

Automated fuel management solution for a fuel dispensing tracking system

Challenge

The client is a company in the agricultural industry involved in different types of activities: cattle breeding, dairy production, and so on. Its fleet contains 141 vehicles and consumes a lot of fuel. The lack of fuel control and its unauthorized use led to significant losses amounting to \$40 thousand per month.

The weakest links included:

- missing fuel station management system. The client wasn't in control of dispenser management: how many gallons of petroleum were dispensed, into the tank of which vehicle, who did it, and at what time;
- paper-based logging;
- human factor. A dispatcher responsible for dispensing was autonomous; lack of control could lead to an error or fraud;
- lack of strategic vision for potential implementation of automated fuel management systems within the company.

To prevent fuel theft, the company decided to implement a management system that would help optimize and control the whole petroleum delivery cycle, automate gas station management, and exclude dispatchers from the process.

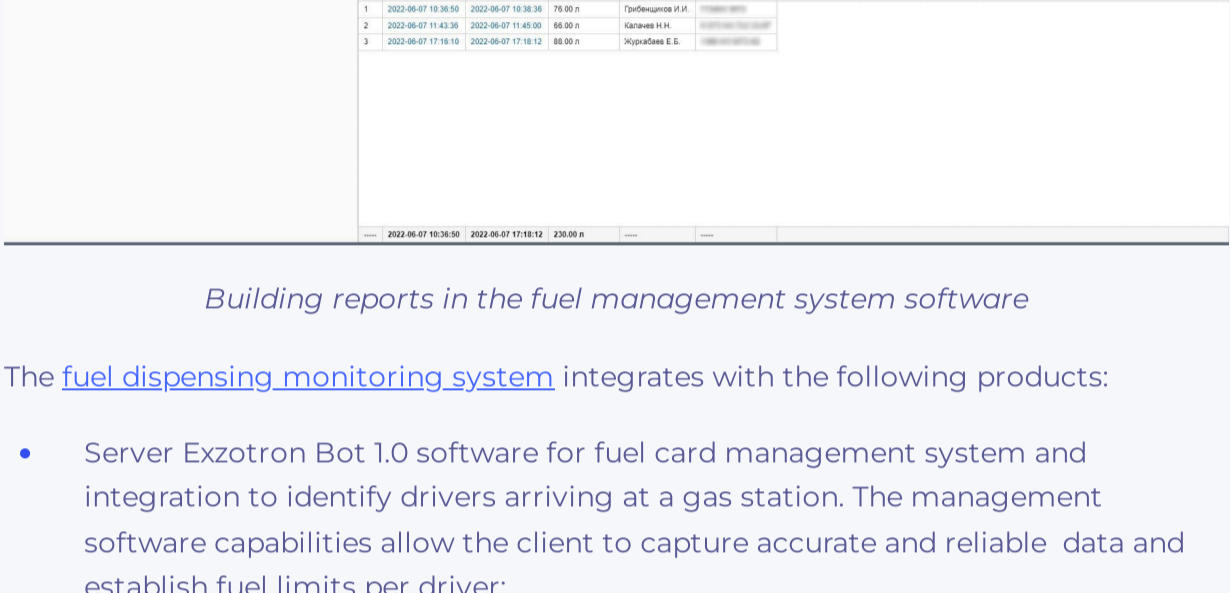
Solution

Avtoskan, our partner from the CA market, started the project with a thorough analysis of the current dispensing tracking system used by the client. After that, they came up with a fuel theft solution that combined a [Wialon-based fuel management system](#), an electronic dispenser system, GPS trackers, and third-party products.

The hardware part of the automated fuel management system includes:

- Exzotron EFL-6.0 (9-36B)
- fuel dispenser that meets the demand for the best price-quality ratio;
- [Galileosky 7x](#) GPS tracker that is installed on a dispensing system and has the functionality to control it through preset algorithms.

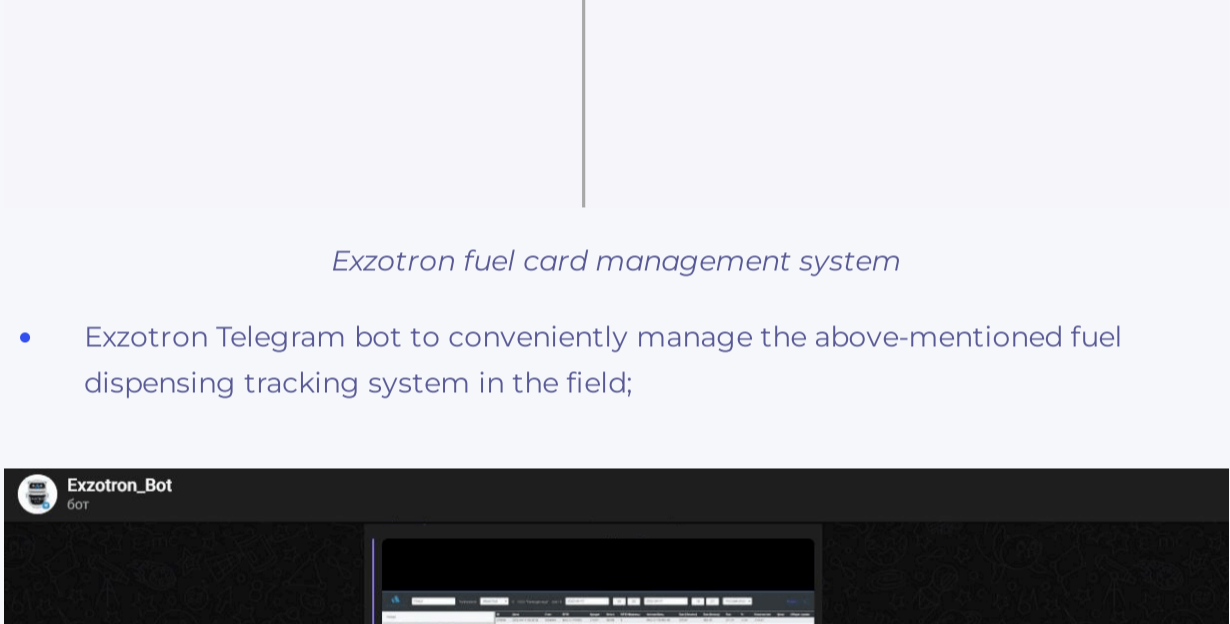
The collected data is sent to the Wialon GPS tracking system. Its diverse and detailed reports help visualize fuel consumption per asset. The dashboard provides a comprehensive view of dispensing operations remotely and in real time.



Building reports in the fuel management system software

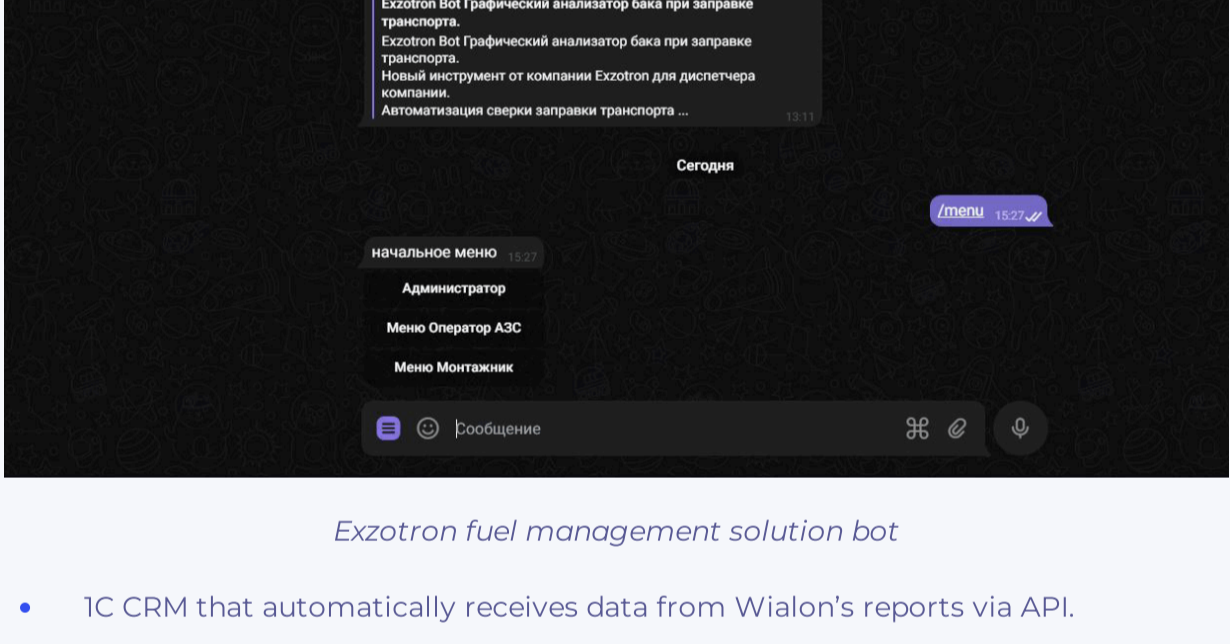
The [fuel dispensing monitoring system](#) integrates with the following products:

- Server Exzotron Bot 1.0 software for fuel card management system and integration to identify drivers arriving at a gas station. The management software capabilities allow the client to capture accurate and reliable data and establish fuel limits per driver;



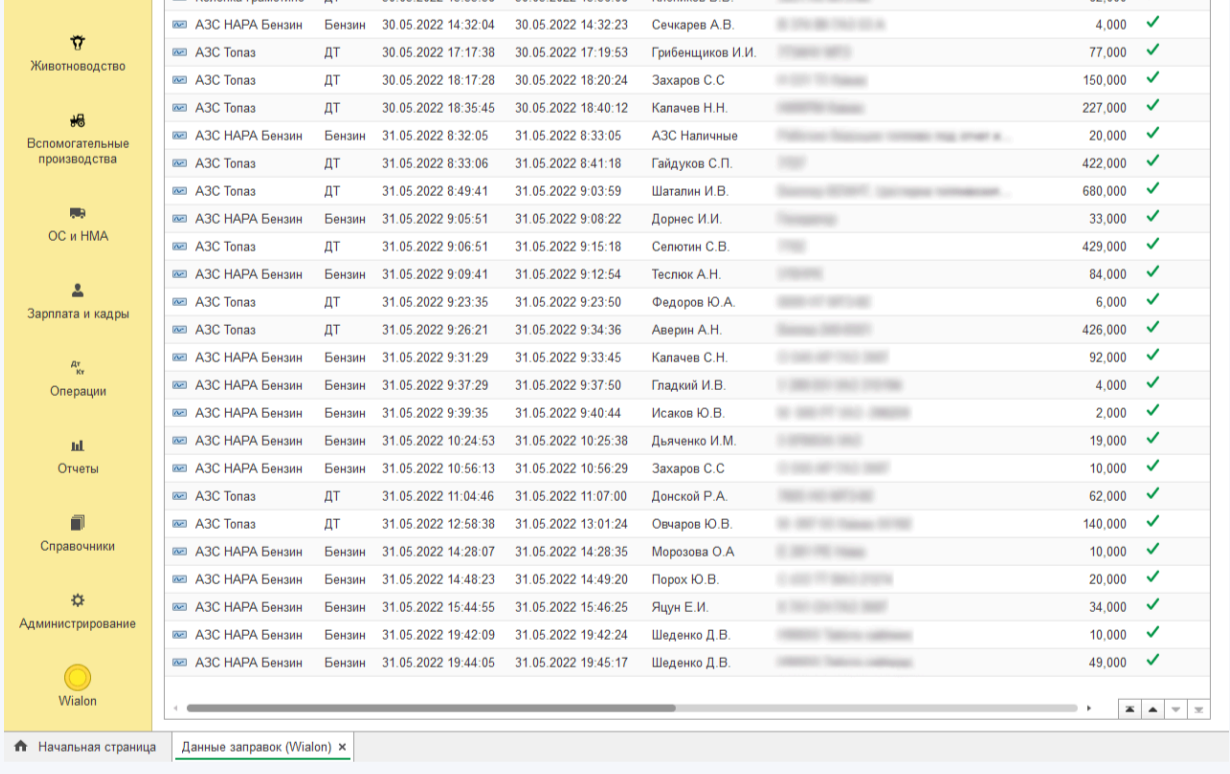
Exzotron fuel card management system

- Exzotron Telegram bot to conveniently manage the above-mentioned fuel dispensing tracking system in the field;



Exzotron fuel management solution bot

- 1С CRM that automatically receives data from Wialon's reports via API.



1С and the fuel dispensing management system integration

Our partner carried out installation and maintenance works in areas with high-voltage equipment at old petroleum stations. Also, they provided 24/7 dedicated technical support.

Results

The automated management system by Avtoskan tracks fuel usage through seamless processes and automatic reporting.

- Fuel consumption reduced by 15%**

One of the system's benefits is that it reduces the risks of petroleum waste and abuse.
- Over \$35,000 saved per year**

The company reduced its fuel consumption and saved money thanks to full control over automated dispensers.
- Process automation**

A driver gets petroleum in a volume preset by the client's limits.
- Increased efficiency in management**

The company's employees don't participate in a fuel distribution cycle and could spend work hours on more valuable tasks.

Company profile

IoT project of the year nomination: Fuel transportation and storage

Country: Kazakhstan

Industry: Agriculture

Hardware

Galileosky 7x

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