

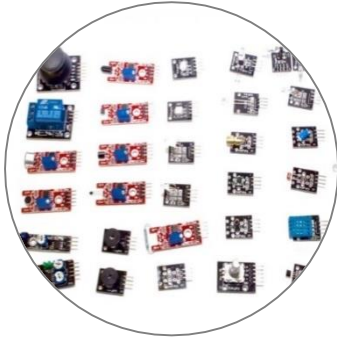


PI System Pervasive Data Collection

Presented by **Chris Felts – Sr. Product Manager**
Dmitriy Shvidchenko – Sr. Software Developer

“Connecting people with sensor based data in ways that were **physically** or **economically** unrealistic before”

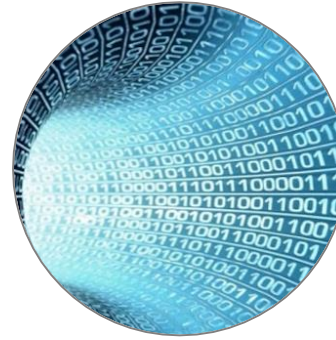
What's Driving the Interest in IoT?



Cheap, and tiny
sensors



Decreasing compute
and storage costs

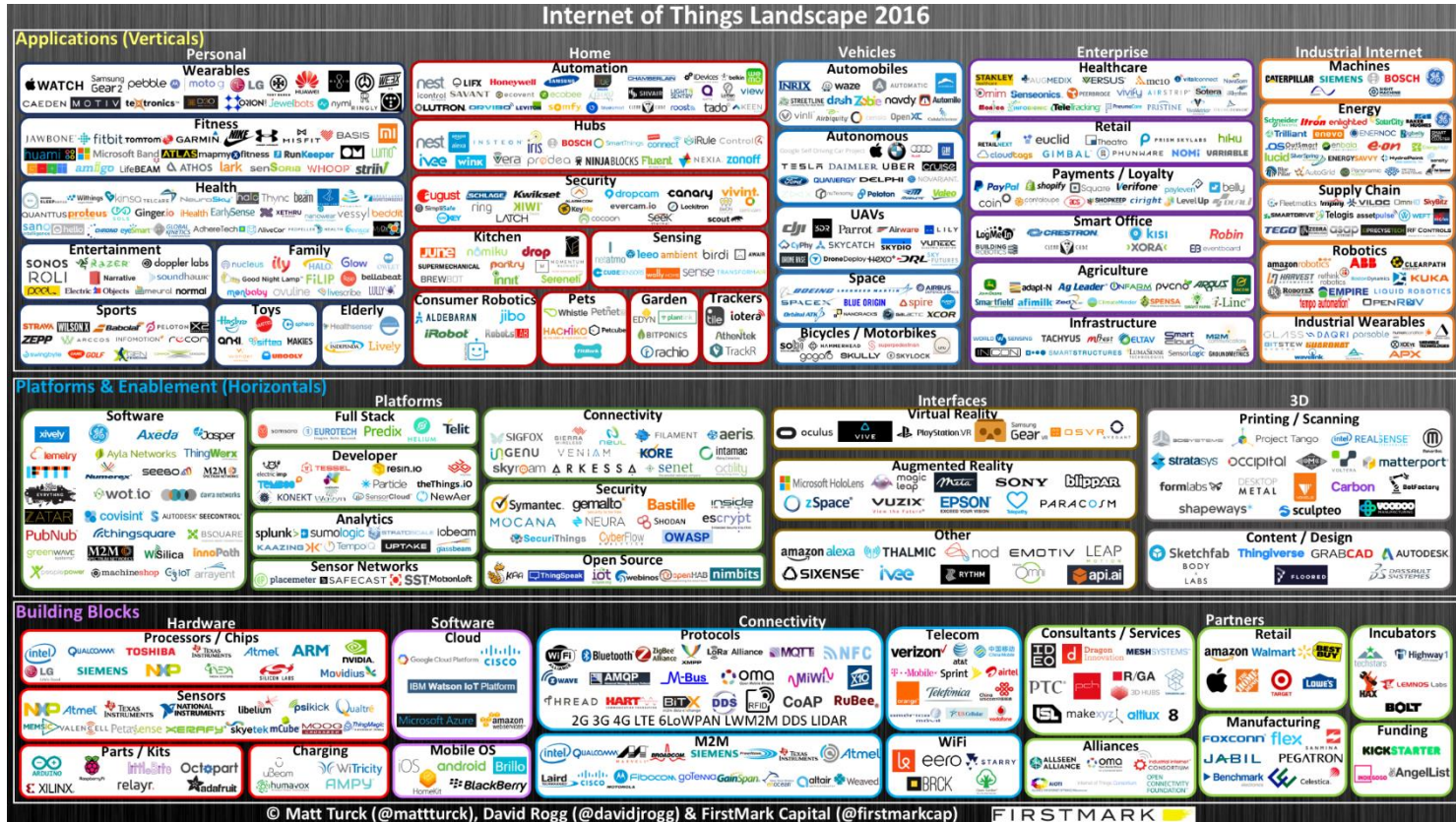


New abilities to
process and analyze
data

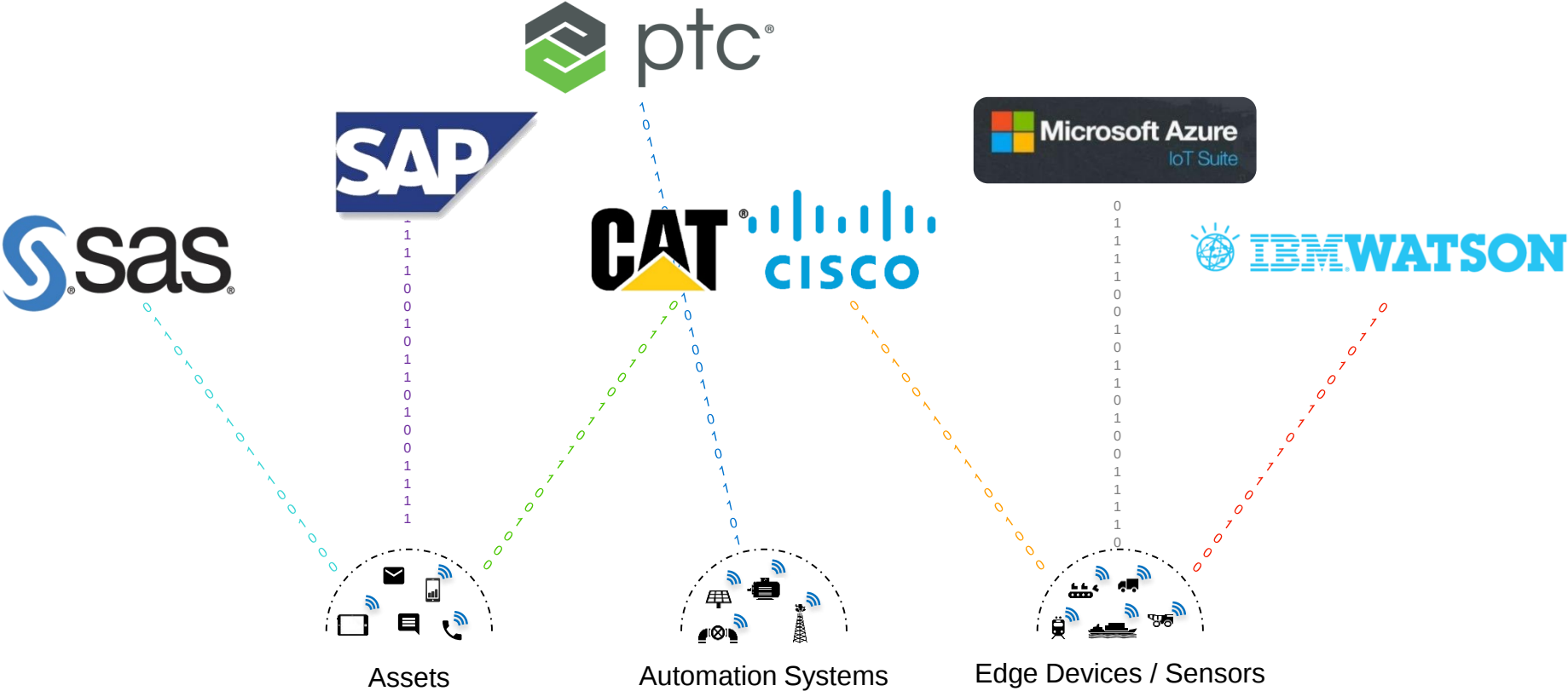


Ubiquitous
connectivity

Interest in IoT is Enormous



IoT is Driving Innovation Across the Industrial World



There are Inherent Risks and Challenges

Data Silos

Multiple versions of the truth
Data exchange data between silos
Data management challenges



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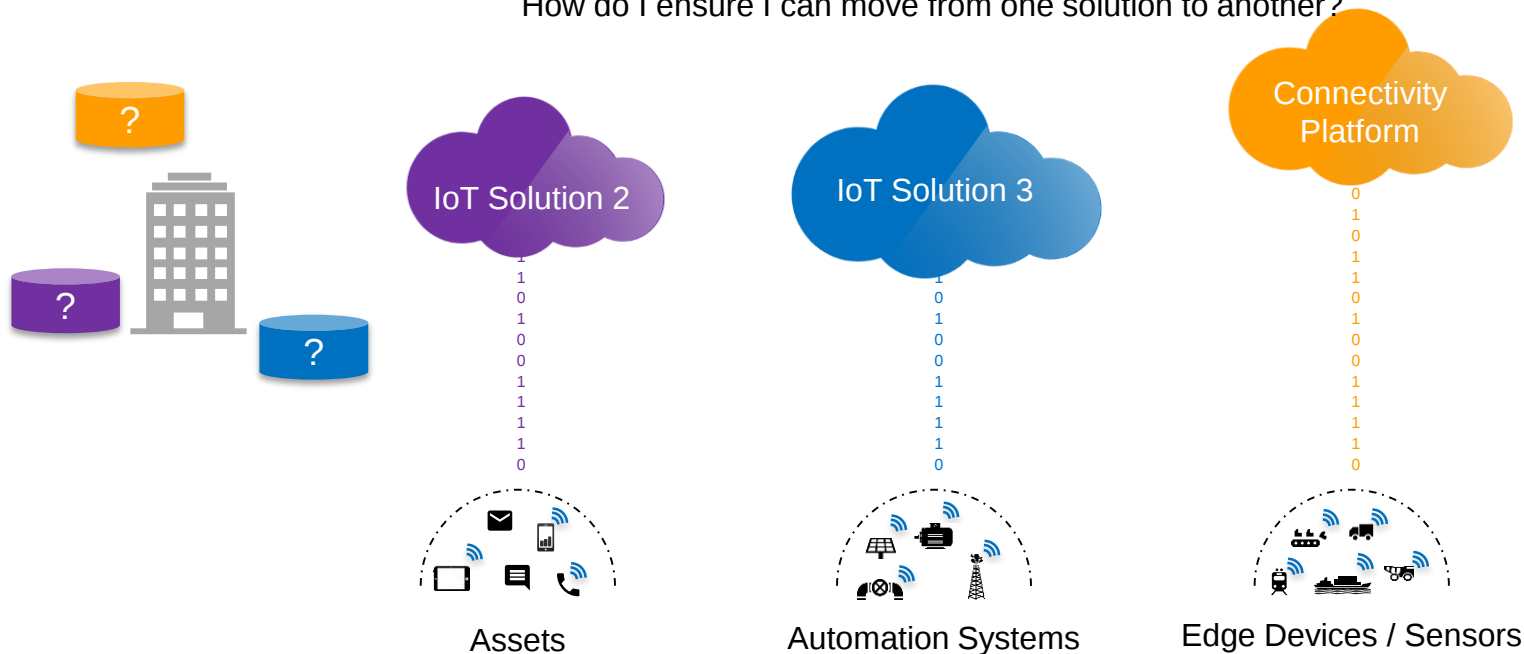


Edge Devices / Sensors

There are Inherent Risks and Challenges

Data Ownership

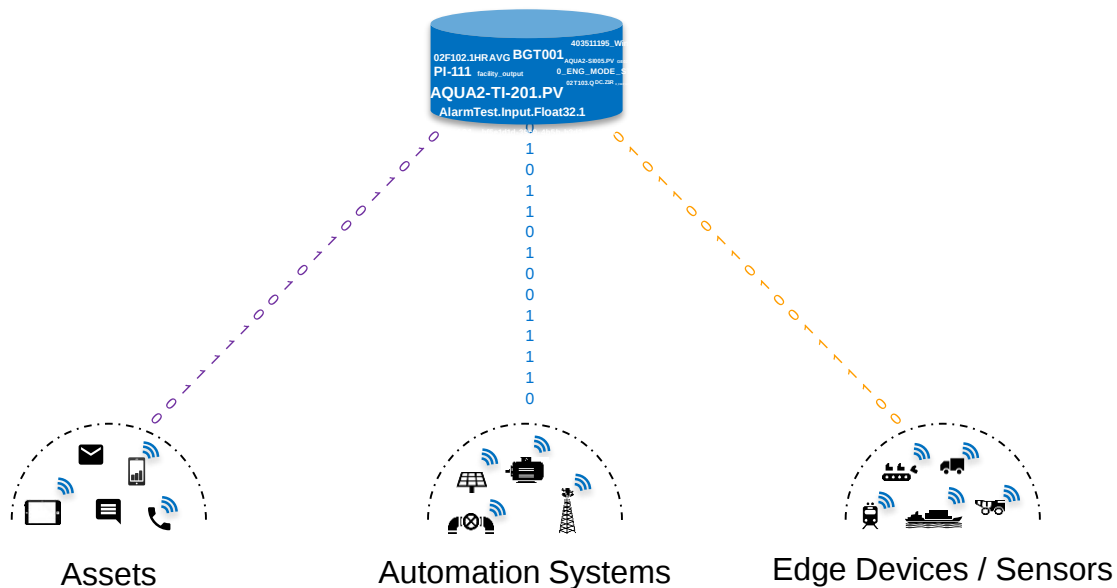
Do I have access to my own data?
How do I ensure I can move from one solution to another?



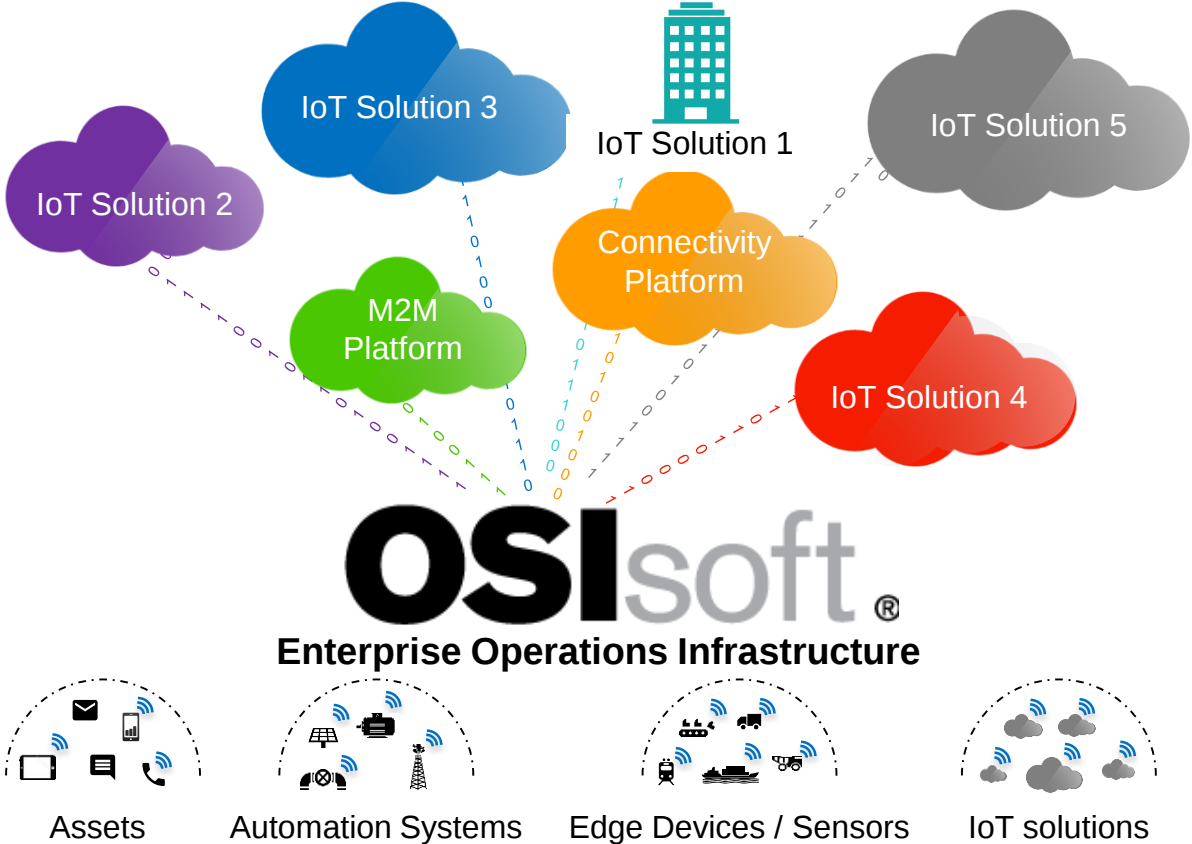
There are Inherent Risks and Challenges

Data Context

Understanding the criteria to analyze data is as important as the data itself
The further data moves from SME's the more important context is



Extending the Time Series Infrastructure from the Edge to the Enterprise



Why Use an OSIsoft Infrastructure?

The world's most powerful time series data sets reside in OSIsoft technology

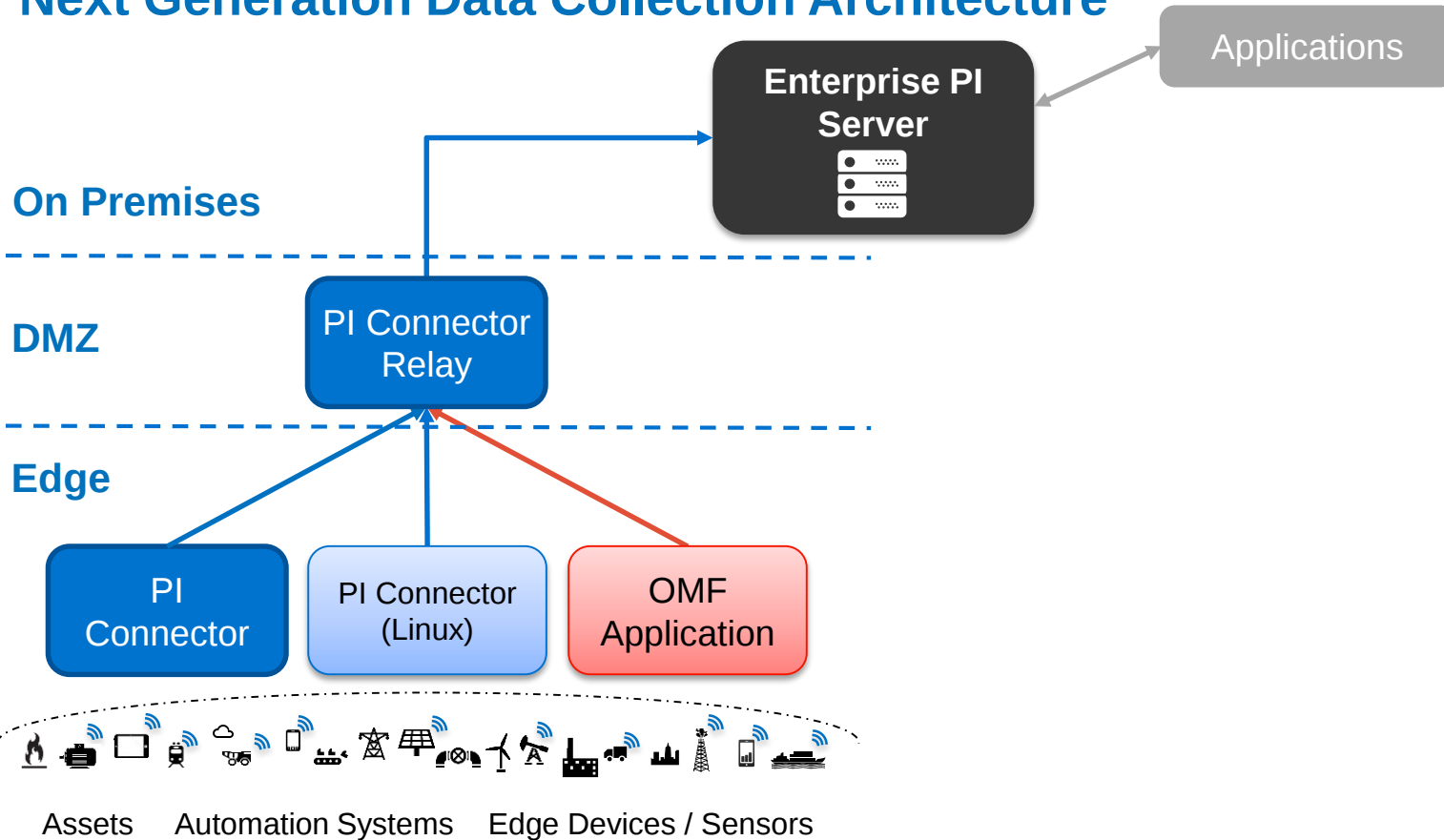
1.5B data streams

35+ years

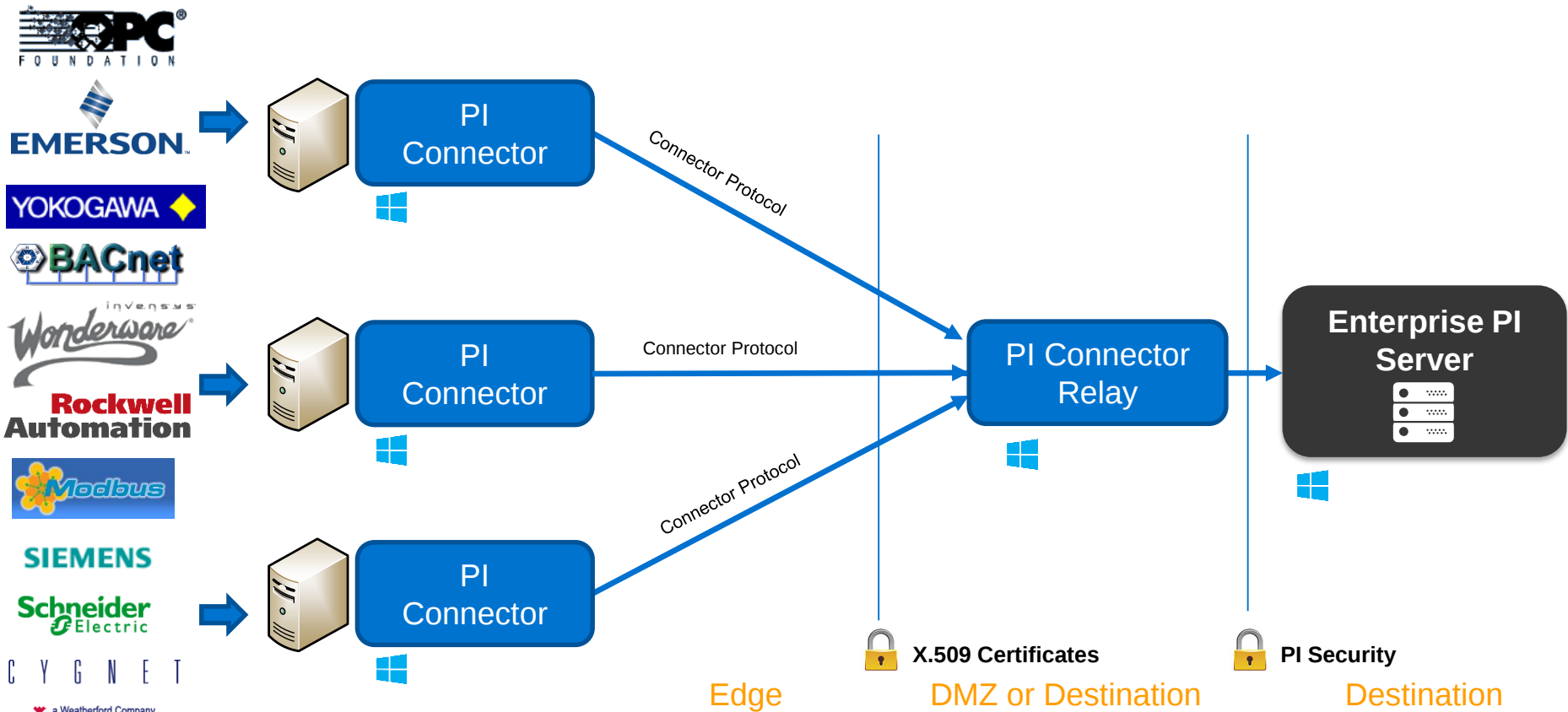
65% of Industrial Fortune 500



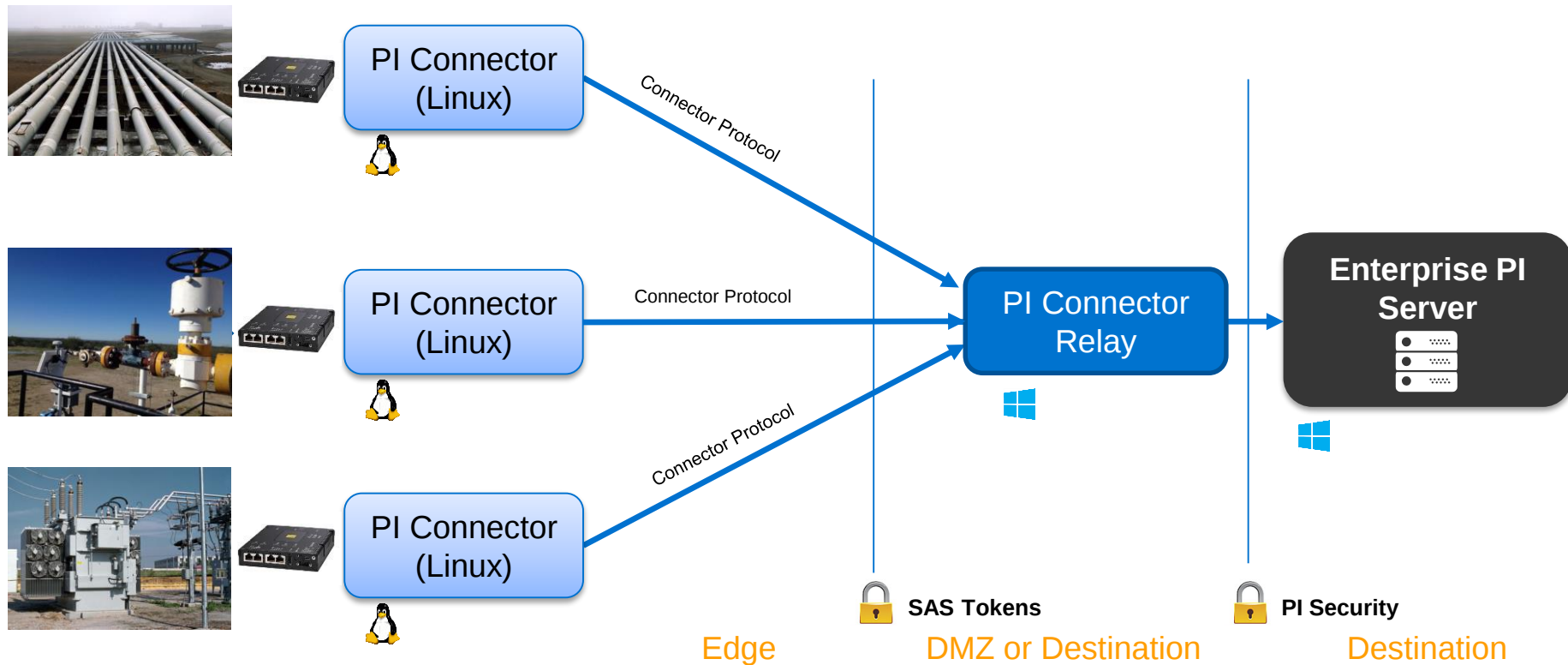
Next Generation Data Collection Architecture



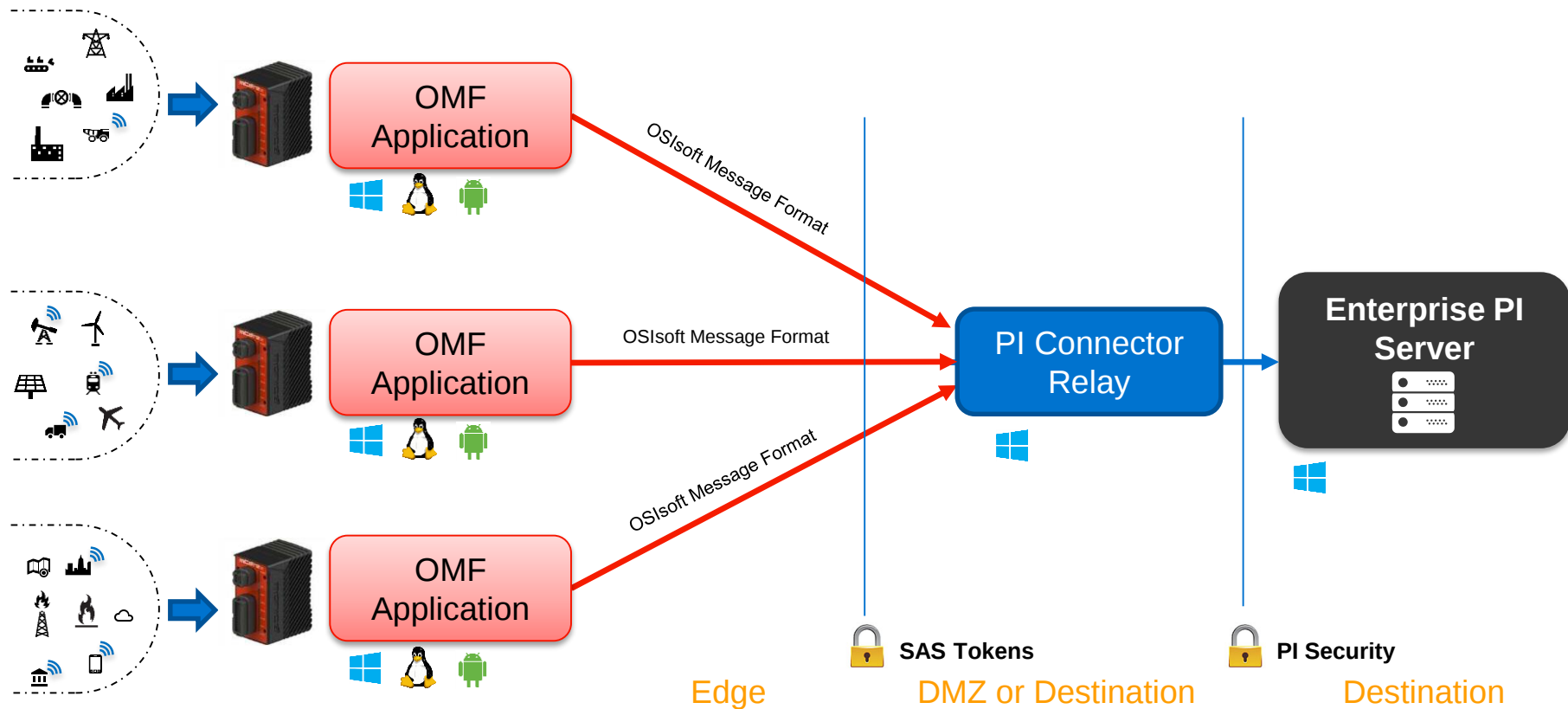
Traditional Data Source Connectivity



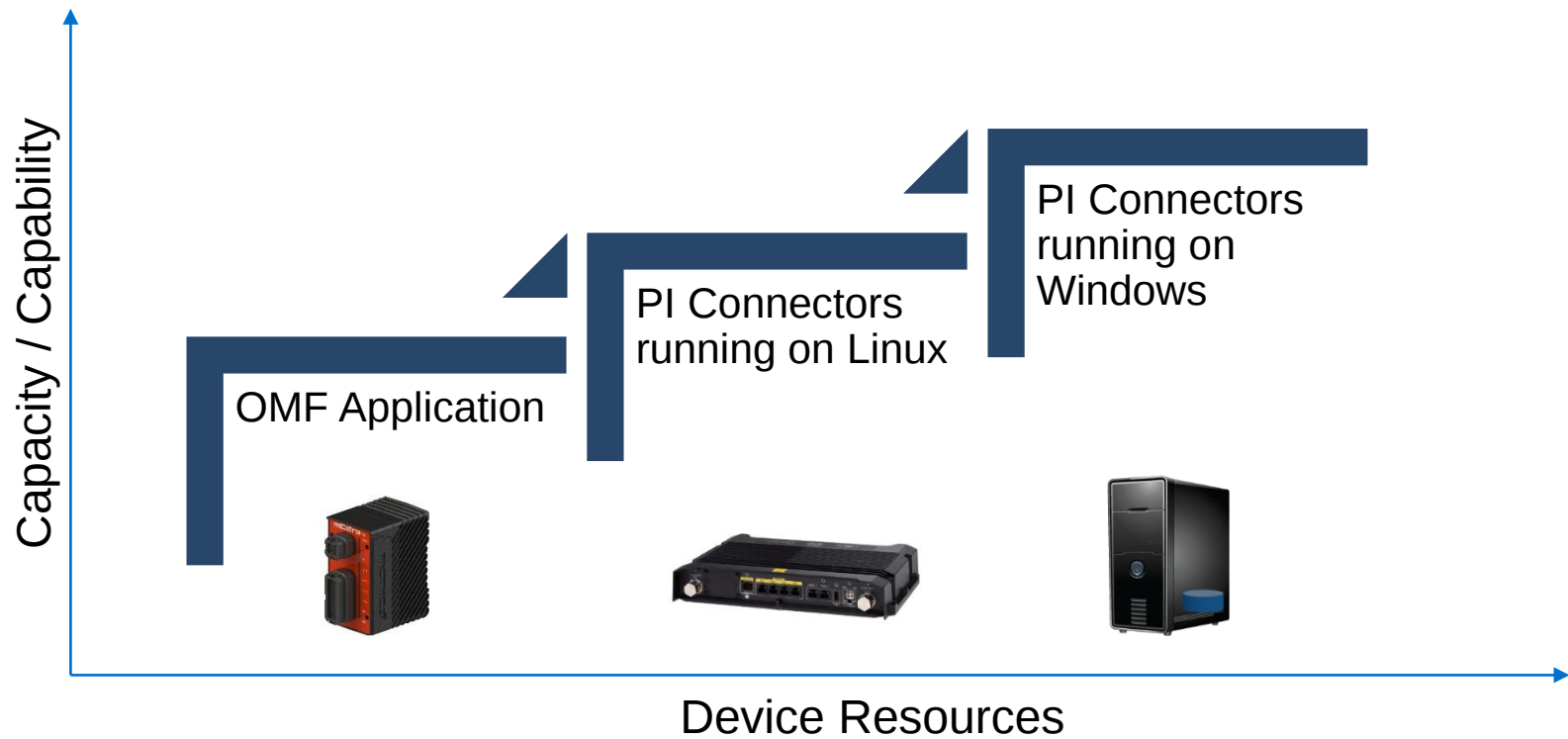
Remote Asset and Device Connectivity



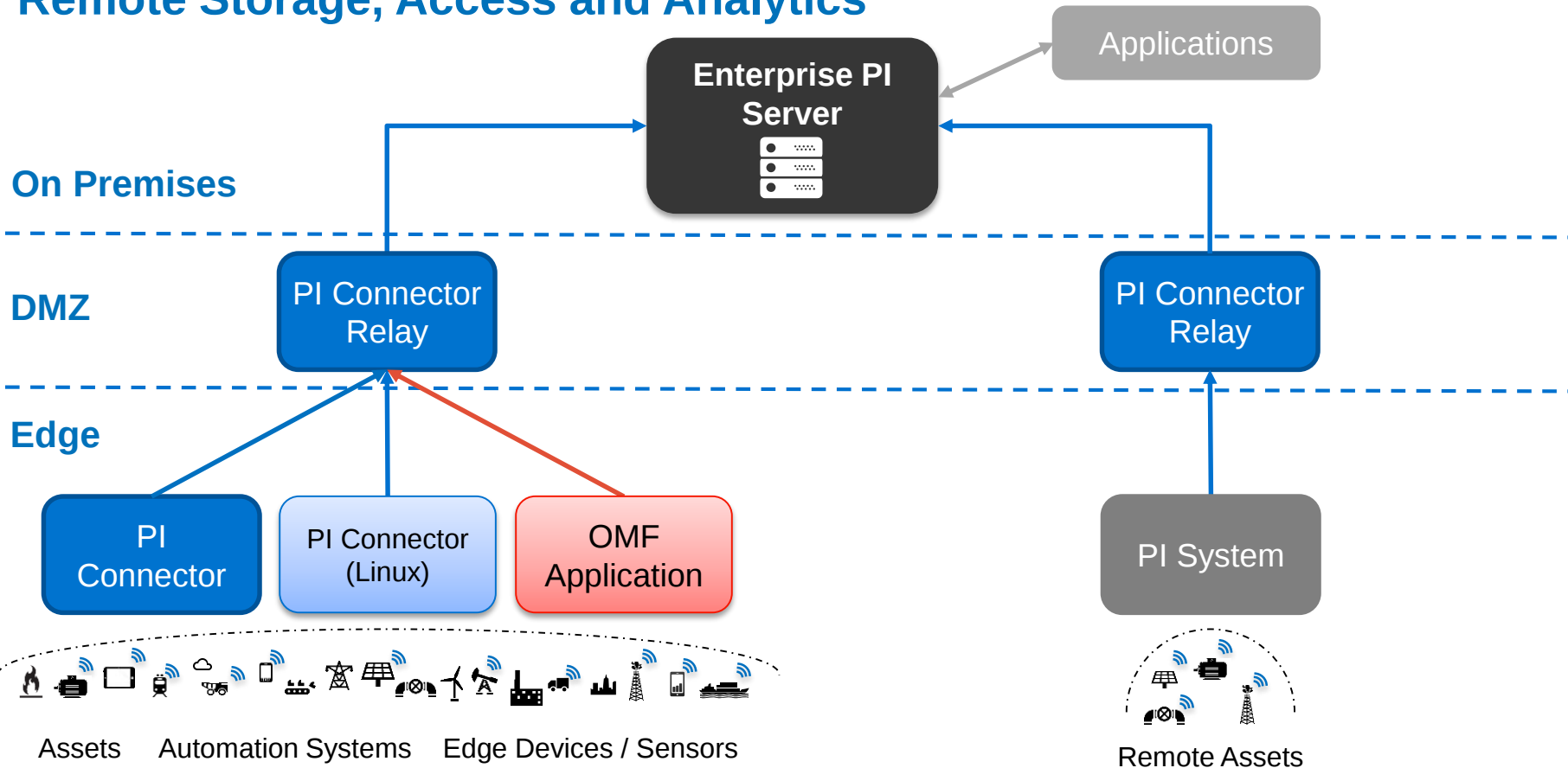
Extending Device Connectivity



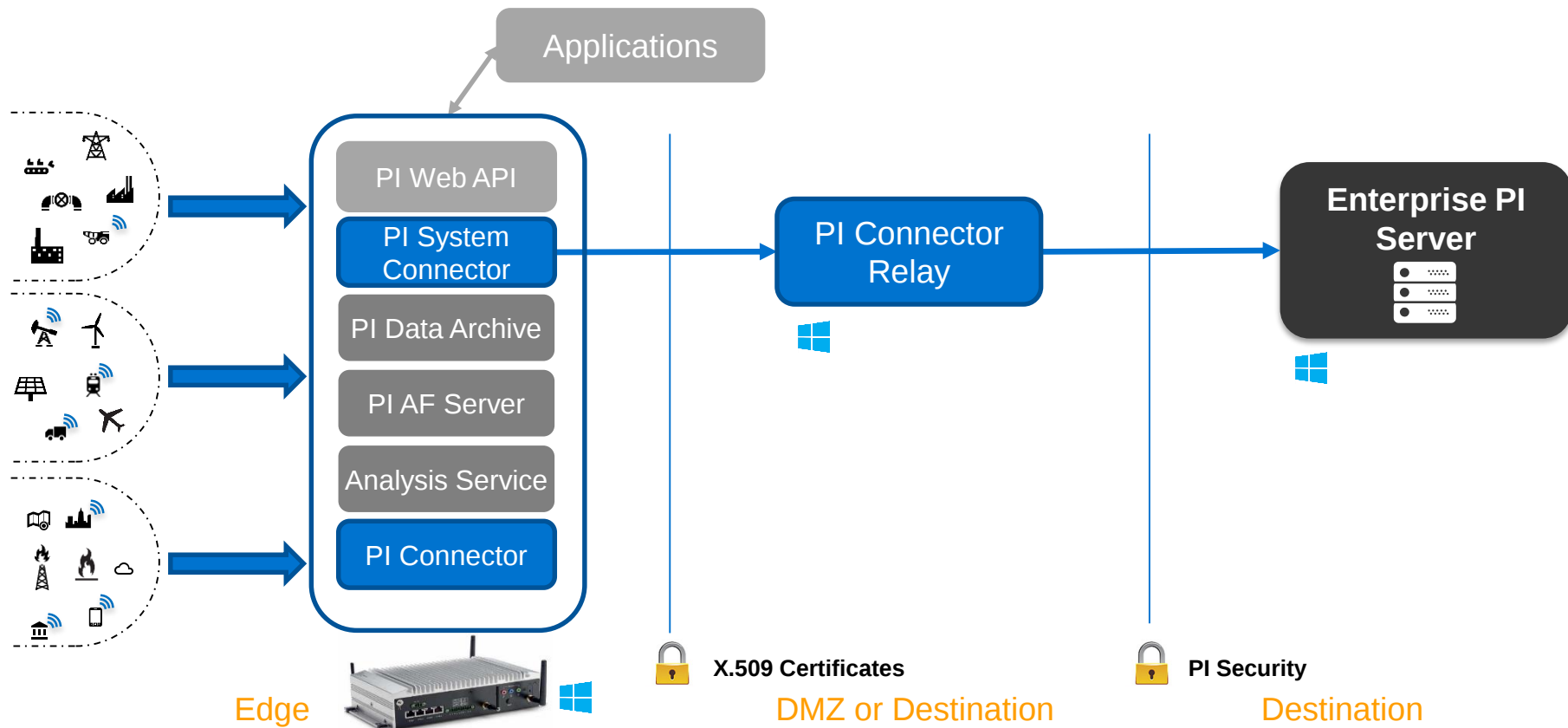
Connectivity Stack



Remote Storage, Access and Analytics



PI System for Edge Gateways



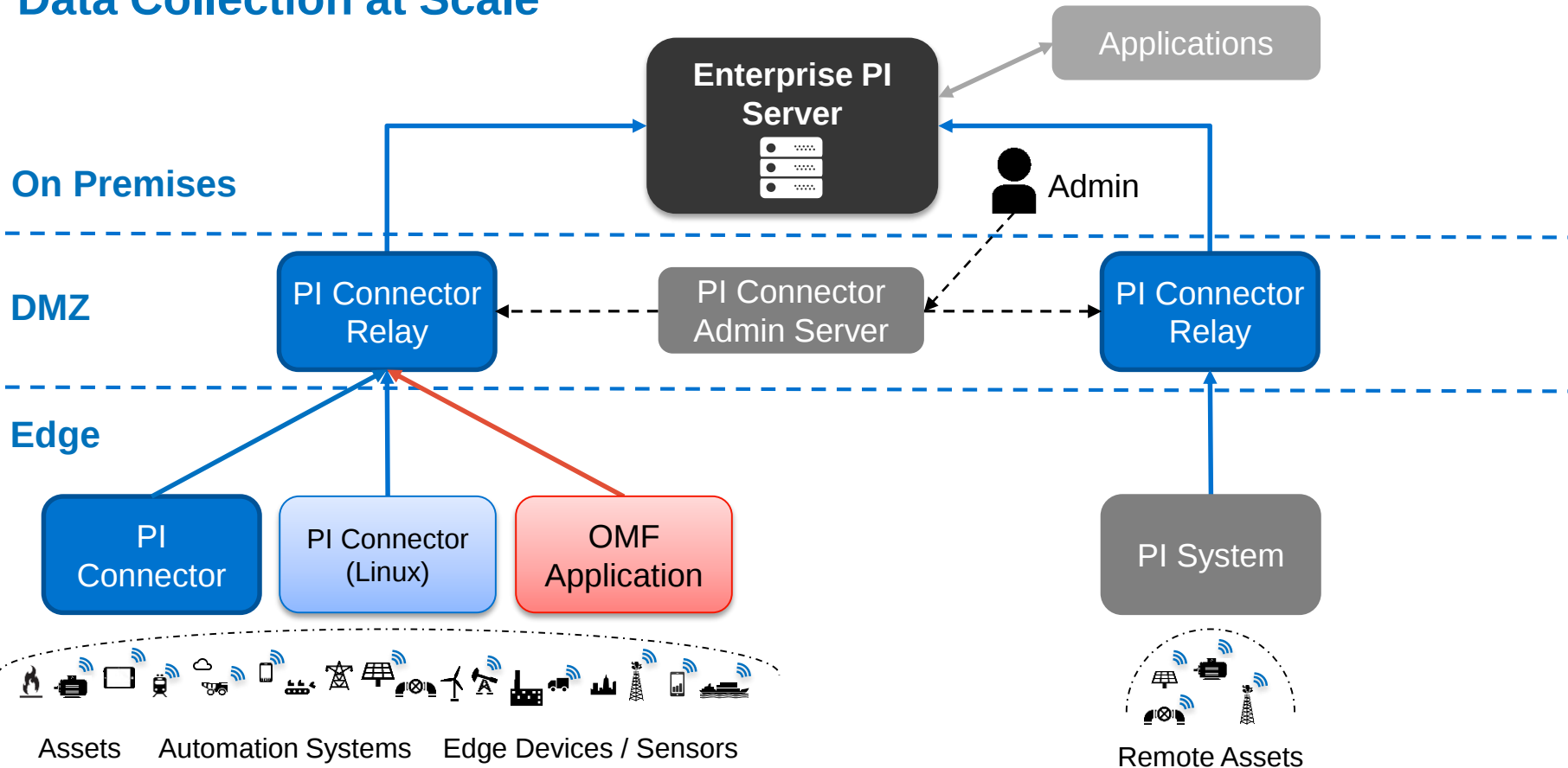
Edge Gateways – An Emerging Class of Hardware



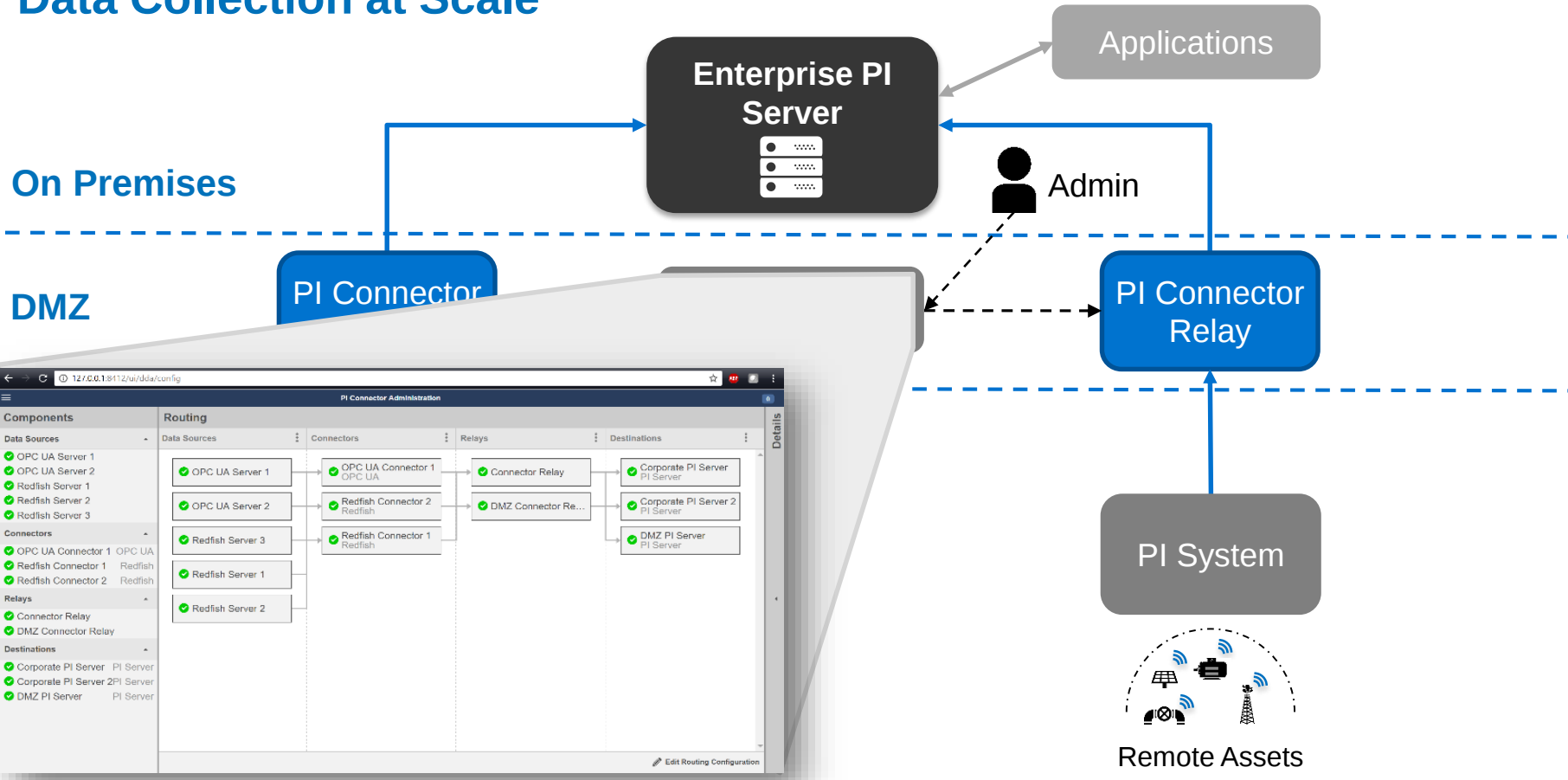
- ✓ Ruggedized
- ✓ Low price hardware
- ✓ Windows 10 IoT Enterprise
- ✓ Scalable from 1k to 2.5k PI tags



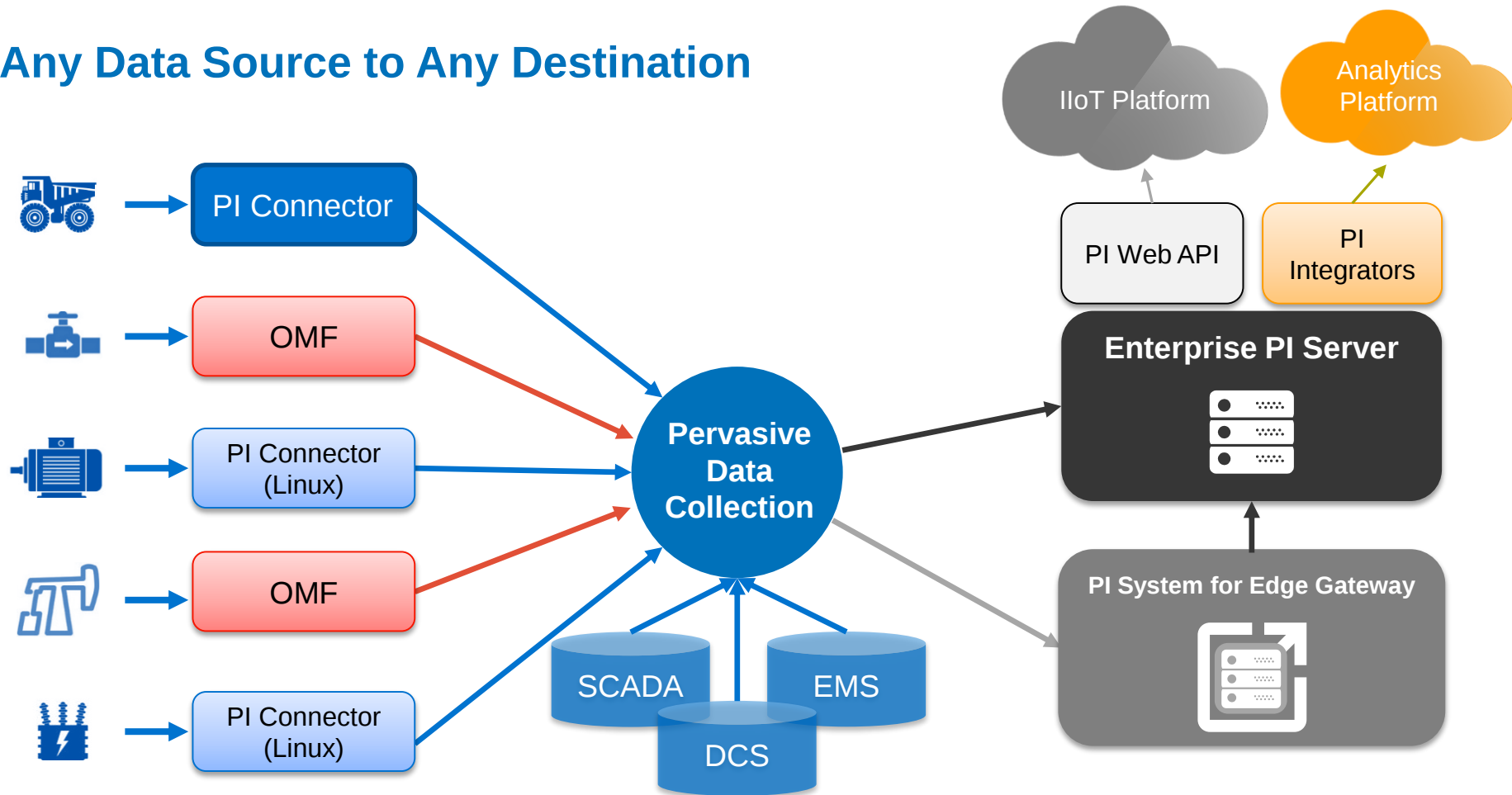
Data Collection at Scale



Data Collection at Scale



Any Data Source to Any Destination



Today we are going to talk about...

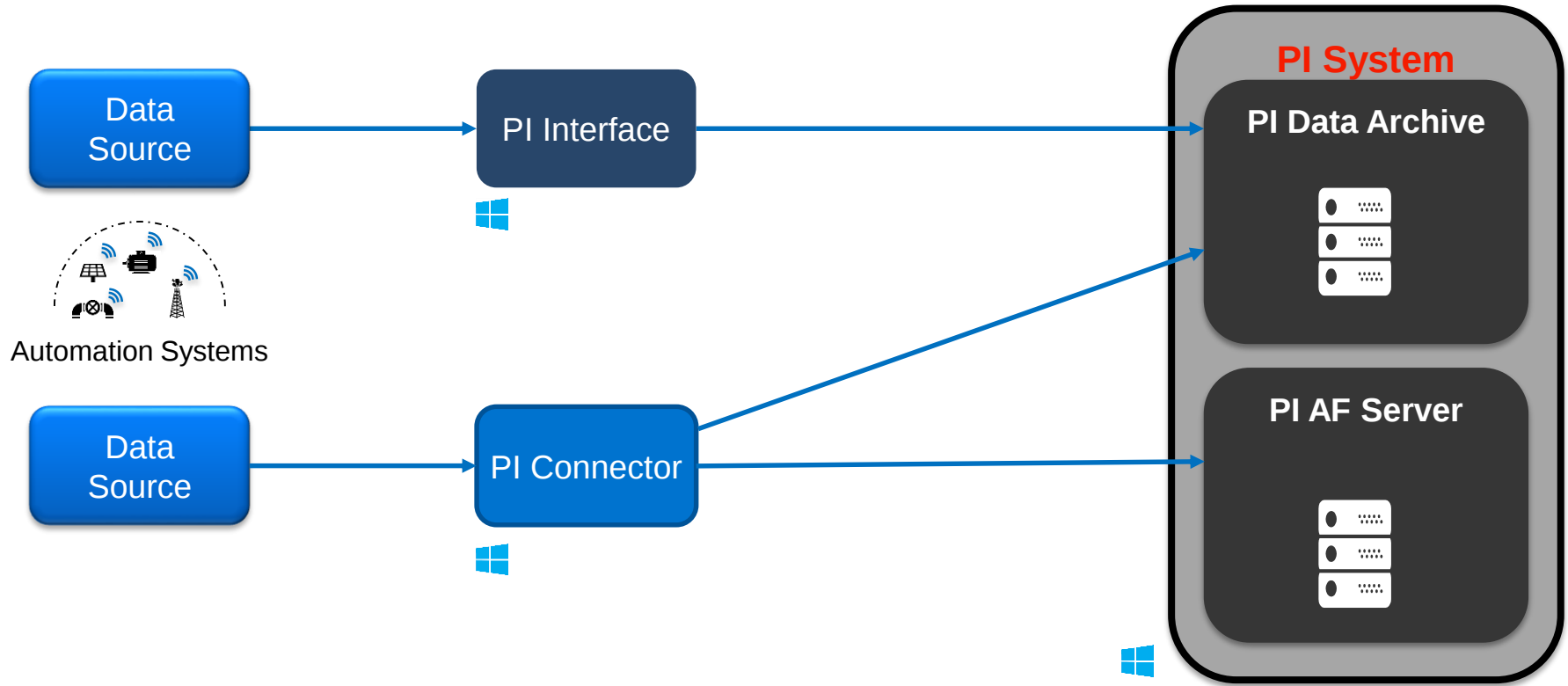
PI Connectors on Linux platform

- Brief history of OSIsoft ingress technologies
- Embedded device landscape – Linux dominate
- Cisco & OSIsoft joint project – PI Connector for Modbus
- Future... How may it look like...

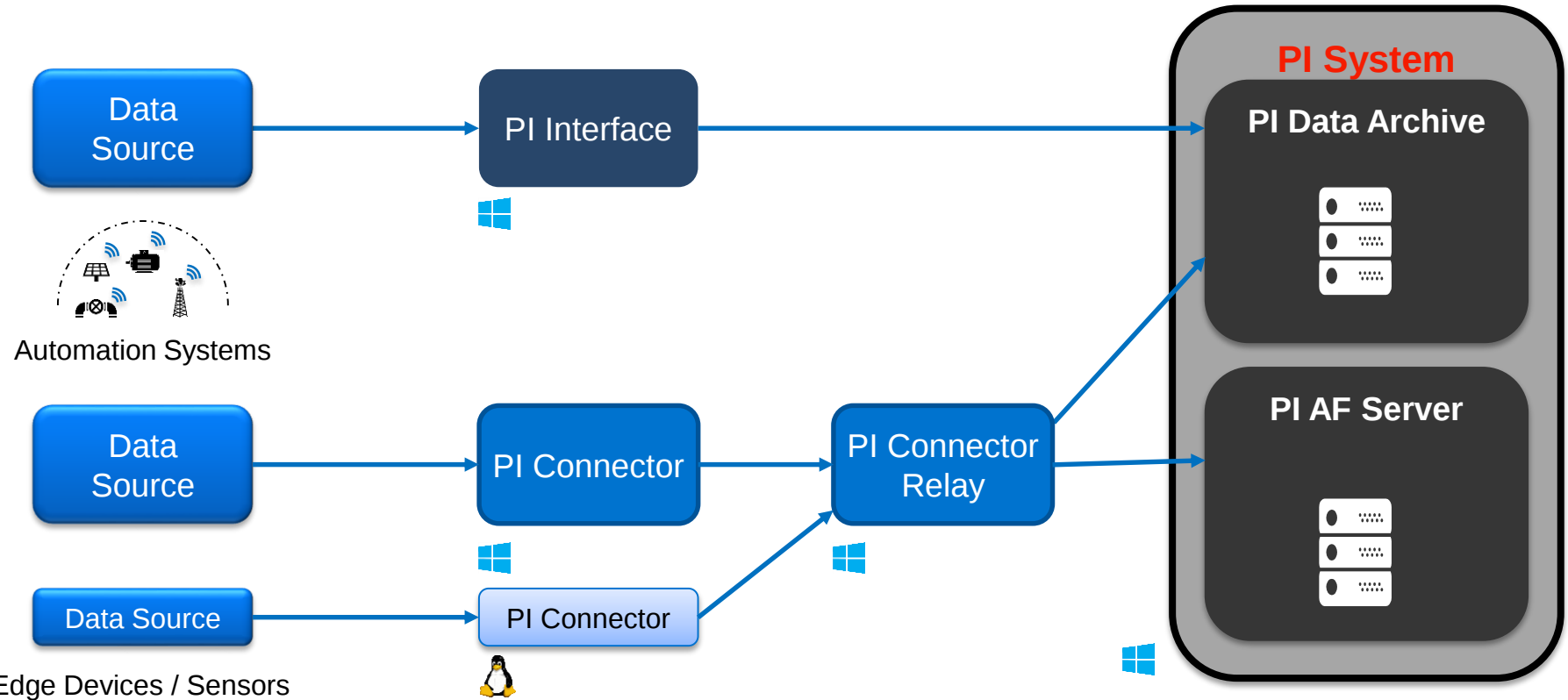
Brief History of OSIsoft Data Ingress Technologies



Brief History of OSIsoft Data Ingress Technologies

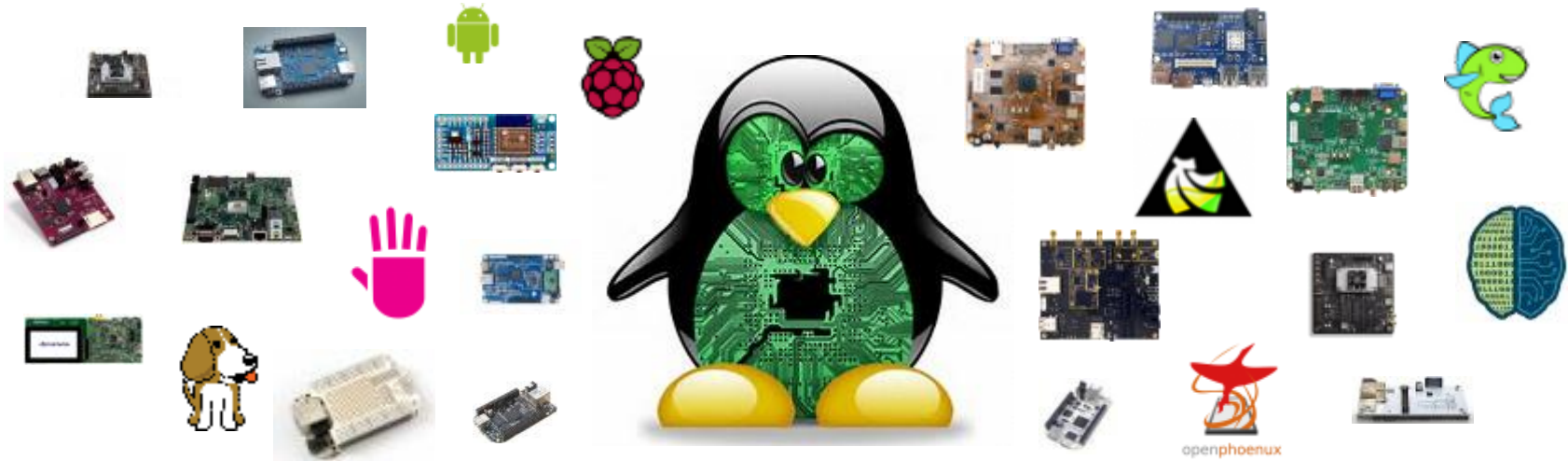


Brief History of OSIsoft Data Ingress Technologies



95% IoT Devices run Embedded Linux

- Couple of words about Linux



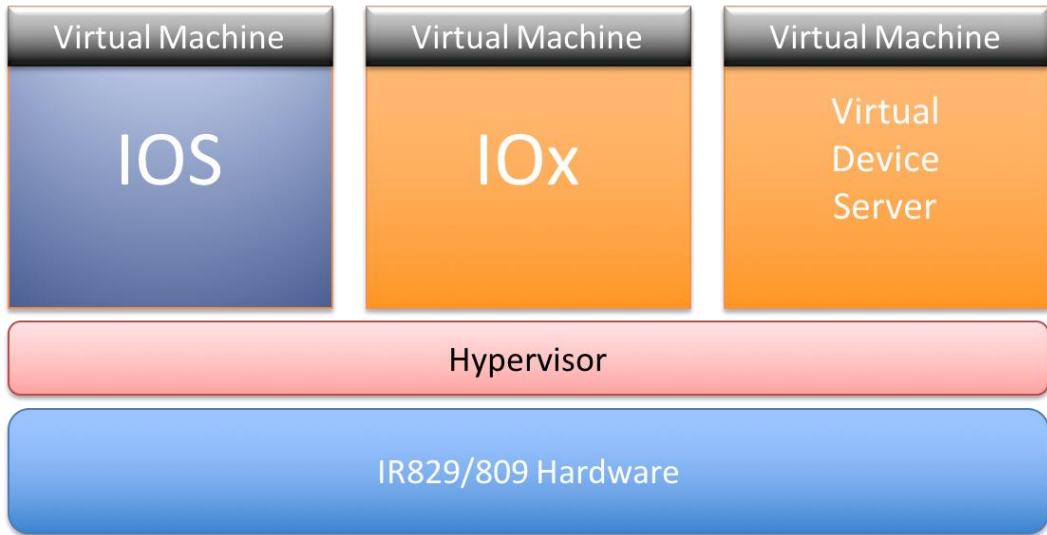
Cisco IR8X9 Industrial Routers and Fog Computing



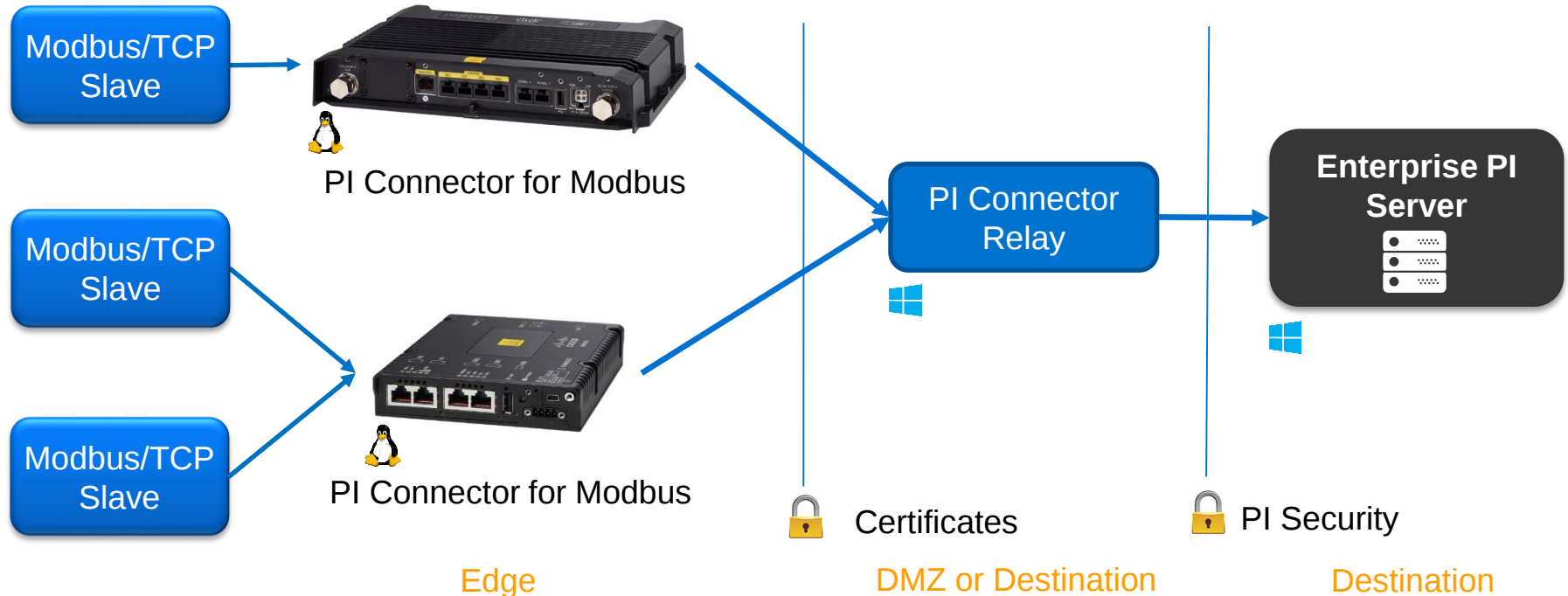
IR829



IR809



PI Connector for Modbus as LXC Container Application





Welcome to **Cisco Fog Director**

No Apps are available

ADD NEW APP

IMPORT APPS

Future... How it may look like...



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감사합니다

谢谢

Danke

Merci

Gracias

Thank You

ありがとう

Спасибо

Obrigado