

RAPID ELS

Emergency Lighting Server

User Operation Guide

Issue: 1.0

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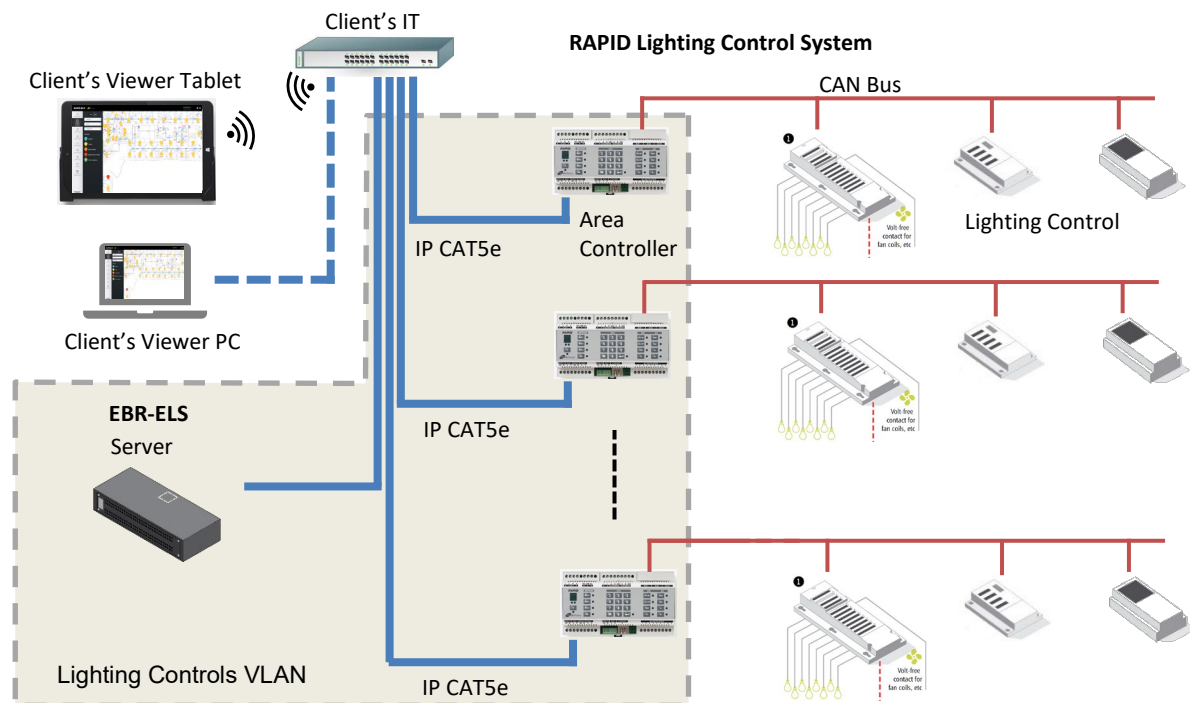
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Overview

1.1 Overview of RAPID Lighting Control System

As part of the RAPID lighting Control System, the ELS Emergency Lighting Server is a dedicated server hardware custom configured to show the site's health status of the emergency light fittings and offering tools to test and report them.

A connection overview is shown here.



This Emergency Light Server ELS product is installed in the customers electrical cupboard safe from inadvertent site disturbances. It works autonomously in the background executing the prescribed schedules of testing and the collection of the results holding historical data for recalling whenever necessary for basic reporting and issue-tracking for any problematic emergency light fitting.

The RAPID lighting control system is installed to provide energy-saving controls and this RAPID ELS solution harnesses the same hardware and network and therefore it only requires the step of adding this dedicated Emergency Lighting Server, compatible DALI emergency light fittings and some programming works to complete the emergency lighting management solution.

1.2 Background of Emergency Light Testing

Automatic testing and reporting means that it would replace the time-consuming task of a person to physically being there to witness and log the emergency test response for each emergency light fitting located in many locations of the site. In order to declare the site safe for use by the occupiers, this testing and reporting is mandatory for every month. Whilst the requirement to keep the emergency lights in a healthy state sounds simple enough, the actual testing and monitoring maintenance regime is not. It has to comply to certain standards like BS5266. It should also take into account that to keep site safe, an adequate amount of emergency light fittings should still function even immediately after a battery-stressed duration test.

1.3 Battery Life of Emergency Fittings

One has to balance sufficient emergency light testing with recommendations of the light

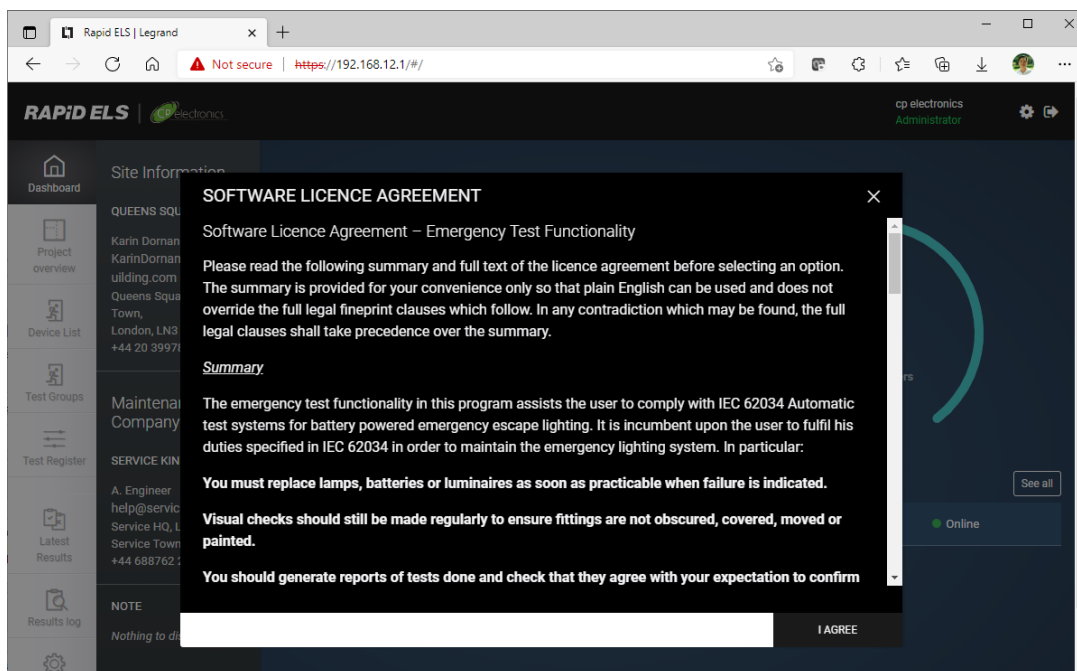
fitting manufacturer so that the expected life of the product would not be compromised due to excessive testing. The RAPID ELS provides all the functionality for the user to reach that balance in a data sharing team working environment. See subsequent chapters for further information.

1.4 Use Policy Agreement License

The ELS is an excellent support tool and make ease of the Emergency Light Testing and reporting process but it will never replace the diligence and remedy works required by the maintenance team onsite.

Evidence provided by the ELS offers good support but for good safety reasons, the user is advised some alternative works independent of the system should be deployed form tiem to time as verification of the accuracy of the results that it offers.

See Use Policy Agreement License notice displayed as a reminder of the above on first log in of the system.



1.5 Hardware Host



The host processor is a custom unit designed to be configured by CP Electronics approved engineers such that when installed and connected, it functions immediately with no intervention when switched to power ON.

Since it is intended to run autonomously 24/7 continuously, it is designed to be connected as to an unswitched power line with preferable backup power for rugged operation.

It can be installed hidden in electrical cupboard locations or sit on rack trays of server racks within an IT room. Whilst it runs beyond standard room temperature ranges its limits stated its specification must NOT be ignored.

1.6 View and Operation Device

The unit has no keyboard nor a screen and runs as a server to customer's preferred viewing devices running applicable web browser applications. On this chosen viewing and operating device connected on a network, the user uses the applicable web browser and assigns the designed URL address that points to the RAPID ELS server. The operation then continues as presented to the user on the web browser screen.

1.7 Applicable Web Browser Applications

In general, the latest web browser applications in common use are applicable for use on the viewer device whether that be running on a laptop or a mobile tablet device. Be aware that small screen devices with limited viewing area is likely to be cumbersome to work with.

1.8 Warranty

The warranty period of the ELS server is 3 years.

Terms and conditions apply. See details listed in CP Electronics website:

<https://www.cpelectronics.co.uk/terms-and-conditions>

2. Specifications


2.1 Electrical Specifications

Electrical Specifications	Input voltage	100- 240V AC
	Input frequency	50/60 Hz
	Circuit protection	3A fuse
	Power rating	65W
	Power connection	UK 3 pin plug on 0.8m lead or IEC C5 socket

2.2 Mechanical Specifications

Mechanical Specifications	Colour	Black
	Material	Mounting tray – Steel (1.2mm)
	Dimension	2U height 19" rack standard 530mm width x 115mm high x 225mm deep
	Weight	3kg

2.3 Environmental Specifications

Environment Specifications	Operating temperature	10 to 40 deg C
	Storage temperature	-10 to 60 deg C
	Humidity	20% to 80% non-condensing
Compliance		

2.4 Network Environment Specifications

Network Environment Specifications	Network	Ethernet up to 1 Gigabit (RJ45 connection)
	Protocols and Ports used	TCP 443, 30307 UDP 30304 SSH 22
	Messaging Protocol	Secure HTTPS over TLS v1.3

2.5 Functional Specifications

Functional Specifications	User memory	128GB solid state drive (SSD)
	Ports	Gigabit Ethernet x 1 HD graphics display port x 1 USB 3 ports x 3

Due to the fast changing nature of IT technology, the specifications of the actual delivered product are subject to change without notice but will be similar or of a higher specification.

2.6 Example Suitable Viewer Web Browsers

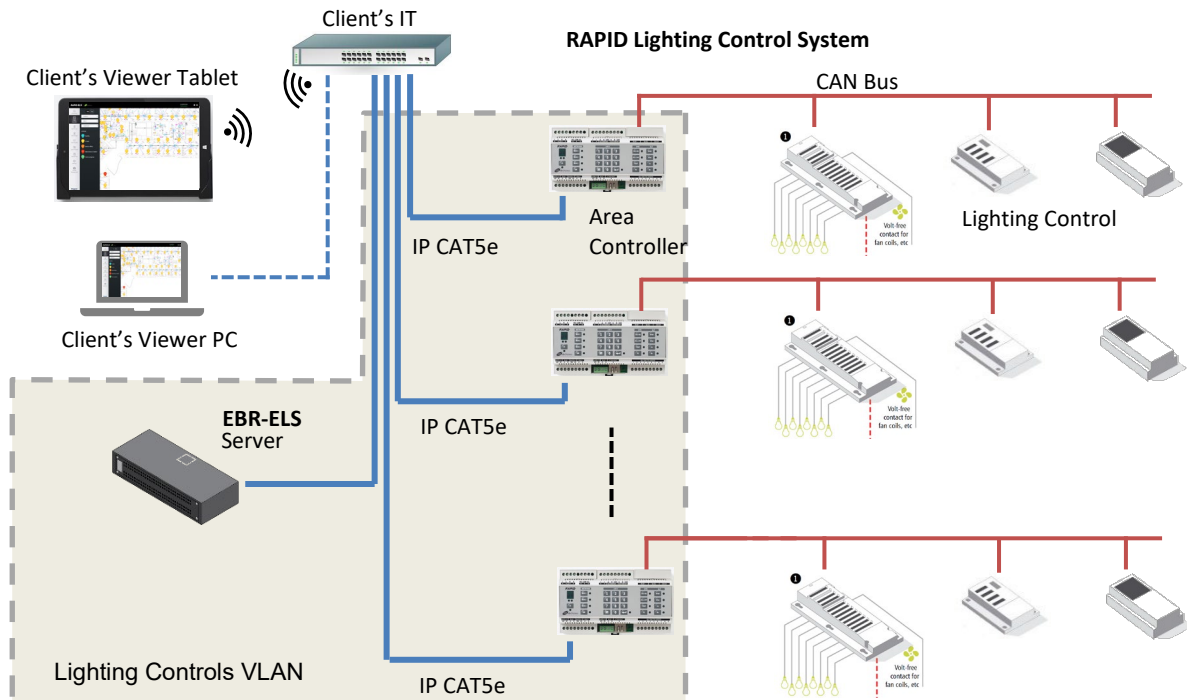
Desktop or Laptop	Microsoft Windows 10 platform browsers: Microsoft Edge, Google Chrome, Firefox
	Apple MAC iOS latest Safari browser
Mobile Device	Apple iPhone or iPad running iOS 10 Safari browser
	Android phone or tablet running Android version 10 Chrome, Firefox, Microsoft Edge
Recommended screen resolution	1920 x 1080 pixels

2.7 Functionalities

General	Floor plan view and device tree view
	Multiple building campus structure
	Dashboard diagnostic summary for each building
	Online status summary for zone controllers
	Simultaneous user operation
	Viewer, Maintainer and Admin user assigned levels of security
Operations	Schedule of emergency lighting tests in calendar dates
	Function and duration tests to user's specified duration period
	On-demand immediate testing
	Device blink identify
	Full history of results log of all tests and to be recalled
	Print to PDF or export to spreadsheet of device status from test results
	Multiple filter capability by location or date or device status to select devices of interest
Security	Username and password security login
	HTTPS encrypted messaging
	Floorplan graphics diagnostics as well as device tree view
	Intuitive pan & zoom operation and mouse over messages
	Password protected system backup files
Management	User creation, amend and deletion
	Secure Access Zones to assign access of each user to specific set of chosen zones (for example for specific tenants for their areas)
	All zones and buildings can be renamed by the user with admin rights
	Date and time adjustments
	System backup and restore

2.8 Network Connection

An overview of a typical network connection is shown below.



2.9 Compatible product and versions

Device type	Part number	Version or build	Comments
End Device Nodes	DALI Emergency Lights only	Meets standard set by the DALI Alliance	Single short address type 1
Lighting Control Modules (LCM's)	EBR-LCM8-8DD EBR-LCM10-10DD EBR-LCM12-12DD EBR-LCM-DALIG64-B EBR-DIN-DALIG64 EBR-PLG-DALIG64	SB 3.0 SB 3.0 SB 3.0 SB 4.0 SB 4.0 SB 4.0	DALI versions only Ports 11 and 12 of EBR-LCM12-12DD is not compatible Blue and black connector type only Devices with no DALI feedback function are not compatible
Other controllers LMS, DIN	All other controllers LMS, DIN hardwired and lighting types may exist but will not communicate to ELS.		
Area Controller	EBR-DIN-AC-ET only	SB 2.05	Ethernet connection only. Other type not usable. Repeater on CAN Bus area controllers also NOT possible.

3. Quick Start and Operation Flow

This section is intended for operator users of the system wanting to get familiar on how to use it for the typical tasks expected to obtain the latest status of the emergency lighting devices onsite.

In order to obtain the latest device status, each emergency lighting must be tested and the results read and stored. This section covers as an example starting from the beginning from the login point to getting a set of results to incorporate into the site's log book.

3.1 Start the Web Browser

Ensure that the viewing device is connected to the appropriate network that offers permitted connection to the RAPID ELS server.

Run the pre-made desktop ICON linked to the web browser or

Open the user prefer web browser and enter the necessary URL address of the RAPID ELS server. e.g. <https://###.###.###.###:443>

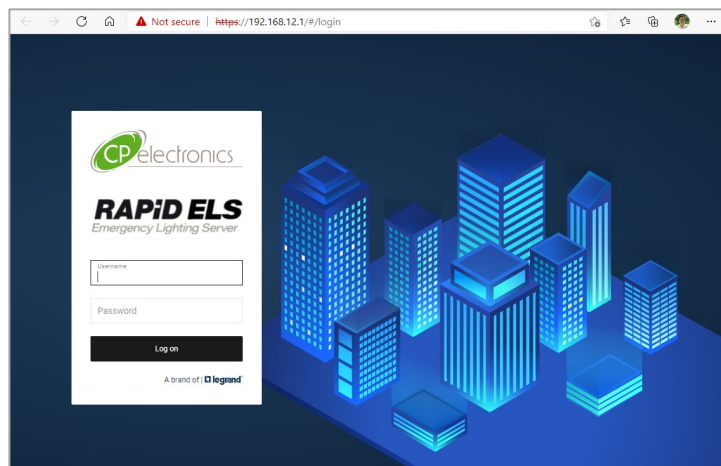
where ###.###.###.### is the IP address of the RAPID ELS server

3.2 Login Page

The web browser opens up the shown login page when correct connection is made to the RAPID ELS server.

Enter your given username and password to enter.

Your username and password combined determines your access rights of the system. This is pre-set by your system administrator or maintenance support supplier.



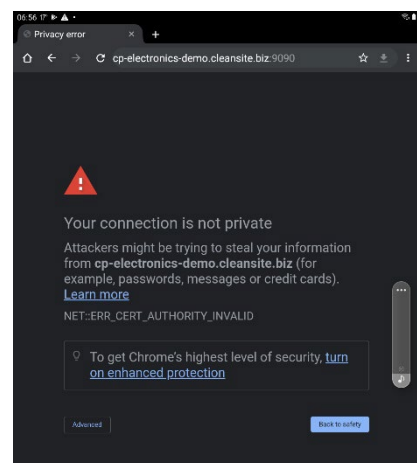
3.3 Browser Security Messages

Due to the deployment of secure encrypted message method that uses the https URL address method within the web browser, there will be warning messages on initial connection as there will not be any authenticated certificates accepted in the viewer's web browser application yet.

Ignore and click on **[Advanced]**

then click **Proceed to ##### (unsafe)**

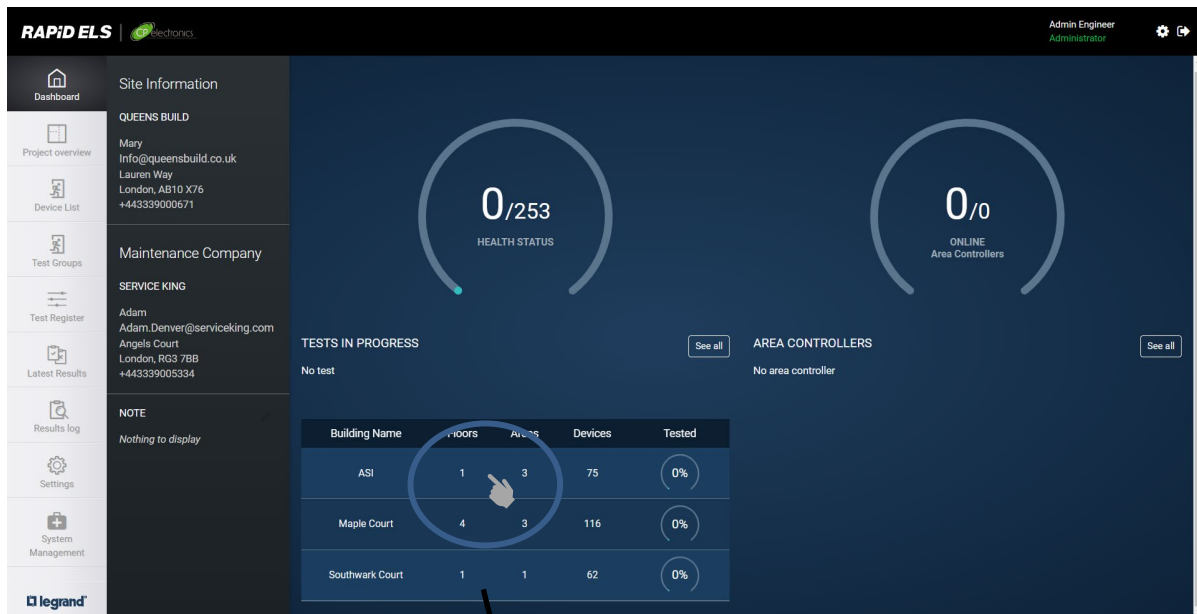
See Authenticated Certificates section to remove security warning messages.



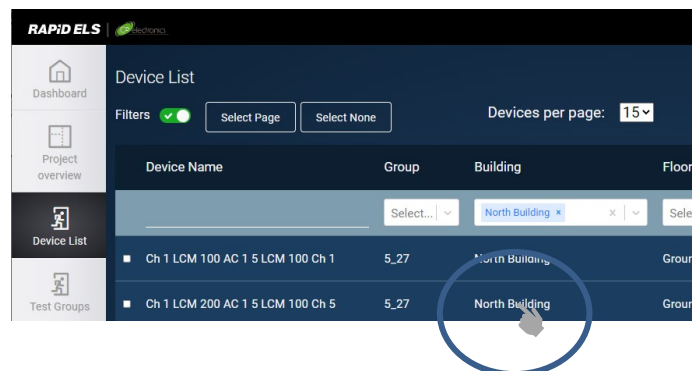
3.4 [Dashboard] Diagnostics Workflow

A typical work flow could be to start with looking at the overview presented on the [Dashboard]. is understood from the Dashboard, one may wish to step into each building by clicking on its tested result.

1. Dashboard View

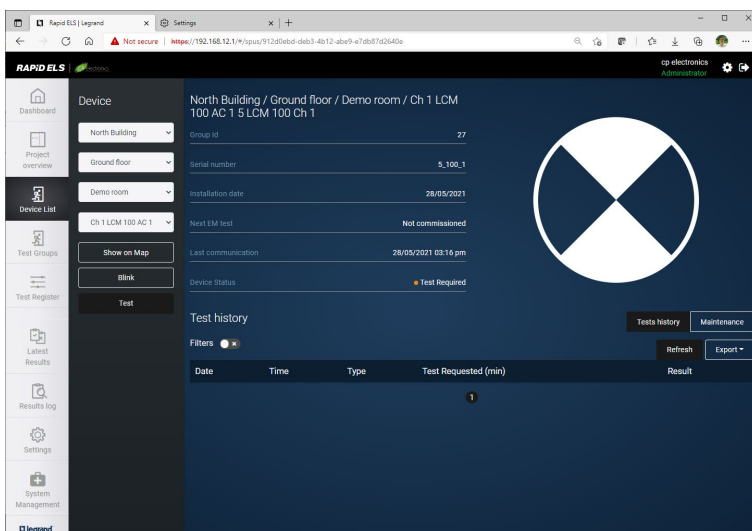


2. Pick the building requiring work.
This jumps to a list of devices of poor health

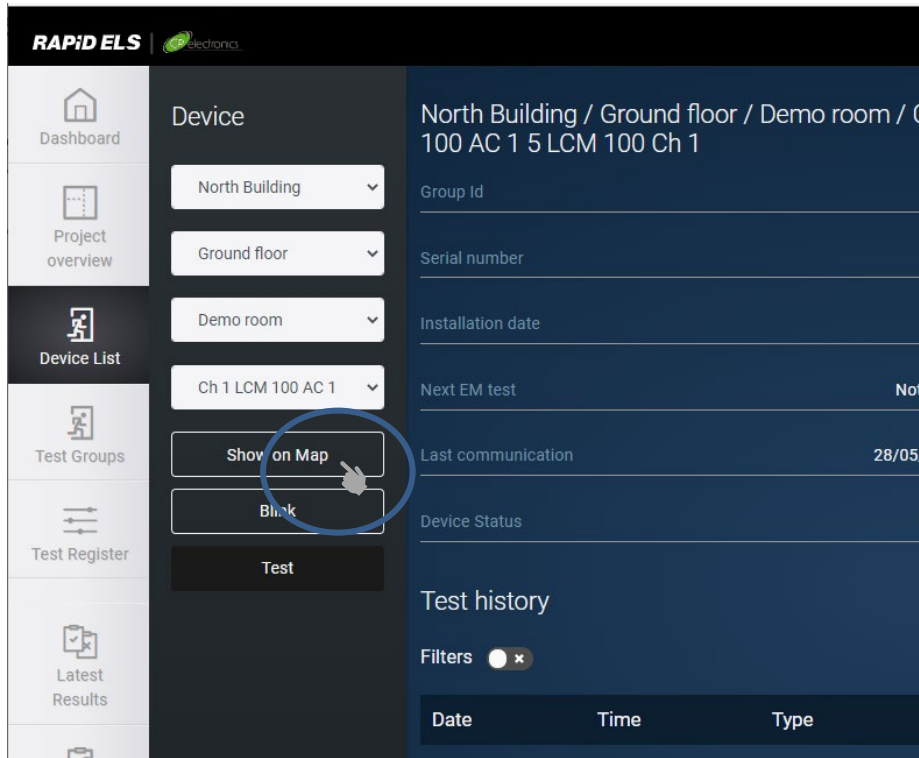


3. Choose the specific device for full details

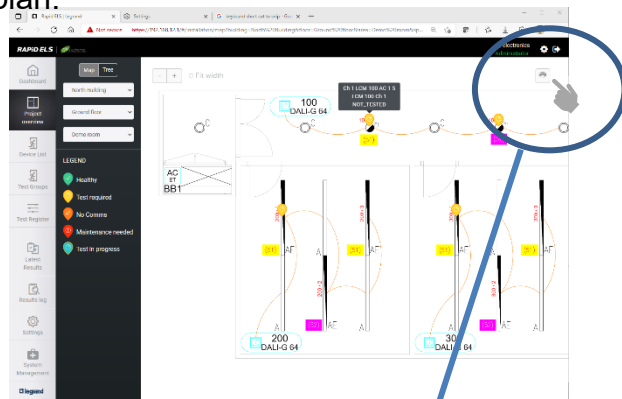
4. Full device health details is displayed



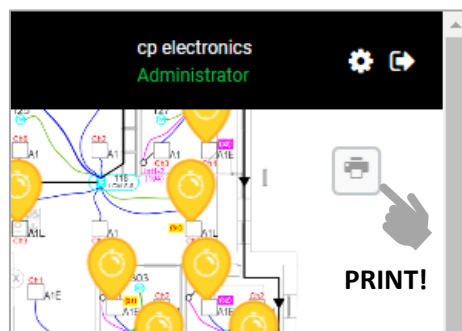
5. Locate device via [Show on Map]



6. Click [Show On Map] to locate the device on a floor plan.



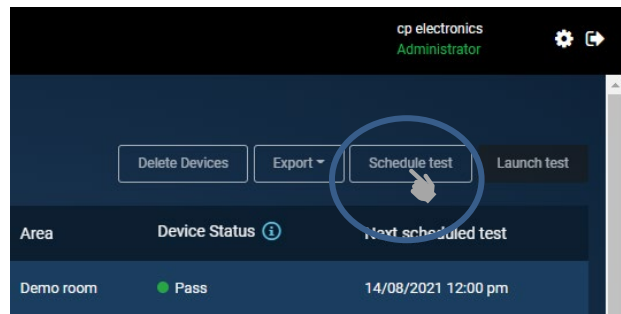
7. Click to [PRINT] floorplan as PDF file so can be later printed on paper



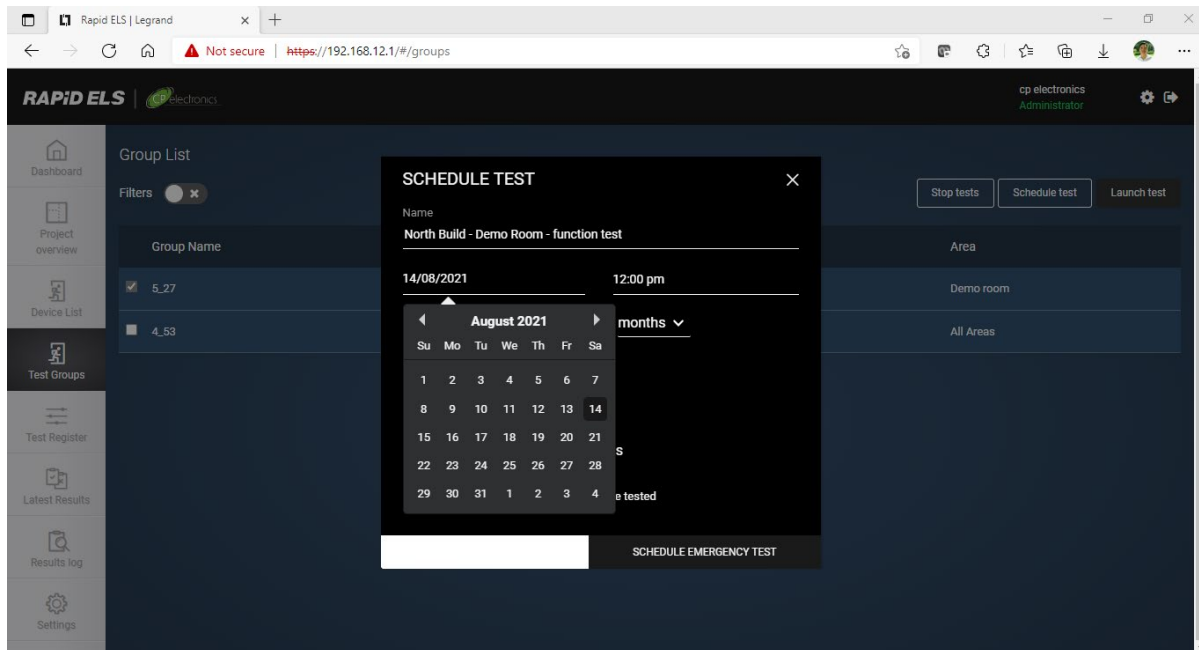
3.5 Scheduling of Tests

3.5.1 Schedule a Regular Group Test

It is important that regular testing is performed on the group rather than manually picking devices each time. The reason is that these groups would have been carefully created at the time of the commissioning of the RAPID lighting control system so as to allow some emergency light fittings to remain unaffected after any one test thus ensuring the space remains safe from complete darkness should power failure coincidentally occur immediately after testing.



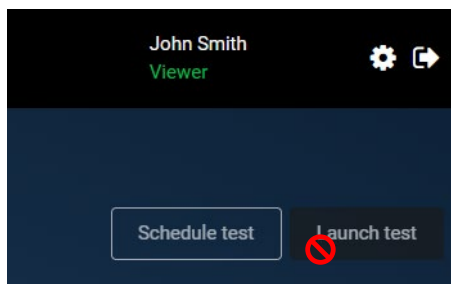
3.5.2 Schedule from a Calendar



3.5.3 Viewer Users Cannot launch Tests

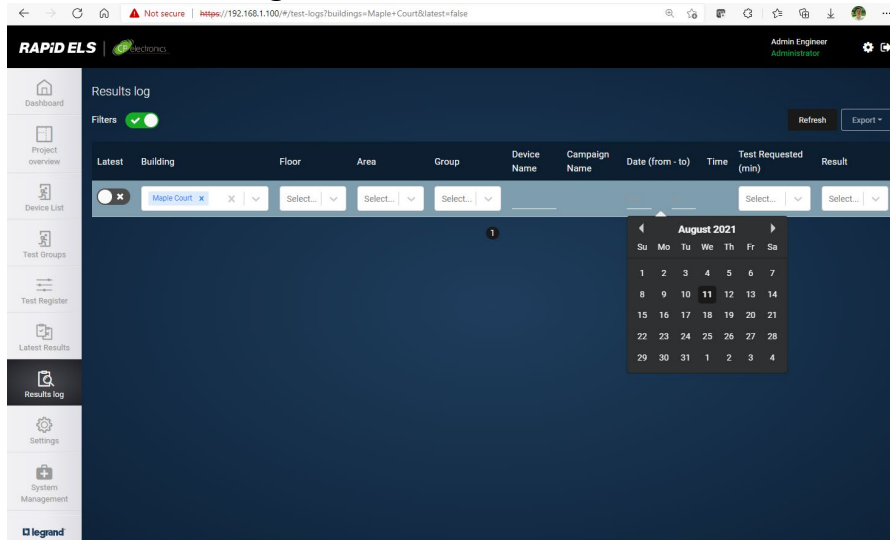
Note that only users with appropriate access rights are permitted to launch test operations.

Users with Viewer rights can view only and will find the “no-entry” symbol on the cursor when the cursor is placed on the launch button.



3.6 Gathering the Result for Log Book

3.6.1 Results Log



Under the Latest Results tab, the results from the latest test of all the devices tested are shown in a list format.

3.6.2 Apply Filter

For example, if the Southwark Building – Floor 1 area is grouped into 2 test groups with adjacent emergency luminaires tested alternate to each other, the results of both of these 2 test groups made in the current month can be selected and presented in the customer’s log book. To do this, one can select the filters below.

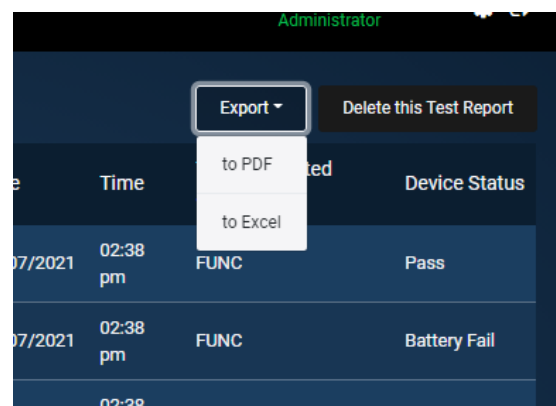
Example filter values

Area : Southwark Building – Floor 1

Date : 1st day current month to today’s date

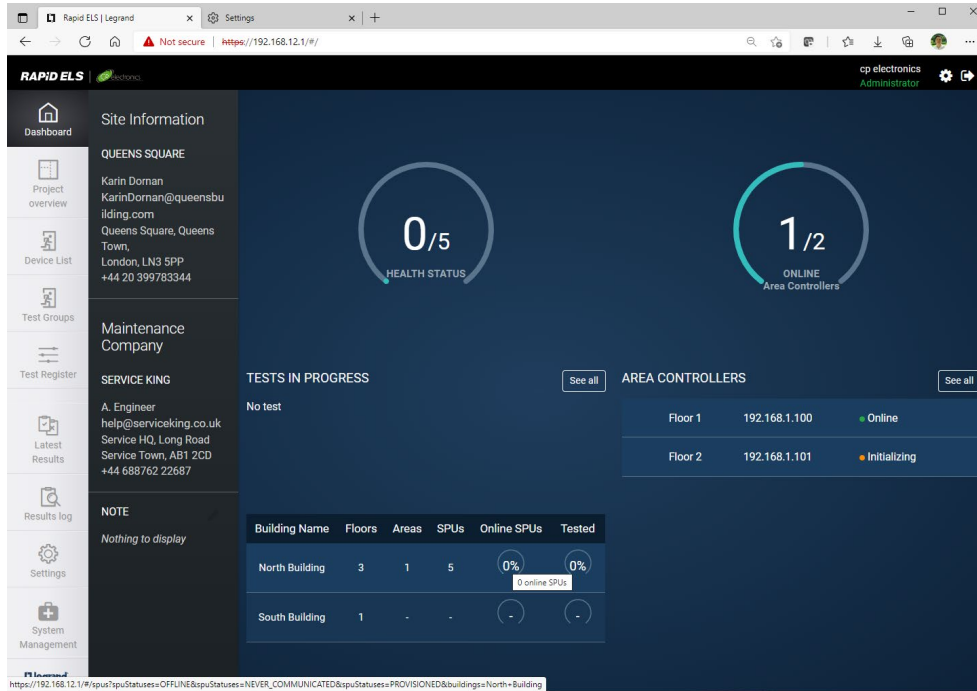
3.6.3 Export selected results

The selected results now shown on the screen via the filters can now be exported as a PDF or Excel spreadsheet ready to be incorporated into the client’s log book.



4. Server Functions Explained by Tab

4.1 Dashboard Overview



4.2 Project Overview

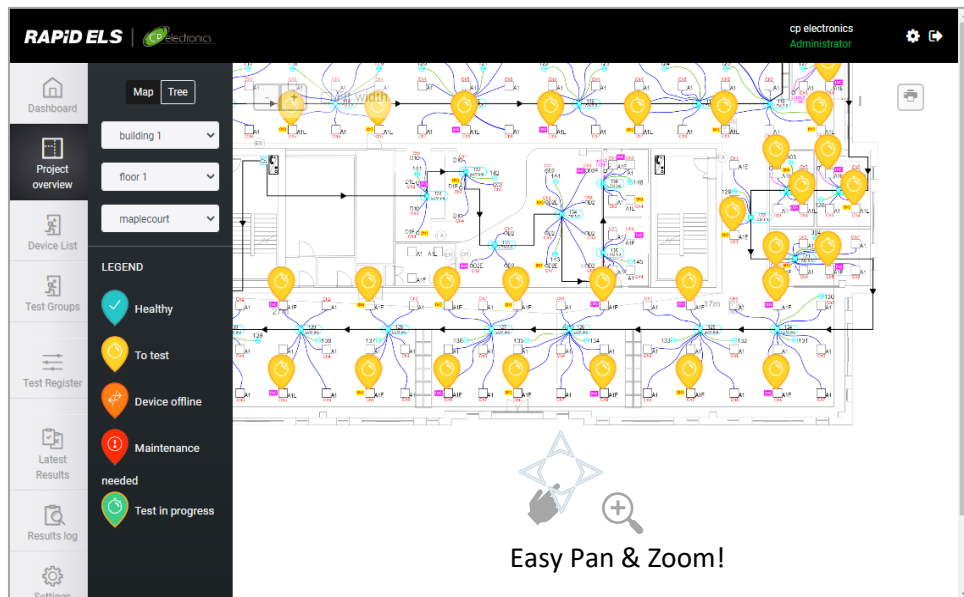
The Project Overview tab offers overview of the site giving the option to click on:

[Map] : for floorplan views

[Tree] : for tree structure view

Select the filters under and choose the preferred [Building], [Floor] and [Zone within floors] to see the exact area of interest.

Example floorplan view



4.2.1 Mouse Operations

Operate the actions below within the floorplan space to affect the floorplan graphics.

Pan : Left mouse click hold and drag to desired direction

Zoom + /- : mouse roller

4.2.2 Zoom within Web Browser

Depending on the specific web browser used, there is also an overall zoom function within the user's web browser. This can zoom in not just the floorplan space but the whole window including the menu tabs etc.

Typically,

Zoom + /- : [CTRL] + mouse roller

4.2.3 Device Status on Floorplan

Healthy : Devices are marked as Healthy if a recent test within the current month shows no faults.

To Test : Devices yet to be tested

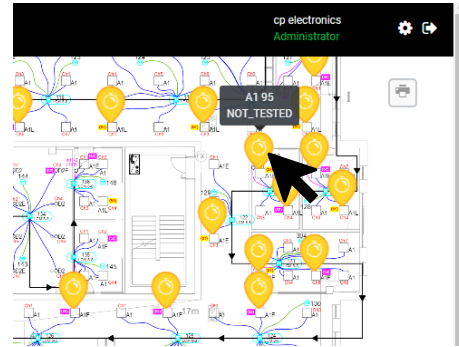
Device offline : Devices reported as offline due to communication breaks

Maintenance needed : A fault was recorded in the last test

Test in progress : Currently in progress of a test operation

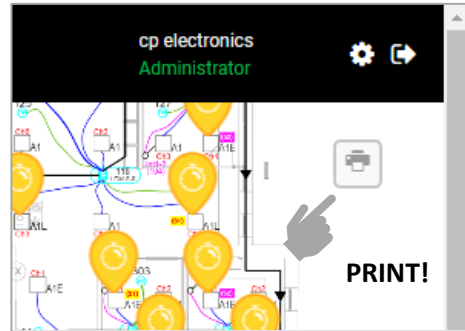
4.2.4 Cursor Tip status

By placing the cursor on top of any device, its identification and status will be displayed.

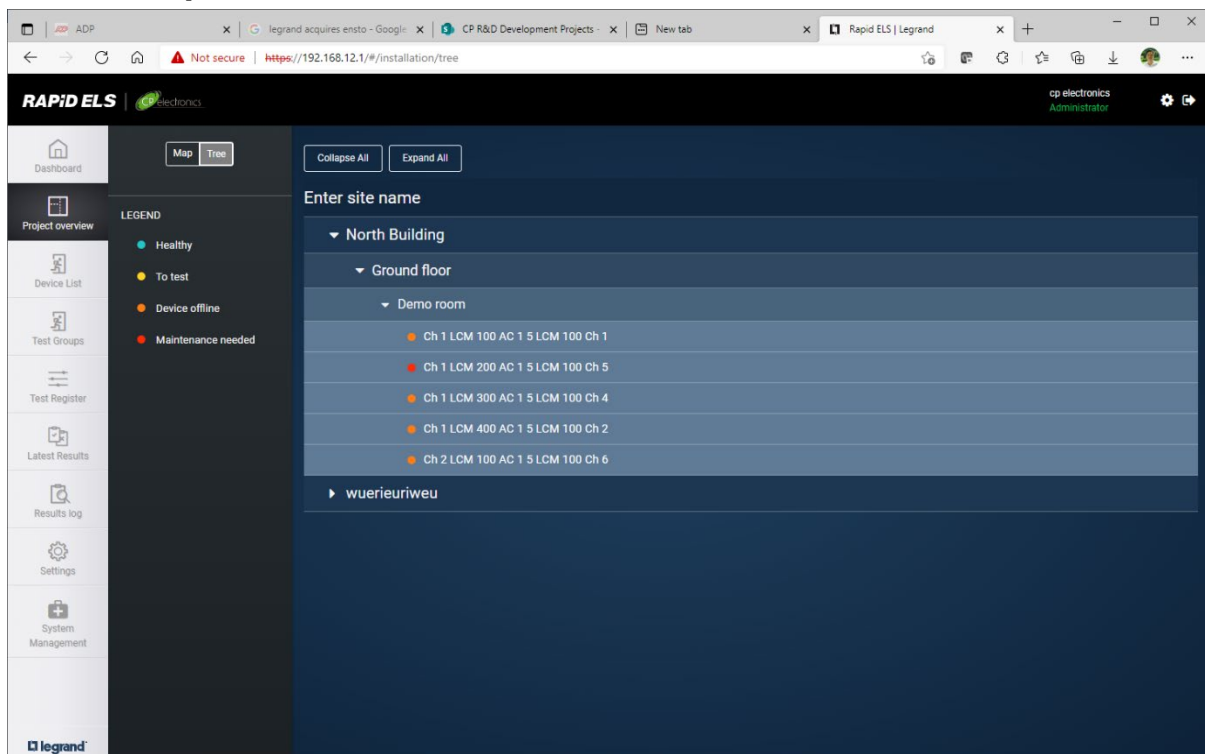


4.2.5 Printing Floorplans

On each floorplan, a print button on the top right of the floorplan offers the print function to PDF that is saved in the download folder designated by your browser application.



4.3 Example Tree View



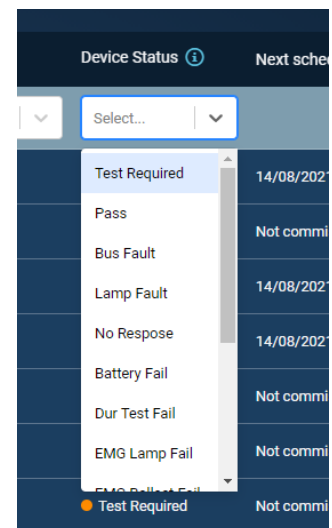
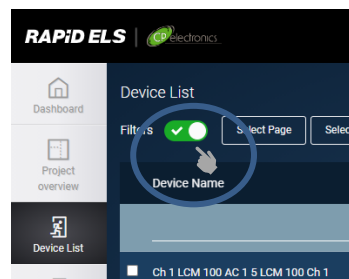
5. Device List

Device Name	Group	Building	Floor	Area	Device Status	Next scheduled test
Ch 1 LCM 100 AC 1 5 LCM 100 Ch 1	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 1 LCM 200 AC 1 5 LCM 100 Ch 5	5_27	North Building	Ground floor	Demo room	Battery Fail	Not commissioned
Ch 1 LCM 300 AC 1 5 LCM 100 Ch 4	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 1 LCM 400 AC 1 5 LCM 100 Ch 2	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 2 LCM 100 AC 1 5 LCM 100 Ch 6	5_27	North Building	Ground floor	Demo room	EMG Lamp Fail	Not commissioned
AC 1 4 LCM 420 Ch 21	4_53	wuerfeuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 22	4_53	wuerfeuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 23	4_53	wuerfeuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 24	4_53	wuerfeuriweu	floor 30	All Areas	Test Required	Not commissioned

The Device List shows all the devices created within the project. Various details about the devices including their health status can be viewed all at once.

5.1 Filtering to view devices of interest

Click the Filter enable slide button to reveal filter drop menu for each column. From these filters, choose the preferred items of interest to find all the devices to work on.



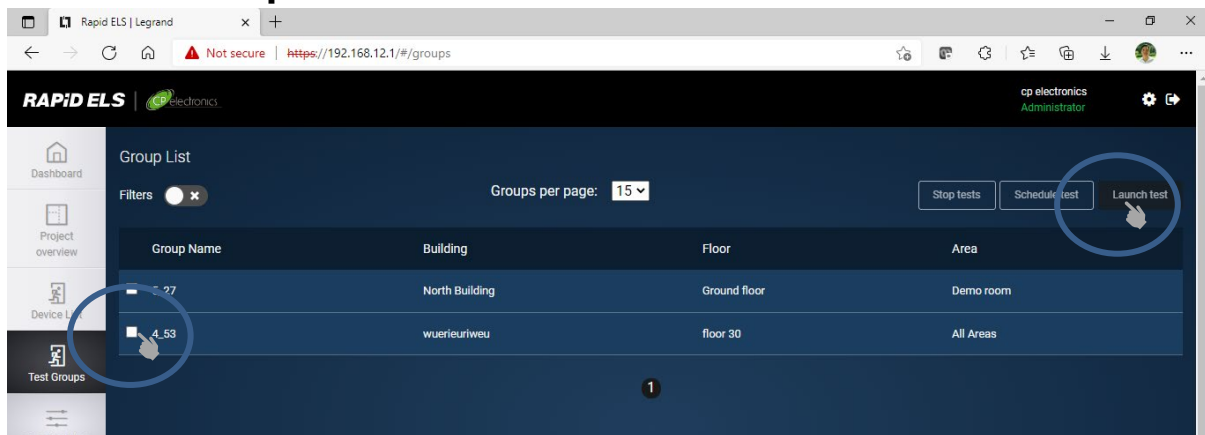
5.2 Specific Device Testing

The ticked emergency lighting devices can be scheduled for testing by then clicking on the [Schedule test] button.

The screenshot shows the Rapid ELS web interface. The browser address bar displays 'https://192.168.12.1/#/spus'. The page title is 'RAPID ELS | CP electronics'. The user is logged in as 'ep electronics Administrator'. The main content area is titled 'Device List' and contains a table of devices. The table has columns for Device Name, Group, Building, Floor, Area, Device Status, and Next scheduled test. There are 10 rows of data. A 'Launch test' button is highlighted in the top right corner of the table area. The left sidebar contains navigation options: Dashboard, Project overview, Device List (selected), Test Groups, Test Register, Latest Results, Results log, and Settings.

Device Name	Group	Building	Floor	Area	Device Status	Next scheduled test
Ch 1 LCM 100 AC 1 5 LCM 100 Ch 1	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 1 LCM 200 AC 1 5 LCM 100 Ch 5	5_27	North Building	Ground floor	Demo room	Battery Fail	Not commissioned
Ch 1 LCM 300 AC 1 5 LCM 100 Ch 4	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 1 LCM 400 AC 1 5 LCM 100 Ch 2	5_27	North Building	Ground floor	Demo room	Pass	14/08/2021 12:00 pm
Ch 2 LCM 100 AC 1 5 LCM 100 Ch 6	5_27	North Building	Ground floor	Demo room	EMG Lamp Fail	Not commissioned
AC 1 4 LCM 420 Ch 21	4_53	wuerieuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 22	4_53	wuerieuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 23	4_53	wuerieuriweu	floor 30	All Areas	Test Required	Not commissioned
AC 1 4 LCM 420 Ch 24	4_53	wuerieuriweu	floor 30	All Areas	Test Required	Not commissioned

6. Test Groups



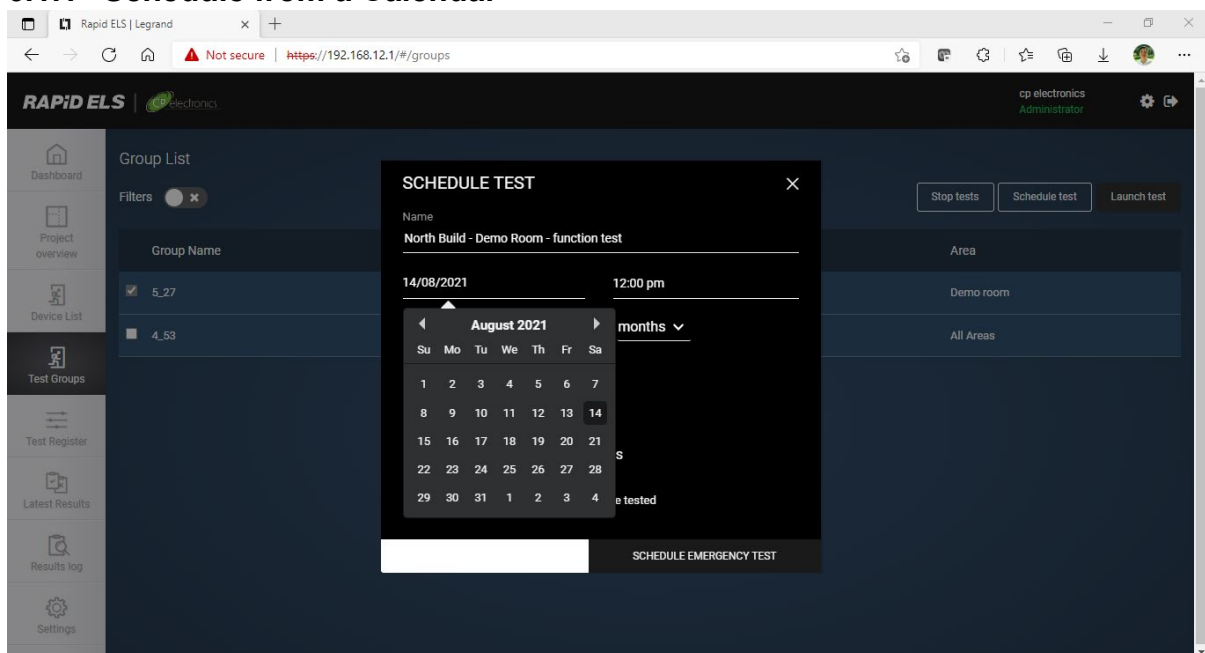
Click on the test group or groups and click on [Launch Test] button on the right and follow the menu to initiate the test.

6.1 Schedule a Regular Group Test

It is important that regular testing is performed on the group rather manually picking devices each time. The reason is that these groups would have been carefully created at the time of the commissioning of the RAPID lighting control system so as to allow some emergency light fittings to remain unaffected after any one test thus ensuring the space remains safe from complete darkness should power failure coincidentally occur immediately after testing.



6.1.1 Schedule from a Calendar



7. Test Register

The screenshot shows the 'Test Register' page in the RAPID ELS system. The page has a dark blue header with the 'RAPID ELS' logo and 'cp electronics Administrator' on the right. A left sidebar contains navigation icons for Dashboard, Project overview, Device List, Test Groups, Test Register (selected), Latest Results, Results log, and Settings. The main content area features a 'Test Register' title, filter buttons ('Filters', 'Select Page', 'Select None'), and an 'Export' button. Below this is a table with the following columns: Name, Group, Type, Status, Execution Date (from - to), Execution Time, and Recurrence. Each row includes a checkbox, an edit icon, and a delete icon.

Name	Group	Type	Status	Execution Date (from - to)	Execution Time	Recurrence
North Build - Demo Room - function test	5_27	FUNC	Scheduled	14/08/2021	12:00 pm	Every 1 months
test 46	5_27	FUNC	Closed	30/07/2021	11:22 am	
test 45	-	FUNC	Closed	30/07/2021	08:52 am	
deniz func test trial	5_27	FUNC	Aborted	20/07/2021	04:17 pm	
test 30	-	FUNC	Closed	07/07/2021	02:37 pm	
test 29	5_27	FUNC	Closed	07/07/2021	02:17 pm	
test 28	5_27	FUNC	Closed	06/07/2021	12:40 pm	
test 27	-	FUNC	Closed	06/07/2021	12:35 pm	
swff	-	DUR 180 min	Closed	02/07/2021	12:00 pm	
abort test	5_27	DUR 5 min	Closed	25/06/2021	09:32 am	
iiiiiiii	-	FUNC	Closed	24/06/2021	02:56 pm	
jjjjjj	-	FUNC	Closed	24/06/2021	02:55 pm	

The Test Register records all the scheduled test created so one can see all the repeating functional tests for every month and all the duration test that are required on a yearly basis for example.

8. Latest Results

Building	Floor	Area	Group	Device Name	Date	Time	Test Requested (min)	Device Status
building 1	floor 1	maplecourt	1_51	A1 46				Test Required
building 1	floor 1	sourthwark	1_51	A1 47	23/04/2021	11:14 am	180	Area Controller Fail
building 1	floor 1	maplecourt	1_51	A1 48				Test Required
building 1	floor 1	maplecourt	1_51	A1 49				Test Required
building 1	floor 1	maplecourt	1_51	A1 52				Test Required
building 1	floor 1	maplecourt	1_51	A1 53				Test Required
building 1	floor 1	maplecourt	1_51	A1 54				Test Required
building 1	floor 1	maplecourt	1_51	A1 55				Test Required
building 1	floor 1	maplecourt	1_51	A1 61				Test Required

Under the Latest Results tab, the results from the latest test of all the devices tested are shown in a list format.

8.1 Apply Filter

You can apply the filter button to enable a filter method to view the chosen elements of interest.

Device Name	Campaign Name	Date (from - to)	Time	Test Requested (min)	Result

9. Results Log

All the test results reported historically are available for view here.

When a combination of 2 or more tests are required to complete the full test report for an area, this can be the easiest place to locate the appropriate test results.

For example, if the Southwark Building – Floor 1 area is grouped into 2 test groups with adjacent emergency luminaires tested alternate to each other, the results of both of these 2 test groups made in the current month can be selected and presented in the customer's log book. To do this, one can select the filters below.

9.1 Example filter values

Area : Southwark Building – Floor 1

Date : 1st day current month to

9.2 Export selected results

The selected results now shown on the screen via the filters can now be exported as a PDF or Excel spreadsheet ready to be incorporated into the client's log book.

The screenshot shows a user interface for test results. At the top right, it says 'Administrator'. Below that, there is a table with columns: 'Time', 'Device Status', and 'Device Status'. A dropdown menu is open over the 'Export' button, showing options 'to PDF' and 'to Excel'. A 'Delete this Test Report' button is also visible.

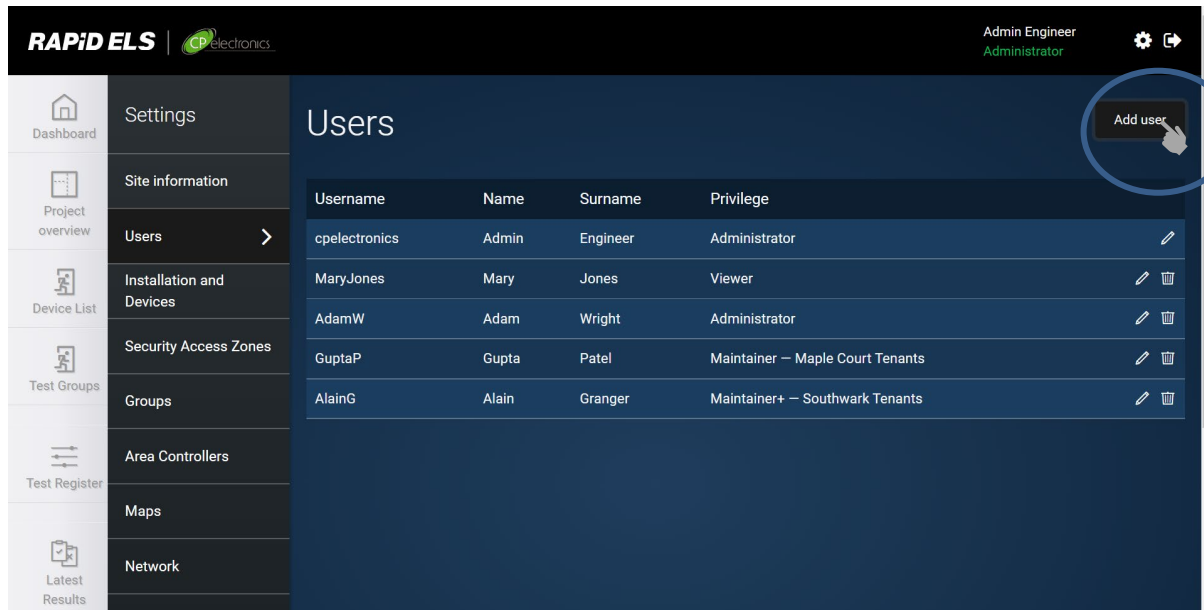
Time	Device Status	Device Status
07/2021 02:38 pm	FUNC	Pass
07/2021 02:38 pm	FUNC	Battery Fail
02:38		

10. Settings

Most of the items are available only for users provided with administrative rights.

For general operation use, these are not required and are recommended to be reserved for use by trained engineers only.

10.1 Creating Users



Users can be added by users possessing administration rights. Set name and password details for the new user. Their ability to make changes or otherwise are determined here by selecting one of the following:

- Viewer
 - Viewers cannot make any changes.
- Maintainer
 - Maintainers can set test schedules and make recordings of results. Also, simple text based amendments are possible.
- Administrator
 - Administrators have all access

CREATE NEW USER ✕

Role

Username

Name

Surname

Password

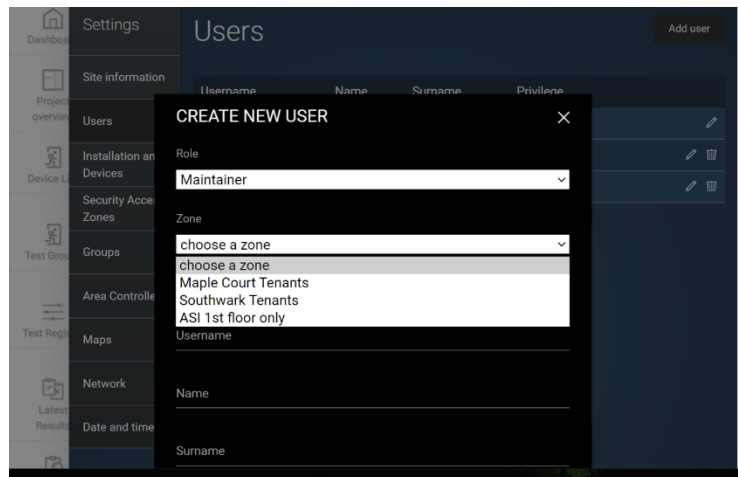
Password confirmation

For security reasons, please enter your password:
 Your password

CREATE

Each Viewer or Maintainer user can then later be allocated to have access to allotted tenant areas from various floors under the section of Security Access Zones available only to administrators.

Example screen when allocating specific limited zones to tenant users



Note that for security reasons, the Administrator password is required to be entered before a new user can be created.

All passwords should be 8 or more characters containing:

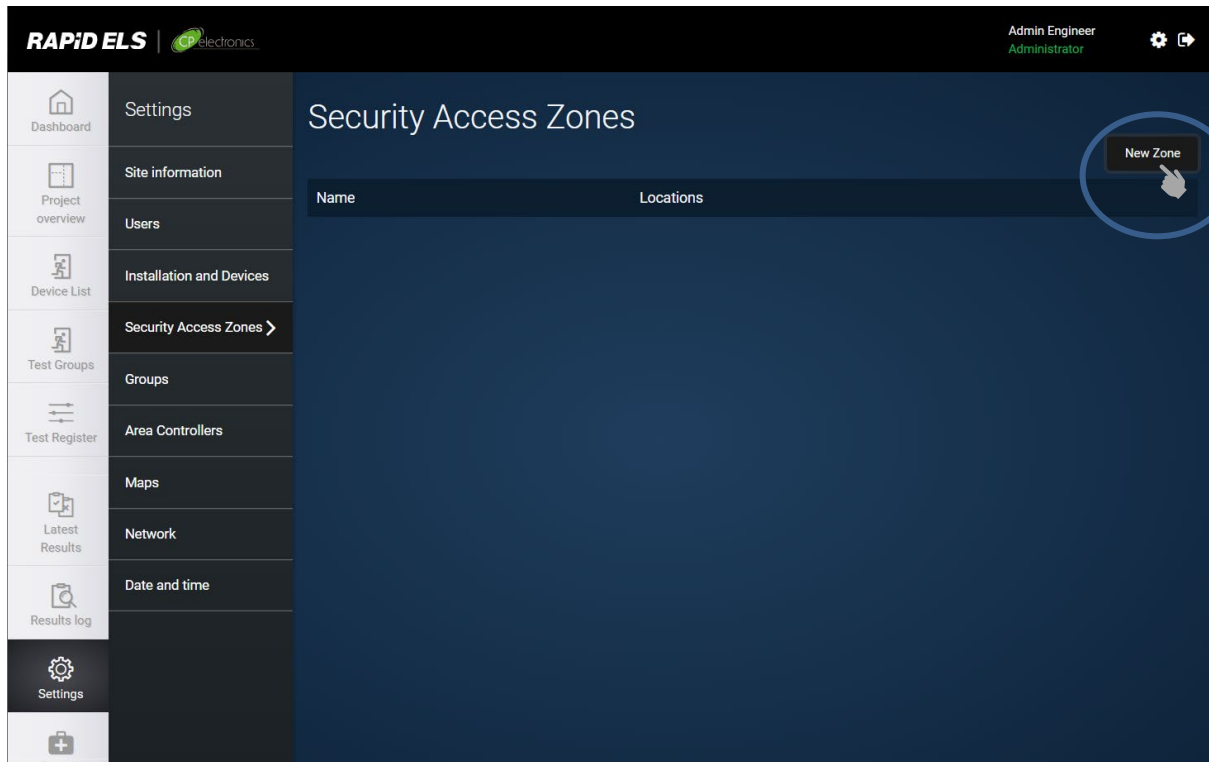
- letters,
- numbers and
- symbols ("!", "/", "_", "-", "&", "#", "~", "^", "%"). Other symbols such as “£” or “\$” are not allowed.

10.2 Re-create user to change the access level

The system locks the user access level at the creation stage and cannot be changed after. Should the access level be required to change, then delete the old user account and create another one.

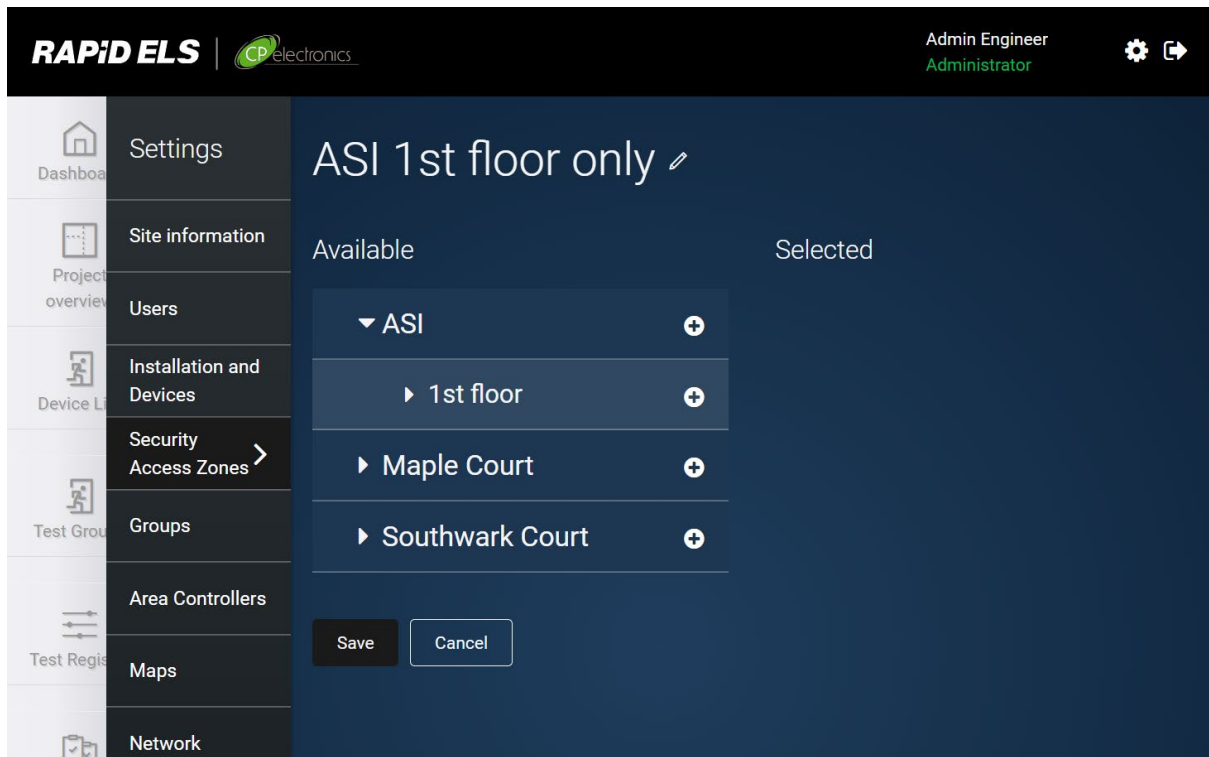
10.3 Security Access Zones

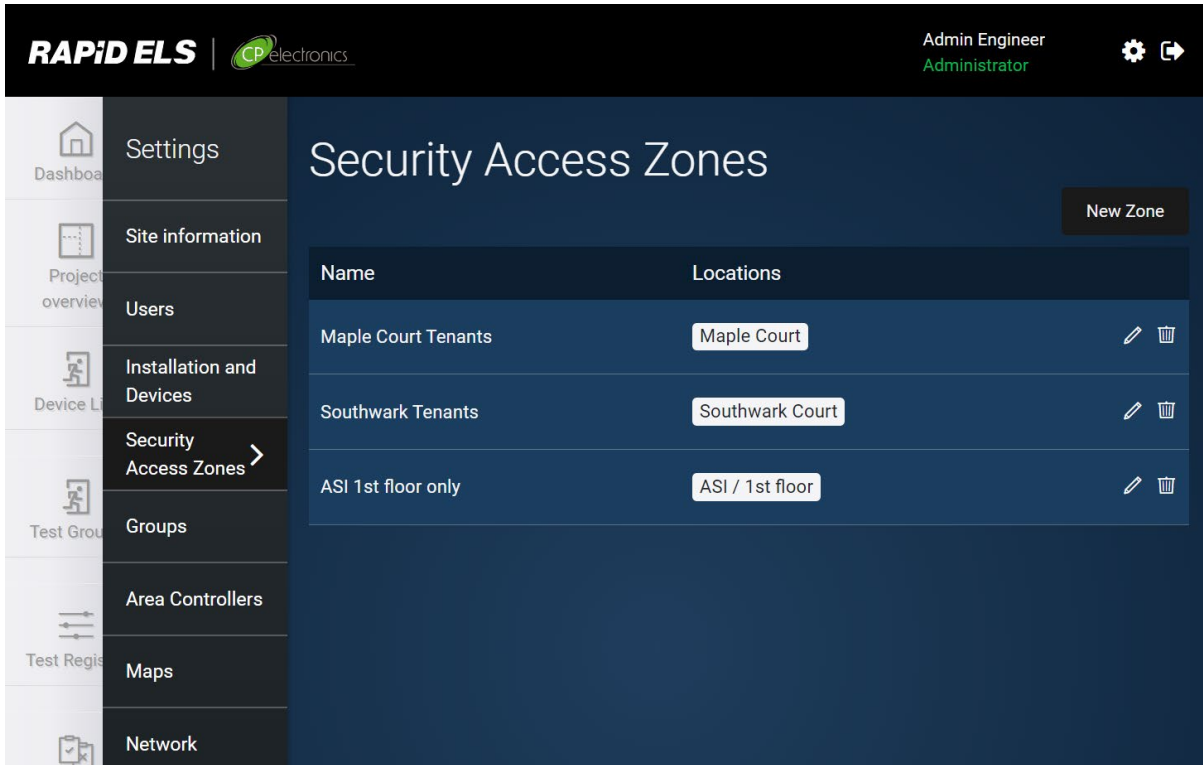
In this section, tenant access to only their areas can be created.



10.3.1 Define a New Zone

After clicking on [New Zone], click on the [v] arrow to open up the floors or zones within each building and select the new security zone. Example ASI building – 1st Floor as a new security zone.

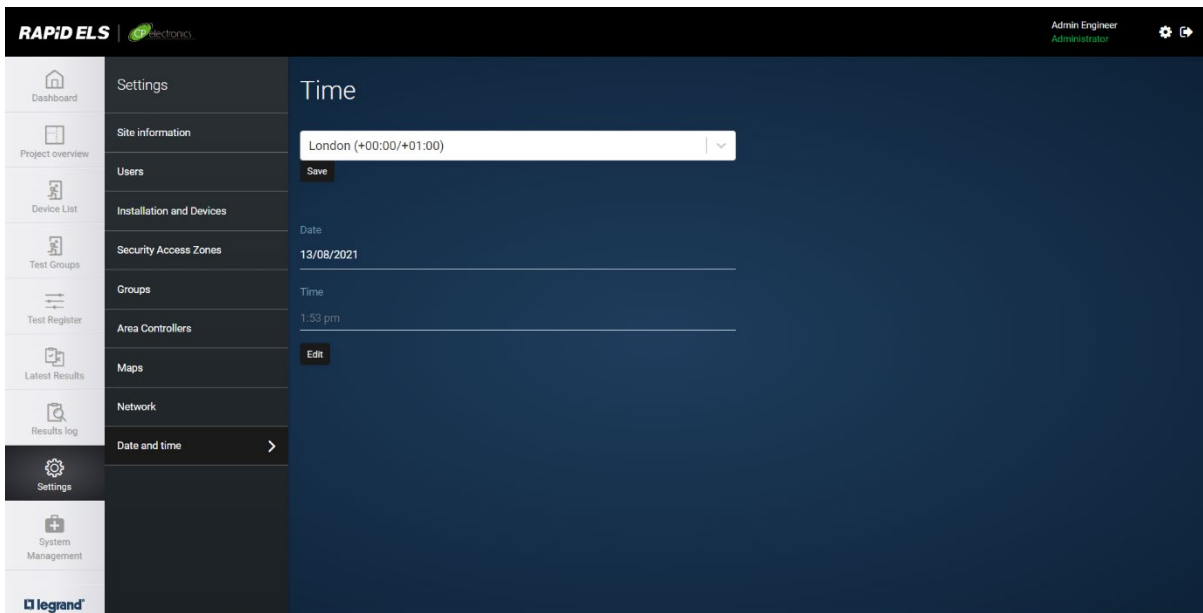




Allocate users to that security zone at the time of creating a new user for that zone.

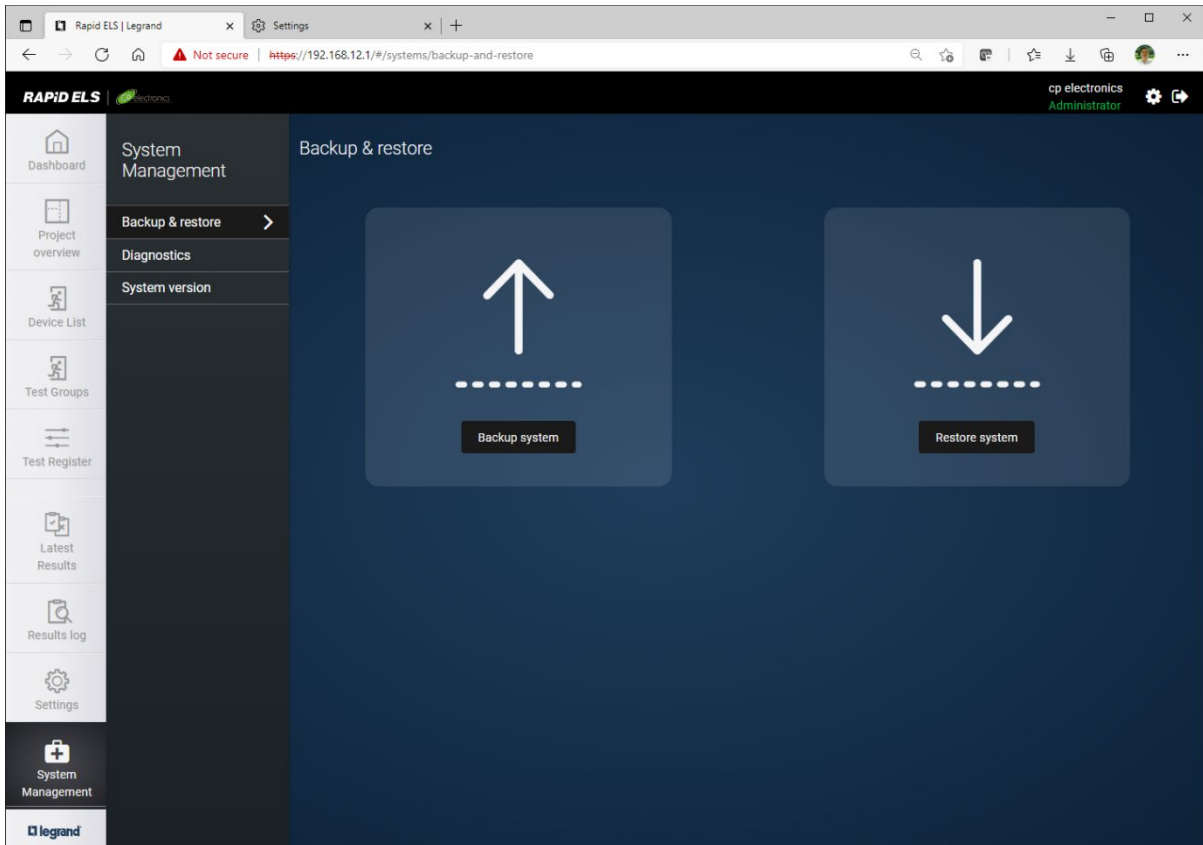
10.4 Date and Time Adjustments

Should the ELS server require any adjustment of the calendar clock, it can be adjusted by admin users using the [Date and time] menu below under the [Settings] tab.



11. System Management

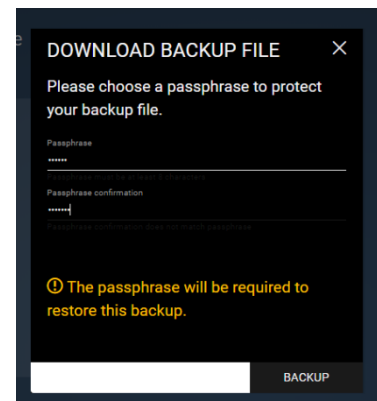
11.1 Backup and Restore



A useful assurance functionality to backup all the setups made for the project in case of inadvertent operation or failures of upgrade etc.

The whole project can perform a backup to a file located in the web browser's designated download folder. These are protected by a passphrase. **Ensure this is noted down securely as there is no other way to recover them.**

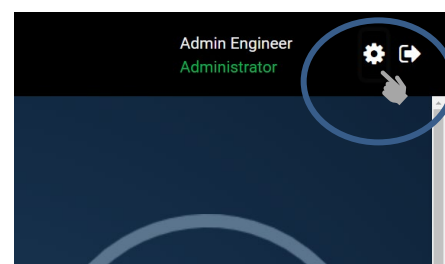
A restore process allows the user to roll back a particular version backed up at previous times.



11.2 Password Change

The password for logging into the system can be changed by clicking on the settings icon on the top right of the screen.

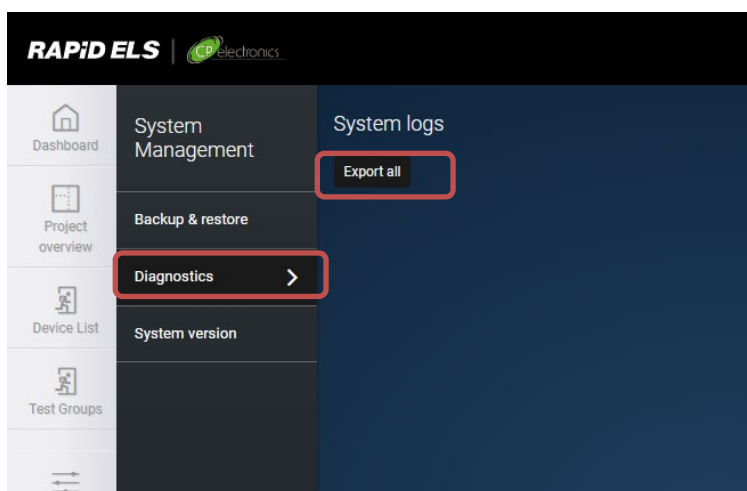
Follow the screen and note that for security reasons, the current password is required in order to change for a new one.



The password should be 8 or more characters containing:

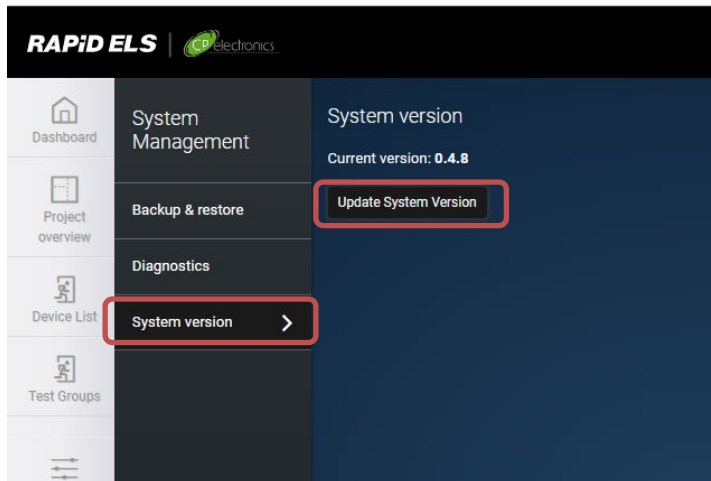
- letters,
- numbers and
- symbols ("!", "/", "_", "-", "&", "#", "~", "^", "%"). Other symbols such as “£” or “\$” are not allowed.

11.3 System Diagnostics



The diagnostics page offers an export of the system logs in case of a need to seek further support to resolve system issues not resolvable by normal means. This log when exported could be sent back to the developers and offer the status history of the system thus, potentially offer clues for them to resolve very complicated problems.

11.4 System Version Upgrade



When offered a newer version of the server software file, an update to the system with the latest features or bug fixes can be performed in the above shown menu.

Click on the [Choose file] option and it should allow the appropriate system file to be chosen from your viewer node machine.

Note that downgrade to older revision is NOT possible as the latest versions with the most improvements are recommended for good operation.

12. Network Environment

In many cases, the access to the ELS server is likely to be within a shared network thus some security measures are expected to be in place. Members in charge of the management of the IP network that connects to the RAPID and RAPID ELS lighting control system should ensure that the following protocols and ports are permitted in the network path of the relevant products.

12.1 Protocol and ports

Certain protocols and ports are required to be opened from security blockages within firewalls and network router settings connecting the RAPID and RAPID ELS system.

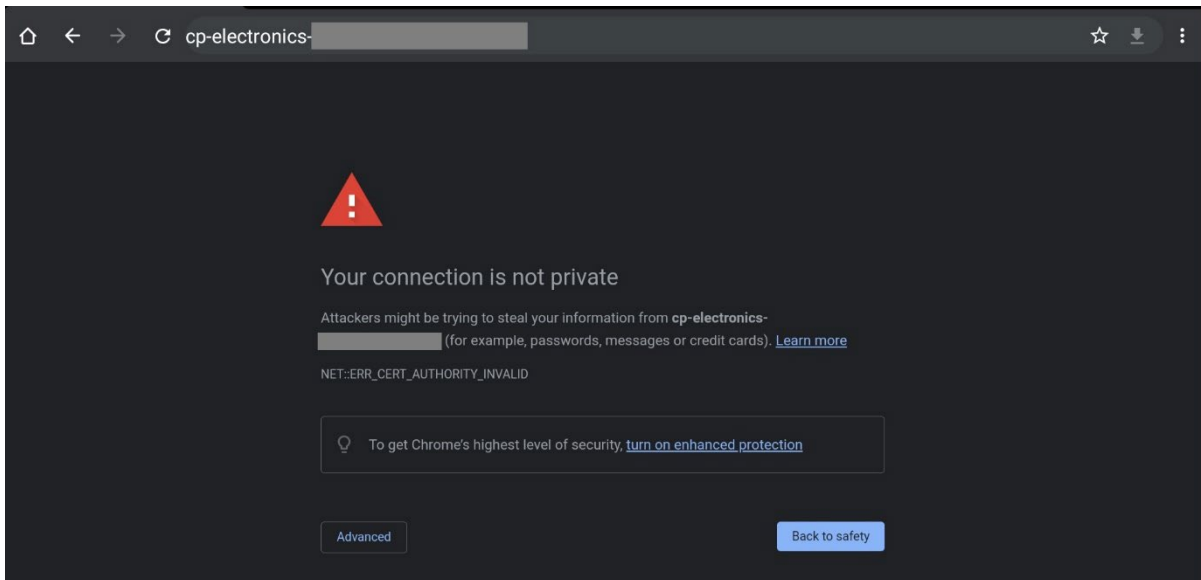
The RAPID ELS web server works on default https encrypted messaging on **port: 443**.

Security permissions are required to allow the ports listed below to pass through any firewalls between the lighting area controllers and the ELS server machine:

Port number	protocol	IP address	Hosts (as in item 4)
443	TCP	ELS server IP address	ELS server machine
22	SSH	ELS server IP address	ELS server machine
30304	UDP	Broadcast address	ELS machine, all area controllers
30307	TCP	IP address of each CP unit	ELS machine, all area controllers

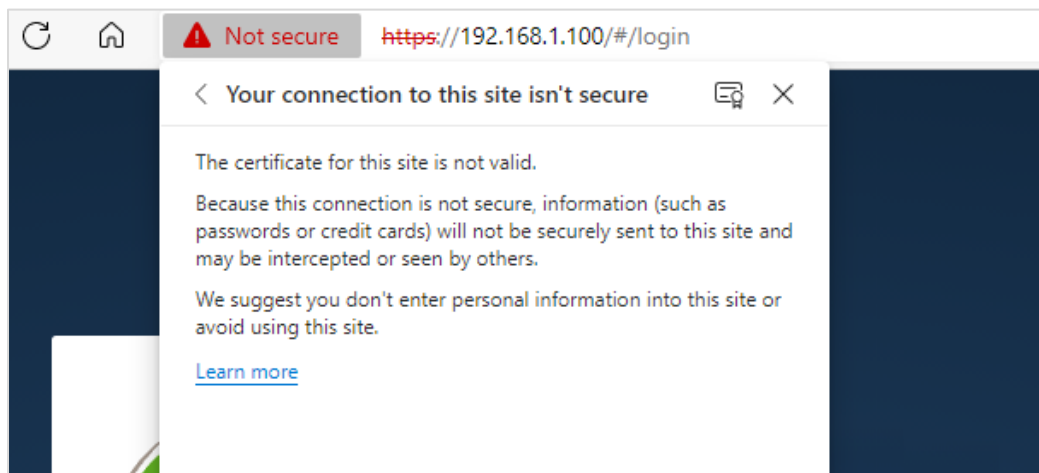
13. Authenticated Certificates

The Rapid ELS server is normally expected to be connected to a network of clients users in a network accessible by the users within the organisation and secure from outside members. As such in normal use circumstances the trust that this server is authentic should not ever be in doubt and therefore the need for an authenticated certificate for the server is generally not necessary. Since the procedure to check for such certificates is generic on every session of the use of the web browser, it is normal to expect it to flag up a warning this certificate is in error or missing for the RAPID ELS server. This is normal.



The warning can be ignored by clicking on **[Advanced]**, and then proceed with the access to the server.

The exclamation mark warning “Not Secure” will remain on the browser page however.



There is no adverse effect to continue to work with the appearance of this warning.

14. Remote access via the Internet

A commonly used method to achieve remote access from offsite is via a secure connection through the internet using the client's own dedicated secure Virtual Private Network (VPN) access. No different to any other internet connected devices, the setup and security measures to be taken resides with the client's IT department and client's must of course be totally satisfied with the measures adopted to alleviate the known risks involved

RAPID ELS deploys standard internet protocol communication methods which are familiar to most IT departments. It offers secure communication over HTTPS using TLS encryption widely accepted by many in the industry. This should help in the effort from the client's IT department to implement any remote access into this system via the internet connection the RAPID ELS server machine.

