Fsas Technologies
a Fujitsu company

Transport Urban Reșița

Powering sustainable urban mobility through advanced IT infrastructure

Transport Urban Reșița (TUR) is the public transportation operator for the city of Reșița, Romania. As a municipal operator, TUR is responsible for managing the city's entire public transport ecosystem, from fleet operations to digital mobility services.

Challenge

Reșița required an energy-efficient IT platform with enhanced processing capacity, scalable secure storage and improved system uptime to support 24/7 traffic management, CCTV, ANPR, telematics and ticketing.

Solution

Fully modernized IT architecture supporting all critical systems within Reșița's newly developed Command & Control Centre, including PRIMERGY servers, ETERNUS storage and UPS systems, providing a high-performance and energy-efficient foundation for Reșița's mission-critical mobility operations.

Outcomes

- Improved operational performance and uptime across all mobility services
- Secure data environment supporting CCTV, ANPR and telematics data
- Energy-efficient and sustainable digital infrastructure

"Sustainability goes beyond electric vehicles - it depends on an efficient, data-driven IT ecosystem. Together with Fsas Technologies and ALTIMATE, we built a modern infrastructure that ensures the reliability of our electric fleet."

Laurențiu Stanciu, General Director, Transport Urban Reșița

Industry:
Public Transport

Location:
Reșița, Romania

Employees:
100

+35%

better performance per watt

-30%

lower energy use compared to legacy server environments

Advancing sustainable mobility through digital modernization

Transport Urban Reșița (TUR), the municipal operator responsible for the city's entire public transport network, has positioned Reșița as the first city in Romania to operate a fully electric public transport fleet. This achievement reflects a strategic focus on environmental responsibility, operational efficiency and Smart City development. Supporting a 100% electric ecosystem required a modern IT foundation capable of managing increasing volumes of operational data, ensuring real-time fleet visibility, and maintaining uninterrupted service across ticketing, dispatching, telematics and CCTV systems.

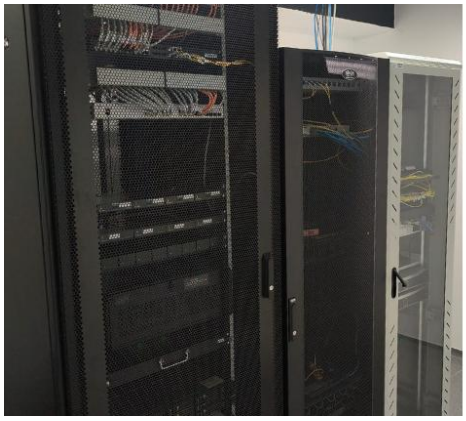
Delivering a high-performance and energy-efficient IT architecture

To support this transition, TUR collaborated with Fsas Technologies and ALTIMATE to design and implement a modernized IT infrastructure to power the **Central Command & Control Centre**, consisting of CCTV and traffic monitoring room and a dedicated server room. This facility operates continuously and hosts the full suite of applications required for managing the electric fleet, traffic prioritization, video analytics, violation detection and Smart City integrations.

The solution integrates:

- **PRIMERGY servers**, which host all real-time processing tasks, including traffic management logic, video analytics, ANPR processing, telematics integration and live operational dashboards. These servers provide the low-latency performance, high reliability and efficiency required for non-stop operations.

- **ETERNUS storage units**, which delivers scalable and secure capacity for CCTV recordings, ANPR images, sensor-generated metadata and historical mobility data. The systems must process and store high-volume video and sensor information originating from the city's traffic monitoring infrastructure, smart intersections and public transport network. The ETERNUS architecture ensures fast retrieval, long retention, high availability and seamless scalability as data volumes increase over time.



+100%

Increase in storage capacity without downtime

-40%

CO_2 reduction & overall fleet emissions

Customer:

Transport Urban Reșița

In collaboration with:

ALTIMATE

- **Central UPS systems**, aligned with N+2 redundancy requirements, ensuring continuous operation of all Command Centre infrastructure and protecting against power fluctuations or outages.

- **PRIMECENTER racks**, which provide optimized airflow and cable management, contributing to reduced cooling needs and stable thermal performance under continuous load. These racks support structured equipment organization and form part of the required supporting subsystems that maintain normal operating conditions, including HVAC cooling, safe cable routing and redundant power - all essential for maintaining 24/7 system availability.

Together, these components form a unified architecture that supports the entire operational chain of Reșița's electric transport ecosystem. The modern servers, storage systems and UPS-backed infrastructure ensure higher uptime, faster data processing and real-time responsiveness across dispatching, ticketing, fleet monitoring, telematics and security systems. Additionally, the energy-efficient design of the solution reduces electricity consumption, lowers cooling requirements and aligns strongly with the municipality's sustainability and circular-economy objectives.

A scalable platform supporting future Smart City initiatives

As Reșița continues to expand its Smart City capabilities, the deployed infrastructure provides a secure, future-ready and scalable platform. It enables the seamless addition of new digital services such as predictive maintenance for the electric fleet, advanced video analytics, route optimization, intelligent traffic prioritization and IoT-driven mobility enhancements. With this foundation in place, the city is well positioned to build upon its leadership in sustainable mobility while ensuring long-term service continuity, environmental responsibility and improved quality of life for its residents.