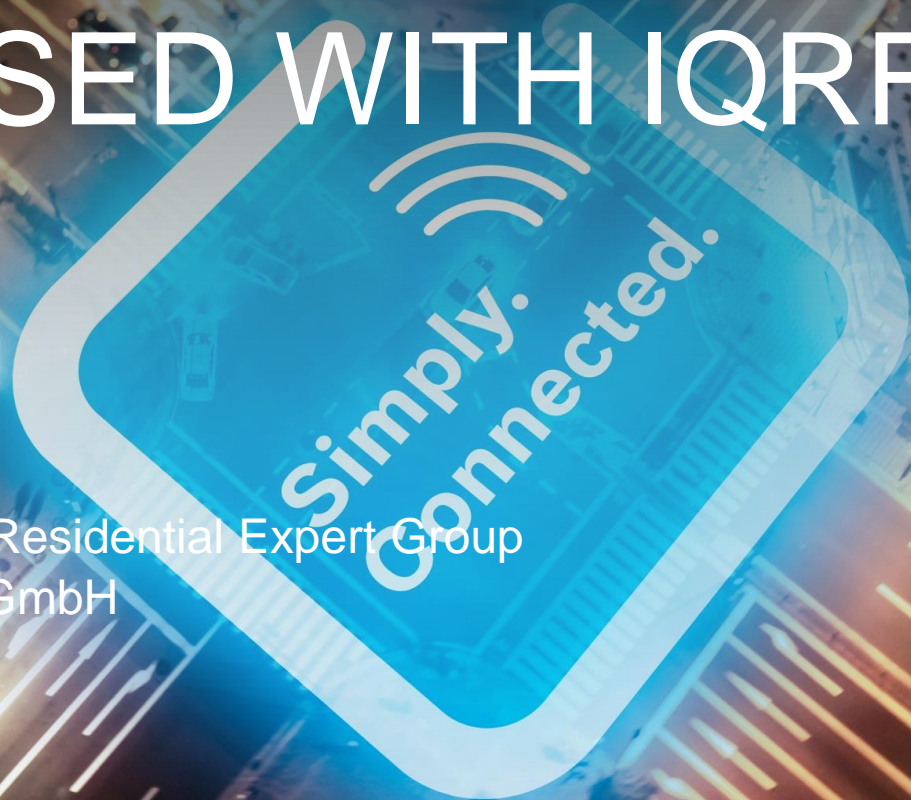


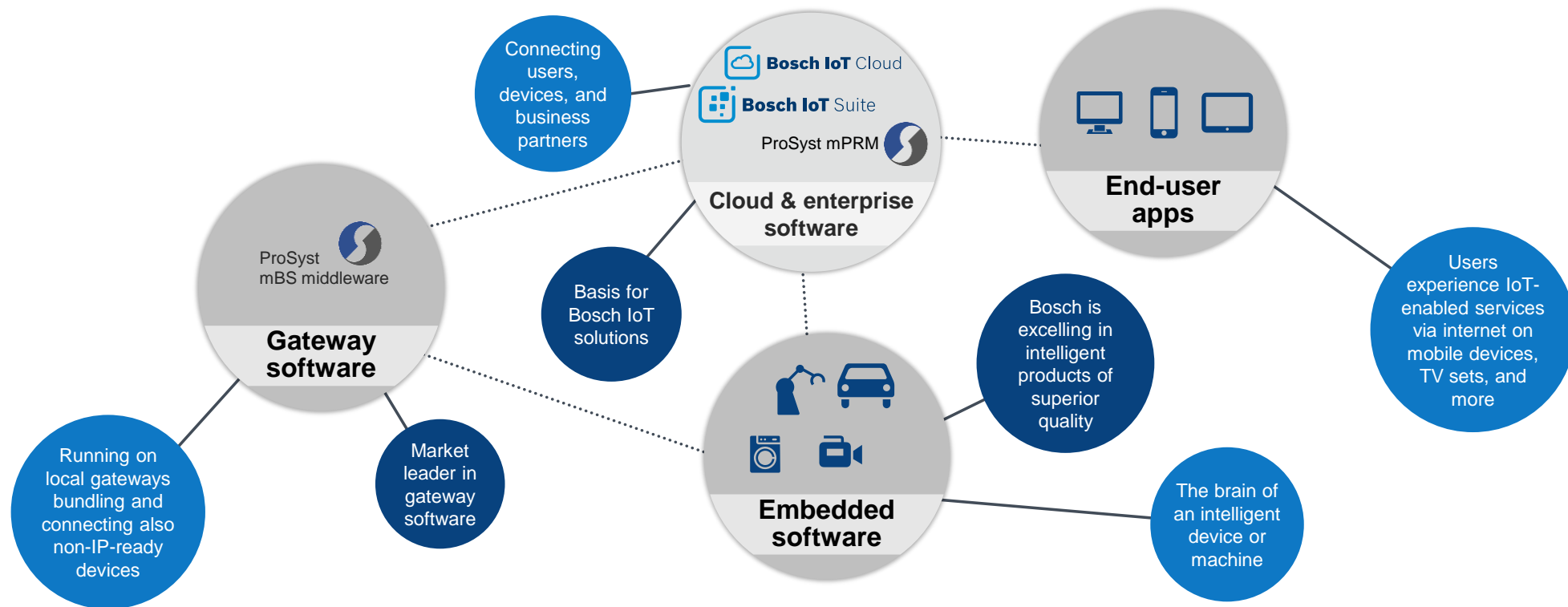
HOW THE OSGI-STANDARDS BASED GATEWAY MIDDLEWARE CAN BE USED WITH IQRF

Kai Hackbarth
Evangelist & Co-Chair OSGi Residential Expert Group
Bosch Software Innovations GmbH



Software components

Strategic impact on IoT applications



Technological, commercial, and user angles covered through Bosch

Our open standards approach

Leading industry standards make IoT work



Bosch Software Innovations is actively involved in open standards organizations and open source communities. Additionally, our products support many additional industry standards.

OSGi Alliance Background

Founded in 1999

**Proven, Mature Software
Architecture**

**Transparent
Development
Process**

**Strategic
Partnerships/
Collaboration**



Global Ecosystem

Best Practices

**Industry & End User
Adoption**

OSGi Alliance

Modularity and Services

Modular Software architecture

- Execution environment, APIs, device abstraction
- Application development framework
- Common architecture is applicable to Cloud, Enterprise, M2M & IoT architecture
- Can run locally on one device, all the way through to distributed across 1,000's of servers

Dynamic Service lifecycle enables:

- True 24/7 remote maintenance
- Remote software updates
- Aftermarket sales of upgrades and extensions

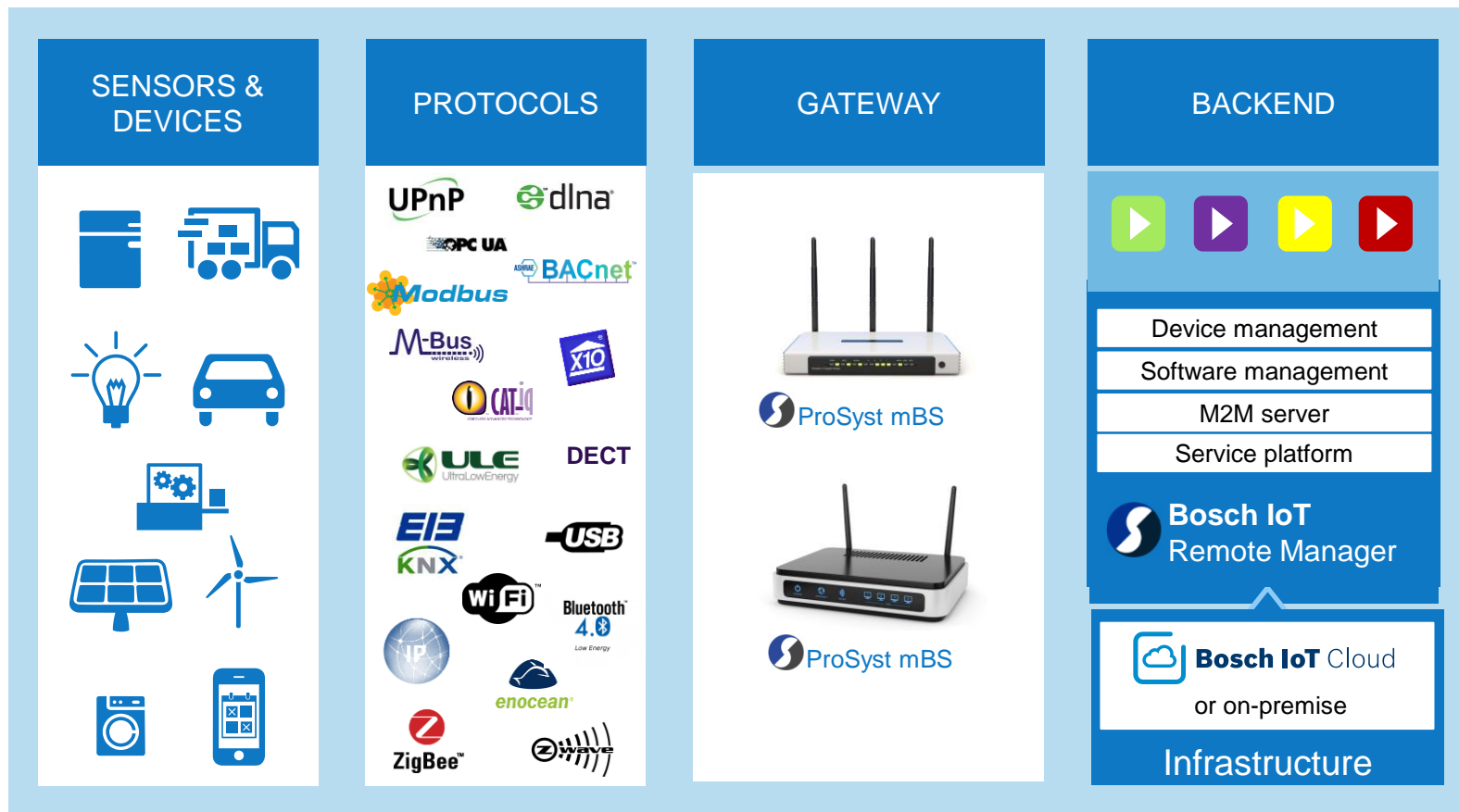
Portable and re-usable software modules enable

- Faster time-to-market
- Increased agility and reduced development effort and project risk
- Reduction in maintenance costs
- Ecosystem based solutions



How to visualize, evaluate and manage machine data

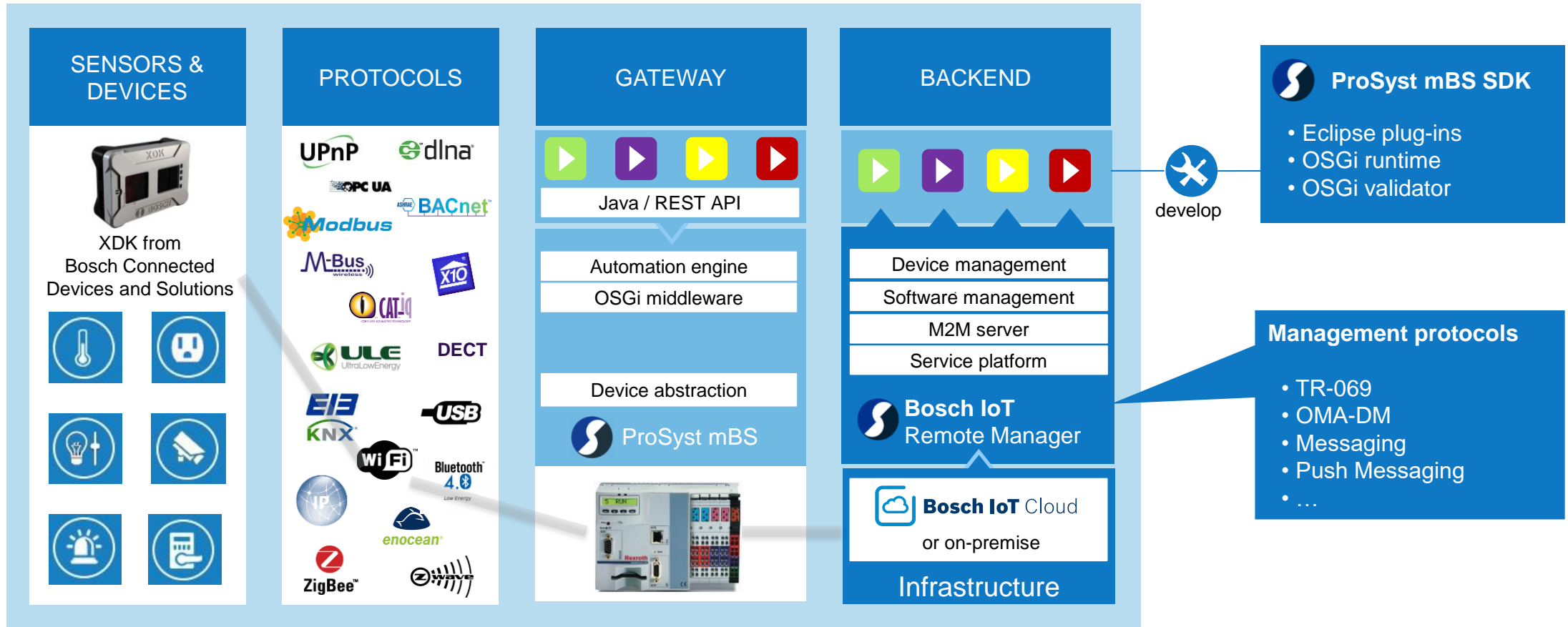
Prosyst end-to-end open standard IoT middleware



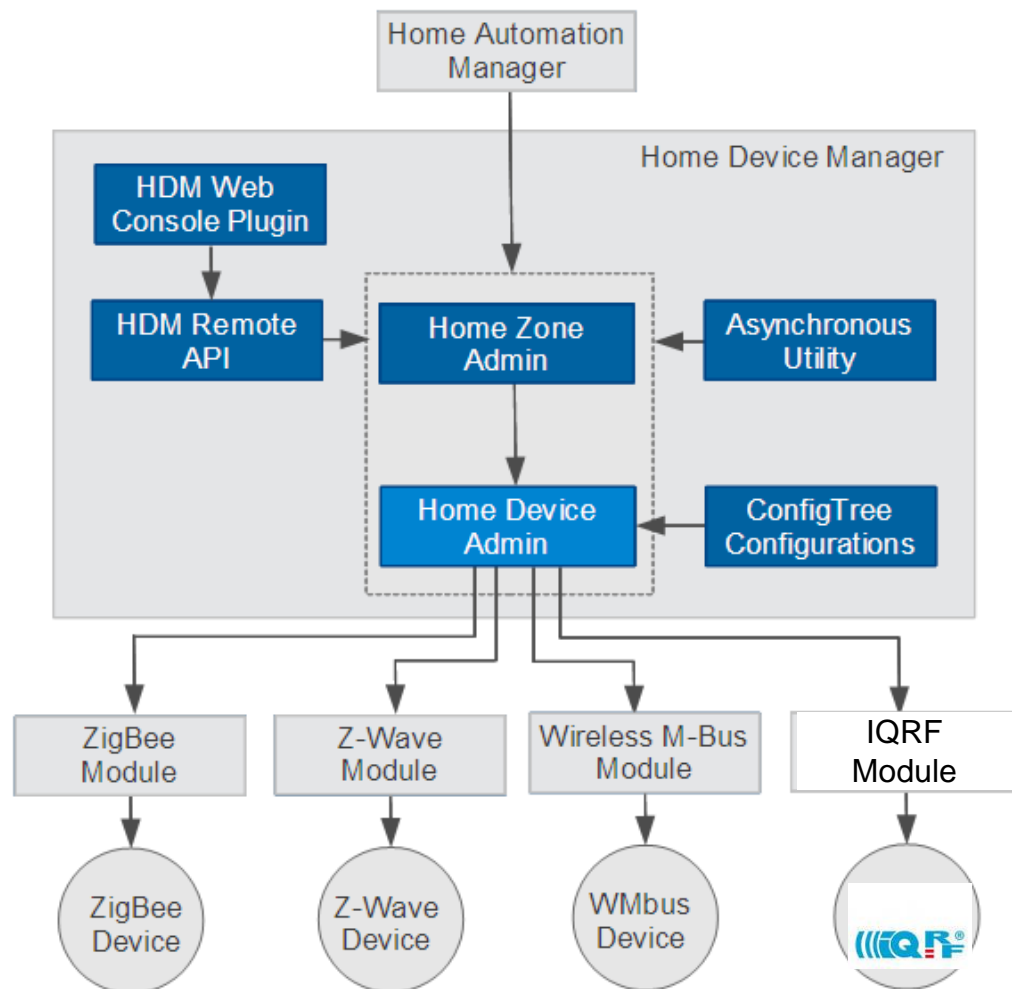
- ▶ Provides connectivity to the edge devices and machines
- ▶ Runs apps and automation logic
- ▶ Enables device management
- ▶ Remote monitoring and support
- ▶ Easy and quick access to machine data from anywhere in the world
- ▶ Reporting and performance tracking

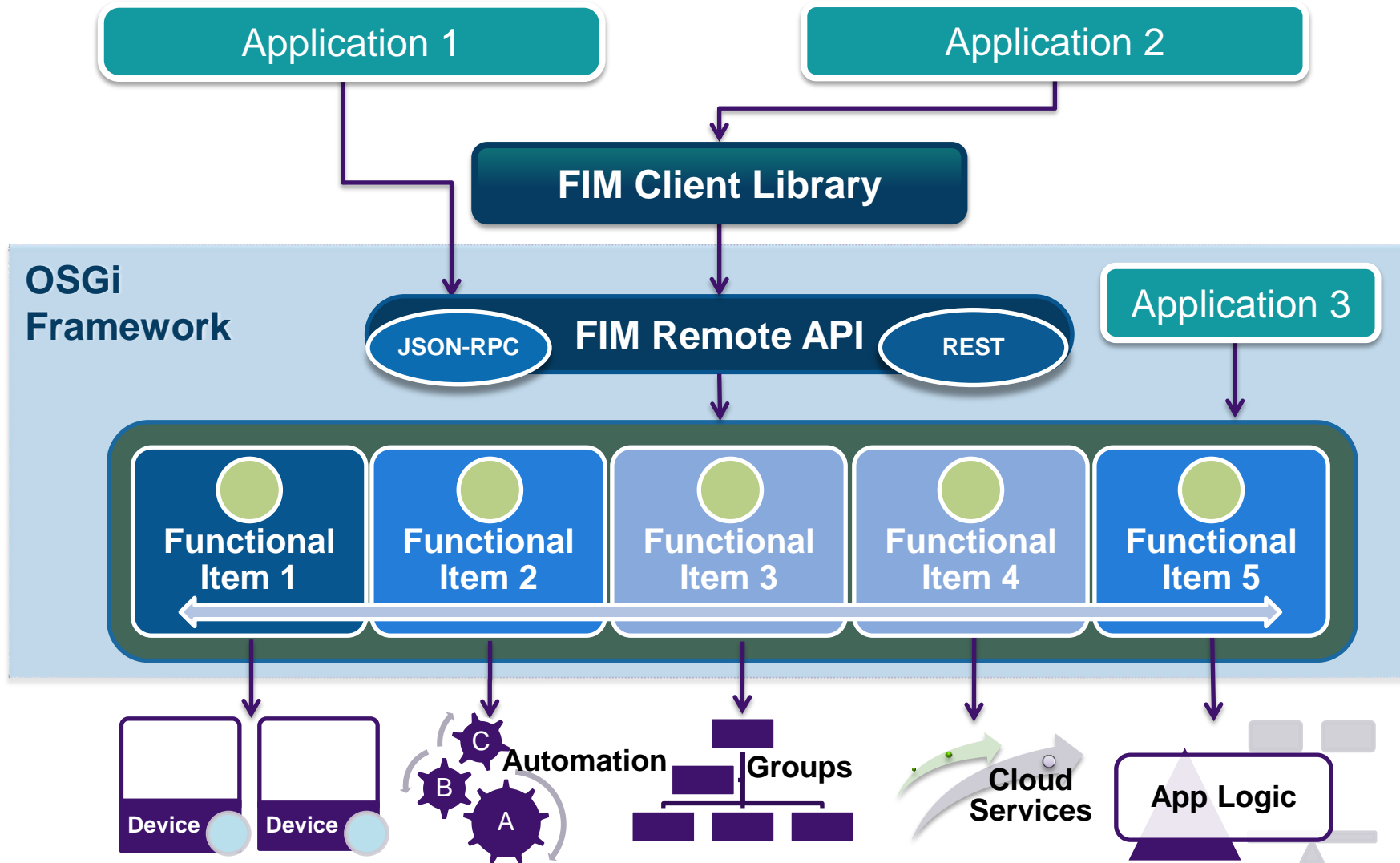
Demo: Connecting Bosch XDK & gateway to Bosch IoT Cloud

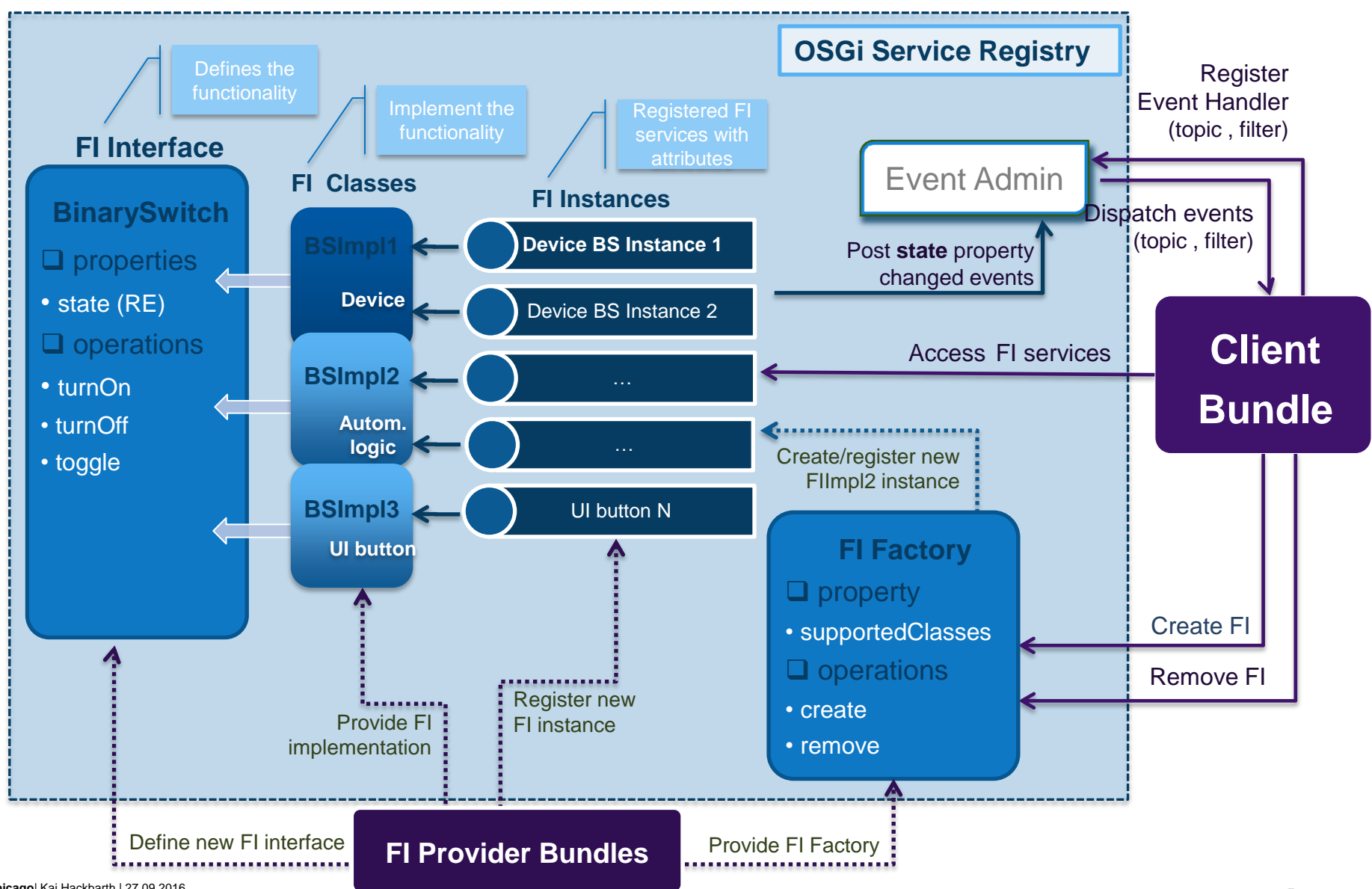
Mastering the variety of protocols



How could this work with IQRF ?







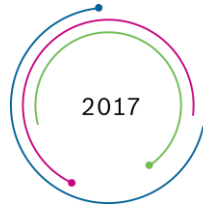
Possible Liaison with OSGi Alliance

- **Joint Marketing Activities**
 - Cross Promotion of Events
 - Joint Webinars
 - etc.
- **Joint Technical Activities**
 - Standardized IQRF interface for OSGi
 - Incl. RFP, RFC, Reference Implementation and Compliance Tests
- **OSGi already liaises with other IoT organizations**
 - HGI, oneM2M, EnOcean Alliance



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2017

Bosch

CONNECTED WORLD

THE INTERNET OF THINGS CONFERENCE
BERLIN MARCH 15-16

Save the Date!

Bosch ConnectedWorld 2017 will take place
March 15-16 at Station Berlin

THANK YOU FOR YOUR ATTENTION!

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