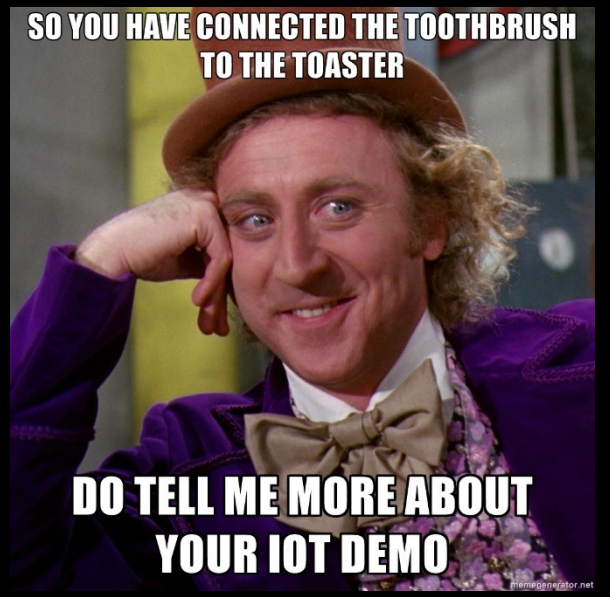

Wi-Fi e IoT para Smart Cities

Marcelo Molinari

System Engineer Director - LATAM

The Transformation: Wi-Fi

Wi-Fi

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The Transformation: Wi-Fi ⎵ Converged Access Network Solutions

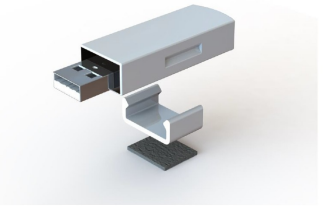
Wi-Fi

Ethernet

Wi-Fi

LTE
(3.5 GHz)

IoT



Any Network Profile. Plug-n-Play Deployment. Carrier-Grade Security.

Complexity Of The IoT Market Is Overwhelming …

amazon web services AWS IoT

splunk>

Predix | GE Digital

IBM Watson

Azure IoT

GIMBAL™

PLATFORM / SERVICES

Ayla

relayr.

Actility Connecting with intelligence

MIDDLEWARE

NETWORK

DEVICES / ENDPOINTS

Ruckus™

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thingworx

Actility Connecting with intelligence

MIDDLEWARE

Wi Fi™

Bluetooth® SMART

Z-WAVE

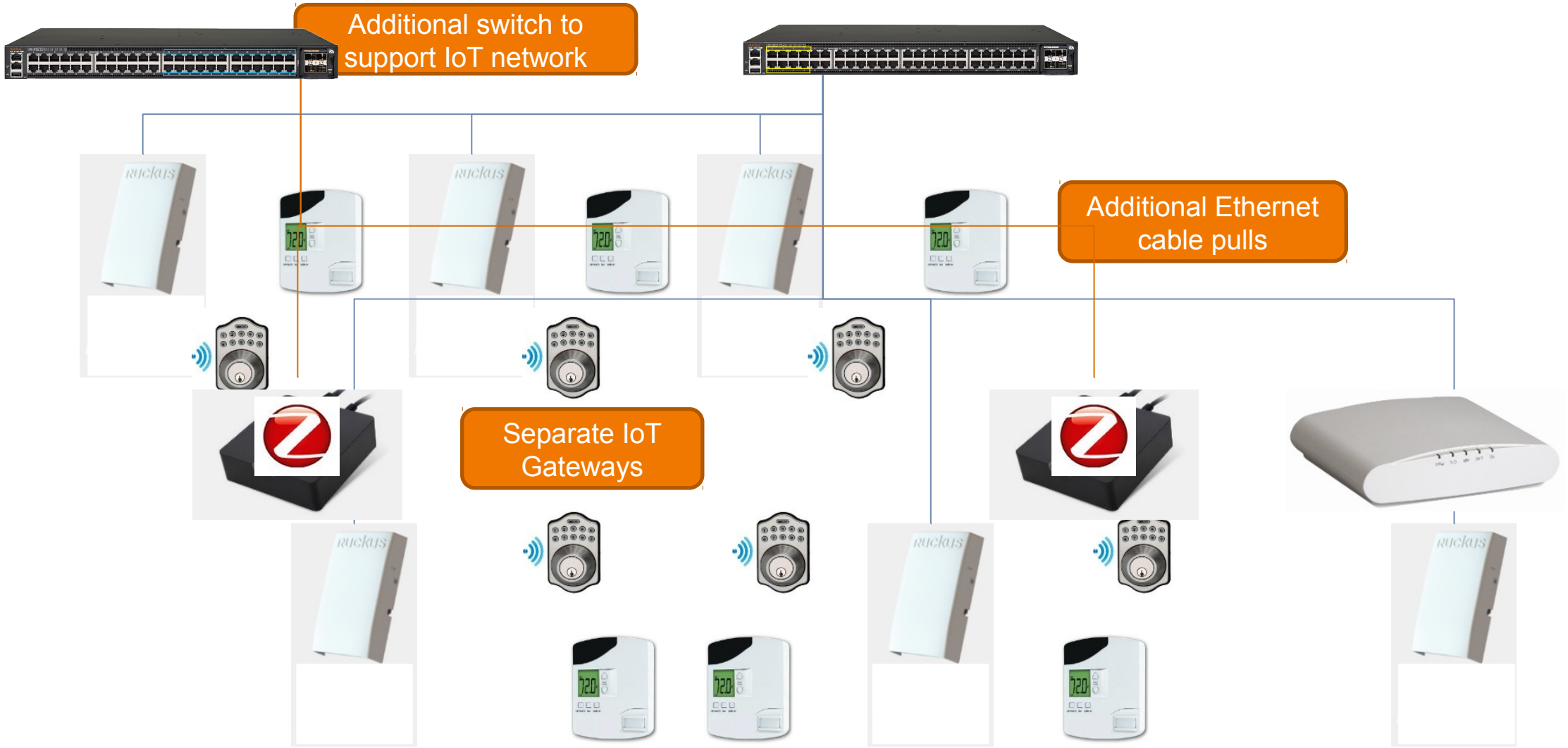
LoRa®

NETWORK

DEVICES / ENDPOINTS

But Ruckus provides integrated solutions to enable the enterprise …

The State of the Union for IoT



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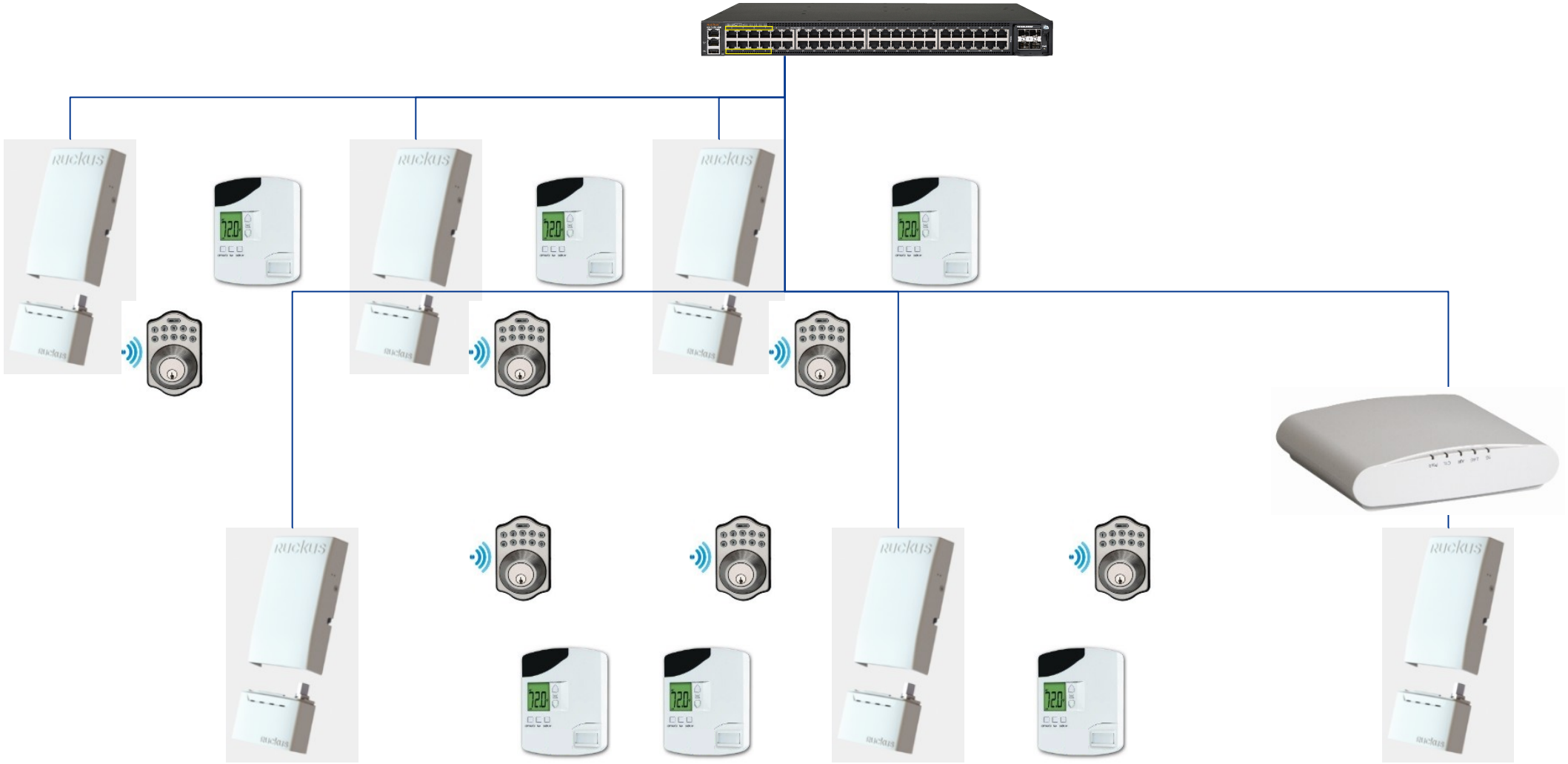
The Ruckus IoT Value Added



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Problems with Current Approaches

Focus on end points & platform services

- Lack of well integrated solutions

Use purpose-built IoT Gateways ⇨ expensive proprietary installs

- Infrastructure cost overheads

Work in closed ecosystems and are not scalable

- Upgrades, extensibility are issues

Cumbersome supply chain ⇨ manageability issues

- IoT integrators are different from partners that provide Wi-Fi access

Ruckus™

The Ruckus IoT Value

Value	Enables
Additional Cost of Redundant Infrastructure with 3rd Party Gateway	~$40 / Room
Potential Cost with Ruckus	$16 / Room
Unified Network with Trusted Infrastructure	Eliminate additional disparate networks that clutter the spectrum
Data Usability	Break data silos ***across*** multiple smart-appliance systems
Upgrades	Adding on service to existing architecture easier
Vendor Management	1 Solution Integrator can be primary touch point
Enterprise Class Features	Enterprise-grade management of multiple gateways and sensors

Ruckus ideally placed to offer cost-effective IoT with single infrastructure

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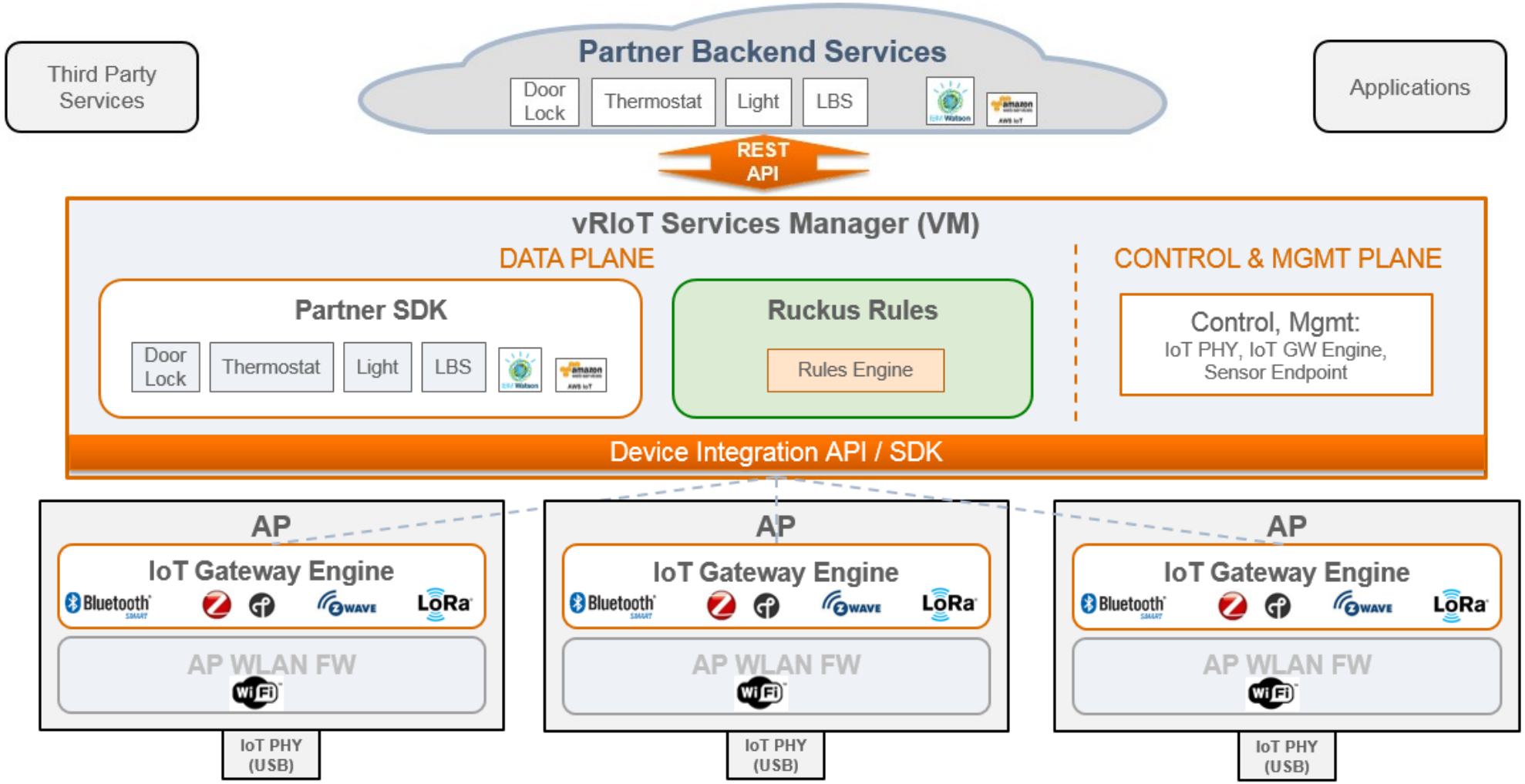
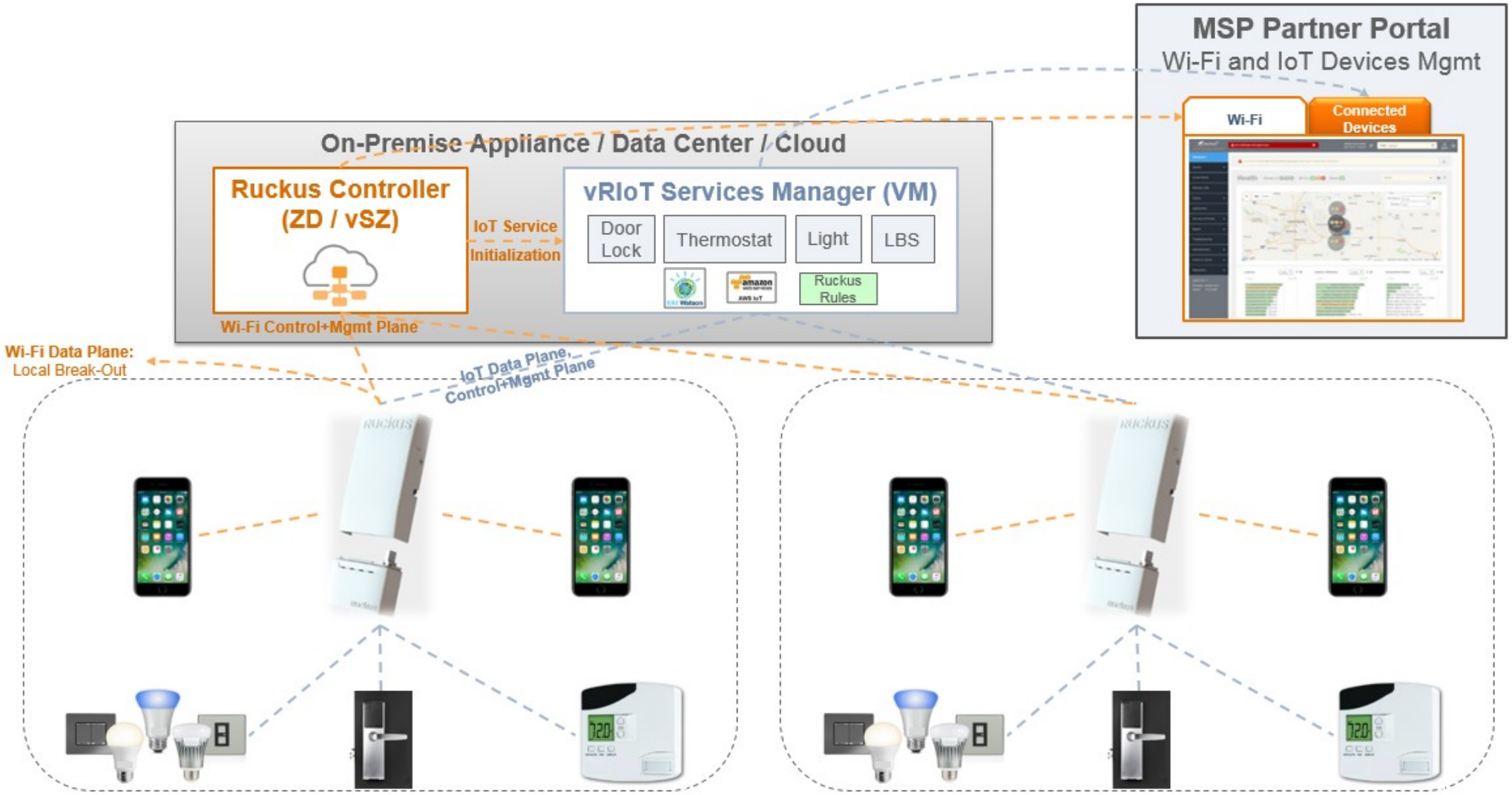
Ruckus IoT: Solution Architecture



Ruckus™

Introducing Ruckus IoT: Solution Overview



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Differentiating with Ruckus IoT

SINGLE ACCESS NETWORK FOR WI-FI & IoT

Manage network across different PHYs

Sensor-to-backend management

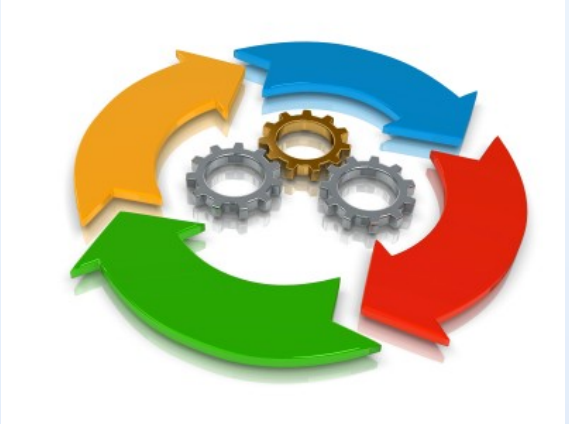
Distributed decision-making (edge vs. backend)

TRANSPORT PROTOCOL AGNOSTIC

Architecture agnostic to transport layer

Support for ZigBee, BLE, LoRa and other IoT transport protocols

NETWORK BACKBONE FOR VARIED SERVICES



Enabling end-to-end services for multiple connected ecosystems

End-to-end solutions with simplified value chain and single network

Ruckus™

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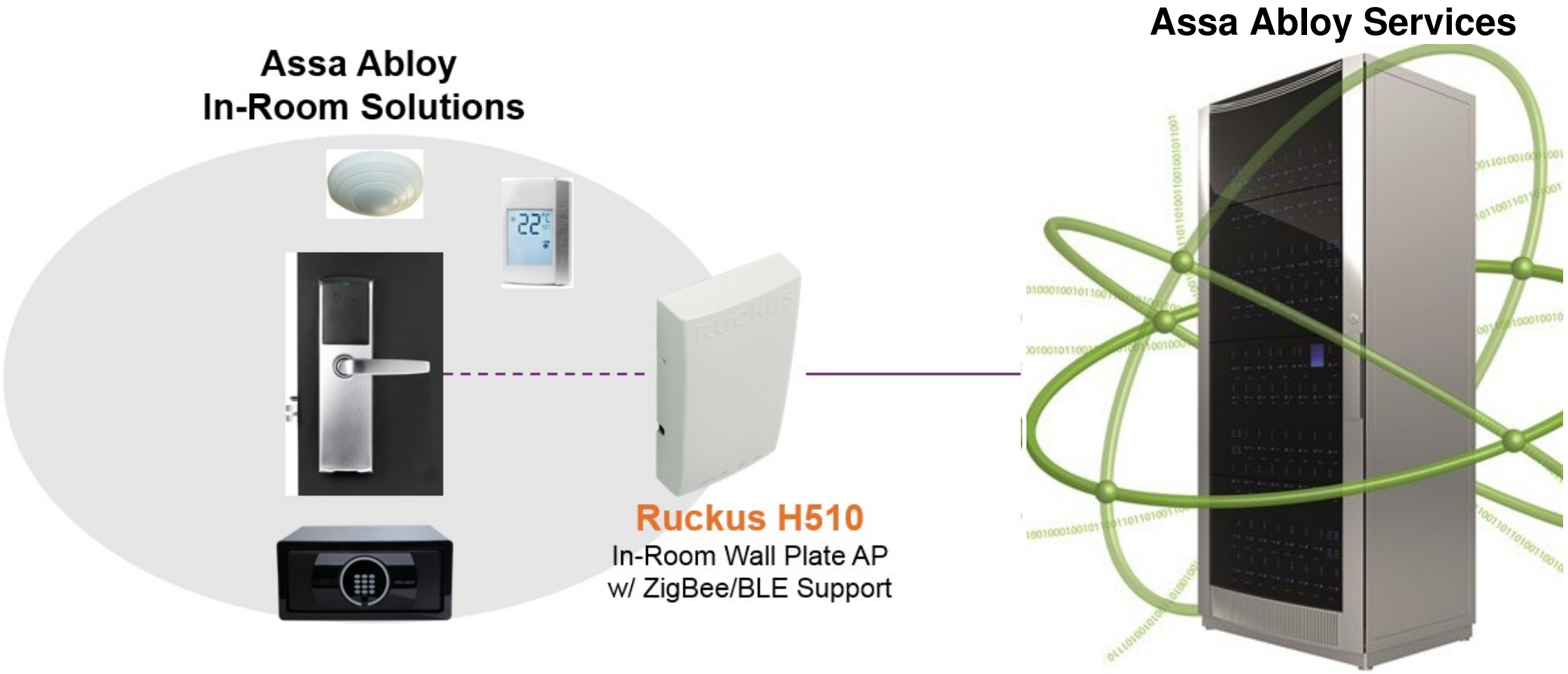
Partnerships and Use Cases

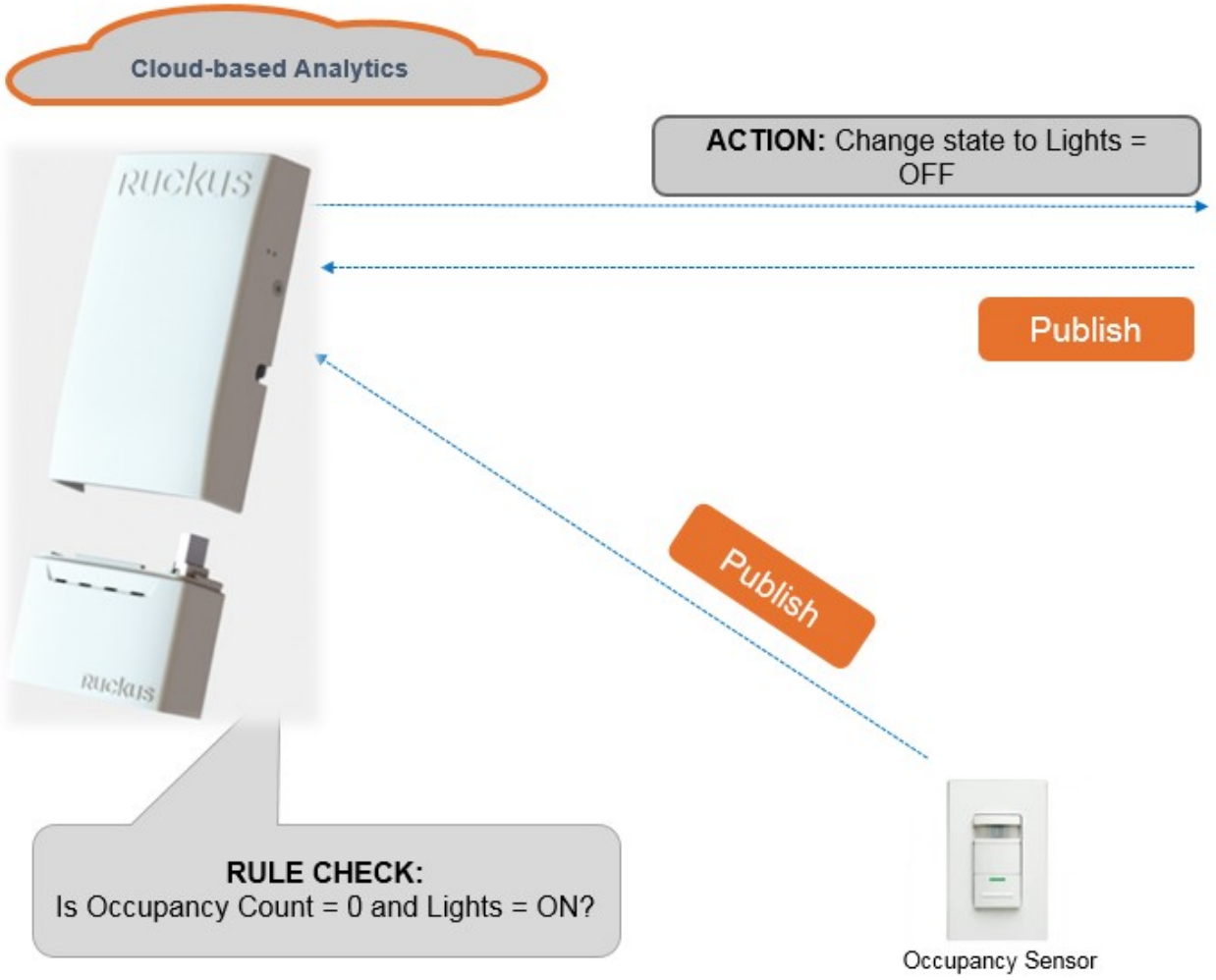
Smart Locks: Ruckus + Assa Abloy



Ruckus and Assa Abloy: Mainstreaming Enhanced Security on Smart Door Locks

Ruckus™

In-Room Automation (Thermostat, Light)



IBM Watson IoT for Smart Buildings

- Engaged with IBM Watson IoT team since November 2016
  - IBM is investing heavily in IoT: $200M IoT HQ in Munich
- Watson IoT enables enhanced Edge Analytics capabilities
  - Integrating IBM Watson IoT Edge Analytics Agent (EAA) into Ruckus APs & ICX Switches
- Smart Buildings is the first focus vertical

BLE Asset Tracking: Ruckus + Kontakt.io

Cloud-based Analytics

Ruckus and Kontakt.io: Asset Tracking using Enterprise-grade LBS solutions

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BLE Locationing, Engagement and Services: Ruckus + Favendo

Cloud-based Analytics

Ruckus and Favendo: The complete next-gen LBS value chain

Ruckus™

Asset Management: Ruckus + TrackR

Cloud-based Analytics

RULE CHECK:
Is TrackR tag in Range?

Publish

Ruckus and TrackR: Enabling Asset Management for Enterprise

Ruckus™