



# Digital vernetzte Systeme

Enabled by Data Driven Transformation

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# ICT Group

**Business Transformation**

**Digital Transformation**

**Industrial IoT & BI**

**Smarter Buildings**

**Smarter Cities**

**Smarter Industries**

**Smarter Healthcare**

## ICT Group companies

**BMA**  
Specialist in Oostbever

**faviio**  
Partner

**CIS SOLUTIONS**  
EXPERT IN IT-SYSTEM INTEGRATION

**RASTER**  
INDUSTRIAL AUTOMATION

**Strypes**  
TECHNOLOGY TOGETHER

Experience almost 40 years

Quoted at AEX

1000+ Professionals

13 Offices

Netherlands

Germany

United States

Bulgaria

### Asset Management

Solutions

### Smart Energy

# Remeha / BDR Thermea (Monitoring)



## Herausforderung

- Stagnierende Märkte
- B2B Business ohne Kontakt zum Endkunden
- Wandel vom Geräteverkauf zum Serviceanbieter für warmes Wasser = Komfort

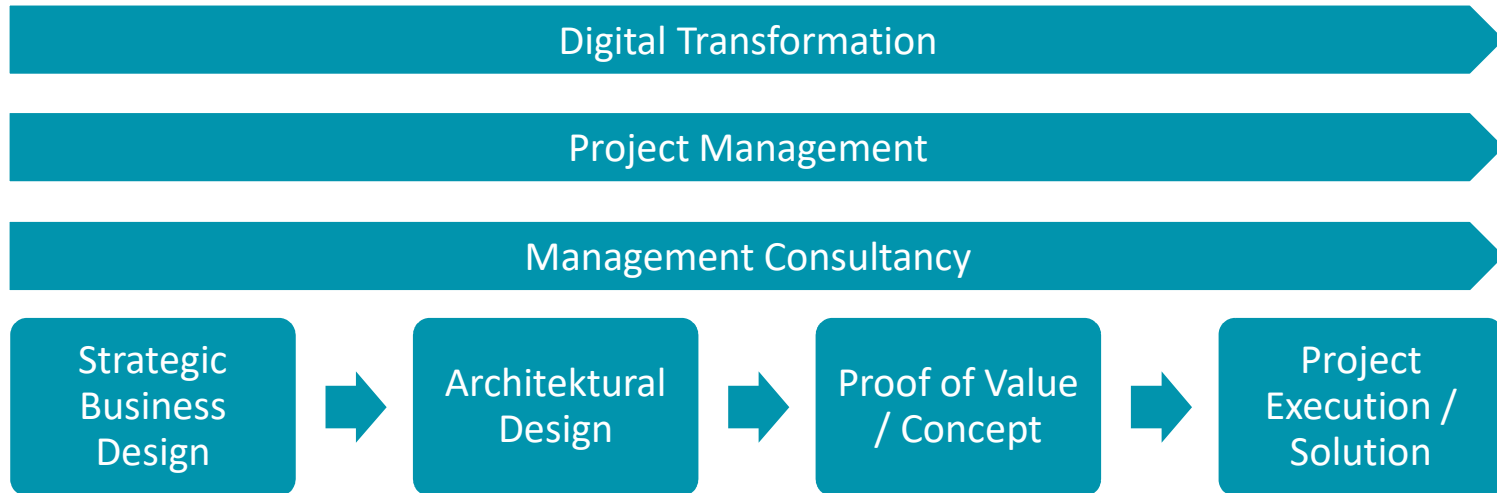
## Lösung

- Remeha benutzt die Azure Plattform zur Datenakquisition und –speicherung von den Geräten
- Konnektivität liefert Remeha die Möglichkeit optimale Hilfestellung für den Gebrauch von Geräten anzubieten

## Vorteile

- Remeha hat nun eine zuverlässige B2B2C Plattform
- Remote Diagnose
- Genauerer Blick in die Benutzung der Geräte. Darauf aufbauende Services wie Predictive Maintenance

# 4 Steps to your Success



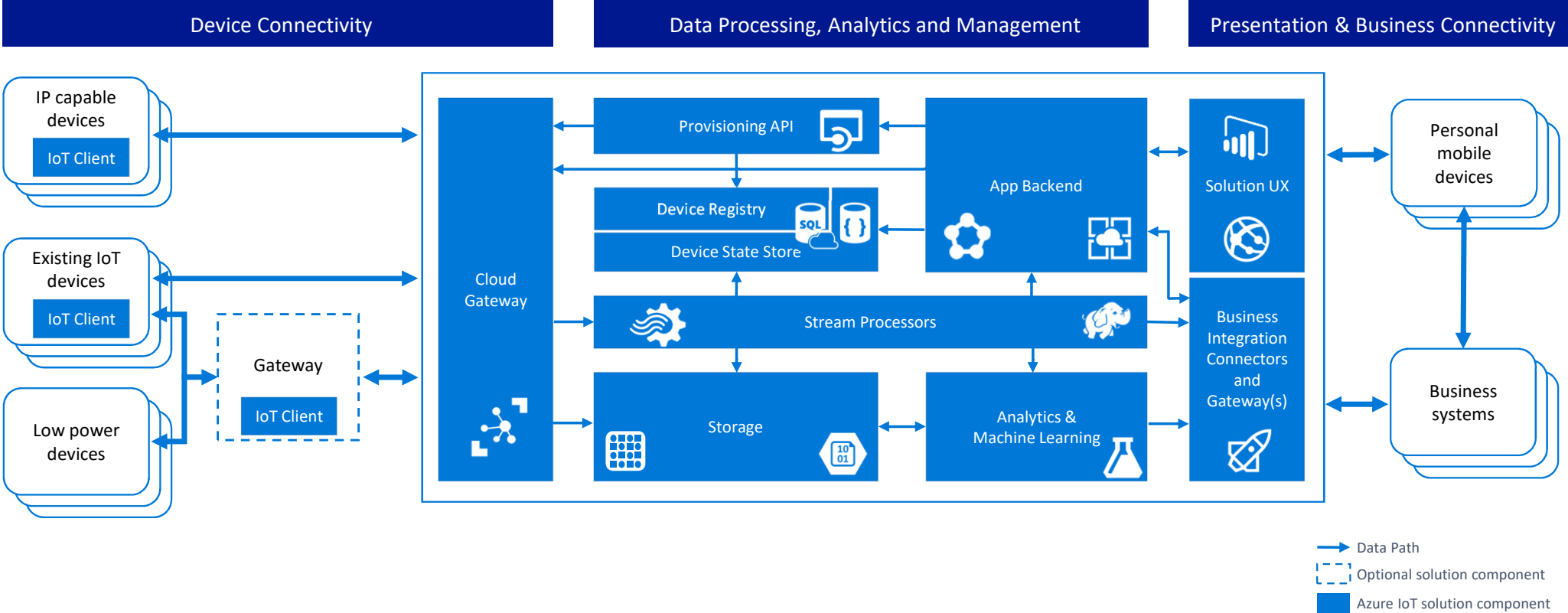
- Management consultancy
- Digital Strategy
- Digital Transformation
- New Business Models

- Technical Specifications
- Cloud Solutions
- IT / IoT Solutions
- SoW

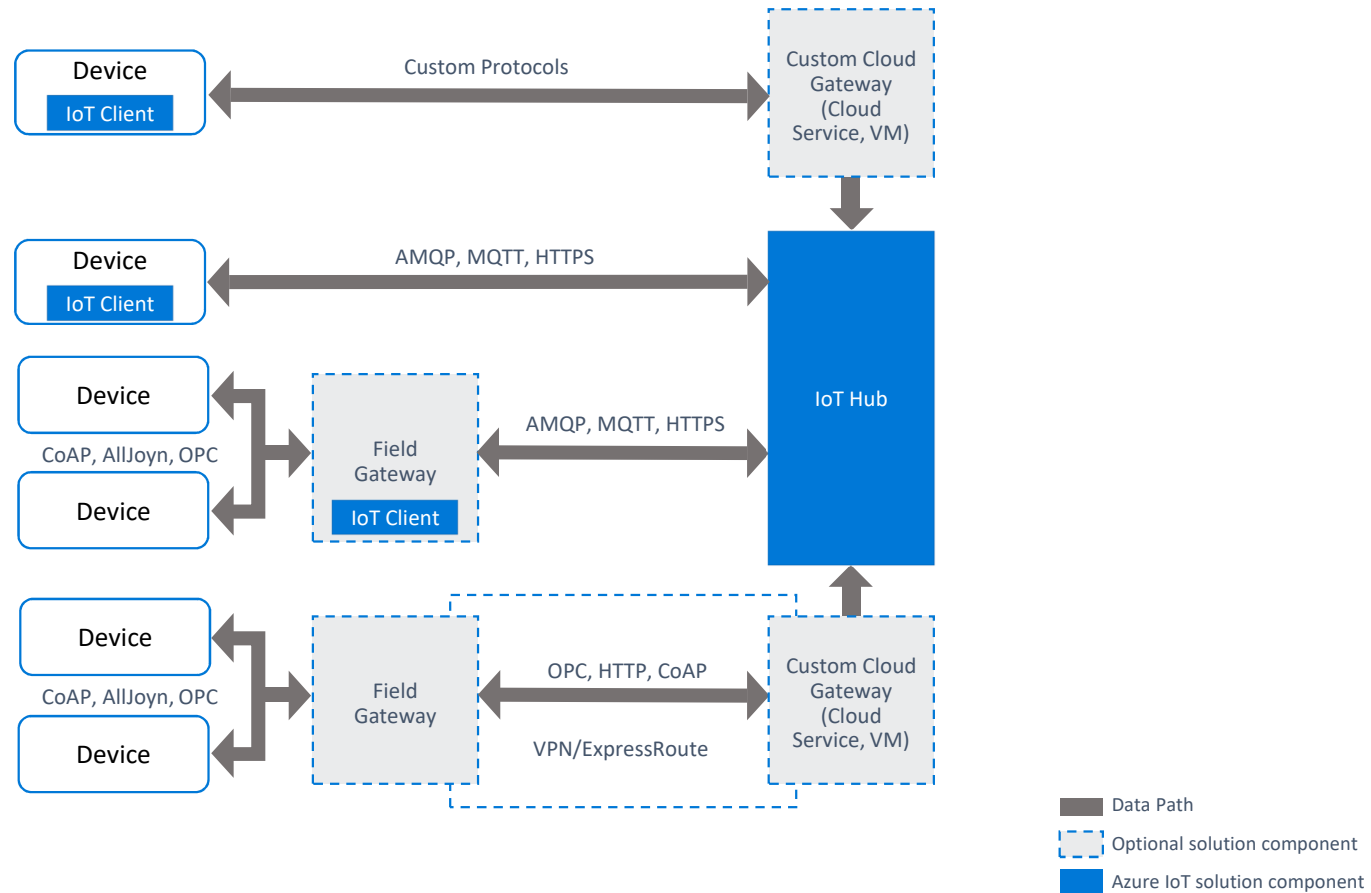
- Pilot Project
- Demonstrator
- Proof of Value

- Project Execution
- Solution implementation

# Cloud Reference Architecture



# Device Connectivity Options



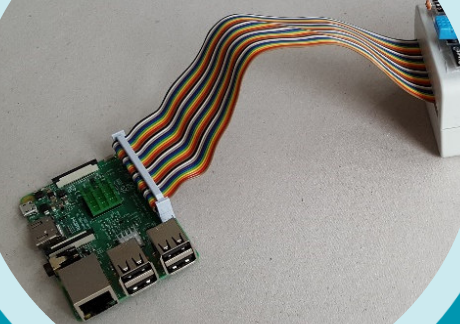
# Kommunikationsstandards für Smart Home



Name	Funk/ Kabel	offen/ proprietär	Genutzte Frequenzen	Wichtigste Unternehmen
All Seen	Funk	offen	siehe WLAN	AT&T, Bosch, Cisco, LG, Microsoft, Panasonic, Qualcomm, Sharp
Bluetooth (IEEE 802.15.1)	Funk	offen	2400 MHz	Archos
DECT	Funk	offen	1900 MHz	AVM
Home Connect	Funk	offen	k. A.	Bosch, Siemens
Homekit	Funk	proprietär	k. A.	Apple
Home Matic (BidCoS)	Funk	proprietär	868 MHz	eQ-3
KNX	Kabel / Funk	offen	868 MHz	Albrecht Jung, Gira, Bosch Telecom, Electrolux, Siemens
OIC	Funk	offen	k. A.	Intel, Samsung, Broadcom, Dell, Atmel
QIVICON	Funk	offen	siehe Zig Bee / Home Matic	Deutsche Telekom
RWE Smart Home (CosIP)	Funk	proprietär	868 MHz	RWE
Thread	Funk	offen	siehe Zig Bee	ARM, Samsung, Nest
WLAN (802.11)	Funk	offen	2400/5000 MHz	Belkin
Zig Bee (IEEE 002.15.4)	Funk	offen	868/2400 MHz	Philips, TI, Comcast
Z-Wave (G.9959)	Funk	offen	868/2400 MHz	Sigma Designs, Danfoss

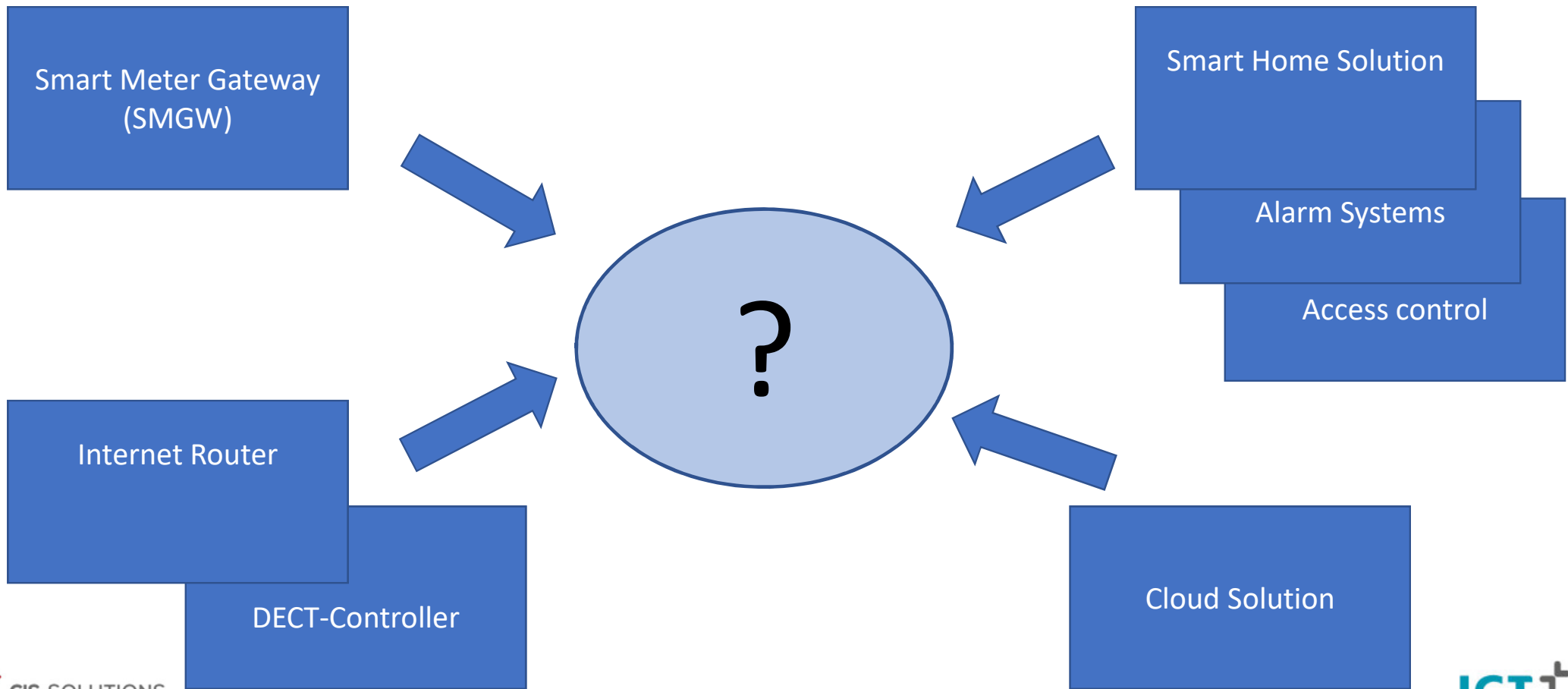
# Starting Point Data Collection

- Variety of gateways available
- Microsoft certified more than 400 Gateways





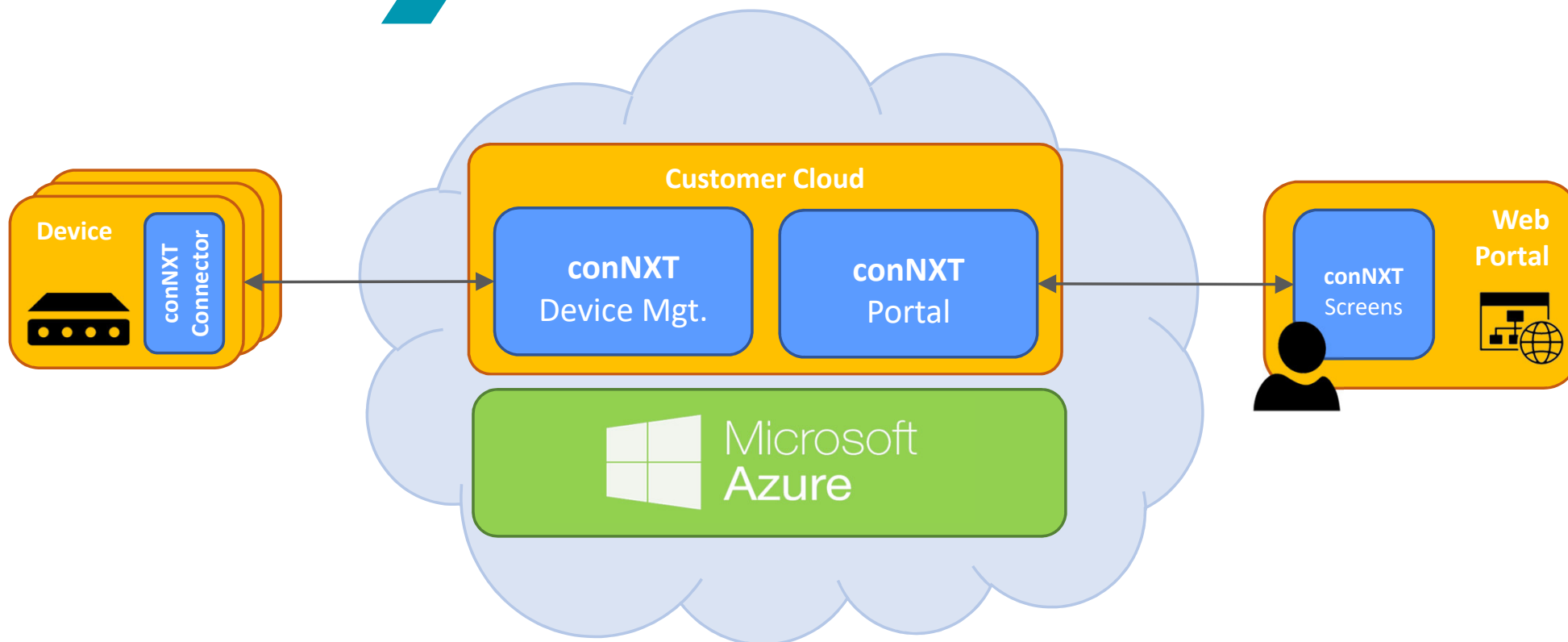
# Zentraler Zugangspunkt





# CONNEXT

ICT+





12



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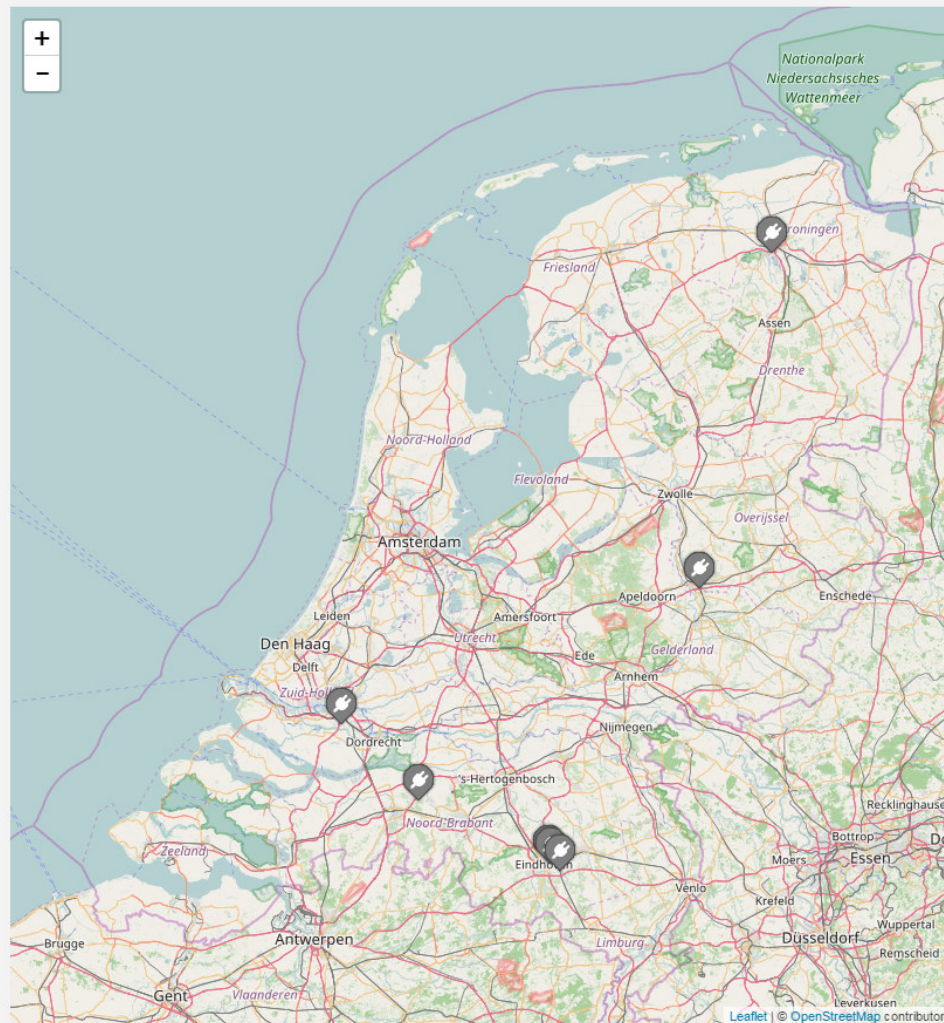
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Terminals met storing

Zoek:

Sinds	Node	Naam	Adres	Plaats	Acties
12-04-2017 13:40:39	ICT Group	Terminal 100006	Wilhelminakanaal Zuid 110	Oosterhout	<a href="#">Terminal status</a>
12-04-2017 14:30:48	ICT Group	Terminal 100005	Rozenburglaan 1	Groningen	<a href="#">Terminal status</a>
12-05-2017 11:49:17	ICT Group	Marco0007	Grasland 12	Genoehuis	<a href="#">Terminal status</a>
12-05-2017 11:51:71	ICT Group	Terminal 100002	Kopenhagen 9	Barendrecht	<a href="#">Terminal status</a>
12-05-2017 12:14:40	ICT Group	Terminal 100003	Voltastraat 4	Bergen op Zoom	<a href="#">Terminal status</a>
16-05-2017 14:02:48	ICT Group	Terminal 100001	Prof. Dr. Dorgelolaan 30	Eindhoven	<a href="#">Terminal status</a>
16-05-2017 14:11:94	ICT Group	Terminal 100004	Munsterstraat 7	Deventer	<a href="#">Terminal status</a>
16-05-2017 16:36:66	ICT Group	Harrie-00030	Rachelsmolen 1	Eindhoven	<a href="#">Terminal status</a>
19-05-2017 08:15:14	ICT Group	Marco0008			<a href="#">Terminal status</a>
19-05-2017 08:17:58	ICT Group	Marco0009			<a href="#">Terminal status</a>
19-05-2017 08:18:94	ICT Group	Marco0010			<a href="#">Terminal status</a>
07-06-2017 10:57:53	Eindhoven	Laptop Samuel	Professor doctor Dorgelolaan 30	Eindhoven	<a href="#">Terminal status</a>

Toont 1 tot 12 van 12 items



## Alles in einer App



- favioo iot toolbox is a modular building block consisting out of 85 features and services
- **Features** to control devices and installations as well as internal and external processes
- Connection of devices with real time data out of the internet and combination to other devices -> Equipment with intelligence
- Internal and external Support and Services

# Vielen Dank

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