

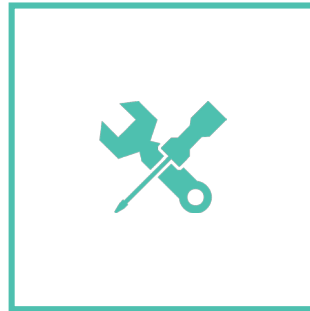
zencontrol

Smart lighting

Smart lighting is the perfect solution for



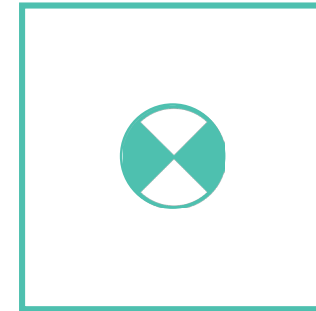
Providing
energy savings



Maintenance



User comfort



Emergency testing

Most buildings turn to smart lighting, which includes DALI drivers and ballast as it allows:

- Cross manufacture compatibility
- Easy reconfiguration
- Easy addition of lights & emergency fittings
- Per fitting control
- Endorsed and published standards IEC 62386
- Reduced wiring
- Green star and NABER approved



DALI 1.0

Version 1.0 of the DALI standard gave support for DALI ballasts, drivers, emergency lighting and other device types. A list of compliant devices can be found at dali-ag.org/products

Selecting a listed device means:

- 100 % compatibility
- Tested and approved to work
- DALI-ag is the working group for the development and maintenance of the DALI standard
- DALI is published under IEC 62386
- Evolt is a DALI member



Compliant vs compatible **warning!**

- There are many stories about issues with DALI
- DALI compliant means to be tested to work exactly per the standard
- Manufacturers who test appropriately can put product on the dali-ag.org website
- DALI compatible is only an approximation and does not mean all functionality works in all cases or uniformly with other compliant devices
- Compliant devices normally mean less problems on integration
- Most DALI issues arise from non-compliant DALI devices, ie compatible devices
 - Dimming speed
 - Addressing
 - Setting
 - Features / operation
 - Serial and EAN registration
 - Emergency testing procedures (do they perform the test correctly / validation)



DALI 2.0

DALI 2.0 What is it?

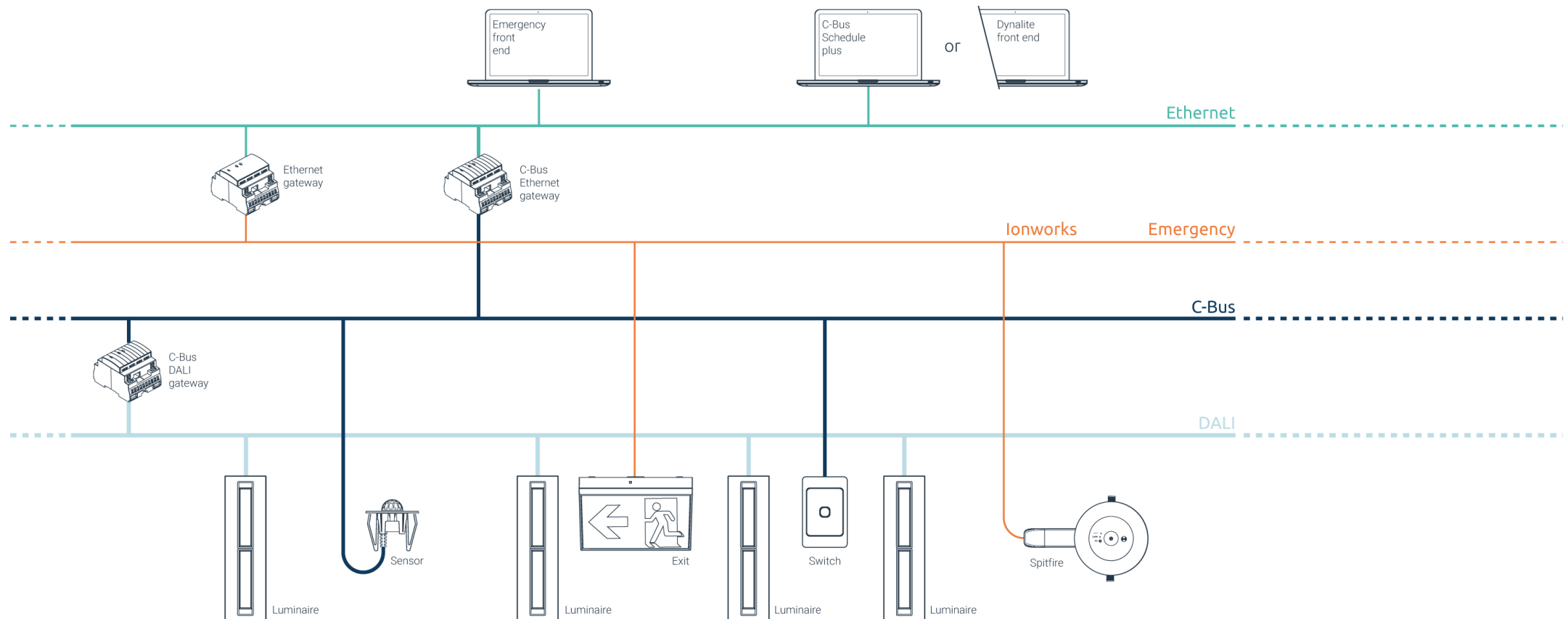
- Provision for full compliance and operation of
 - Occupancy sensors
 - Light sensors
 - Input devices including sensors and switches
- Full ratification of switches and sensors in a DALI network
 - Works with all DALI 2.0 systems
 - Backwards compatible with DALI 1.0
 - Full set of
 - Standards
 - Test flows
 - Tester and certification

DALI 2.0 Provides

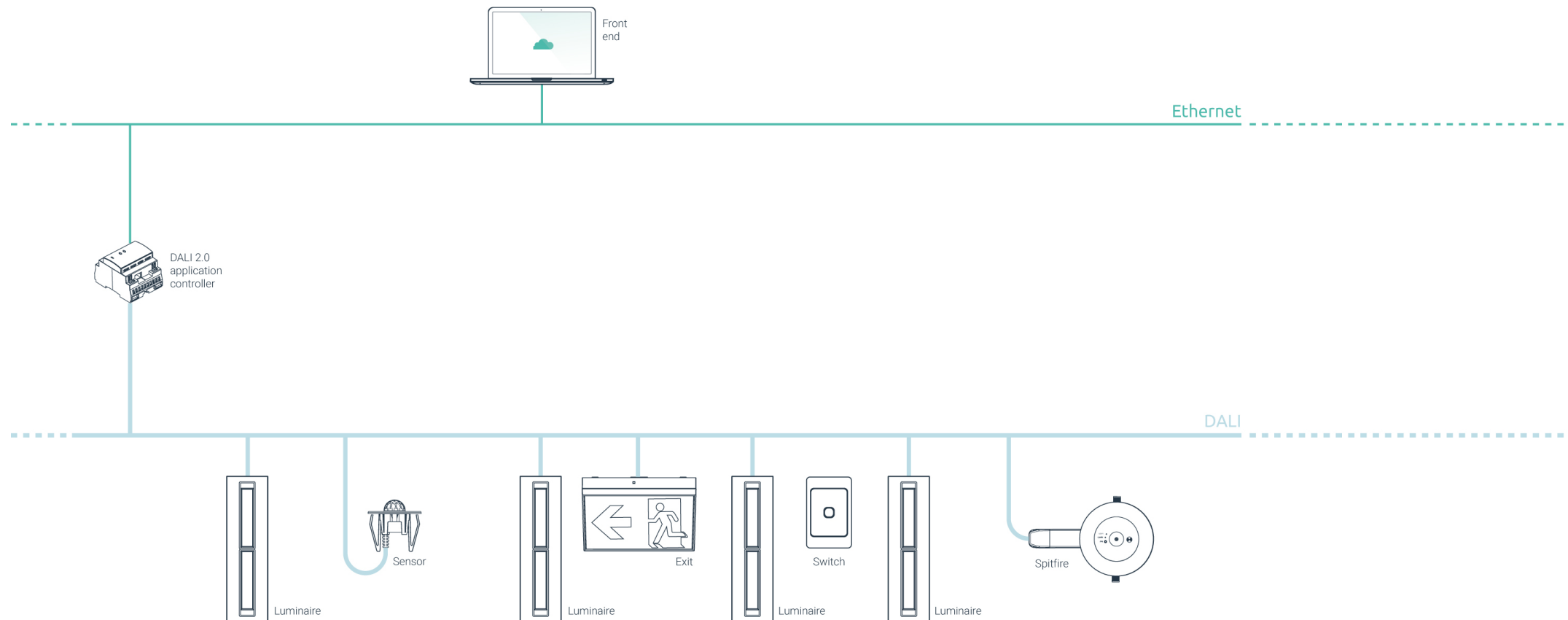
- Simpler wiring, one line for lighting, emergency, switches and sensors
- Endorsed & compliant switch and sensor devices
- Cross manufacture compatibility
- Lower over-all costs
- Published under IEC 62386

2.0

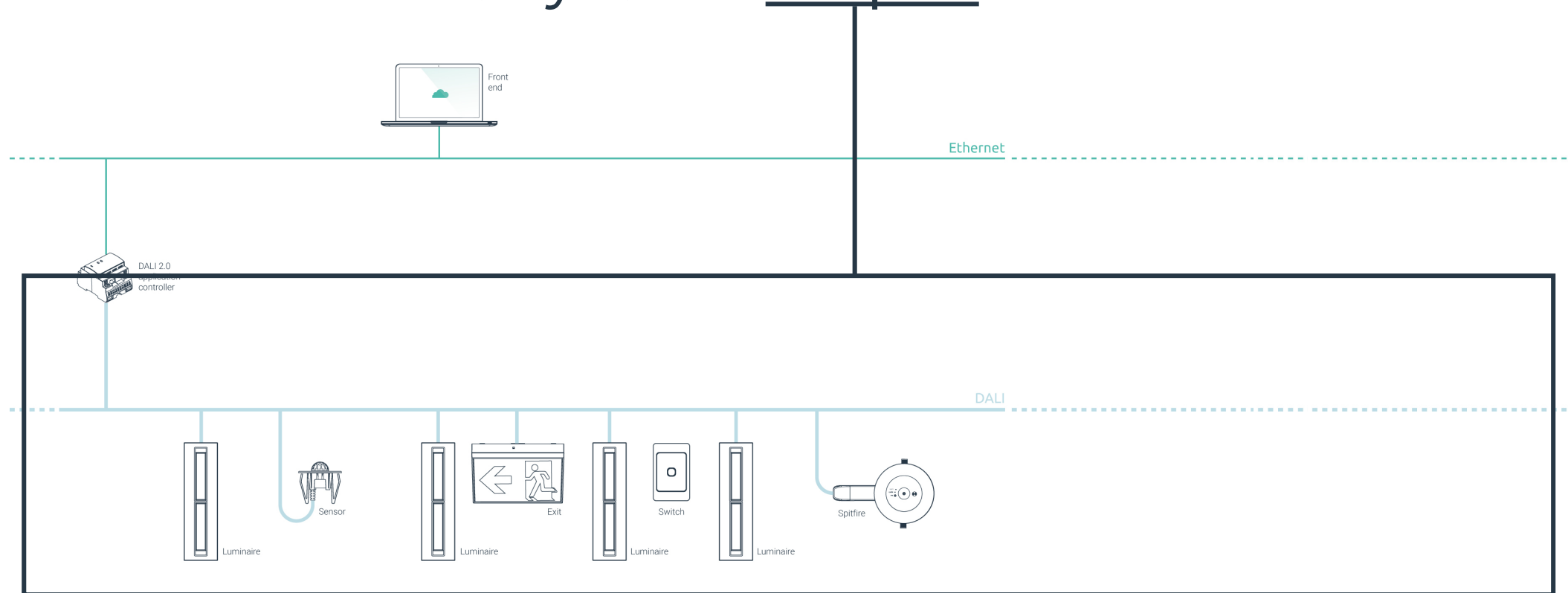
Traditional lighting



DALI 2.0 / DALI 1.0



All this sounds great and DALI is a great, well written standard but DALI only covers this part



What about the rest?

zencontrol

Why zencontrol?

zencontrol philosophy

Simplest building control on the market

- Works out of the box
- Removes the complication
- Fixes contractor mistakes automatically
- Built using a “Just works” philosophy
- Simplest commissioning process

zencontrol is modern lighting control

- Full DALI support
- DALI 2.0 and DALI 1.0 compliant
- Automatic commissioning of standard features
- Cloud connectivity for commissioning / monitoring, *but not required for operation*
- Advanced programming and integration possible through web interface and mobile devices



Lets look at some industry problems

Control systems take a long time to setup and commission, the solution: zencontrol does all the hard parts for them

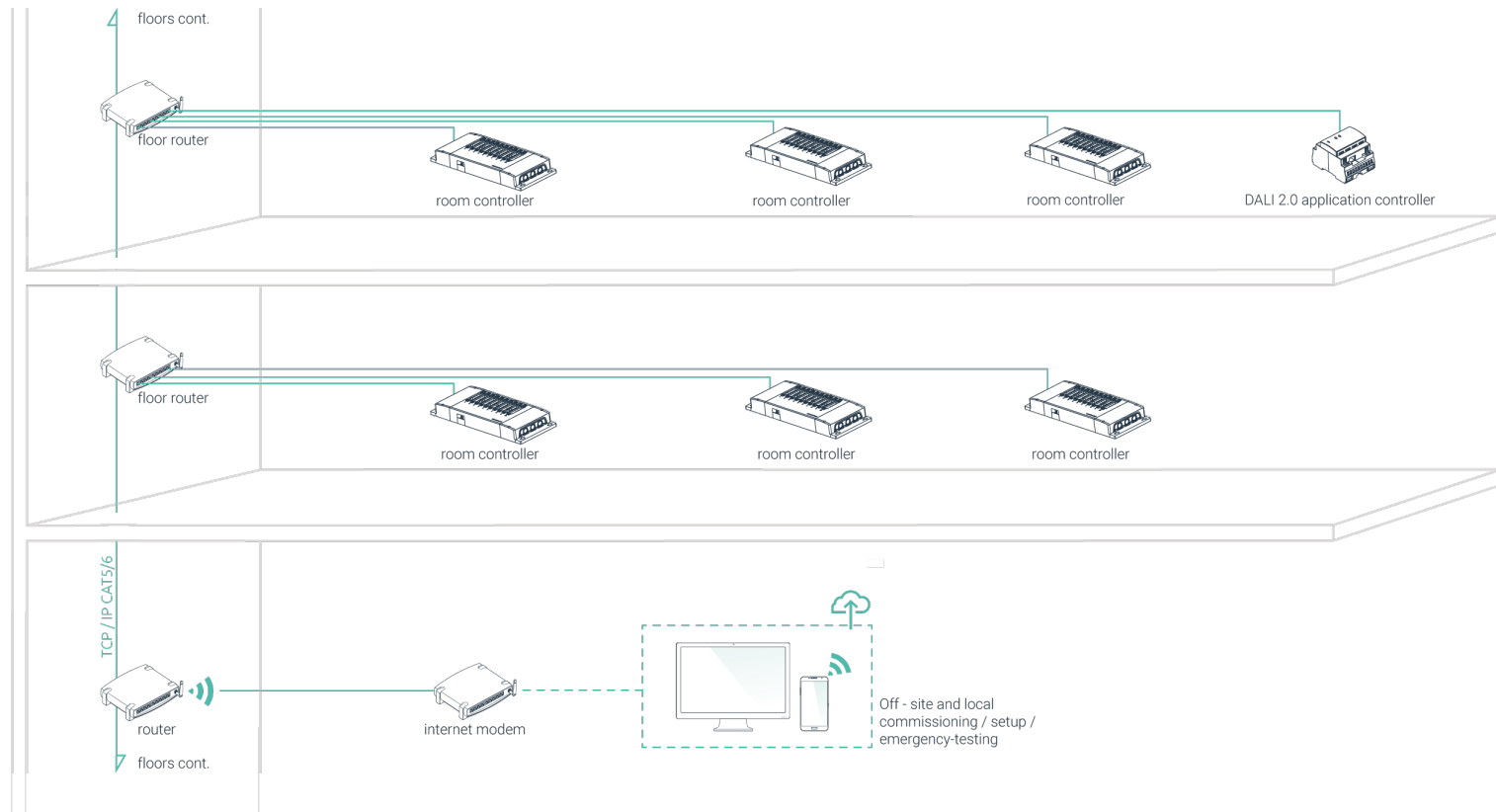
Task	Previously (conservative)	zencontrol
Random addressing	5 – 10 ⁺ mins / 64 fittings	Automatic
Scanning setting	2 - 10 mins depending on amount of data / 64 fittings	Automatic
Readdressing new devices	2 ⁺ mins	Automatic
Fixing address conflicts	2 ⁺	Automatic
Setup of switches and sensors	5 ⁺ mins	Automatic
Grouping rooms	5 – 10 ⁺ mins / group	Automatic
Syncing data changes	1 - 10 ⁺ mins depending on what is written	Automatic

**All information is per DALI line*

The zencontrol building

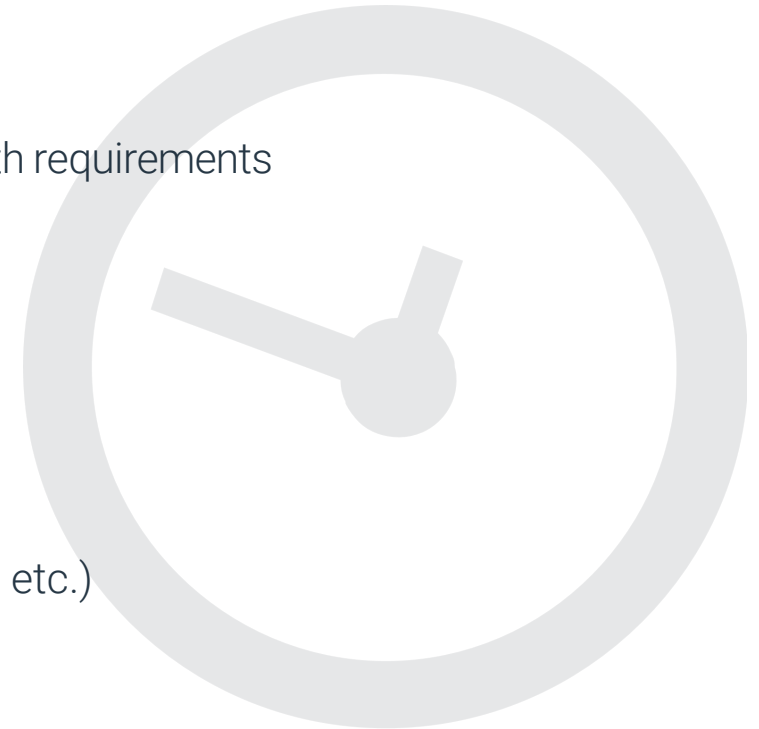
zencontrol is built on high speed TCP/IP network, which has the following advantages:

- Uses standard IT equipment
- Allows high bandwidth vs RS232 or RS484 alternatives (faster to use and commission)
- Easily expandable
- Reduces additional hardware needed to connect to PC and the cloud
- No additional hardware required to interface to BACnet or KNX servers.



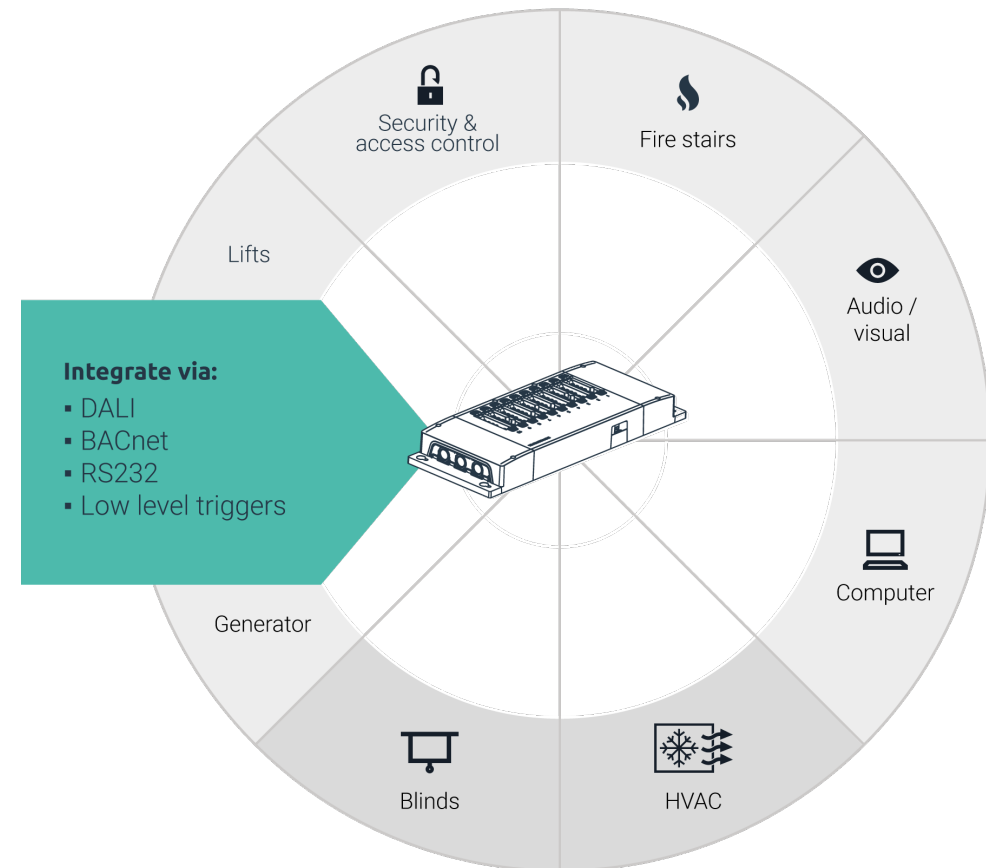
Speed is critical

- High speed TCP/IP connections are critical to modern lighting control
- Older RS485 systems are slow and cannot adequately handle the bandwidth requirements
- High speed connections allow for
 - Faster commissioning
 - More responsive control
 - Faster fault finding
 - More real-time feeds on power and usage etc.
 - Less bottle necks when connecting to other systems (BMS / HVAC etc.)
 - Lower overall costs

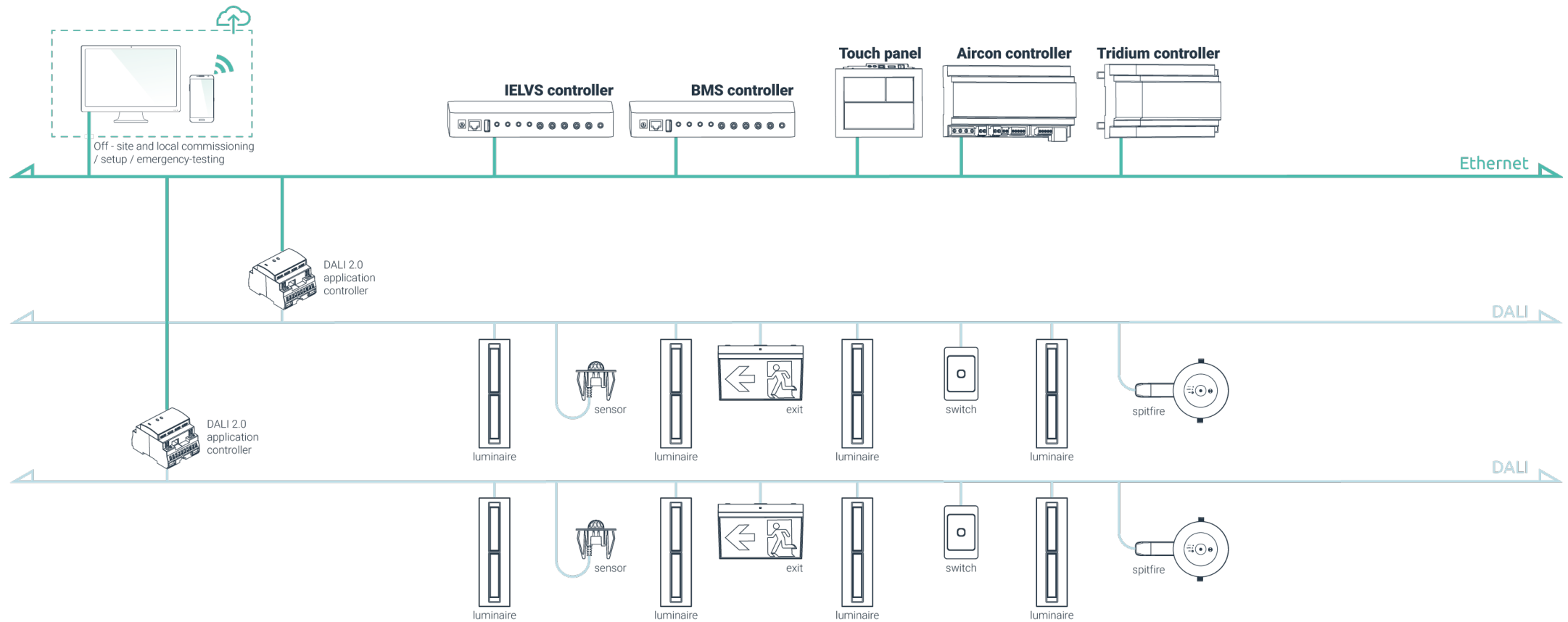


Integration

The zencontrol system has been designed to integrate with other building systems.

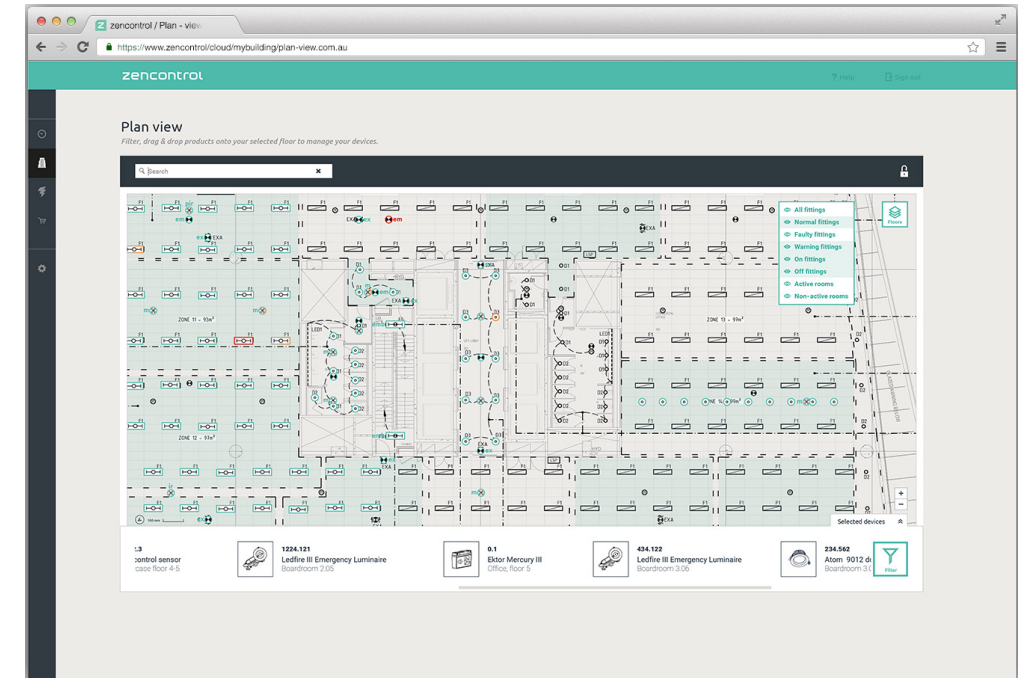


zencontrol integration







zencontrol cloud management

- Centralised building control, access multiple buildings from any location
- Hierarchy of user permissions ensures the correct privileges are given to the correct users
- Secure TLS 1.2 PSK encryption for local network
- Enterprise TLS 1.2 PKI RSA 4096 encryption for cloud connection
- Manage, monitor and commission from the cloud
- Fast reporting & setup



Check out our other zencontrol advantages

 Data security	 Security	 Room control
 Product range	 Blind control	 Emergency control
 zencontrol lighting	 Software	Download everything at <i>zencontrol.com.au</i>