Automotive Industry Success Story

A top-notch development unit was going through hardships due to the dynamic nature of the application they were working on, technicalities involved with remote teams, and multiple database languages used, a mix of Oracle and MS-SQL as well as initiatives for PostgreSQL. Due to the need of acceleration the existing CI\CD processes every release became a cause for concern due to crashes, bugs and down-times. They needed to find a way to accelerate releases while at the same time maintaining high quality standards and minimizing downtime.

The Company

A Global 100 company, a leading automobile manufacturer which has been pioneering transportation for over a century. In 2018 the company employed over 150,000 people and had revenue of over \$100B.

The Challenge

The company's Global Purchasing and Supply Chain (GSPC) contains the Purchasing, Logistics and Quality groups responsible for the procurement of parts, equipment and services for operations in Europe, Asia, Africa, and the Americas. This application sources the above at the best possible prices, while ensuring efficient deliveries and optimal product quality.

However there were some significant issues the developers were facing:



- Development developer and DBA overhead due to many database schema and meta-data changes which caused delays in the releases and the quality of the releases, requiring excessive fixes.
- Ops and releases application downtime caused by database-related errors
- Undetected security loopholes caused after every release
- Lack of visibility when it came to remediating problems

With the automobile industry becoming extremely competitive in the last decade, the company simply couldn't afford hiccups in a system which could accurately be defined as the backbone of its global operations. It's primary focus had become to find a sustainable method to generate safe, repeatable and auditable database releases with minimal technical hiccups.





The Solution

It was obvious that any feasible solution would need to oversee a unified automated release process that included the relevant permissions for the various teams and their ongoing activities across the globe. The automotive giant needed a comprehensive solution that could integrate with other tools such as Jenkins and their own proprietary mechanisms.

The search for the right solution was not easy, as many products had compatibility issues, while others didn't really help on the visibility front.

However, following a speedy evaluation process that yielded concrete results, DBmaestro's solution was implemented and the results didn't take long to arrive. Thanks to the smart automation, the bots and the drift detector of the entire release process, a wide range of actions can now be taken to ensure smooth delivery with minimal technical issues. Some of them include:

- Elimination of out-of-process changes
- Smooth enforcement of company policies and standards
- Flagging of potential issues in real-time for quick mitigation
- Creation of a seamless database delivery pipeline
- Minimizing friction from development to release



• The Result

Due to the speedy implementation and minimal maintenance involved, the developer onboarding process has been a breeze for the company's decision makers. The automobile company already has three DBmaestro DevOps Platform systems in place – one test system and 2 production systems, which are located at different sites yet work seamlessly together with no issues.

The company also proactively switches between sites to make sure they are functioning properly and failover procedures are always in place.

With the Oracle side of things already covered, the company is now in the process of expanding the coverage for Microsoft SQL Server. The successful integration of DBmaestro's solution has also set up the foundation for other channels. Other divisions within this automobile giant are starting to look at this solution and prepare the ground for implementation.

The Bottom Line

A huge improvement in the repeatability of our releases, their quality and safety, which are now fully automated, and with the ability to have a well audited process to cover our compliance requirements, for optimal results, now the next phase is an expansion for further applications.



