

Configure with MultiOne and SimpleSet

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Information given is indicative and needs validation in the end application by the integrator or customer. On request design-in support can be provided by Philips Lighting.

PHILIPS

Configure with MultiOne and SimpleSet

Content

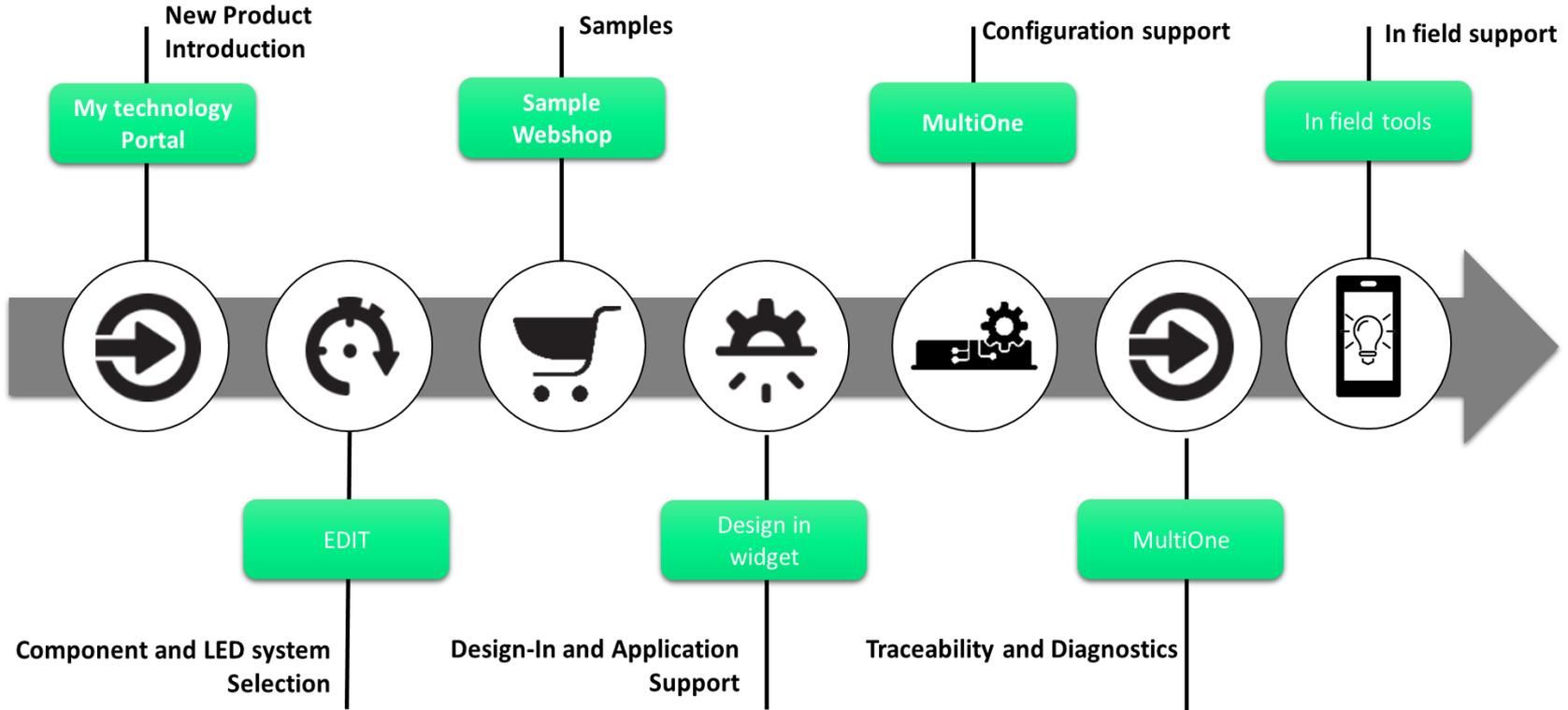
- ❑ The customer journey
- ❑ Philips MultiOne promise
- ❑ The building blocks
- ❑ Set up the configuration system
- ❑ Different applications – different solutions
- ❑ Specific features/functionality
- ❑ Future developments



Customer journey

Configure with MultiOne and SimpleSet

The customer journey - tools and services



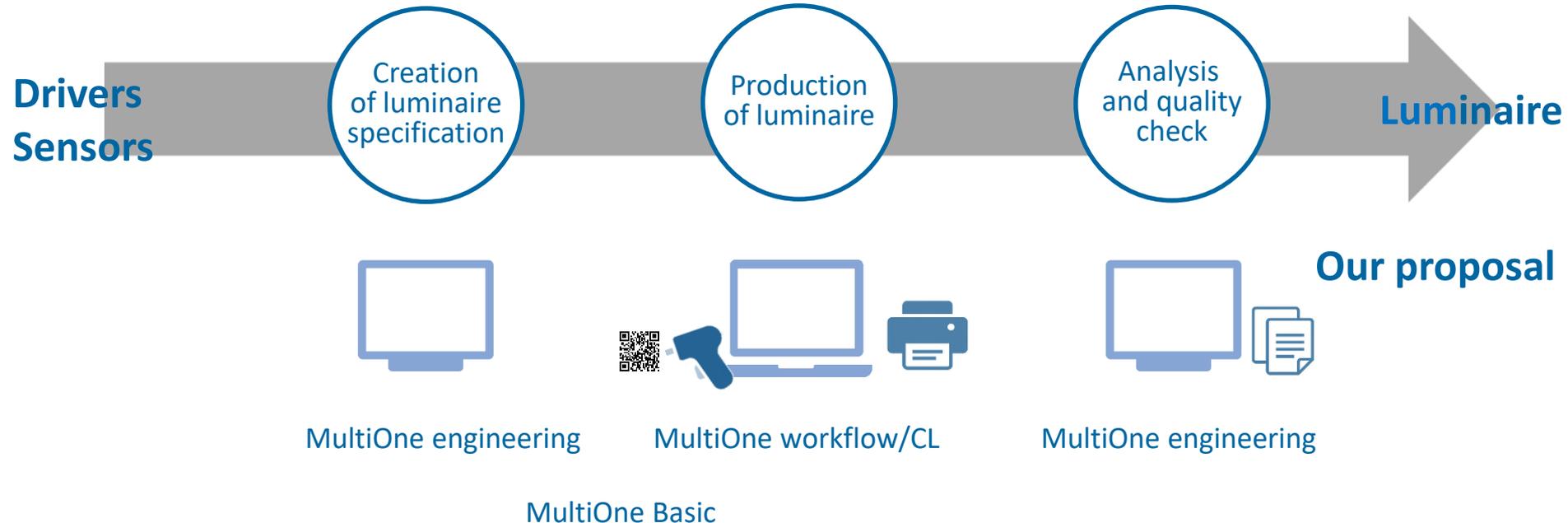


MultiOne promise

Configure with MultiOne and SimpleSet

Introduction: one tool

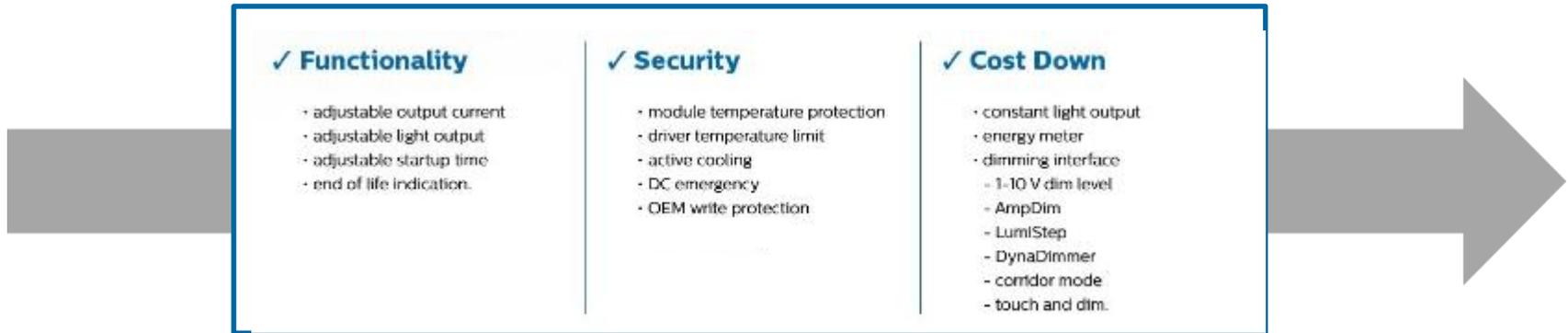
OEM organization



Configure with MultiOne and SimpleSet

Introduction: feature set

Depending on the type of driver, a set of features and functionality is available

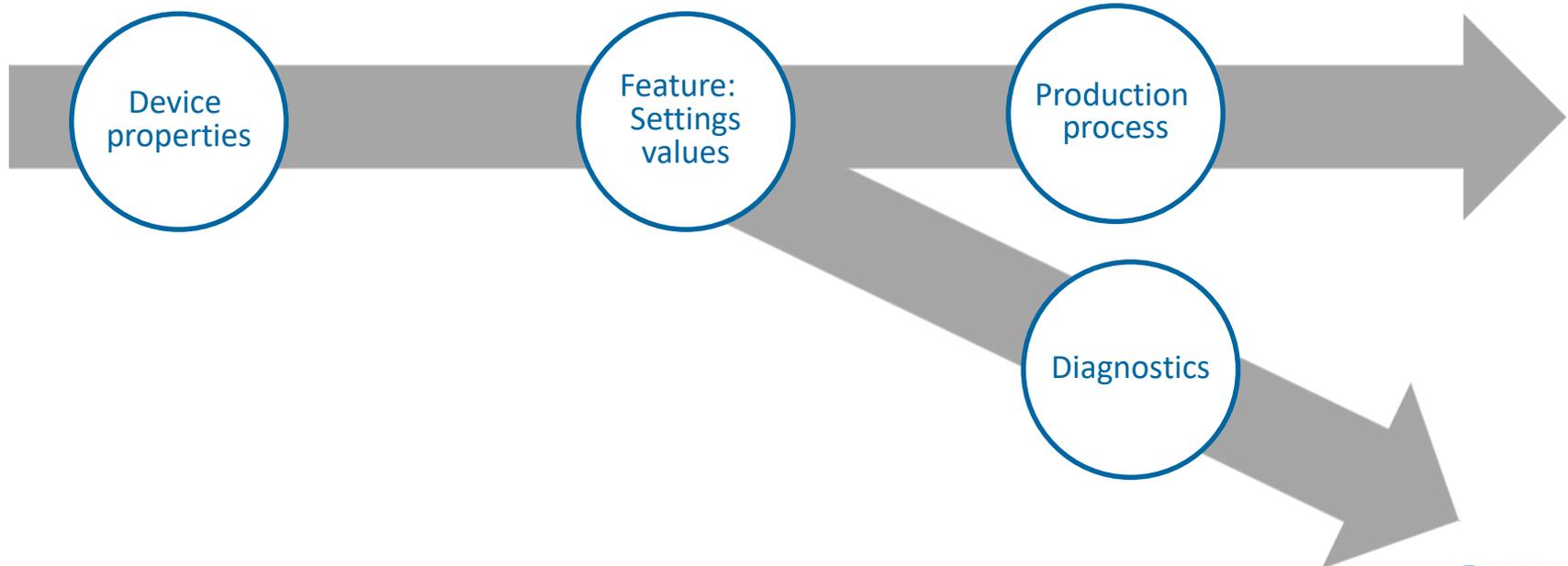


Added (Based on DiiA) Luminaire info – MB1

Configure with MultiOne and SimpleSet

introduction: logging data

The collected information during configuration, can be used to set up traceability of product and process



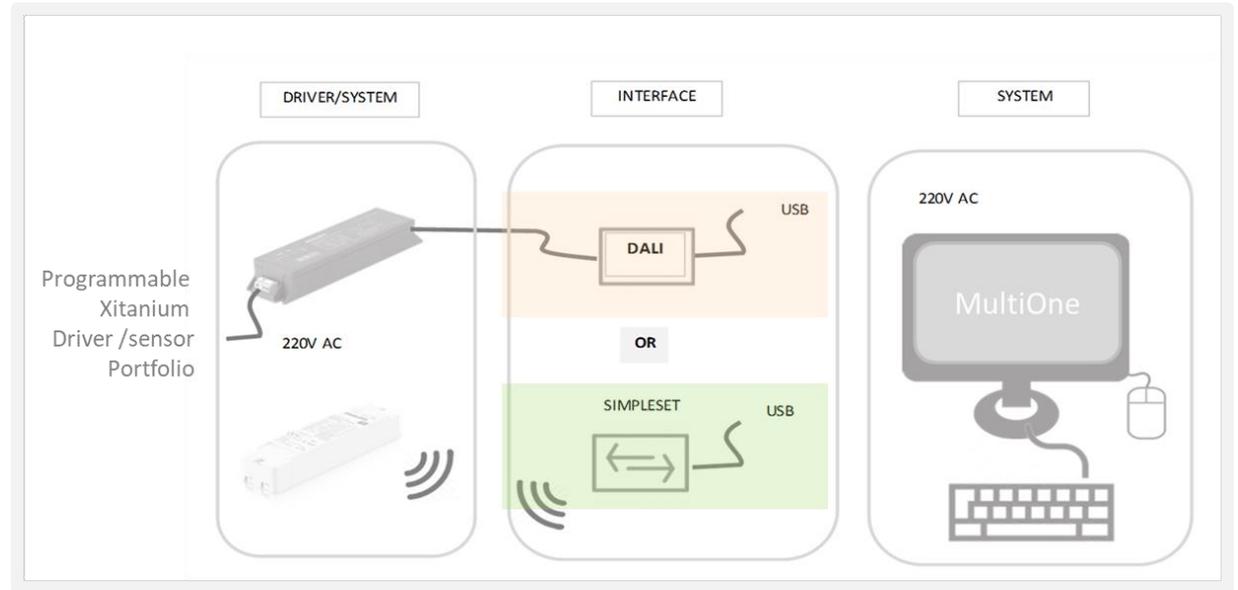


Building blocks

Configure with MultiOne and SimpleSet

Building blocks

- **Basic set-up:**
- **Our product portfolio** (drivers, sensors...)
- **Hardware**
 - Windows operating PC with multiple USB ports
 - Interface (USB2...)
 - Other equipment (when needed): label printer, scanner ,..
- **Software**
 - MultiOne configuration packages
 - Device firmware



Configure with MultiOne and SimpleSet

Building blocks - Technology

- **Interface technology trend**
- **SimpleSet (NFC)**
 - Robust solution with 4 years experience
 - Reliable configuration in any stage of the lifecycle of the devices
- **Standardization**
 - NFC technology according standards
 - Use of FEIG tooling – MD sig
- **Flexible**
 - Use of the best configuration method in each step (DALI, SimpleSet)

How to configure with Philips	Use of	Setting/Read out of
Via resistor on driver ➤ Rset, LEDset ➤ High resolution, no discrete steps		Current
Via DALI ➤ Philips MultiOne configurator ➤ Make use of DALI network		Features DALI commands Diagnostics
Via SimpleSet (*) ➤ Philips MultiOne configurator ➤ Make use of NFC technology ➤ Wireless, power less, fast, any stage conf		Current Features Diagnostics

- * SimpleSet technology is based on
- **Wireless short range** proximity based communication technology
 - Based upon **RFID technology** at 13.56 MHz
 - Standardized by the **NFC Forum**, protocol according ISO 15693
 - Operating distance typical **1 cm to 10 cm**

Configure with MultiOne and SimpleSet

Building blocks - Interface

	Type of tool	Name	12 NC	Details
DALI		LCN8600 Philips MultiOne Interface USB2DALI	913700346703	-Single and Multiple configuration -Used for DALI functionalities -Device must be wired and powered

	Type of tool	Name	12 NC	Components	Distance	Position antenna's	Engineering Workflow <u>CommandLine</u>	Basic
NFC		LCN9610 FEIG <u>MultiOne</u> SimpleSet Interface	929000999406	<ul style="list-style-type: none"> • 1 Tool • 1 USB cable 	1cm		•	
		LCN9620 FEIG <u>MultiOne</u> SimpleSet Interface	929000999506	<ul style="list-style-type: none"> • 1 Tool • 1 USB cable 	1cm		•	•
		LCN9630 FEIG <u>MultiOne</u> SimpleSet Interface	929001546306	Basic box: <ul style="list-style-type: none"> • 1 universal power connector • 1 power adapter cable • 1 reader (LCN 9630) • 1 USB cable • 1 antenna with cable 	1 - 20cm (depending on antenna)	 	•	•

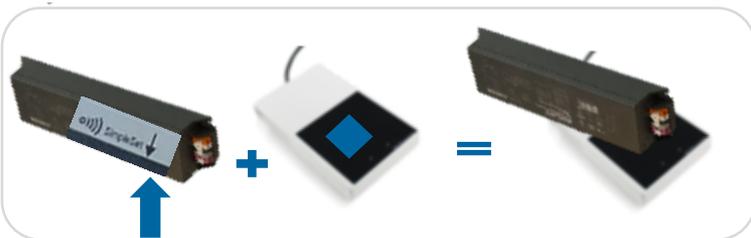
Configure with MultiOne and SimpleSet

Basic blocks for configuration – driver portfolio



Configure driver/subassembly/luminaire guidelines

- Recognize SimpleSet by *symbol*
 - Type of interface in driver supported device list
 - *Location of antenna* depending on driver
 - Driver *wireless* and *powerless*, single operation
 - Not moving or sliding during configuration
 - *No metal* housing around the antenna's
 - Configuration time : 3s - 8s
 - Configuration by close *parallel contact* between the antenna's
 - Distance depending on strength of antenna
-
- Design new luminaires => reachability of antenna



Configure with MultiOne and SimpleSet

Building blocks – NFC antenna's

LCN 9630 – overview antenna solutions



The basic box (LCN9630) consists of:

1. Power converter
2. NFC reader (LCN9630)
3. USB cable
4. Antenna with housing and cable

	Type of antenna	Name (FEIG)	Use
1		ID ISC.ANT40/30	PCB is build in Philips housing Part of the LCN9630 box. The code ID ISC.ANT40/30 contains only the PCB
2		ID ISC.ANT340/240	Elegant flat table model of plastic
3		ID ISC.ANTH200/200	Handheld model Available with straight or angled handle
4		ID ISC.ANTS370/270-A	Table model with glass housing, for more industrial environment

Configure with MultiOne and SimpleSet

Conclusion: best fit

SimpleSet (NFC)

Robust solution with 4 years experience

Available in the total product portfolio

Reliable configuration in any stage of the lifecycle of the devices

Different solutions depending on application -> reader -> antenna

Standardisation

NFC technology according standards

Use of FEIG tooling – MD sig certified

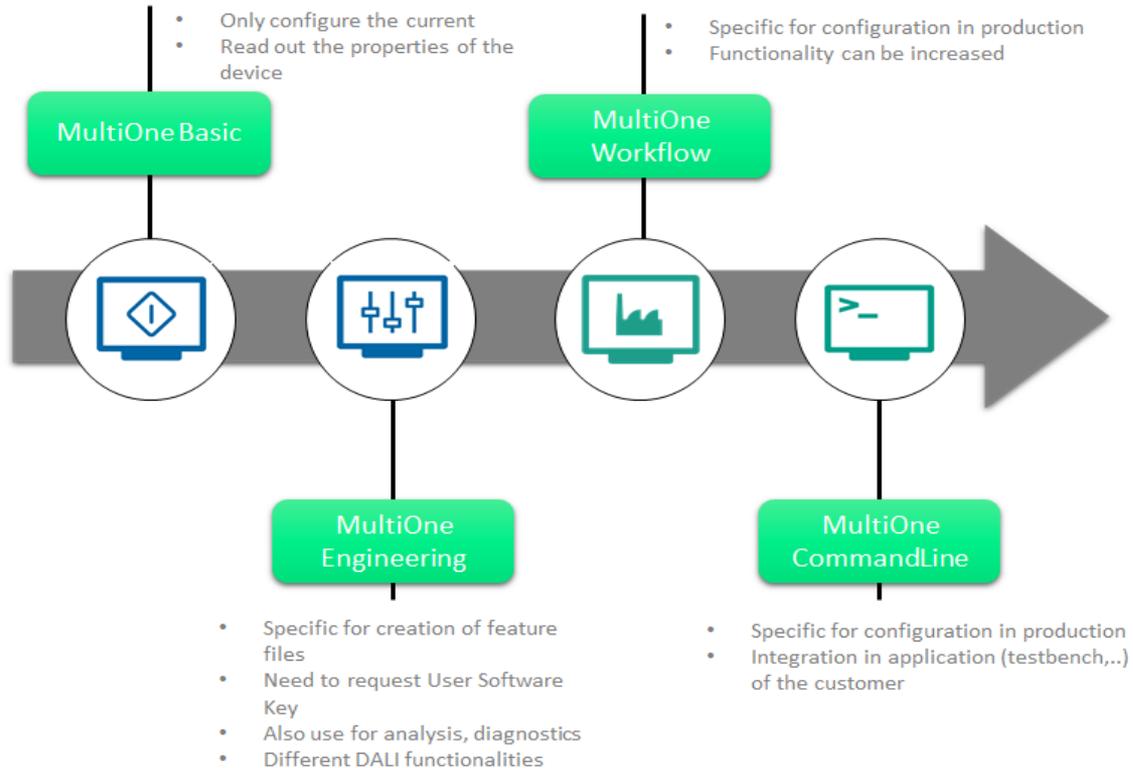
Flexible

Use of the best configuration method in each step (DALI, SimpleSet)

MultiOne engineering, MultiOne workflow and MultiOne Basic used in mix in the total process

Configure with MultiOne and SimpleSet

Building Blocks – Software



Configure with MultiOne and SimpleSet

Building Blocks – Software

Production



MultiOne Basic

- Free download from the My Technology Portal (create account)
- Specific to support configuration of AOC (LEDset replacement)
- Also used for quality – read out properties
- No creation of feature files

Configure with MultiOne and SimpleSet

Basic blocks- Software

Development



Development software:
configure, create feature files,
commission,
analyze



MultiOne Engineering

MultiOne Engineering 3.10.2

- Release 4x/year
- Free download from website (www.philips.com/MultiOne)
- Specific for creation of feature files
- Also use for analysis and DALI

Type of feature files

- Requested features inclusive or exclusive driver
- All features inclusive or exclusive driver

Attention points:

- Need to request User Software Key
- 1 key for each computer
- Automatic request via website
- On line or off line activation
- Check your spam filter/firewall/...



Configure with MultiOne and SimpleSet

Basic blocks- Software

More than configuration of drivers – extra functionalities available

Interface	Energy meter	Diagnostics	Installer	Commands	Scheduler	Query	Dali sniffer	Traceability
DALI	✓	✓	✓	✓	✓	✓	✓	✓
NFC		✓	✓					
	Real time info Only possible with DALI	DALI: Real time info NFC: Info update every hour	configure all installer features (coded light)	Setting DALI commands 102 (gear) 202 (emergency lighting)	Writing DALI scripts	execute a number of standard DALI query	Replaces the free DALI sniffers available on the web	How many time is the configuration changed – Signify After sales information

Configure with MultiOne and SimpleSet

Basic blocks- Software

Manufacturing



MultiOne workflow 3.10.2 - Command Line 3.10.2

- Release 4x/year
- Free download from website
- Specific for implementation in production
- 2 parts: GUI + CL

Create customized solutions

- Increase control during configuration
- Increased functionality (barcode, label printing, reporting,...)

Attention points:

- No User Software Key
- Automatic installation of FEIG up-to-date software



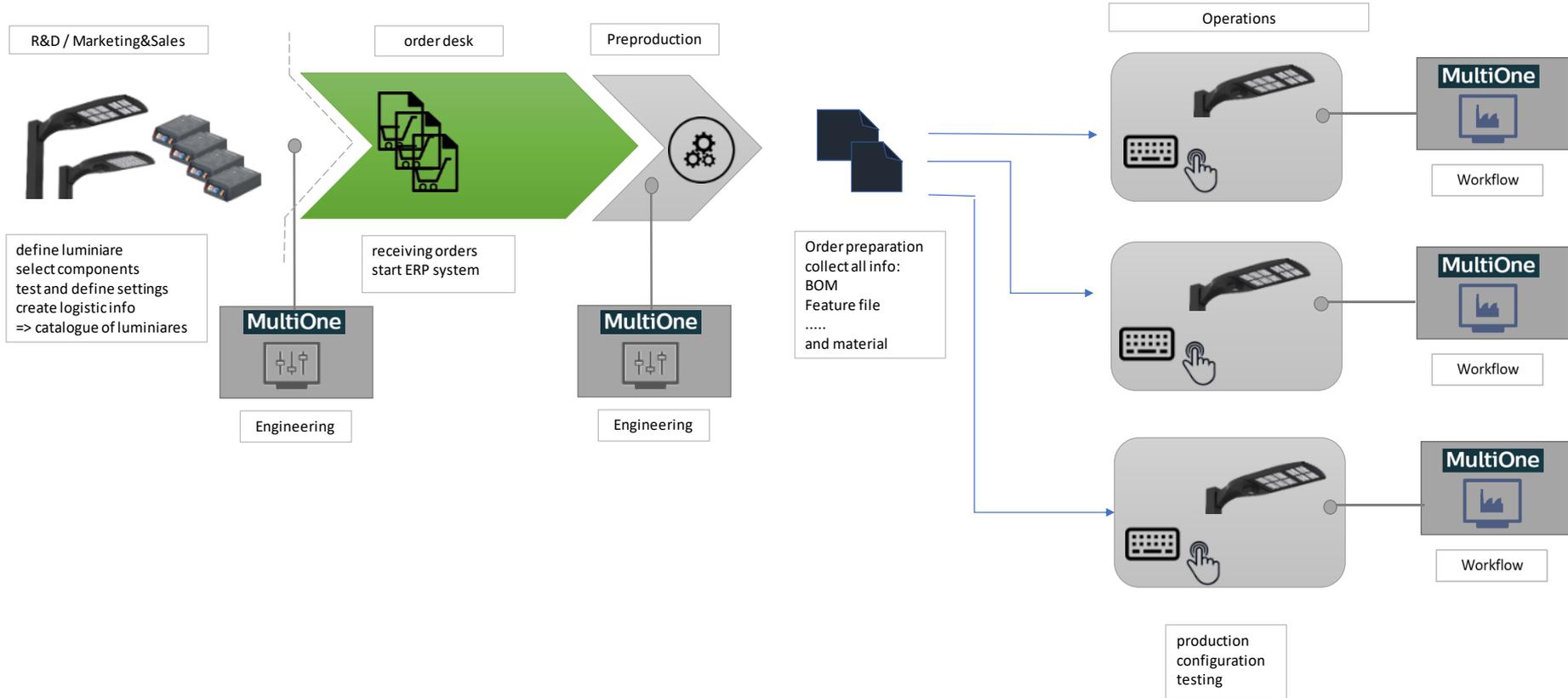
MultiOne Workflow



Set up the configuration system

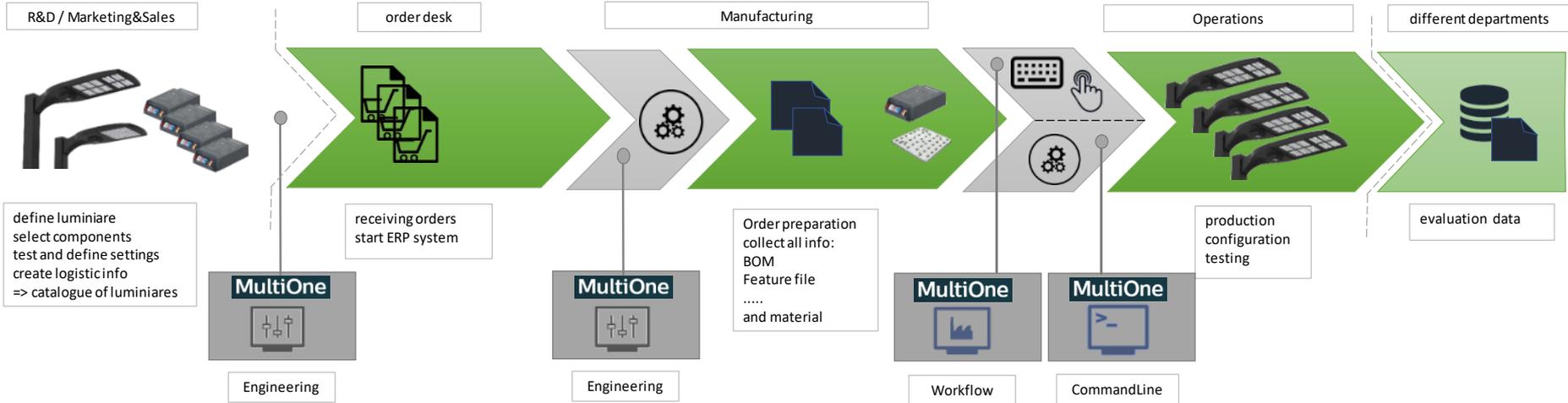
Configure with MultiOne and SimpleSet

Setting up the configuration system – work cell production



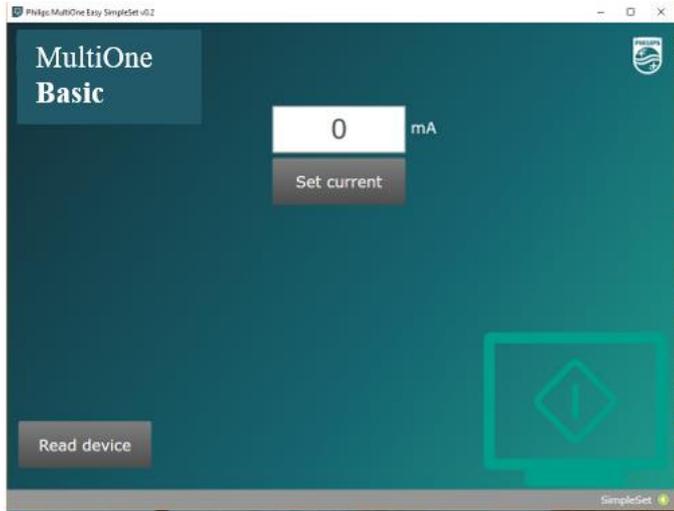
Configure with MultiOne and SimpleSet

Setting up the configuration system – in line production



Configure with MultiOne and SimpleSet

Setting up the configuration system – Basic

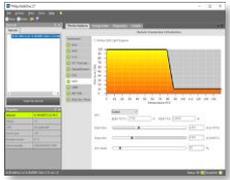


- Install the software
- Connect the interface tool
- Start working
 - Press read device
 - All properties of the driver are visible

 - Fill value of current to be set
 - Press set current
 - Wait until green V
 - Driver is programmed

Configure with MultiOne and SimpleSet

Setting up the configuration system – customized workflow



Barcode:

- Feature file (xml file)
- 2 custom fields
- quantity



Feature file (barcode)
Settings station



Product portfolio
Interface



Label - direct printing
Datalogging xml file

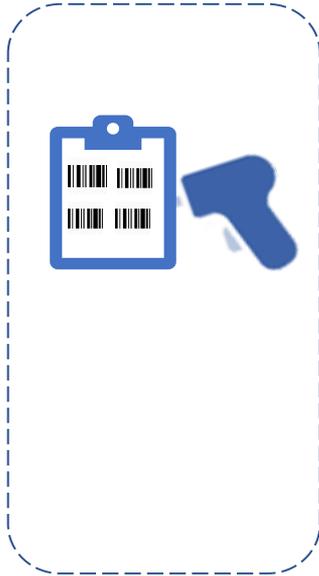
Datalogging (xml file):

- Driver info
- Features + values
- Production process

Label

Configure with MultiOne and SimpleSet

Setting up the configuration system – customized workflow



Feature file (barcode)

Barcode:

- Feature file (xml file)
- 2 custom fields
- quantity

Barcode:

- Make use of a Barcode reader
- USB connection
- Keyboard mode
- 300dpi
- Plug and play

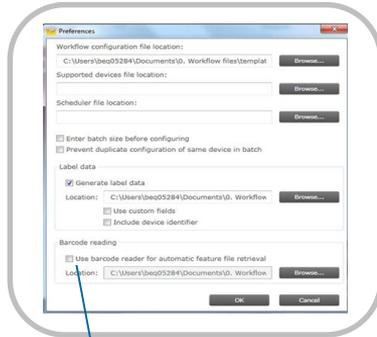


Type of reader we use in the set up :

- Datalogic GD4130

Configure with MultiOne and SimpleSet

Setting up the configuration system - customized workflow

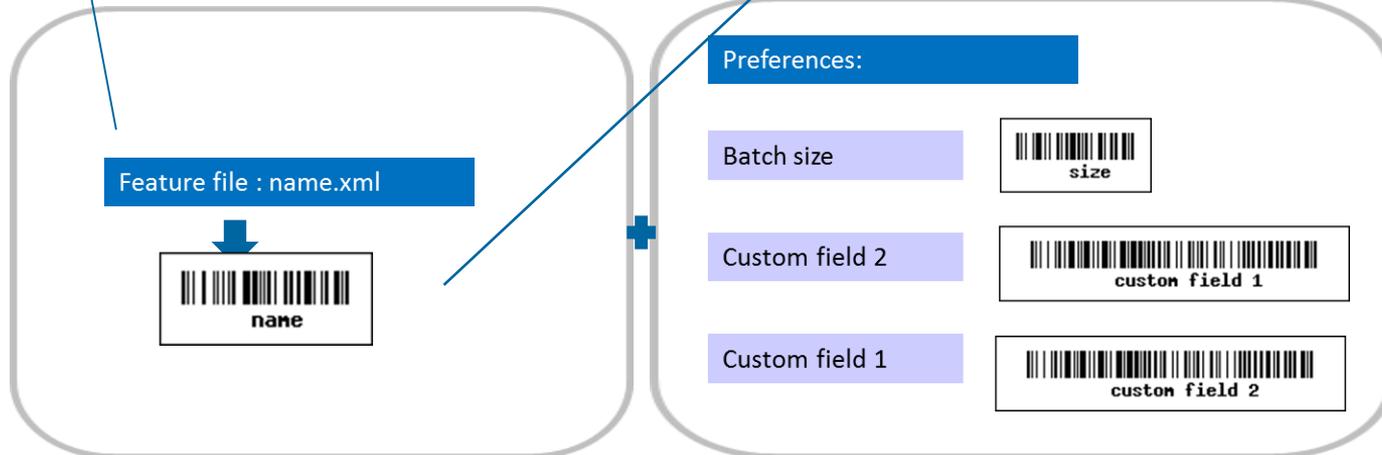


Preferences

Feature file is located on the described place

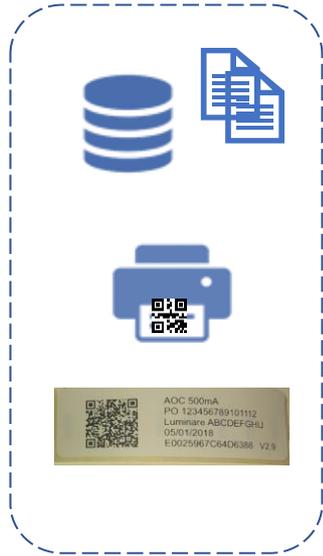


Convert the name of the feature file in a barcode

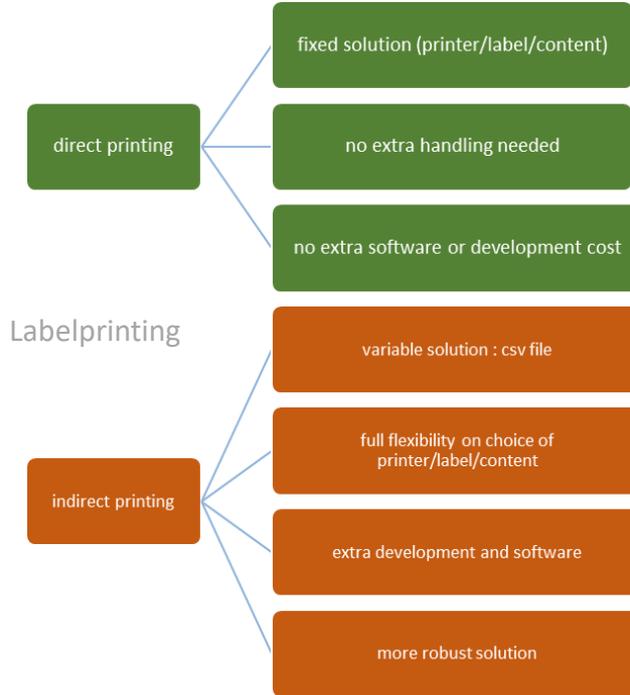


Configure with MultiOne and SimpleSet

Setting up the configuration system – customized workflow



Label - direct printing



Brand	Type	Use
Dymo	 LabelWriter 450 Turbo	Low volume production
Zebra	 Zebra GX43-t	High volume production

Label printing needs software installed on PC:

1. Label lay-out software like NiceLabelPro
2. Label management software like Automation Manager+ Builder (automatic printing)

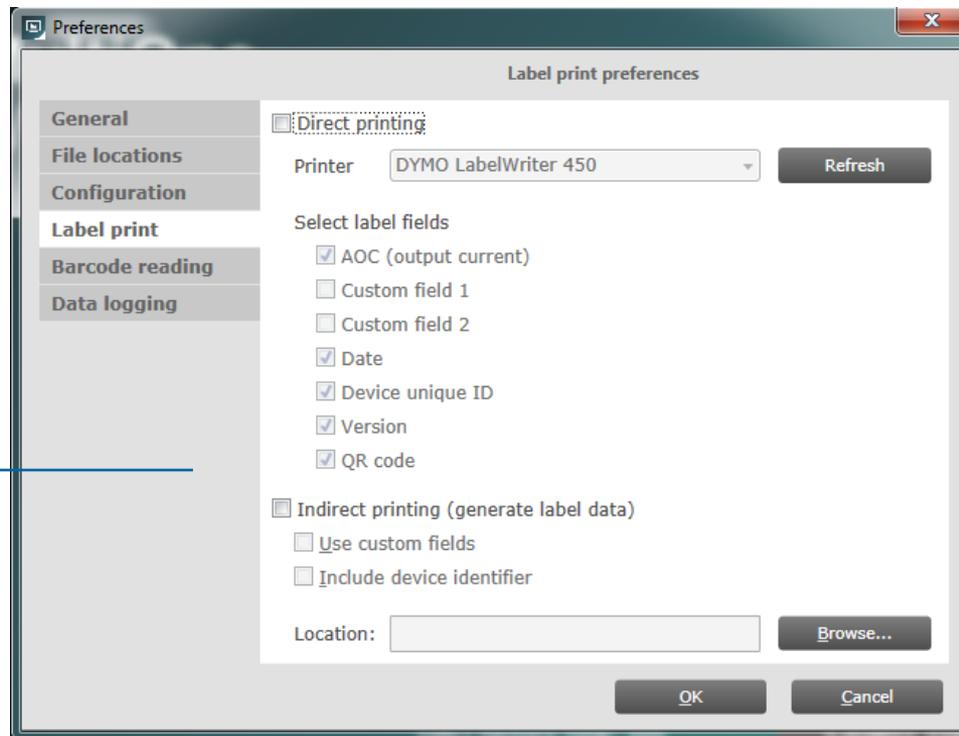
Example: Nicelabel + driver on the supported list of Nicelabel

Configure with MultiOne and SimpleSet

Setting up the configuration system – customized workflow



Label - direct printing





Specific features / functionality

Configure with MultiOne and SimpleSet

Traceability

Datalogging:

Name	Date modified	Type	Size
Batch-20180313T110117.xml	3/13/2018 11:01 AM	XML Document	
Batch-20180313T150354.xml	3/13/2018 3:03 PM	XML Document	
Day-80-20170321T175131.xml	9/5/2017 2:35 PM	XML Document	
Day-116-20170426T122214.xml	9/5/2017 2:35 PM	XML Document	
Day-143-20170523T122341.xml	9/5/2017 2:35 PM	XML Document	1
Day-159-20170608T145440.xml	9/5/2017 2:35 PM	XML Document	1
Day-164-20170613T173222.xml	9/5/2017 2:35 PM	XML Document	
Day-166-20170615T131246.xml	9/5/2017 2:35 PM	XML Document	
Day-174-20170623T135526.xml	9/5/2017 2:35 PM	XML Document	1
Day-177-20170626T135337.xml	9/5/2017 2:35 PM	XML Document	
Week-26-20170628T110213.xml	9/5/2017 2:35 PM	XML Document	10
Xi FP 40W 0.3-1.0A SNLDAE 230V S175 sXt-20170320T163615.xml	9/5/2017 2:35 PM	XML Document	
Xi FP 40W 0.3-1.0A SNLDAE 230V S175 sXt-20170320T163658.xml	9/5/2017 2:35 PM	XML Document	
Xi SR 150W 0.2-0.7A SNEMP 230V S240 sXt-20170628T172429.xml	9/5/2017 2:35 PM	XML Document	
Xi SR 150W 0.2-0.7A SNEMP 230V S240 sXt-20170628T172442.xml	9/5/2017 2:35 PM	XML Document	
Xi SR 150W 0.2-0.7A SNEMP 230V S240 sXt-20170628T172454.xml	9/5/2017 2:35 PM	XML Document	
Xi SR 150W 0.2-0.7A SNEMP 230V S240 sXt-20170628T172504.xml	9/5/2017 2:35 PM	XML Document	
Xitanium 35W 0.08-0.35A 150V S 230V-20180302T082917.xml	3/2/2018 8:29 AM	XML Document	
Xitanium 35W 0.08-0.35A 150V S 230V-20180302T082926.xml	3/2/2018 8:29 AM	XML Document	
Xitanium 35W 0.08-0.35A 150V S 230V-20180302T082930.xml	3/2/2018 8:29 AM	XML Document	
Xitanium 35W 0.08-0.35A 150V S 230V-20180302T082933.xml	3/2/2018 8:29 AM	XML Document	
Xitanium 36Wm 0.3-1.05A 54V OffDiag-20180302T075753.xml	3/2/2018 7:57 AM	XML Document	
Xitanium 60W 0.08-0.35A 300V S 230V-20180302T082909.xml	3/2/2018 8:29 AM	XML Document	
Xitanium 100W 0.15-0.5A 300V SR 230V iXt-20170628T172600.xml	9/5/2017 2:35 PM	XML Document	
Xitanium 100W 0.15-0.5A 300V SR 230V iXt-20170628T172608.xml	9/5/2017 2:35 PM	XML Document	
Xitanium 100W 0.15-0.5A 300V SR 230V iXt-20170628T172615.xml	9/5/2017 2:35 PM	XML Document	

```
<?xml version="1.0" encoding="UTF-8"?>
<Datalogging Version="1" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.
- <Device>
  - <DeviceInfo>
    <DeviceName>Xi LP 150W 0.3-1.0A SL 230V S240 sXt</DeviceName>
    <DeviceVersion>1.0</DeviceVersion>
    <HardwareVersion>Not applicable</HardwareVersion>
    <FirmwareRevision>1453</FirmwareRevision>
    <DeviceIdentifier>E00258E2A7D6406D</DeviceIdentifier>
    <TwelveNc>929000962706</TwelveNc>
  </DeviceInfo>
  - <Features>
    - <Feature>
      - <AOC>
        <Enabled>True</Enabled>
        <Current>600</Current>
      </AOC>
    </Feature>
  </Features>
  - <ConfigurationData>
    <DateTime>2017-06-28T11:02:13</DateTime>
    <SchedulerFile/>
    <FeatureFileLocation>C:\Users\beq05284\Documents\0. Workflow files\2. Product files\te
    <Protocol>NFC</Protocol>
  - <BatchInfo>
    <BatchSize>1</BatchSize>
    <BatchProgress>1</BatchProgress>
  </BatchInfo>
  - <CustomFields>
    <CustomField1/>
    <CustomField2/>
  </CustomFields>
  - <WorkflowConfiguration>
    <WorkflowVersion>3.4.32.39105</WorkflowVersion>
    <WorkflowType>Philips MultiOne Workflow 3.4</WorkflowType>
    <FileLocation>C:\Users\beq05284\Documents\0. Workflow files\1. Templates\7. Wor
    driverinfo.txt</FileLocation>
    <Verify>true</Verify>
```

Configure with MultiOne and SimpleSet

Traceability

Datalogging: xml conversion to xlx

Device | Attribute:Version

Table

Expand Aggregate

- (Select All Columns)
- DeviceInfo
- Features
- ConfigurationData



Device.DeviceInfo.DeviceName	Device.DeviceInfo.DeviceVersion	Device.DeviceInfo.HardwareVersion	Device.DeviceInfo.DeviceID	Device.DeviceInfo.DeviceType	Device.DeviceInfo.DeviceStatus	Device.Features.FeatureCount	Device.ConfigurationData.FeatureCount	Device.ConfigurationData.FeatureList	Device.ConfigurationData.FeatureLocation
XI LP 150W 0.3-1.0A SL 230V S240 sxt	1.0	Not applicable	1453	E002582A7064060	92900962706	True	600	2017-06-28T11:02:13	C:\Users\bec
XI LP 150W 0.3-1.0A SL 230V S240 sxt	1.0	Not applicable	1453	E002582A7064060	92900962706	True	600	2017-06-28T11:02:48	C:\Users\bec
XI LP 150W 0.3-1.0A SL 230V S240 sxt	1.0	Not applicable	1453	E002582A7064060	92900962706	True	600	2017-06-28T11:02:53	C:\Users\bec
XI LP 150W 0.3-1.0A SL 230V S240 sxt	1.0	Not applicable	1453	E002582A7064060	92900962706	True	600	2017-06-28T17:30:14	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506	True	700	2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506			2017-06-28T17:30:43	C:\Users\bec
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XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506	True	300	2017-06-28T17:31:16	C:\Users\bec
XI LP 150W 0.3-1.0A SL 230V S240 sxt	1.0	Not applicable	1453	E002582A7064060	92900962706	True	300	2017-06-28T17:32:59	C:\Users\bec
Xitanium 100W 0.15-0.5A 300V SR 230V sxt	2.1	Not applicable	8812	E002408E7C83857	929001540806	True	300	2017-06-28T17:33:05	C:\Users\bec
XI SR 150W 0.2-0.7A SNEMP 230V S240 sxt	0.2	Not applicable	5191	E002405013433485	929001507506	True	300	2017-06-28T17:33:12	C:\Users\bec
Xitanium 100W 0.15-0.5A 300V SR 230V sxt	2.1	Not applicable	8812	E002408E7C83857	929001540806			2017-06-28T17:33:33	C:\Users\bec

Device.DeviceInfo | Device.Features | Device.ConfigurationData

Expand Aggregate

- (Select All Columns)
- DeviceName
- DeviceVersion
- HardwareVersion
- FirmwareRevision
- DeviceIdentifier
- TwelveNc

Device.DeviceInfo.TwelveNc | Device.Features

Expand Aggregate

- (Select All Columns)
- Feature

Device.DeviceInfo.TwelveNc | Device.Features.Feature

Expand Aggregate

- (Select All Columns)
- AOC

Device.ConfigurationData

Expand Aggregate

- (Select All Columns)
- DateTime
- SchedulerFile
- FeatureFileLocation
- Protocol
- BatchInfo
- CustomFields
- WorkflowConfiguration

Configure with MultiOne and SimpleSet

Traceability

Information free to use and available in the datalogging :

Product

DeviceName
DeviceVersion
FirmwareRevision
DeviceIdentifier
TwelveNc
Feature 1
setting 1
setting 2
Feature 2
Feature

Production

DateTime
BatchSize
BatchProgress
Production successful
scheduler file location
FeatureFileLocation
Protocol
WorkflowType
Verify
IdentifyAlways
MultiDevice
CommissionAll
CheckDevicemodel
DaliFactoryNew
CheckDevicePresent

Customer

CustomField1
CustomField2

Configure with MultiOne and SimpleSet

Traceability

Feature Luminaire info MB1

Content format ID:	<input type="text" value="Unformatted content"/>
GTIN (EAN13):	<input type="text" value="9999999999999"/>
Identification number:	<input type="text" value="18446744073709551615"/> <input type="checkbox"/> Use device UID
Additional info (101):	<input type="text" value="Some extra information"/>

- contains three mandatory fields:
 - Content format ID -> select the content format,
 - GTIN of the luminaire (13 digits)
 - Identification number of the luminaire (up till 15 digits)
 - >used as traceability information for OEMs
- Depending on Content format ID -> additional fields are available for storing more detailed information

More info in separate presentation

A futuristic city street at night, illuminated with vibrant blue light. The scene is dominated by large, wave-like structures on either side of a road, which appear to be part of a modern architectural design. The structures are composed of vertical, curved panels that create a sense of movement and depth. The road is flanked by low, glowing blue barriers, and the overall atmosphere is one of advanced technology and urban development. In the background, tall buildings are visible, their lights adding to the city's glow. The text "Future development - API" is overlaid in the center of the image.

Future development - API



Webinar : Configure with MultiOne and SimpleSet

Setting up the main flow of configuration

