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RED HAT FORUMS

IoT and Edge Computing

Architecture and Use Cases

Tiziano Modotti
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Red Hat | EUROTECH

SECTION BREAK

EUROTECH
Imagine. Build. Succeed.

IoT and Edge Computing

Architecture and Use Cases

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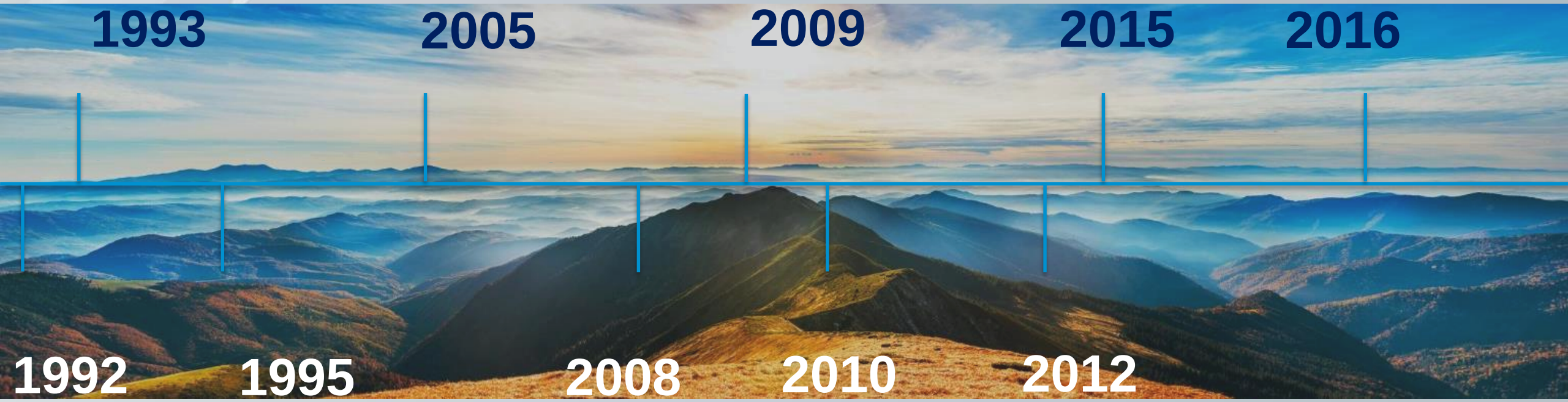
Agenda

- Eurotech intro
- IOT use cases
- Everyware IOT
- Everyware IOT and Red Hat

A Brief History



1992

Company's **Foundation**

1993

First Products Based on **PC/104**

1995

First Producer PC/104 market module based on Intel 32-bit 486DX processor

2005

Listed in the Milan **Stock Market** STAR segment

2008

Launch of innovative **Catalyst Module,** Intel Atom processor

2009

VDC Research Group Platinum Award for **Embedded Board Vendor**

2010

Launch of the **Everyware IoT** platform

Announcement of Aurora "green" **Supercomputer** with liquid cooling

2012

Eurotech and IBM donated the MQTT protocol to OASIS to create a new standard for IoT connectivity

2015

Launch of the **IoT Gateway Family**

2016

ESF and **EC** are also available through **Eclipse** in the Open Source format

- Behind the products of more than 20 Global 500 companies
- One of the world top player in the Embedded Computers market
- 25 Years of experience in ruggedized embedded, IoT, and distributed systems

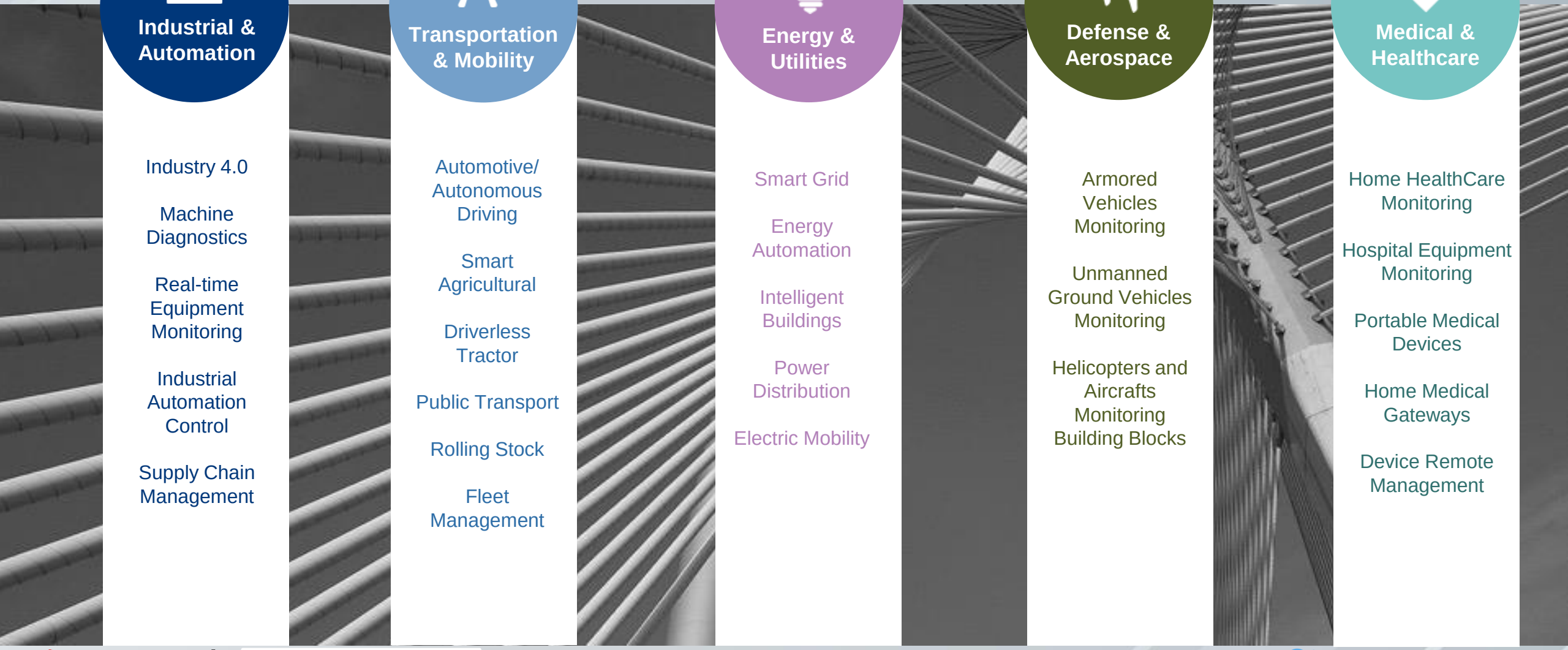
Eurotech Group - Global Footprint

Development & Engineering

Production

Marketing & Sales

Vertical Markets



Industrial & Automation

- Industry 4.0
- Machine Diagnostics
- Real-time Equipment Monitoring
- Industrial Automation Control
- Supply Chain Management

Transportation & Mobility

- Automotive/ Autonomous Driving
- Smart Agricultural
- Driverless Tractor
- Public Transport
- Rolling Stock
- Fleet Management

Energy & Utilities

- Smart Grid
- Energy Automation
- Intelligent Buildings
- Power Distribution
- Electric Mobility

Defense & Aerospace

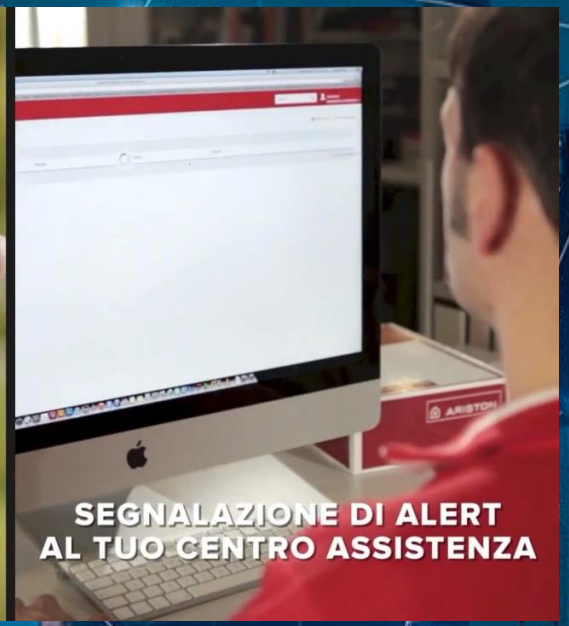
- Armored Vehicles Monitoring
- Unmanned Ground Vehicles Monitoring
- Helicopters and Aircrafts Monitoring Building Blocks

Medical & Healthcare

- Home HealthCare Monitoring
- Hospital Equipment Monitoring
- Portable Medical Devices
- Home Medical Gateways
- Device Remote Management

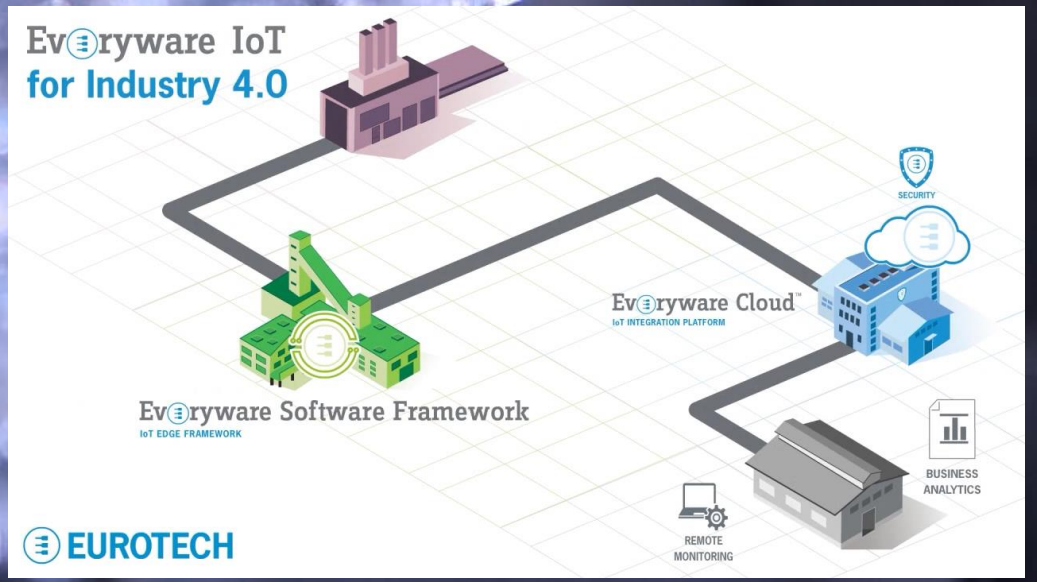
SAVE WORLD ENERGY

Hardware and Software Solutions for Energy Efficient Smart Buildings and Smart Homes



PREDICT AN INCIDENT BEFORE IT HAPPENS

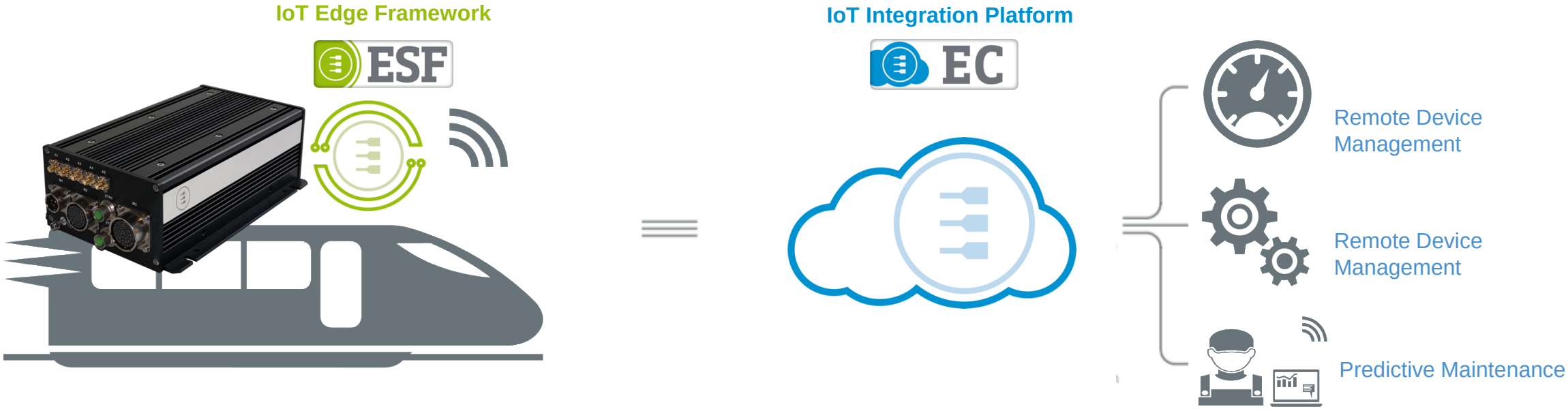
Enable Remote and Predictive Maintenance for the Smart Factory and Industry 4.0



TRACK THE CONNECTED TRAINS

Non-Invasive Access to Locomotive Data for Real-time Status and Operational Insights

Deutsche Bahn Cargo



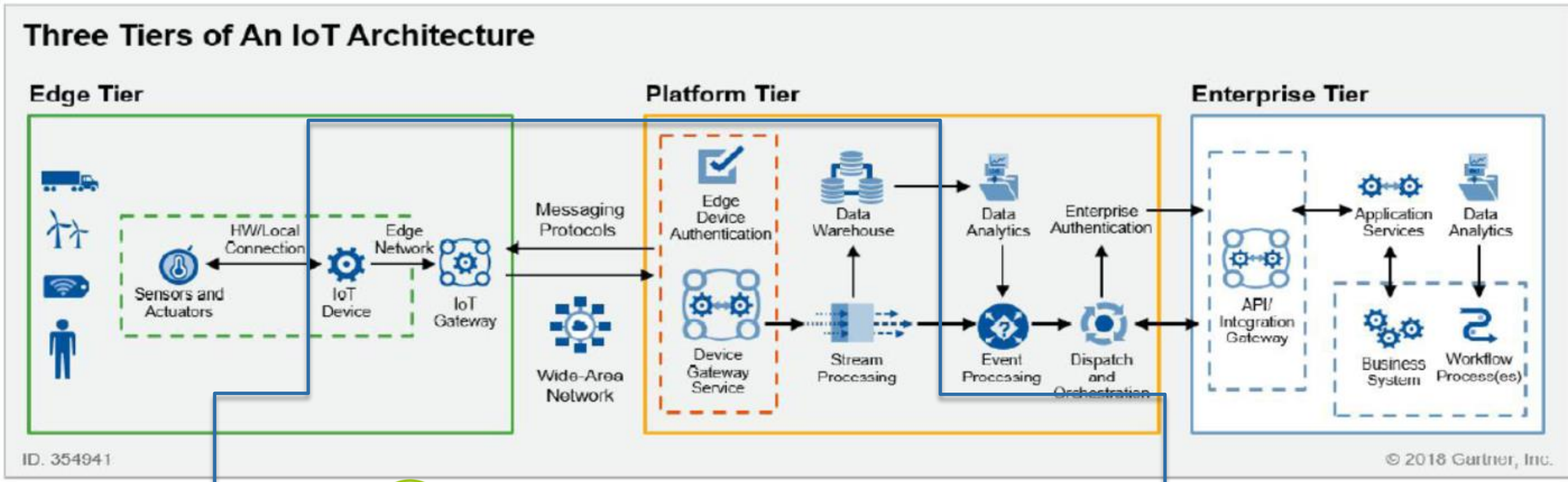
GOALS

- Gain real-time insights on fleet of 450 locomotives
- On board diagnostics and edge analytics
- Enable remote and predictive maintenance
- Flexible hardware and software platform for future use cases

SUCCESS FACTORS

- Railway-certified Intel® Atom® Smart MVB Data Logger
- Non-invasive, high-performance MVB signal sampling
- Configurable edge analytics data pipelines
- Digital Twin
- Open, Integrated, Managed Edge-to-Cloud Platform

Everyware IoT and OpenShift



Source: Gartner (April 2018)

RED HAT® FUSE

RED HAT® A-MQ

RED HAT® DECISION MANAGER

OPENSHIFT® by Red Hat®

Product strategy: edge computers

Edge Computers

Intel® Atom®
Fanless Rugged Controllers

Edge computers
Remote Maintenance
Smart Building

Edge Servers

Intel® Xeon® D / Xeon® E3
Fanless Rugged Servers

Edge Servers
Predictive Maintenance Smart Factory

Product strategy: AI enablement at the edge

Edge Analytics

Intel® Atom®
Intel Movidius™ Myriad™ X

Edge computers
Remote Maintenance
Smart Building

Edge AI Inference

Intel® Xeon® D / Xeon® E3
Intel Movidius™ Myriad™ X
Jetson AGX Xavier

Edge Servers
Predictive Maintenance
Smart Factory

Autonomous Systems
Field Training
Advanced industrial AI

Thank You!

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THANK YOU

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