temperature · pressure · humidity · vibration · power · touch LED · GPS · gateway · cloud
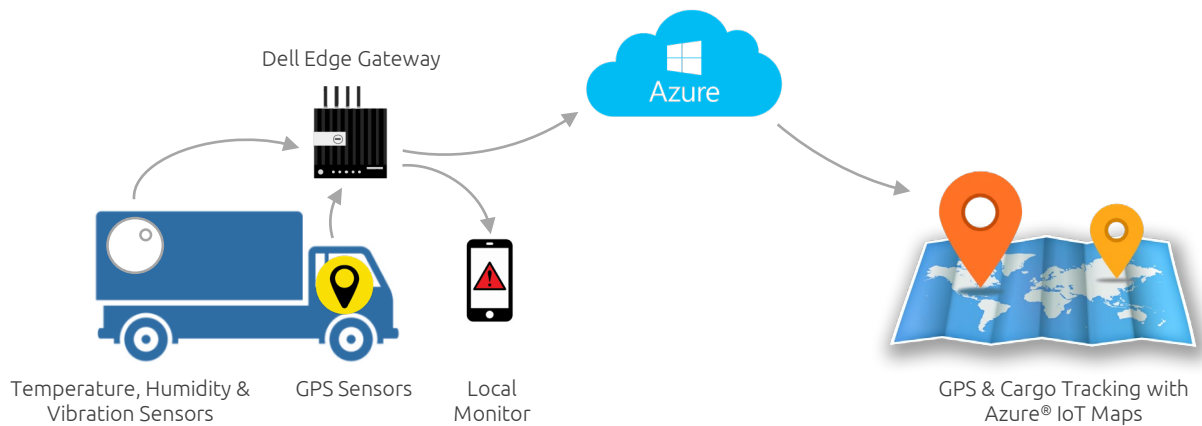
## Use-Case: Online GPS & Cargo Condition Monitoring

Use your IIoT Jumpstart Kit to solve real applications today, such as GPS tracking of your fleet of reefer trucks or other temperature-controlled vehicles, combined with real-time condition monitoring of your transported goods with alerts for exposure to excessive shocks, violation of specified temperature and humidity ranges, etc. With integrated GPS, BLE connectivity to Ruuvi cargo condition sensors, vehicle-friendly power feed and a flexible edge software stack, the Dell 3000-series Edge Gateways* are ideal for IoT-based cold chain logistics.



Dell Edge Gateway

Azure

Temperature, Humidity & Vibration Sensors — GPS Sensors — Local Monitor

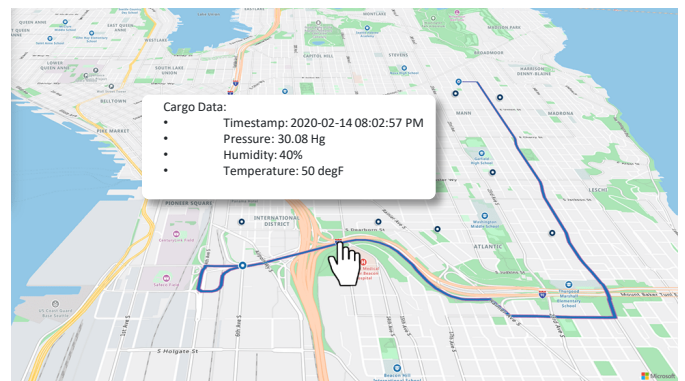GPS & Cargo Tracking with Azure® IoT Maps

- Collect cargo condition data with wireless Bluetooth sensors
- Set thresholds and act on the collected data with Node-RED
- Create Grafana dashboards for local visualization and alerts

- Schedule and stream real-time GPS & cargo data to Azure® IoT Hub
- Use Azure® IoT Maps by TomTom to track location and conditions
- Collect, trend and store data for long-term compliance reporting

### Where is our delivery? When will it be here?
### What is the status of my cargo?
### Does the vehicle need maintenance?

Increase just-in-time productivity, reduce costs, improve driver safety and be proactive with vehicle maintenance through online monitoring of your fleet's daily operations. Manage your important temperature-controlled cargo through real-time condition monitoring and predict shipment arrivals with geofencing of your vehicles.



Cargo Data:
- Timestamp: 2020-02-14 08:02:57 PM
- Pressure: 30.08 Hg
- Humidity: 40%
- Temperature: 50 degF

*Cellular option required. Optional CANbus interface required for ECU on-board diagnostics. Depending on your desired mapping functionality, some cloud fees may apply. Check with the friendly folks at Technotects for your particular use-case.

## CONTACT US FOR HELP WITH YOUR NEXT IIOT PROJECT