GPS TRACKER DEPLOYMENT AND MAINTENANCE WITH FOTA WEB

INTRO

Vehicle telematics is a fast-growing industry. According to Fortune Business Insights, its global market size reached $72.85 billion in 2022 and is estimated to grow to $280.78 billion by 2030. This growth means new opportunities and new challenges for telematics service providers.

CHALLENGE

Implementing a telematics project takes skill and dedication. From analysing customer requirements to selecting the right technology partner and deploying the solution in the field, service providers face many challenges. However, an IoT professional rarely has the luxury of focusing on one customer at a time.

According to our research, an average service provider manages around 5.6 thousand IoT devices belonging to multiple end clients. The customer projects that the service provider has to manage have different levels of complexity, implementation stages and service-level agreements. To manage this number of devices and a variety of projects, a service provider must ensure cost-effective device implementation, provide timely device maintenance, and adapt projects as customers' business needs change.

Sure, these challenges could be addressed by expanding the engineering team. But let's consider the cost of an expert's time. We estimate that it takes between 5 and 10 minutes to manually set up and configure a device. This means that just preparing 5.6 thousand GPS devices for deployment would require more than 900 engineering hours. In Lithuania, that would mean around 15,000 euros of extra cost.

What is more, the actual cost of deploying devices would be even higher due to the regular maintenance and project adjustments required by the end customer. The only way to reduce the cost of operations is to implement a tracking GPS device management solution that provides scalability and remote access to the hardware installed in the customer's fleet.

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SOLUTION

FOTA WEB ENSURES THAT ALL GPS DEVICES ARE ALWAYS UP TO DATE WITH THE LATEST FEATURES

Teltonika Telematics offers all its GPS trackers with FOTA WEB - a versatile cloud-based device management platform. To demonstrate the solution, let's take the next-generation FTC921 model as an example to see how FOTA WEB helps to optimise the telematics provider's operations.

How it works – once a telematics service provider orders a shipment of FTC921 or any other Teltonika Telematics tracking device, the shipment is reflected in its FOTA WEB account. The virtual counterparts of the real devices with corresponding IMEIs are automatically created in corresponding service provider company. As long as the devices are not connected, they would have an 'inactive' status. This is the stock that a telematics provider could use to implement one of the projects in the pipeline, for example green driving solution.

To streamline the project implementation in the field, a proper FOTA WEB setup should be prepared. Service providers can create a structure of child companies and distribute the stock of devices among them. This approach makes it possible to link customer fleets with specific IoT hardware to be installed in the vehicles. In addition, each child company has its own file storage - a dedicated place to upload project-specific device configuration or custom firmware developed specifically for that customer.

To ensure that the devices have the correct configuration when they are switched on, the service provider sets up Update Configuration Task. This eliminates the need to update each device individually. FOTA WEB allows the creation of groups of tasks to speed up the process of setting up the GPS devices. All the service provider needs to do is create a configuration file in TCT, upload it to the right company and create a group of tasks for a selected set of devices.

Once the installation team has inserted SIM cards into the devices and connected them to the power supply, the devices will check the built-in APN database to find a mobile network and connect to FOTA WEB. Once a stable connection is established, GPS trackers perform configuration update tasks previously created by the service provider. This simple operation eliminates the need for individual device configuration and helps ensure that the settings applied are replicated correctly to all devices.

But how do you deal with situations where customers have a mixed set of devices needed to monitor different aspects of the business: heavy goods vehicles, light commercial vehicles and lone workers all at the same time? FOTA WEB makes it possible to group the devices within a company to apply different device configurations for each use case. In addition, the tool allows to assign a specific firmware and/or configuration to each group.

This functionality is invaluable for future tracker maintenance as it helps to automate the GPS device update process. Once the firmware and/or configuration has been assigned to a group, FOTA WEB automatically creates the corresponding update tasks. What is more, if the customer's fleet expands, adding newly installed devices to a group is enough to trigger its remote configuration.
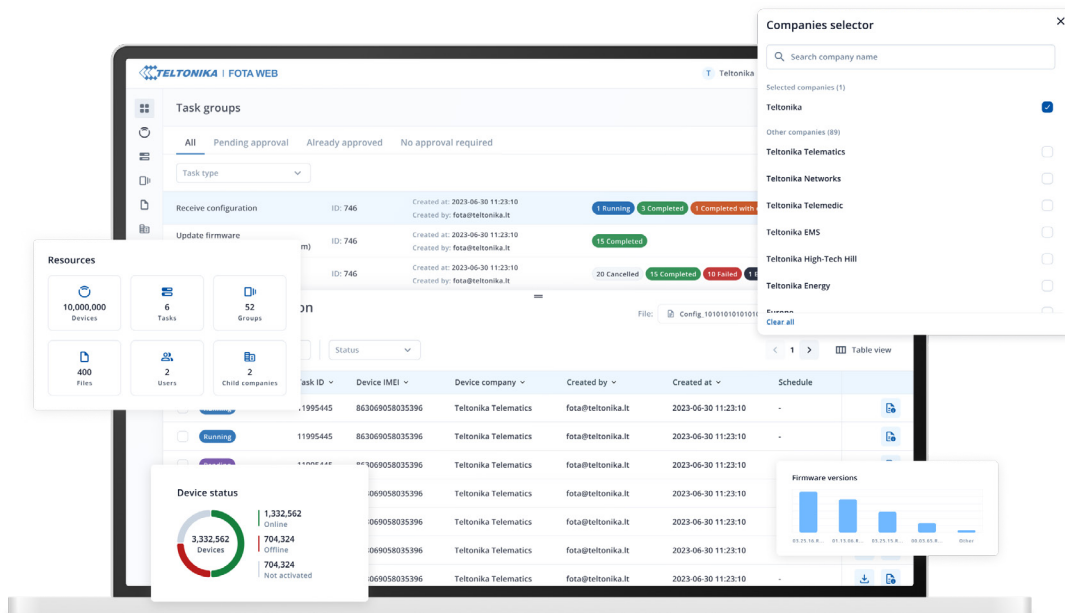
To track task performance, a service provider can use the Task Groups page. Colour-coded statuses allow to identify potential issues and retry tasks that have failed due to mobile network issues, for example. The big picture of your tracking devices is always available on the Dashboard page. It shows if your devices are online and detects those that haven't connected to FOTA WEB in the last 24 hours. This remote monitoring allows you to send your device maintenance engineers into the field only when you need them.

Last but not least, all device management and monitoring tasks can be performed via the API. Service providers can set up seamless integration between FOTA WEB and other corporate systems: fleet management platform, ERP, CRM, and Helpdesk systems. This integration minimises the risk of human error and reduces the time needed to perform device update tasks. Read more about FOTA WEB functionality here.

TOPOLOGY
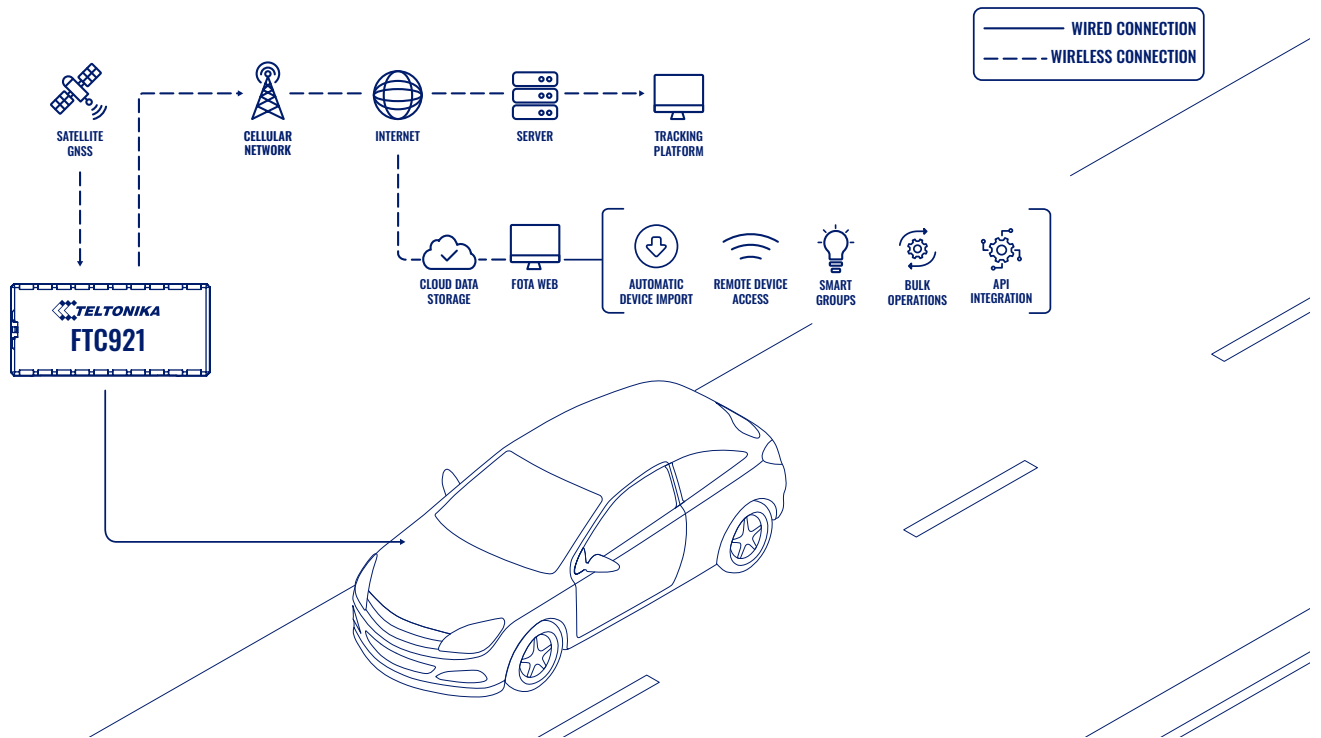
BENEFITS

- **The ultimate device management platform -** the FOTA WEB tool is a cloud-based solution specifically designed to remotely update the firmware and configuration of Teltonika Telematics products. This ensures that all GPS devices are always up to date with the latest features and security patches.

- **Remote GPS tracker access -** with FOTA WEB, fleet managers can manage devices in the field without having to physically access them. This means that necessary updates can be carried out from the comfort of the office, saving time and resources.

- **Automatic device import -** any telematics product purchased directly from Teltonika is automatically added to the virtual company on FOTA WEB. This streamlines the process of adding new devices to the system and ensures smooth integration.

- **Cloud data storage -** accessing FOTA WEB is as simple as opening a browser and connecting to the Internet. The cloud-based nature of the tool means that all data is securely stored online, eliminating the need for local storage solutions and ensuring that data is always accessible.

- **Device and task grouping -** FOTA WEB allows users to create groups with specific firmware and configurations. As devices are added to these groups, the tool automatically creates update tasks, ensuring that all devices within a group receive the same updates.

- **API integration capabilities -** for companies with existing internal systems, FOTA WEB offers flexible API integration capabilities. This ensures seamless IoT operations and a consistent experience across all platforms.

- **Comprehensive support and information -** we provide a full FAQ and additional information on its Wiki to help users set up their accounts and understand the full capabilities of the FOTA WEB solution.

WHY TELTONIKA?

Incorporating the FOTA WEB tool into fleet management ensures that all GPS trackers are always working at their best. Its cloud-based nature, remote access capabilities, and seamless integration features make it an irreplaceable tool for modern fleet management. We guarantee high software availability and uptime, data security, and timely customer support via a top-rated Helpdesk.

But technology is only the beginning. At Teltonika Telematics, we believe in long-term building relationships, not just customer lists. That is why we offer comprehensive after-sales support and training to ensure you get the most out of your investment. When you partner with us, you are not just buying a product or service – you are investing in a long-term business partnership built on trust, innovation, and shared success.

FEATURED PRODUCT

FTC921

RELATED PRODUCTS

FOTA WEB, TCT TELEMATICS CONFIGURATION TOOL