



IOT - CONNECTED MINE, CONNECTED PORT

Intel IoT Group

INTEL'S STRATEGY FOR IOT – ACROSS VERTICALS



**CONNECT THE
UNCONNECTED**



**INTELLIGENT,
INTERCONNECTED THINGS**





**AUTONOMOUS, SOFTWARE-
DEFINED SYSTEMS**



Connected Port: Use Case





Achieve Operational Excellence

- **Connected Plant/Port** by non cellular based low Power long range connectivity solution. 
- **Real time geo location tracking** of vehicle movements within a secure personalized network. 

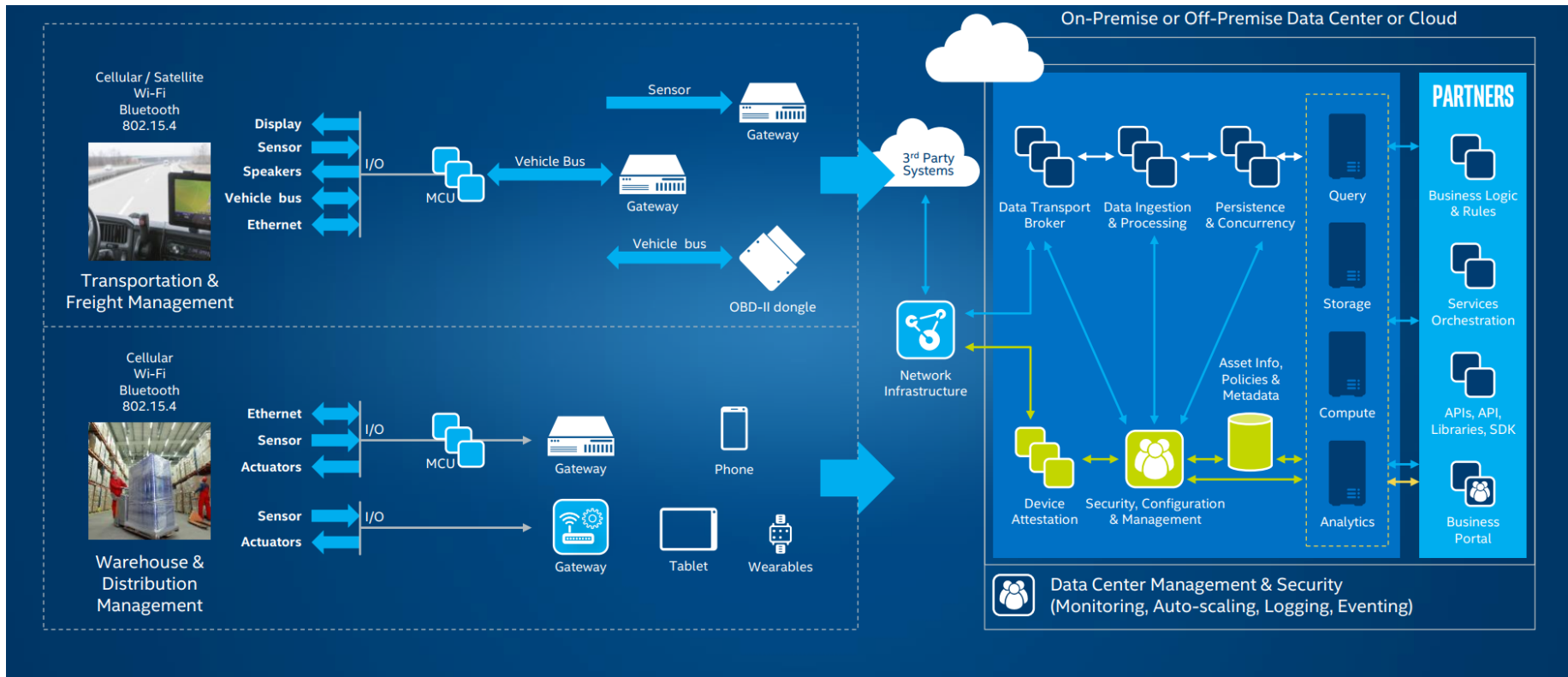
People Movement & Safety measure

- **In remote and hazardous work location**, tracking people's location and Safety. 
- **SOS button feature** for worker to raise Alarm in case of emergency. 

Predictive Maintenance, Asset Theft /leakage monitoring

- **Tracking real time conditional monitoring** of assets by sensors – Temp, Pressure, Velocity, tilt, Vibration, Fuel level in case of oil tanker/water tanker etc. 
- **Tracking vehicles real time conditions** from vehicle CAN data – Engine Temp, Pressure, RPM, Fuel level, Fuel temperature, Mileage from distance travelled 

Connected Port – Logical Architecture



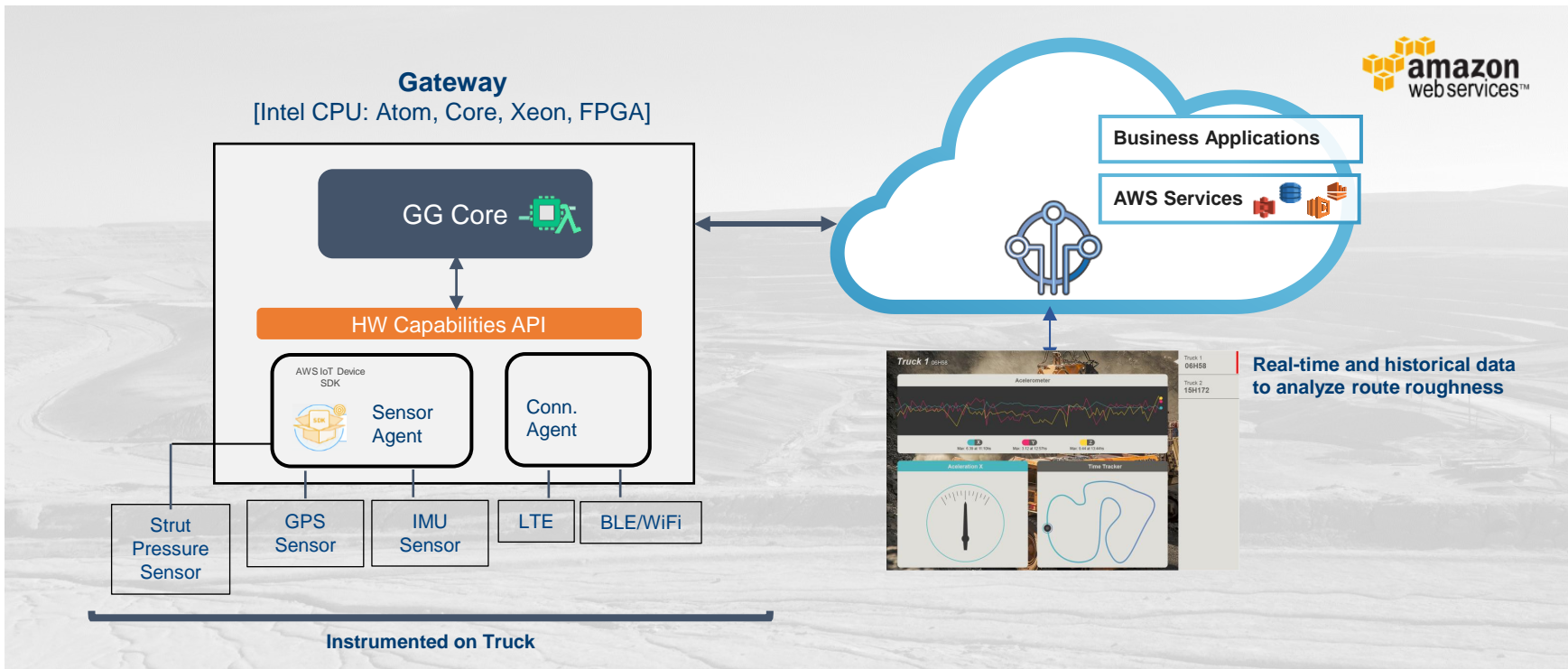
Connected Mine: Use Case

Customer Problem:

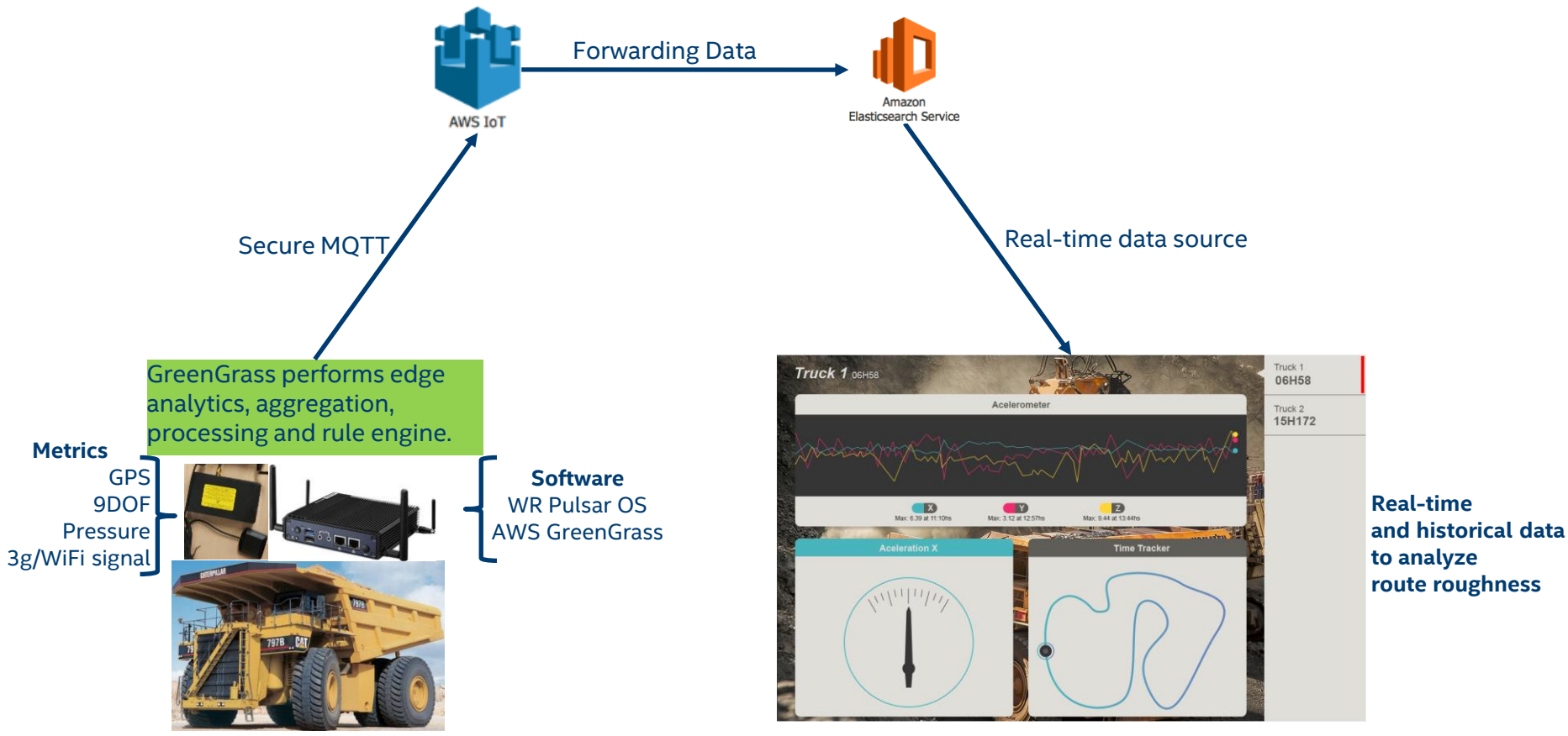
- Extending life of high value assets:
 - Trucks, Tires and other Mining Equipment
 - Create road roughness models
- Transmitting sensor data to cloud for analytics is challenged due to connectivity issues. Wi-Fi and cellular connectivity spotty.
- Sensor data Aggregation
- Local data ingestion even when the connection is spotty
- Local and Cloud Analytics



Connected Mine Solution (Continued)



Connected Mine Reference Design



Intel - Honeywell Connected Freight Solution launched in May 2017



https://www.youtube.com/watch?v=JL3CoO5z2_I