

The logo for Red Hat Summit, featuring the words "RED HAT" in a smaller font above "SUMMIT" in a larger, bold font, both in white on a red, speech-bubble-like background.

RED HAT  
**SUMMIT**

# Building Edge to Cloud IoT Solutions

Featuring Intelligent IoT Gateway

Patrick Steiner  
Ishu Verma

May 3, 2017

# Enterprise IoT



Photo courtesy of Confluent Corporation

Smart pumps can further improve safety by standardizing the dosing units and calculating the rate in these dosing units, as well as mL/hr, eliminating the risk of calculation error.

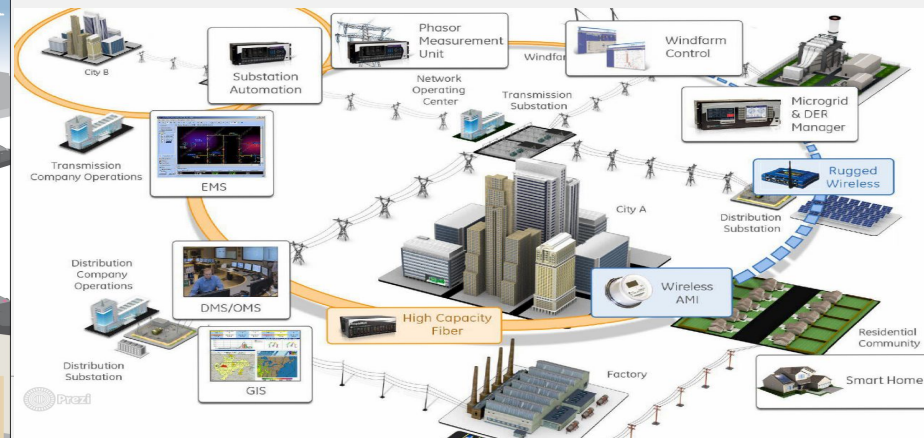
## Help with finding a parking space

30 percent of drivers in cities are looking for a parking space. Intelligent machine-to-machine (M2M) solutions make life easier in the city.

- Sensors "detect"** whether a parking space is occupied or vacant and...
- ... transmit **data to the central server**
- Smartphone app "requests"** a parking space and guides drivers to the free space
- Parking fee** is paid directly through the app
- Special permit** Administration of - parking and local resident IDs - permits for taxis, coaches, deliveries
- Legitimation** Access control to restricted traffic areas such as loading zones, residential parking

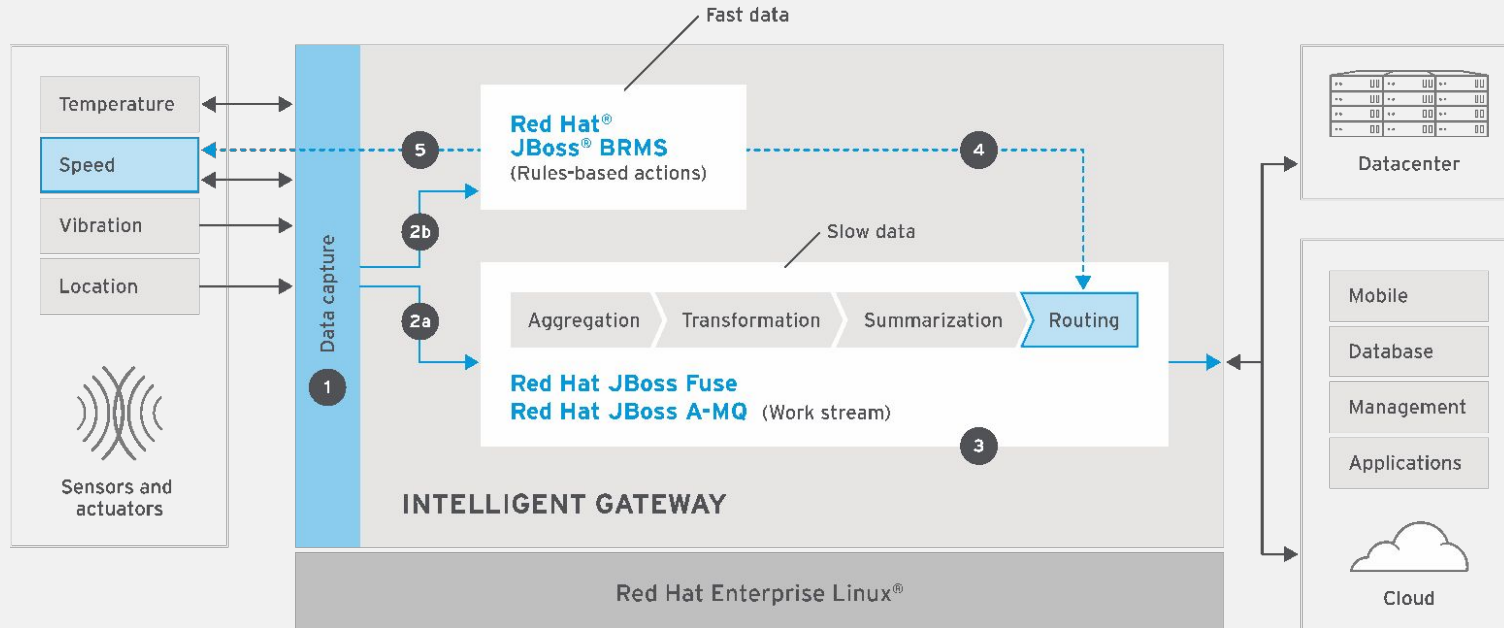
**Intelligent Street Lighting** turns on (or increases the light intensity) when the street is actually used

Source: Deutsche Telekom



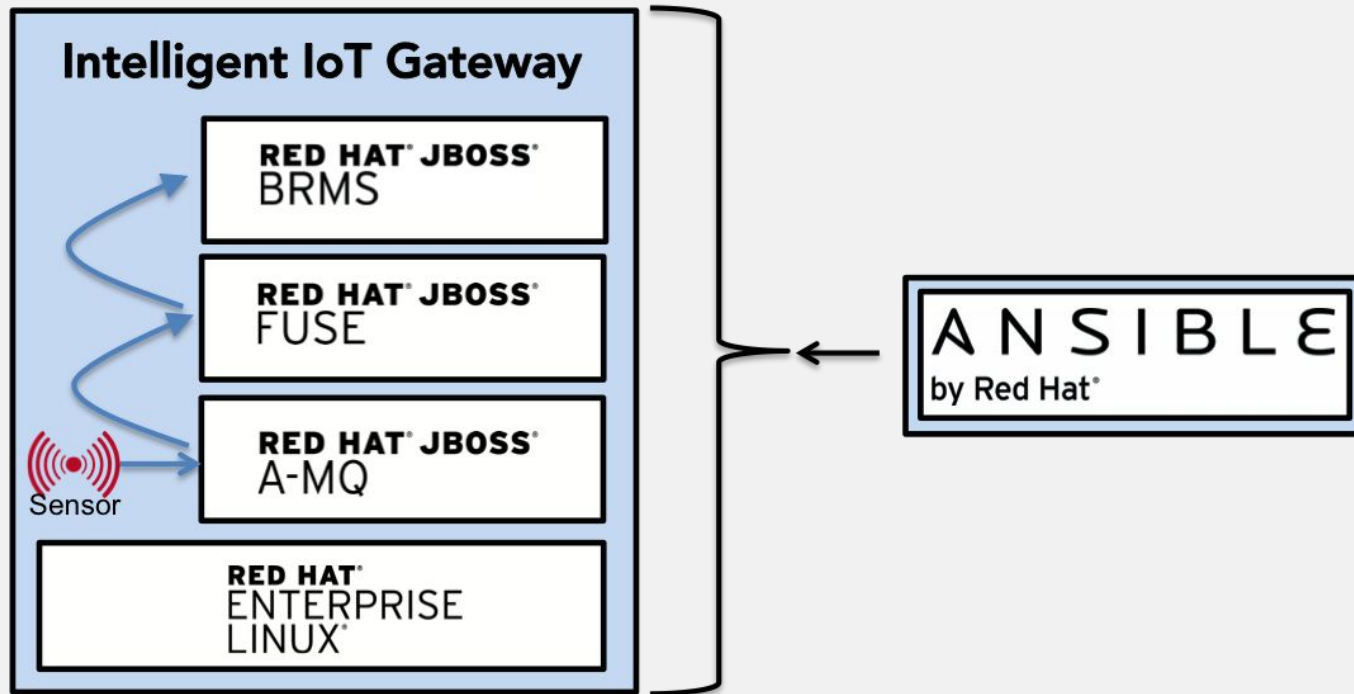
# Intelligent IoT Gateway

Transforming device data into actionable information

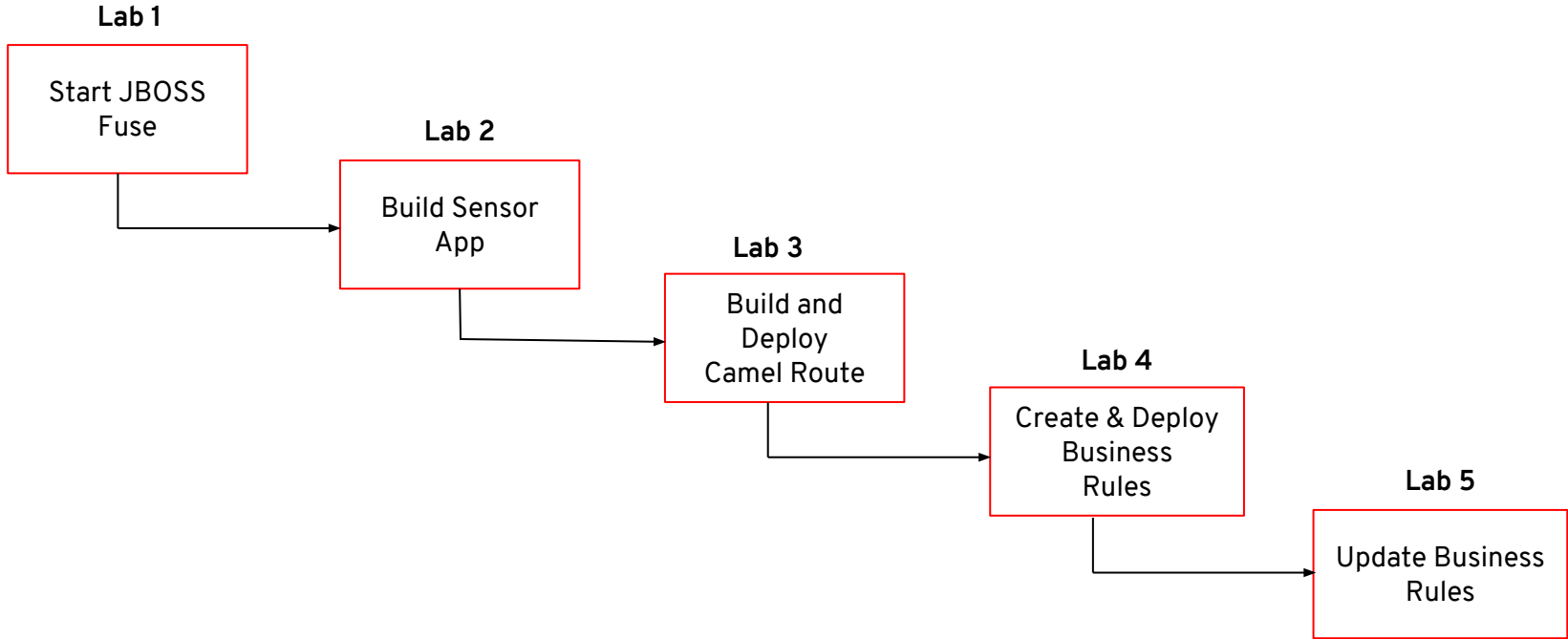


# Lab Walkthrough

# Key Components



# Lab Workflow





# Resources

# Additional Resources

- Lab Exercises
  - This lab: [https://github.com/PatrickSteiner/loT\\_Summit\\_Lab](https://github.com/PatrickSteiner/loT_Summit_Lab)
  - Building Sensors: [https://github.com/PatrickSteiner/loT\\_Sensor\\_Labs](https://github.com/PatrickSteiner/loT_Sensor_Labs)
- End-to-End loT Demo Setup
  - [https://github.com/PatrickSteiner/loT\\_Demo\\_AllInOne](https://github.com/PatrickSteiner/loT_Demo_AllInOne)
- loT Intelligent Gateway Demo Setup
  - Docker based: [https://github.com/PatrickSteiner/loT\\_Demo\\_Gateway](https://github.com/PatrickSteiner/loT_Demo_Gateway)
  - OpenShift based: [https://github.com/PatrickSteiner/loT\\_Demo\\_Openshift](https://github.com/PatrickSteiner/loT_Demo_Openshift)
- loT Datacenter Demo Setup
  - [https://github.com/PatrickSteiner/loT\\_Demo\\_Datacenter](https://github.com/PatrickSteiner/loT_Demo_Datacenter)



**Don't forget to submit the survey!**

RED HAT  
**SUMMIT**

# THANK YOU



[plus.google.com/+RedHat](https://plus.google.com/+RedHat)



[facebook.com/redhatinc](https://facebook.com/redhatinc)



[linkedin.com/company/red-hat](https://linkedin.com/company/red-hat)



[twitter.com/RedHatNews](https://twitter.com/RedHatNews)



[youtube.com/user/RedHatVideos](https://youtube.com/user/RedHatVideos)