

Real-time, high-volume processing of automotive data

Cloud-based fleet management with Fujitsu Enterprise Postgres

Case study



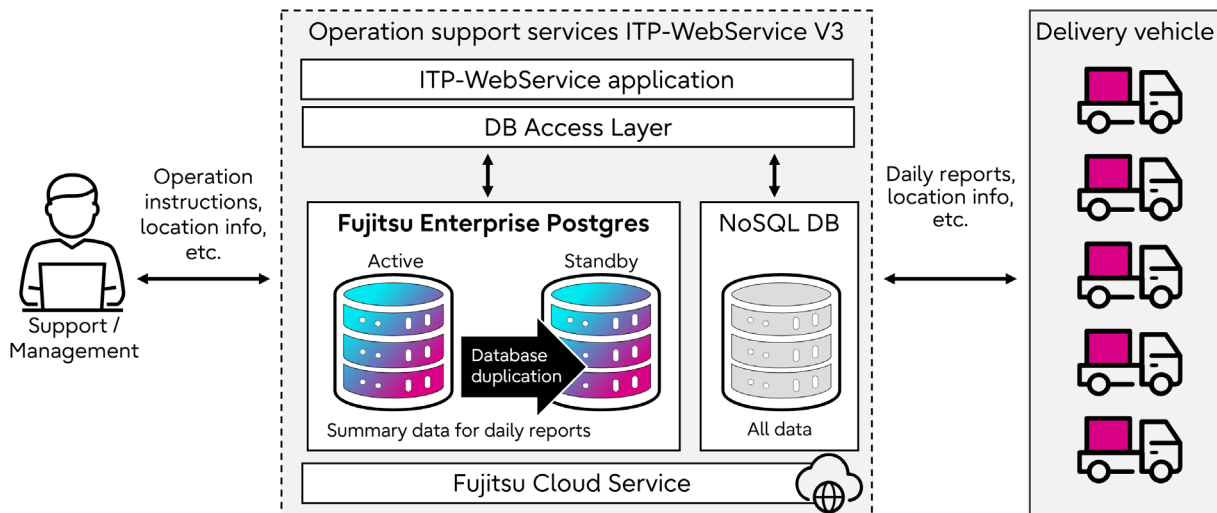
Now that everything is connected to the Internet and a vast amount of information is collected, there is a call for effective use of that data. In this environment, Transtron Inc. is working to improve its service levels to meet the growing needs in the automotive and logistics industries, such as advanced fleet management and diversified operation support. The stability of the database that processes massive amount of traffic data is directly linked to the credibility of the organization. We spoke with three key players at Transtron Inc. who have chosen to build their system using Fujitsu Enterprise Postgres.

Challenge	Value of Fujitsu Enterprise Postgres
To deliver cloud-based network operation support to multiple companies, it was essential to achieve stable system operation at a lower cost than ever before.	System costs are kept to a minimum while realizing a stable operation through a high availability set up .
Leveraging the strengths of OSS PostgreSQL while also ensuring performance and reliability.	Improved performance and reliability . High compatibility with OSS tools facilitate the development of services, resulting in increased customer satisfaction.
24x7x365 business continuity. Because this system is essential to daily operations, an enterprise support structure was critical.	24x7x365 support with enterprise SLA . Prompt support response allows quick identification of the cause of the issue and resolution.

Providing high quality services to customers at low cost with instant processing of huge amounts of data

A huge amount of data is collected from devices via the Internet, and the use of big data is attracting attention in the automotive and logistics industries. The digital tachograph management service ITP-WebService V3 provided by Transtron Inc. has been adopted by over 7,500 companies, with 270,000 units in operation (as of February 2025), making it the most adopted networked digital tachograph solutions based on dashcams*.

*According to Transtron Co., Ltd.



ITP-WebService V3 can solve various operational challenges in the industry by storing and utilizing data recorded by digital tachographs on the cloud. For example, the service can automatically calculate on-duty hours from driving records and automatically output daily reports, and can also assist in understanding the situation in the unlikely event of an accident or other emergencies, with information from the drive recorder built into the digital tachograph. For this reason, it is being rapidly adopted by numerous companies. But the company was faced with the challenge of having to efficiently and stably process rapidly increasing volumes of data while also reducing system cost.

"To win in the market competition, we need to be able to process huge amounts of operation data stably and quickly, while providing customers with high-quality service at low cost. To do this, we needed to review our previous system, which was running on the Windows platform at the time, and consider using OSS to reduce operating costs.

It was also important for us to be able to make the system redundant easily and at low cost so that our customers could rely on it **24 hours a day, 365 days a year**. We chose Fujitsu Enterprise Postgres because it maximizes the strengths of OSS, guarantees **performance and reliability** in areas such as **security and redundancy**, and comes with **OSS tools (APIs)** related to PostgreSQL, making it easy to develop new services."

Masatsugu Isogai

Director
Information Service Development Department, Transtron Inc.

ITP-WebService V3 is a system that is deeply connected to daily operation, so even the slightest delay cannot be tolerated.

"For example, some companies finalize payment by having drivers submit a daily report after completing a delivery. It is our important mission to ensure that drivers submit their daily reports promptly so that they can finish their work in a good mood."

Yuuki Murase

Information Service Development Department, Transtron Inc.

The operations team and the development team met to discuss what the optimal system would be to keep on-site operations running smoothly.

Why Fujitsu Enterprise Postgres; : Taking the strength of OSS to the next level

The company's old system ran on a Windows platform with Internet Information Services (IIS) and SQL Server. However, in 2018, the company began considering using OSS to reduce operational costs. But this raised concerns about the lack of support. With OSS, in case of any problems or bugs, the users must resolve them in-house, which inevitably increases workload.

In addition, to provide information immediately when creating daily reports or when an accident occurs, the large amount of data sent from the digital tachograph to ITP-WebService V3 requires that summary data important to business operations be extracted quickly 24 hours a day, 365 days a year. After thorough comparison and consideration, they decided on Fujitsu Enterprise Postgres, which makes the most of the strengths of the Linux platform, Apache, and OSS, and has enhanced reliability by duplicating the system, enabling robustness and high-speed switching in the event of a problem. 24x7 support by Fujitsu is included in the annual license, so they decided to go ahead with Fujitsu Enterprise Postgres.

Why Fujitsu Enterprise Postgres?



High Availability and performance at a low cost



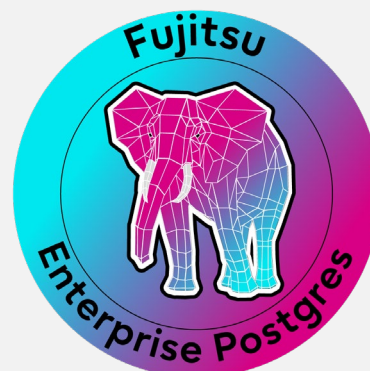
Enterprise security



True Open standard



24 x 7 x 365 supported included in the annual license



Flexible system expansion enables stable service provision 24 x 365

The number of companies adopting ITP-WebService V3 continues to grow, but no major system problems have occurred. To reduce the time that drivers spend on processing daily reports and other tasks, it is necessary to make database searching as fast as possible. This business requirement was efficiently met by processing the entire system with a NoSQL database and searching summary data with Fujitsu Enterprise Postgres. This was possible because Fujitsu Enterprise Postgres, which is highly compatible with OSS PostgreSQL, can smoothly link with NoSQL databases as well as offer enhanced performance based on OSS PostgreSQL. In addition, Fujitsu's Postgres solution allows users to expand their services to meet the diversifying needs of their customers while maintaining stable system operation. As the number of users increases, the system can be expanded flexibly, such as by increasing the number of servers.

Looking ahead # embracing innovation with Fujitsu Enterprise Postgres

In the future, the automotive and logistics industries are hopeful that the evolution of connected cars with communication functions will lead to safer driving.

"If the route, speed, and other information is pre-registered in the system, the driver can concentrate only on driving. This will lead to safer driving. In fact, there has been a recent decrease in accidents caused by careless human mistakes," said Isogai.

" After migrating to the new system, we came across some minor issues, but we were able to resolve them by changing the settings of the OS, memory, and other parameters. We contacted Fujitsu support at the time and were delighted at how quickly we received a reply from Fujitsu Support Team with information on how to resolve the issue."

Murase (above)

"According to the person in charge, there are set goals for solving problems, such as the time it takes to get back to us after an inquiry and the time it takes to resolve the problem. Thanks to this, the level of support is high, and we are very satisfied with the comprehensive all-in-one support, which includes Fujitsu's cloud environment,"

Kazuhiisa Fujita

Senior Manager

Information Service Development Department, Transtron Inc.

The organizations that provide cloud-based driving services are now being asked to provide systems that allow drivers to concentrate on driving stress-free.

"These days, it is possible to obtain data such as blood pressure without contact, and the services that can be provided using this data are becoming more diverse. In our future transformation, we will continue to use Fujitsu Enterprise Postgres, increasing the number of system connections and aiming to provide customers with convenient and comfortable services," said Isogai.



Transtron Inc. and Fujitsu development department staff

Transtron Inc.	
Location	NMF Shin-Yokohama Building, 2-15-16 Shin-Yokohama, Kohoku-ku, Yokohama, Kanagawa Prefecture
Established	April 2, 1990
President and CEO	Mizuyasu Hayashi
Capital	1 billion JPY (6.6 million USD)
Number of employees	395 (as of March 31, 2020)
Home page	https://www.transtron.com/en/
Business summary	<p>Development, design, manufacture, sale, and service of various electronics products and related products in the following areas:</p> <ol style="list-style-type: none"> 1. Products related to improving the safety, environmental compatibility, and performance of automobiles. 2. Products that correspond to the advanced information technology of various mobile objects such as industrial machinery. 3. Products that apply automobile technology to various mobile objects.