

Introduction

This document describes the use of virtual zones within the RAPIX Lighting Control System.

Zones

A RAPIX zone is an area of lighting that is controlled or monitored by the RAPIX system. A zone can range in scale from a single device or room, through larger areas including corridors or floors of a building, up to an entire building or site.





A RAPIX zone can contain any combination of zone "members":

- DALI Units ("control gear")
- DALI Groups
- DALI Lines (DALI "broadcast")
- Other Zones

All aspects of the RAPIX system are configured through zones, which greatly simplifies commissioning and maintenance. This includes:

- RAPIX switches and sensors
- Schedules and Logic
- Floor plans
- Third-party interfaces: RAPIX API, ModBus, BACnet, MQTT



Virtual Zone Members

If a non-RAPIX device or system needs to control a RAPIX Zone, it can be done through a "virtual" zone member (Short Address or DALI Group). A virtual zone member has no physical DALI units associated with it.

Example

Requirement

A non-RAPIX wall switch needs to control some aspect of logic through a virtual zone. The wall switch controls Short Address 50 and there is no DALI unit at this address.

Creating the Virtual Zone Member

In RAPIX Integrator, a virtual unit can be added as follows:

1. In the **Addressing** tab, click on the **Add** button.

ADDRESSING	GROUPS SCENES GO MOE	ILE					
DALI Units Filter Units: All Unconfirmed							
	Database		DALI Line				Confirm All 🝷
Address	Name	Device Type	Device Type	Requested	New	Confirmed	State ^
DALI Addres	s						^
0		Emergency	Emergency				•
1	Device 1	Relay	Relay			\checkmark	•
2	Device 2	Relay	Relay			\checkmark	•
3	Device 3	• LED	• LED				•
	😑 📄)={ 🍈 🛞	¢?∶ ₹	SCAN: 🖒	•	

The Add Unit button (highlighted)

2. Select the "Virtual" unit type, the short address, and click on OK.

Add DALI Units			
Add DALI unit(s) to the database. Add one or more DALI units of the same type to the database.			
Unit Details			
Туре:	Virtual	~	
Starting Address:	50	~	
Quantity:	1	~	
	ок		Cancel

Adding a virtual unit



Creating the Virtual Zone

To create a virtual zone containing the virtual Short Address:

1. On the **Zones** tab, click on the **Add** button:

\$	Zones
HOME	Zones Q Search
	Show: Named Zones Multi-Member Zones Zone ID
	Amber 1 1 member
SITE	Amber 2 1 member
FLOOR PLANS	
ZONES	
ACTIONS	
	Add + Clone Zedit Remove

The Add Zone button (highlighted)

2. Give the zone a name, then click on the **Add Members** button.

Members	Group by: None Type	DALI Interface
# Description		Sync Rule
🛨 Add 📝 Edit 🔼 Move Up 🔽 Move Down 🔲 Remove		

The Add Zone Members button (highlighted).

3. Select the virtual short address, then click on the button to add it to the zone. Click on **Close**. Note that the "**Is Virtual**" check box will be already selected, as a virtual unit is being added.



APPLICATION NOTE

d New Zone Member				
Id a Member to this Zone Select the type of zone member to add to t	his zone.			
Member to Add			Zo	ne Members
🔿 Zone	DALI Interface:		#	Description
Add another zone in this project as a member to this zone.	Floor 1	~		
🔿 DALI Line Broadcast	DALI Line:			
Add an entire DALI line to be controlled by this zone.	F1 L1	× 📃		
	DALI Address:			
Add a specified DALI group address to be controlled by this zone.	50 : Unit 50	× >		
DALI Short Address				
Add a specified DALI short address to be controlled by this zone.				
Select the Sync Rule to use:				
Sync Rule: Do Nothing	~			
Mark zone member as virtual:				Nove Up 🔽 Move Down
				Close

Adding a virtual short address to a zone

Virtual Zones

A virtual zone is a zone that has no physical DALI units. It can have a virtual zone member, as described above, or it can have no members at all.

A virtual zone can be used anywhere in the RAPIX system that a normal zone is used.

A RAPIX input unit can control a virtual zone directly, without the need for a virtual short address.

Example

<u>Requirement</u>

A RAPIX wall switch needs to control a virtual zone.

Creating the Virtual Zone

To create a virtual zone with no virtual addresses:

- On the Zones tab, click on the **Add** button.
- Give the zone a name.

Controlling the Virtual Zone

To allow the RAPIX Wall switch to control the virtual zone:

- 1. Edit the RAPIX unit.
- 2. Add the **Toggle** template.

3. The virtual zone is not local to the device, so it will not be in the drop-down list of local zones. Click on the **remote zones** button, then select the virtual zone from the list.

Toggle (ID 58, V 5)	? ×			
Toggle Press a switch to alternate zon This template is suitable for us contact inputs.	e between on and off. e with Rapix push buttons, Rapix dials, or momentary switches connected to dry			
Button	Channel 1 - Button 1 🔽 🔄 🗌 Show All			
Zone	<new zone=""></new>			
New Member	<new member="" zone=""></new>			
	▼ MORE			
Fade Time	Instant			
Summary Operate "Channel 1 - Button 1" to toggle or fade " <new zone="">" between on and off. Fade time is Instant.</new>				
	OK Cancel			

The Toggle template (with Remote Zones button highlighted)

4. Click on the **OK** button to finish.



Change History

Rev	Date	Updated By	Comment
1	15 April 2024	DS	First Release

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