# KPIT Technologies OTA (Over-the-air) Update Solution

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<u>KPI1</u>

Vehicle Makers and Mobility Infrastructure Companies face high cost and slow response times in software patch updates and software feature rollouts to their shipped products.

OEMs face high costs of recall campaigns and challenges in rolling out new software features over product's lifetime.

The solution lies in using an OTA update for firmware, software and applications.

Such a solution can help keep products current and relevant, while reducing cost of updates over time.



#### **CHALLENGES**

Increasing software content in vehicles and infrastructure components such as EV chargers makes it imperative that the software be maintainable and updatable over time. However, dealership or field update campaigns lack responsiveness, involve high cost and do not guarantee coverage. This leads to inferior customer experience and brand impact.

#### **IDEAL SOLUTION**

A robust, secure, fault-tolerant and comprehensive Over-the-Air (OTA) update solution can alleviate these issues by providing infield updates for software patch updates and software feature rollouts.

## **DESIRED OUTCOMES**

Such a solution can mitigate software recall expense, respond faster to cybersecurity incidents, maintain post-sale performance and feature enhancements and provide an alwayscurrent product experience to customers.



#### **In-place and A/B Updates**

Efficient "in-place" as well as "A/B updates" to work within available resource constraints of target ECUs.

#### **Campaign Management Platform**

Campaign Management Platform aligned to existing OEM processes and policies.

Backed by Configuration Manager for vehicle model and software version dependencies.

#### **Uptane Compliant Security**

Uptane-compliant secure integration of OTA backend platform with OEM cloud.

# **KPIT OTA + Azure**

KPIT's OTA Cloud solution is designed for Azure. It leverages Azure services to deliver a scalable, high performance solution with low operational costs for features such as firmware repository & version management, campaign management, update management with best in class security & industry standards compliance



#### **Scalability & Performance**

Azure enables the KPIT OTA solution to deliver high performance & scalability to millions of assets leveraging the power of containers & container management.

## **Best In Class Security**

Azure and KPIT together bring industry leading Best In Class Security & Compliance recognizing the highly sensitive nature of OTA updates for Vehicles to ensure proactive protection from Cyber Attacks.

#### **Firmware Content Management**

Azure CDN ensures that the update packages are available at Edge Nodes worldwide close to your asset to ensure reliable & higher speed downloads even with weak cellular connections. Customer success: OTA invehicle solution deployment for US passenger car OEM

- End to end software platform development
- Highly scalable cloud architecture based on micro-services
- Loyalty program integration to influence driver behavior
- Operations portal branded for fleet operator



#### At-scale deployment

- Deployed in 5 million cars
- Tested for 100,000 cycles
- Support for 14 models over 4 model years

## **Comprehensive solution**

- Embedded Flash Manager adaptation to target
- Server initiated remote vehicle update
- End-to-end with Delta update and secure download
- Cybersecurity implementation

## **Full feature support**

- A/B update
- User data retained across SW update cycle
- Integration of 3<sup>rd</sup> party solutions in KPIT's OTA platform for vehicle and cloud

# Get in touch for an OTA demo

Contact us: https://www.kpit.com/contact/

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