RAPIX EMERGENCY

Version 5.8

SOFTWARE MANUAL

OZUNO™

RAPIX Emergency Manual

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Table of Contents

1 Introduction

Welcome to RAPIX Emergency, the best in class software application for monitoring emergency lighting luminaires.

RAPIX Emergency will allow you to:

- Perform one-click automatic commissioning and configuration of a DALI emergency system.
- Configure and run routine tests as required by the Australian Standard AS2293 for "*Emergency escape lighting and exit signs for buildings*".
- Log events and create full test and maintenance repair reports in PDF format.
- Receive email notification of important events.

Getting Started with RAPIX Emergency

The general process to get RAPIX Emergency to monitor the emergency DALI Devices on a site, involves:

1. Installing RAPIX Emergency on a designated computer.
   See topic Installing RAPIX Emergency 10 for more information.

2. Creating and configuring a Test Plan. See section Commissioning a Site 15 for more information.
   This step involves:
   a. Discovering DALI Lines and DALI Devices on DALI.
   b. Assigning DALI Devices to test groups.
   c. Creating Duration Test Schedules and Function Test Schedules, and assigning them to test groups.
   d. Setting up automatic email notifications.

3. Monitoring the site.
   See section Monitoring a Site 44 for more information.

Each of the four steps above will be explained within this manual.

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RAPIX EMERGENCY

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1.2 Glossary of Terms

AS2293

This is the Australian Standard for emergency lighting.

Configuration Mode

This is the mode in which RAPIX Emergency operates, where a Test Plan can be configured for a site.

DALI

DALI is an acronym that stands for Digital Addressable Lighting Interface, which is an open standard for network-based systems that can control the lighting in buildings.

DALI Device
A DALI Device as referenced in this document, is an emergency lighting device, like an exit sign, which is connected to the DALI network.

DALI Interface Device
A DALI Interface Device is a device that permits the communication between DALI Devices and software over a local area network via Ethernet.

DALI Line
A DALI Line consists of a pair of wires that allows the connection of multiple DALI Devices that can communicate to each other.

Device Presence Check
This is a function that RAPIX Emergency can perform, which checks whether all of the DALI Devices in a Test Plan are currently connected and communicating.

Duration Test Schedule
A Duration Test Schedule is a schedule that can be configured in a Test Plan, which performs a duration test on DALI Devices.

Discharge Test
This is the Australian name for a "duration test", as defined in AS2293.

Duration Test
This is a test that is performed on emergency lighting devices, which turns on the emergency lamp and discharges the battery for a predefined period of time (normally 90 minutes or 120 minutes). An emergency lighting device that is still illuminated after this predefined period of time is considered to be OK.

Function Test
This is a test that is performed on emergency lighting devices, which turns on the emergency lamp on for a few moments to ensure the correct operation of the lamp and circuit integrity. Note that this test does not perform a full discharge of the battery like a duration test.

Full Test Report
This is a test report generated by RAPIX Emergency once a duration test or function test has completed. This report contains the full results of the test, including the results for all of the DALI Devices that performed the test.

Diginet Archive
This is a compressed file that RAPIX Emergency Test Plans can be exported to, so that Test Plans can be backed up and moved between computers. The file extension for Diginet Archive files is *.dtz.

IP address
An IP address is a label, or address, assigned to devices that communicate using the IP protocol. A DALI Interface Device is one such device.

Maintenance Password
This is a password that RAPIX Emergency requires for authentication, while a Test Plan is being run, if the user wants to perform an action that requires communication with DALI, (such as scheduling a new duration test or running a function test).

Repair Report
This is a test report generated by RAPIX Emergency once a duration test or function test has completed. This report contains details about all of the DALI Devices that failed the test, and

allows the building manager to record maintenance performed on those faulty devices.

Run Mode
This is the mode in which RAPIX Emergency operates, when a Test Plan is being run, such that the Duration Test Schedules and Function Test Schedules defined within it, are being run.

Scheduled Test
This is a test that exists within a Test Plan which has been scheduled to run at a future date and time, and tests whether an emergency DALI Device if functioning correctly. A scheduled test in RAPIX Emergency can either be a duration test or a function test.

Short Address (SA)
A short address is an address that each DALI Device is assigned, so that it can be identified during communication on DALI.

Supervisor Password
This is a password that RAPIX Emergency requires for authentication, if the user wants interrupt the monitoring of a site via a Test Plan.

Test Group
This is a logical collection of DALI Devices on a DALI Line. There can be up to eight of these per DALI Line. Duration Test Schedules and Function Test Schedules are associated with test groups, so that the DALI Devices in a test group are tested together.

Test Plan
A Test Plan is a RAPIX Emergency file that contains information about the site being tested. It contains information about the DALI Devices and how they are to be tested.

Test Report
A test report is a report, that RAPIX Emergency generates in PDF format, which contains information about the results of a duration test or function test. A test report is generated when a test completes.

2 Software Installation

2.1 System Requirements

The minimum system requirements for running RAPIX Emergency are as follows:

Processor: Intel Core i5 or higher.
Memory: 4 GB.
Hard Disk: 1 GB free.
Ports: 1 x Ethernet port.
Operating System: Microsoft Windows 7 Professional.
PDF Reader: Adobe Reader or an equivalent PDF viewer is required to view test reports.

Automatic Start Up

A feature of RAPIX Emergency is that it is designed to start up automatically when the PC is started and a user is logged in, ensuring that emergency luminaires continue to be monitored. For this functionality to occur, other system requirements may need to be considered. A UPS (Uninterruptible Power Supply) can be used, and this is recommended for larger installations.

If no UPS is used, it is still possible to have the PC running RAPIX Emergency start up after a power failure.

Auto Start Up If a UPS Is Used

If the power supply of the PC running RAPIX Emergency is connected to a UPS, ensure that the UPS is configured to automatically:

- Shut down the PC running RAPIX Emergency when the UPS power supply runs low.
- Start up the PC running RAPIX Emergency when mains power is restored.

Note: *Information on how to set up a UPS is outside the scope of this document. For assistance, you may require the assistance of IT support personnel.*

Auto Start Up If No UPS Is Used

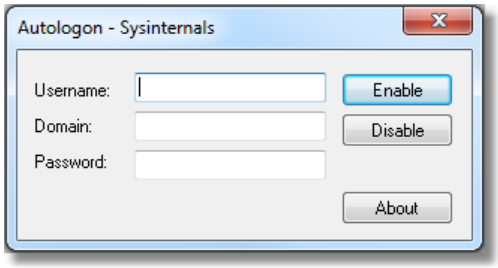
If no UPS is used, the PC will need to be configured to automatically start up when mains power is applied. This can be set up in the BIOS settings of the PC.

Note: *BIOS settings differ between PC manufacturers. You may require the PC's manual or the assistance of IT support personnel.*

Automatic Logon

Ensure that a user is automatically logged on to the PC when the PC is started, so that RAPIX Emergency is run.

This can be done by using the **Autologon** utility, which is part of the **SysInternals Suite** provided by Microsoft. It can be downloaded from the following link:
http://technet.microsoft.com/en-au/sysinternals/bb963905



The Autologon utility

To automatically log a user onto the PC when it starts up, run the **Autologon** utility, and enter the username and password of the user to be automatically logged on, and click the **Enable** button.

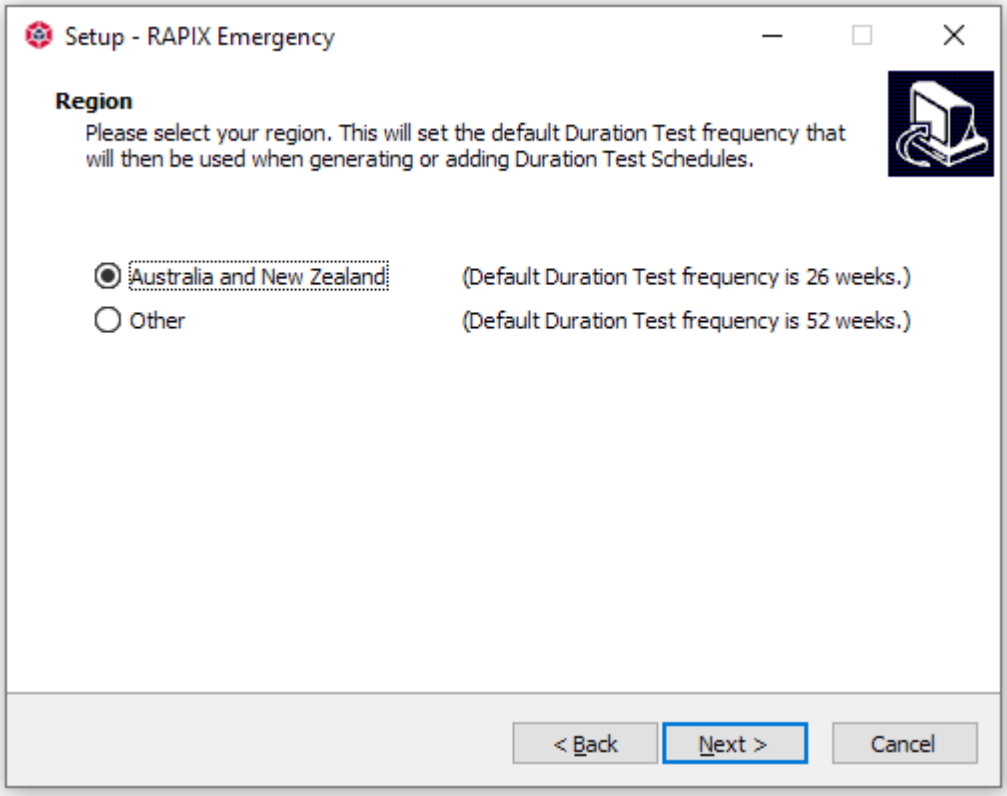
2.2 Installing RAPIX Emergency

To install RAPIX Emergency, run the installer executable. This will prepare the software so it is ready to use. Windows may ask for permission to run the RAPIX Emergency Setup, to which you answer **Yes**.

The installer is a wizard that will guide you through the steps to install RAPIX Emergency.

1. Click **Next** on the *Welcome to the RAPIX Emergency Setup Wizard* page.

2. Read the End-user License Agreement and agree to it by clicking the **I accept the agreement** radio button, then click **Next** a few times until you see the *Region* page.

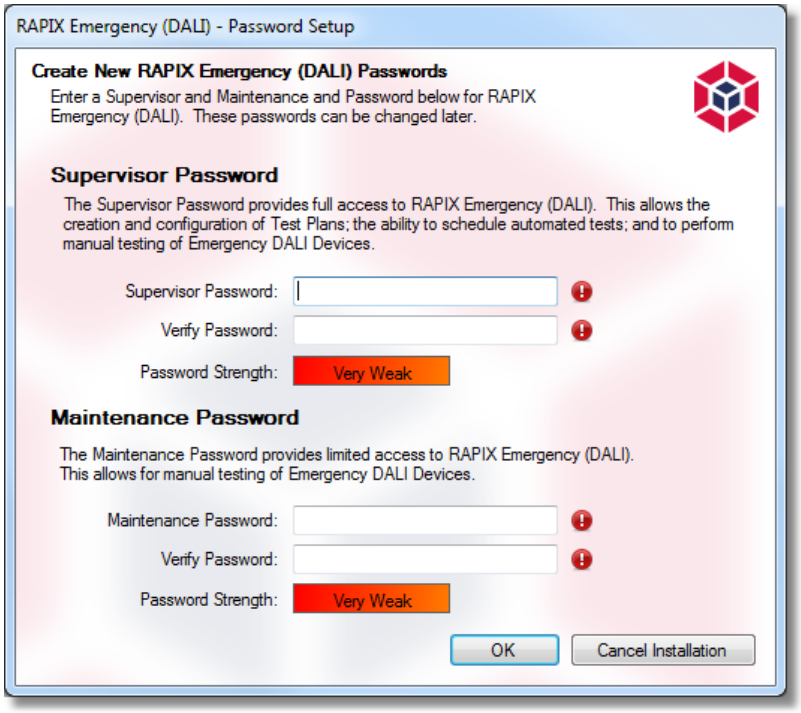


Select the first option if you are in Australia or in New Zealand, otherwise select **Other**. The selection will affect the availability of test frequencies and their default values that can be selected when configuring the Duration Test and Function Test schedules. The differences are explained below.

- **Australia and New Zealand**:
  The available Duration Test frequencies are: 13 weeks (3 months) and 26 weeks (6 months).
  The default Duration Test frequency is 26 weeks (6 months).
  The available Function Test frequencies are: 1 week, 2 weeks, 4 weeks, 13 weeks (3 months) and 26 weeks (6 months).

- **Other**:
  The available Duration Test frequencies are: 13 weeks (3 months), 26 weeks (6 months) and 52 weeks (12 months).
  The default Duration Test frequency is 52 weeks (12 months).
  The available Function Test frequencies are: 1 week, 2 weeks and 4 weeks.

3. Next, a dialogue will appear asking for passwords.



The **Supervisor Password** allows full access to RAPIX Emergency, which allows for the creation and configuration of emergency Test Plans, as well as the ability to schedule automated tests of emergency luminaires. Installers and building managers would use this password.

The **Maintenance Password** allows limited access to RAPIX Emergency, which allows only for manual testing of emergency luminaires.

The passwords entered here can be changed from within RAPIX Emergency later.

Enter a new **Supervisor Password** and **Maintenance Password** then click **OK**.

Important: *Write these passwords down and keep them in a safe and secure place.*

4. The installer will continue the installation, and then when complete, will display a page which provides the option to run RAPIX Emergency immediately.

   Click **Finish** to complete the installation.

2.3 Running RAPIX Emergency

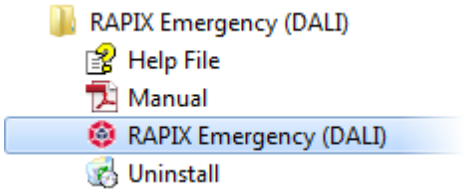
RAPIX Emergency is designed to automatically start up when the PC is started, so that in the case of a power cut, when the power is restored, the system can continue to monitor emergency luminaires.

If RAPIX Emergency exits abnormally, it will automatically get restarted.

If, for any reason, RAPIX Emergency is not running, it can be started by following the steps below:

1. Open the **Start** menu.
2. Click **All Programs**.
3. Open **Diginet** folder, then the **RAPIX Emergency (DALI)** folder.

4. Click **RAPIX Emergency (DALI)**.



The Welcome Screen

When RAPIX Emergency first runs, the welcome screen will be displayed.

The welcome screen

Buttons on the Welcome Screen

The welcome screen provides buttons to create a new Test Plan, to open an existing Test Plan, or to run a previously-configured Test Plan.

Note: *Clicking most of the buttons below will require a supervisor password before performing the function. See topic* *Password Management* 42 *for more information on passwords.*

"Create a new Test Plan" button
Click this button to create a new Test Plan and start configuring it. See topic User Interface (Configuration Mode) 15 for more information on the Configuration Mode user interface.

"Auto-configure Test Plan" button
Click this button to:

1. Create a new Test Plan; then
2. Automatically discover any DALI Interface Devices on the local area network; then
3. Automatically discover any DALI Devices connected to them; then
4. Set up a default collection of test schedules so all emergency DALI Devices are tested according to AS2293[7] .

"Open an existing Test Plan" button
Click this button to open an existing Test Plan. This button will display a dialogue allowing you to select a pre-existing Test Plan to open.

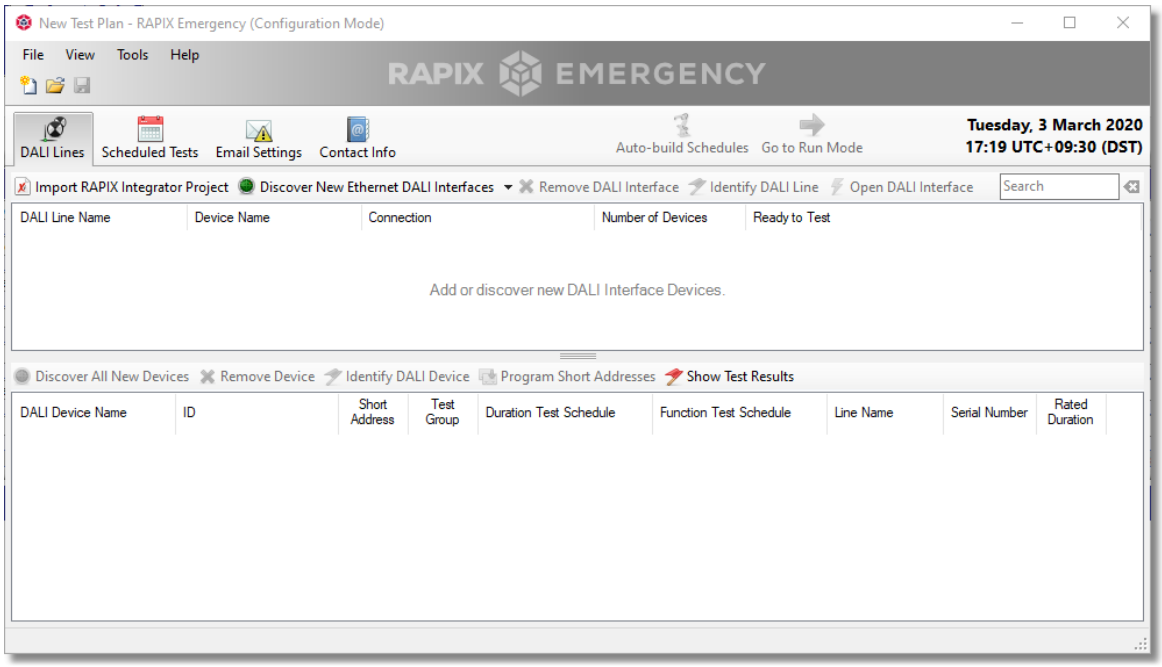
"Run the default Test Plan" button
if this button is enabled, then a Test Plan has already been set up and run on this PC. Click this button to open the Test Plan in Run Mode to begin monitoring the emergency DALI Devices.

"Exit" button
Click this button to exit RAPIX Emergency.

3 Commissioning a Site

3.1 User Interface (Configuration Mode)

When in Configuration Mode, the user interface consists of a single window where a Test Plan can be configured.



A new Test Plan in the Configuration Mode user interface

Menu Bar

The menu bar provides functions to manage Test Plans, navigate the user interface, and manage site passwords.

The Configuration Mode menu bar

File Menu

The File menu provides Test Plan management functionality, explained below.

"New" menu-item
Click this to create a new Test Plan. If one is already open, it will first be closed. If there are any unsaved changes, they can be saved or discarded.

"Open" menu-item
Click to open an existing Test Plan. If one is already open, it will first be closed. If there are any unsaved changes, they can be saved or discarded.
This menu-item will open RAPIX Emergency's **Load a Test Plan** dialogue, where a Test Plan can be chosen and opened.

"Close" menu-item
Click to close the currently-open Test Plan. Any unsaved changes can be saved or discarded.
Once the Test Plan is closed, RAPIX Emergency will return to the Welcome screen.

"Save" menu-item
Click to save the currently-open Test Plan. If there are no unsaved changes, then this menu-item will be disabled.

"Import..." menu-item
Click to import a *Diginet Archive (*.dtz)* file into RAPIX Emergency. See the Glossary of Terms 7 for a description of a Diginet Archive file.

"Export..." menu-item
Click to export any Test Plan into a *Diginet Archive (*.dtz)* file. See the Glossary of Terms 7 for a description of a Diginet Archive file.

"Exit" menu-item
Click to exit RAPIX Emergency. Any unsaved changes can be saved or discarded.

View Menu

The View menu allows for navigation between the 4 tabs mentioned below. Click any menu-item to show that tab.

The menu-item representing the currently-visible tab will be displayed with a tick next to it.

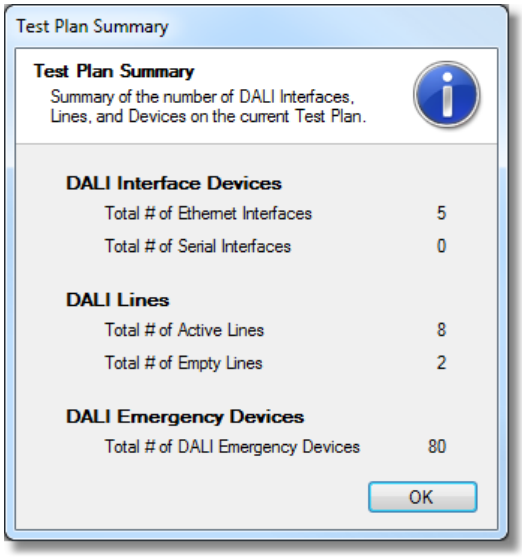
Tools Menu

The Tools menu provides extra DALI Line and Test Plan functionality, as well as site password management.

"DALI Address Grid..." menu-item
Click this item to open the *DALI Short Addresses* dialogue, which can show all of the DALI short addresses on a DALI Line, and what type of DALI Devices occupy the short addresses.
See topic DALI Address Status Grid 28 for more information.

"Test Plan Summary..." menu-item
Click this item to open the *Test Plan Summary* dialogue.

This dialogue shows basic statistics of the Test Plan, including the number of DALI Interface Devices, the number of DALI Lines, and the number of Emergency DALI Devices in the Test Plan.



The Test Plan Summary dialogue

"Change Supervisor Password..." menu-item
Click this item to show the *Change Supervisor Password* dialogue. See topic Password Management 42 for more information.

"Change Maintenance Password..." menu item
Click this item to show the *Change Maintenance Password* dialogue. See topic Password Management 42 for more information.

Help Menu

The Help menu provides access to the RAPIX Emergency help files and About dialogue.

"Help Contents..." menu-item
Click this item to open the help file for RAPIX Emergency.

"About RAPIX Emergency..." menu-item
Click this item to open the About dialogue box for RAPIX Emergency.

Quick Access Buttons

The menu bar also provides quick access buttons for:

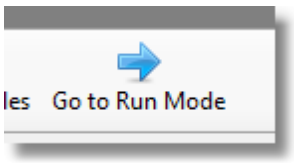
- Creating a new Test Plan.
- Opening a Test Plan.
- Saving the currently-open Test Plan if there are changes to be saved.

The quick access buttons in Configuration Mode

Going to Run Mode

The tab bar in Configuration Mode provides a button called **Go to Run Mode**, which, when the Test

Plan is ready to be run, can be clicked to run the Test Plan. See topic Monitoring a Site User Interface[44] for more information.



The Go to Run Mode button

If there are any unsaved changes to the Test Plan, they must be saved before entering Run Mode.

Date and Time Display

When RAPIX Emergency is in Configuration Mode, the current date and time is always displayed.

The time zone offset, and whether daylight savings is currently active, is also displayed.

This date and time display can be useful when planning scheduled tests for a Test Plan.

Configuration Mode Tabs

This window consists of four main tabs that allow the configuration of each part of a Test Plan.

Configuration Mode tabs

The tabs are explained below.

DALI Lines tab

This tab is used to view, identify, and name DALI Interface Devices and DALI Devices. DALI Devices can also be assigned to different test groups for automatic test scheduling.

See topic DALI Lines Tab[19] for more information about this tab.

Scheduled Tests tab

This tab is used to view and edit scheduled tests, and to see when particular DALI Devices are to be tested.

See topic Scheduled Tests Tab[23] for more information about this tab.

Email Settings tab

This tab is used to set up automatic email alerts so people can be notified of imminent and completed tests.

See topic Email Settings Tab[25] for more information about this tab,

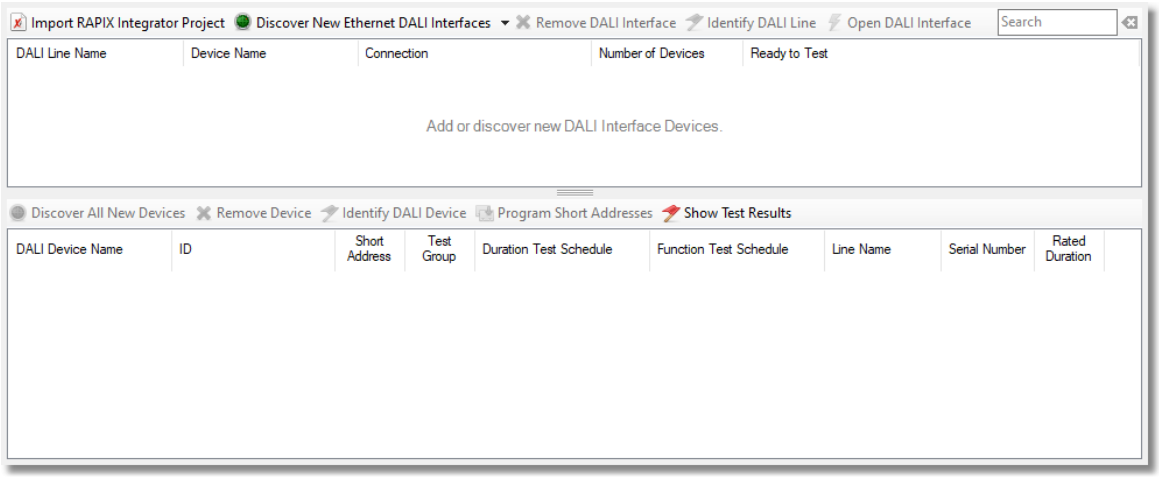
Contact Info tab

This tab is used to enter in the contact details of people who may be required to be contacted in case of problems with the site.

See topic Contact Info Tab 27 for more information about this tab.

3.1.1 DALI Lines Tab

This tab is used to view, identify, and name DALI Interface Devices and DALI Devices.



The DALI Lines tab

DALI Lines list

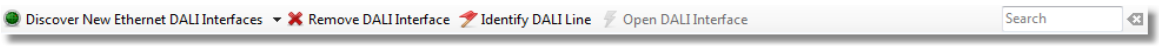
The top-most list displays all of the DALI Lines in the Test Plan.

Each row represents a DALI Line, and displays the following attributes for each DALI Line.

- The name of the DALI Line.
- The name of the DALI Interface Device that the DALI Line is connected to.
- The type of connection made to the DALI Line; whether it is Ethernet-based or Serial-based.
- The number of DALI Devices on the DALI Line.
- Whether or not the DALI Line is ready to be tested.
  RAPIX Emergency will examine the DALI Line to determine whether all DALI Devices on it are assigned to test groups that are scheduled to run periodic duration tests.

DALI Line Buttons

There are buttons that allow the configuration of DALI Lines.



Toolbar for the DALI Lines list

"Discover New Ethernet DALI Interfaces" button
Click this button to find any DALI Interface Devices on the network, which can then be added to the Test Plan.
See topic Discover DALI Interface Devices 34 for more information.

"Add New Serial DALI Interface..." button

Click this button, accessible via the small drop-down button next to the Discover button, to add a new Serial-based DALI Interface Device to the Test Plan.

"Add New Ethernet DALI Interface..." button
Click this button, accessible via the small drop-down button next to the Discover button, to add a new Ethernet-based DALI Interface Device to the Test Plan, by manually entering its IP address.

"Remove DALI Interface" button
Click this button when there are DALI Lines selected in the list, to remove them from the Test Plan.

"Identify DALI Line" button
Click this button when there are DALI Lines selected in the list, to commence identification of the DALI Interface Devices and DALI Devices on those DALI Lines. This button will remain checked until clicked again.

"Open DALI Interface" button
Click this button when there is a DALI Line selected that is currently not connected to DALI, to attempt a reconnection to DALI.

Discovering DALI Lines

To discover new DALI Lines and add them to the Test Plan, simply click the **Discover New Ethernet DALI Interfaces** button. This will display a dialogue that will automatically search the network for any DALI Interface Devices that are not currently in the Test Plan.

See topic Discover DALI Interface Devices 34 for more information.

Editing DALI Lines

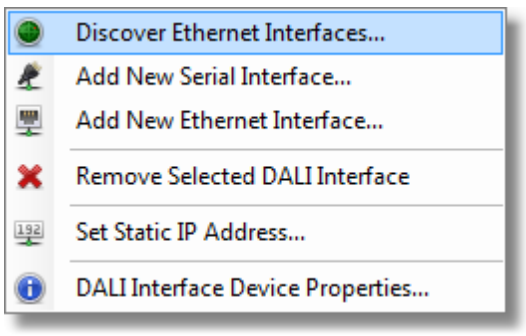
The properties of DALI Lines can be edited directly from within the list.

The *DALI Line Name* field can be edited by double-clicking the cell to be edited, and all other fields by single-clicking the cell to be edited.

Note: Any cells where the text is grey indicates a read-only property.

Right-click Menus

Right-click in the DALI Lines list to access the same functionality as in the toolbar, as well as extra options.



Right-click menu in the DALI Lines list

"Set Static IP Address..." item

Click this item to change the IP address of an Ethernet-based DALI Interface Device.
See topic Setting Static IP Addresses[35] for more information.

"DALI Interface Device Properties..." item
Click this item to get detailed information about the DALI Interface Device.

DALI Devices list

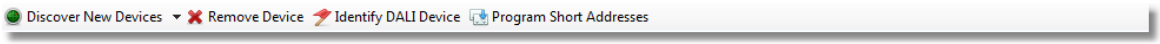
The bottom-most list displays all of the DALI Devices for the selected DALI Line.

Each row represents a DALI Device, and displays the following attributes for each DALI Device:

- The name of the DALI Device.
- The ID of the DALI Device, which is a text-based property describing it.
- The DALI short address of the DALI Device.
- The test group assigned to the DALI Device.
- The Duration Test Schedules and Function Test Schedules assigned to the DALI Device.
- The name of the DALI Line that the DALI Device is on.
- The DALI Device serial number.
- The rated duration, in minutes, that the DALI Device is expected to run for on battery power.

DALI Devices Buttons

There are buttons that allow the configuration of DALI Devices.



Toolbar for the DALI Devices list

"Discover New Devices" button
Click this button to invoke the DALI Device discover dialogue which will find any DALI Devices that are on the currently-selected DALI Line.
See topic Discovering DALI Devices[36] for more information.

"Discover New Devices on All DALI Lines" button
Click this button to invoke the DALI Device discover dialogue which will find any DALI Devices that are on any of DALI Lines in the current Test Plan.

"Remove Device" button
Click this button when there are DALI Devices selected in the list, to remove them from the Test Plan.

"Identify DALI Device" button
Click this button when there are DALI Devices selected in the list, to commence identification of the DALI Devices. This button will remain checked until clicked again.

"Program Short Addresses" button
Click this button to reprogram the DALI short addresses of DALI Devices on the currently-selected DALI Line.
See topic Programming Short Addresses[37] for more information.

Discovering DALI Devices

To discover new DALI Devices and add them to the Test Plan, click the **Discover New Devices** button. This will show a dialogue that will automatically search the DALI Line for any DALI Devices

that are not currently in the Test Plan.

See topic Discovering DALI Devices 36 for more information.

Editing DALI Devices

The properties of DALI Devices can be edited directly from within the list.

The *DALI Device Name* field can be edited by double-clicking the cell to be edited, and all other fields by single-clicking the cell to be edited.

Note: Any cells where the text is grey indicates a read-only property.

Configuring Test Groups

A test group is a collection of DALI Devices that are to be duration tested and/or function tested at the same time.

Every DALI Line allows up to 8 configurable test groups, as well as a Duration Test Schedule and Function Test Schedule.

The test group for a DALI Device can be configured in two ways, by:

1. Editing the value in the Test Group column, either by typing in a new value (between 1 and 8), or clicking the small up and down arrows in the cell).

2. Dragging the DALI Device up or down from one test group, and dropping it onto another. When dragging, a tool-tip under the mouse cursor will indicate what will happen to the test group of the DALI Device being dragged, if dropped there.

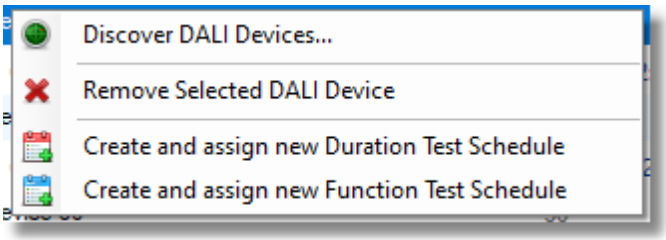
Assigning Duration Test Schedules and Function Test Schedules

Assigning a Duration Test Schedule or Function Test Schedule to a test group is done by assigning it to a DALI Device in a test group. This is done by clicking in the Duration Test Schedule or Function Test Schedule cell, revealing the drop-down box, and selecting a schedule from the list.

All other DALI Devices in the same test group on the same DALI Line will automatically have that new schedule assigned.

Right-click Menus

Right-click in the DALI Devices list to access the same functions as in the toolbar, as well as extra options.



Right-click menu in the DALI Devices list

"Create and assign new Duration Test Schedule" item
Click this item when a DALI Device is selected to create a new Duration Test Schedule, and automatically assign it to this DALI Device and other DALI Devices on this DALI Line in the same test group.

"Create and assign new Function Test Schedule" item
Click this item when a DALI Device is selected to create a new Function Test Schedule, and automatically assign it to this DALI Device and other DALI Devices on this DALI Line in the same test group.

Searching for DALI Lines or DALI Devices

In the top-right corner of the tab is a search box, which can be used to search for DALI Lines and DALI Devices.

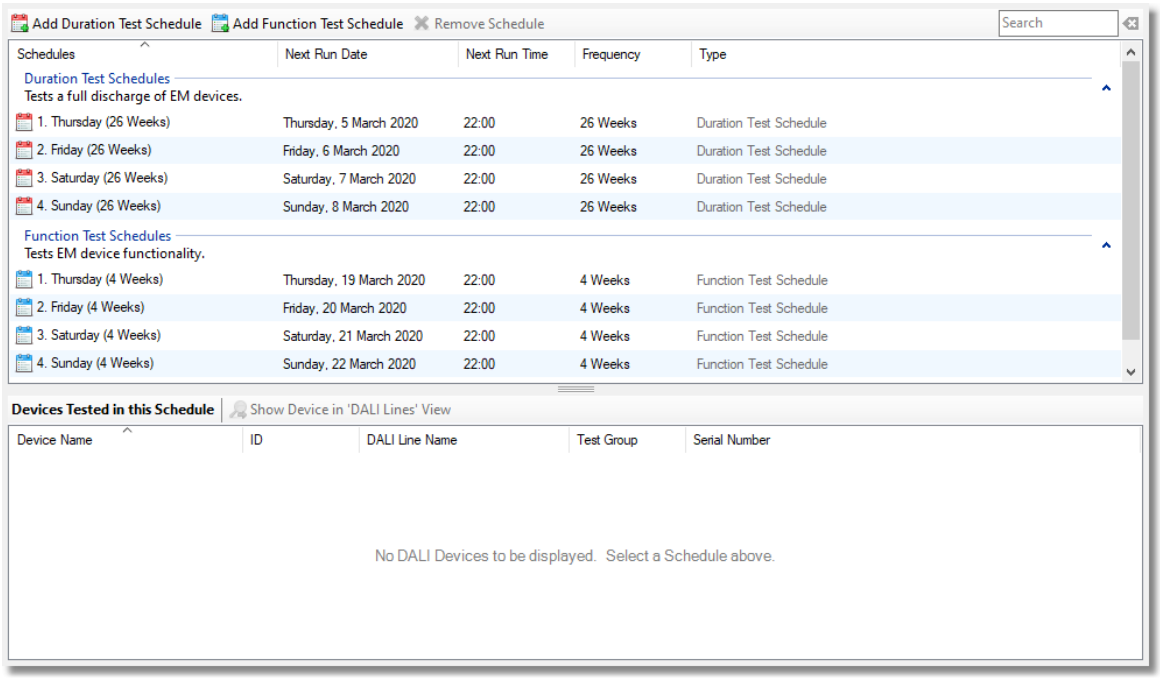
The search box

Search matches are highlighted in yellow in the lists.

Note: *If the search text that has been entered yields no results, the colour of the search box turns red.*

3.1.2 Scheduled Tests Tab (Configuration Mode)

This tab is used to view and configure scheduled tests in a Test Plan.



The Scheduled Tests tab

Schedules list

The top-most list displays all of the schedules in the Test Plan.

Each row represents a schedule, and displays the following attributes for each schedule:

- The name of the schedule.
- The date and time the schedule is to be run next.
- How often the schedule will be run.
- What type of schedule it is.

Schedule Buttons

There are buttons that allow the configuration of schedules.

Toolbar for the Schedules list

"Add Duration Test Schedule" button
Click this button to add a new Duration Test Schedule to the Test Plan. This will add a new row to the list, and immediately allow the entering of a name for the schedule.

"Add Function Test Schedule" button
Click this button to add a new Function Test Schedule to the Test Plan. This will add a new row to the list, and immediately allow the entering of a name for the schedule.

"Remove Schedule" button
Click this button when there are schedules selected in the list, to remove them from the Test Plan. Any DALI Devices that were assigned to be tested by this schedule will now have no schedule assigned.

Editing Schedules

The properties of schedules can be edited directly from within the list.

The *Schedule Name* field can be edited by double-clicking the cell to be edited, and all other fields by single-clicking the cell to be edited.

Note: *Any cells where the text is grey indicates a read-only property.*

Right-click Menus

Right-click in the schedules list to access the same functionality as in the toolbar.

Devices Tested in this Schedule list

The bottom-most list displays all of the DALI Devices that are tested by the currently-selected schedule.

Note: *DALI Devices will be shown only if one schedule is selected at a time.*

Each row represents a DALI Device, and displays the following properties for each DALI Device:

- The name of the DALI Device.
- The ID of the DALI Device, which is a text-based property describing it.
- The name of the DALI Line that the DALI Device is on.
- The test group that the DALI Device is a member of.

- The DALI Device serial number.

Devices Tested in this Schedule Buttons

Toolbar for the Devices Tested in this Schedule list

"Show Device in 'DALI Lines' View" button
Click this button to show the selected DALI Device in the DALI Lines tab. This will select the DALI Line that the selected DALI Device is on, and then select the DALI Device itself.

Right-click Menus

Right-click in the Devices Tested in this Schedule list to access the same functionality as in the toolbar.

Searching for Schedules or DALI Devices

In the top-right corner of the tab is a search box, which can be used to search for schedules and the DALI Devices tested by them.

The search box

Search matches are highlighted in yellow in the lists.

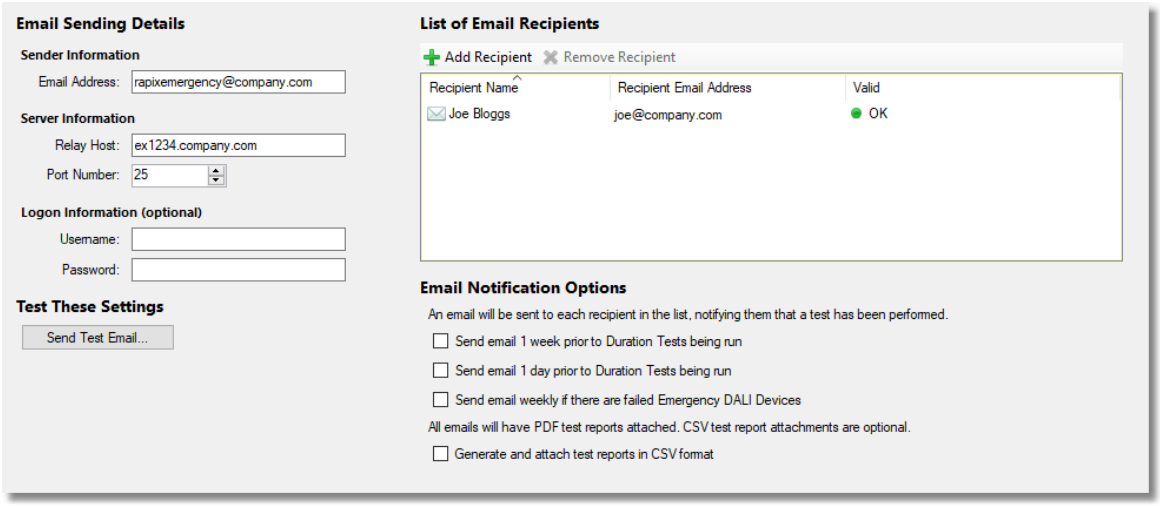
Note: *If the search text that has been entered yields no results, the colour of the search box turns red.*

3.1.3 Email Settings Tab

This tab is used to view and configure email sending notifications for a Test Plan.

If email sending options are correctly set up, and there is at least one recipient, then when a Duration Test Schedule or Function Test Schedule is completed, RAPIX Emergency will automatically send out an email with the results of that test.

Important: *Contact your IT support personnel for assistance with these settings.*



The Email Settings tab

Email Sending Details

RAPIX Emergency attempts to auto-populates the following fields when this tab is first opened, based on any settings found on the network that the computer is connected to at the time.

Sender Email Address
This is the email address that will appear as the sender of any emails sent by RAPIX Emergency.

Server Information

Relay Host
This is the name of the machine that may be required to pass emails outside of the network.

Port Number
This is the port that the relay host is to be communicated with.

Logon Information

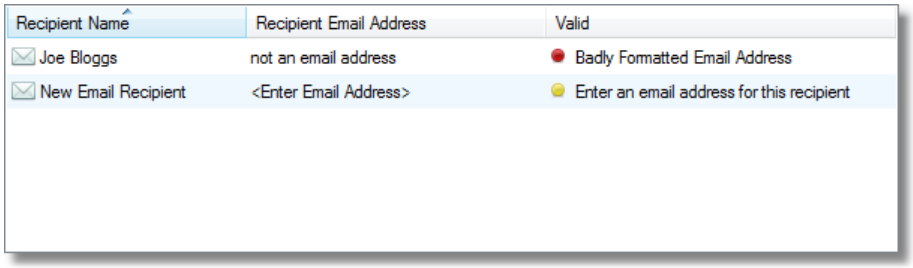
Authentication may be required to send emails. If this is the case, then the **Username** and **Password** fields must be filled in.

Email Recipients

Multiple recipients of RAPIX Emergency emails can be configured in a Test Plan.

To add a new recipient, click the **Add Recipient** toolbar button above the recipients list. A new row will be added, which immediately allows the entering of a recipient's name. To edit the email address, simply click on the cell, type in a new email address, and hit Enter or click elsewhere.

Once an email address has been typed in, the right-most column will indicate whether the email address is a properly-formed email address, assisting in the avoidance of some typographical errors.



The email recipients list with invalid email addresses

To remove an existing recipient, select a recipient in the list, and click the **Remove Recipient** button.

Notification Options

Send email 1 week prior to Duration Tests being run
Select this option to have RAPIX Emergency send out an email exactly one week prior to a Duration Test Schedule being run. This option is useful to warn facility managers of any scheduled tests that are to be run.

Send email 1 day prior to Duration Tests being run
Select this option to have RAPIX Emergency send out an email exactly 24 hours prior to a Duration Test Schedule being run. This options is useful to warn facility managers of any scheduled tests that are to be run.

Send email weekly if there are failed Emergency DALI Devices
Select this option to have RAPIX Emergency send out a weekly reminder email, reminding the facility manager that there are Emergency DALI Devices in the Test Plan that have failed a test.

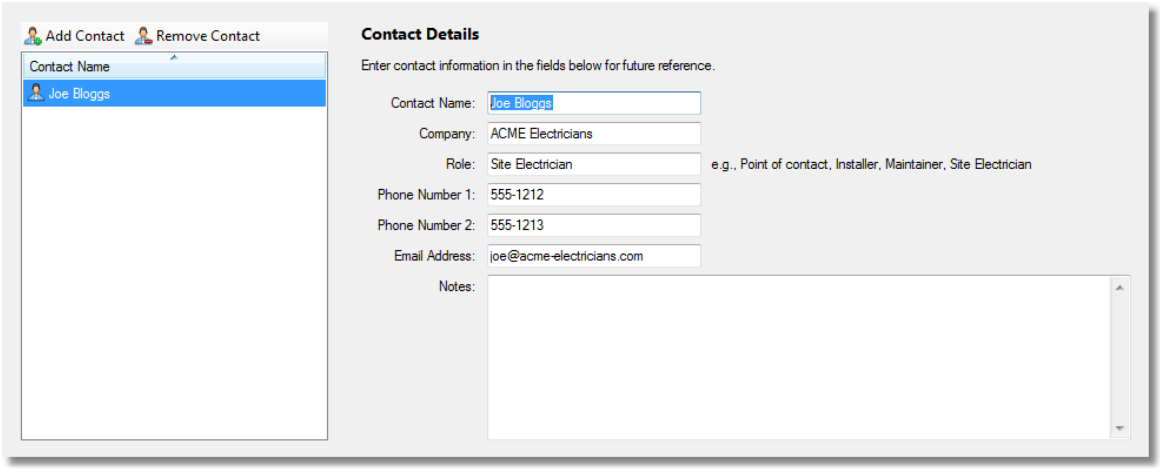
Test These Settings

The **Send Test Email...** button allows for the testing of email settings. When clicking this button, RAPIX Emergency will send out a test email to all of the recipients in the recipients list.

Use this button to quickly test whether the email settings that have been configured will function correctly when RAPIX Emergency is running.

3.1.4 Contact Info Tab (Configuration Mode)

This tab is used to view and configure details of contacts who can be contacted in case of a problem with the Test Plan.



The Contact Info tab

Add a Contact

To add a new contact, simply click the **Add Contact** button. A new row will appear in the list, and the **Contact Name** field on the right will be automatically selected, allowing for the immediate entering of the contact's details.

Edit a Contact

To edit a contact, simply click on the name of the contact in the list, and the contact's details will appear in the fields on the right.

Type in the contact's new details as desired.

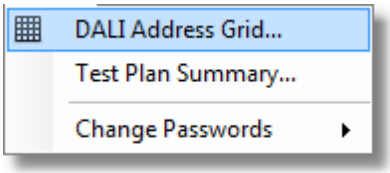
Remove a Contact

To remove a contact, simply select a contact in the list, and click the **Remove Contact** button.

3.1.5 DALI Address Status Grid

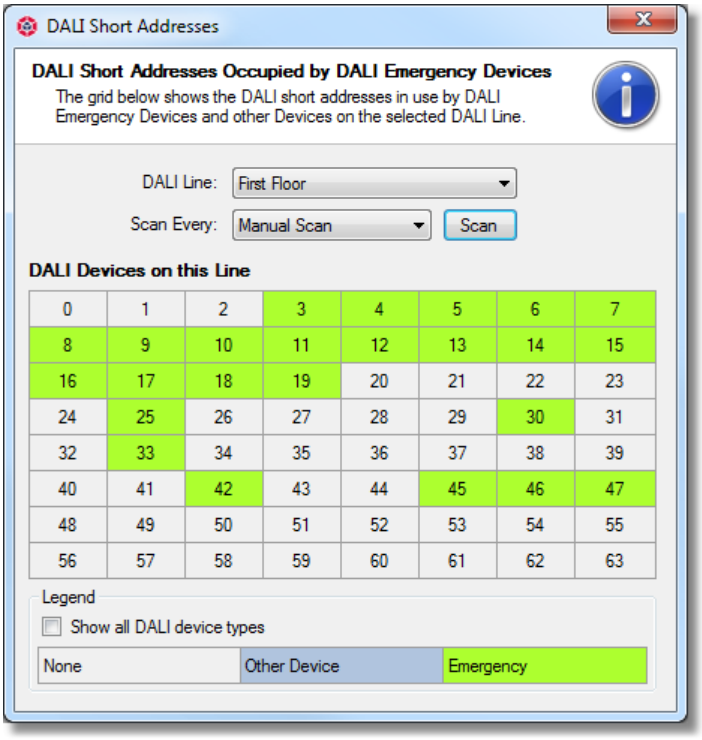
The **DALI Short Addresses** dialogue scans a DALI Line and displays all of the DALI short addresses, and what type of DALI Device occupies them.

To open the **DALI Short Address** dialogue, click the **DALI Address Grid...** item in the **Tools** menu.



The DALI Address Grid... item in the Tools menu

Different DALI device types are displayed in different colours for easy viewing.



The DALI Short Addresses dialogue showing a DALI Line with 24 DALI Devices

By default, RAPIX Emergency will display emergency DALI Devices in green and non-emergency in blue.

Choosing a DALI Line to scan

The **DALI Line** drop-down list allows for the selection of any DALI Line in the Test Plan for scanning. To scan a different DALI Line, simply choose the DALI Line from the list, and click the **Scan** button.

Choosing a scan interval

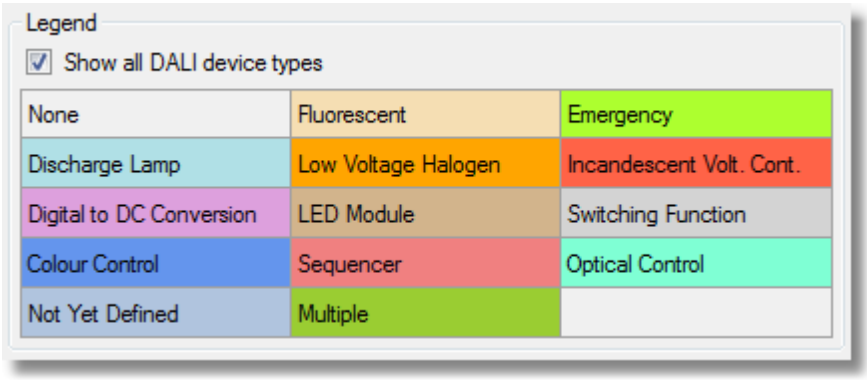
The **Scan Every** drop-down allows for the selection of a scan interval for repeating scans. The options available are:

- **Manual Scan.**
  A scan of the DALI Line will only occur when the **Scan** button is clicked.
- **10 seconds.**
  A scan will repeat every 10 seconds.
- **20 seconds.**
  A scan will repeat every 20 seconds.
- **1 minute.**
  A scan will repeat every minute.

Showing all DALI device types

To see all of the different DALI device types, simply click the **Show all DALI device types** checkbox, and all non-emergency DALI Devices will change colour to reflect the type of DALI Device it is.

The different colours are as seen below:



DALI device type colours

3.2 Basic Working Procedures

This section describes the most common and important basic tasks that will be used when setting up a Test Plan in RAPIX Emergency.

It is designed as a "How To" guide and reference manual.

3.2.1 Configuring DALI Interfaces

There are two possible methods of setting up DALI Interface Devices using RAPIX Emergency.

They are:

1. Assigning of IP addresses and saving of names to DALI Interface Devices before they are installed on site.
2. Installing of DALI Interface Devices on site once the site's local area network is set up and operational, then connecting to the DALI Interface Devices one at a time and assigning IP addresses and saving names.

Both of these options require a Test Plan to be created before connecting to DALI Interface Devices.

See topic Discover DALI Interface Devices 34 for more information on discovering DALI Interface Devices.

Option 1: Setting Up of DALI Interface Device before Installation

To set up a DALI Interface Device with this option, follow the steps below.

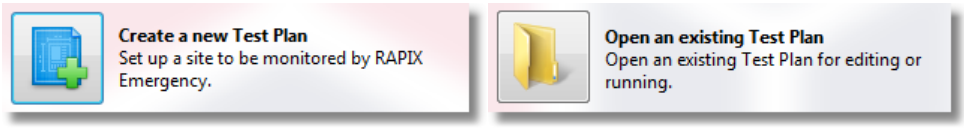
1. Disconnect the PC from any local area network.

2. Change the network settings of the PC to use a static IP address that is in the same subnet that is intended for the DALI Interface Devices.
   For example, if a DALI Interface Device is to have the IP address **172.20.22.10**, then set the IP address of the PC to be **172.20.22.1**.

   Note: *An explanation of IP subnets is outside the scope of this document. For an explanation of this, consult an online resource, or contact your IT support personnel for assistance.*

3. Connect a DALI Interface Device to the Ethernet port on the PC, and ensure that it is powered.

4. Open RAPIX Emergency and on the welcome screen, either click **Create a new Test Plan** or **Open an exiting Test Plan**.



The Create and Open Test Plan buttons

5. Once a new Test Plan has been created, click the **Discover New Ethernet DALI Interfaces** button on the **DALI Lines** tab.
   See topic Discover DALI Interface Devices 34 for more information.

6. The discovery dialogue will appear, and attempt to automatically discover any DALI Interface Devices connected to the PC.
   The DALI Interface Device currently connected to the PC should appear in the list. It will probably be marked as **Unreachable**. This is expected.
   If it does not appear, press **F5** or click the **Rescan (F5)** button to attempt another scan.

7. Right-click the newly-discovered DALI Interface Device in the list, and select the **Set Static IP Address...** option.

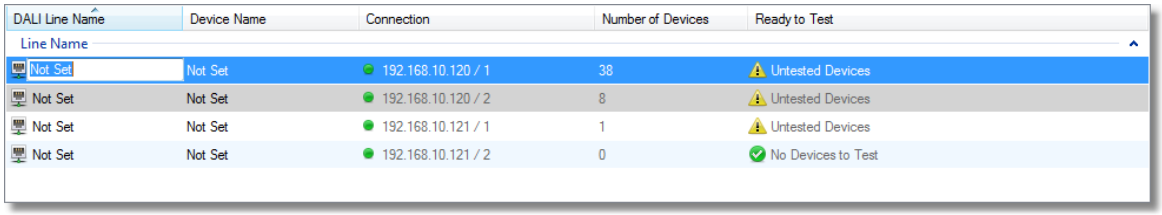
8. Enter in the desired IP address for the DALI Interface Device and click **OK**.

The Set Static IP Address dialogue

9. Once the IP address has been changed, the discovery dialogue will rescan the network, and the DALI Interface Device should now appear with the new IP address.

10. Make sure that the DALI Interface Device is ticked and click **Add** to add it to the Test Plan.

11. Once the DALI Interface Device has been added to the Test Plan, in the DALI Lines list, enter in the desired name for each of the DALI Interface Device's DALI Lines, and for the DALI Interface Device itself.



Entering in a DALI Line name (double-click the DALI Line names to start editing them)

Repeat this process for each DALI Interface Device that requires setting up.

Saving the Changes

To save the changes to the physical DALI Interface Devices, simply press **Ctrl+S** or select **File** and then **Save**. The changes will be saved to the physical DALI Interface Device at the same time as the Test Plan is saved to disk.

Option 2: Installation of DALI Interface Device before Setting Up

To set up a DALI Interface Device with this option, follow the steps below.

1. Install the DALI Interface Device into its intended enclosure, ensuring that it is correctly powered and connected to DALI and the local area network.

2. Connect the PC running RAPIX Emergency to the same local area network that the DALI Interface Devices are connected to.

3. Open RAPIX Emergency and on the welcome screen, either click **Create a new Test Plan** or **Open an exiting Test Plan**.

The Create and Open Test Plan buttons

4. Once a new Test Plan has been created, click the **Discover New Ethernet DALI Interfaces** button on the **DALI Lines** tab.
See topic Discover DALI Interface Devices 34 for more information.

5. The discover dialogue will appear, and attempt to automatically discover any DALI Interface Devices connected to the local area network.
The DALI Interface Devices may all appear as **Unreachable**, and this is to be expected.

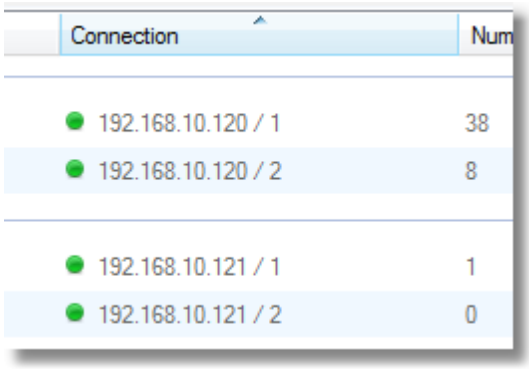
6. Click **Add** to add the desired DALI Interface Devices to the Test Plan.
RAPIX Emergency will now attempt to discover any DALI Devices connected to the DALI Interface Devices.

7. Once the DALI Interface Devices have been added to the Test Plan, in the DALI Lines list, they will need to be identified before assigning an IP address and naming.

Identification of a DALI Interface Device

Now, each of the DALI Interface Devices in the Test Plan must be identified and named.

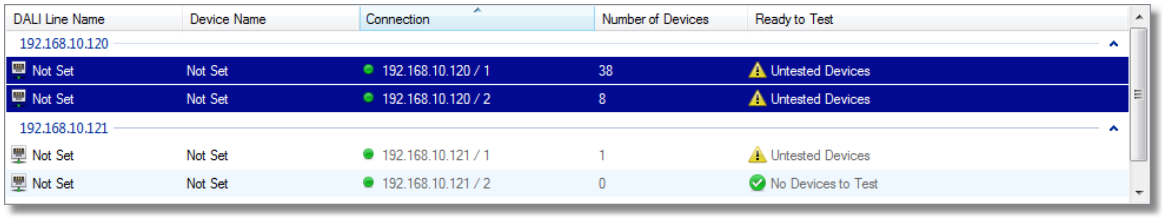
Firstly, click on the **Connection** column header to sort all of the DALI Interface Devices. Each individual DALI Interface Device will be displayed in a group, with the DALI Lines they are connected to grouped together.



Sorting DALI Interface Devices by the Connection column

Next, select all of the DALI Lines for a DALI Interface Device, and click the **Identify DALI Line** button to start identifying that DALI Interface Device.

Note: *To select all of the DALI Lines of a DALI Interface Device, click each of the DALI Lines while holding the Control or Shift key.*



Identifying both DALI Lines of a DALI Interface Device

Two things will happen:

1. The green DALI Line indicators on the DALI Interface Device will flash rapidly, revealing which DALI Interface Device is currently highlighted in RAPIX Emergency.
2. All of the DALI Devices that are connected to the highlighted DALI Lines will perform their identification routines, which can be seen by walking around the site and observing the DALI Devices.

Note: *The identification routines performed by the highlighted DALI Devices will vary according to the device's manufacturer and model..*

This process will provide enough information to decide on a suitable name for both the DALI Interface Device and the DALI Lines it is connected to.

Note: *Individual DALI Lines can be identified by only having a single DALI Line selected in the list and clicking the* ***Identify DALI Line*** *button. This can assist in narrowing down which DALI Devices are connected to individual DALI Lines rather than entire DALI Interface Devices.*

Now that the DALI Interface Device and its DALI Lines have been identified, enter in a name for the DALI Interface Device and each of the DALI Lines it is connected to.

Repeat this process for each DALI Line on all of the DALI Interface Devices.

Saving the Changes

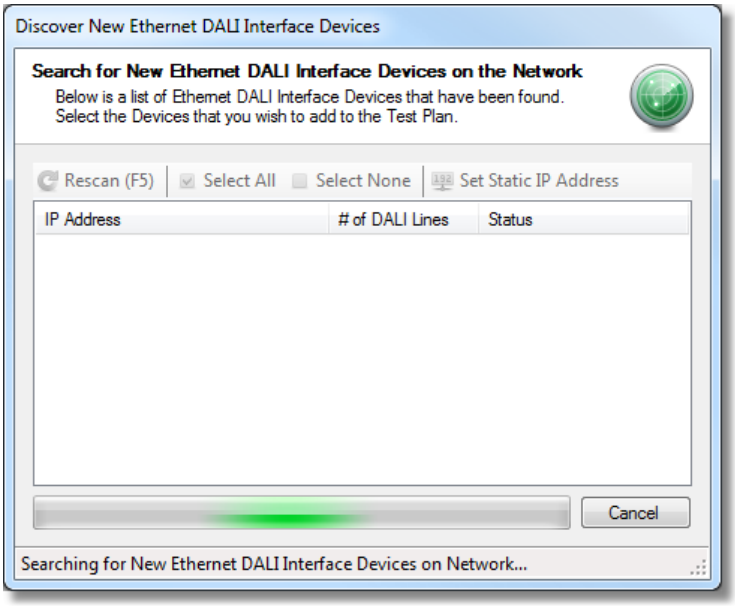
To save the changes to the physical DALI Interface Devices, simply press **Ctrl+S** or select **File** and then **Save**. The changes will be saved to the physical DALI Interface Device at the same time as the Test Plan is saved to disk.

Next Steps

The next step in setting up a Test Plan is to identify and give meaningful names to emergency DALI Devices.

3.2.2 Discover DALI Interface Devices

To discover new DALI Lines and add them to the Test Plan, go to the **DALI Lines** tab and click the **Discover New Ethernet DALI Interfaces** button. This will display a dialogue that will automatically search the network for any DALI Interface Devices that are not currently in the Test Plan.



Discovering DALI Interface Devices on the network

Once the discovery is complete, a list of DALI Interface Devices will be displayed, showing:

- The DALI Interface Device's IP address.
- The number of DALI Lines associated with the DALI Interface Device.
- The status if the DALI Interface Device, which indicates whether the DALI Interface Device is:
  - **OK**.
    This means that the DALI Interface Device can be added to the Test Plan.
  - **Currently In Use**.
    This means that the DALI Interface Device is currently in use by another Test Plan.
  - **Unreachable**.
    This means that the DALI Interface Device is not accessible using TCP/IP, and must be assigned another IP address before it can be added.
  - **Dynamic IP Address**.
    This means that the DALI Interface Device has been allocated an IP address from the local area network. This is the default setting for a DALI Interface Device from the factory. To be able to add this DALI Interface Device to the Test Plan, the its IP address must be set to a static IP address so that it will never change without the knowledge of RAPIX Emergency.
    See topic Setting Static IP Addresses 35 for more information.

Once DALI Lines have been selected, clicking OK will start a discovery of DALI Devices on the

selected DALI Lines. See topic Discovering DALI Devices 36 for more information.

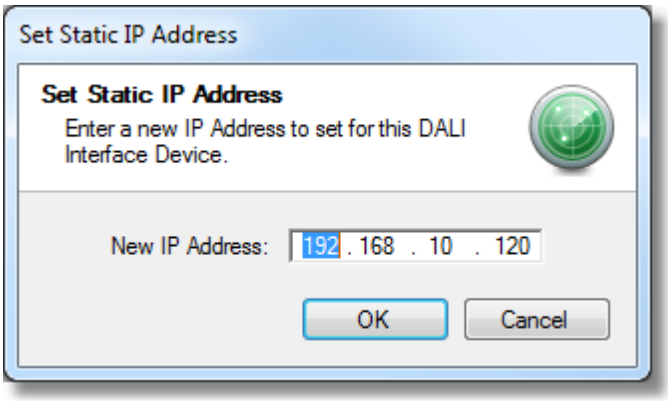
3.2.3 Setting Static IP Addresses

The **Set Static IP Address** dialogue can be used to change the IP address of a DALI Interface Device when configuring a Test Plan.

If a DALI Interface Device, when discovered, is marked as unreachable, its IP address can be changed so RAPIX Emergency can communicate with it.

This dialogue can be displayed by:

- Right-clicking on a DALI Interface Device in the **Discover DALI Interface Devices** dialogue and clicking the **Set Static IP Address...** item.
- Right-clicking on a DALI Line already in a Test Plan, and clicking the **Set Static IP Address...** item.



The Set Static IP Address dialogue

To change the IP address of a DALI Interface Device, simply type in a new IP address, and click **OK** to perform the change.

Note: *When entering an IP address, pressing the full stop, ('.') key will move the text selection to the next set of digits in the IP address.*

Upon clicking **OK**, a progress bar will be shown, indicating that the change is occurring.

3.2.4 DALI Interface Device Properties

Detailed properties about DALI Interface Devices can be retrieved, which can be used for troubleshooting or documentation.

The properties of a DALI Interface Device can be retrieved and displayed in the **DALI Interface Device Properties** dialogue.

This dialogue can be displayed:

- When discovering DALI Interface Devices, by right-clicking on a DALI Interface Device and clicking the **DALI Interface Device Properties...** item.
- When in Configuration Mode, by right-clicking on a DALI Line in the DALI Lines list, and clicking the **DALI Interface Device Properties...** item.
- When in Run Mode, by right-clicking on a DALI Line in the DALI Lines list, and clicking the **DALI Interface Device Properties...** item.

When the dialogue is displayed, each DALI Line of the DALI Interface Device is shown as a separate

tab, and the properties of each DALI Line are shown on each tab.

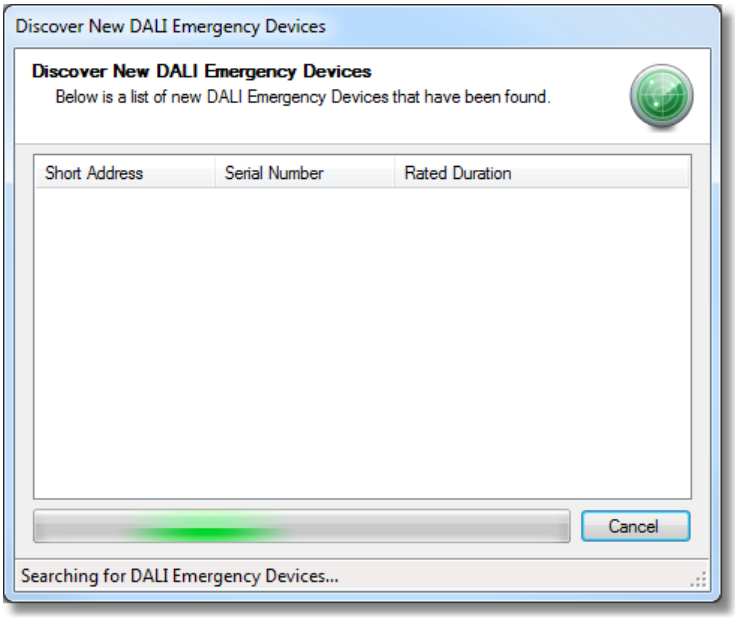
Click the **Close** button to close the dialogue.

3.2.5 Discovering DALI Devices

Discovering DALI Devices occurs when adding a new DALI Line to the Test Plan.

DALI Devices can also be discovered manually, by clicking the **Discover New Devices** button on the DALI Lines tab.

Doing so will show the following dialogue:



Discovering DALI Devices on a DALI Line

This dialogue will search for any DALI Devices that are not currently in the Test Plan. When searching completes, the dialogue will display all of the DALI Devices that it found, displaying their:

- DALI short address.
- Serial number.
- Rated duration.

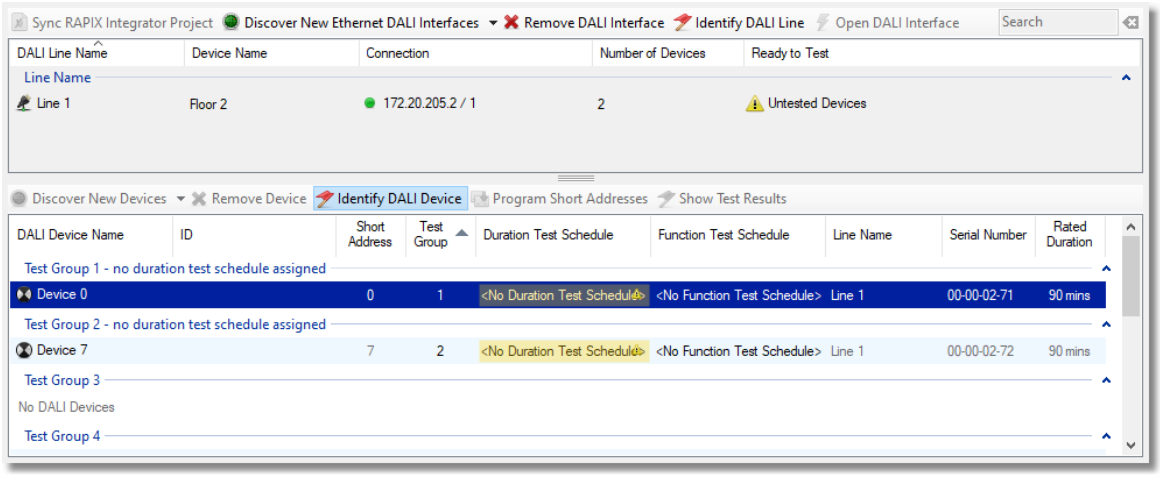
Click **OK** to add these DALI Devices to the Test Plan, or click **Cancel** to not add them.

3.2.6 Identifying and Naming Devices

The process of identifying and naming emergency DALI Devices first involves locating the DALI Device on the site, and then giving that DALI Device an appropriate name in RAPIX Emergency.

Identifying a DALI Device

Identifying a DALI Device involves selecting the DALI Device in the DALI Devices list on the DALI Lines tab, and clicking the **Identify DALI Device** button to start identification mode.



Identifying a DALI Device at short address 0

When identification mode is on, the selected rows will pulsate between a dark and pale blue. This means that RAPIX Emergency will be sending out identification commands over DALI to the selected DALI Devices every 10 seconds, to ensure that they continue to perform their identification procedure.

Note: *The identification routines performed by the highlighted DALI Devices will vary according to the device's manufacturer and model.*

When the DALI Device has been located on the site, it needs to be given an appropriate name that describes what and where it is.

Naming a DALI Device

To name a DALI Device, RAPIX Emergency can remain in identification mode.

To edit the name of the DALI Device, simply double-click the **DALI Device Name** column and type in a new name. Press **Enter** to accept the name change.

The **ID** column is intended to be used to describe the DALI Device in terms of where it is wired up.

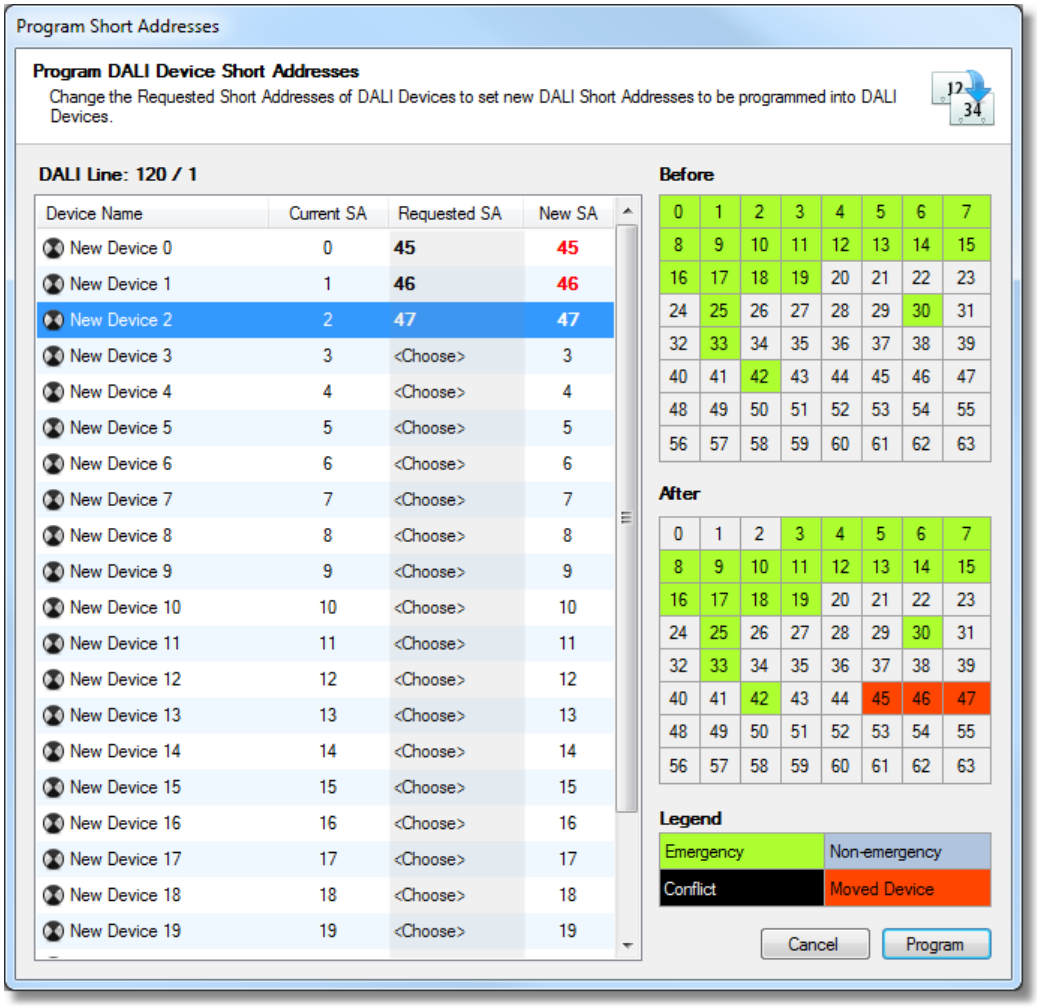
When the naming of DALI Devices is complete, simply press **Ctrl+S** or click **Save** in the **File** menu.

Note: *The names of DALI Devices are not stored in the physical DALI Devices themselves. They are only stored in the RAPIX Emergency Test Plan.*

3.2.7 Programming Short Addresses

The Program Short Addresses dialogue allows the re-assignment of physical DALI short addresses in DALI Devices.

When the dialogue opens, the DALI Line is scanned, and the location of DALI Devices is shown in the **Before** grid on the top-right of the dialogue.



The Program Short Addresses dialogue with 3 pending changes

Emergency DALI Devices are shown as green, and non-emergency DALI Devices are shown in blue. If there are any conflicts when querying a short address, the short address cell will be displayed in black.

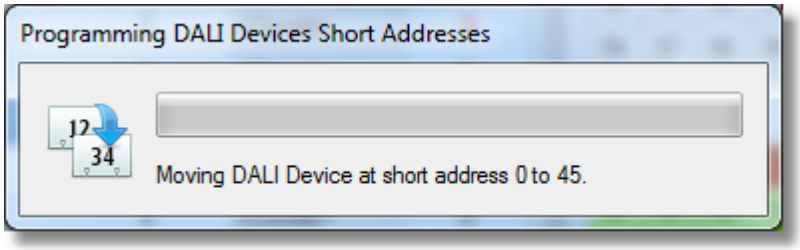
A conflict is where more than one DALI Device has the same short address.

The list displays all DALI Devices on the DALI Line, displaying:

- The name of the DALI Device.
- The current DALI short address of the DALI Device.
- The user-requested short address of the DALI Device.
  To edit the short address of a DALI Device, simply click a cell in the **Requested SA** to reveal a drop-down list of available short addresses.
  To swap the short address of one DALI Device with another, simply choose the desired short address of one DALI Device, and the other DALI Device with the same short address will automatically be swapped, and can be seen in the **New SA** column.
- The final DALI short address of the DALI Device.

As new short addresses for DALI Devices are chosen, the **After** grid will update to reflect the change. Short address cells are coloured red to indicate a DALI Device that will have its short address changed.

To apply the short addresses changes, click the **Program** button, which will show this dialogue when re-assigning short addresses.



Short address re-assignment in progress

Note: *When short address reprogramming has completed, the DALI Devices in the Test Plan will be updated to reflect the change in short address on the physical device.*

3.2.8 Setting Up Schedules

Setting up all DALI Devices in a Test Plan to be tested according to the AS2293 standard, is a three step process in RAPIX Emergency.

Step 1: Creating Test Schedules

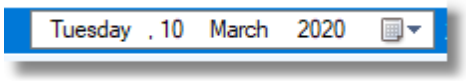
To create test schedules, go to the **Scheduled Tests** tab in Configuration Mode.

See topic Scheduled Tests Tab 23 for more information about this tab.

On this tab, click the **Add Duration Test Schedule** button to create a new Duration Test Schedule. Repeat this step for however many Duration Test Schedules are required to test the site.

Once the Duration Test Schedules have been created and named, set a **Next Run** date and time, which is the time that the Duration Test Schedule is next to be run, as well as a **Frequency** and appropriate name.

To set the Next Run value for a schedule, click the schedule's next run date. This will enable editing of this value.



Editing a schedule's next run date

The small arrow on the right of the cell can be clicked to reveal a drop-down calendar where a data can be selected.

Next, double-click the values in the **Next Run Time** and **Frequency** columns to edit them.

Note: *Press the **Tab** key to edit the next cell in the row, or press **Shift-Tab** to edit the previous cell in the row.*

Step 2: Assigning DALI Devices to Test Groups

When DALI Devices are discovered, they are automatically assigned to test groups such that the test groups will have an equal number of DALI Devices in each.

DALI Devices can be moved from one test group to another, either by dragging and dropping the DALI Device into another test group, or by editing the value displayed in the **Test Group** column, in the DALI Devices list on the DALI Lines tab.

See topic DALI Lines Tab 19 for more information about changing test groups.

Step 3: Assigning Test Schedules to Test Groups

Assigning test schedules to test groups is as simple as clicking on a cell in the **Duration Test Schedule** or **Function Test Schedule** columns, and choosing a schedule from the list.

All other DALI Devices on the same DALI Line in the same test group will be assigned that test schedule.

See topic DALI Lines Tab 19 for more information about assigning schedules to test groups.

Example: Testing a Site in 4 Parts Over 4 Weeks

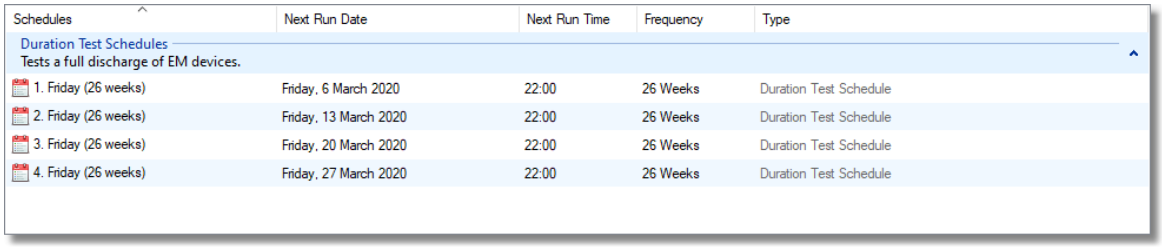
Consider a site that is required to be tested in 4 parts, where each part is required to be tested late on a Friday night.

Creating the 4 Test Schedules

First, four Duration Test Schedules must be created, and each of them must run on a Friday evening.

See topic Scheduled Tests Tab 23 for more information.

See the screenshot below to see how these Duration Test Schedules may be set up.



Schedules	Next Run Date	Next Run Time	Frequency	Type
Duration Test Schedules Tests a full discharge of EM devices.				
1. Friday (26 weeks)	Friday, 6 March 2020	22:00	26 Weeks	Duration Test Schedule
2. Friday (26 weeks)	Friday, 13 March 2020	22:00	26 Weeks	Duration Test Schedule
3. Friday (26 weeks)	Friday, 20 March 2020	22:00	26 Weeks	Duration Test Schedule
4. Friday (26 weeks)	Friday, 27 March 2020	22:00	26 Weeks	Duration Test Schedule

Four Duration Test Schedules set up to be run on Friday evenings

The first Duration Test Schedule **1. Friday (26 Weeks)** will execute on the 6th March at 10:00 pm. Then, on the following Friday at the same time, **2. Friday (26 Weeks)** will be executed, and so on for the four schedules.

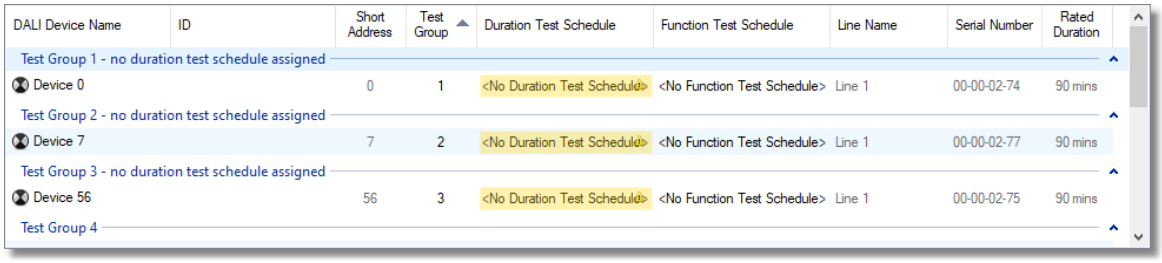
Once each Duration Test Schedule is run, its next run date will automatically be incremented by the frequency (26 weeks in this example).

Assigning DALI Devices to 4 Test Groups

Next, all of the DALI Devices must be assigned to one of four test groups.

See the section *Configuring Test Groups* in topic DALI Lines Tab 19 for more information on how to assign test groups to DALI Devices.

See the screenshot below to see how these test groups may be assigned.

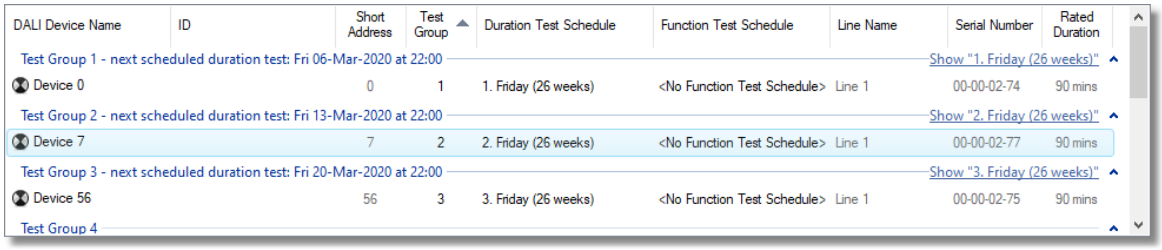


Four DALI Devices assigned to 4 test groups

Assigning Schedules to Test Groups

Finally, the Duration Test Schedules must now be assigned to the DALI Devices in the test groups.

See the screenshot below to see how these the Duration Test Schedules may be assigned.



Four DALI Devices assigned to 4 test groups with Duration Test Schedules assigned

These DALI Devices, when RAPIX Emergency is in Run Mode, will now be tested on consecutive Fridays starting with **Device 0** on Friday the 6th March at 10:00 pm.

Note: *In the example test groups above, the stairwell DALI Devices are spread across multiple test groups to ensure that a single duration test will not test the entire stairwell at once. This is to minimise the risk of the entire stairwell not being able to remain illuminated in the case of a power outage occurring when the batteries are not fully charged after a duration test.*

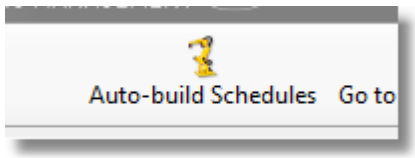
See topic DALI Lines Tab 19 for more information on test schedule assignment.

3.2.9 Auto-build Schedules

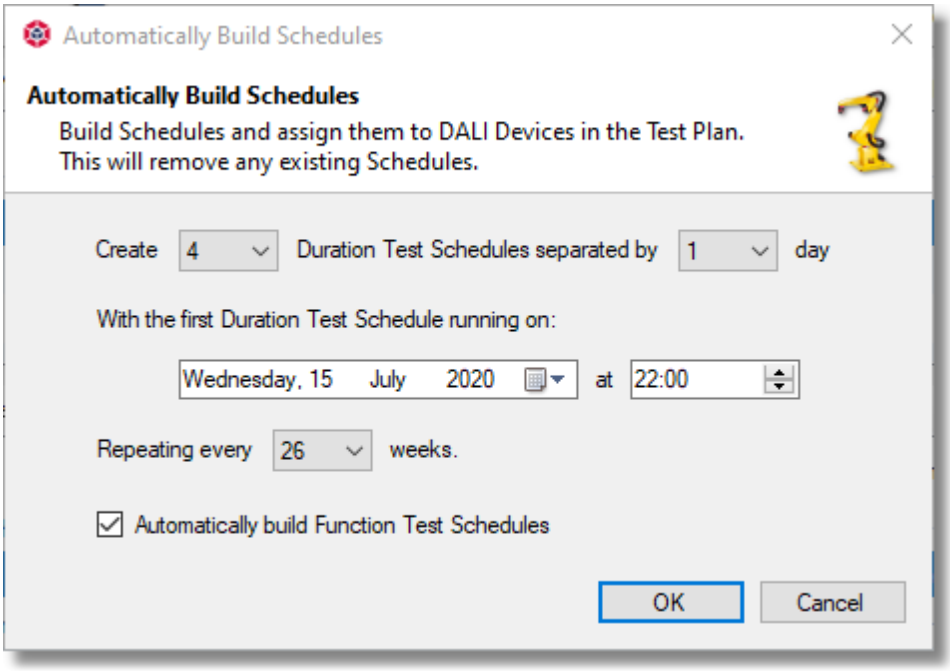
The process of creating schedules, assigning DALI Devices to test groups and associating schedules to test groups can be tedious.

RAPIX Emergency provides a quick method for creating schedules for a Test Plan.

This can be done using the **Automatically Build Schedules** dialogue, by clicking the Auto-build Schedules button on the main toolbar:



The Auto-build Schedules button



The Automatically Build Schedules dialogue

The dialogue allows the configuration of:

- How many Duration Test Schedules to create.
- Whether 1 day or 7 days separates consecutive Duration Test Schedules.
- When the first Duration Test Schedule is to be run.
- How often the Duration Test Schedules repeat.
- Whether to create Function Test Schedules as well.

When the desired options have been chosen, click the **OK** button to apply the changes.

Note: *A warning will appear upon clicking* ***OK*** *confirming the changes, because all existing Duration Test Schedules and Function Test Schedules will be overwritten.*

3.2.10 Password Management

Parts of RAPIX Emergency are protected by two types of passwords.

The types of passwords that protect different areas of RAPIX Emergency are:

- The supervisor password.
- The maintenance password.

Note: *The passwords apply to a single installation of RAPIX Emergency, and are first set when installing RAPIX Emergency. They are not stored in Test Plan files.*

The Supervisor Password

The supervisor password provides full access to all areas of RAPIX Emergency.

RAPIX Emergency will ask for a supervisor password when:

- Creating a new Test Plan or opening an existing Test Plan from the Welcome screen.

- Attempting to close down RAPIX Emergency.
- Exiting Run Mode to go to Configuration Mode to reconfigure a Test Plan.
- Closing a running Test Plan in Run Mode.

In essence, the supervisor password is designed to restrict anyone but those with "supervisor" access to RAPIX Emergency from stopping the monitoring of a site.

The Maintenance Password

The maintenance password provides limited access to some areas when RAPIX Emergency is running a Test Plan in Run Mode.

RAPIX Emergency will ask for a maintenance password when:

- Initiating a manual Device Presence Check from the Dashboard.
- Scheduling a manual duration test in Run Mode.
- Running a manual Function Test in Run Mode.
- Removing a manual duration test from the Test Plan when in Run Mode.
- Stopping a currently-active Duration Test or Function Test.

In essence, the maintenance password is designed to restrict anyone but those who are responsible for the maintenance of a site from performing any functions on physical DALI Devices.

3.2.11 Auto-configure Test Plan

Setting up a Test Plan can be a tedious process, and in many cases it may be sufficient to use the auto-configuration feature of RAPIX Emergency to set up a Test Plan and perform any modifications after.

The auto-configuration feature can be started from a button on the welcome screen, called **Auto-configure Test Plan**.

The auto-configure button on the welcome screen

To automatically configure a site, simply click the **Auto-configure Test Plan** button on the welcome screen. RAPIX Emergency will then, without the need for any user input:

1. Automatically discover any DALI Interface Devices on the local area network, and add them to the Test Plan; then
2. Automatically discover any DALI Devices connected to any of the discovered DALI Interface Devices, and add them to the Test Plan; then
3. Place all of the discovered DALI Devices into 4 test groups; then
4. Create 4 Duration Test Schedules and 4 Function Test Schedules and assign them to the 4 test groups; then
5. Show a summary dialogue that notifies the user how many DALI Interface Devices, DALI Lines, and DALI Devices were added to the Test Plan.

Note: *The default setup for Duration Test Schedules when using this feature, is to create Duration Test Schedules that will run a day apart, with a repeat frequency of 26 weeks.*

After using this feature to set up a Test Plan, the DALI Devices can be moved between test groups,

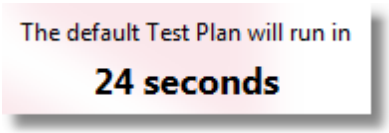
and schedules can be modified as required.

4 Monitoring a Site

4.1 User Interface (Run Mode)

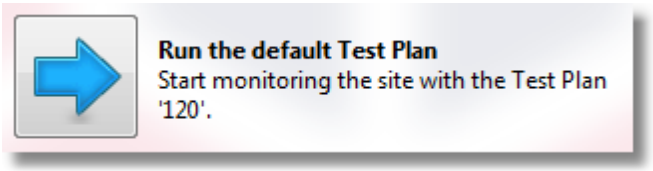
There are 3 ways to enter Run Mode.

1. When RAPIX Emergency opens it will, after 30 seconds, attempt to open the default Test Plan in Run Mode.



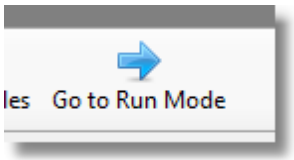
The welcome screen's Test Plan countdown

2. By clicking the **Run the default Test Plan** button on the welcome screen, to open the Test Plan in Run Mode.



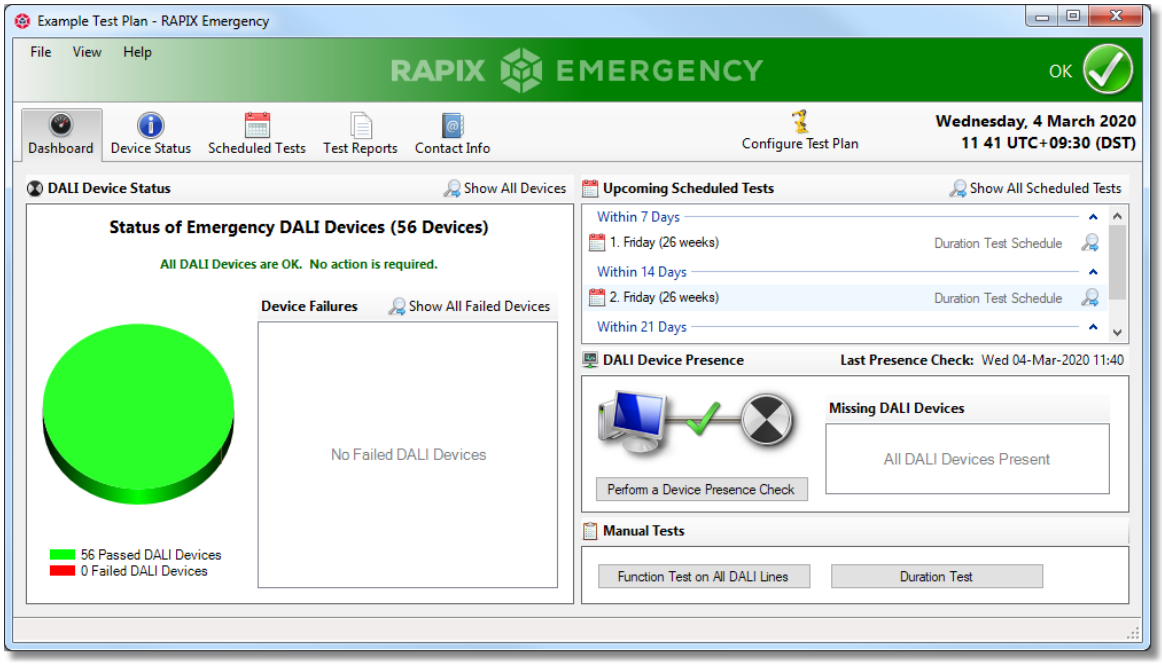
The Run the default Test Plan button

3. By clicking the **Go to Run Mode** button in Configuration Mode.



The Go to Run Mode button

When in Run Mode, the user interface consists of a single window where a Test Plan can be managed, and the status of DALI Devices can be viewed.



A Test Plan in the Run Mode user interface

Status Bar

The menu and status bar provides functionality to manage Test Plans, and to view the overall status of the Test Plan.

No Failures in the Test Plan

If all DALI Devices in the Test Plan are OK and have passed all of the Duration Test Schedules and Function Test Schedules assigned to them, then the Test Plan is considered to be OK, and the status bar will be displayed in green, as follows:

The Run Mode status bar indicating that everything is OK

Failures in the Test Plan

If one or more DALI Devices has not passed a Duration Test Schedule or Function Test Schedule, then the whole Test Plan is considered to be in an error state, and the status bar will be displayed in red, with a short summary of how many failures are present in the Test Plan written on the right hand side:

The Run Mode status bar indicating that 14 failed DALI Devices and 2 untested DALI Devices

When displaying failures in the Test Plan, number of DALI Devices that have failed a test, as well as the number of DALI Devices that have not yet been tested, will be displayed in the status bar.

Tests Currently Running

If there are any tests that are currently running, the status bar will be displayed in blue, and an animated icon showing chasing arrows will be shown, as follows:

The Run Mode status bar indicating that a test is currently running

When tests complete, and there are no more currently-active tests, then the status bar will return to a colour indicating the new state of the Test Plan.

Menu Bar

The menu bar provides functionality to manage Test Plans.

File Menu

"Close" menu-item
Click this to close the currently-running Test Plan. A supervisor password will be required before a Test Plan can be closed. Once the Test Plan is closed, RAPIX Emergency will return to the Welcome screen.

"Exit" menu-item
Click to exit RAPIX Emergency. A supervisor password will be required before RAPIX Emergency can be exited.

View Menu

The View menu allows for navigation between the 5 tabs mentioned below. Click any menu-item to show that tab.

The menu-item representing the currently-visible tab will be displayed with a tick next to it.

Help Menu

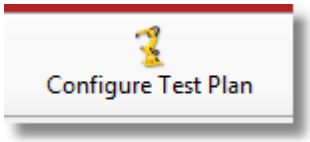
The Help menu provides access to the RAPIX Emergency help files and About dialogue.

"Help Contents..." menu-item
Click this item to open the help file for RAPIX Emergency.

"About RAPIX Emergency..." menu-item
Click this item to open the About dialogue for RAPIX Emergency.

Configuring a Test Plan

The tab bar in Run Mode provides a button called **Configure Test Plan**, which, when the Test Plan requires re-configuring, can be clicked to exit Run Mode and enter Configuration Mode to edit it.



The Configure Test Plan button

A supervisor password will be required before RAPIX Emergency can exit Run Mode.

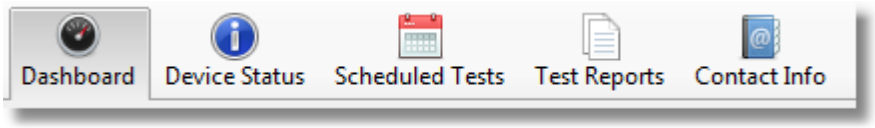
Date and Time Display

When RAPIX Emergency is in Run Mode, the current date and time is always displayed.

The time zone offset, and whether daylight savings is currently active, is also displayed.

Run Mode Tabs

This window consists of five main tabs that allow for the on-going management and maintenance of a Test Plan.



Run Mode tabs

The tabs are explained below.

Dashboard tab

This tab is used to view the current status of a Test Plan in three ways:

- The number of DALI Device failures, and their failure types, can be seen.
- Any upcoming tests that are scheduled to be run within the next four weeks, can be seen.
- Any DALI Devices that are considered missing after running a Device Presence Check can be seen.

See topic Dashboard Tab 48 for more information about this tab.

Device Status tab

This tab is used to view the status of, and identify, DALI Interface Devices and DALI Devices. Manual duration tests and function tests can also be initiated from this tab.

See topic Device Status Tab 51 for more information about this tab.

Scheduled Tests tab

This tab is used to view scheduled tests, and to see when particular DALI Devices are to be tested.

See topic Scheduled Tests Tab[55] for more information about this tab.

Test Reports tab

This tab is used to view the PDF test reports that are generated when tests complete.

See topic Test Reports Tab[57] for more information about this tab.

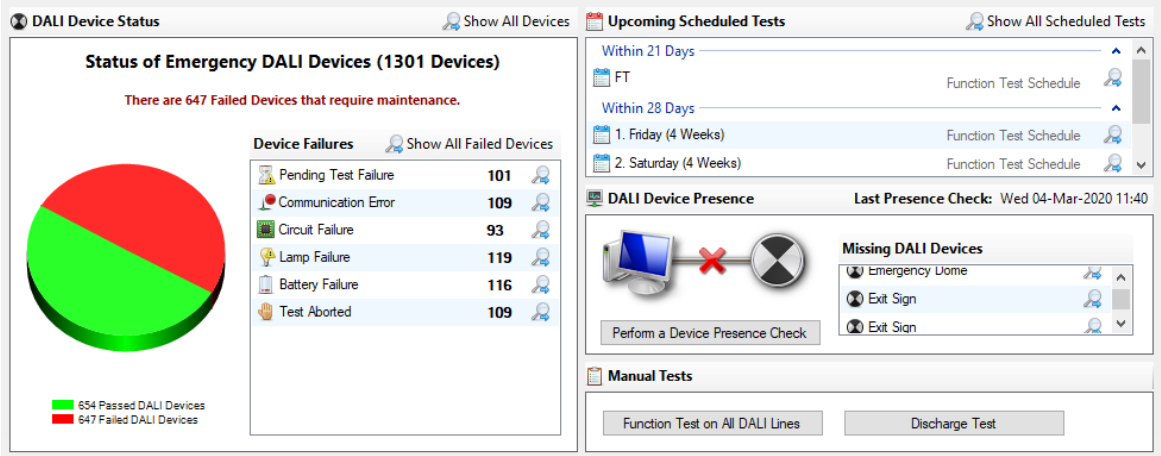
Contact Info tab

This tab is used to view the contact details of people who may be required to be contacted in case of problems with the site.

See topic Contact Info Tab[58] for more information about this tab.

4.1.1 Dashboard Tab

This tab provides a quick at-a-glance view of the status of a Test Plan.



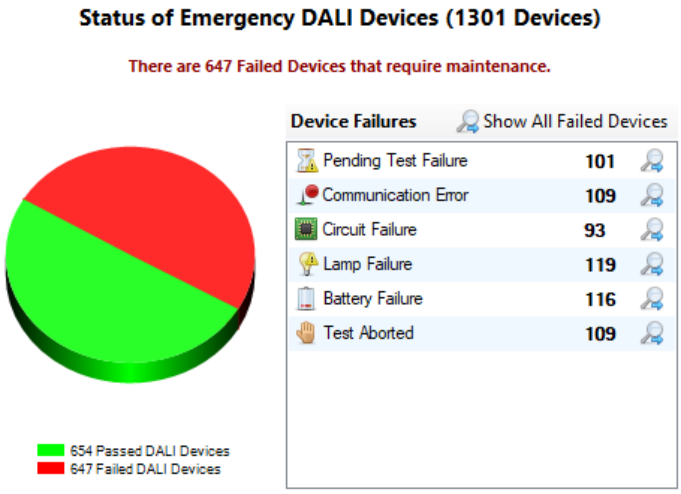
The Dashboard tab

At a glance, the status of DALI Devices can be seen, as well as what scheduled tests are upcoming, and which DALI Devices, if any, are currently not accessible via RAPIX Emergency.

Note: *Anywhere where there is a magnifying glass icon can be clicked to navigate RAPIX Emergency to either the Device Status tab or the Scheduled Tests tab, to display more information about the item that was clicked.*

Status of DALI Devices

The DALI Device status section of the Dashboard tab displays a tally of all of the DALI Devices that have passed and failed their scheduled tests.



DALI Device status

Pie Chart

The pie chart represents all of the DALI Devices in the Test Plan, with the green and red sectors representing the number of DALI Devices that have passed or failed their tests, respectively.

The green and red sectors can be single-clicked, to display all of the respective DALI Devices in the Device Status tab.

Device Failures List

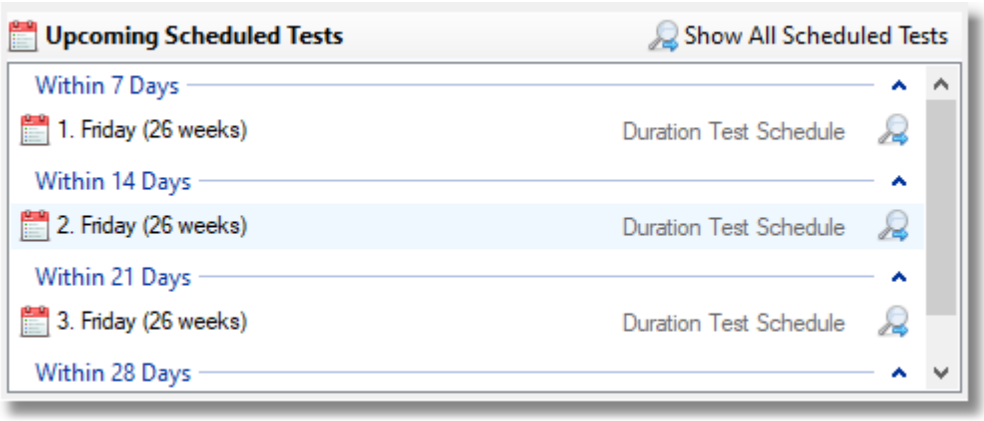
The list of DALI Device failures tallies up all of the different types of DALI Device failures in the Test Plan.

Clicking the **Show All Failed Devices** button will show the **Device Status** tab, and filter all DALI Devices in the Test Plan to show all of the failed DALI Devices only.

The magnifying glass icons in the list can be single-clicked, which will go to the **Device Status** tab to display all of the DALI Devices with that reported failure type. For example, clicking the magnifying glass for the *Battery Failure* row will display all of the DALI Devices that have reported a battery failure, on the **Device Status** tab. Note that each row can also be double-clicked to perform the same action.

Upcoming Scheduled Tests

The Upcoming Scheduled Tests section displays all of the scheduled tests in the Test Plan that are scheduled to run within the next 4 weeks.



Upcoming Schedules

The scheduled tests are listed in time order, such that scheduled tests that will run sooner will be displayed at the top, and scheduled tests that rill run later will be displayed at the bottom.

The scheduled tests are also grouped into one-week groups, to make it easier to see which tests will run in the next 7 days, 14 days, and so on.

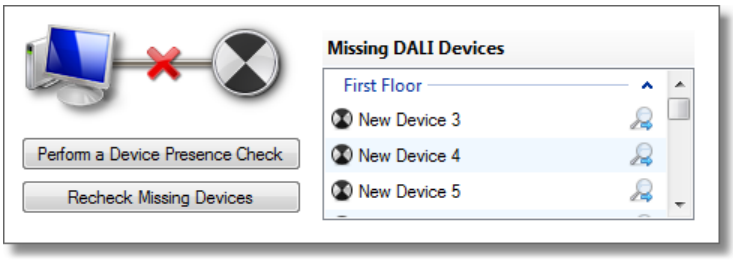
The magnifying glass icons in the list can be single-clicked, which will go to the **Scheduled Tests** tab to display more information about the selected scheduled tests. Note that each row can also be double-clicked to perform the same action.

DALI Device Presence

The DALI Device Presence section displays all of the DALI Devices in the Test Plan that are considered to be missing.

When RAPIX Emergency enters Run Mode, a Device Presence Check is automatically run, whereby all of the DALI Devices in the Test Plan are polled to check that they are still connected to DALI. A Device Presence Check is also run once per week thereafter.

Any DALI Devices that do not respond will be considered missing. Note that if a communication fault occurs between RAPIX Emergency and DALI, all of the affected DALI Devices may be considered missing.



Device Presence Check showing missing DALI Devices

The list displays all of the missing DALI Devices, which are grouped by the DALI Line on which they reside.

The magnifying glass icons in the list can be single-clicked, which will show the **Device Status** tab to display more information about the selected DALI Device. Note that each row can also be double-clicked to perform the same action.

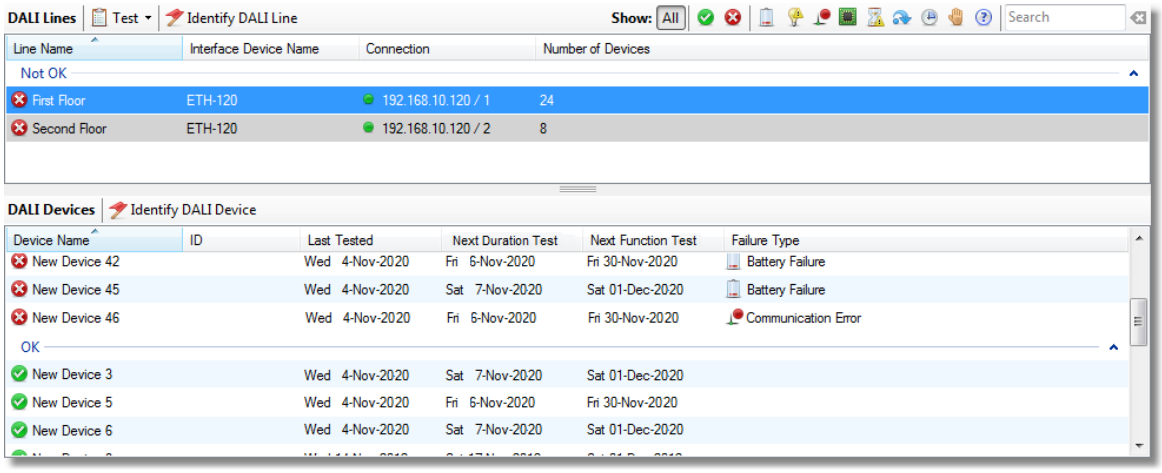
Running a Manual Device Presence Check

A manual Device Presence Check can be triggered by clicking the **Perform a Device Presence Check** button. The Device Presence Check can take a few seconds, during which time a cancel button will be visible.

If there are missing DALI Devices, a Device Presence Check can be run on just those missing DALI Devices to check if they are still missing by clicking the **Recheck Missing Devices** button.

4.1.2 Device Status Tab

This tab is used to view the status of, and identify, DALI Interface Devices and DALI Devices.



The Device Status tab

DALI Lines list

The top-most list displays all of the DALI Lines in the Test Plan.

Each row represents a DALI Line, and displays the following attributes for each DALI Line:

- The name of the DALI Line.
- The name of the DALI Interface Device that the DALI Line is a part of.
- What type of connection is made to the DALI Line; whether it is Ethernet-based or Serial-based.
- The number of DALI Devices on the DALI Line.
- The status of the DALI Line.
  The status is depicted by the icon on the left-side of each row, where a DALI Line with a red cross is considered not OK, and a DALI Line with a green tick is considered OK.
  A DALI Line is OK only if all of its DALI Devices have passed their tests.

DALI Line Buttons

There are buttons that allow for the manual testing, and identification, of DALI Devices.

Toolbar for the DALI Lines list

"Test" drop-down button
Click this button to reveal a menu that provides the ability to run a manual function test, and to schedule a manual duration test. These actions require a maintenance password to be entered before continuiing.

See topic Run a Manual Function Test[58] for more information about running a manual function test on DALI Devices, and topic Scheduling a Manual duration test[60] for more information about scheduling a manual duration test.

"Identify DALI Line" button
Click this button when there are DALI Lines selected in the list, to commence identification of the DALI Interface Devices and DALI Devices on those DALI Lines. This button will remain checked until clicked again..

DALI Devices list

The bottom-most list displays all of the DALI Devices for the selected DALI Lines.

Each row represents a DALI Device, and displays the following attributes for each DALI Device:

- The name of the DALI Device.
- The ID of the DALI Device, which is a text-based property describing it.
- The date that the DALI Device last performed a duration test or function test, whichever was sooner.
- The date that the DALI Device is to next run a duration test.
- The date that the DALI Device is to next run a function test.
- The status of the DALI Device.

DALI Devices Buttons

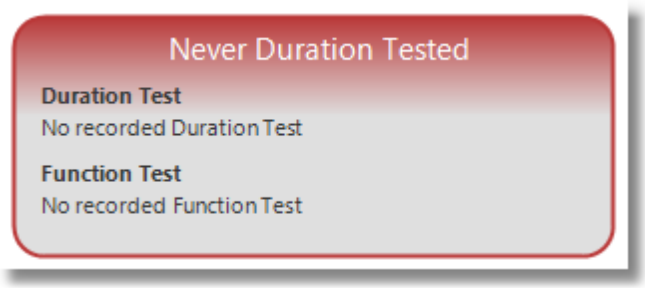
There is a button that allows for the identification of DALI Devices.

Toolbar for the DALI Devices list

"Identify DALI Device" button
Click this button when there are DALI Devices selected in the list, to commence identification of the DALI Devices. This button will remain checked until clicked again.

More Information About DALI Devices

When a DALI Device is selected in the list, a pop-up appears in the lower-right of the list, displaying more information about the status of the DALI Device.

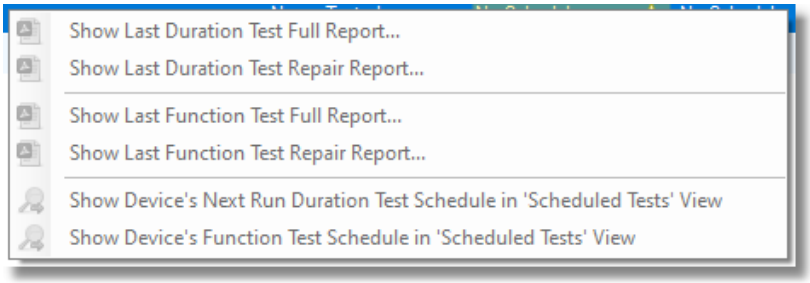


Device Status pop-up for a selected DALI Device

The pop-up displays both the result and date that the DALI Device ran a function test and a duration test.

Right-click Menus

Right-click in the DALI Devices list to access extra options for the selected DALI Device.



Right-click menu in DALI Devices list

"Show Last duration test Full Report..." item
Click this item to view the full PDF test report for the last duration test that the selected DALI Device performed. RAPIX Emergency will go to the **Test Reports** tab and select the PDF test report in the list, and then attempt to open the PDF test report in the computer's default PDF file viewer.
See topic Test Reports[64] for more information about the different types of RAPIX Emergency test reports.

"Show Last duration test Repair Report..." item
Click this item to view the PDF repair report for the last duration test that the selected DALI Device performed. RAPIX Emergency will go to the **Test Reports** tab and select the PDF test report in the list, and then attempt to open the PDF test report in the computer's default PDF file viewer.
See topic Test Reports[64] for more information about the different types of RAPIX Emergency test reports.

"Show Last Function Test Full Report..." item
Click this item to view the full PDF test report for the last function test that the selected DALI Device performed. RAPIX Emergency will go to the **Test Reports** tab and select the PDF test report in the list, and then attempt to open the PDF test report in the computer's default PDF file viewer.
See topic Test Reports[64] for more information about the different types of RAPIX Emergency test reports.

"Show Last Function Test Repair Report..." item
Click this item to view the PDF repair report for the last function test that the selected DALI Device performed. RAPIX Emergency will go to the **Test Reports** tab and select the PDF test report in the list, and then attempt to open the PDF test report in the computer's default PDF file viewer.
See topic Test Reports[64] for more information about the different types of RAPIX Emergency test reports.

"Show Device's Next Run Duration Test Schedule in 'Scheduled Tests' View" item
Click this item when a DALI Device is selected in the list, to show the DALI Device's duration test that it will next run in the **Scheduled Tests** tab. RAPIX Emergency will select the Duration Test Schedule in the **Scheduled Tests** tab, and then select the DALI Device in that test as well.

"Show Device's Function test Schedule in 'Scheduled Tests' View" item
Click this item when a DALI Device is selected in the list, to show the DALI Device's function test that it will next run in the **Scheduled Tests** tab. RAPIX Emergency will select the Function Test Schedule in the **Scheduled Tests** tab, and then select the DALI Device in that test as well.

Searching for DALI Lines or DALI Devices

In the top-right corner of the tab is a search box and search buttons, which can be used to search for DALI Lines and DALI Devices.

The search bar on the Device Status tab

DALI Lines and DALI Devices can be searched by typing in text, and by filtering based on the status of the DALI Devices.

The status filter buttons, from left to right, which can display DALI Devices based on their status, are:

- **All.** Show all DALI Devices in the Test Plan regardless of their status.

- **All Passed.** Show all DALI Devices in the Test Plan that have passed their most recent tests.
- **All Failed.** Show all DALI Devices in the Test Plan that have failed a duration test or function test for any reason.

- **Battery Failures.** Show all DALI Devices in the Test Plan that report a battery failure.
- **Lamp Failures.** Show all DALI Devices in the Test Plan that report a lamp failure.
- **Communication Failures.** Show all DALI Devices in the Test Plan that report a communication failure.
- **Circuit Failures.** Show all DALI Devices in the Test Plan that report a circuit failure.
- **Pending Test Failures.** Show all DALI Devices in the Test Plan that report a pending test failure.
- **Missed duration test.** Show all DALI Devices in the Test Plan that report that they have missed a scheduled duration test.
- **Overdue for duration test.** Show all DALI Devices in the Test Plan that have not been tested for more than six months.
- **Duration test Aborted.** Show all DALI Devices in the Test Plan that aborted their last duration test.
- **Never Duration Tested.** Show all DALI Devices in the Test Plan that have never been duration tested.

Search matches are highlighted in yellow in the lists.

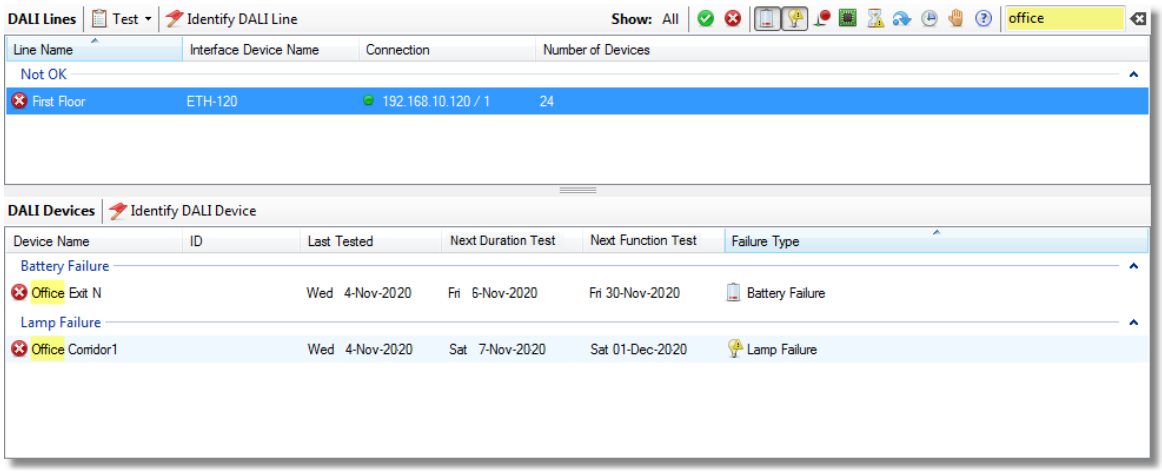
Note: *If the search text that has been entered yields no results, the colour of the search box turns red.*

Searching for DALI Lines and DALI Devices based on their status, as well as text, can be performed. See the examples below for more information.

Example: Searching for all DALI Devices Tagged "Office" with a Battery or Lamp Failure

To search for all DALI Devices that are tagged with the name "office", which have reported a battery or lamp failure:

1. Click the battery failure button and the lamp failure button.
2. Type the text "office" into the search box.
   Note: *Searching by text is case insensitive.*

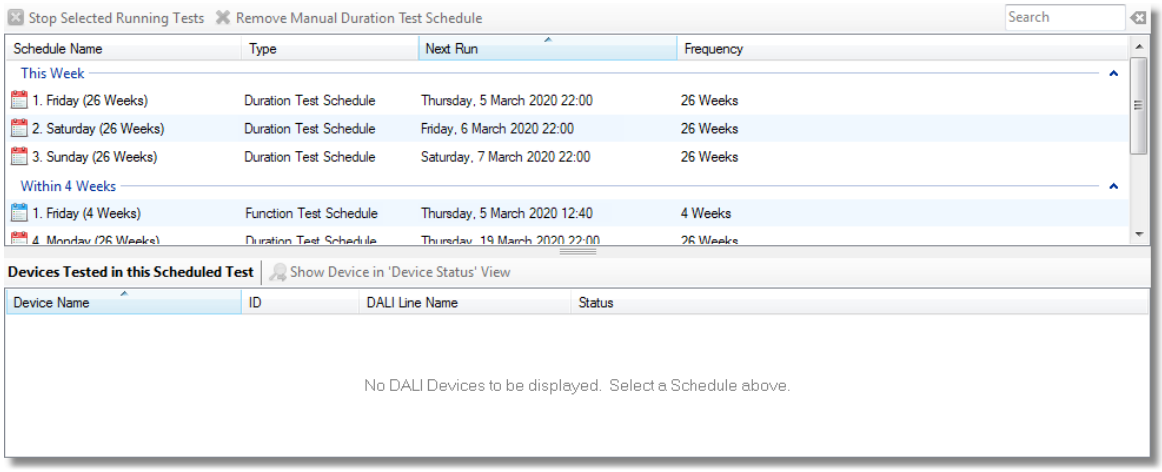


Searching for battery and lamp failures on DALI Devices tagged with the name "office"

All DALI Devices matching the search criteria will be shown, and the word "office" will be highlighted in yellow.

4.1.3 Scheduled Tests Tab (Run Mode)

This tab is used to view scheduled tests in a Test Plan.



The Scheduled Tests tab

Schedules list

The top-most list displays all of the schedules in the Test Plan.

Each row represents a schedule, and displays the following attributes for each schedule:

- The name of the schedule.
- What type of schedule it is.
- The date and time that the schedule is to be run next.
- How often the schedule will be run.

Schedule Buttons

There are buttons that allow the cancellation of currently-active schedules and removal of manual

Duration Test Schedules.

Toolbar for the Schedules list

"Stop Selected Running Tests" button
Click this button when there are currently-active schedules selected in the list, to stop them immediately. A maintenance password will be required to perform this action.
See topic Stopping Active Schedules[64] for more information about stopping currently-active schedules.

"Remove Manual Duration Test Schedule" button
Click this button when there is a manual Duration Test Schedule selected in the list, to remove it from the Test Plan. A maintenance password will be required to perform this action.

Right-click Menus

Right-click in the schedules list to access the same functionality as in the toolbar.

Devices Tested in this Scheduled Test list

The bottom-most list displays all of the DALI Devices that are tested by the currently-selected schedule.

Note: *DALI Devices will be shown only if one schedule is selected at a time.*

Each row represents a DALI Device, and displays the following properties for each DALI Device:

- The name of the DALI Device.
- The ID of the DALI Device, which is a text-based property describing it.
- The name of the DALI Line that the DALI Device is on.
- The current status of the DALI Device.

Devices Tested in this Scheduled Test Buttons

Toolbar for the Devices Tested in this Scheduled Test list

"Show Device in 'Device Status' View" button
Click this button to show the selected DALI Device in the Device Status tab. This will select the DALI Line that the selected DALI Device is on, and then select the DALI Device itself.

Right-click Menus

Right-click in the Devices Tested in this Scheduled Test list to access the same functionality as in the toolbar.

Searching for Schedules or DALI Devices

In the top-right corner of the tab is a search box, which can be used to search for schedules and the DALI Devices tested by them.

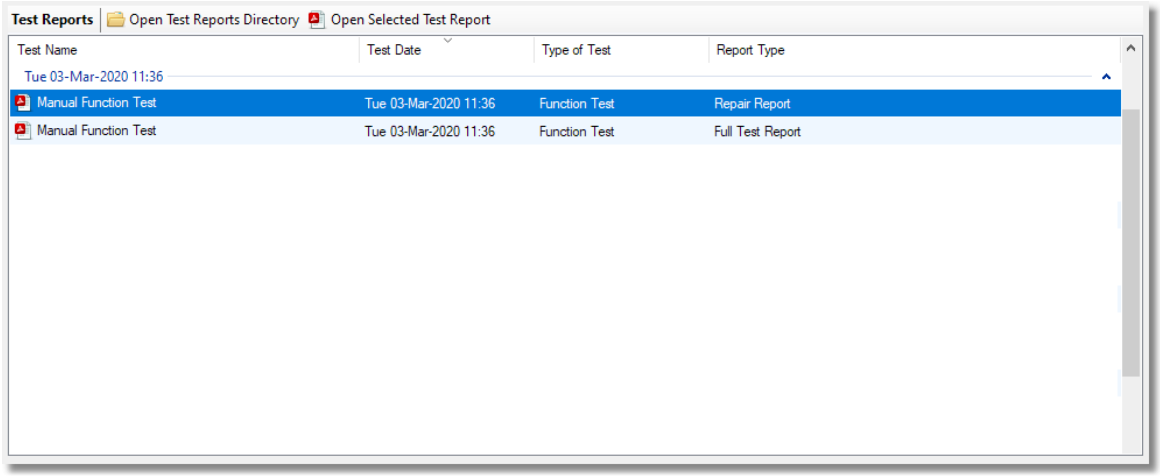
The search box

Search matches are highlighted in yellow in the lists.

Note: *If the search text that has been entered yields no results, the colour of the search box turns red.*

4.1.4 Test Reports Tab

This tab is used to view PDF test reports generated by RAPIX Emergency after tests on DALI Devices have been run.



The Test Reports tab showing two PDF reports

The list displays all of the PDF test reports for the Test Plan.

Each row represents a PDF report, and displays the following attributes for each report:

- The name of the report.
- The date of the test that was performed which generated the report.
- The type of test that was performed which generated the report.
- The type of report.

When a test completes and the PDF reports have been generated, they will automatically appear in this list.

See topic Test Reports 64 for more information about test reports.

Test Report Buttons

There are buttons that allow for the viewing of PDF test reports.

Toolbar for the Test Reports list

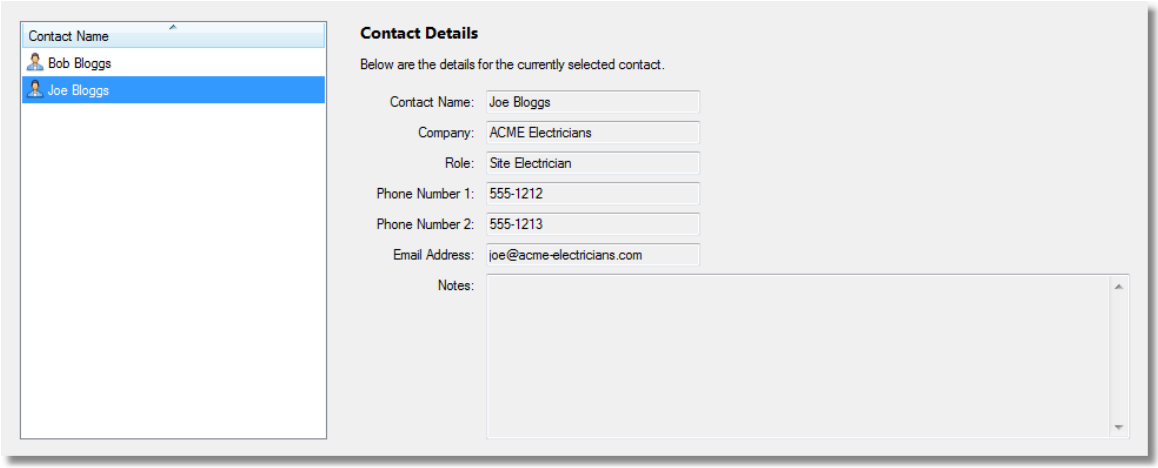
"Open Test Reports Directory" button
Click this button to open the directory where all of the PDF test reports are stored, in Windows Explorer.

"Open Selected Test Report" button
Click this button when there is a PDF report selected in the list, to open the report in the computer's default PDF viewer.

Note: *PDF reports can also be opened in the computer's default PDF viewer by double-clicking the PDF report row in the list.*

4.1.5 Contact Info Tab (Run Mode)

This tab is used to view contacts who can be contacted in case of a problem with the Test Plan.



The Contact Info tab

To view the details of a contact, simply click a contact's name in the list on the left. The details for that contact will then be displayed in the fields on the right.

4.2 Basic Working Procedures

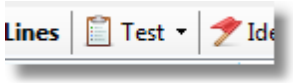
This section describes the most common and important basic tasks that will be used when monitoring a site using a RAPIX Emergency Test Plan.

It is designed as a "How To" guide and reference manual.

4.2.1 Run a Manual Function Test

A manual function test can be run on DALI Devices at any time, by initiating a new test from the **Device Status** tab.

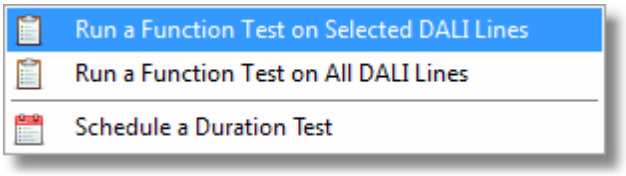
To run a manual function test, simply click the **Test** menu in the DALI Lines toolbar.



The Test menu button in the DALI Lines toolbar

Then, in the resulting drop-down menu, there is an option to perform a function test on:

- All of the DALI Devices on the currently-selected DALI Lines in the DALI Lines list.
- All DALI Devices on all DALI Lines in the Test Plan.

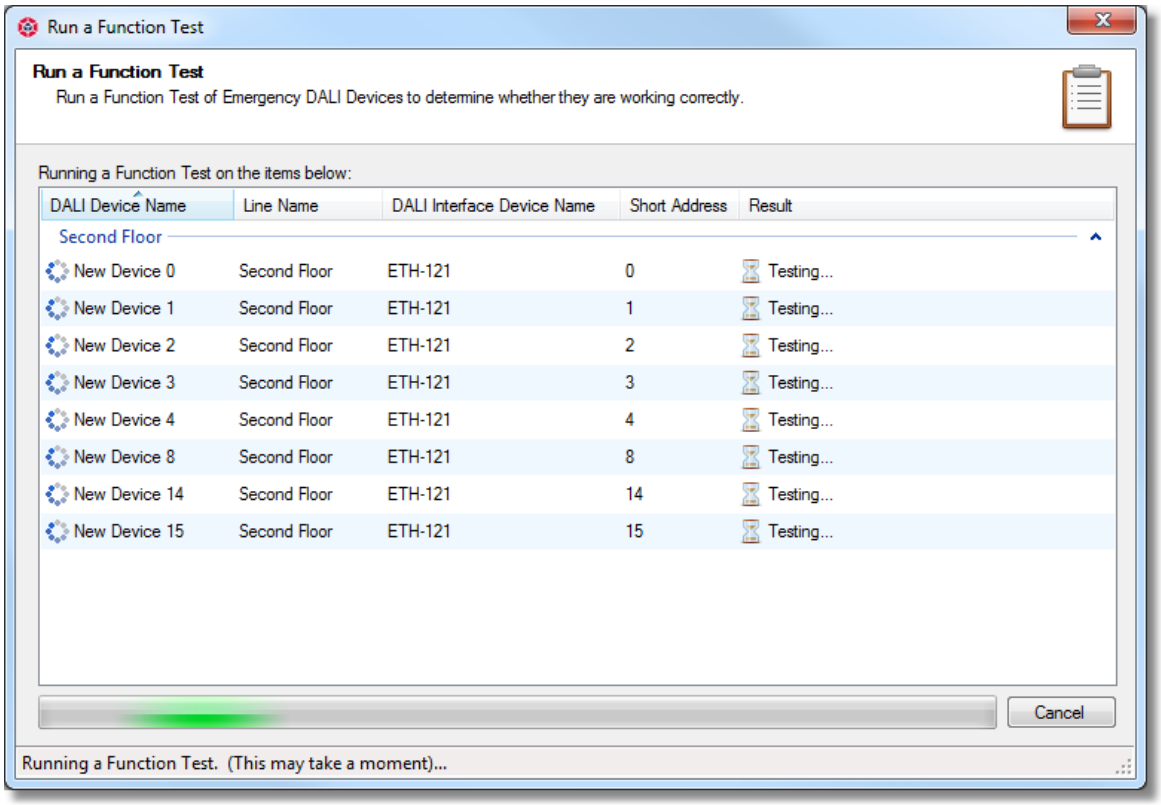


The Tests drop-down menu

Both of these options will launch the **Run a Function Test** dialogue, and a function test will begin immediately.

The Run a Function Test dialogue

The **Run a Function Test** dialogue displays all of the DALI Devices that are being manually function test.



The Run a Function Test dialogue testing 8 DALI Devices

Each row in the list represents a DALI Device, and displays the following properties for each DALI Device:

- The name of the DALI Device.
- The name of the DALI Line that the DALI Device is on.
- The name of the DALI Interface Device that the DALI Device is on.
- The short address of the DALI Device.
- The result of the function test on the DALI Device.
  The result of the function test on a DALI Device will be **Testing...** while the function test is in progress.
  Once the function test completes, the result of the function test will then be displayed.

Aborting the Function Test

To abort the function test, simply click the **Cancel** button, or click the red **X** in the top-right corner of the window.

The function test will then be immediately cancelled.

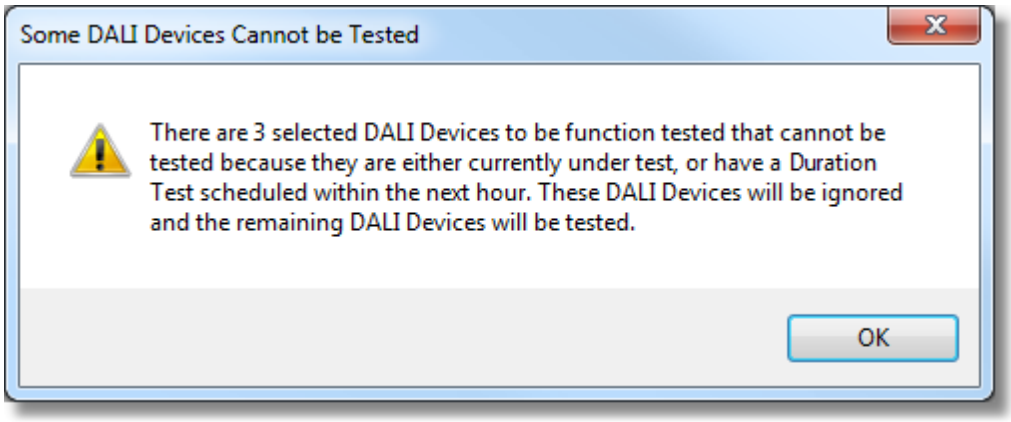
Conditions for DALI Devices to Perform a Function Test

There are conditions that a DALI Device must meet if it is to perform a function test.

To perform a function test, the DALI Device must:

- Not currently be under test.
- Not have a scheduled or manual duration test scheduled to be run on it within the next hour.

If any DALI Devices do not meet these conditions, a warning will be shown, similar to below:



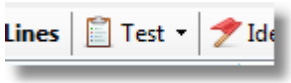
Warning shown when DALI Devices cannot perform a function test

The DALI Devices that cannot be tested will be ignored for this function test.

4.2.2 Scheduling a Manual Duration Test

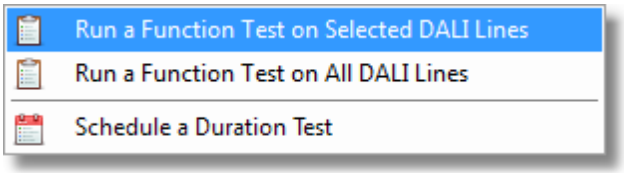
A manual duration test can be run on DALI Devices at any time, via the **Device Status** tab.

To schedule a new manual duration test, simply click the **Test** menu in the DALI Lines toolbar.



The Test menu button in the DALI Lines toolbar

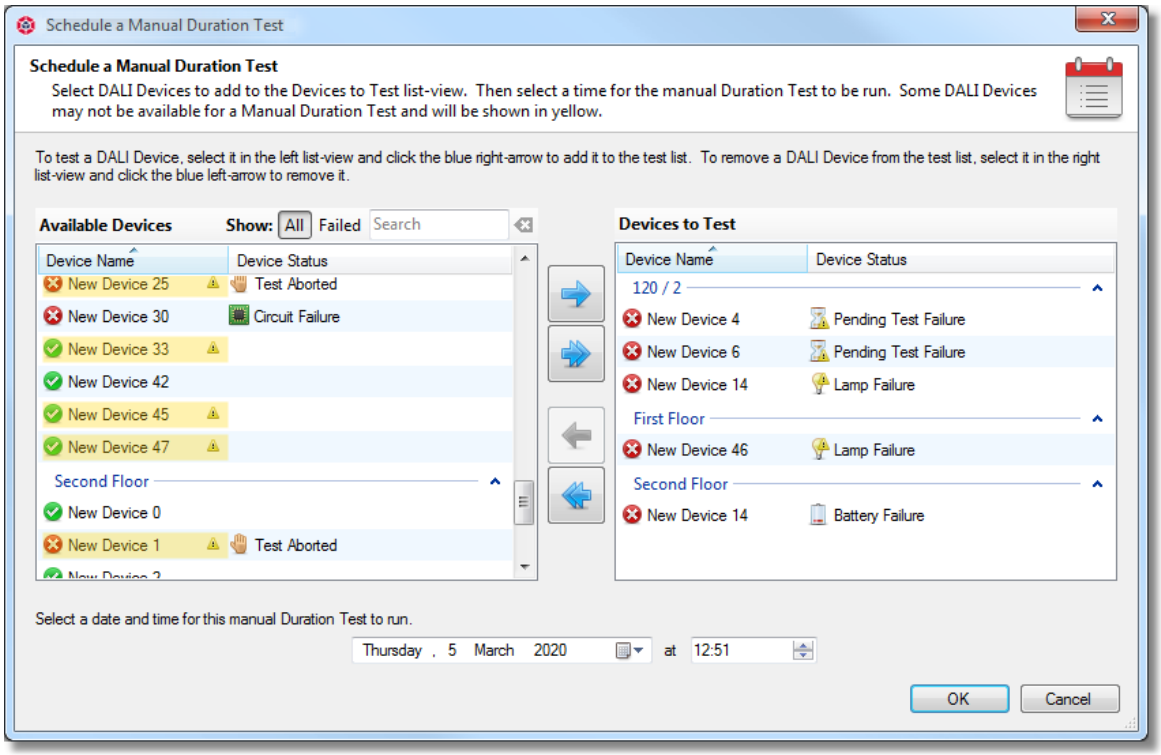
Then, in the resulting drop-down menu, there is the option to schedule a new duration test.



The Tests drop-down menu

Select the **Schedule a duration test** item to show the **Schedule a Manual duration test**

dialogue.



The Schedule a Manual duration test dialogue

From this dialogue, the DALI Devices can be configured, as well as the date and time that the schedule is due to run.

Available Devices list

The available DALI Devices list displays all of the DALI Devices that can be added to the manual Duration Test Schedule.

Each row represents a DALI Device, and displays the following properties for each DALI Device:

- The name of the DALI Device.
- The current status of the DALI Device.
- Whether or not the DALI Device can be added to the Duration Test Schedule (displayed with yellow highlighting).

All of the DALI Devices displayed in this list are grouped by their DALI Line.

Searching for Available DALI Devices

In the top-right corner above the Available Devices list, is a search box and search buttons, which can be used to search for DALI Devices.

The Available Devices search box

DALI Devices can be searched for by typing in text, and by selecting whether to show all DALI

Devices or only failed DALI Devices.

Search matches are highlighted in yellow in the list.

Note: *If the search text that has been entered yields no results, the colour of the search box turns red.*

Devices to Test list

The **Devices to Test** list displays all of the DALI Devices that have been added to the manual Duration Test Schedule.

Each row represents a DALI Device, and displays the following properties for each DALI Device:

- The name of the DALI Device.
- The current status of the DALI Device.

All of the DALI Devices displayed in this list are grouped by their DALI Line.

Default DALI Device Setup

By default, when this dialogue is opened, the **Devices to Test** list will be pre-populated with all of the failed DALI Devices in the Test Plan.

This makes it easy when wanting to schedule a manual duration test to re-test all of the failed DALI Devices in the Test Plan, after making repairs to them.

Adding or Removing DALI Devices to the Test

DALI Devices can be added and removed from the list of DALI Devices to Test.

Adding a DALI Device to the Test

To add a DALI Device to the test, simply select the DALI Device to be added in the **Available Devices** list, then click the **Add DALI Device** button, depicted by a blue right-pointing arrow.

From top to bottom: The Add, All All, Remove, and Remove All buttons

The DALI Device can also be added to the **Devices to Test** list by double-clicking the DALI Device to be added.

To add all DALI Devices to the manual Duration Test Schedule, simply click the **Add All DALI Devices** button.

Removing a DALI Device from the Test

To remove a DALI Device from the test, simply select the DALI Device to be removed in the **Devices to Test** list, then click the **Remove DALI Device** button, depicted by a blue left-pointing arrow.

The DALI Device can also be removed from the **Devices to Test** list by double-clicking the DALI Device to be removed.

To remove all DALI Devices from the manual Duration Test Schedule, simply click the **Remove All DALI Devices** button.

Setting the Run Date

To set the date and time that the schedule is to be run, simply choose the desired date and time via the picker controls.

The Manual Duration Test Schedule date and time pickers

The allowable date selection is restricted to between the time that the dialogue was opened, and the end of the 7th day from now. Also, by default, when the dialogue opens, the date and time will be set to 24 hours and 30 minutes from now.

So, for example, if it is Thursday the 19th of November 2020 at 9:17 am, then:

- The default run date for the schedule will be set to Friday the 20th of November at 9:47 am.
- The latest possible date and time that can be selected is Thursday the 26th of November at 11:59 pm.

The purpose of the default date and time being set to 24 hours and 30 minutes in the future, is to minimise the chances of battery failures being reported on DALI Devices that may have been tested within the last 24 hours, (which have hence not had sufficient time to recharge).

Manual duration test Requirements for DALI Devices

Some DALI Devices may be highlighted in yellow, indicating that they are not able to be added to the **Devices to Test** list for testing.

Untestable DALI Device

A DALI Device is not able to be manually duration tested, if:

- It is already scheduled for a duration test within the next 8 days.
  The possibility may exist where a DALI Device may be scheduled for a duration test,within 24 hours of the manual duration test.

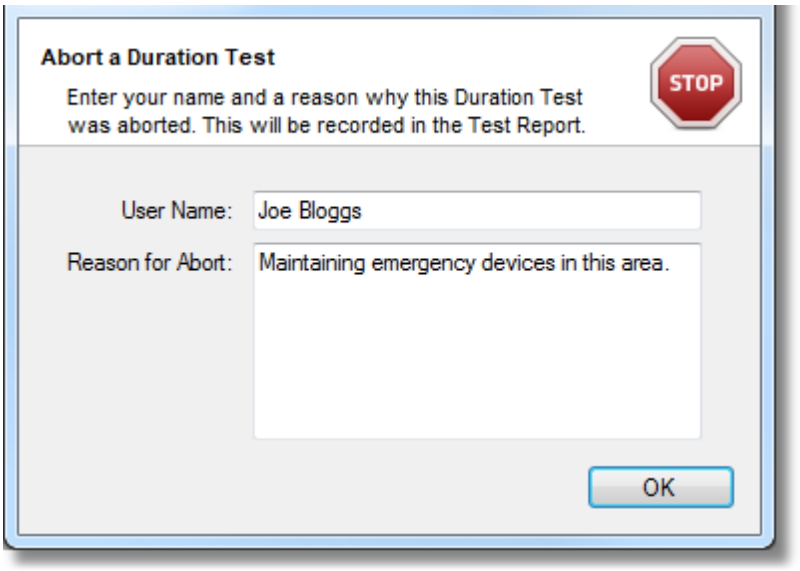
- If it is currently under test.
  The possibility may exist, if a DALI Device is currently being duration tested, that it can be scheduled for a manual duration test without sufficient time given for the battery to be recharged.

4.2.3 Stopping Active Schedules

When monitoring a site with a Test Plan, sometimes it may be necessary to stop a scheduled duration test or function test.

In RAPIX Emergency, this can be done on the **Scheduled Tests** tab:

1. Select the currently-running schedule that is to be aborted in the schedules list.
2. Click the **Stop Selected Running Tests** button in the toolbar.
3. Enter the maintenance password to continue.
4. If aborting a duration test, the name of the person cancelling the test, and a reason for why the test was cancelled, must be entered.
   The user name and reason are published in the aborted test's PDF reports.



The Abort a duration test dialogue

Aborting a duration test

When aborting a duration test, all of the DALI Devices that were being tested will cancel their tests, and will report the **Test Aborted** state.

Aborting a Function Test

When aborting a function test, all of the DALI Devices that were being tested will cancel their tests, and no results will be published for the DALI Devices. The effect of aborting a function test is the same as not running a function test at all.

4.3 Test Reports

Test reports are reports that are automatically generated by RAPIX Emergency upon the completion of a function test or duration test.

The test reports are written in PDF format, which requires a PDF viewer like Adobe Reader to view.

Types of Test Reports

RAPIX Emergency generates two types of reports upon the completion of a duration test or function test.

They are:

- The full test report; and
- The repair report.

Full Test Report

The full test report is a summary of all of the results from the duration test or function test.

This report begins with a pie chart representing the proportion of DALI Devices that passed the test, versus the DALI Devices that failed the test. The number of failures and passes is also noted.

The report then continues with a table, with each row representing every DALI Device in the test, grouped by DALI Line. Each row displays:

- The name of the DALI Device.
- The ID of the DALI Device, which is a text-based property describing it.
- The short address of the DALI Device.
- The DALI Device's result from the test.

Any rows in the table that represent DALI Devices that failed the test will be displayed in red for easy viewing.

Repair Report

The repair report is a summary of all of the failed DALI Devices from a test.

This report, once printed out, can be used by building maintainers to track the maintenance of failed DALI Devices.

This report lists all of the failed DALI Devices as rows in the table, but also provides room for the building maintainers to log any maintenance performed, including:

- **Maintenance Performed.** What was done with this DALI Device to fix it. For example, "Replaced battery", or "Replaced lamp".
- **Date.** The date that the maintenance on the DALI Device was performed.
- **Initials.** The initials of the person who performed the maintenance.

At the end of the report is a section entitled Maintenance Details, which can be used by a building manager to sign off on the maintenance work that was performed. The report provides space for:

- **Company Name.** The name of the company that performed the maintenance.
- **Address.** The physical address of the company that performed the maintenance.
- **Phone Number.** The phone number that can be used to contact the maintainers.
- **Signature.** The signature of the person responsible for the maintenance.
- **Printed Name.** The name of the person responsible for the maintenance.
- **Date.** The date that the maintenance was signed off.

Generation and Retention of Test Reports

Both the full test reports and repair reports are generated upon the completion of a duration test or function test.

If emails have been set up in the Test Plan, an email will also be sent with both reports attached.

RAPIX Emergency will never remove old test reports.

The end user is responsible for archiving the test reports in accordance to the AS2293 standard.

Test Report File Names

The file names of RAPIX Emergency test reports are generated automatically. For easy identification, the following information is in the file name:

- The test's start date and time.
- The type of test the report is for (duration test or function test).
- The type of report (full test report or repair report).
- The name of the test itself.

For example, the following file name:

20201115_1523_FunctionTest_RepairReport_Weekly Zone 1 Function Test.pdf

represents a PDF report that is reporting on the failed DALI Devices of a **function test**, that was performed on the **15th of November 2020 at 3:23 pm**, and the name of the test that was performed is **Weekly Zone 1 Function Test**.

Index

A

B

C

D

E

F

G

I

L

M

N

O

P

R

S

T

U

W