

UPS Achieves +30% Increase in Development Speed with Accelario's All-in-One TDM Solution

With over 500,000 employees and annual revenue exceeding \$80 billion, UPS is a cornerstone in the logistics and transportation industry. However, the company faced significant challenges in managing its test data environments. Its in-house test data management (TDM) solution struggled to keep pace with the increasing demand for test environments and the need for frequent data refreshes. This bottleneck posed significant risks to development and testing workflows, and a negative impact on the quality of software releases.

The Critical Need for an Efficient Test Data Management Solution

UPS faced significant challenges with its existing test data management (TDM) system, which couldn't keep up with the growing need for more test environments. This shortfall led to slower development cycles and more defects in production as developers and QA teams often worked with outdated data.

The infrequent and cumbersome data refresh process severely hampered operations. For example, the QA team needed frequent and reliable copies of test data but often received physical copies that hadn't been refreshed in three years. This outdated data compromised the accuracy and reliability of their testing, resulting in less effective quality assurance and more issues in production.

On top of that, the development team struggled to resolve production defects efficiently due to the lack of reliable test environments. Fixing a production issue usually required working on a clone of the environment, but this only happened about once a month. The inability to quickly and frequently refresh test environments created bottlenecks, slowing down issue resolution and negatively impacting overall software quality and operational efficiency.

UPS needed a solution that could quickly and efficiently manage multiple test environments and refresh them frequently. The solution had to be cost-effective, easy to implement, and integrate seamlessly with their existing systems. Additionally, per the company headquarters, all had to comply with corporate regulations for protecting private data, especially in Test and Dev environments.

Unlocking Instant Value with Accelario's Agile TDM Solution

UPS conducted a thorough evaluation of potential solutions, including

Accelario's pioneering approach to test data management is a paradigm shift in the industry.

David Benzano,
Infrastructure & Technology
Manager at UPS



Solutions Used



Data Anonymization



Database Virtualization

Key Results

Monthly to Daily

Refreshed test data

+40%

Faster time-to-market

+30%

Increase in development speed

+50%

Decrease in Dev & QA bottlenecks

a proof of concept (POC) demonstration by Accelario. This demonstration, combined with Accelario's ability to meet all their requirements and offer additional benefits like database virtualization and data anonymization, led to the final decision to implement Accelario's solution.

Compliance with Corporate Data Protection Policy

Compliance with corporate data protection policy was critical for UPS, requiring any solution to adhere to stringent regulations to safeguard private data, especially in Test and Dev environments. Accelario addressed these requirements with its advanced Data Anonymization solution, automatically anonymizing sensitive data to prevent unauthorized access. The solution also offered robust encryption and access control mechanisms, ensuring full alignment with UPS's data protection policies. This integration provided UPS with the confidence that their data remained secure and compliant, allowing them to enhance their development processes without compromising on data integrity.

Ease of Use

One of the standout features of Accelario's solution is its user-friendly design. This accessibility meant that all team members, regardless of their technical expertise, could effectively use the system. The intuitive interface and straightforward functionality allowed for quick adoption and minimal learning curve, ensuring that the transition to the new system was smooth and efficient.

Quick Spin-Up

Accelario's solution enabled UPS to quickly spin up new test environments, significantly enhancing their development processes. This capability allowed for more agile and responsive workflows, as development teams could create and refresh test environments rapidly to meet evolving project demands. This agility was crucial for keeping up with the fast-paced nature of software development and ensuring timely delivery of high-quality products.

Easy Integration

The seamless integration of Accelario's solution with UPS's CI/CD pipelines facilitated smoother and faster development workflows. This integration meant that the new TDM system could be easily incorporated into existing processes without requiring major changes. As a result, UPS could maintain continuity in its development operations while benefiting from the enhanced capabilities provided by Accelario.

Implementation Process

The implementation process was both straightforward and efficient, marked by clear stages of preparation, execution, and onboarding. During the preparation phase, the team focused on setting up the necessary infrastructure, including getting the servers ready, opening firewall ports, and configuring database credentials. This groundwork ensured that the subsequent stages would proceed without significant technical obstacles.

In the execution phase, the initial setup of Oracle virtualization was



Industry

Transportation & logistics provider



Headquarters

Atlanta, GA, USA



Company Size

>500K Employees

+200 Countries and territories served

Almost 2,000 Daily flight segments globally



Database Size

+5TB



Integrations

Oracle Database

MSSQL

completed in just a few days. Accelario and UPS teams worked closely together during this period, leveraging their combined expertise to address any issues promptly. This collaboration was key to the rapid and effective implementation of the solution.

The onboarding process was completed within 3 days, including overcoming minor issues with firewall ports. This quick turnaround allowed UPS to start benefiting from the new system almost immediately, minimizing downtime and disruption to their operations.

Vendor Support

Accelario provided exceptional vendor support throughout the implementation process. This support included on-the-job training, ensuring that the UPS team was well-equipped to manage the new system independently. The training requirements were minimal, underscoring the user-friendly nature of Accelario's solution. This support helped UPS staff quickly become proficient with the new TDM system, ensuring a smooth transition and ongoing successful operation.

Efficiency Gains

UPS experienced significant improvements in efficiency and productivity after implementing Accelario's solution. They were now able to manage the required number of test environments effectively, addressing one of the critical challenges they faced with their previous system. Additionally, the capability to refresh these environments as frequently as needed supported faster development cycles. This flexibility meant that development teams could work with the most current data, reducing the time spent on setting up and maintaining test environments and allowing them to focus more on development tasks.

User Experience

The solution greatly enhanced the experience for UPS's development and QA teams. By providing up-to-date and relevant data for testing, Accelario considerably reduced the number of defects that reached production. This improvement not only increased the efficiency of the teams but also boosted their confidence in the testing process. The ability to work with accurate and timely data meant that the QA and development teams could identify and resolve issues earlier in the development cycle, leading to higher-quality software releases.

Operational Improvement

Beyond efficiency gains, UPS also saw several other operational benefits from implementing Accelario's solution. Accelario Data Anonymization provided enhanced data security, protecting sensitive information within test environments. This security measure was particularly important given the increasing concerns around data privacy and compliance.

Accelario Database Virtualization allowed for the efficient management of multiple test environments, addressing a critical need for the development and QA teams. The data refresh capability enabled quick and easy updates of test environments, ensuring that teams always worked with the most current data.



Results

UPS overcame multiple challenges and achieved significant improvements in efficiency, productivity, and operational effectiveness by implementing Accelario's TDM solution. Accelario's user-friendly and quick spin-up capabilities allowed for more agile and responsive development processes, while its seamless integration with UPS's CI/CD pipelines facilitated smoother workflows. As a result, UPS saw a +30% increase in development speed and a +50% decrease in Dev & QA bottlenecks, significantly enhancing their overall operational efficiency.

Additionally, Accelario enhanced UPS's data security, and the ability to frequently refresh test environments ensured that teams always worked with up-to-date data. These improvements led to +40% faster time-to-market for new releases, reduced defects in production, and more streamlined operations, ultimately resulting in higher-quality software releases and improved business performance. UPS plans to continue leveraging Accelario's solution to further enhance its development processes and explore additional functionalities to support its evolving needs.



If there's one thing I've learned, it's that innovation thrives on collaboration and Accelario exemplifies this truth remarkably well. Accelario Database Virtualization and Data Anonymization solutions have seamlessly integrated into our CI/CD pipelines, allowing us to refresh test environments frequently and eradicate bottlenecks. Enhanced data security and compliance ensure we always operate with the latest information. This integration has not only elevated our software quality but also significantly boosted overall dev performance. Accelario's pioneering approach to test data management is a paradigm shift in the industry.

David Benzano,
Infrastructure & Technology
Manager at UPS



About UPS

United Parcel Service (UPS) is a global leader in logistics, known for its comprehensive services in package and freight transport, international trade facilitation, and advanced technological solutions. Committed to innovation and excellence, UPS sets the standard in the industry by efficiently delivering goods worldwide while promoting social responsibility and environmental sustainability.