

# leo Intelligence Platform

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# **But We're Not Just Browsing Any More**



Welcome to 5G/Edge

Basics

Automation



**Biometrics** 

Travel

Wearables



**Autonomy** 

**Delivery** 

Self Driving

Supply Chain



**Quantum Computing** 

Remote animal surgery

Remote surgery concept

## **Averting a Crisis: When Milliseconds Matter**



Sudden congestion

Stopped vehicles notify Edge

Vehicles behind take action: Brake!



A spike in device voltage

Sensor data streamed to on-prem Edge

Failure predicted in 38 ms: Shut down!

#### **5G Edge Cell Tower**

A vehicle traveling 60 MPH covers 88' /second, several milliseconds can be the difference between stopping safely and causing an accident.

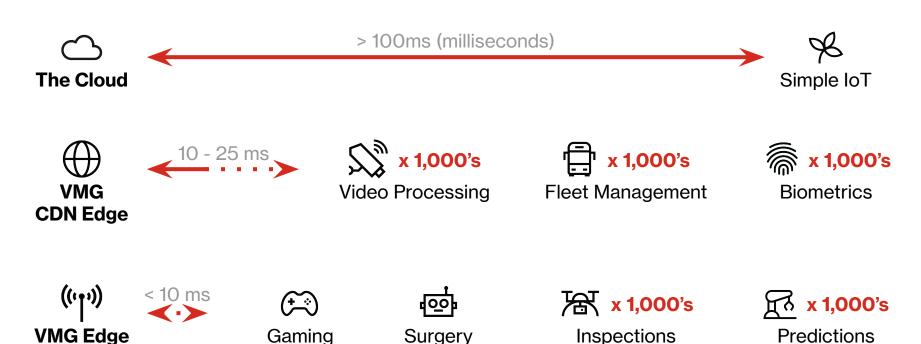
#### VMG Edge Appliance

In a manufacturing facility, a few milliseconds can be the difference between a safe shutdown and an industrial accident.

# 5G / Edge: When the Cloud isn't Fast Enough

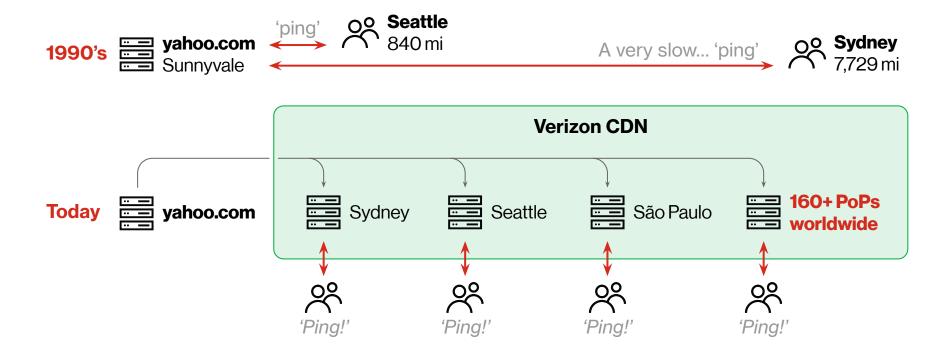
Gaming

**Appliance** 

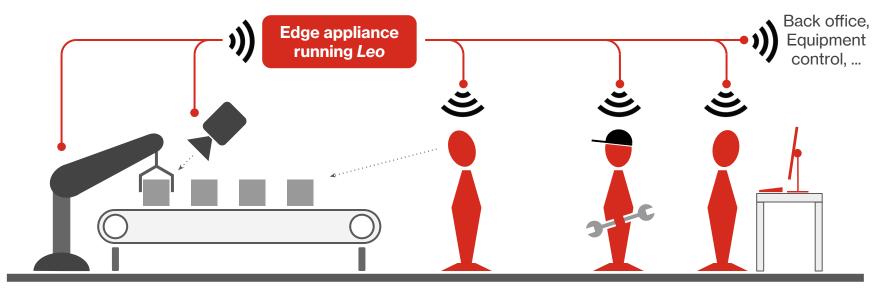


Surgery

## **Browsing yahoo.com**



# **Example: Smart Manufacturing**



**Equipment** 

Stream voltage and other data

**QA Cameras** 

100s of streams to monitor quality

**Floor Team** 

Audible feedback keeps eyes on job

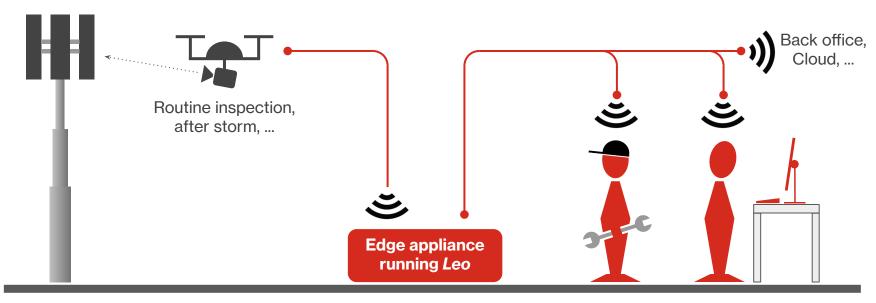
Maintenance

"Just in time" scheduling

**Operations** 

Analytics and analysis

# **Example: Field Inspection**



## **Equipment**

Towers, pipelines, pumps, ...

## **Drone Cameras**

Stream remote inspection video

#### **Ground Station**

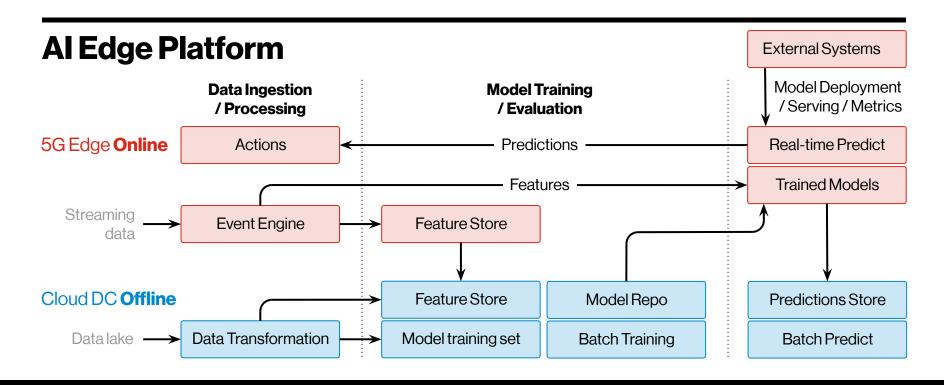
Fixed or mobile

#### Maintenance

Emergency or scheduled

## **Operations**

Analytics and analysis



Train in Cloud, Serve on Edge for Real Time Inferencing

Batch Training & Inferencing in Cloud using Data from Edge

Streaming Data Ingestion from Sensors, Devices, Network

Complex Event Processor - Aggregates, Filters, Pattern Detection, Actions

Model Lifecycle Management from Training, Tracking, Publishing to Serving

Real Time Inferencing via Endpoints

## Leo at 20,000'

#### **Any Data Source**









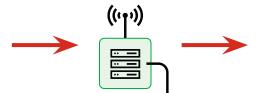












**Support Apps Across Verticals** 

**Biometrics Crew Safety** Touchless Travel **Analytics** Video IoT

**Autonomy Drone Delivery Smart Manufacturing** 

## **Any Cloud**

**Public or Private** 



verizon/











## **Edge Appliance (eg, at Customer Facility)**

**Any Edge Platform** 



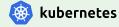












**Any ML Framework** 















# Leo - Edge Al Platform enabling inferencing in milliseconds

#### **Key Product Capabilities**



Data Management



Application Enablement & Management



Secure Platform



Analytics

#### **Key Customer Benefits**

- Multi-format data ingestion (e.g. stream, batch) for IoT, video, network, location data
- Supports 3rd party data integration tools
- Multi-format data storage (e.g. time series, video)
- Application Platform as a service (aPaaS) Application-enabling infrastructure components, application development, runtime management
- Extensible i.e. Enterprise customers can bring their own ML models built on any ML framework, leverage Leo ML platform from training, tracking, publishing to serving
- Secure edge-to-cloud platform with cloud based orchestration, managed end-to-end security for enterprises using private clouds
- Support customizable security frameworks
- Agnostic to customers' (public or private cloud) deployment scenarios and interoperable across multi-cloud strategy
- Complex Event Processor Aggregates, Filters, Pattern Detection, Actions
- Analytics runtime, ML model management, data visualization & reporting
- Built-in support for notifications, alams, alerts

# 5G / Edge: When the Cloud isn't Fast Enough

**Appliance** 

