DIGITAL CONCEPTS

Smart EnOcean Gateway
DC-GW/EO-IP

Learning-in EnOcean Devices

Table of contents

Introduction 3
Differences in learn-in methods of various EnOcean devices 3
Examples 3
Learn-in procedure using the Gateway's web interface 4
4 button rocker switch 4
Window handle 6
Window contact 7
Motion detector / Brightness sensor 9
Weatherstation 11
Switching power outlet *Eltako FSSA-230V* 13
Switching power outlet *Permundo PSC 234* 16
Switching actuator *Eltako FSR61VA* 18
Radiator control valve actuator *HORA SmartDrive MX* 21
Radiator control valve actuator with deep standby *Micropelt iTRV MVA-002* 23
Devices with no Learn-in telegrams (Manual Learn-in) 25

Introduction

The learn-in procedure is an important step in setting up a working EnOcean environment. Since the introduction of the EnOcean wireless standard, several learn-in methods have been introduced in order to pair two or more devices together. Three basic types of learn-in pairings also used to connect EnOcean devices with DC-GW/EO-IP gateway are: EEP learn-in telegrams, UTE and Smart Ack. Because the type of pairing procedure can't be automatically detected for each device, missing information must be provided by the user.

In this document your will find the explanation of learning-in procedures for several most widely used EnOcean device types.

Differences in learn-in methods of various EnOcean devices

We can separate EnOcean devices into unidirectional and bidirectional. Unidirectional devices read out and report physical values (typically various sensors). Bidirectional (1-way) devices report values but they can also be instructed to do actions or change their property (typically actuators, controllers etc.). In order to receive data from unidirectional (2-way) EnOcean devices, they need to be properly and uniquely defined only at the gateway side. Bidirectional devices need to be learned-in on both ends, a device must be learned-in in the gateway, and the gateway must be learned-in in the device. Some devices use UTE and Smart Ack learn-in methods in order to simplify the process. Therefore, the scope of learn-in process depends on EnOcean components which are being learned-in. When learning-in devices with UTE and Smart Ack learn-in procedures, various steps are necessary depending on the manufacturer and component.

Actions commonly used to initiate device learn-in:

Action	Device being learned-in / communication type	Device group
Short button press	Sensor / unidirectional	Rocker button
Repeated/long button press	Actuator / bidirectional	Switching actuator
Opening or closing magnet contact	Sensor / unidirectional	Window contact
Turning window handle	Sensor / unidirectional	Window handle
Briefly swiping a magnet across device in order to initiate the learn-in procedure	Sensor / unidirectional	Motion detector/Brightness sensor
Connect power supply (230V or battery)	Sensor / unidirectional	Weather station
Turning a potentiometer	Actuator / bidirectional	Switching actuator

Some components have multiple functions (i.e. sensor and actuator in one product). If this is the case, each function needs to be learned-in separately.

Examples

In this section, we will provide examples of how are the following devices learned-in to a DC-GW/EO-IP gateway.

Device	Profile group	Profile	Learn-in method	Product	Manufacturer	Comms.	Learn-in difficulty
4 button rocker switch	RPS	F6-02-01	receivedRps			Unidirect.	Low
Window handle	RPS	F6-10-00	receivedRps	Hoppe	SecuSignal	Unidirect.	Low
Window contact	1BS	D5-00-01	received1BS			Unidirect.	Low
Weather station	4BS	A5-13-01	received4BS	Multisensor MS	Eltako	Unidirect.	Low

Switching power outlet	RPS	F6-02-01	receivedRps	FSSA-230V	Eltako	Bidirect.	Low
Switching power outlet	VLD	D2-01-09	UTE	SmartPlug PSC234	Permundo	Bidirect.	Low
Radiator control valve actuator	4BS	A5-20-04	SmartAck	SmartDrive MX	Hora	Bidirect.	Low
Switching actuator	RPS 4BS	F6-02-01 A5-12-01	receivedRps received4BS	FSR61VA FSR61VA	Eltako Eltako	Bidirect. Unidirect.	High High

Learn-in procedure using the Gateway's web interface

The learn-in procedure can be accessed under the "EnOcean" menu item. Instructions on how to access the Gateway are available for download on www.enocean-gateway.eu.

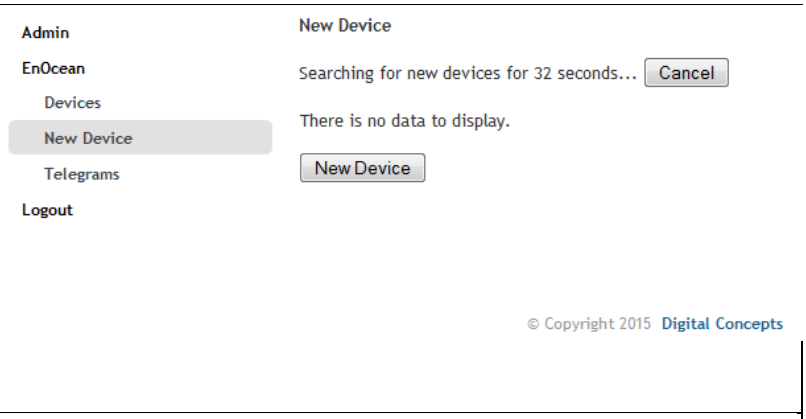
4 button rocker switch

Start the learn-in process:

1. Select menu item "EnOcean" – "New Device"

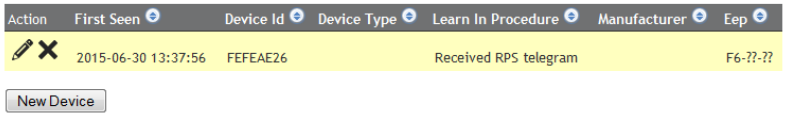
Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button.

2. During the countdown, trigger the transmission of a learn-in telegram on the new device



After learn-in telegram has been received, gateway will display telegram properties on the web interface.

3. To add newly detected device, press the pencil icon.
(At this moment, new device is still not in added in the gateway's device database)



*In case of adding a Rocker switch, **RPS telegram** will be recognized as the current learn-in method.*

RPS telegrams contain no particular device or component information, except that we are learning-in a Rocker switch. Therefore, some information needs to be entered manually.

4. Select device type
   Unidirectional Device

5. Enter device name
   "Friendly Name"
   e.g. Ceiling light living room

6. Enter name of physical device
   "Physical device"
   e.g. Rocker Switch
   Optional entry

7. Selection of the respective EnOcean Equipment Profile
   Leave as suggested or consult your device's product documentation to match the correct profile

8. Select the desired message transmission behavior
   Section "Transmit"

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

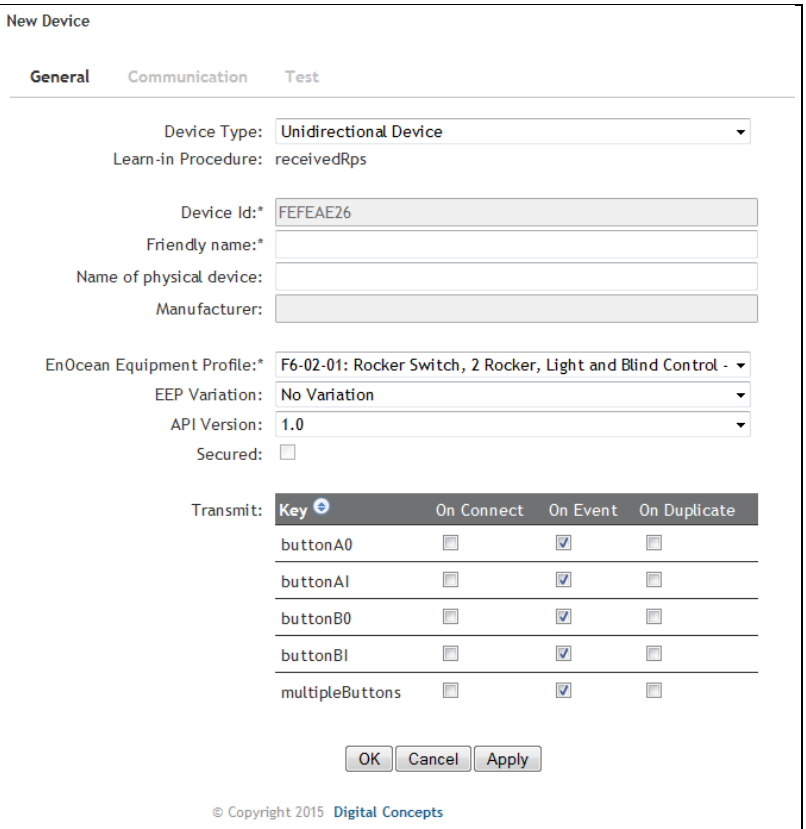
On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

9. When all properties are specified, device can be saved.
   Press "OK"
   Web interface goes back to "Devices" overview

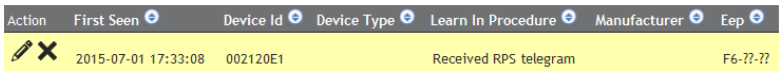
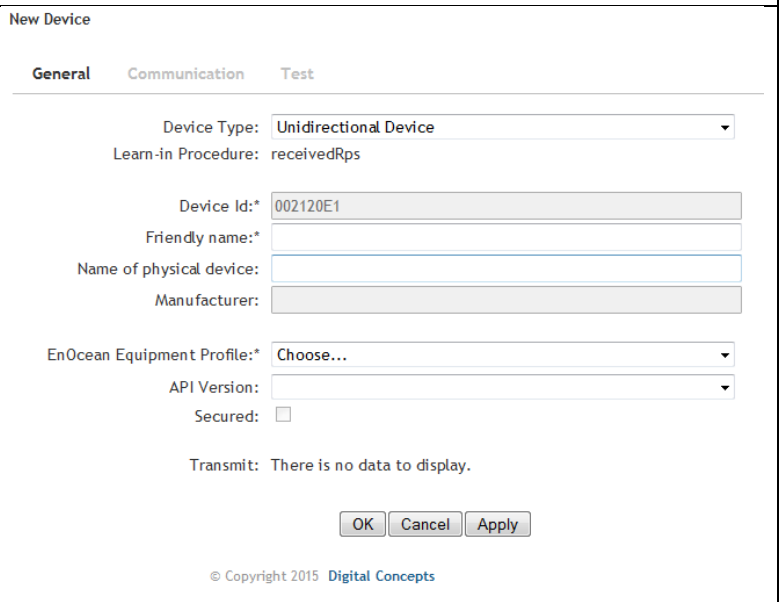
   or

   Press "Apply"
   Web interface stays in "Edit" menu.



To verify that the learn-in process was successful, look for new device in "Devices" menu.	

Window handle

Start the learn-in process: 1. Select menu item "EnOcean" – "New Device" *Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button.* 2. During the countdown, rotate window handle to send the learn-in telegram	
After learn-in telegram has been received, gateway will display telegram properties on the web interface. . 3. To add newly detected device, press the pencil icon. *(At this moment, new device is still not in added in the gateway's device database)*	
*In case of adding a window handle, **RPS telegram** will be recognized as the current learn-in method.* *RPS telegrams contain no particular device or component information. Therefore, some information needs to be entered manually.* 4. Select device type *Unidirectional Device* 5. Enter device name "Friendly Name" *e.g. Window handle living room* 6. Enter name of physical device *e.g. Soda window handle* *Optional entry*	

7. Selection of the respective EnOcean Equipment Profile

   In this example, the device's EEP Profile is automatically recognized and selected

8. Select the desired message transmission behavior

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
API messages will be sent for all actions that device makes (Streaming)

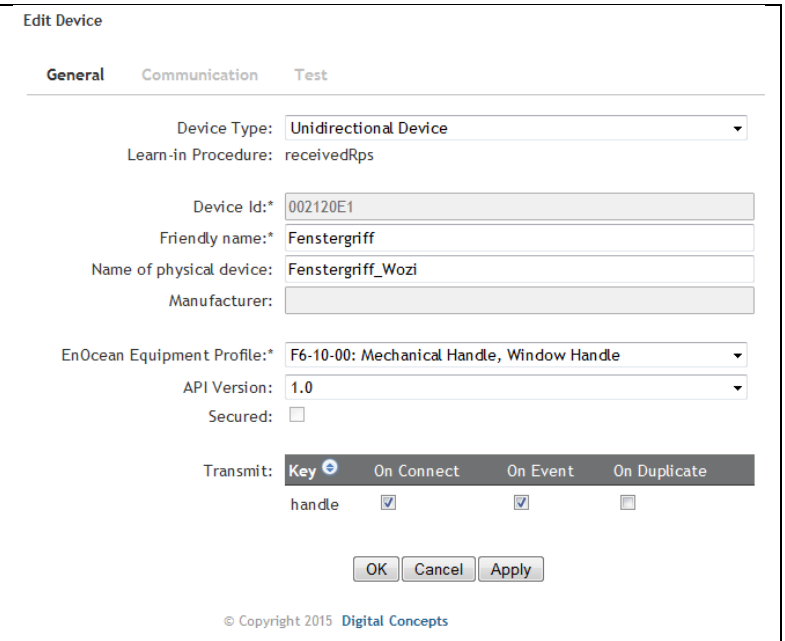
On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

9. When all properties are specified, device can be saved.

   Press "OK"
   Web interface goes back to "Devices" overview

   or

   Press "Apply"
   Web interface stays in "Edit" menu.



To verify that the learn-in process was successful, look for new device in "Devices" menu.

Window contact

Start the learn-in process:

1. Select menu item "EnOcean" – "New Device"

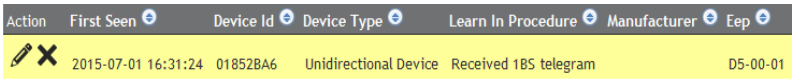
Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button.

2. During the countdown, swipe magnet across the area on window contact marked with a square.

   NOTE: In normal operation, magnetic

contact is placed on the side closer to window.

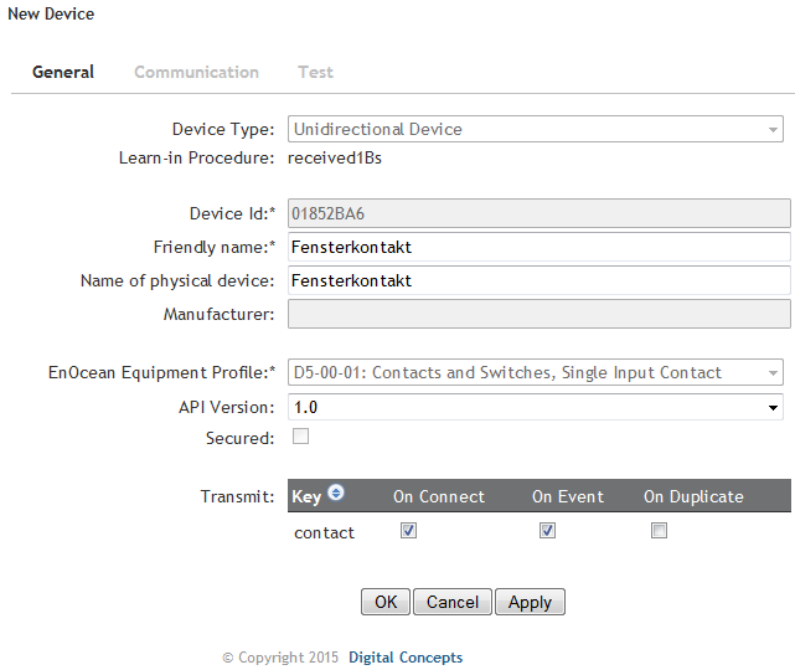
After learn-in telegram has been received, gateway will display telegram properties on the web interface.



3. To add newly detected device, press the pencil icon.
   (At this moment, new device has still not been added to gateway's device database)

In case of adding a window handle, **1-BS-telegram** will be recognized as the current learn-in method.

Gateway is now aware that we are learning in a "unidirectional" device. Corresponding EEP profile is automatically selected.



4. Select device type
   "Friendly Name"
   e.g. Window contact

5. Enter name of physical device
   "Physical device"
   e.g. Eltako window contact
   Optional entry

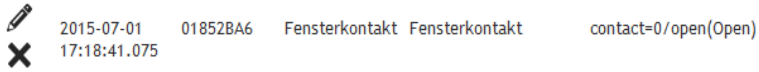
6. Selection of the respective EnOcean Equipment Profile
   In this case, it will be automatically filled in by gateway
7. Select the desired message transmission behavior

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

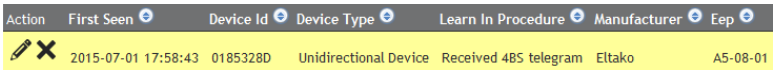
On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

8. When all properties are specified, device can be

saved. *Press "OK"* *Web interface goes back to "Devices" overview* *or* *Press "Apply"* *Web interface stays in "Edit" menu.* *In both cases, new device is stored in the gateway's device database*	
To verify that the learn-in process was successful, look for new device in "Devices" menu	

Motion detector / Brightness sensor

Start the learn-in process: 1. Select menu item "EnOcean" – "New Device" Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button. 2. During the countdown, swipe magnet across the area marked with a square.	
In case of adding a motion detector/ brightness sensor, **4BS telegram** will be recognized as the current learn-in method. 3. To add newly detected device, press the pencil icon. (At this moment, new device has still not been added to gateway's device database)	

In case of adding a motion detector / brightness sensor, **4BS telegram** will be recognized as the current learn-in method.

Gateway is now aware that we are learning in a "unidirectional" device. Corresponding EEP profile is automatically selected.

4. Enter device name
   "Friendly Name"
   e.g. Motion detector hallway

5. Enter name of physical device
   e.g. Multipurpose sensor hallway
   Optional entry

6. Selection of the respective EnOcean Equipment Profile
   In this case, it will be automatically filled in by gateway

7. Select the desired message transmission behavior

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

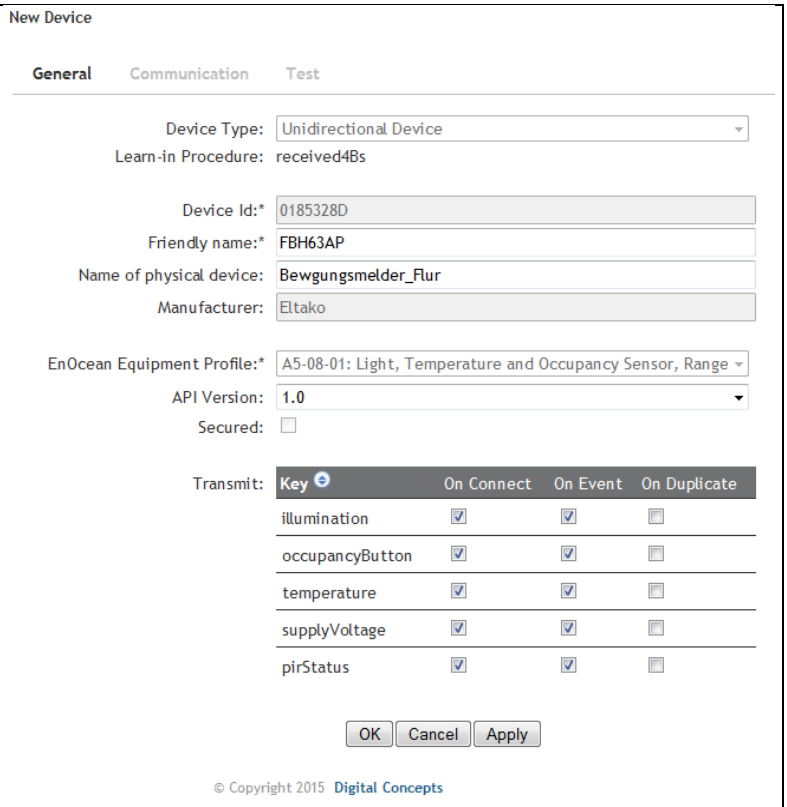
8. When all properties are specified, device can be saved.

   Press "OK"
   Web interface goes back to "Devices" overview

   or

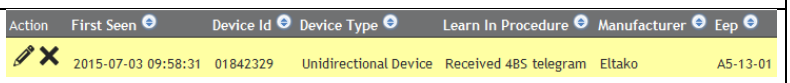
   Press "Apply"
   Web interface stays in "Edit" menu.

In both cases, new device is stored in the gateway's device database



To verify that the learn-in process was successful, look for new device in "Devices" menu.	2015-07-01 17:18:41.075 01852BA6 Fensterkontakt Fensterkontakt contact=0/open(Open)

Weatherstation

Start the learn-in process: 1. Select menu item "EnOcean" – "New Device" Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button. 2. During the countdown, swipe magnet across the area marked with a square.	
In case of adding a weatherstation, **4BS telegram** will be recognized as the current learn-in method. 3. To add newly detected device, press the pencil icon. *(At this moment, new device has still not been added to gateway's device database)*	

In case of adding a weatherstation, **4BS telegram** will be recognized as the current learn-in method.

Gateway is now aware that we are learning in a "unidirectional" device. Corresponding EEP profile is automatically selected.

4. Enter device name
   "Friendly Name"
   e.g. Weatherstation Haussteuerung

5. Enter name of physical device
   "Physical device"
   e.g. Multisensor_MS
   Optional entry

6. A Selection of the respective EnOcean Equipment Profile
   In this case, it will be automatically filled in by gateway

7. Select the desired message transmission behavior

   All supported values are shown based on EE Profile. Some devices do not support all displayed functions. Therefore all relevant functions must be checked and adjusted accordingly.

   On Connect
   Reports the last known /actual device status when connection to Gateway's API is (re)established

   On Event
   API messages will be sent for all actions that device makes (Streaming)

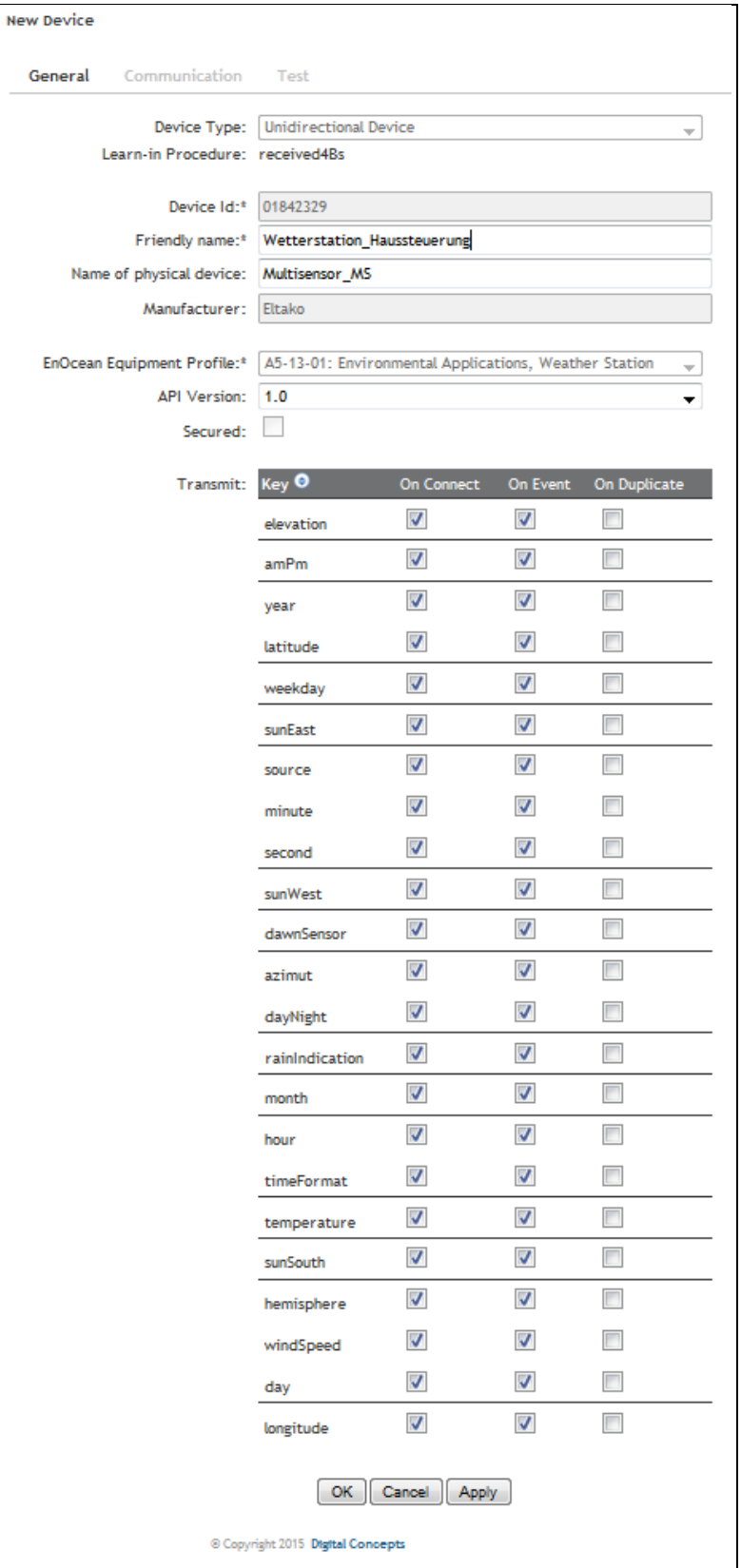
   On Duplicate
   API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

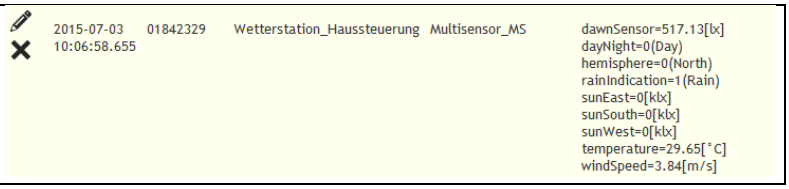
8. When all properties are specified, device can be saved

   Press "OK"
   Web interface goes back to "Devices" overview

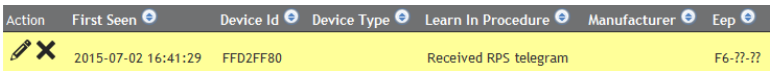
   or

   Press "Apply"
   Web interface stays in "Edit" menu.



To verify that the learn-in process was successful, look for new device in "Devices" menu.	

Switching power outlet *Eltako FSSA-230V*

Start the learn-in process: ATTENTION: Before you begin learn-in procedure, make sure that confirmation telegrams are enabled for your EnOcean device. Refer to device manual on how to activate the confirmation telegrams. 1. Select menu item "EnOcean" – "New Device" *Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button* 2. Supply device with power (plug into a powered outlet) 3. Press ON/OFF button	
After learn-in telegram has been received, gateway will display telegram properties on the web interface.. 4. To add newly detected device, press the pencil icon. *(At this moment, new device is still not in added in the gateway's device database)*	

In case of adding a switching power outlet, **RPS telegram** will be recognized as the current learn-in method.

RPS telegrams contain no particular device or component information. Therefore, some information needs to be entered manually.

5. Select device type
   "Bidirectional Device" must be selected, since we are dealing with bidirectional device (reports current state).

6. Enter device name
   "Friendly Name"
   e.g. Steckdose_Wozi_Stehlampe

7. Enter name of physical device
   "Physical device"
   e.g. FSSA-230V
   optional entry

8. Selection of the respective EnOcean Equipment Profile
   In this case, EE Profile for rocker switch is used, because devices use the same profile.

9. Selection of the respective EEP Variation
   In this case for FSSA-230V

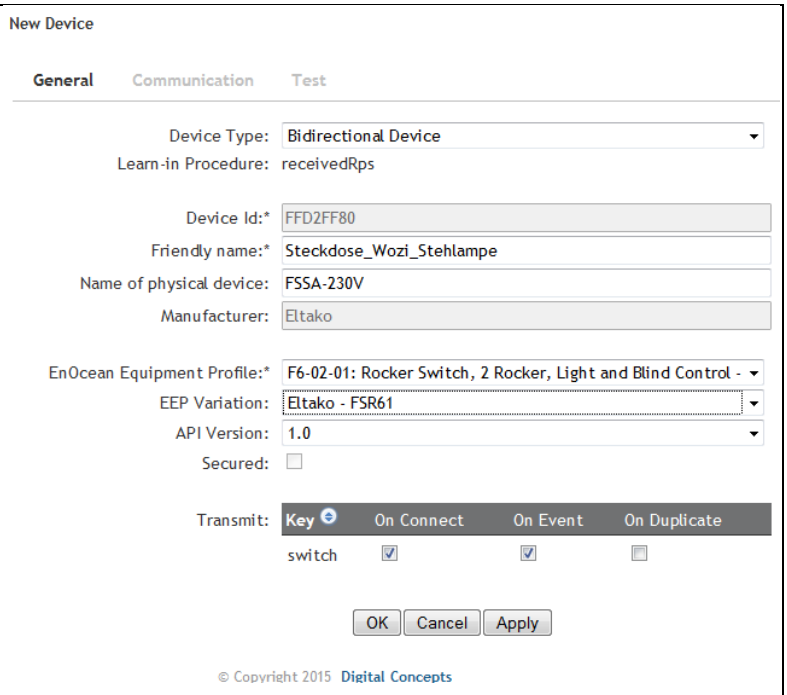
10. Select the desired message transmission behavior

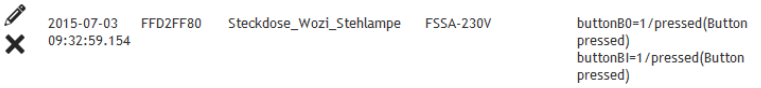
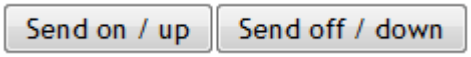
On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

11. When all properties are specified, device can be saved.
    Press "OK"
    Web interface goes back to "Devices" overview



or *Press "Apply"* Web interface stays in "Edit" menu. *In both cases, device is now stored in gateway's database.*	
Your device is now recognized by gateway. To verify that the learn-in process was successful, look for new device in "Devices" menu. *IMPORTANT: Since this is a bi-directional device, gateway must be learned-in into switching power outlet.* 12. Press the pencil icon in order to edit device configuration.	
13. Select "Communication" menu 14. On actuator, activate learn-in mode for "On" function - Press "LNR" button for 0.5 seconds *Actuator's LED turns on* - Press "ON/OFF" button 3 times *Actuator's LED flashes* 15. On the web interface, press "Send on / up" Button *Actuator's LED stops flashing* 16. On actuator, activate learn-in mode for "Off" function - Press "LNR" button for 0.5 seconds *Actuator's LED turns on* - Press "ON/OFF" button 4 times *Actuator's LED flashes* 17. On the web interface, press "Send off / down" *Actuator's LED stops flashing* 18. Confirm your settings with "Apply"	
Now you can test switching function of new actuator by pressing respective buttons. If functions do not work as expected, repeat the programming procedure.	
Select tab "Test" to test switching functions	

Switching power outlet *Permundo PSC 234*

Start the learn-in process:

ATTENTION: Before you begin learn-in procedure, make sure that confirmation telegrams are enabled for your EnOcean device. Refer to device manual on how to activate the confirmation telegrams.

1. Select menu item "EnOcean" – "New Device"

Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button

2. Supply device with power (plug into a powered outlet)
3. Press and hold finger on the touch-spot for 5 seconds

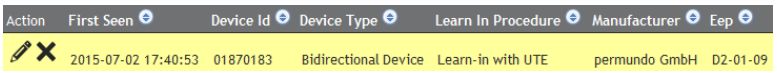
   LED flashes

4. Press and hold finger on the touch-spot for another 5 seconds

After learn-in telegram has been received, gateway will display telegram properties on the web interface.

5. To add newly detected device, press the pencil icon.

(At this moment, new device is still not in added in the gateway's device database)



In case of adding a Permundo switching power outlet, **UTE-telegram** will be recognized as the current learn-in method.

UTE-telegrams contain almost all particular device or component information. Therefore, only device name needs to be entered manually.

5. Enter device name
   "Friendly Name"
   z.B. Steckdose_SchlaZi_Stehlampe

6. Enter name of physical device
   e.g. PSC23
   optional entry

7. Select the desired message transmission behavior

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
API messages will be sent for all actions that device makes (Streaming)

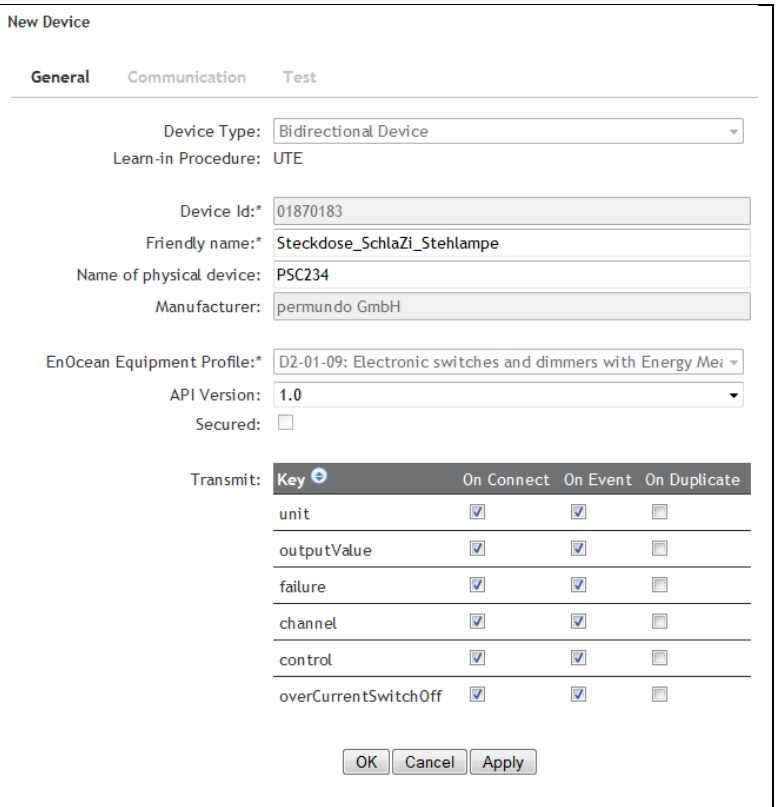
On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

8. When all properties are specified, device can be saved
   Press "OK"
   Web interface goes back to "Devices" overview

   or

   Press "Apply"
   Web interface stays in "Edit" menu.

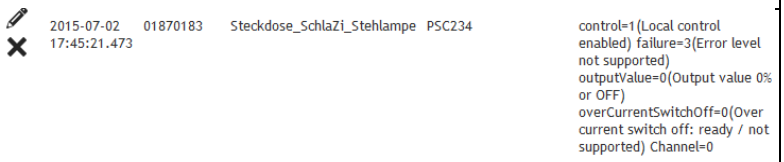
In both cases, device is now stored in gateway's database.



Your device is now recognized by gateway.

To verify that the learn-in process was successful, look for new device in "Devices" menu.

When using UTE-telegrams to learn in new device, it is not necessary to learn-in gateway into actuator.



Switching actuator *Eltako FSR61VA*

Start the learn-in process:

ATTENTION: Before you begin learn-in procedure, make sure that confirmation telegrams are enabled for your EnOcean device. Refer to device manual on how to activate the confirmation telegrams.

1. Select menu item "EnOcean" – "New Device"

Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button

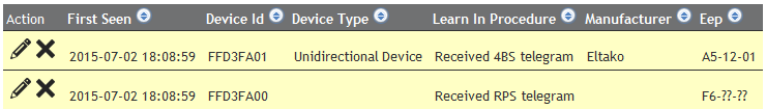
2. Supply device with power (plug into a powered outlet)

After learn-in telegram has been received, gateway will display telegram properties on the web interface

This switching actuator example shows that more than one profile can be used by one physical device. Here we can see two reported functions:

Function 1: 4BS Telegram –Energy metering
Function 2: RPS Telegram – Switching

3. To add newly detected device, press the pencil icon.
(At this moment, new device is still not in added in the gateway's device database)



We start by learning-in the function with the **4BS-telegram.**

4. Select device type
it has already been identified by gateway

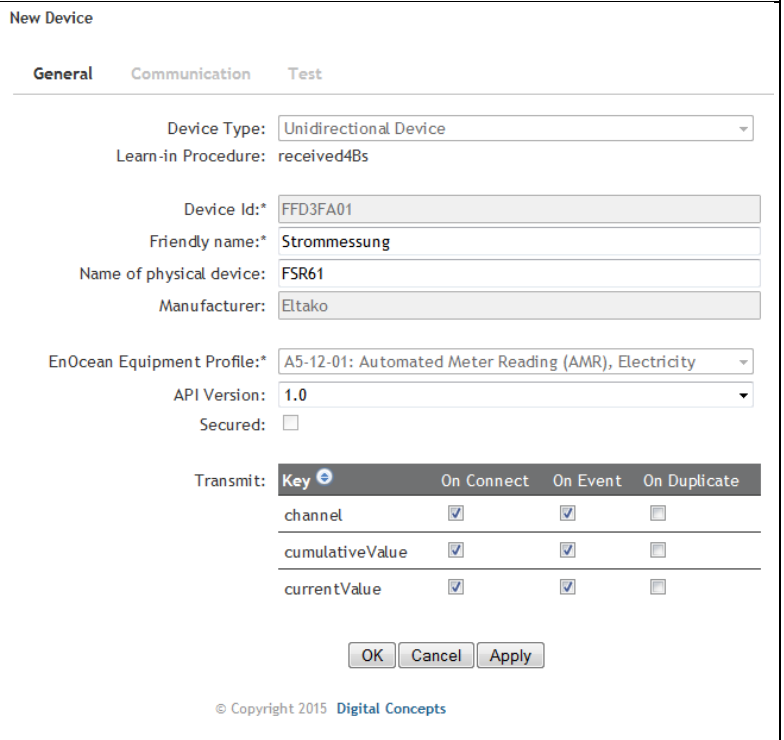
5. Enter device name
"Friendly Name"
e.g. Strommessung

6. Enter name of physical device
e.g. Device type
optional entry

7. Select the desired message transmission behavior

On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event



API messages will be sent for all actions that device makes (Streaming)

On Duplicate

API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

8. When all properties are specified, device can be saved.
   Press "OK"
   Web interface goes back to "Devices" overview

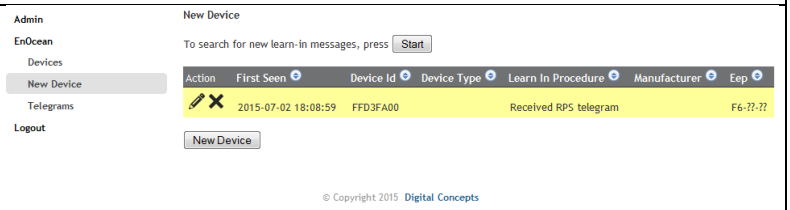
   or

   Press "Apply"
   Web interface stays in "Edit" menu.
   In both cases, device is now stored in gateway's database.

9. Go back to to „New device" menu in order to learn-in devices second function

10. To add newly detected device, press the pencil icon.

    (At this moment, new device is still not in added in the gateway's device database)



In this case **RPS-telegram** is be recognized as the current learn-in method.

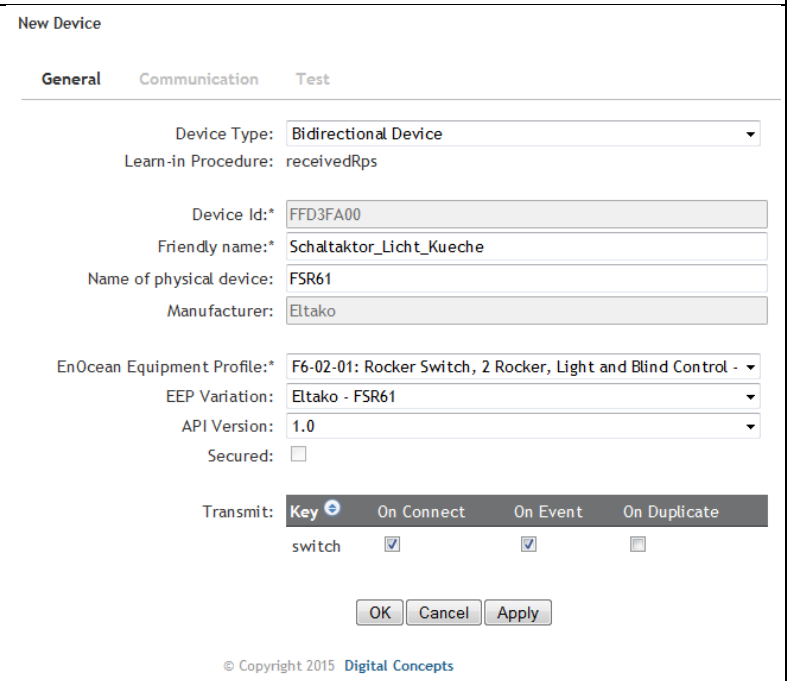
RPS-telegrams contain no particular device or component information. Therefore, some information needs to be entered manually.

11. Select device type
    "Bidirectional Device" must be selected, since we are dealing with bidirectional device (reports current state).

12. Enter device name
    "Friendly Name"
    e.g. Schalaktor_Licht_Kueche

13. Enter name of physical device
    "Physical device"
    e.g. FSR61
    optional entry

14. Selection of the respective EnOcean Equipment Profile
    Here F6-02-01



15. Selection of the respective EEP
    Here Eltako FSR61
    This profile variation was added specifically for this switch

16. Select the desired message transmission behavior

On Connect
    Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
    API messages will be sent for all actions that device makes (Streaming)

On Duplicate
    API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

17. When all properties are specified, device can be saved
    Press "OK"
    Web interface goes back to "Devices" overview

    or

    Press "Apply"
    Web interface stays in "Edit" menu.

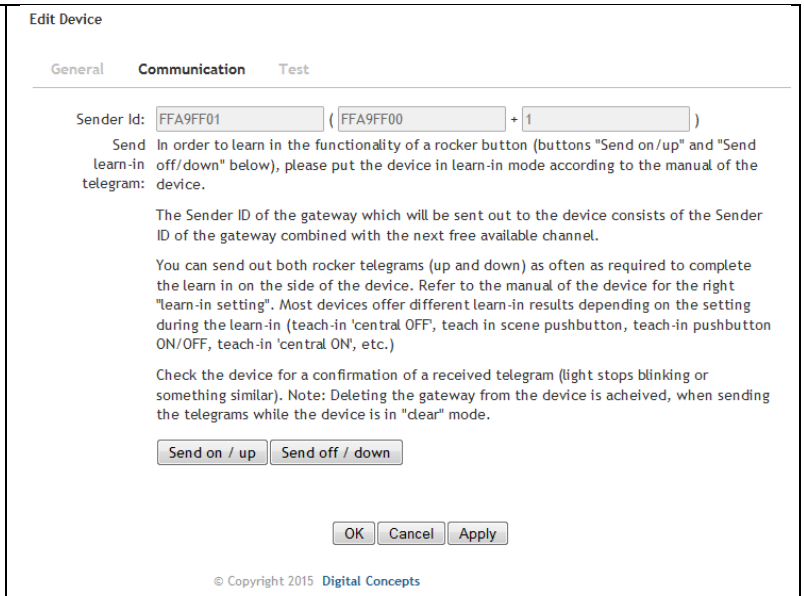
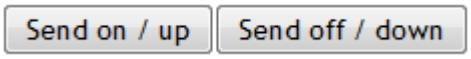
In both cases, device is now stored in gateway's database.

Your device and both fucntions are now recognized by gateway.

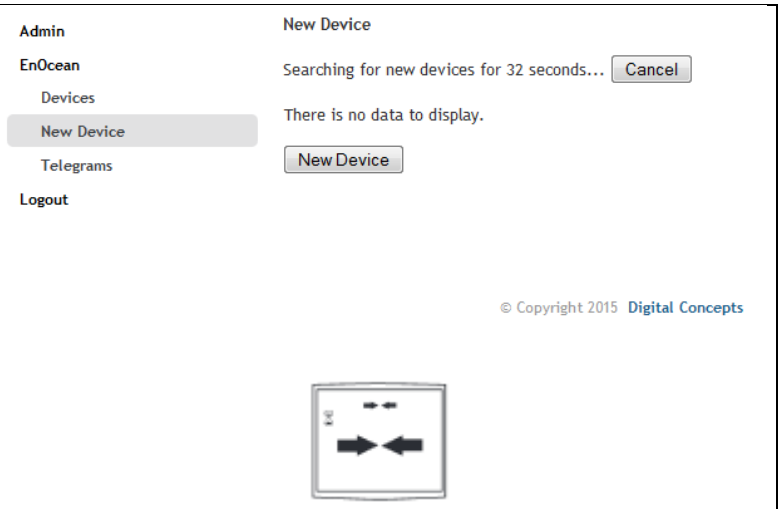
To verify that the learn-in process was successful, look for new device in "Devices" menu.

IMPORTANT: Since this is a bi-directional device, gateway must be learned-in into switching power outlet.

18. Press the pencil icon in order to edit device configuration.

19. Select "Communication" menu On actuator, activate learn-in mode for central "ON" function: - Rotate upper knob to "LRN" *Actuator's LED flashes* - Rotate lower knob to "infinity" symbol *Actuator's LED flashes* 20. Within 10 seconds, press „Send on / up" on the web interface *Actuator's LED stops flashing* 21. On actuator, activate learn-in mode for central "OFF" function: - Turn upper knob to "LRN" *Actuator's LED flashes* - Turn lower knob to "2" *Actuator's LED flashes* Within 10 seconds, press „Send off / down" on the web interface *Actuator's LED stops flashing* 22. Put the top knob back to „ESV" *(Betriebsmodus)* 23. Save gateway settings by pressing "Apply"	
Now you can test switching function of new actuator by pressing respective buttons. If functions do not work as expected, repeat the programming procedure.	
Select tab "Test" to test switching functions	

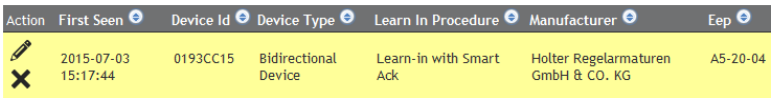
Radiator control valve actuator *HORA SmartDrive MX*

Start the learn-in process: IMPORTANT: Most radiator control valve actuators send teach-in telegrams only when installed on radiator. 1. Select menu item "EnOcean" – "New Device" *Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button* 2. Press the initializing button towards right until the opposing arrows appear on the display	

After learn-in telegram has been received, gateway will display telegram properties on the web interface

3. To add newly detected device, press the pencil icon.

   (At this moment, new device is still not in added in the gateway's device database)



In case of adding HORA SmartDrive MX, **SmartACK telegram** will be recognized as the current learn-in method.

SmartACK telegrams contain almost all particular device or component information. Therefore, only device name needs to be entered manually.

4. Enter device name
   "Friendly Name"
   e.g. Heizung_Wohnzimmer

5. Enter name of physical device
   "Physical device"
   e.g. SmartDrive_MX
   optional entry

6. Select the desired message transmission behavior

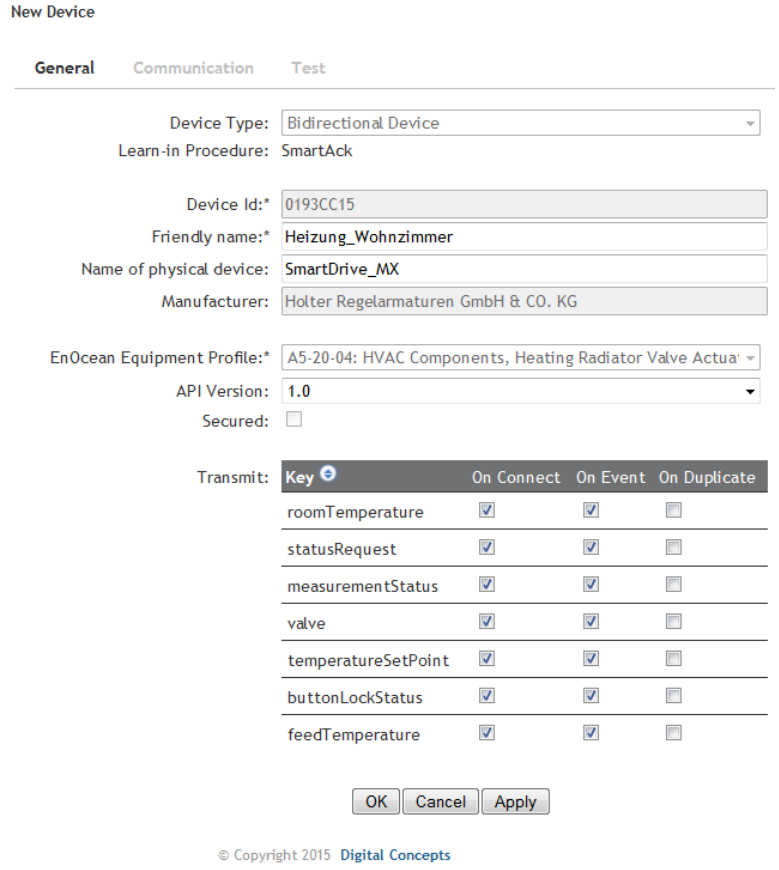
On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

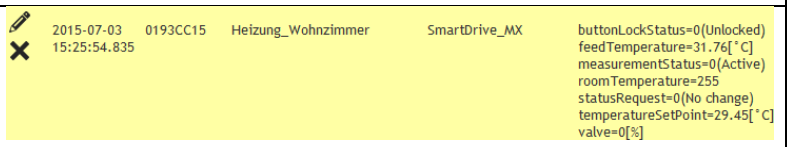
On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

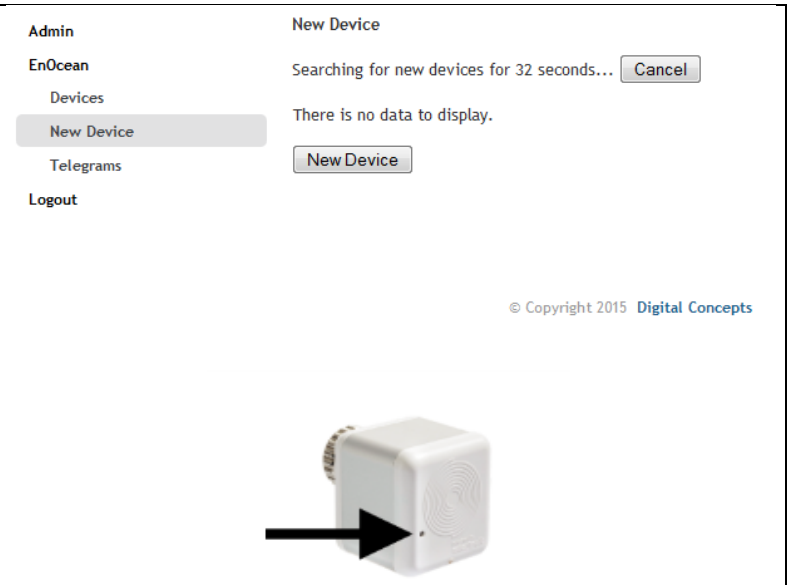
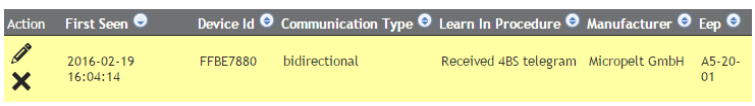
7. When all properties are specified, device can be saved.
   Press "OK"
   Web interface goes back to "Devices" overview

   or



Press "Apply" *Web interface stays in "Edit" menu.* *In both cases, device is now stored in gateway's database.*	
Your device is now recognized by gateway. *To verify that the learn-in process was successful, look for new device in "Devices" menu.* When using **SmartACK telegrams** to learn in new device, it is not necessary to learn-in gateway into actuator.	

Radiator control valve actuator with deep standby *Micropelt iTRV MVA-002*

IMPORTANT: Devices of this type spend most time in deep standby mode and will only periodically send and receive EnOcean data telegrams. Therefore, some time will pass before device starts exchanging data with gateway. For this group of devices, **Soft Smart Ack** feature needs to be used. For this particular device, time between online-interval ranges from 10 minutes in winter mode, to 8 hours in summer mode. Most radiator control valve actuators send teach-in telegrams only when installed on radiator! Start the learn-in process: 1. Select menu item "EnOcean" – "New Device" *Automatic search mode is started and gateway waits for an incoming learn-in telegram from a new device. Search mode can be retriggered by pressing the "Start" button* 2. Press the recessed button two times with a blunt pointed object such as a ball-point pen. Device LED will flash 1x after successful pairing, or 6x after failed pairing.	
After learn-in telegram has been received, gateway will display telegram properties on the web interface	

3. To add newly detected device, press the pencil icon.

(At this moment, new device is still not in added in the gateway's device database)

In case of adding Micropelt iTRV MVA-002, **4BS telegram** will be recognized as the current learn-in method.

4BS telegrams contain almost all particular device or component information. Therefore, only device name needs to be entered manually.

4. Enter device name
   "Friendly Name"
   e.g. Heizung_Wohnzimmer

5. Enter name of physical device
   "Physical device"
   e.g. Micropelt iTRV
   optional entry

6. Enable Soft Smart Ack
   for devices with deep standby and periodical connection activity, this feature must be enabled

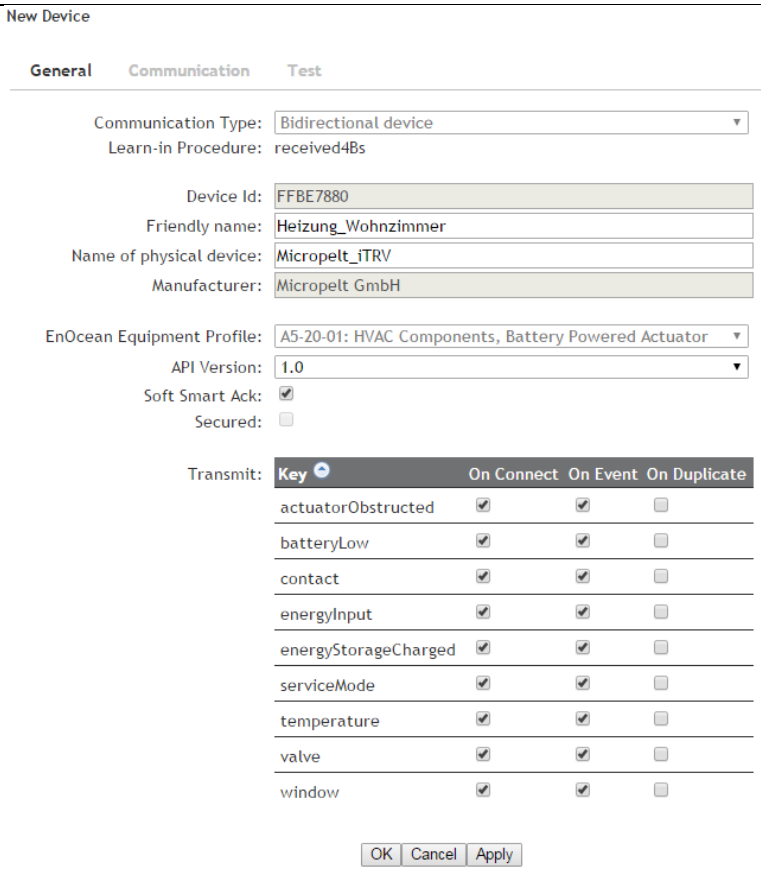
7. Select the desired message transmission behavior

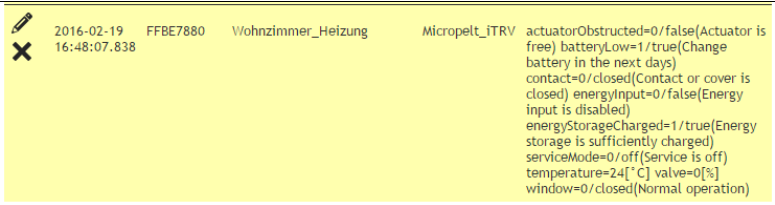
On Connect
Reports the last known /actual device status when connection to Gateway's API is (re)established

On Event
API messages will be sent for all actions that device makes (Streaming)

On Duplicate
API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)

8. When all properties are specified, device can be saved.
   Press "OK"
   Web interface goes back to "Devices" overview



or Press "Apply" *Web interface stays in "Edit" menu.* *In both cases, device is now stored in gateway's database.*	
Your device is now recognized by gateway. *To verify that the learn-in process was successful, look for new device in "Devices" menu.* When using **4BS telegrams** together with "Soft Smart Ack" feature, it is not necessary to learn-in gateway into actuator.	

Devices with no Learn-in telegrams (Manual Learn-in)

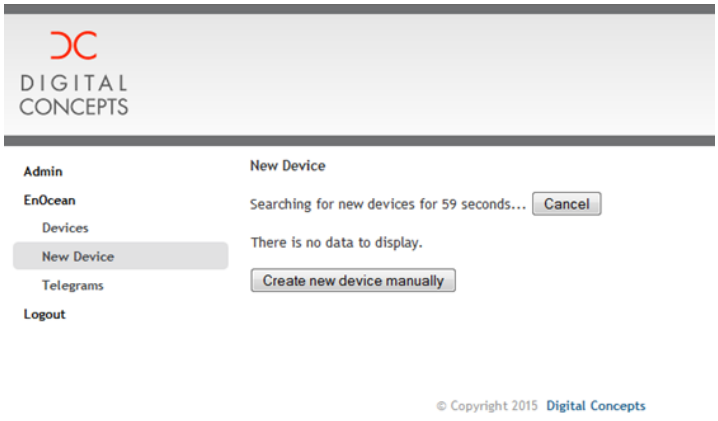
In practice it may happen that devices have to be learned-in without sending learn-in telegrams. Sending of learn-in telegrams is often not possible because:

- Devices are not yet installed or powered (preparing for installation)
- Device is, in rare cases, not fully supported / recognized

For these special scenarios, menu item "Create new device manually" is provided.

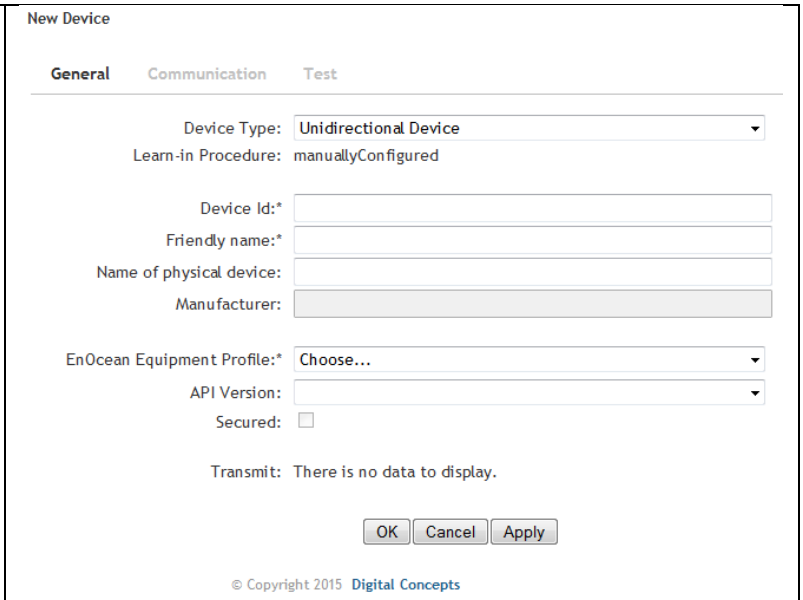
After pressing this button, you will be taken directly to "New Device" page.

Understandably, no information is entered automatically and relevant parameters must be provided. In order to find right device parameters, consult device documentation or its manufacturer.



Fill in with device specific data:

1. Device Type
   Define communication properties of your device
2. Learn-In Procedure
   "manuallyConfigured"
3. Device Id
   EnOcean specific hardware ID
4. Friendly name
   Enter device's name or function
5. Name of physical device
   *Optional entry
   Suggestion: fill with device model for easier device managing
6. Manufacturer
   **cannot be entered manually*
7. EnOcean Equipment Profile EEP
   Chose the right profile for your device. Profile type should be noted in device documentation

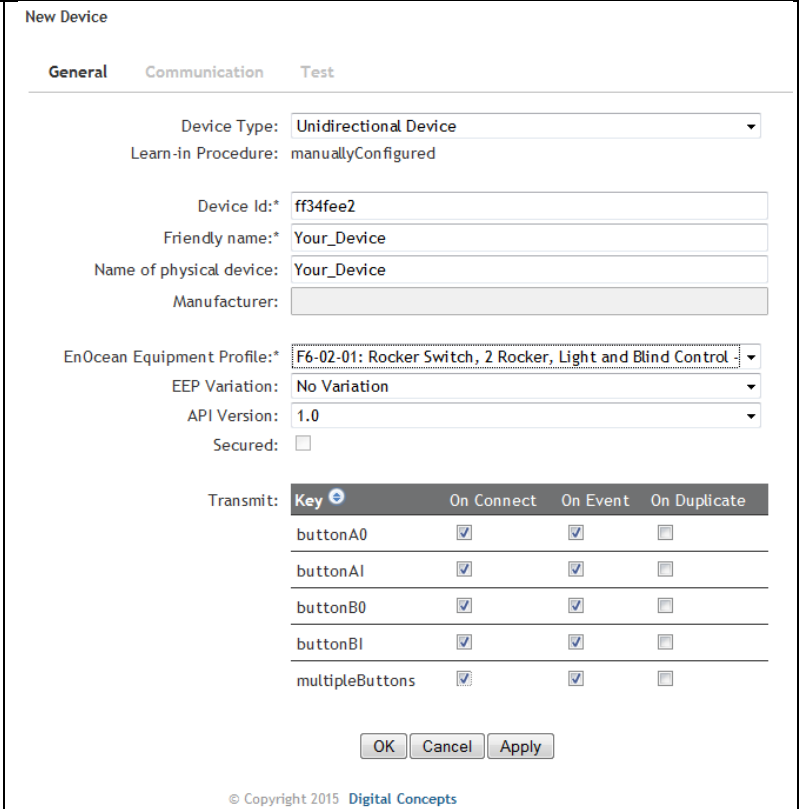


8. EEP Variation
   Use to assign device specific variations, i.e. Fa. Eltako actuators
9. API Version
   Select API version to be used
   Default: 1.0
10. Secured
    Checkt to use secure connection
11. A Select the desired message transmission behavior
    Übermittlungseigenschaften

    On Connect
    Reports the last known /actual device status when connection to Gateway's API is (re)established

    On Event
    API messages will be sent for all actions that device makes (Streaming)

    On Duplicate
    API messages will be sent upon receiving of duplicate/already known state. More information can be found in the manual)
12. When all properties are specified, device can be saved.



Press "OK" Web interface goes back to "Devices" overview or Press "Apply" Web interface stays in "Edit" menu. *In both cases, device is now stored in gateway's database.*	
IMPORTANT: If your device is bidirectional, gateway must be learned-in to device. In order to do so, use tab "Communication"	General **Communication** Test
13. Initialize learn-in mode on your device *For information on how to put device in learn-in mode, consult device documentation or contact the manufacturer* 14. Use "Send on / up" and "Send off / down" to learn-in gateway to your device 15. Press "Apply" to finish *Web interface stays in "Edit" menu.*	