

Case Study | Vehicle Identification

Cloud-supported Access Control and Fleet Management

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Challenge

One of the largest and strongest insurance companies in the world does not only focus on best performance for its customers; the company has also decided to make its own park and fleet management state of the art. The insurance group relies on the passive UHF RFID technology and device management from Kathrein Solutions in Ismaning.

Background

The Group has over 9,000 employees in Germany. At its various locations, it was necessary to develop a smart solution for an easy access control of the employees' cars and the pool vehicles. The goal was to create an automated access and exit system for authorised employees and pool vehicles, as well as to track the fleet for the internal cost allocation.

Solution

In order to optimally meet the modular and flexible requirements, the company opted for the ARU 3570, a Kathrein reader with an integrated wide-range antenna and 2G/3G communication. With its IP67 protection class, the reader is perfectly suited for such an outdoor installation.

The Kathrein IoT platform CrossTalk takes over the complete device management, monitoring and raw data preparation at the sensor level. The filtered data is transferred to a back end in the event format, depending on the customer's requirements. For the insurance company, the back end is a cloud that receives the reader data from CrossTalk and permanently provides the current white list (list of authorised RFID transponders). The white list data is regularly retrieved by each reader via a CrossTalk agent (CrossTalk runs remotely on the reader's Linux operating system). If a transponder has been successfully authorised, the reader issues a digital output signal (GPIO) command to open the correct barrier.

Result

Together with Kathrein Solutions, the Group was able to implement an innovative solution with technological perfection for parking applications. The installation enables the employees to quickly and easily drive in and out, as well as to facilitate fleet management for the group. The reliable and secure RFID system has significantly improved the speed with which authorised vehicles can enter the company premises.