

# IoT Fleet kickstart



## Challenge

### Edge data processing underutilized

Devices are getting smarter each day and can produce data assets for building new digital services. In real life on field there are several different hardware variants, possible from multiple vendors and different eras that is complex to handle. Data is not connected between IT and OT systems. Running one device with some firmware, launching new software and update old ones will come a managed nightmare at scale easily. It's very difficult to share same kind of technology and business language when there are just too many parameters between multiple layers from embedded systems to Cloud based solutions and all between. That disperse landscape will cause that only a very small group of people in organization will deeply understand the fleet and processes. The power of edge computing might be not understood and exploited.



## 4 weeks kickstart for fleet operations

### Gamechanger approach for fleet edge data processing

Our kickstart is a cost-efficient and easy way to start building powerful harmonized edge data capabilities using AWS services. AWS IoT Greengrass is software that extends cloud capabilities to local devices with OTA. This will enable few key elements like optimize network bandwidth and data usage. Distributed computing makes it easy to execute local and cloud data processing. AWS Greengrass combined with our patterns will take care of latency issues and will introduce security models that are good foundation of any connected solution. Our model support also retro fitting. We evaluate and make edge proposal during kickstart what is feasible to current fleet devices depending on factors like hardware, cost and what kind of data processing will be implement in order to have solid edge data processing in place combined with Cloud machine learning. We will use AutoML to accelerate adoption of machine learning to edge and provide insights at edge and cloud – both.

## Benefits

Guaranteed fleet data processing at Edge and Cloud with schema registry in order to produce data products with AutoML features.



### Seamless Edge data processing

We will capture basic data such as monitoring equipment location and status and then we extend that to metrics available on Edge.



### Painless Over-the-air programming (OTA)

OTA updates allow you to deploy firmware updates to one or more devices in your fleet. This will give you secured bi directional channel at scale with Edge unit.



### Rapid AutoML

Our templates and frameworks will accelerate the development & deployment of machine learning models. We also use AWS SiteWise for data modelling and computing metrics in real time.



### Manage edge configurations

We will ensure device's state available to apps and other services whether the device is connected to AWS IoT or not and push relevant edge configuration information to Cloud for inventory.

## Solita on AWS

Solita is an AWS Advanced Consulting Partner with Machine Learning and Data & Analytics Consulting Competencies. Solita is a Nordic data leader having almost 1500 professionals in Finland, Sweden, Denmark, Estonia, Belgium and Germany. We use scalable AWS IOT services to build future proof data platforms including data ingestion and predictive maintenance. Let's create impact that lasts by combining tech, data and human insight.

## Solution packages

Our experts have created a bulletproof architecture and taking relevant AWS services to build this kickstart with two options.

### 1 - Data ingestion package and OTA

This package makes it easy to build Edge data processing and data is pushed to Cloud for data storage and data API. We will introduce also AWS Device Defender on Edge and Security Hub on cloud how security should be built in from the start. We use advanced tactics and services to build data schema registry with industry standard formats like Avro so any event is well identified and can be validated before storing to scalable storage and publish as data product. OTA is enabled in first 2 weeks to AWS certified hardware that we will bring with us or we show how same can be accomplished with your own device. Data Mesh approach is introduced so you will learn how to build your team around data to scale and experiments. End of the 4 weeks kickstart you will have a remote access to device, see logs real time, update/command device and run edge data processing.

### 2 – AutoML package

AutoML is the perfect silver bullet to speed up complex Edge data processing and combine that with Cloud. *AutoML* enables developers with limited machine learning expertise to train high-quality models specific to their business needs. We will design and implement from edge to cloud solid AutoML using AWS robust services and how it suits for your specific use cases. We use data farming for data if access to fleet data is not possible and real-life scenario data can be enabled in any point of time. You will have own AWS account and first AutoML models ready in 4 weeks time to start building new services after kickstart.

## Pricing



### Option 1: Data ingestion package and OTA

Kickstart to data ingestion and OTA in the easy way, including AWS certified equipment, with results in 4 weeks.



### Option 2: AutoML package

Kickstart to AutoML for Edge data processing, including AWS certified equipment, with results in 4 weeks.

## Customer References and Case Studies

Read how a global leader in its industry, [KONE](#), is enhancing the predictive maintenance capabilities with Solita.

## Get started with Solita solutions on AWS

Contact us: <https://www.solita.fi/en/solita-connected-fleet/>