Using Ontrol
KNX Driver for R-ION
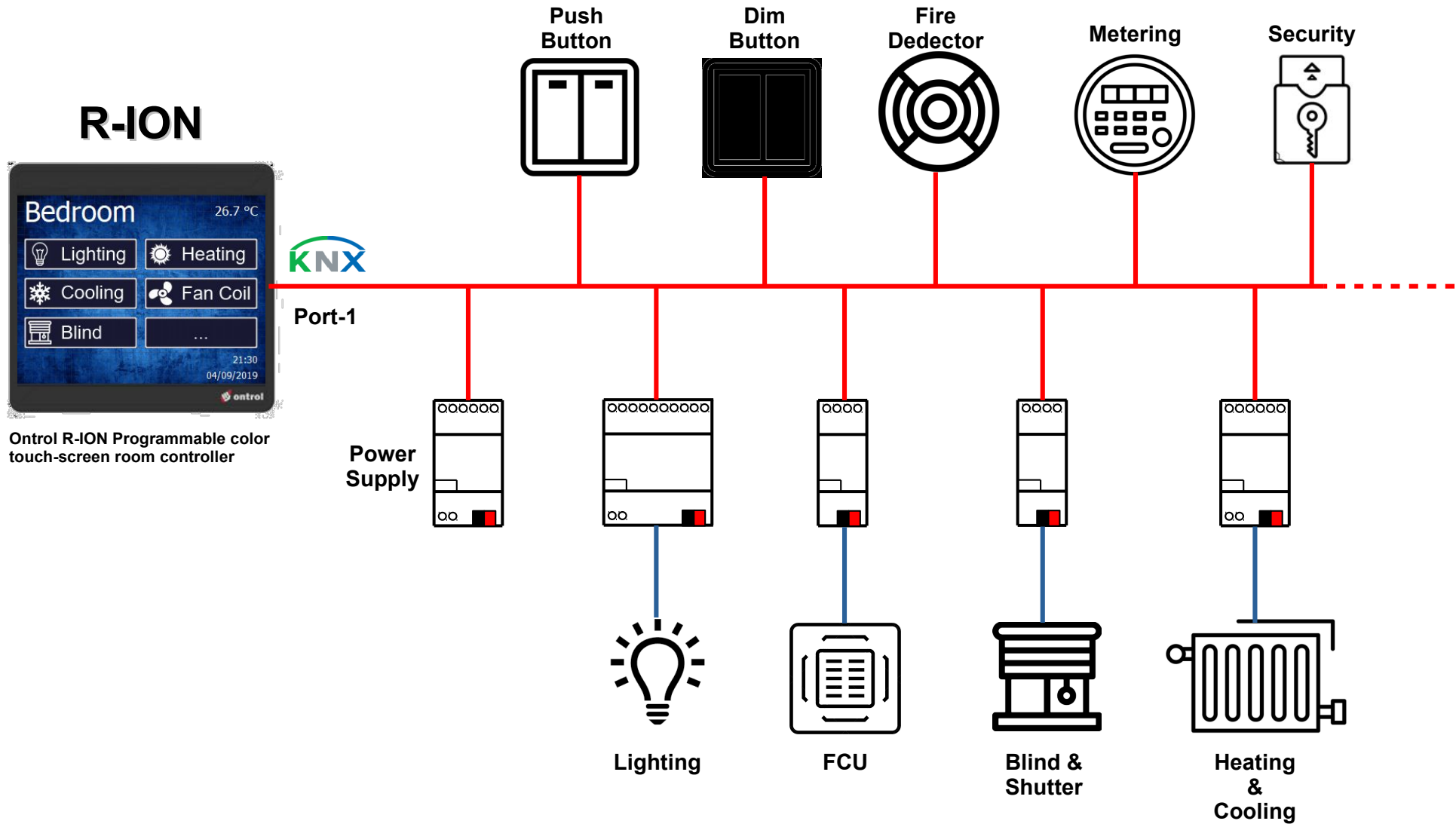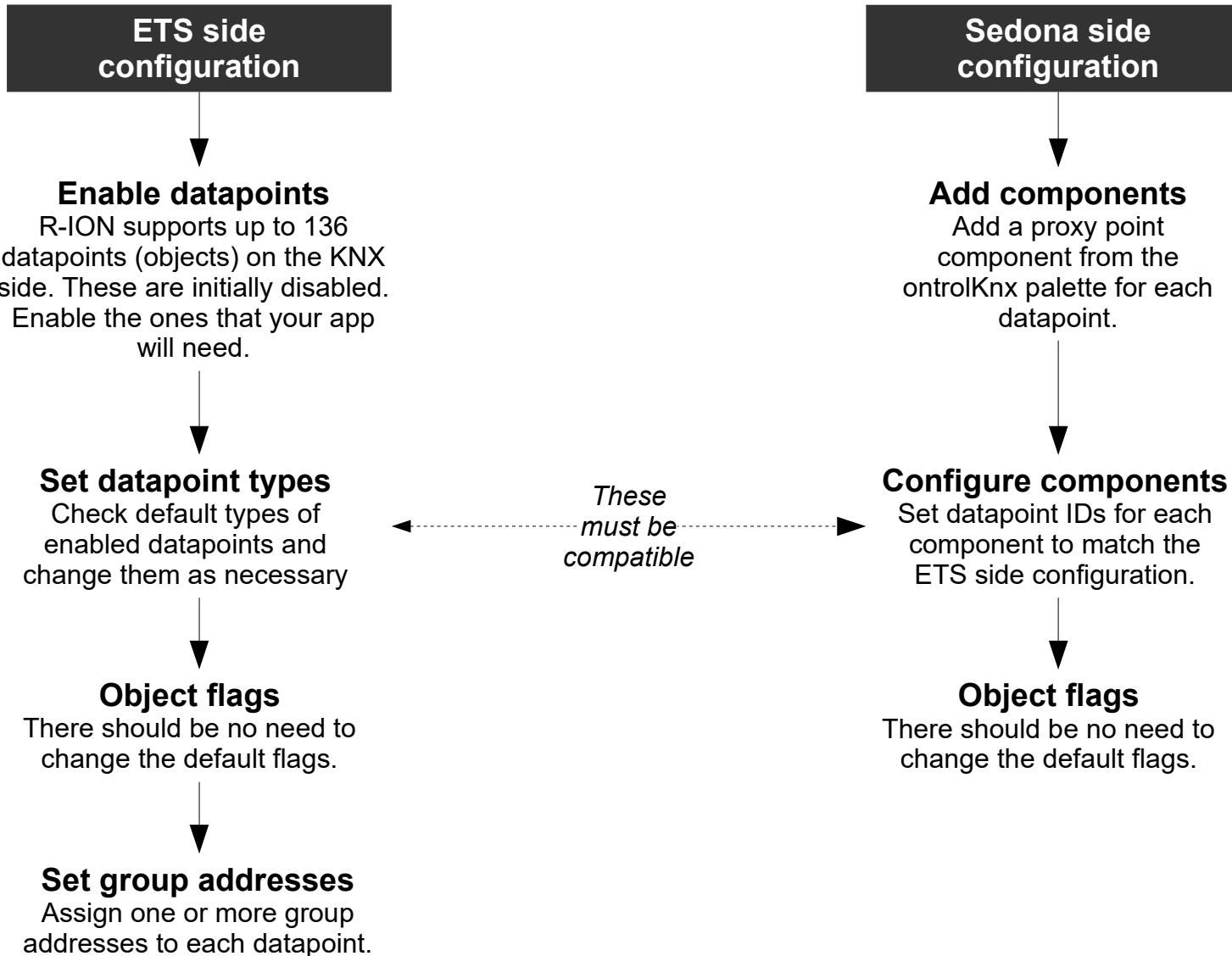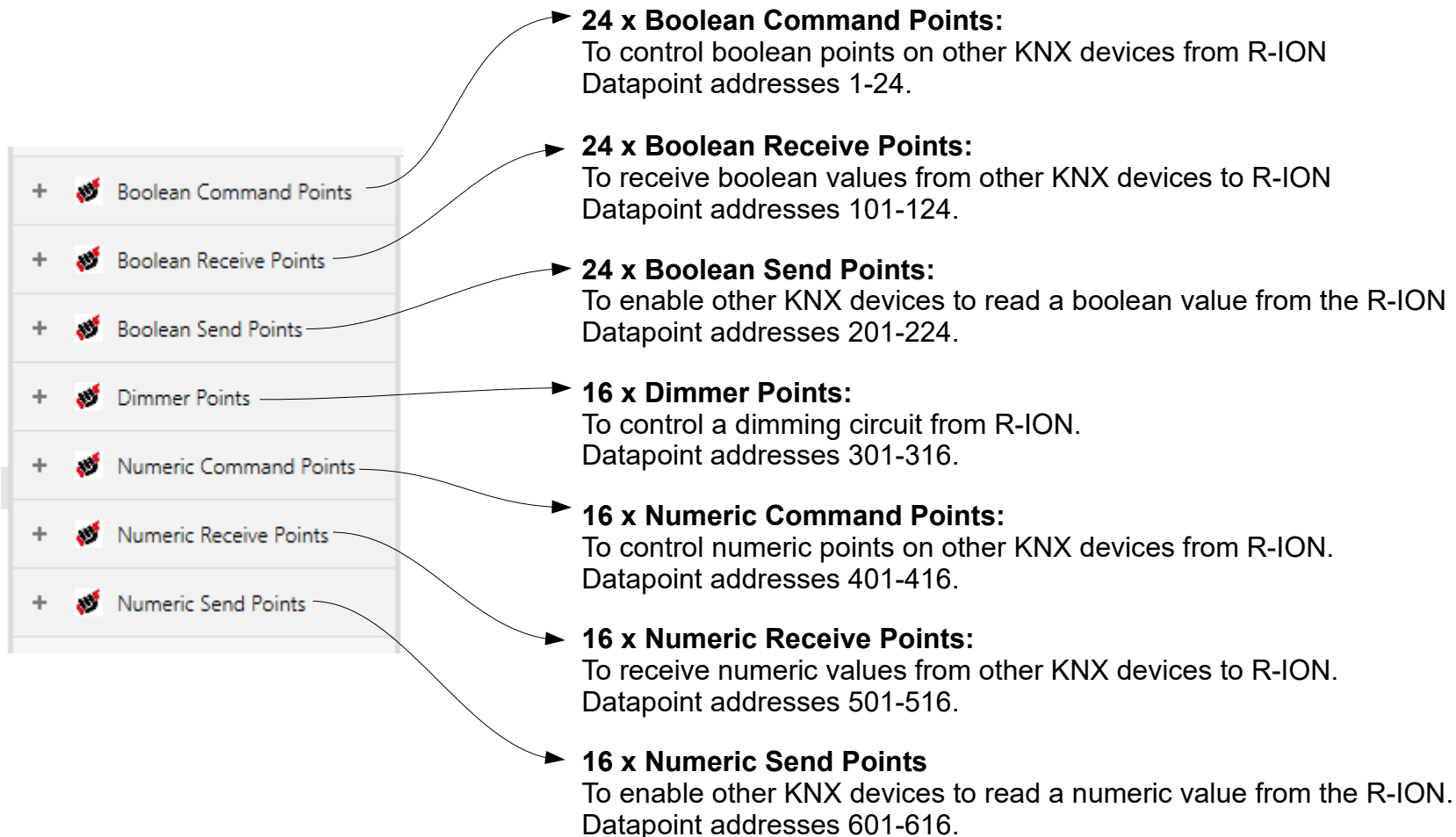
KNX Architecture

Configuration Overview

Configuration is required both in ETS software and on Sedona side.
These can be done by different people at different times.

ETS side configuration	Sedona side configuration

Enable datapoints
R-ION supports up to 136 datapoints (objects) on the KNX side. These are initially disabled. Enable the ones that your app will need.

Add components
Add a proxy point component from the ontrolKnx palette for each datapoint.

Set datapoint types
Check default types of enabled datapoints and change them as necessary

These must be compatible

Configure components
Set datapoint IDs for each component to match the ETS side configuration.

Object flags
There should be no need to change the default flags.

Object flags
There should be no need to change the default flags.

Set group addresses
Assign one or more group addresses to each datapoint.

ETS Overview

R-ION exposes up to 136 objects or datapoints on the KNX bus.These are grouped into below types to achieve different functions. Each type is explained in detail in the following pages.

+ 🔥 Boolean Command Points
+ 🔥 Boolean Receive Points
+ 🔥 Boolean Send Points
+ 🔥 Dimmer Points
+ 🔥 Numeric Command Points
+ 🔥 Numeric Receive Points
+ 🔥 Numeric Send Points

24 x Boolean Command Points:
To control boolean points on other KNX devices from R-ION
Datapoint addresses 1-24.

24 x Boolean Receive Points:
To receive boolean values from other KNX devices to R-ION
Datapoint addresses 101-124.

24 x Boolean Send Points:
To enable other KNX devices to read a boolean value from the R-ION
Datapoint addresses 201-224.

16 x Dimmer Points:
To control a dimming circuit from R-ION.
Datapoint addresses 301-316.

16 x Numeric Command Points:
To control numeric points on other KNX devices from R-ION.
Datapoint addresses 401-416.

16 x Numeric Receive Points:
To receive numeric values from other KNX devices to R-ION.
Datapoint addresses 501-516.

16 x Numeric Send Points
To enable other KNX devices to read a numeric value from the R-ION.
Datapoint addresses 601-616.

ETS: Boolean Command Point
Datapoint addresses 1-24

ontrol

Purpose
This object type can be used to control boolean points on other KNX devices from R-ION.
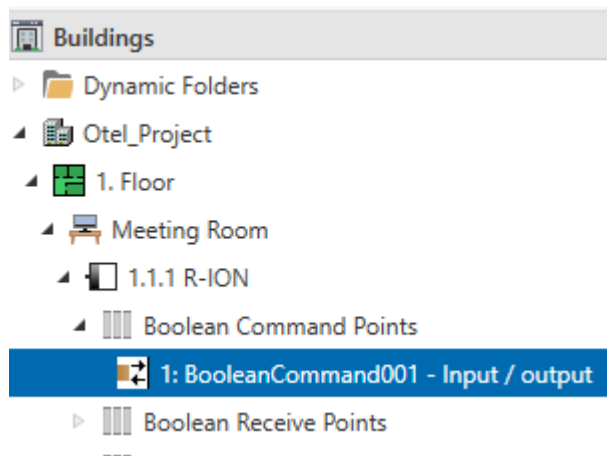
Typical application
To switch a light circuit on/off from a soft button on the display.
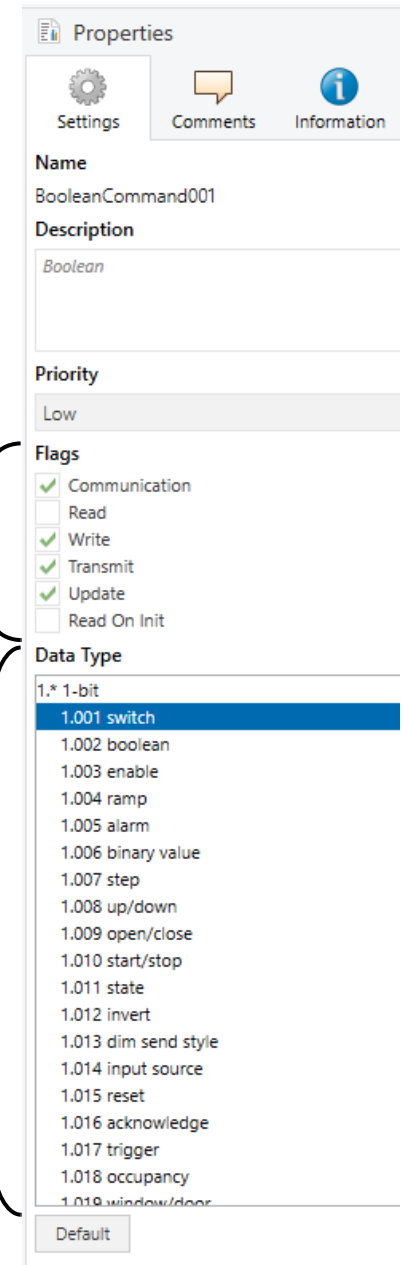
Supported KNX Data Types
DPT1 1-bit

For use with Sedona component types
BooleanWritableTrig

Properties

Settings   Comments   Information

Name
BooleanCommand001
Description
Boolean

Priority
Low

Default Flags

C=Communication
W=Write
T=Transmit
U=Update

Flags
✓ Communication
  Read
✓ Write
✓ Transmit
✓ Update
  Read On Init

Data Point Type
DPT-1

Data Type
1.* 1-bit
1.001 switch
1.002 boolean
1.003 enable
1.004 ramp
1.005 alarm
1.006 binary value
1.007 step
1.008 up/down
1.009 open/close
1.010 start/stop
1.011 state
1.012 invert
1.013 dim send style
1.014 input source
1.015 reset
1.016 acknowledge
1.017 trigger
1.018 occupancy
1.019 window/door

Default

Buildings
▷ 📁 Dynamic Folders
▲ 🏢 Otel_Project
  ▲ 🟩 1. Floor
    ▲ 🛋 Meeting Room
      ▲ 🔲 1.1.1 R-ION
        ▲ ||| Boolean Command Points
            ⬛ 1: BooleanCommand001 - Input / output
          ▷ ||| Boolean Receive Points

ETS: Boolean Receive Point
Datapoint addresses 101-124

ontrol

Purpose
This object type can be used to receive boolean status from other KNX devices to R-ION.

Typical applications
Receive alarm status for local display.
Receive occupancy information from a motion detector.

Supported KNX Data Types
DPT1 1-bit

For use with Sedona component types
BooleanPoint

Properties

Settings   Comments   Information

Name
BooleanReceive002

Description
boolean_Status

Priority
Low

Flags
✔ Communication
  Read
✔ Write
✔ Transmit
✔ Update
✔ Read On Init

Default Flags
C=Communication
W=Write
T=Transmit
U=Update
I=Read on Init

Data Type

1.* 1-bit
  1.001 switch
  1.002 boolean
  1.003 enable
  1.004 ramp
  1.005 alarm
  1.006 binary value
  1.007 step
  1.008 up/down
  1.009 open/close
  1.010 start/stop
  1.011 state
  1.012 invert
  1.013 dim send style
  1.014 input source
  1.015 reset
  1.016 acknowledge
  1.017 trigger
  1.018 occupancy
  1.019 window/door

Data Point Type
DPT-1

Buildings
▷ 📁 Dynamic Folders
◢ 🏢 Otel_Project
  ◢ 🟩 1. Floor
    ◢ 🛏 Meeting Room
      ◢ ▢ 1.1.1 R-ION
        ▷ ▥ Boolean Command Points
        ◢ ▥ Boolean Receive Points
          ▦ 102: BooleanReceive002 - Input
        ▷ ▥ Boolean Send Points

ETS: Boolean Send Point
Datapoint addresses 201-224

Purpose
This object type can be used to send boolean status to other KNX devices from the R-ION.

Typical application
To make available the current output of a logic function or a time schedule that runs on the R-ION.

Supported KNX Data Types
DPT1 1-bit

For use with Sedona component types
BooleanWritable

Properties

Settings   Comments   Information

Name
BooleanSend002

Description
Boolean

Priority
Low

Default Flags

C=Communication
R=Read
T=Transmit

Flags
✓ Communication
✓ Read
☐ Write
✓ Transmit
☐ Update
☐ Read On Init

Data Type
1.* 1-bit

Data Point Type

DPT-1

1.001 switch
1.002 boolean
1.003 enable
1.004 ramp
1.005 alarm
1.006 binary value
1.007 step
1.008 up/down
1.009 open/close
1.010 start/stop
1.011 state
1.012 invert
1.013 dim send style
1.014 input source
1.015 reset
1.016 acknowledge
1.017 trigger
1.018 occupancy
1.019 window/door

Default

ETS: Dimmer Point
Datapoint addresses 301-316

ontrol

Purpose
This object type can be used to control dimmer circuits on other KNX devices from the R-ION.

Typical application
To control dimmer circuits or blinds on other KNX devices from soft buttons on the display.

Supported KNX Data Types
3.007 dimming control
3.008 blinds control

For use with Sedona component types
DimmerControl
ShutterControl

Properties

Settings | Comments | Information

Name
DimControl001

Description

Priority
Low

Default Flags
C=Communication
T=Transmit

Flags
✔ Communication
☐ Read
☐ Write
✔ Transmit
☐ Update
☐ Read On Init

Data Point Type
DPT-3

Data Type
3.* 3-bit controlled
3.007 dimming control
3.008 blind control

ontrol

Purpose
This object type can be used to control numeric points on other KNX devices from R-ION.

Typical application
To set an absolute brightness level (as percent) on a dimmer circuit from a soft button on the display.

Supported KNX Data Types
DPT5 8-bit unsigned value
DPT6 8-bit signed value
DPT7 2x8-bit unsigned value
DPT8 2x8-bit signed value
DPT9 16-bit float value
DPT12 4x8-bit unsigned value
DPT13 4x8 signed value
DPT14 32-bit float value

For use with Sedona component types
NumericWritable

Numeric Command Point Default Flags

C=Communication
W=Write
T=Transmit
U=Update

Data Point Type

DPT-5, DPT-6, DPT-7
DPT-8, DPT-9, DPT-12,
DPT-13, DPT-14

Properties

Settings | Comments | Information

Name
NumericCommand001
Description

Priority
Low

Flags
✓ Communication
☐ Read
✓ Write
✓ Transmit
✓ Update
☐ Read On Init

Data Type
4.* character
   4.001 character (ASCII)
   4.002 character (ISO 8859-1)
5.* 8-bit unsigned value
   5.001 percentage (0..100%)
   5.003 angle (degrees)
   5.004 percentage (0..255%)
   5.005 ratio (0..255)
   5.006 tariff (0..255)
   5.010 counter pulses (0..255)
   5.100 fan stage (0..255)
6.* 8-bit signed value
   6.001 percentage (-128..127%)
   6.010 counter pulses (-128..127)
   6.020 status with mode
17.* scene number
   17.001 scene number
18.* scene control
   18.001 scene control
20.* 1 byte

ontrol

Purpose
This object type can be used to receive a numeric value from other KNX devices to R-ION.

Typical applications
Receive current dim value or blinds position.
Receive temperature value or setting from another device

Supported KNX Data Types
DPT5 8-bit unsigned value
DPT6 8-bit signed value
DPT7 2x8-bit unsigned value
DPT8 2x8-bit signed value
DPT9 16-bit float value
DPT12 4x8-bit unsigned value
DPT13 4x8 signed value
DPT14 32-bit float value

For use with Sedona component types
NumericPoint
IntegerPoint
LongIntegerPoint

Numeric Receive Point Default Flags

C=Communication
W=Write
T=Transmit
U=Update
I=Read On Init

Data Point Type

DPT-5, DPT-6, DPT-7
DPT-8, DPT-9, DPT-12,
DPT-13, DPT-14

Properties

Settings | Comments | Information

Name
NumericReceive001

Description

Priority
Low

Flags
✓ Communication
☐ Read
✓ Write
✓ Transmit
✓ Update
✓ Read On Init

Data Type
4.* character
   4.001 character (ASCII)
   4.002 character (ISO 8859-1)
5.* 8-bit unsigned value
   5.001 percentage (0..100%)
   5.003 angle (degrees)
   5.004 percentage (0..255%)
   5.005 ratio (0..255)
   5.006 tariff (0..255)
   5.010 counter pulses (0..255)
   5.100 fan stage (0..255)
6.* 8-bit signed value
   6.001 percentage (-128..127%)
   6.010 counter pulses (-128..127)
   6.020 status with mode
17.* scene number
   17.001 scene number
18.* scene control
   18.001 scene control

ETS: Numeric Send Point
Datapoint addresses 601-616

ontrol

Purpose
This object type can be used to send a numeric value to other KNX devices from the R-ION.

Typical application
To make available the current temperature measurement or output of a logic function that runs on the R-ION.

Supported KNX Data Types
DPT5 8-bit unsigned value
DPT6 8-bit signed value
DPT7 2x8-bit unsigned value
DPT8 2x8-bit signed value
DPT9 16-bit float value
DPT12 4x8-bit unsigned value
DPT13 4x8 signed value
DPT14 32-bit float value

For use with Sedona component types
NumericWritable

Properties

Settings | Comments | Information

Name
NumericSend001
Description

Priority
Low

Boolean Send Point Default Flags

C=Communication
R=Read
T=Transmit

Flags
✓ Communication
✓ Read
☐ Write
✓ Transmit
☐ Update
☐ Read On Init

Data Point Type

DPT-5, DPT-6, DPT-7
DPT-8, DPT-9, DPT-12,
DPT-13, DPT-14

Data Type
4.* character
    4.001 character (ASCII)
    4.002 character (ISO 8859-1)
5.* 8-bit unsigned value
    5.001 percentage (0..100%)
    5.003 angle (degrees)
    5.004 percentage (0..255%)
    5.005 ratio (0..255)
    5.006 tariff (0..255)
    5.010 counter pulses (0..255)
    5.100 fan stage (0..255)
6.* 8-bit signed value
    6.001 percentage (-128..127%)
    6.010 counter pulses (-128..127)
    6.020 status with mode
17.* scene number
    17.001 scene number
18.* scene control
    18.001 scene control

Sedona Side Configuration

Ontrol KNX Network Hierarchy

Typical Application

OntrolKnx Palette
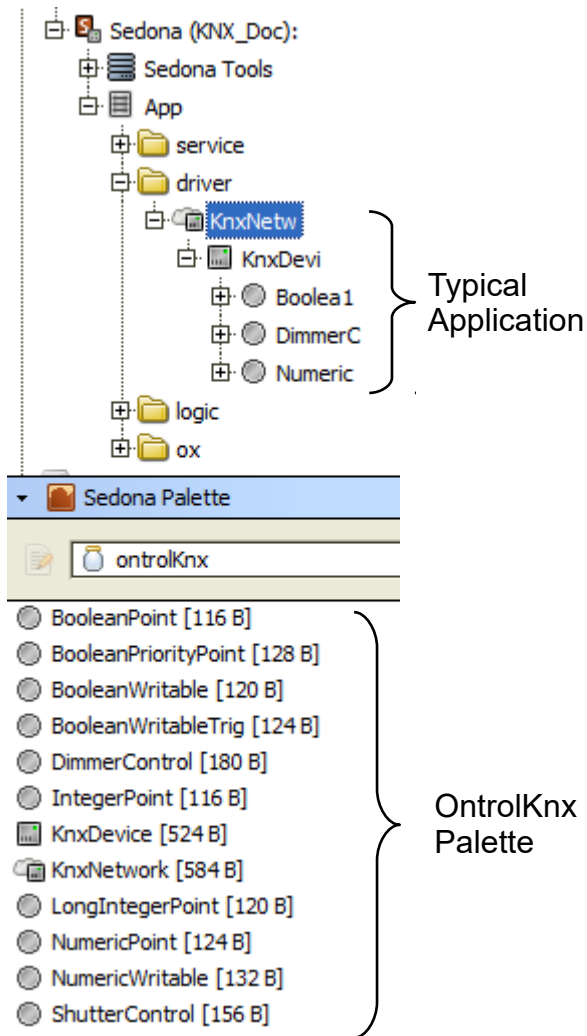
OBSERVE HIERARCHY

KnxNetwork can reside anywhere but,

- KnxDevice must go under KnxNetwork

- Client points must go under a KnxDevice

- Use up-to-date ontrolKnx kit from www.ontrol.com web site
- Only **RS2-K** models support KNX communication

Sedona Side Configuration

KNX Network Properties

Enable
To enable or disable KNX communication

No function in KNX driver

No function in KNX driver

Poll Reduction
If true, KNX points are polled only when required for display

Bus Connection State
Shows KNX bus status

Individual Address Area Field
Shows KNX address Area of R-ION.

Individual Address Line Field
Shows KNX address Line of R-ION.

Individual Address Device Field
Shows KNX address Device of R-ION.

Only changeable on ETS software

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

Min Write Time
Driver will not write to an individual client point more frequently then this setting

Port Number
Typically port 25 for the R-ION

Programming Mode
Shows R-ION programming mode status

Trig Programming Mode
Linkable slot to place R-ION in programming mode

KnxNetw (ontrolKnx::KnxNetwork)

Meta	Group [1] »	
Status	OK	
Enable	true	
Ping Period	300	s [30 - 65535]
Slow Rate	30	s [30 - 255]
Normal Rate	5	s [5 - 255]
Fast Rate	1	s [1 - 255]
Response Timeout	200	ms [50 - 3000]
Max Retries	1	[0 - 10]
Max Write Time	0	s [0 - 65535]
Min Write Time	500	ms [0 - 65535]
Max Read Fails To Mark Device Down	3	[1 - 255]
Poll Reduction	false	
Port Number	25	[0 - 255]
Bus Connection State	connected	
Programming Mode	off	
Trig Programming Mode	false	
Individual Address Area Field	1	[0 - 15]
Individual Address Line Field	1	[0 - 15]
Individual Address Device Field	1	[0 - 255]
Knx Manufacturer Id	471	

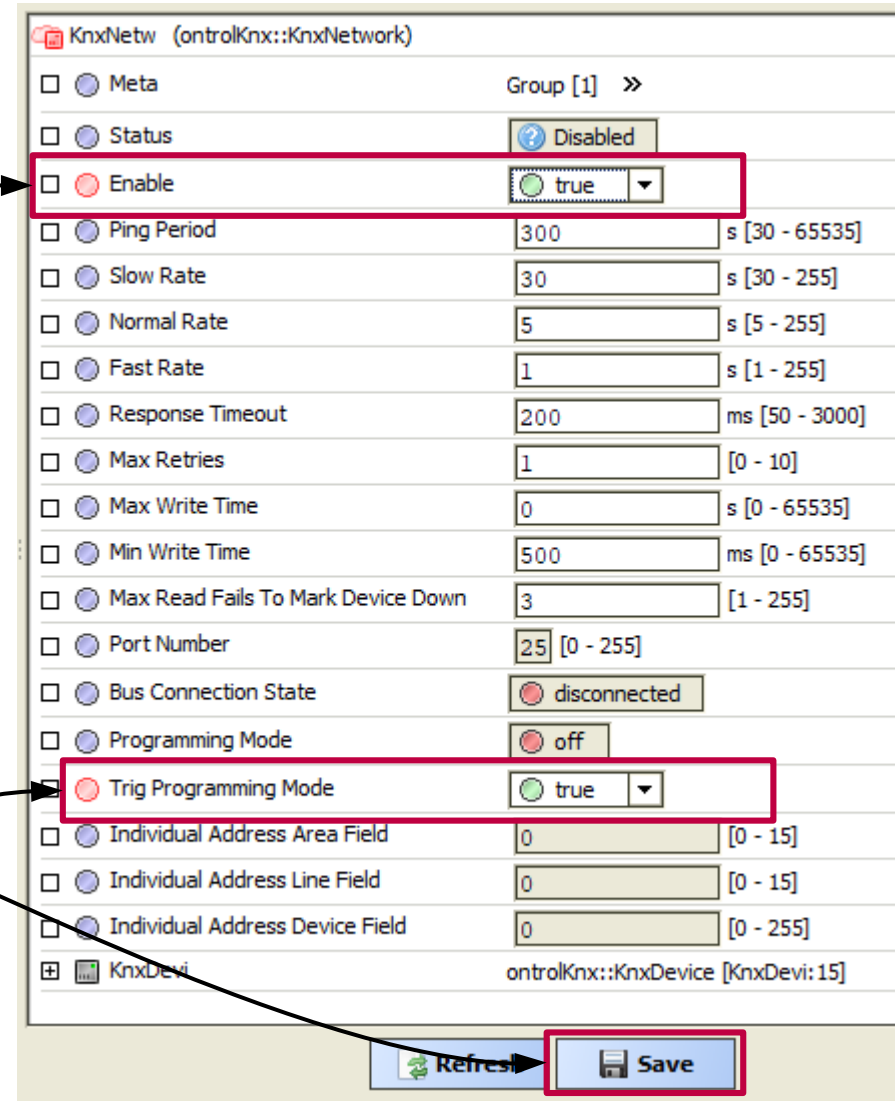# Sedona Side Configuration

ontrol

Programming Mode

Knx Network must be enabled.

Set to 'true' and click 'save' to put R-ION into programming mode. Remember to set back to false after download is complete.
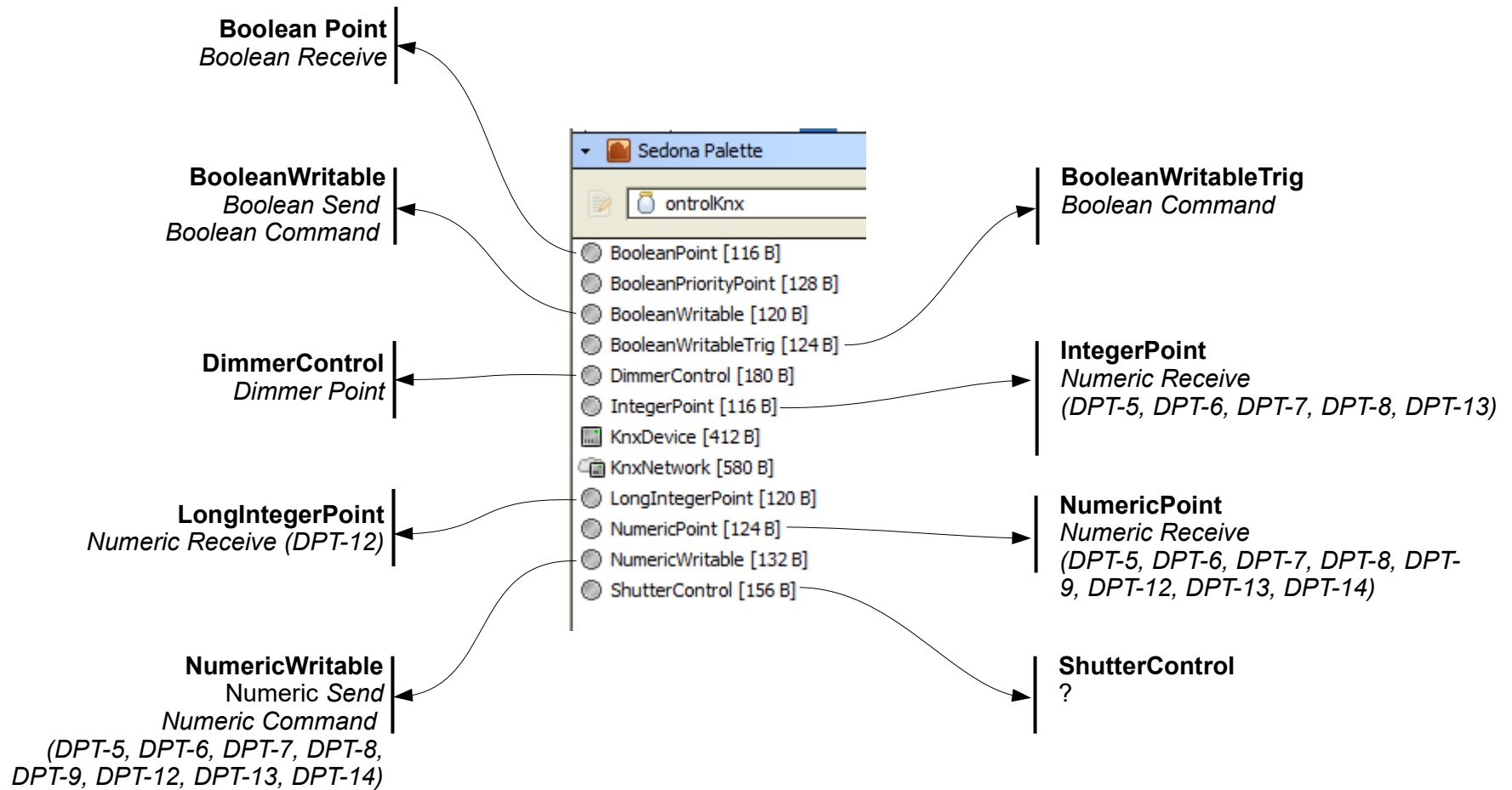
This slot can also be associated with a soft button on the display.

KnxNetw (ontrolKnx::KnxNetwork)

☐ ◉ Meta	Group [1] ≫	
☐ ◉ Status	Disabled	
☐ ◉ Enable	true ▼	
☐ ◉ Ping Period	300	s [30 - 65535]
☐ ◉ Slow Rate	30	s [30 - 255]
☐ ◉ Normal Rate	5	s [5 - 255]
☐ ◉ Fast Rate	1	s [1 - 255]
☐ ◉ Response Timeout	200	ms [50 - 3000]
☐ ◉ Max Retries	1	[0 - 10]
☐ ◉ Max Write Time	0	s [0 - 65535]
☐ ◉ Min Write Time	500	ms [0 - 65535]
☐ ◉ Max Read Fails To Mark Device Down	3	[1 - 255]
☐ ◉ Port Number	25 [0 - 255]	
☐ ◉ Bus Connection State	disconnected	
☐ ◉ Programming Mode	off	
◉ Trig Programming Mode	true ▼	
☐ ◉ Individual Address Area Field	0	[0 - 15]
☐ ◉ Individual Address Line Field	0	[0 - 15]
☐ ◉ Individual Address Device Field	0	[0 - 255]
⊞ ▦ KnxDevi	ontrolKnx::KnxDevice [KnxDevi:15]	

Refresh   💾 Save

Sedona Side Configuration

ontrol

Available points and corresponding ETS datapoint types

Boolean Point
Boolean Receive

BooleanWritable
Boolean Send
Boolean Command

DimmerControl
Dimmer Point

LongIntegerPoint
Numeric Receive (DPT-12)

NumericWritable
Numeric *Send*
Numeric Command
(DPT-5, DPT-6, DPT-7, DPT-8,
DPT-9, DPT-12, DPT-13, DPT-14)

Sedona Palette

ontrolKnx

- BooleanPoint [116 B]
- BooleanPriorityPoint [128 B]
- BooleanWritable [120 B]
- BooleanWritableTrig [124 B]
- DimmerControl [180 B]
- IntegerPoint [116 B]
- KnxDevice [412 B]
- KnxNetwork [580 B]
- LongIntegerPoint [120 B]
- NumericPoint [124 B]
- NumericWritable [132 B]
- ShutterControl [156 B]

BooleanWritableTrig
Boolean Command

IntegerPoint
Numeric Receive
(DPT-5, DPT-6, DPT-7, DPT-8, DPT-13)

NumericPoint
Numeric Receive
(DPT-5, DPT-6, DPT-7, DPT-8, DPT-9, DPT-12, DPT-13, DPT-14)

ShutterControl
?

Configuring a BooleanPoint

ontrol

ETS Side configuration:

- Enable a BooleanReceive type datapoint.
- Set its data type and group address.

out
Actual received value
from KNX bus

Component properties

Set the datapoint number
here (101...124)

Data point type and
flags show-up here[1]

Note 1: If configuration & download completed in ETS

Configuring a BooleanWritable

ontrol

ETS Side configuration:

- Enable a BooleanCommand or BooleanSend type datapoint.
- Set its data type and group address.

<u>Optional</u>:
If it is possible to receive actual status feedback from a distinct group address:
- Enable a BooleanReceive type datapoint.
- Set its datatype and group address.

Boolean ontrolKnx::BooleanWritable	⊘
Fault	false
Status	0
Write Data Point Type	Disabled
Write Data Point Flags	0
Read Data Point Type	Disabled
Read Data Point Flags	0
In	null
Out	null

In
Link to 'in' slot to control boolean point

Out
If read datapoint is set, this reflects the actual status of the load. Otherwise, it shows the result of the last command sent to the associated write datapoint's group address

Component properties

☐ ⬤	Meta	Group [1] ≫	
☐ ⬤	Fault	🔴 false	
☐ ⬤	Status	0	
☐ ⬤	Enable	🟢 true ▼	
☐ ⬤	Poll Frequency	Normal ▼	
☐ ⬤	Write Data Point Id	0	[1 - 1000]
☐ ⬤	Write Data Point Type	Disabled	
☐ ⬤	Write Data Point Flags	0	[0 - 255]
☐ ⬤	Read Data Point Id	0	[0 - 1000]
☐ ⬤	Read Data Point Type	Disabled	
☐ ⬤	Read Data Point Flags	0	[0 - 255]

Set the write datapoint here

Data point type and flags show-up here[1]

Set the feedback datapoint here *(optional)*

Data point type and flags show-up here[1]

Note 1: If configuration & download completed in ETS

Configuring a BooleanWritableTrig

ETS Side configuration:

- Enable a BooleanCommand type datapoint.
- Set its data type and group address.

<u>Optional</u>*:*
If it is possible to receive actual status feedback from a distinct group address:
- Enable a BooleanReceive type datapoint.
- Set its datatype and group address.

```
Boolean                                      ⭕
ontrolKnx::BooleanWritableTrig
Fault                                     false
Status                                        0
Write Data Point Type              Disabled
Write Data Point Flags                    0
Read Data Point Type               Disabled
Read Data Point Flags                     0
Trig True                                 false
Trig False                                false
Trig Toggle                               false
Out                                        null
```

Trig True[1]
Sends out a 'true' or on command

Trig False[1]
Sends out a 'false' or off command

Trig Toggle[1]
Sends out a command to reverse the current status of the output.

Out
If read datapoint is set, this reflects the actual status of the load. Otherwise, it shows the result of the last command sent to the associated write datapoint's group address

Note 1: Trig type inputs cause a command telegram to be sent on a transition from false to true. They are designed to be directly associated with soft buttons on a display.

Component properties

☐ ⚪ Meta	Group [1] ≫	
☐ ⚪ Fault	🔴 false	
☐ ⚪ Status	0	
☐ ⚪ Enable	🟢 true ▼	
☐ ⚪ Poll Frequency	Normal ▼	
☐ ⚪ Write Data Point Id	0	[1 - 1000]
☐ ⚪ Write Data Point Type	Disabled	
☐ ⚪ Write Data Point Flags	0	[0 - 255]
☐ ⚪ Read Data Point Id	0	[0 - 1000]
☐ ⚪ Read Data Point Type	Disabled	
☐ ⚪ Read Data Point Flags	0	[0 - 255]

Set the write datapoint here

Data point type and flags show-up here[2]

Set the feedback datapoint here *(optional)*

Data point type and flags show-up here[2]

Note 2: If configuration & download completed in ETS

Configuring a Dimmer (part 1)

ontrol

ETS Side configuration:
- enable a Dimmer type datapoint.
- set its group address (type is DPT3)

<u>Optional</u>:
If it is possible to receive actual percentage feedback from a distinct group address:
- enable a NumericReceive type datapoint.
- set its datatype (DPT 5) and group address.

If it is possible to receive actual on/off feedback from a distinct group address:
- enable a BooleanReceive type datapoint.
- set its datatype (DPT 1) and group address.

DimmerC ontrolKnx::DimmerControl	○
Fault	false
Status	0
Write Data Point Type	Disabled
Write Data Point Flags	0
Read Data Point Type	Disabled
Read Data Point Flags	0
Switch Data Point Type	Disabled
Switch Data Point Flags	0
Trig Up	false
Trig Down	false
Out Percent	nan
Out Switch	null

Trig Up[1]
Sends out one or more telegrams to switch on or dim up when set to true

Trig Down[1]
Sends out one or more telegrams to switch off or dim down whens set to true

Out
If read datapoint is set, this reflects the actual percentage status of the load. Otherwise, it remains 'null'

Out Switch
If switch data point is set, this reflects the actual on/off status of the load. Otherwise, it follows the 'out' value.

Note 1: Trig type inputs cause a command telegram to be sent on a transition from false to true. They are designed to be directly associated with soft buttons on a display.

Set the write datapoint here

Data point type and flags show-up here[2]

Set the feedback datapoint here *(optional)*

Data point type and flags show-up here[2]

☐ ○ Fault	🔴 false	
☐ ○ Status	0	
☐ ○ Enable	🟢 true ▼	
☐ ○ Poll Frequency	Normal ▼	
☐ ○ Write Data Point Id	0	[1 - 1000]
☐ ○ Write Data Point Type	Disabled	
☐ ○ Write Data Point Flags	0	[0 - 255]
☐ ○ Read Data Point Id	0	[0 - 1000]
☐ ○ Read Data Point Type	Disabled	
☐ ○ Read Data Point Flags	0	[0 - 255]
☐ ○ Switch Data Point Id	0	[0 - 1000]
☐ ○ Switch Data Point Type	Disabled	
☐ ○ Switch Data Point Flags	0	[0 - 255]
☐ ○ Action On Press		

Set the dimmer switch feedback datapoint here

Data point type and flags show-up here[2]

Configuring a Dimmer (part 2)

These properties determine the functionality of the trigUp & trigDown input slots when associated with soft buttons on the display.
The buttons can be configured to perform in several different ways.
See below examples.

☐ ◉	Switch Data Point Flags	0	[0 - 255]
☐ ◉	Action On Press	none ▼	
☐ ◉	Action During Hold	stepUpDown ▼	
☐ ◉	Action On Short Release	stepUpDown ▼	
☐ ◉	Action On Long Release	none ▼	
☐ ◉	Number Of Intervals	7	[1 - 7]
☐ ◉	Duration Of Long Operation	300	ms [300 - 3000]
☐ ◉	Cyclical Hold Actions	enable ▼	
☐ ◉	Hold Action Repeat Period	1000	ms [200 - 2000]

Determines number of dim steps between %0 to %100.

Determines to minimum press&hold time to distinguish between a short-press and a long-press

Resend the ActionDuringHold command continously while the button is pressed?

Repeat frequency when cyclicalHoldAction = true

Some examples of button configuration

Simple on/off switch
Action On Press = fullOnOff
Action During Hold = none
Action On Short Release = none
Action On Long Release = none

Stepwise dimming:
Short-press to switch fully on/off,
Press & hold to dim
Action On Press = none
Action During Hold = stepUpDown
Action On Short Release = fullOnOff
Action On Long Release = none
Cyclical Hold Actions = true

Stepwise dimming (low traffic – requires long dim period)
Short-press to switch fully on/off, press & hold to dim
Action On Press = stepUpDown
Number Of Intervals = 1
Action On Hold=none
Action On Short Release = fullOnOff
Action On LongRelease = stop

Configuring a Numeric Point

ETS Side configuration:

- Enable a NumericReceive type datapoint.
- Set its data type and group address.

Out
Actual receive value of KNX point

Component properties

Set the read datapoint here

Data point type and flags show-up here[1]

Scale
Received numeric point values will be multiplied by the 'scale' property before setting the 'out' slot.

Offset
Received numeric point values will be added by the 'offset' property before setting the 'out' slot.

Note 1: If configuration & download completed in ETS

Configuring Integer & LongInteger Points

ontrol

ETS Side configuration:

- Enable a NumericSend type datapoint.
- Set its data type and group address.

Integer
Support 16 bit values, -32768 to 32767

LongInteger
Support 32 bit values, -2,147,483,648 to 2,147,483,647

Integer ontrolKnx::IntegerPoint	
Fault	false
Status	0
Data Point Type	Disabled
Data Point Flags	0
Out	0

LongInt ontrolKnx::LongIntegerPoint	
Fault	false
Status	0
Data Point Type	Disabled
Data Point Flags	0
Out	0

Out
Actual value received
from KNX bus

Component properties

☐ ◉ Meta	Group [1] ≫	
☐ ◉ Fault	◉ false	
☐ ◉ Status	0	
☐ ◉ Enable	◉ true ▼	
☐ ◉ Poll Frequency	Normal ▼	
☐ ◉ Data Point Id	0	[1 - 1000]
☐ ◉ Data Point Type	Disabled	
☐ ◉ Data Point Flags	0	[0 - 255]

Set the read
datapoint here

Data point type and
flags show-up here[1]

Note 1: If configuration & download completed in ETS

Configuring a NumericWritable

ETS Side configuration:

- Enable a NumericCommand or NumericSend type datapoint.
- Set its data type and group address.

<u>Optional</u>:
If it is possible to receive actual value feedback from a distinct group address:
- Enable a NumericReceive type datapoint.
- Set its datatype and group address.

```
Numeric                              ◯
ontrolKnx::NumericWritable
Fault                            false
Status                               0
Write Data Point Type         Disabled
Write Data Point Flags               0
Read Data Point Type          Disabled
Read Data Point Flags                0
In                                 nan
Out                                nan
```

In
Link to 'in' slot to control numeric point

Out
If read datapoint is set, this reflects the actual status of the load. Otherwise, it shows the result of the last command sent to the associated write datapoint's group address

Component properties

☐ ◯ Meta	Group [1] »	
☐ ◯ Fault	🔴 false	
☐ ◯ Status	0	
☐ ◯ Enable	🟢 true ▼	
☐ ◯ Poll Frequency	Normal ▼	
☐ ◯ Write Data Point Id	0	[1 - 1000]
☐ ◯ Write Data Point Type	Disabled	
☐ ◯ Write Data Point Flags	0	[0 - 255]
☐ ◯ Read Data Point Id	0	[0 - 1000]
☐ ◯ Read Data Point Type	Disabled	
☐ ◯ Read Data Point Flags	0	[0 - 255]
☐ ◯ Scale	1.00	
☐ ◯ Offset	0.00	

Set the write datapoint here

Data point type and flags show-up here[1]

Scale
Send numeric point value will be multiplied by the 'scale' property before setting the out

Set the feedback datapoint here *(optional)*

Data point type and flags show-up here[1]

Offset
Send numeric point values will be added by the 'offset' property before setting the 'out' slot.

Note 1: If configuration & download completed in ETS