Title: An Intelligent IQRF® Gateway

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Description: In this presentation we present the design of the Intelligent IQRF gateway.

An IQRF gateway is a device that interfaces the IQRF network and the Internet and mediates the connection from individual sensors to cloud systems.

The IQRF gateway design is taken as open from both hardware and software perspectives.

In this presentation, we describe the different sub-steps of the design. We start with an explanation of the basic design, which is based on a Linux machine, a simple IQRF shield and open-source IQRF Gateway Daemon software.

Gradually, additional functionality is presented that extends the applicability of the IQRF gateway for battery-powered beaming sensor systems or for use in industrial environments. We come to the most complicated design of the Off grid IQRF Gateway, which will allow use without external power supply.

Along with the IQRF gateway design, we explain the role and use of the IQRF gateway daemon and other gateway software.

Finally, the role of the IQRF cloud is also outlined, which becomes part of the whole IQRF ecosystem, especially for off grid systems.

Learning outcomes:

- IQMESH systems
- Design of an IQRF Gateway
- IQRF Gateway Daemon

Tutorial structure

- IQRF introduction
- IQRF Gateway architecture
- IQRF Gateway Daemon
- Design of an IQRF Gateway

Duration: TBD

Audience: Interested in IoT issues, hardware design, Linux Enthusiasts, IQRF fans