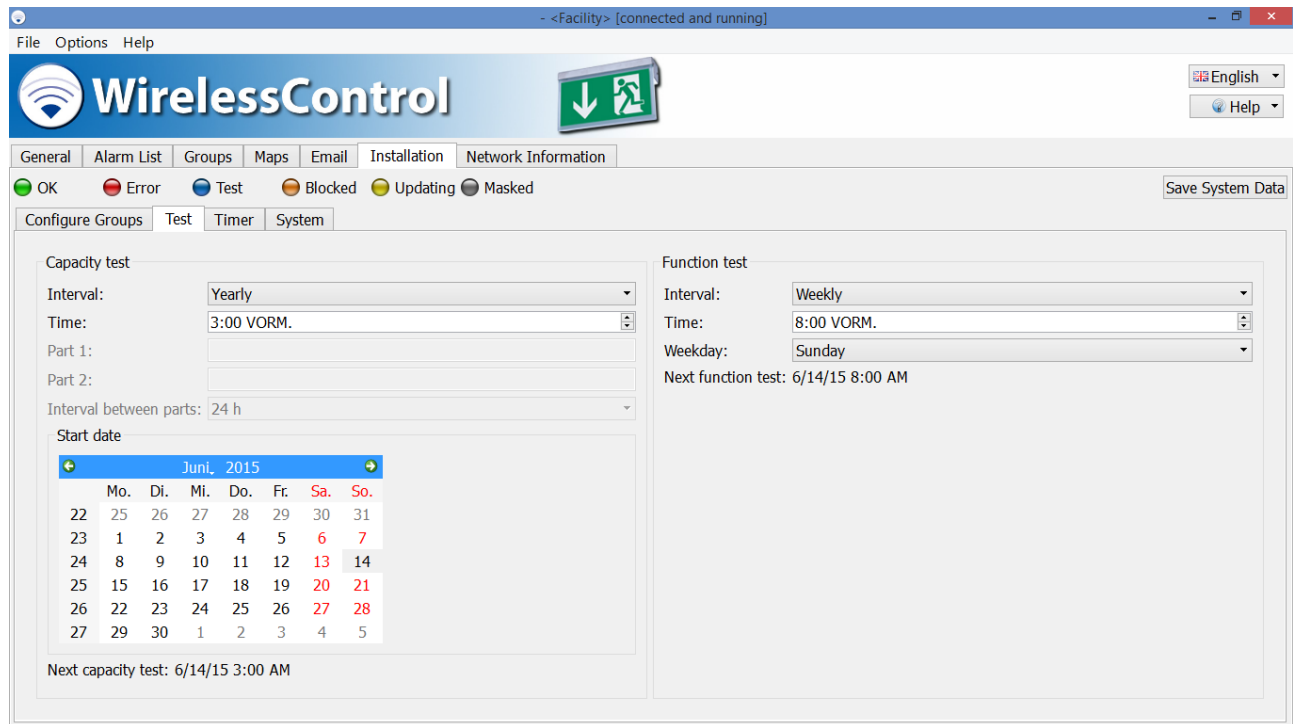


Figure 24: Test tab, installer user level

The WirelessProfessional system carries out automatic tests of emergency escape lighting systems according to EN 50172 and EN 62034. The settings for the automatic functional test and the automatic duration test are on the **Test** tab. Fig. 24 shows a screenshot of the **Test** tab.

Table 21 lists the fields on the **Capacity test** section of the **Test** tab and explains their function.

Field	Function
Interval	Time interval for duration tests. Choose from Yearly , Half-Yearly , Every 4 Months and Quarterly . Choosing Manually turns automatic testing off.
Time	Time the duration test starts at. Select a time when the building is not occupied.
Part 1	Not implemented
Part 2	Not implemented
Interval between parts	Not implemented
Start date	Select a date for the next duration test
Next capacity test	The date for the next duration test is displayed after the setup is completed by clicking on Save System Data

Table 21: fields on the **Capacity test** section of the Test tab

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

If an automatic duration test is started and one or more emergency luminaires are not sufficiently charged (refer to sections 2.2 and 2.3), the duration test for these luminaires will be postponed for 24 hours. After 24 hours a new duration test on these luminaires will take place. The software allows for a maximum of 3 attempts at a duration test on the emergency luminaires.

Table 22 lists the fields on the **Function test** section of the **Test** tab and explains their function.

Field	Function
Interval	Time interval for functional tests. Choose from Daily , Weekly and Manually . Choosing Manually turns automatic testing off.
Time	Time at which the functional test starts. Select a time when the building is not occupied.
Weekday	Weekday on which the functional test is carried out. This field is only available if Weekly is chosen as the interval.
Next function test	The date for the next functional test is displayed after the setup is completed by clicking on Save System Data

Table 22: fields on the **Function test** section of the Test tab

If you make any changes in the **Test** tab, select **Save System Data** to save the changes.

5.11.3 Timer tab

To view the **Timer** tab, click on the **Timer** tab in the lower tab bar on the **Installation** tab.

Timers allow emergency luminaires to be switched automatically at a pre-set time. Fig. 25 shows a screenshot of the **Timer** tab.

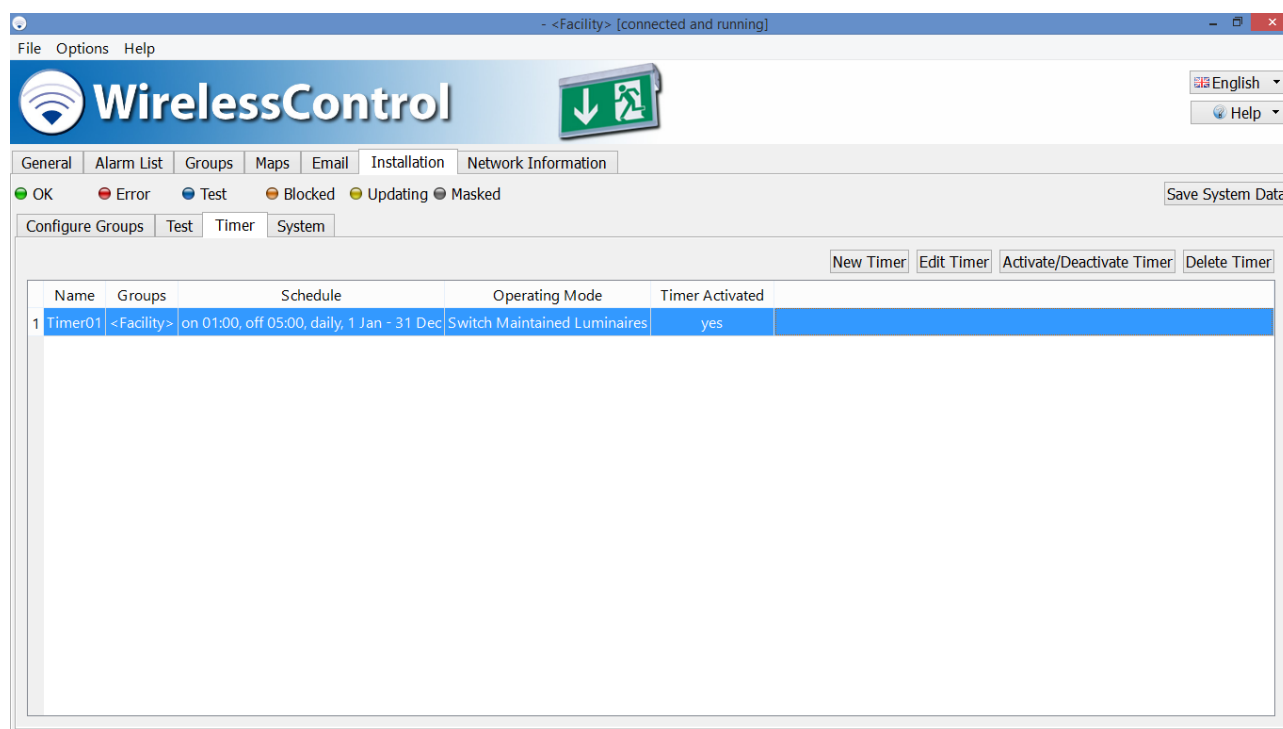


Figure 25: timer tab, installer user level

Table 23 lists the functions that can be accessed from the **Timer** tab with the buttons.

Button	Function	User level
New Timer	Opens the Configure Timer window (Fig. 26) for a new timer	Installer
Edit Timer	Opens the Configure Timer window (Fig. 26) for the selected timer entry	Installer
Activate/Deactivate Timer	Enables or disables the selected timer entry	Installer
Delete Timer	Deletes the selected timer entry	Installer

Table 23: functions accessible on the Timer tab

The buttons **New Timer** and **Edit Timer** open the **Configure Timer** window with the timer settings (Fig. 26). Table 22 lists the fields in the **Configure Timer** window and explains their function.

Figure 26: Configure Timer window

Field	Function
Name	The timer's name
Start Date	Date from which the timer is active
End Date	Date from which the timer is inactive
Switch-On Time	Time at which the emergency luminaires are switched on
Switch-Off Time	Time at which the emergency luminaires are switched off
Days	Select the days on which the timer should be active or select Daily
Operating Mode	Select the timer's switching function. Select from: <ul style="list-style-type: none"> • Switch maintained emergency luminaires • Switch non-maintained emergency luminaires • Energy Save (turns all switchable emergency luminaires off) • Activate (turns all switchable maintained emergency luminaires on)
Groups to switch	Select the groups whose emergency luminaires are to be switched

Table 24: fields in the Configure Timer window

If you make any changes in the **Timer** tab, select **Save System Data** to save the changes.

5.11.4 System tab

To view the **System** tab, click on the **System** tab in the lower tab bar on the **Installation** tab.

The installer's contact details are entered on the **System** tab. In addition several other settings that affect the overall emergency lighting system are located on the **System** tab. Fig. 27 shows a screenshot of the **System** tab.

Table 25 lists the fields in the **System** tab and explains their function.

Field	Function
First Name, Last Name, Company, Phone, Email	Installer's contact details. These contact details are shown in the Maintenance Due reminder window.
System Name	Name for the system
Project Name	Name for the project
Time to connection error	Time span from a broken wireless connection until an error is reported. This setting applies to all devices except IO-Boxes.
Time to connection error for IO boxes	Time span from a broken wireless connection with an IO-Box until an error is reported. In addition to the error message, the IO-Box's relay 1 (output K1) drops out.
Emergency follow-up time	Time from the end of a fire alarm until the emergency luminaires are turned off again. If Manual Retraction is chosen, the emergency follow-up time must be ended with the Retract Emergency Follow-Up button on the General tab.
Commands waiting	Number of commands that remain to be transmitted to a device
Commands in execution	Number of commands in the USB-Koordinators output buffer

Table 25: fields on the System tab

The larger of the two time spans **Time to connection error** and **Time to connection error for IO-Boxes** determines the minimum time which the automatic test system displays the **Status is being updated** (colour symbol 🟡) message at start-up. The system cannot change to the **No errors** (colour symbol 🟢) status prior to this time span having passed because a connection error, that is present from start-up onwards, can only be reported after the time span **Time to connection error** has passed.

The screenshot shows the WirelessControl software interface at the installer user level. The title bar indicates the facility is connected and running. The main menu includes File, Options, and Help. The interface is divided into several tabs: General, Alarm List, Groups, Maps, Email, Installation, and Network Information. The 'System' tab is currently active, displaying a form for installer contact information and system configuration. The form includes fields for First name, Last name, Company, Phone, Email, System name, and Project name. It also features dropdown menus for Time to connection error, Time to connection error for IO Boxes, and Emergency follow-up time. At the bottom, there are indicators for Commands waiting and Commands in execution, both showing 0. A 'Save System Data' button is located in the top right corner of the form area.

Figure 27: System tab, installer user level

Table 26 lists the functions that can be accessed from the **System** tab with the buttons.

Button	Function	User level
Serial Port	Manually set the USB-Koordinator's port	Installer
Change Installer Password	Change the installer password	Installer
Reset Facility Manager Password	Sets the facility manager password back to 1111	Installer
Import Inspection Log	Not implemented	Installer
Export Groups	Exports the groups-structure in a file with csv (comma separated values) format	Installer

Table 26: functions accessible on the System tab

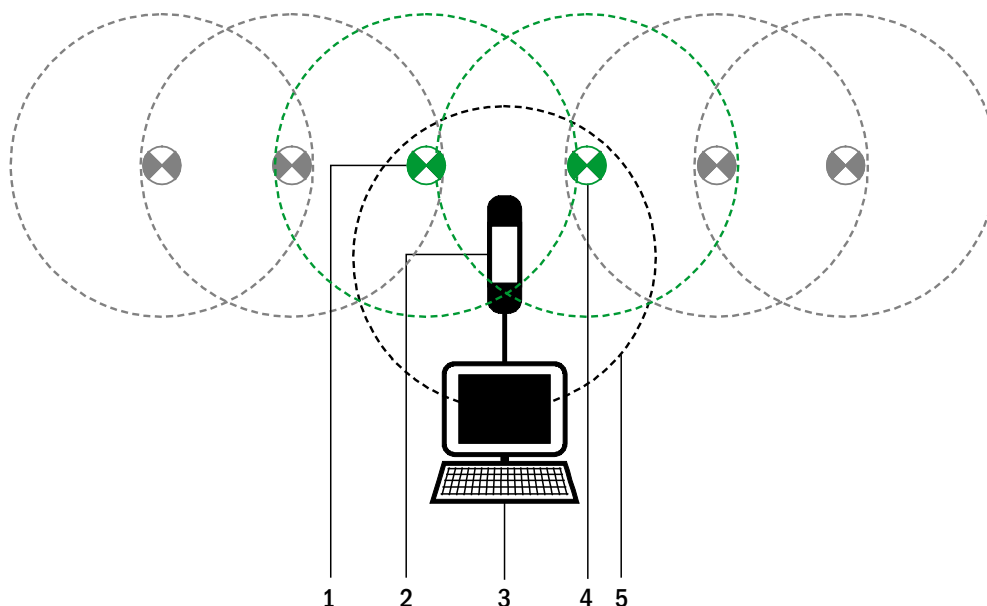
If you make any changes in the **System** tab, select **Save System Data** to save the changes.

5.12 Network Information tab

To view the **Network Information** tab, click on the **Network Information** tab in the tab bar. The **Network Information** tab is only available on the installer and distributor user levels.

The upper section of the **Network Information** tab shows the wireless signal strength of the devices, which are in direct range of the USB-Koordinator. In Fig. 28, devices within direct range of the USB-Koordinator are marked. Fig. 29 shows a screenshot of the **Network Information** tab. The size of the bars indicates the signal strength. The devices' addresses are displayed above the bars.

After the device's signal strength has been measured, a two-minute timer is started. While the timer is running, the colour of the bar indicating the signal strength changes from green to grey. If the two-minute timer expires without a new signal strength value for the device being acquired, the device is removed from view.



- 1 Device within direct range of the USB-Koordinator
- 2 USB-Koordinator
- 3 Computer
- 4 Device within direct range of the USB-Koordinator
- 5 Range of the USB-Koordinator

Figure 28: devices within direct range of the USB-Koordinator

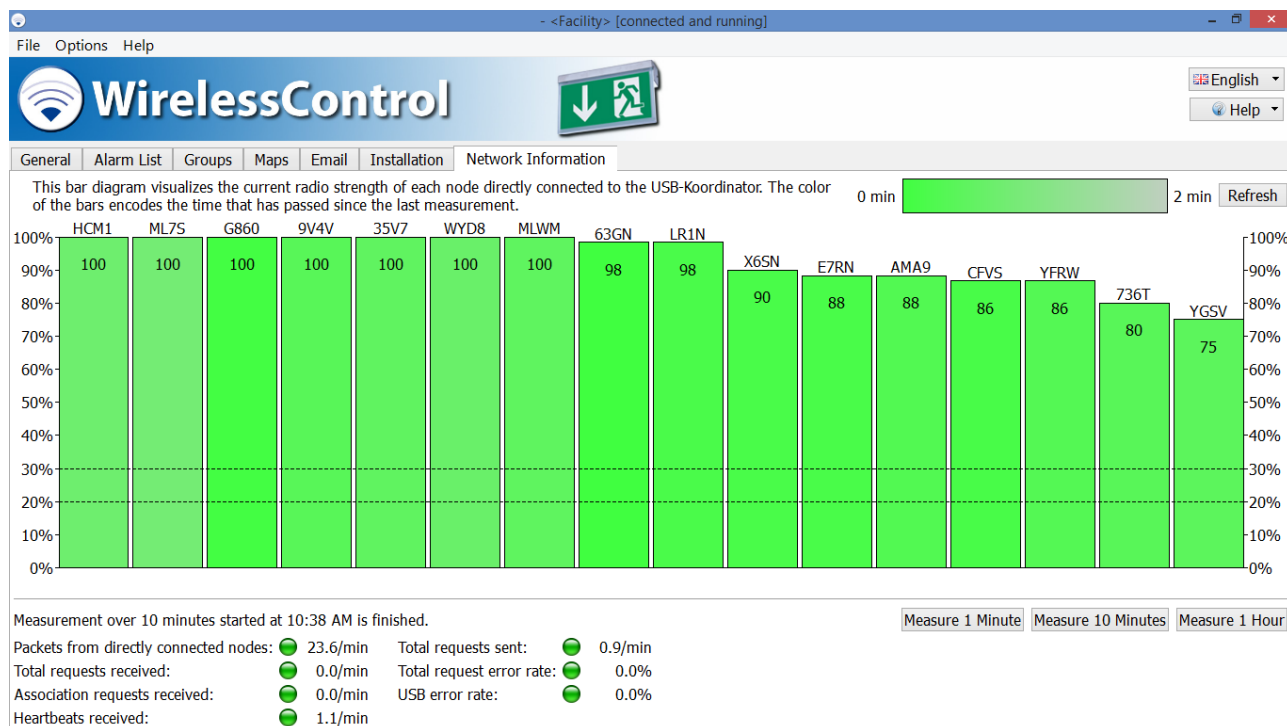


Figure 29: Network Information tab, installer user level

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The lower section of the **Network information** tab serves to measure various parameters of the wireless network. These measurements are useful for troubleshooting. If a measurement is necessary, the distributor will carry it out or ask you to do it and communicate the results.

Start the measurement with the button **Measure 1 Minute**, **Measure 10 Minutes** or **Measure 1 Hour**.

Before a measurement over 1 hour is started, set the logout time on the **Email** tab to **never** and complete the change with **Save System Data**.

Table 27 lists the fields in the lower section of the **Network information** tab and explains their function.

Field	Function
Packets from directly connected nodes	Number of wireless packets per minute from devices within direct range of the USB-Koordinator. This measurement's colour symbol turns yellow or red if too many devices are in direct range of the USB-Koordinator.
Total requests received	Total number of requests per minute sent from devices to the automatic test system
Association requests received	Number of requests per minute from devices which aren't already registered in any system
Heartbeats received	Parameter of the wireless network
Total requests send	Number of requests per minute sent from the automatic test system to the devices
Total request error rate	Percentage of requests, which cannot be transmitted to the devices
USB error rate	Percentage of requests, which cannot be transmitted via the USB connection to the USB-Koordinator

Table 27: fields in the lower section of the Network Information tab

5.13 Distributor tab

To view the **Distributor** tab, click on the **Distributor** tab in the tab bar. The **Distributor** tab is only available on the distributor user level.

The distributor's contact details and company logo are entered on the **Distributor** tab. In addition other general system settings are located on the **Distributor** tab. Fig. Fig. 30 shows a screenshot of the **Distributor** tab.

Table 28 lists the fields on the **Distributor** tab and explains their function.

Field	Function
Company, Contact person, Phone, Email	Distributor's contact details.
Logo	Company logo that is displayed between the menu bar and the tab bar. If no distributor logo is loaded, the WirelessProfessional logo will be displayed. Fig. 30 shows the Distributor tab with the distributor's logo. Click on the Search button to open a dialogue window and select the logo file. The logo will be displayed after the Save System Data button has been clicked. Click on the Reset button to change back to the WirelessProfessional logo.
Maintenance notification	The WirelessProfessional software displays maintenance signals according to the maintenance time intervals set. The maintenance tab is only accessible via the Help menu when Maintenance notification is selected.
Next maintenance	Date when the Maintenance Due window is displayed. Once maintenance is complete, the date for the next maintenance will be set according to the maintenance time interval selected.
Maintenance interval	Period of time between the completed maintenance and the next maintenance signal
Maintenance password protected	The password that must be entered in the Maintenance tab in order to complete the maintenance. The maintenance password is created automatically from the USB-Koordinator address by the WirelessProfessional software and cannot be chosen by the user.
Maintenance plan 1-3	File paths of the maintenance plans and texts displayed of the links to the maintenance plans
Send maintenance emails	Sends emails with a reminder that the maintenance is due
Reduced duration test	The length of time taken to carry out the duration test can be reduced here from the full test time to 2/3 of the test time.

Table 28: fields on the distributor tab

Figure 30: Distributor tab, distributor user level

Table 29 lists the functions that can be accessed from the **Distributor** tab with the buttons.

Button	Function	User level
Acknowledge tests	Deletes all entries of incorrect test results (duration test and functional test) out of the Alarm list tab. The incorrect test results aren't removed from the inspection log and it is stated there that the acknowledge tests function has taken place. The relevant test for emergency luminaires with incorrect test results is displayed with an orange colour symbol in the luminaire's details window and the error is displayed as "acknowledged" if the mouse cursor is placed on the colour symbol. The function Acknowledge tests has the purpose of allowing the distributor to leave a customer's system without error messages if errors occurred during a duration test and were eliminated but the emergency luminaires must be charged for 20 hours before the next duration test can be started.	Distributor
Reset Invalid Devices	Registers the firmware of invalid devices in the system. The error message Device invalid is displayed if the firmware of a device already registered in the system is updated.	Distributor
Change Distributor Password	Change the distributor's password	Distributor
Reset Installer Password	Resets the installer's password to 2222	Distributor
Save System Data	Saves changes	Distributor

Table 29: functions on the distributor tab

5.14 Maintenance tab

The **Maintenance** tab is only available via the Help menu or the maintenance notification. The entry **Maintenance** in the Help menu is only active if the distributor has activated the maintenance function. The **Maintenance** tab is available on the facility manager, installer and distributor user levels. Fig. 31 shows a screenshot of the maintenance tab.

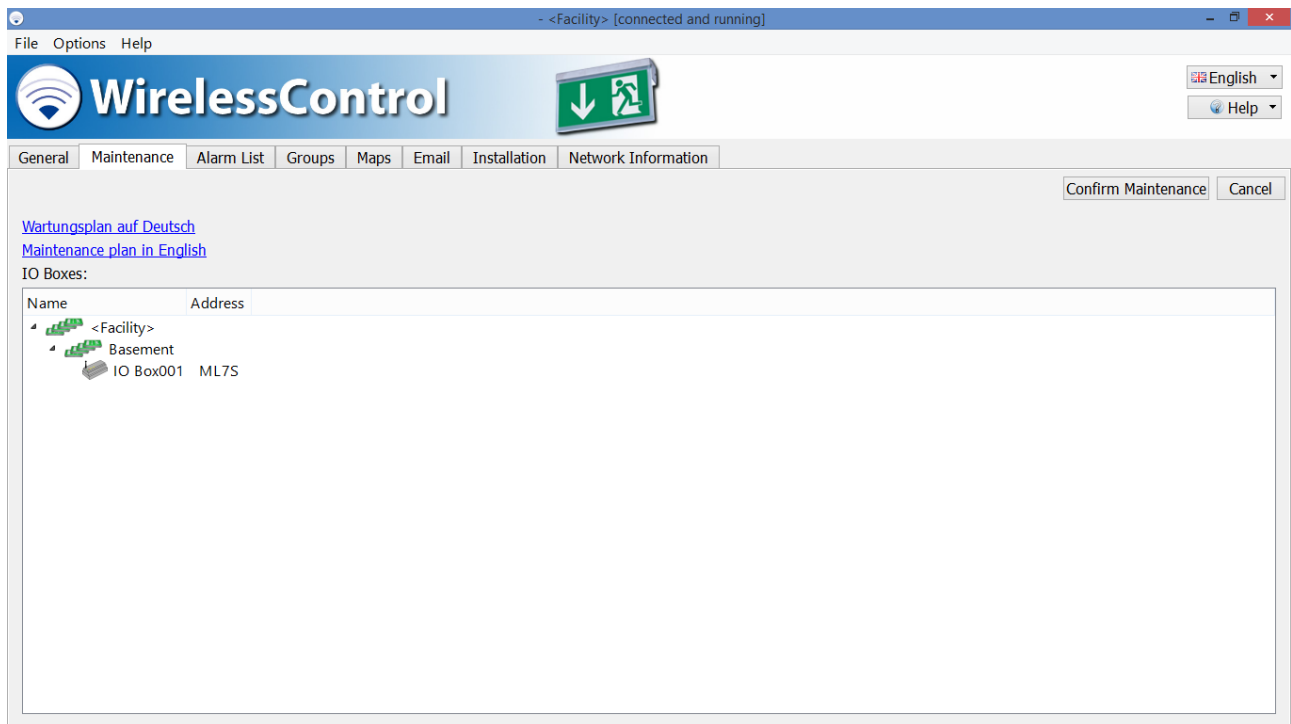


Figure 31: Maintenance tab, installer user level

To open the relevant maintenance plan, click on or touch the link **Maintenance plan in English**. The maintenance plan contains detailed instructions for the system's maintenance.

One element of the maintenance is the inspection of the relays of the IO-Boxes. The IO-Boxes in the system are listed in the **IO-Boxes** section. A double click or two touches on the entry of one IO-Box in the **IO-Boxes** section will open the device details window of this IO-Box. The relay to be tested can be switched using the **T** button in the configuration tab (refer to section 5.15.3).

Using the **Complete maintenance** button, maintenance can be completed, the maintenance window is shut and the timer for the next maintenance date is set. The **Complete maintenance** button is secured with a password. In order to end the maintenance with the **Complete maintenance** button, enter the maintenance password on the left hand side of the **Maintenance** tab.

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5.15 Device details windows

Click on or touch a device twice in the **Alarm List** tab, the **Groups** tab or the **Configure Groups** tab to open the device's details window. The **Device Details** windows vary according to the type of device.

The **Device Details** windows can be opened on all user levels but the entries can only be edited on the installer user level.

5.15.1 Device details emergency luminaire

The **Device Details** window for emergency luminaires allows the luminaire's position to be entered and the operating mode to be changed between maintained and non-maintained emergency luminaire. The **Device Details** window shows the luminaires position on the floor plan, its address and the results of the last three tests. If you position the mouse pointer on one of the colour symbols, the test's date and time as well as the test result are displayed.

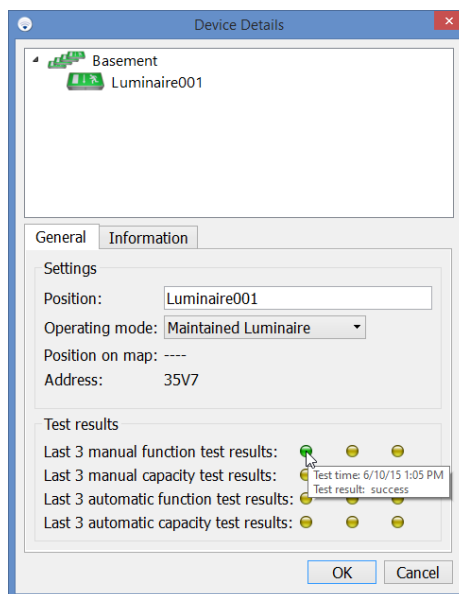


Figure 32: device details emergency luminaire

5.15.2 Device details repeater

The **Device Details** window for repeaters allows the repeater's position to be entered and the position on the floor plan and the device's address are shown.

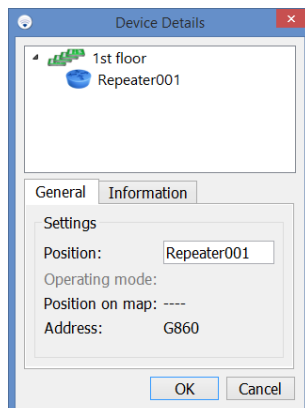


Figure 33: device details repeater

5.15.3 Device details IO-Box

The **General** tab of the **Device Details** window for IO-Boxes allows the IO-Box's position to be entered and the position on the floor plan and the device's address are shown. Additionally the current status of the mains supply and the switching status of the three outputs (K1-K3) and the two inputs (E1, E2) are displayed with the same colours as those of the indicators on the IO-Box.

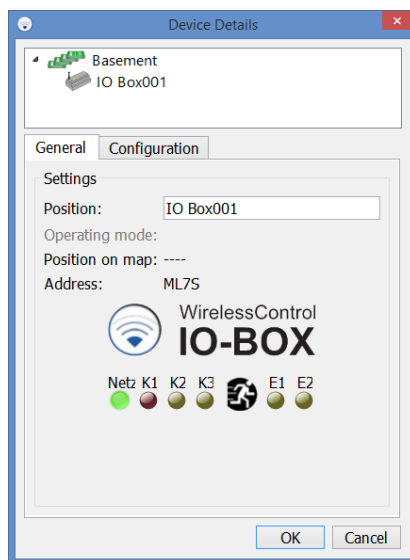


Figure 34: device details IO Box, General tab

The inputs and outputs can be configured on the **Configuration** tab of the **Device Details** window for IO-Boxes (Fig. 35).

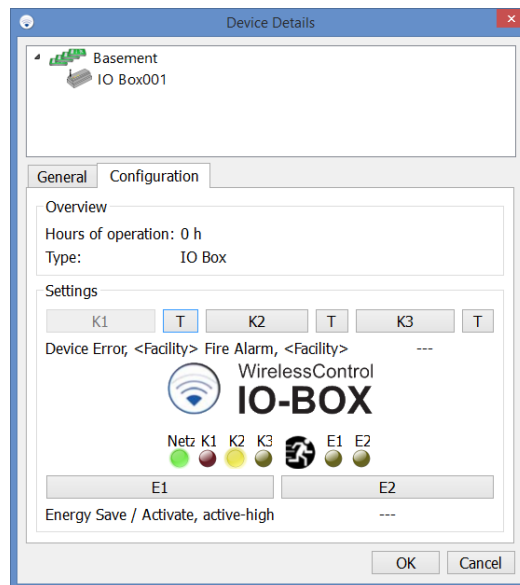


Figure 35: device details IO box, Configuration tab

Select the buttons **K2** or **K3** on the **Configuration** tab to set up the IO-Box's outputs 2 or 3. Fig. 36 shows the **Configure IO Box Output** window. The **Output State** section of the window facilitates the selection of the event that triggers the output relay. Table 30 explains the events the user can select from. The **Groups applying** section allows groups to be selected in which the selected event must occur in order to trigger the output. If one of the events **Energy Save / Activate**, **Fire Alarm** or **Disabled** is chosen, the **Groups applying** section is inactive, because these events always affect the entire system.

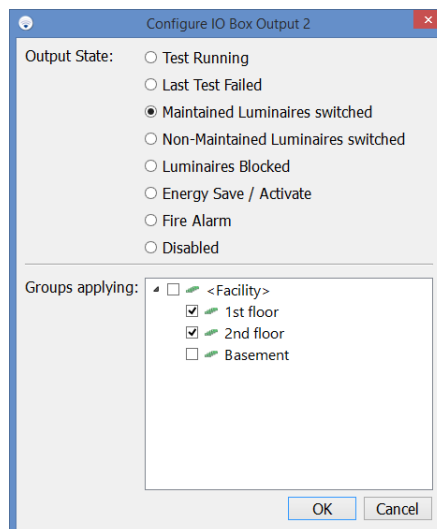


Figure 36: Configure IO Box Output window

Event	Function
Test Running	Output is closed while a test is running
Last Test Failed	Output is closed if the last test was finished with errors
Maintained Luminaires switched	Output is closed if at least one maintained emergency luminaire is turned off
Non-Maintained Luminaires switched	Output is closed if at least one non-maintained emergency luminaire is turned on
Luminaires Blocked	Output is closed if at least one emergency luminaire is in remote inhibiting mode
Energy Save / Activate	Output is closed if all switchable emergency luminaires are turned off
Fire Alarm	Output is closed in case of a fire alarm at the corresponding IO-Box input
Disabled	Output is disabled

Table 30: events that trigger the IO-Box's outputs

Output 1 (K1) always switches on the event **Device Error** and cannot be configured. The relay of output 1 drops out whenever a device reports an error. If the wireless connection between the IO-Box and the automatic test system is broken, the relay of output 1 is delayed by the time span **Time to connection error for IO boxes**. The time span **Time to connection error for IO boxes** can be set on the **Installation/System** tab (section 5.11.4).

Using the **T**-buttons in the configuration tab, the output relays can be checked. The **T**-buttons are used to switch the relays of the corresponding outputs. Once the configuration tab is exited, the K1-K3 output relays return to switching status corresponding to the configuration of the respective output.

Select the buttons **E1** or **E2** on the **Configuration** tab to set up the IO-Box's input 1 or 2. Fig. 37 shows the **Configure IO Box Input** window. In the **Input Name** field a name can be assigned. In the **Operating Mode** section, the action that is triggered by the input signal can be selected. Table 31 explains the actions in the **Operating Mode** section. The **Logic Level** section allows selection of whether the action is triggered by a high level (active-high) or a low level (active-low) at the input. In the **Groups to switch** section, the groups in which the selected action should be performed on can be chosen. If one of the actions **Energy Save / Activate**, **Fire Alarm** or **Disabled** is chosen, the **Groups to switch** section is inactive, because these events always affect the entire system.

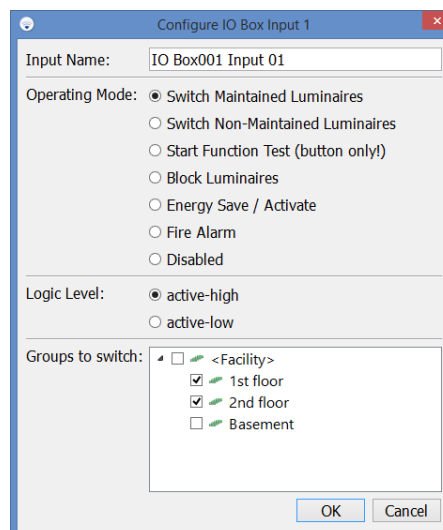


Figure 37: Configure IO Box Input window

Action	Function
Switch Maintained Luminaires	Switches maintained emergency luminaires on/off
Switch Non-Maintained Luminaires	Switches non-maintained emergency luminaires on/off
Start function test	Starts a functional test
Block luminaires	Turns emergency luminaires into remote inhibiting mode
Energy Save / Activate	Turns all switchable emergency luminaires off / turns all maintained luminaires on
Fire Alarm	Turns all switchable emergency luminaires on
Disabled	Input is disabled

Table 31: Actions triggered by an IO-Box input

5.16 Menus

In the WirelessProfessional software, the menu bar is located below the title bar. **In full screen mode, the menu bar is not displayed!** You can switch between full screen mode and normal display mode with Alt + Enter.

5.16.1 File menu

Fig. 38 shows a screenshot with the **File** menu folded out. Table 32 explains the entries in the **File** menu. The items **Inspection Log**, **Communications Log** and **System Log** have the same effect as the functions on the **Alarm List** tab.

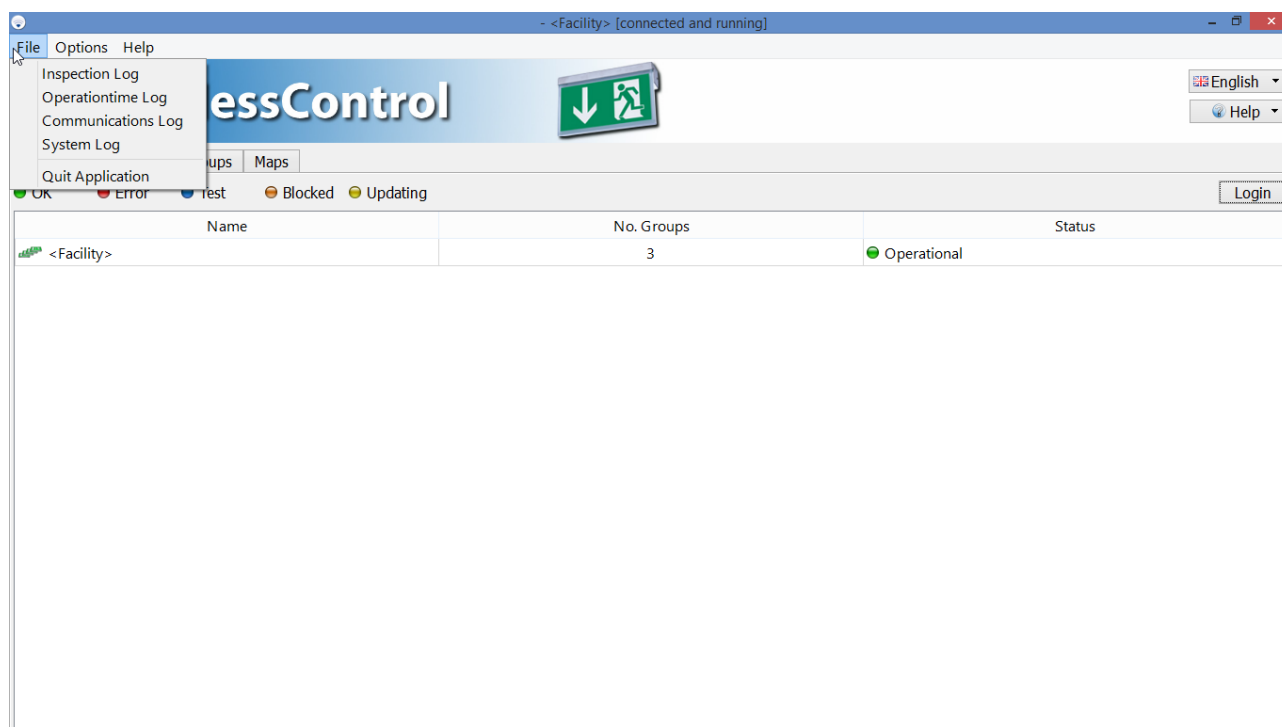


Figure 38: File menu

Menu item	Function
Inspection Log	Opens the inspection log. See section 5.7.1.
Operationtime Log	Not implemented
Communications Log	Opens the communications log. See section 5.7.2.
System Log	Opens the system log. See section 5.7.3.
Quit Application	Closes the WirelessProfessional software

Table 32: File menu

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5.16.2 Options menu

Fig. 39 shows a screenshot with the **Options** menu folded out. Table 33 explains the entries in the **Options** menu.

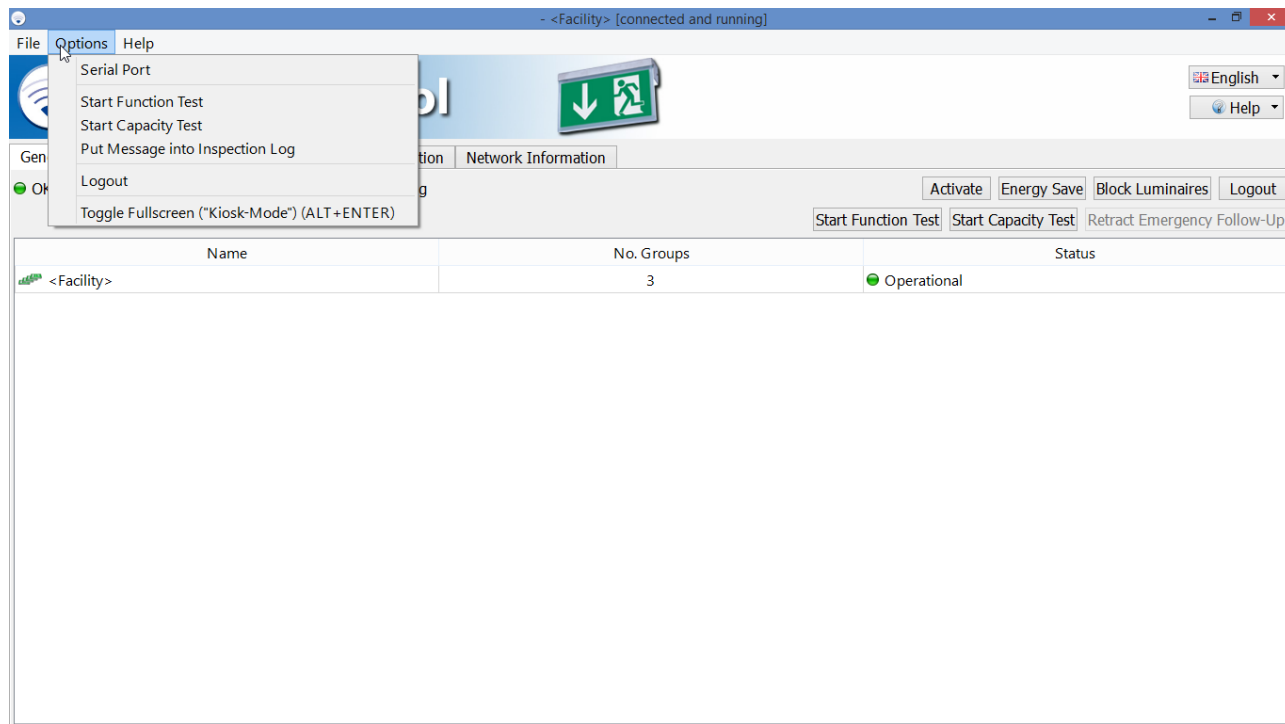


Figure 39: Options menu

Menu item	Function	User level
Serial Port	Manually set the USB-Koordinator's port	Anybody
Start Function Test	Starts a functional test on all emergency luminaires	Facility manager, installer
Start Capacity Test	Starts a duration test on all emergency luminaires	Facility manager, installer
Put Message into Inspection Log	Manually enter a message in the inspection log	Anybody
Login / Logout	Login / logout as facility manager or installer	-
Toggle Fullscreen	Changes to full screen mode	Anybody

Table 33: Options menu

The emergency luminaire batteries must be fully charged (for a minimum of 20 hours) in order for a functional or duration test to take place (refer to sections 2.2 and 2.3).

5.16.3 Help menu

Fig. 40 shows a screenshot with the **Help** menu folded out. Table 34 explains the entries in the **Help** menu.

Menu item	Function
Contact	Shows the installer's contact details
Show Support Information	Shows the USB-Koordinator's address (Device number), the software's build date and the installer's and distributor's contact details (Fig. 41)
Register	Not implemented
Perform maintenance	Opens the Maintenance tab. The Perform maintenance entry is only active if the distributor has activated the maintenance function.
About	Shows the software version, the build date and the manufacturer

Table 34: Help menu

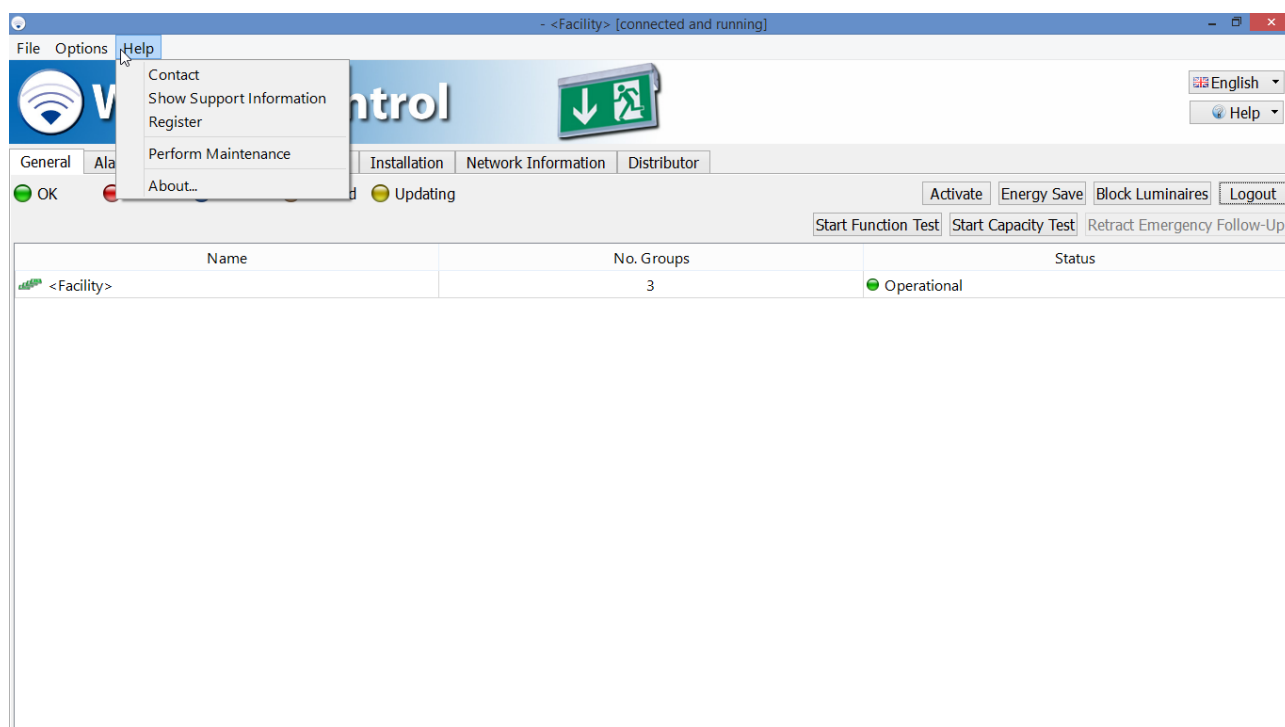
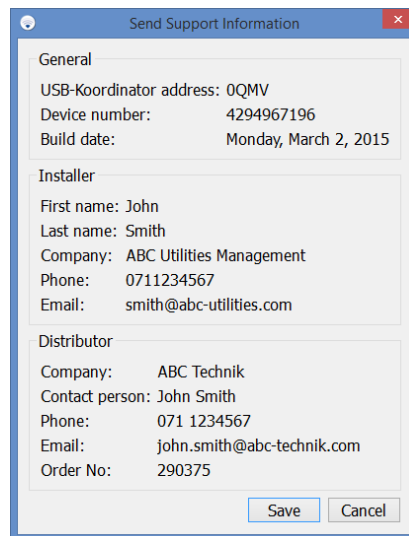


Figure 40: Help menu



The image shows a Windows-style dialog box titled "Send Support Information". It contains three sections: "General", "Installer", and "Distributor", each with a list of fields and their values. At the bottom right are "Save" and "Cancel" buttons.

General	
USB-Koordinator address:	0QMV
Device number:	4294967196
Build date:	Monday, March 2, 2015

Installer	
First name:	John
Last name:	Smith
Company:	ABC Utilities Management
Phone:	0711234567
Email:	smith@abc-utilities.com

Distributor	
Company:	ABC Technik
Contact person:	John Smith
Phone:	071 1234567
Email:	john.smith@abc-technik.com
Order No:	290375

Figure 41: Send Support Information window

6 Additional software

WirelessProfessional systems are delivered with additional preinstalled software. This software fulfils different functions in the WirelessProfessional system. Table 35 displays an overview of the additional preinstalled software.

For some of the software preinstalled on the computer it is necessary to obtain a license in order to be able to use the software.

It is possible to operate a WirelessProfessional system from another computer using the VNC Server and Teamviewer Host software. The software transfers the screen content of the WirelessProfessional PC onto another computer from which the system can be operated. The respective Client software for the remote desktop connection must be installed on this computer (refer to Table 35).

Software	Function	License
VNC Server	Remote desktop software for local network connections. Client's download (VNC viewer) from https://www.realvnc.com/download/	Server: Licence required, www.realvnc.com Client: no license required
Teamviewer Host	Remote desktop software for internet connections. Client's download (Teamviewer All-in-one) from http://www.teamviewer.com/de/download/index.aspx	Server (Host): No license required Client: license required, https://www.teamviewer.com/de/
Cobian Backup	Backup software. Periodically saves the inspection log, communication log and system log.	No license required
Crystal Disk Info	Hard drive status analysis tool. Necessary for the WirelessProfessional system's maintenance.	No license required
AL Battery Tool	PC battery status analysis tool. Necessary for the WirelessProfessional system's maintenance.	No license required

Table 35: Additional preinstalled software

7 Troubleshooting

7.1 During the installation process, a device's address is not shown in the **Unknown nodes** section

Check the following in the given order:

1. Check if the device is connected to the mains supply (emergency luminaires: is the charge-indicator lit? IO-Box: is the green indicator lit?)

If the mains supply is connected: continue with no. 2

If the mains supply is not connected: connect the device to the mains supply

2. Check if the device is sending a wireless signal. Put the USB-Koordinator together with the Computer and the WirelessProfessional software next to the device. Check if the device's address is displayed on the **Network Information** tab.

If the device's address is displayed on the **Network Information** tab: continue with no. 3

If the device's address is not displayed on the **Network Information** tab: contact the distributor

3. Check if the device's address is displayed in the **Unknown nodes** section, when the USB-Koordinator together with the Computer and the WirelessProfessional software is run next to the device.


If the device's address is displayed in the **Unknown nodes** section: presumably the wireless connection with this device is broken, because the distance between devices at one or multiple positions is too large.

If the device's address is not displayed in the **Unknown nodes** section: the device was not recognized by the system. Manually add the device and register the device in the system. Afterwards delete the emergency luminaire from the system and from the **Unknown nodes** section. The device should now show up automatically in the **Unknown nodes** section.

7.2 There are **Device invalid** entries in the **Unknown nodes** section

The WirelessProfessional software reports invalid devices if it does not recognise the device's firmware version. This is typically the case when new devices with a later production date are added to an existing system. Contact the distributor to update the WirelessProfessional software.

7.3 After start-up of the WirelessProfessional software, the system stays in the **Status is being updated** state

The larger of the two time spans **Time to connection error** and **Time to connection error for IO-Boxes** determines the minimum time which the automatic test system displays the **Status is being updated** (colour symbol ) message at start-up. The values for **Time to connection error** and **Time to connection error for IO boxes** can be set on the **Installation/System** tab (section 5.11.4).

7.4 The facility manager's password is lost

The facility manager's password can be reset to **1111** by the installer or the distributor. The facility manager's password is reset on the **Installation/System** tab.

7.5 The installer's password is lost

The installer's password can be reset to **2222** by the distributor.

8 Glossary

automatic test system (ATS)

automated test system that may be manually initiated, consisting of parts (such as timers, current detectors, light detectors, changeover switches) which, when connected together, make a system that can carry out the routine testing requirements of emergency lighting luminaires, and indicate the test results (EN 62034:2012)

duration test

test to check if the battery emergency power supply source supplies the system within the limits of rated duration of emergency operation (EN 62034:2012)

emergency follow-up time

time span during which the emergency luminaires stay turned on after the signal at the fire alarm input has become inactive

emergency lighting

lighting for use when the supply to the normal lighting fails; it includes emergency escape lighting, high-risk task-area lighting and standby lighting (CIE publication 17.4, EN 60598-2-22:1998 + A1:2003)

emergency luminaire rated luminous flux

lumen output as claimed by the luminaire manufacturer 60 s (0.25 s for high-risk task-area lighting luminaires) after failure of the normal supply, and continuously to the end of rated duration of operation (EN 60598-2-22:1998 + A1:2003)

emergency mode

state of a self-contained emergency luminaire that provides lighting when energized by its internal power source, the normal supply having failed (EN 60598-2-22:1998 + A1:2003)

fire alarm

IO-Box input configuration. If the signal at the fire alarm input is active, all switchable emergency luminaires are turned on. When the signal at the fire alarm input becomes inactive again, the emergency luminaires stay on for the emergency follow-up time and will only then be turned off.

functional test

test to check the integrity of the circuit and the correct operation of a emergency luminaire, a changeover device and a battery emergency power supply (EN 62034:2012)

maintained emergency luminaire

luminaire in which the illuminant is energized at all times when normal or emergency lighting is required (EN 60598-2-22:1998 + A1:2003)

masking

A function of the WirelessProfessional Software, that suppresses error messages from masked devices. Masked devices can be identified as being masked on the **Configure Groups** tab.

non-maintained emergency luminaire

luminaire in which the illuminant is in operation only when the supply to the normal lighting fails (EN 60598-2-22:1998 + A1:2003)

normal mode

state of a self-contained emergency luminaire that is ready to operate in emergency mode while the normal supply is on. In the case of a normal supply failure, the self-contained luminaire automatically changes over to the emergency mode (EN 60598-2-22:1998 + A1:2003)

normal supply failure

condition in which the normal lighting can no longer provide a minimum illuminance for emergency escape purposes and when the emergency lighting should become operative (EN 60598-2-22:1998 + A1:2003)

rated duration of emergency operation

time, as claimed by the manufacturer, that the rated emergency lumen output is provided (EN 60598-2-22:1998 + A1:2003)

remote inhibiting mode

state of a self-contained emergency luminaire which is inhibited from operating by a remote device while the normal supply is on and in case of a normal supply failure the luminaire does not change-over to emergency mode (EN 60598-2-22:1998 + A1:2003). The remote inhibiting mode is only allowed during shutdown periods. Only switchable emergency luminaires can be turned into remote inhibiting mode. If the emergency luminaire's wireless connection to the automatic test system is broken, the remote inhibiting mode is cancelled after 15 min. Emergency luminaires in remote inhibiting mode cannot be tested and also remain switched off if a fire alarm occurs.

self-contained emergency luminaire

luminaire providing maintained or non-maintained emergency lighting in which all the elements, such as the battery, the illuminant, the control unit and the test and monitoring facilities, where provided, are contained within the luminaire or adjacent to it (that is, within 1 m cable length) (EN 60598-2-22:1998 + A1:2003)

9 Revision history

WirelessProfessional – Setup and Operation		
Date	Software-Version / Revision	Comment/Important changes
23 rd October 2014	1.2.0	Creation (based on German Version 1.2.0 as of 9 th July 2014)
10 th December 2015	1.3.0	Update. “Maintenance” and “Additional software” sections added.

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11 Contact information

