

# RAPIX COMMISSIONING 3

USING RAPIX EMERGENCY SOFTWARE

22 OCT 2018



## COURSE PURPOSE

### *Testing Emergency Devices with RAPIX.*

This will help you to understand:

- Traditional testing of DALI Emergency Devices;
- The RAPIX Emergency Software.

## COURSE PURPOSE

### *Pre-requisites.*

It is recommended that you have already completed:

- DALI Basics;
- RAPIX Introduction;
- RAPIX Commissioning 1 - RAPIX Addressing;
- RAPIX Commissioning 2 - RAPIX Integrator.

# COMMISSIONING



# COMMISSIONING

## Traditional Commissioning of DALI Emergency Devices

- Each DALI Line and device is configured separately
  - Not done as a complete system
- Tools are quite basic
- Very time consuming
- Difficult to ensure that local regulations have been met
- Running tests and gathering test results is difficult

# COMMISSIONING

## RAPIX Commissioning of DALI Emergency Devices

- Whole system can be set-up at once
- “One-click” test configuration is very fast
  - Ensures that local regulations are met
- Tests are run automatically
- Test results are generated and distributed automatically

# RAPIX EMERGENCY SOFTWARE



# RAPIX EMERGENCY SOFTWARE

## RAPIX Emergency Software features

- Create “Test Plans”
  - Database with all DALI Lines and Devices
- Schedule DALI Emergency device tests
  - Functional test
  - Duration test
  - Send email to building manager to warn of upcoming tests
- Generate Test reports
  - PDF Test Report
  - PDF Maintenance Report
  - Optional reports in CSV format
  - Email reports to building manager



# RAPIX EMERGENCY SOFTWARE

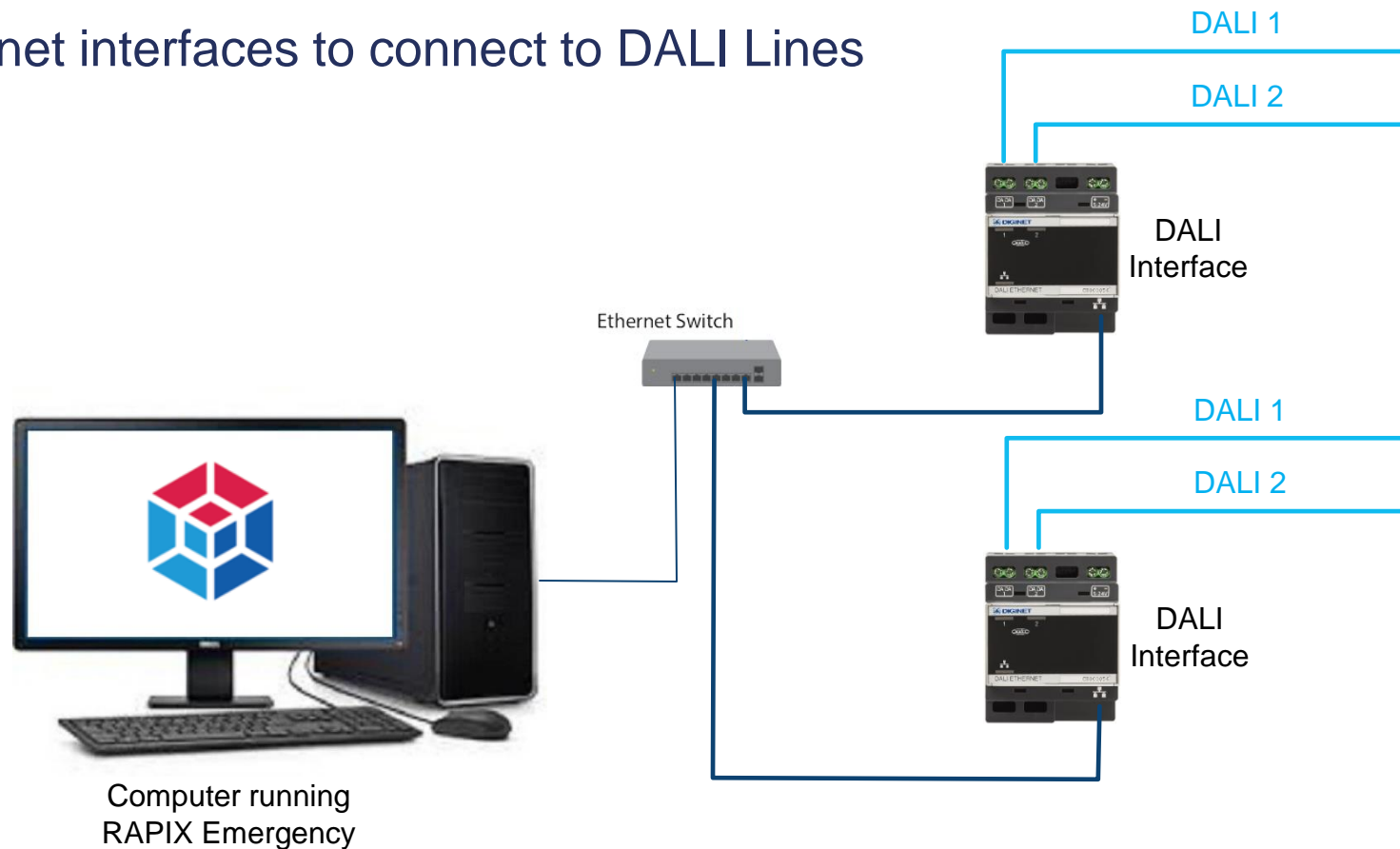
## RAPIX Emergency Software features

- Manually run DALI Emergency device tests
  - Functional test
  - Duration test
  - Device presence check
- User Access Control
  - Supervisor login has full access
  - Maintenance login has limited access

# RAPIX EMERGENCY SOFTWARE

## Interfacing with Ethernet DALI Interface Devices

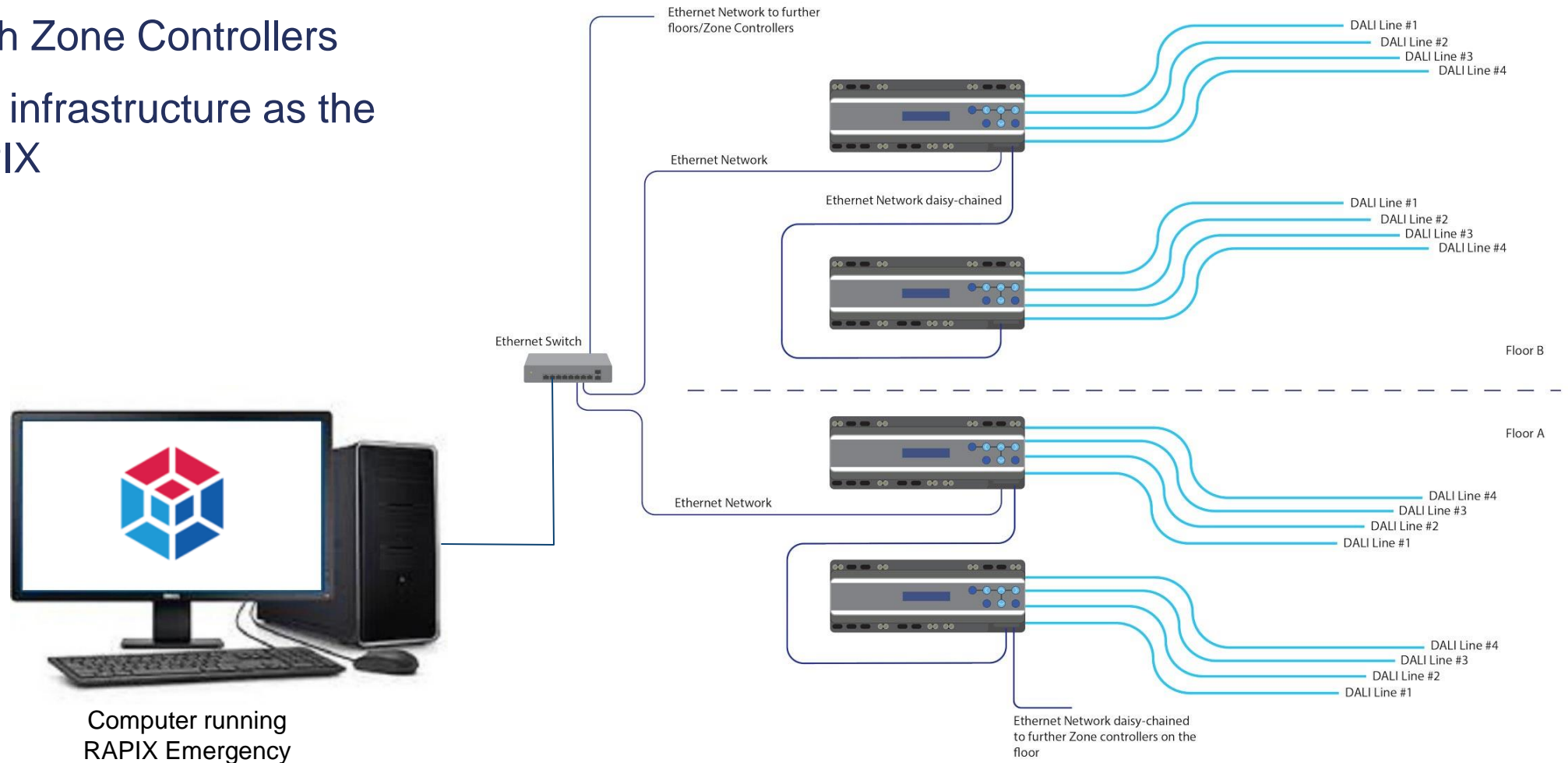
- Uses Ethernet interfaces to connect to DALI Lines



# RAPIX EMERGENCY SOFTWARE

## Interfacing with Zone Controllers

- Uses same infrastructure as the rest of RAPIX



# IMPORTING A RAPIX PROJECT

THE QUICK WAY TO COMMISSION WITH RAPIX EMERGENCY



# COMMISSIONING

Using a RAPIX Integrator Project

1. Run RAPIX Emergency
2. Click Create a **New Test Plan**

Welcome to RAPIX Emergency

**Welcome to RAPIX Emergency**



**Create a new Test Plan**  
Set up a site to be monitored by RAPIX Emergency.



**Auto-configure Test Plan**  
Creates a new Test Plan, automatically discovers DALI Devices, and builds test schedules.



**Open an existing Test Plan**  
Open an existing Test Plan for editing or running.



**Run the default Test Plan**  
Start monitoring the site with the Test Plan 'Darrens Test Site'.



The default Test Plan will run in

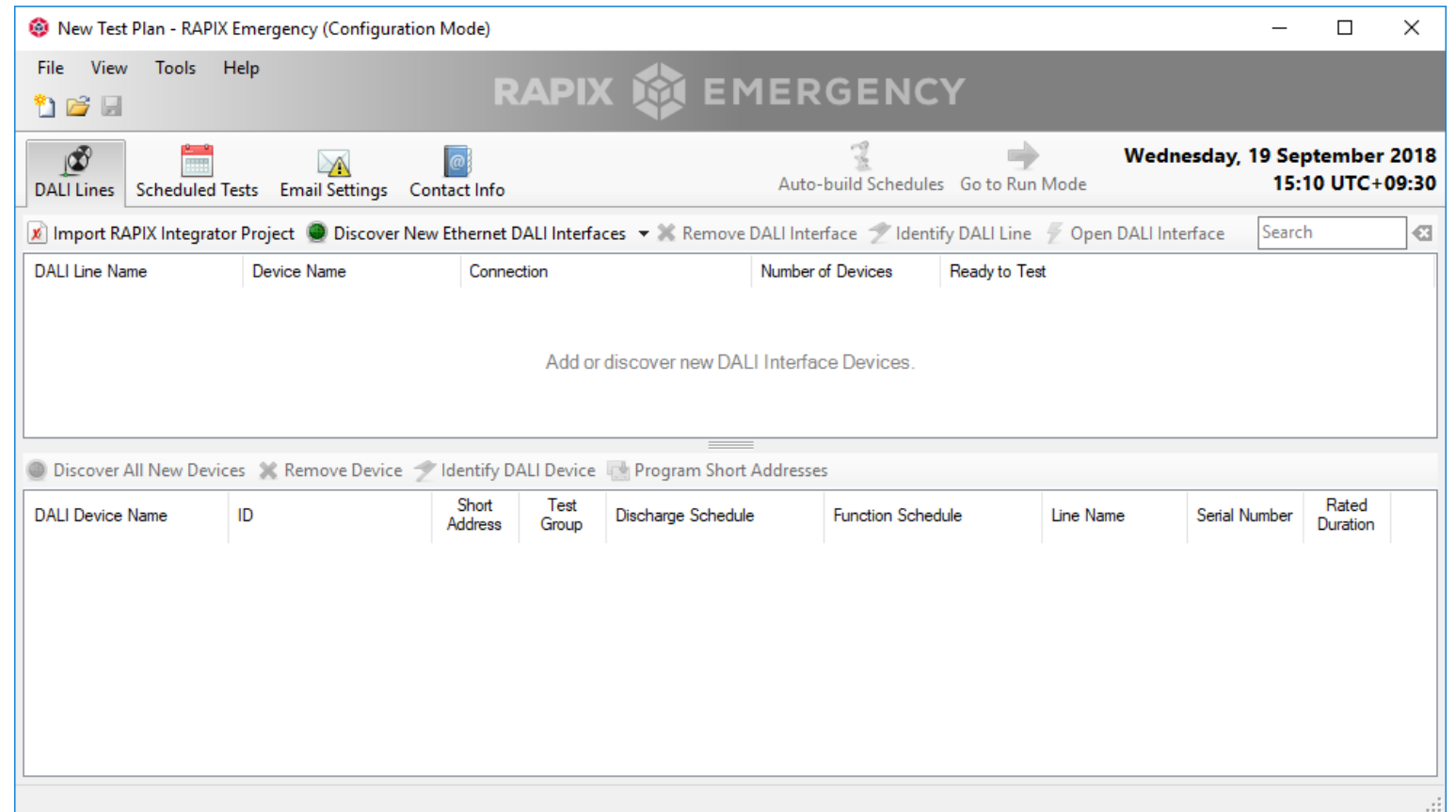
24 seconds

[Exit](#)

# COMMISSIONING

3. Click **Import RAPIX Integrator Project**

4. Select Project file



**RAPIX EMERGENCY**

Wednesday, 19 September 2018  
15:10 UTC+09:30

Import RAPIX Integrator Project Discover New Ethernet DALI Interfaces Remove DALI Interface Identify DALI Line Open DALI Interface

























DALI Line Name	Device Name	Connection	Number of Devices	Ready to Test
Add or discover new DALI Interface Devices.				

Discover All New Devices Remove Device Identify DALI Device Program Short Addresses

DALI Device Name	ID	Short Address	Test Group	Discharge Schedule	Function Schedule	Line Name	Serial Number	Rated Duration
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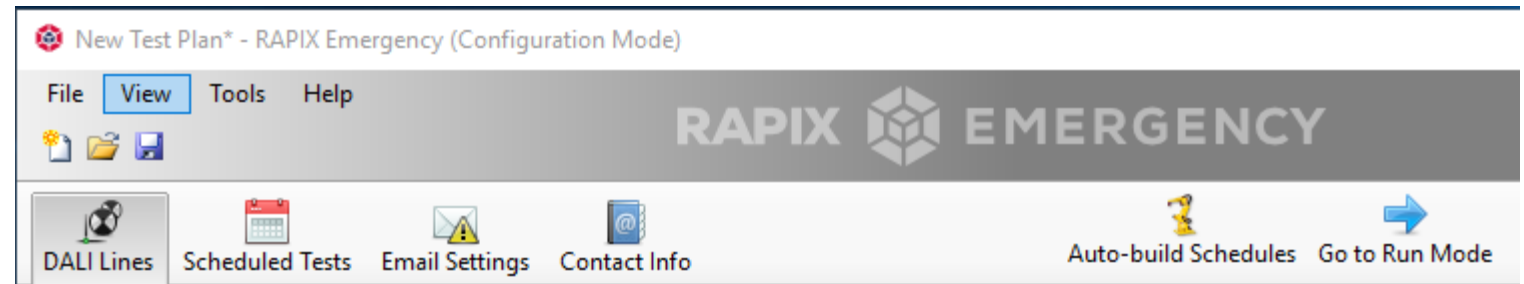
# COMMISSIONING

5. You will see a summary of the DALI Emergency Devices found

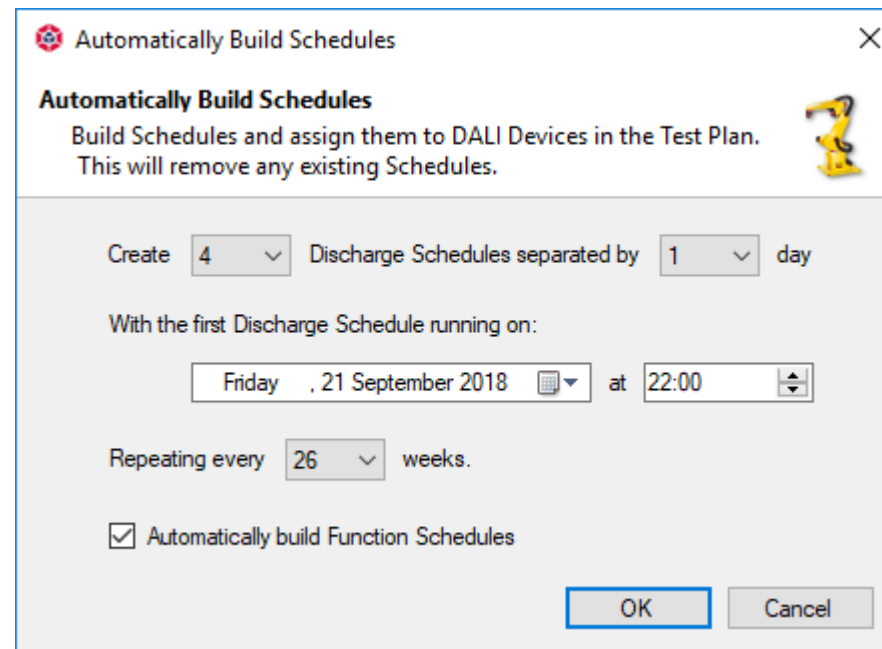
DALI Line Name	Device Name	Connection ^	Number of Devices	Ready to Test
172.20.205.1				
 Line 1	Floor 1	 172.20.205.1 / 1	2	 Untested Devices
 Line 2	Floor 1	 172.20.205.1 / 2	3	 Untested Devices
 Line 3	Floor 1	 172.20.205.1 / 3	2	 Untested Devices
 Line 4	Floor 1	 172.20.205.1 / 4	2	 Untested Devices
172.20.205.2				
 Line 1	Floor 2	 172.20.205.2 / 1	2	 Untested Devices
 Line 2	Floor 2	 172.20.205.2 / 2	2	 Untested Devices
 Line 3	Floor 2	 172.20.205.2 / 3	0	 No Devices to Test
 Line 4	Floor 2	 172.20.205.2 / 4	0	 No Devices to Test

# COMMISSIONING

6. Click **Auto-build Schedules**



7. Select schedule options



8. Click on **OK**



# COMMISSIONING

## 9. You can view the automatically created Schedules

Schedules	Next Run Date	Next Run Time	Frequency	Type
<b>Discharge Schedules</b> Tests a full discharge of EM devices.				
1. Friday (26 Weeks)	Friday, 21 September 2018	22:00	26 Weeks	Discharge Schedule
2. Saturday (26 Weeks)	Saturday, 22 September 2018	22:00	26 Weeks	Discharge Schedule
3. Sunday (26 Weeks)	Sunday, 23 September 2018	22:00	26 Weeks	Discharge Schedule
4. Monday (26 Weeks)	Monday, 24 September 2018	22:00	26 Weeks	Discharge Schedule
<b>Function Schedules</b> Tests EM device functionality.				
1. Friday (4 Weeks)	Friday, 5 October 2018	22:00	4 Weeks	Function Schedule
2. Saturday (4 Weeks)	Saturday, 6 October 2018	22:00	4 Weeks	Function Schedule
3. Sunday (4 Weeks)	Sunday, 7 October 2018	22:00	4 Weeks	Function Schedule
4. Monday (4 Weeks)	Monday, 8 October 2018	22:00	4 Weeks	Function Schedule

# COMMISSIONING

10. Optionally, set email addresses (so reports will be sent automatically)

1. Set Server details

The screenshot shows the 'Email Settings' tab in a software interface. It is divided into several sections:

- Email Sending Details:**
  - Sender Information:** Email Address:
  - Server Information:** Relay Host: ; Port Number:
  - Logon Information (optional):** Username: ; Password:
  - Test These Settings:**
- List of Email Recipients:**
  - Buttons:
  - Table:

Recipient Name	Recipient Email Address	Valid
<input checked="" type="checkbox"/> User	user@domain.com	<input checked="" type="radio"/> OK
- Email Notification Options:**
  - Text: An email will be sent to each recipient in the list, notifying them that a test has been performed.
  - Options:
    - Send email 1 week prior to Discharge Tests being run
    - Send email 1 day prior to Discharge Tests being run
    - Send email weekly if there are failed Emergency DALI Devices

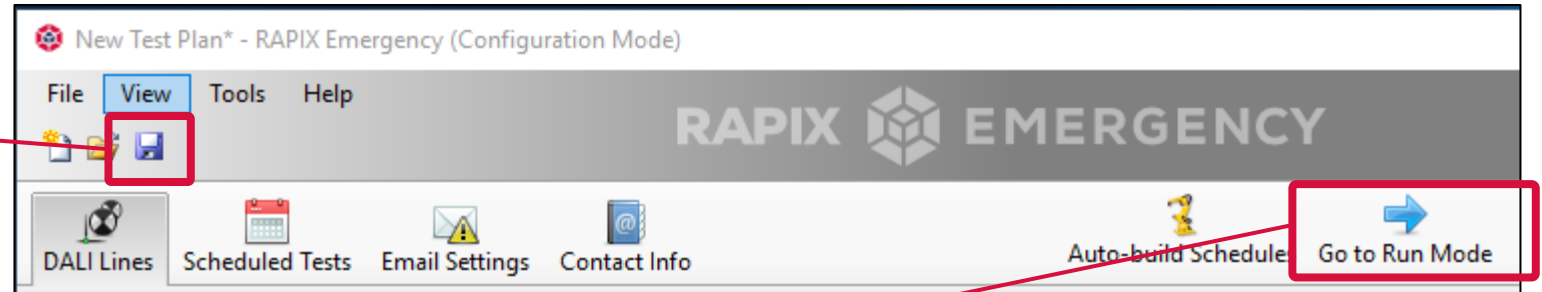
2. Add recipients

3. Select options

# COMMISSIONING

## 11. Save Test Plan

1. Click on Save
2. Enter Site name



## 12. Click **Go to Run Mode**

Finished!

# COMMISSIONING

The screenshot shows the RAPIX EMERGENCY software interface. At the top, it displays 'asasasa - RAPIX Emergency' and '16 Untested Emergency Devices'. The main navigation bar includes 'Dashboard', 'Device Status', 'Scheduled Tests', 'Test Reports', and 'Contact Info'. The date and time are 'Wednesday, 19 September 2018 16:38 UTC+09:30'.

The interface is divided into several sections:

- DALI Device Status:** Titled 'Status of Emergency DALI Devices (16 Devices)', it states 'There are 16 Untested DALI Devices that require a Discharge Test.' It features a large red circle representing the status of the devices. A 'Device Failures' table shows 'Never Discharge Tested' with a count of 16. A legend at the bottom indicates '0 Passed DALI Devices' (green) and '16 Failed DALI Devices' (red).
- Upcoming Scheduled Tests:** Lists tests 'Within 7 Days':
 

1. Friday (26 Weeks)	Discharge Schedule
2. Saturday (26 Weeks)	Discharge Schedule
3. Sunday (26 Weeks)	Discharge Schedule
4. Monday (26 Weeks)	Discharge Schedule
- DALI Device Presence:** Shows 'Last Presence Check: Wed 19-Sep-2018 16:38'. It includes a 'Missing DALI Devices' section with a dropdown menu showing 'Line 2' and 'Device 1'.
- Manual Tests:** Includes buttons for 'Function Test on All DALI Lines' and 'Discharge Test'.

Test summary  
(nothing tested yet)

Scheduled Tests

Missing Devices

# AUTO CREATING TEST PLAN



# AUTO CREATING TEST PLAN

Auto-create test Plan if not using RAPIX Integrator project

- 1. Click Auto-configure Test Plan

Welcome to RAPIX Emergency

**Welcome to RAPIX Emergency**



**Create a new Test Plan**  
Set up a site to be monitored by RAPIX Emergency.



**Auto-configure Test Plan**  
Creates a new Test Plan, automatically discovers DALI Devices, and builds test schedules.



**Open an existing Test Plan**  
Open an existing Test Plan for editing or running.



**Run the default Test Plan**  
Start monitoring the site with the Test Plan 'Darrens Test Site'.

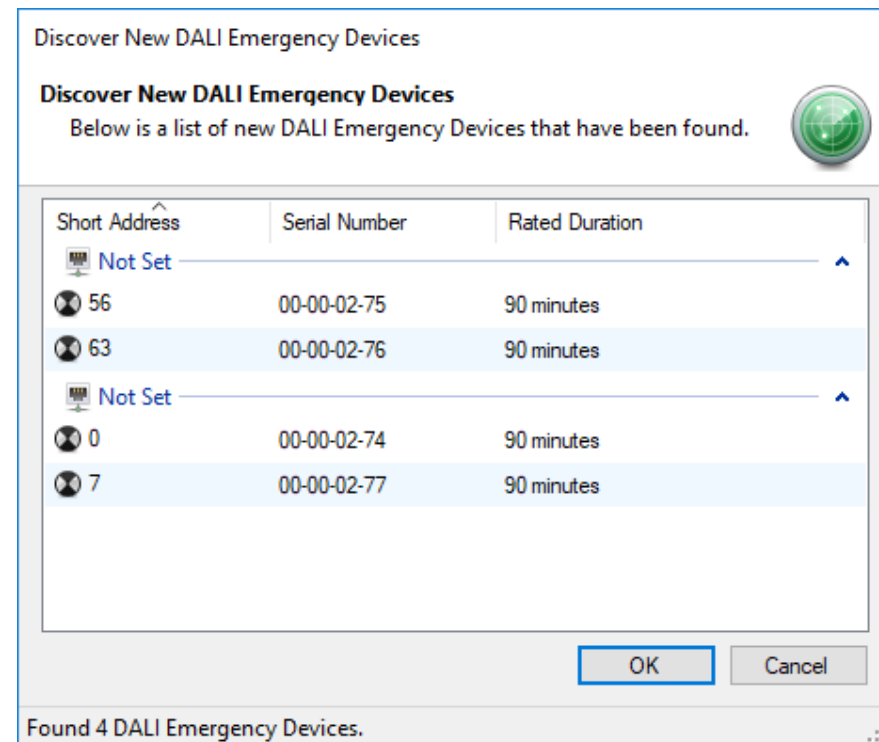
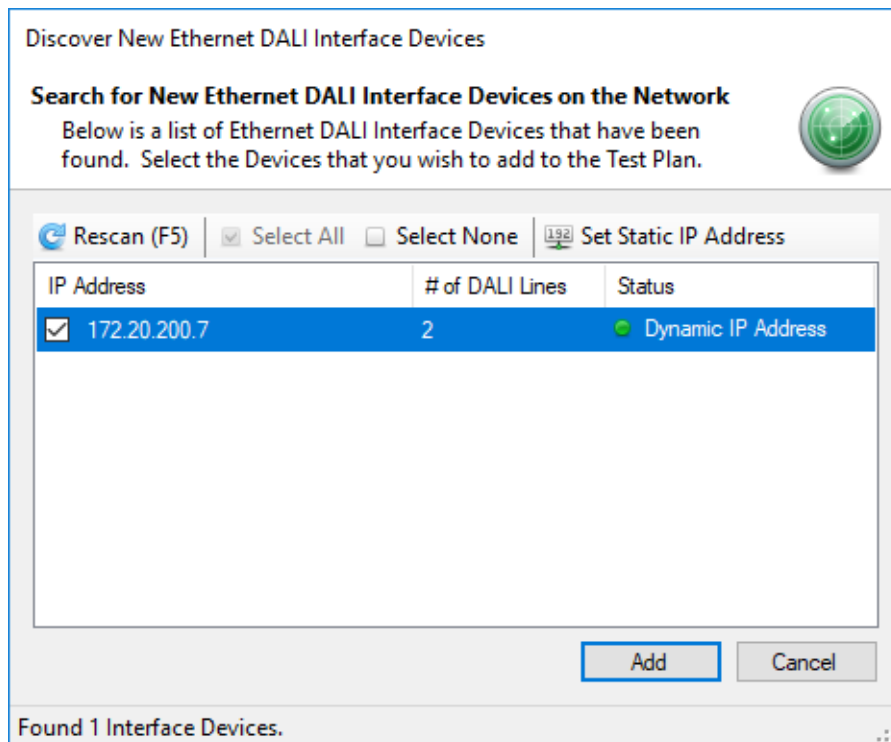


The default Test Plan will run in  
**24 seconds**

[Exit](#)

# AUTO CREATING TEST PLAN


- 2. RAPIX will find DALI Interfaces then scan to find DALI Emergency Devices



# AUTO CREATING TEST PLAN

- 3. RAPIX Emergency will show a summary of what was found:
- 4. Click on **OK**

Test Plan Summary

**Test Plan Summary** 

Summary of the number of DALI Interfaces, Lines, and Devices on the

<b>DALI Interface Devices</b>	
Total # of Zone Controllers	0
Total # of Ethernet Interfaces	1
Total # of Serial Interfaces	0
<b>DALI Lines</b>	
Total # of Active Lines	2
Total # of Empty Lines	0
<b>DALI Emergency Devices</b>	
Total # of DALI Emergency Devices	4



# AUTO CREATING TEST PLAN

- 5. RAPIX Emergency will automatically schedule the tests in 4 groups:

The screenshot shows the RAPIX EMERGENCY software interface in Configuration Mode. The window title is "New Test Plan\* - RAPIX Emergency (Configuration Mode)". The interface includes a menu bar (File, View, Tools, Help), a toolbar with icons for DALI Lines, Scheduled Tests, Email Settings, and Contact Info, and a status bar showing the date and time: "Thursday, 20 September 2018 10 09 UTC+09:30".

Below the toolbar, there are several action buttons: "Import RAPIX Integrator Project", "Discover New Ethernet DALI Interfaces", "Remove DALI Interface", "Identify DALI Line", and "Open DALI Interface". A search box is also present.

The main area displays a table of DALI Lines:

DALI Line Name	Device Name	Connection	Number of Devices	Ready to Test
Not Set	Not Set	172.20.200.7 / 1	2	OK
Not Set	Not Set	172.20.200.7 / 2	2	OK

Below the DALI Lines table, there are more action buttons: "Discover New Devices", "Remove Device", "Identify DALI Device", "Program Short Addresses", and "Show Test Results".

The bottom section shows a table of DALI Devices and their scheduled tests:

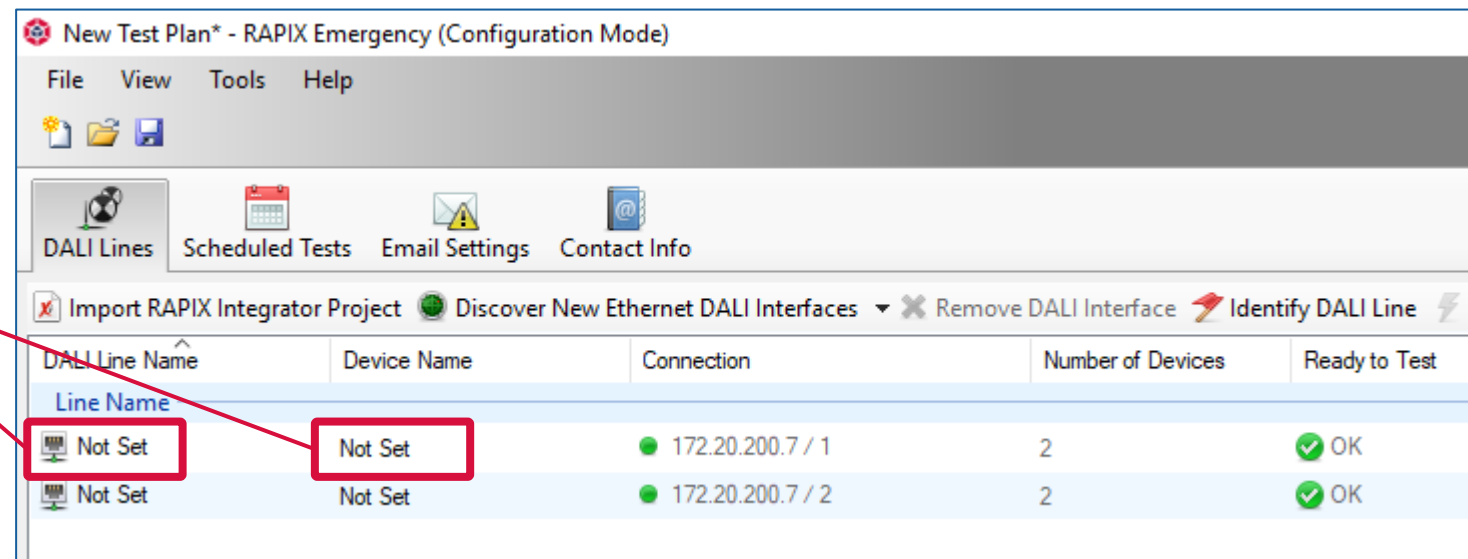
DALI Device Name	ID	Short Address	Test Group	Discharge Schedule	Function Schedule	Line Name	Serial Number	Rated Duration
Test Group 1 - next scheduled discharge test: Sat 22-Sep-2018 at 22:00 <a href="#">Show "1. Saturday (26 Weeks)"</a>								
New Device 56		56	1	1. Saturday (26 Weeks)	1. Saturday (4 Weeks)	Not Set	00-00-02-75	90 mins
Test Group 2 - next scheduled discharge test: Sun 23-Sep-2018 at 22:00 <a href="#">Show "2. Sunday (26 Weeks)"</a>								
New Device 63		63	2	2. Sunday (26 Weeks)	2. Sunday (4 Weeks)	Not Set	00-00-02-76	90 mins
Test Group 3								
No DALI Devices								
Test Group 4								

# AUTO CREATING TEST PLAN

- 6. Add names to DALI Lines and Emergency Devices

1. Double click on name

2. Enter a new name



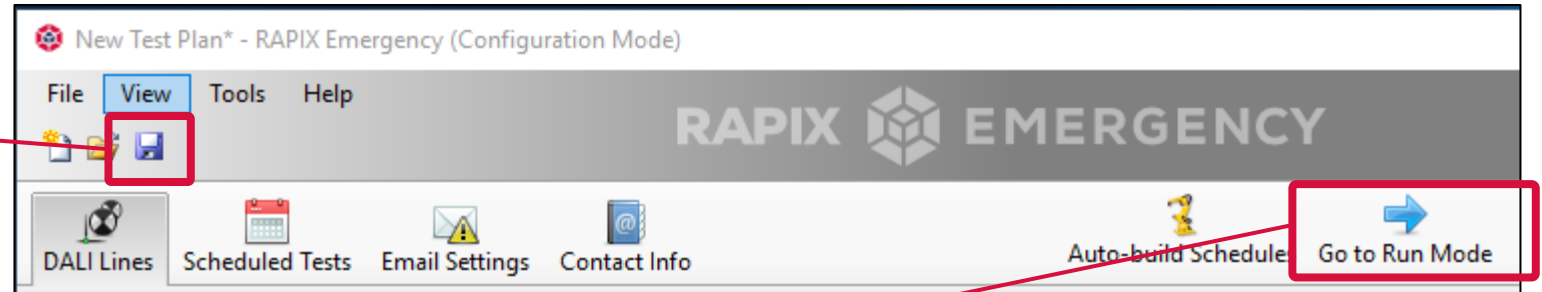
DALI Line Name	Device Name	Connection	Number of Devices	Ready to Test
Line Name				
Not Set	Not Set	172.20.200.7 / 1	2	OK
Not Set	Not Set	172.20.200.7 / 2	2	OK

- 7. Add email details

# COMMISSIONING

## 8. Save Test Plan

1. Click on Save
2. Enter Site name



## 9. Click **Go to Run Mode**

# MANUALLY CREATING A TEST PLAN



## MANUALLY CREATING A TEST PLAN

- Refer to help file for Instructions

# MANUALLY RUNNING TESTS



# MANUALLY RUNNING TESTS

The screenshot shows the RAPIX EMERGENCY software interface. At the top, there is a red header with the text "RAPIX EMERGENCY" and "16 Untested Emergency Devices". Below the header is a navigation bar with icons for Dashboard, Device Status, Scheduled Tests, Test Reports, and Contact Info. The main content area is divided into several sections:

- DALI Device Status:** A large red circle indicates the status of 16 devices. A legend shows "0 Passed DALI Devices" (green) and "16 Failed DALI Devices" (red).
- Device Failures:** A box titled "Device Failures" shows "Never Discharge Tested" with a count of 16.
- Upcoming Scheduled Tests:** A list of tests scheduled within 7 days, including "1. Friday (26 Weeks) Discharge Schedule", "2. Saturday (26 Weeks) Discharge Schedule", "3. Sunday (26 Weeks) Discharge Schedule", and "4. Monday (26 Weeks) Discharge Schedule".
- DALI Device Presence:** A section titled "Missing DALI Devices" shows "Line 2" with "Device 1" listed below it. A red "X" icon is present next to a device icon.
- Manual Tests:** A section at the bottom with two buttons: "Function Test on All DALI Lines" and "Discharge Test".

Check for Missing Devices

Function Test

Discharge Test

# TEST REPORTS






# TEST REPORTS


## Test Report

### Full Test Report

**Site:** asasasa  
**Test Name:** Manual Function Test  
**Test Type:** Function Test  
**Network Type:** DALI  
**Scheduled Test Date:** Wednesday, 19 September 2018 16:43:24  
**Next Test Date:** Not scheduled to run again (once-off test).



#### Tested Devices



**Passed:** 13 (81%)  
**Failed:** 3 (19%)

#### Test Result Explanation

Passed	EM control gear successfully passed the test.
Communication Error	Unable to communicate to the control gear.
Battery Failure	A disconnected battery or a battery with reduced capacity.
Lamp Failure	A disconnected or faulty lamp.

DALI Line: Line 1. Interface Device Name: Floor 2. Connection: 172.20.205.2.				
Device Name	ID	Short Address	Test Result	Test Duration
Device 0		00	Passed	
Device 7		07	Passed	

DALI Line: Line 2. Interface Device Name: Floor 2. Connection: 172.20.205.2.				
Device Name	ID	Short Address	Test Result	Test Duration
Device 56		56	Passed	
Device 63		63	Passed	

DALI Line: Line 1. Interface Device Name: Floor 1. Connection: 172.20.205.1.				
Device Name	ID	Short Address	Test Result	Test Duration
Dev 0		00	Lamp Failure	
Dev 7		07	Passed	

DALI Line: Line 2. Interface Device Name: Floor 1. Connection: 172.20.205.1.				
Device Name	ID	Short Address	Test Result	Test Duration
Device 56		56	Battery Failure	
Device 63		63	Passed	
Device 1		01	Communication Error	

Summary

Details

# TEST REPORTS

## Repair Report

### Repair Report

**Site:** asasasa  
**Test Name:** Manual Function Test  
**Test Type:** Function Test  
**Network Type:** DALI  
**Scheduled Test Date:** Wednesday, 19 September 2018 16:43:24  
**Next Test Date:** Not scheduled to run again (once-off test).

---

**Test Result Explanation**

Passed	EM control gear successfully passed the test.
Communication Error	Unable to communicate to the control gear.
Battery Failure	A disconnected battery or a battery with reduced capacity.
Lamp Failure	A disconnected or faulty lamp.

---

**DALI Line: Line 1. Interface Device Name: Floor 1. Connection: 172.20.205.1.**

Device Name	ID	Short Address	Test Result	Test Duration
Dev 0	00	00	Lamp Failure	
Maintenance Performed:				
Date: _____ Initials: _____				

---

**DALI Line: Line 2. Interface Device Name: Floor 1. Connection: 172.20.205.1.**

Device Name	ID	Short Address	Test Result	Test Duration
Device 56	56	56	Battery Failure	
Maintenance Performed: _____				
Date: _____ Initials: _____				
Device 1	01	01	Communication Error	
Maintenance Performed:				
Date: _____ Initials: _____				

Device

Failure

Maintenance performed

Maintenance signature

TOOLS



# TOOLS

## DALI Device Grid

- Select **Tools / DALI Address Grid**
- Select DALI Line
- Click **Scan**

DALI Short Addresses
✕

**DALI Short Addresses Occupied by DALI Emergency Devices**  
 The grid below shows the DALI short addresses in use by DALI Emergency Devices and other Devices on the selected DALI Line.

DALI Line: Line 1

▼

Scan Every: Manual Scan

Scan

0	1	2	3	4	5	6	7
8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23
24	25	26	27	28	29	30	31
32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47
48	49	50	51	52	53	54	55
56	57	58	59	60	61	62	63

Legend

 Show all DALI device types
 


None	Fluorescent	Emergency
Discharge Lamp	Low Voltage Halogen	Incandescent Volt. Cont.
Digital to DC Conversion	LED Module	Switching Function
Colour Control	Sequencer	Optical Control
Not Yet Defined	Multiple	

# TOOLS

## Summary

- Select **Tools / Test Plan Summary**

Test Plan Summary

**Test Plan Summary**  
Summary of the number of DALI Interfaces, Lines, and Devices on the 

<b>DALI Interface Devices</b>	
Total # of Zone Controllers	0
Total # of Ethernet Interfaces	1
Total # of Serial Interfaces	0
<b>DALI Lines</b>	
Total # of Active Lines	2
Total # of Empty Lines	0
<b>DALI Emergency Devices</b>	
Total # of DALI Emergency Devices	4