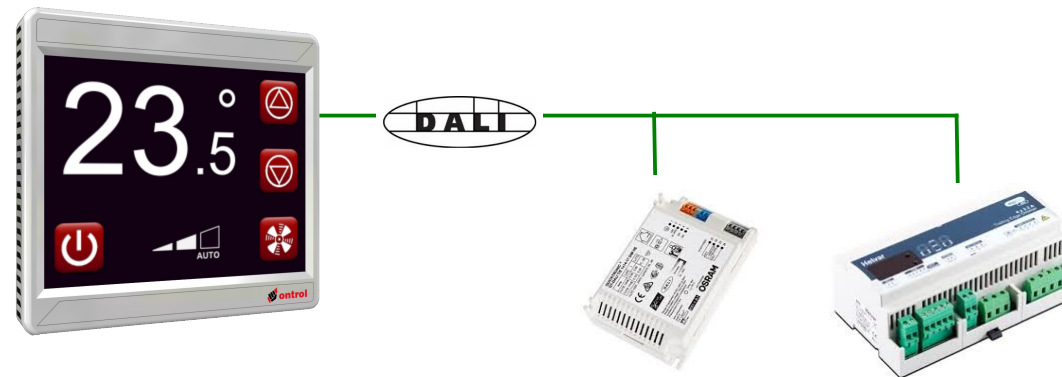




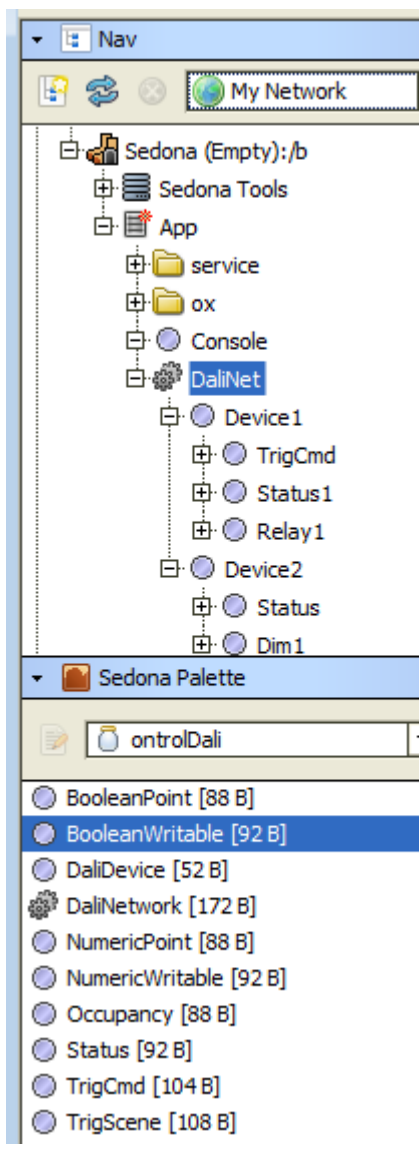
Using Ontrol DALI Driver on the R-ION



DALI Ballasts, dimmers, modules...



Ontrol DALI Driver for Sedona



} Dali Network in Typical Application

} OntrolDali Palette

OBSERVE HIERARCHY

- DaliNetwork can reside anywhere but,
- DaliDevices must go under DaliNetwork
 - Client points must go under a DaliDevice



DALI Network properties



DaliNet (ontrolDali::DaliNetwork)

<input type="checkbox"/> <input checked="" type="radio"/> Meta	Group [1] >>
<input type="checkbox"/> <input checked="" type="radio"/> Enable	<input checked="" type="radio"/> true ▼
<input type="checkbox"/> <input checked="" type="radio"/> Slow Rate	<input type="text" value="30"/> s [30 - 255]
<input type="checkbox"/> <input checked="" type="radio"/> Normal Rate	<input type="text" value="10"/> s [5 - 29]
<input type="checkbox"/> <input checked="" type="radio"/> Fast Rate	<input type="text" value="1"/> s [1 - 4]
<input type="checkbox"/> <input checked="" type="radio"/> Response Timeout	<input type="text" value="200"/> ms [50 - 3000]
<input type="checkbox"/> <input checked="" type="radio"/> Max Retries	<input type="text" value="1"/> [0 - 10]
<input type="checkbox"/> <input checked="" type="radio"/> Max Write Time	<input type="text" value="60"/> s [0 - 65535]
<input type="checkbox"/> <input checked="" type="radio"/> Port Number	<input type="text" value="3"/> [0 - 255]

Poll rates
(for readable points)
Each client point has
slow/normal/fast selection

maxWriteTime
Driver will repeat writes
to client points with this
frequency even if the
value has not changed

Serial Port number
Always 3 for the R-ION

No response handling
Duration to wait for a response
from slave device. Then, if no
response received, number of
times to retry before marking point
status as fault.



DALI Device properties



DALI DEVICE COMPONENTS HAVE NO UNIQUE PROPERTIES !

DALI Protocol allows addressing of individual 'control gear' (ballasts, relays, dimming circuits...) without needing to refer to a parent device.

For this driver, you can either;

- Add one DaliDevice component and put all your client points under that or,
- Add multiple DaliDevice components representing the actual physical devices on your bus.

In either case, there is no performance or functionality difference; it is purely a personal choice.

<input checked="" type="radio"/>	Device1 (ontrolDali::DaliDevice)
<input type="checkbox"/>	<input checked="" type="radio"/> Meta Group [1] >>
<input type="checkbox"/>	<input checked="" type="radio"/> Fault <input type="radio"/> false ▼
<input type="checkbox"/>	<input checked="" type="radio"/> Status <input type="text" value="0"/>
<input type="checkbox"/>	<input checked="" type="radio"/> Enable <input type="radio"/> true ▼



DALI POINT COMPONENTS

- TrigCmd : Provides inputs for triggering DALI commands (off, up, down, recall max, recall min etc...) on a single address, a group, or all devices (broadcast)
- TrigScene : Provides 16 inputs for activating scenes on a single address, a group, or all devices (broadcast)
- NumericPoint : Queries actual value (numeric)
- NumericWritable : Queries actual value and provides a numeric input for sending a direct power control level command to a control gear
- BooleanPoint : Queries actual value (boolean)
- BooleanWritable : Queries actual value and provides a boolean input for sending a direct on/off command to a control gear
- Status : Queries status of a control gear
- Occupancy : Queries a Helvar multisensor for occupancy information



TrigCmd component



TrigCmd component is used for triggering DALI commands.

Individual in slots are provided for various DALI commands.

A transition from false to true will cause the associated DALI command to be sent to the control gear.

These slots are ideal for use with soft buttons on the device display (i.e. oxWidgets)

Property	Value
TrigCmd	
ontrolDali::TrigCmd	
Fault	false
Status	0
Trig Off	true
Trig Up	false
Trig Down	false
Trig Step Up	false
Trig Step Down	false
Trig Recall Max	false
Trig Recall Min	false
Trig Step Down And Off	false
Trig On And Step Up	false

Address
Set address here

Address Mode
Select single, group or broadcast addressing mode

TrigCmd (ontrolDali::TrigCmd)

Meta Group [1] >>

Fault false

Status 0

Enable true

Poll Frequency Normal

Address 7 [1 - 64]

Address Mode Single

Trig Off true

Trig Up false

Trig Down false

Trig Step Up false

Trig Step Down false

Trig Recall Max false

Trig Recall Min false

Trig Step Down And Off false

Trig On And Step Up false



TrigScene component



TrigSce	
ontrolDali::TrigScene	
Fault	false
Status	0
Scene1	false
Scene2	false
Scene3	false
Scene4	false
Scene5	false
Scene6	false
Scene7	false
Scene8	false
Scene9	false
Scene10	false
Scene11	false
Scene12	false
Scene13	false
Scene14	false
Scene15	false
Scene16	false

TrigScene component is used for triggering preset scenes

Individual in slots are provided for scenes 1...16

A transition from false to true will cause the associated scene select command to be sent to the control gear.

These slots are ideal for use with soft buttons on the device display (i.e. oxWidgets)

Address
Set address here

Address Mode
Select single, group or broadcast addressing mode

TrigSce (ontrolDali::TrigScene)

- Meta Group [1] >>
- Fault false
- Status
- Enable true
- Poll Frequency
- Address [1 - 64]
- Address Mode
- Scene1 false
- Scene2 false
- Scene3 false
- Scene4 false
- Scene5 false
- Scene6 false
- Scene7 false
- Scene8 false
- Scene9 false
- Scene10 false
- Scene11 false



Numeric & Boolean components



NumericPoint and BooleanPoint

Both component types will query a control gear (in single address mode) for actual value.

The reply from the DALI device is scaled to 0..100% range.

NumericWritable and BooleanWritable

These components have the same functionality as the above. Additionally, they allow writing a direct value to the control gear.

BooleanWritable

Relay1 (ontrolDali::BooleanWritable)	
<input type="checkbox"/> Meta	Group [1] >>
<input type="checkbox"/> Fault	<input type="radio"/> false
<input type="checkbox"/> Status	0
<input type="checkbox"/> Enable	<input checked="" type="radio"/> true
<input type="checkbox"/> Poll Frequency	Normal
<input type="checkbox"/> Address	7 [1 - 64]
<input type="checkbox"/> Out	<input checked="" type="radio"/> true
<input type="checkbox"/> In	<input checked="" type="radio"/> true

Address
Set address here

Read actual value
at 'out' slot

Link to 'in' slot to
control device

NumericWritable

Numeric (ontrolDali::NumericWritable)	
<input type="checkbox"/> Meta	Group [1] >>
<input type="checkbox"/> Fault	<input type="radio"/> false
<input type="checkbox"/> Status	0
<input type="checkbox"/> Enable	<input checked="" type="radio"/> true
<input type="checkbox"/> Poll Frequency	Normal
<input type="checkbox"/> Address	7 [1 - 64]
<input type="checkbox"/> Out	100.00
<input type="checkbox"/> In	100.00



Status component



Status1	<input type="radio"/>
ontrolDali::Status	
Fault	false
Status	0
Device Status	OK
Lamp Failure	OK
Lamp Power	OFF
Limit Error	OK
Fade	Ready
Reset State	No
Missing Address	No
Power Failure	OK

Status component queries control gear for current operational values

Following slots are provided, though all may not be applicable depending on device/manufacture

- Device Status
- Lamp Failure
- Lamp Power
- Limit Error
- Fade
- Reset State
- Missing Address
- Power Failure

Status1 (ontrolDali::Status)

Meta Group [1] >>

Fault false ▾

Status

Enable true ▾

Poll Frequency ▾

Address [1 - 64]

Device Status OK

Lamp Failure OK

Lamp Power OFF

Limit Error OK

Fade Ready

Reset State No

Missing Address No

Power Failure OK

Address
Set address here