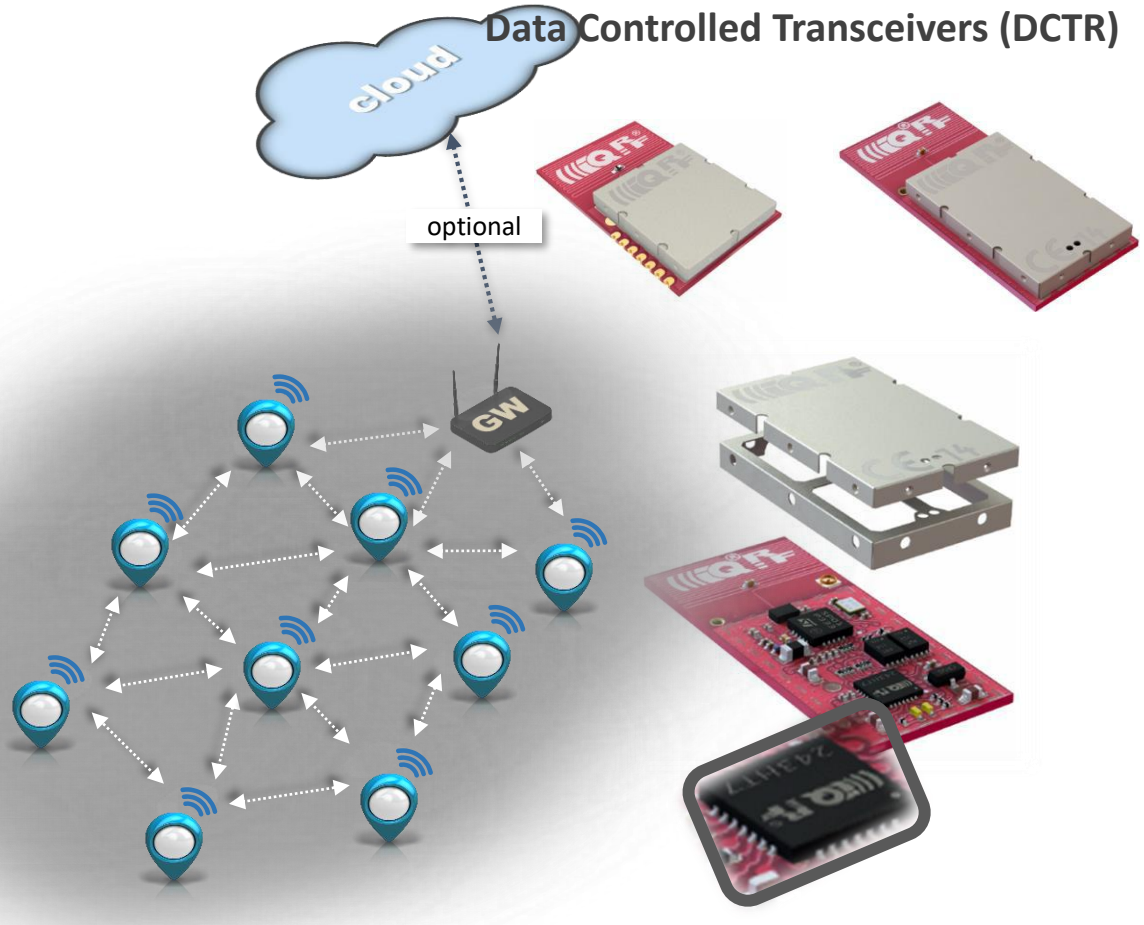
Technical concept

Dr. Vladimír Šulc, CEO, MICRORISC s.r.o.

Short recap
Smarter Wireless. Simply.

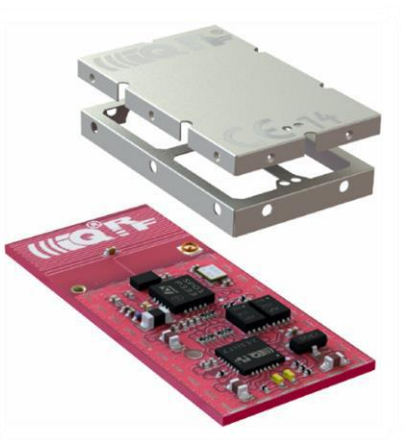
Excellent horizontal platform for IoT based on mature wireless mesh technology

Data Controlled Transceivers (DCTR)

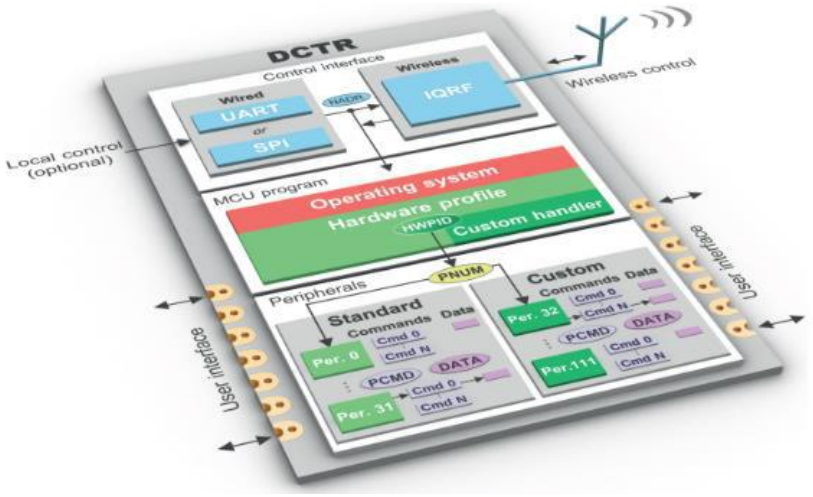


Excellent horizontal platform for IoT based on mature wireless mesh technology

Data Controlled Transceiver Module



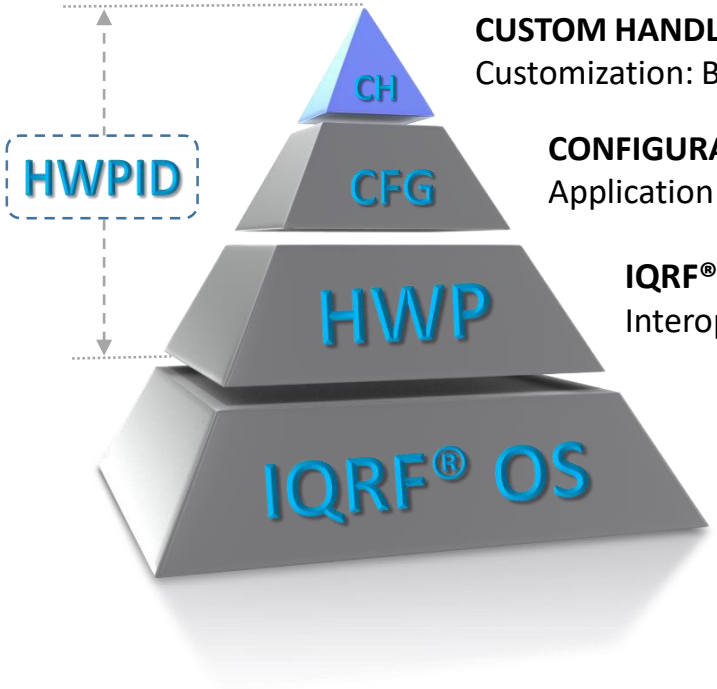
IQRF® HWPs
IQRF® OS



All IQRF® transceivers with IQRF OS 4.01+ will be capable to run HWPs. Without any surcharge.

Excellent horizontal platform for IoT based on mature wireless mesh technology

IQRF® Core SW



CUSTOM HANDLER
Customization: Behavior, Additional functionality

CONFIGURATION
Application Specific Configuration

IQRF® HWP (DPA based)
Interoperability, Optimizing, Maintenance

IQRF® OS
PHY, Networking, Security, App mgmt.

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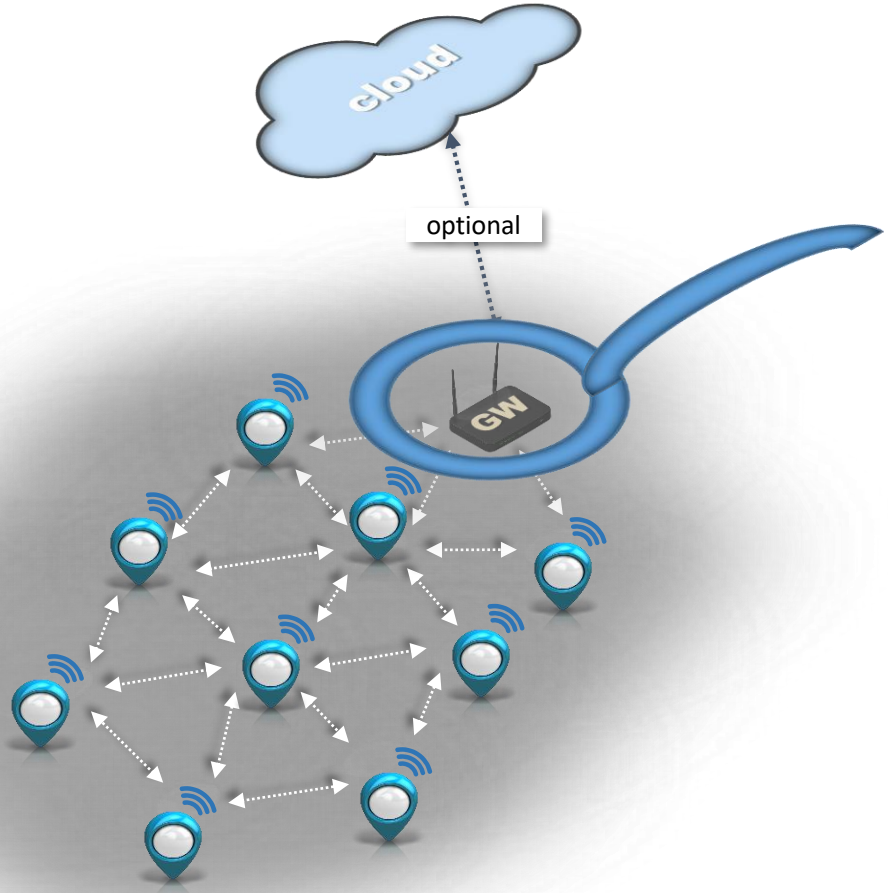
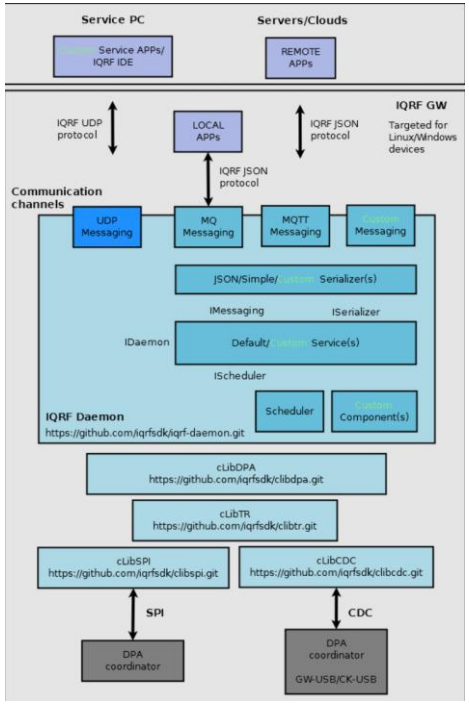


IQRF® SDK + Daemon



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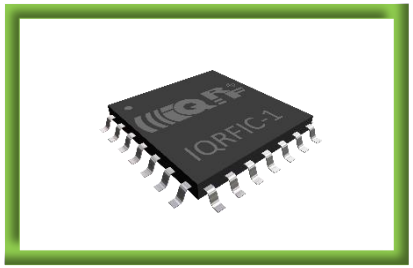
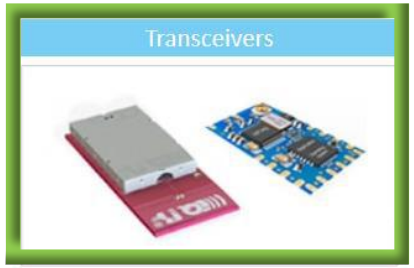
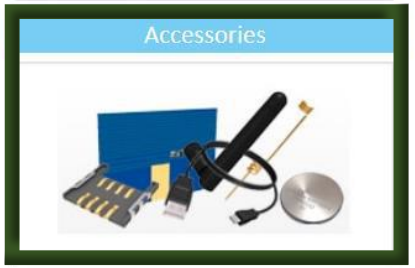
Further products
focus and development
Smarter Wireless. Simply.

Further products focus and development



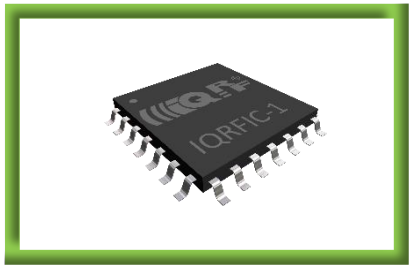




www.iqrf.org

Excellent horizontal platform for IoT based on mature wireless mesh technology

New modules variants
Fitting specific needs for volume projects
TR-7xG scheduled to 2018
More resources (RAM, FLASH)



IQRF® ASIC
To support volume projects
To license transceivers manufacturing
More info will be released begin of 2018

IQRF®
dev. tools

IQRF® Development tools
IQRF® IDE
Anything to accelerate development cycle

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Further products
...and software
Smarter Wireless. Simply.

Verticals support	IQRF® OS IQRF® HWPs IQRF® CH	IQRF® Daemon + interfacing SW	HWP: repeater
	Transceivers 		Routers
	End devices 	Accessories 	Development tools

Excellent horizontal platform for IoT based on mature wireless mesh technology

Verticals support	IQRF® OS IQRF® HWPs IQRF® CH	IQRF® Daemon + interfacing SW	HWP: repeater

ACCELERATE

Time to market

Shorten R&D cycle for our customers

Excellent horizontal platform for IoT based on mature wireless mesh technology

Technical concept

Data Controlled Transceivers

Hardware profiles (HWP)

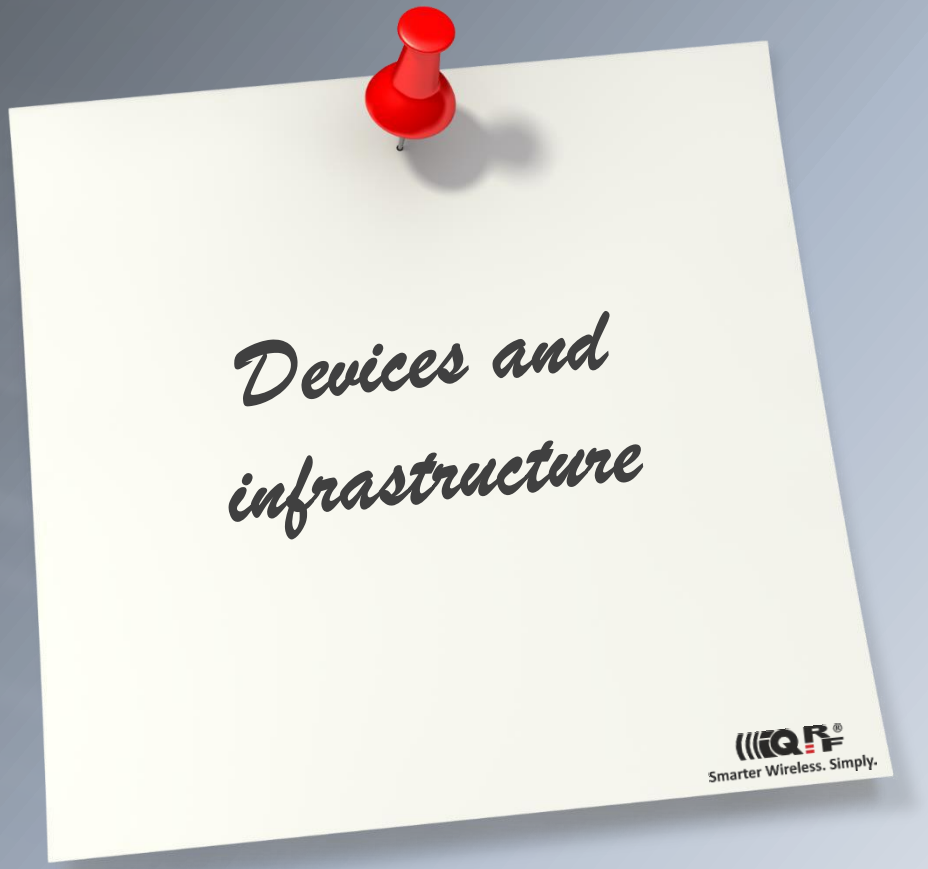
Simple

Secure

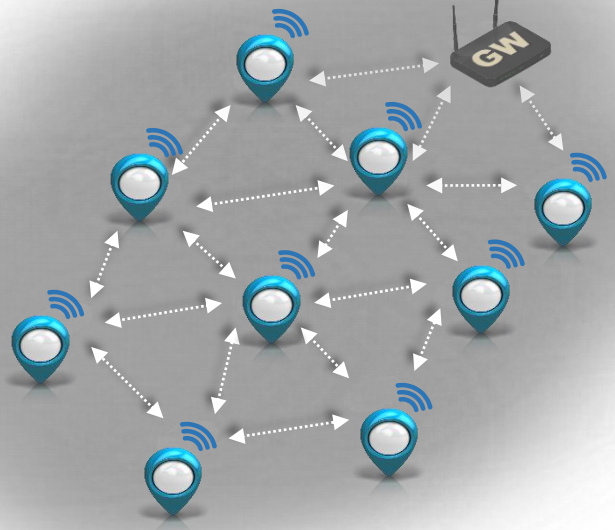
Interoperable

DPA protocol

Standardized DPA commands


Devices and infrastructure
Smarter Wireless. Simply.

Devices vs. Infrastructure …



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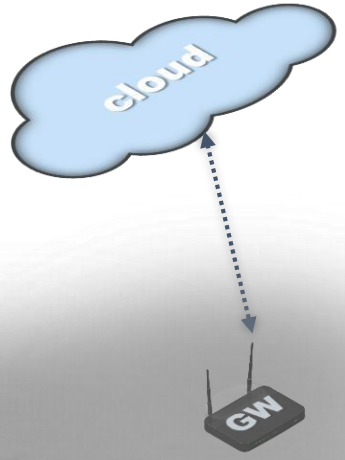
Devices vs. Infrastructure …



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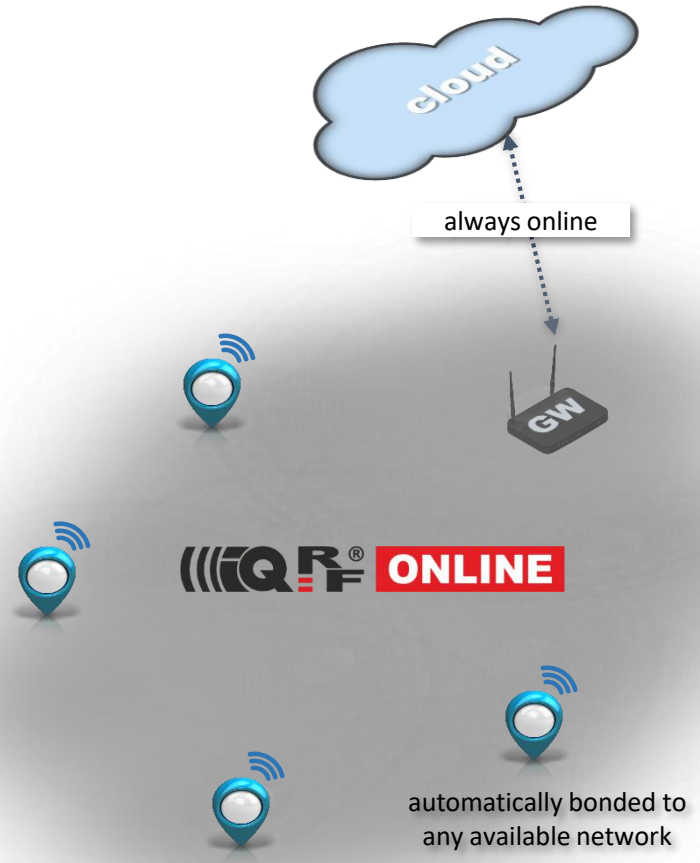
Devices vs. Infrastructure …



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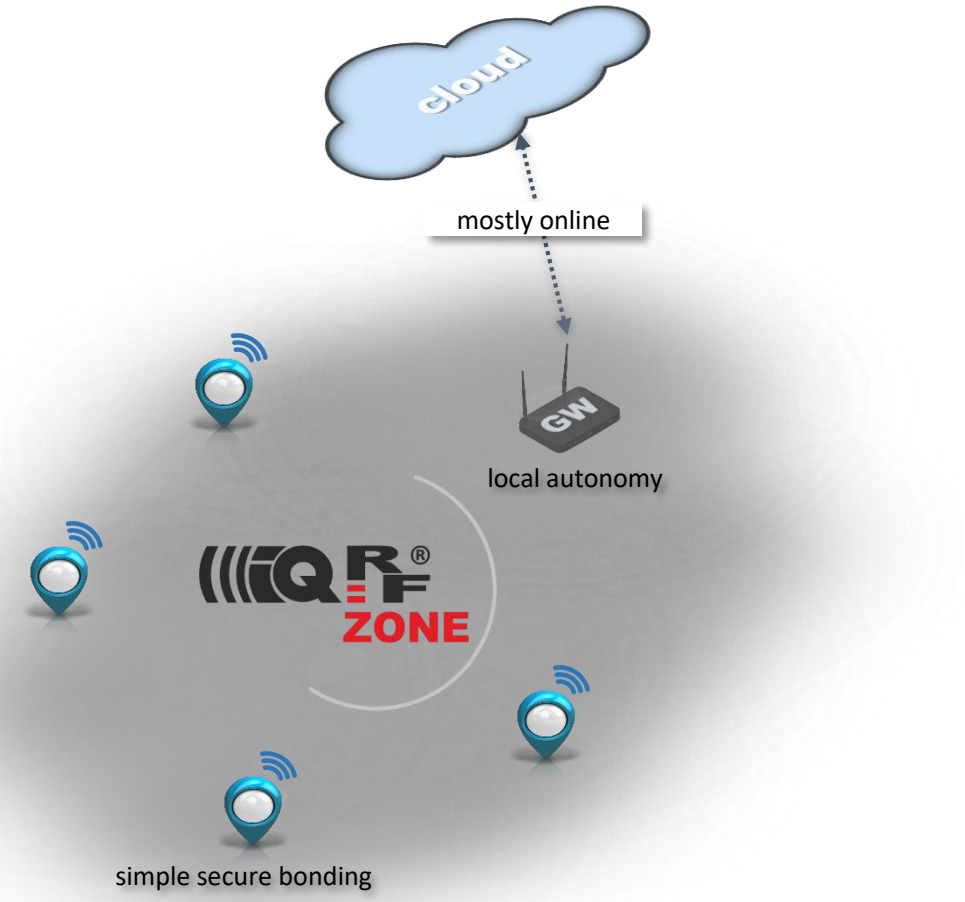

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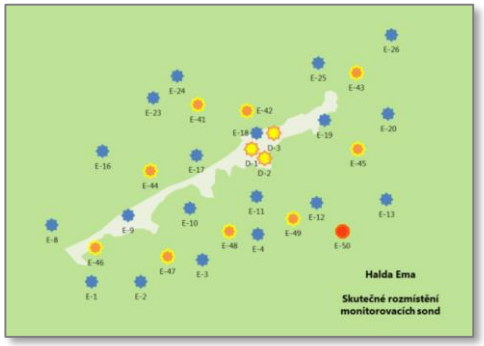
Technical concept

Devices vs. Infrastructure …



QRF ZONE

QRF ONLINE

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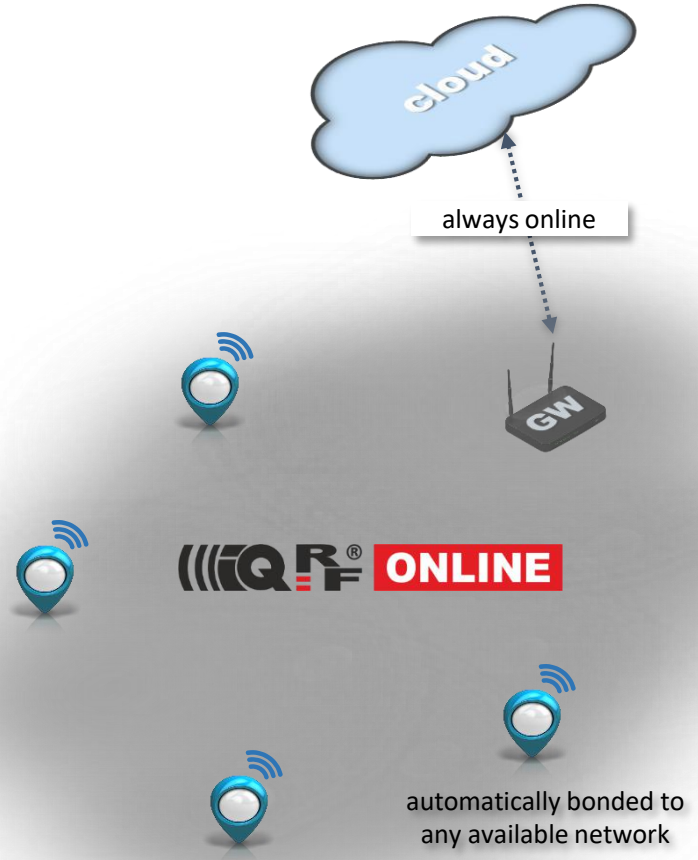
Devices vs. Infrastructure …



SENSORS AUTOMATICALLY
connect to the IQRF.online service
provided by operators or created privately

DEVs automatically connect to existing infrastructure
DEVs are not routing
DEVs send data asynchronously
Scheduled LBT-LPTX followed by LPRX
SECURE communication to IQRF.online service
END-to-END encryption
Typical application: online sensor networks
Dramatically simplifies DEVs design

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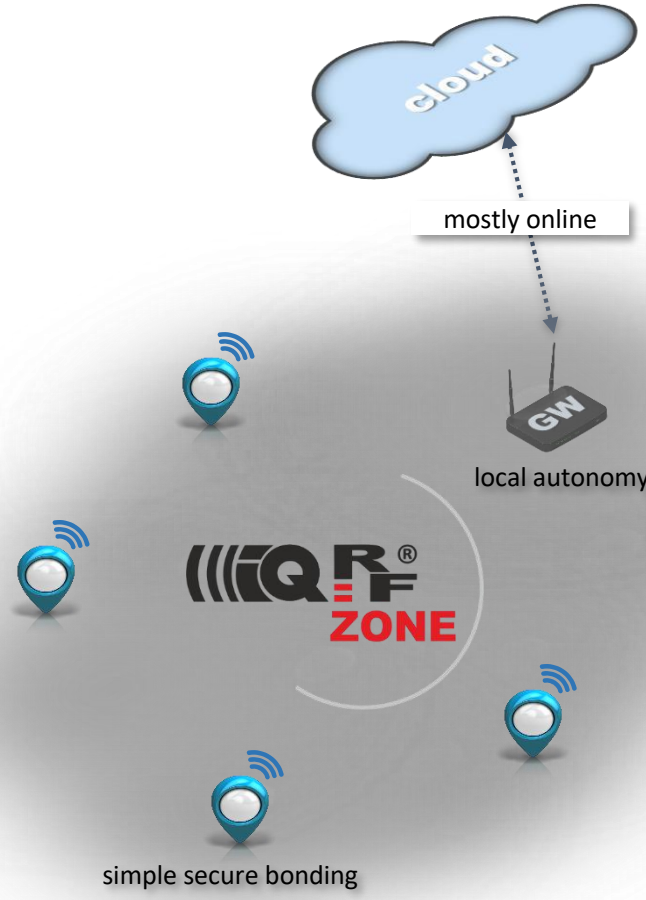
Devices vs. Infrastructure …



GW AUTONOMOUS mode
enables applications such as building automation

DEVs deploy IQRF.zone infrastructure
Infrastructure under full end user's control
SECURE adding all devices to the IQRF.zone is SIMPLE
DEVs are not routing
There are dedicated routers
DEVs may send data asynchronously
Event based support for a local control
LPTX/LPRX for devices (STDTX/STDRX for repeaters?)
SECURE communication inside IQRF.zone
Very simple DEVs design, standardized repeaters
Typical application: building automation

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Technical concept

IQRF Tech s.r.o.

QRF® SUMMIT 2017
Thank you