sagentia innovation

## Over The Air Firmware Update for IoT devices



Frontier Smart Technologies Ltd

Development of Nuvola Cloud which has an Over The Air (OTA) IoT Firmware Update service.

Expertise and domain knowledge

- IoT
- · Firmware Update
- Cloud Computing





## The project story:

Nuvola Cloud has an Over The Air (OTA) IoT Firmware Update service. It has been developed to be extremely light-weight with the ability to scale to large numbers of devices.

The Firmware Update service is Operating System agnostic and is providing services to Embedded Linux and several smaller RTOS platforms.

This allows clients to rapidly update devices in the field to add functionality, fix bugs or patch security vulnerabilities.

This is a mature service with more than eight years of operation and during this time has supported over 1.8 billion transactions and an installed base in excess of four million devices.

Typical daily operations cover 1.1 million devices and approximately 1.500 firmware downloads.

Clients can access a dashboard with analytics information about device location, connectivity and firmware version.

## **Key Features:**

- Lightweight HTTPS-based API. No MQTT required
- Fault tolerant design running in multiple regions in the Azure Cloud
- 99.999 uptime over the past two years
- Granular control: clients can update individual devices, groups of devices or all devices of a SKU
- Content Delivery Networks are employed to get firmware as close to the Edge as possible to speed up download times and allow scaling

## Contact us

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