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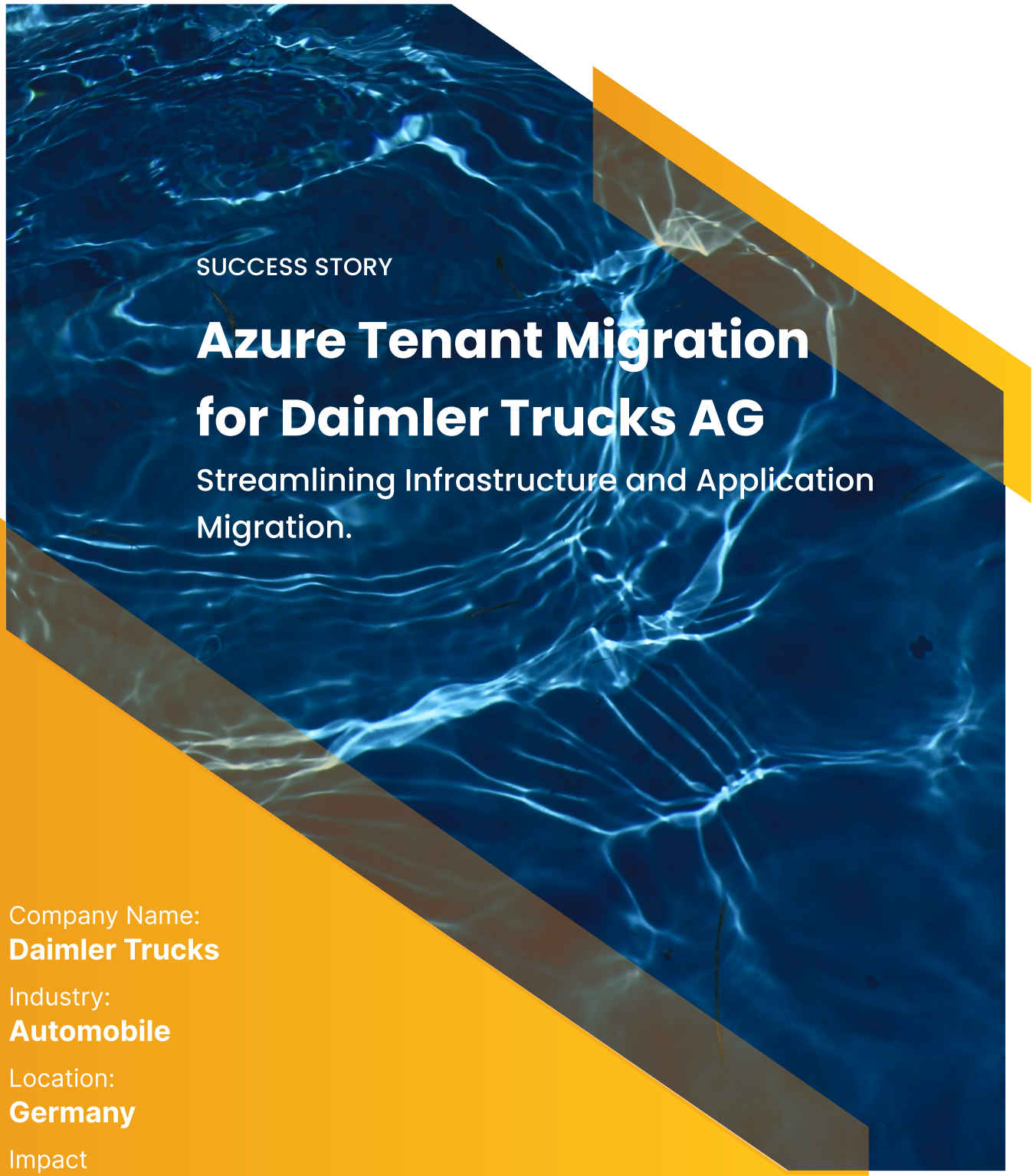

SUCCESS STORY

Azure Tenant Migration for Daimler Trucks AG

Streamlining Infrastructure and Application Migration.

Company Name:
Daimler Trucks

Industry:
Automobile

Location:
Germany

Impact
Efficient, Reliable and Scalable

Application
Azure

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Azure Tenant Migration for Daimler Trucks AG

A CASE STUDY

Streamlining Infrastructure and Application Migration.

Background

Following the separation of Daimler AG into Mercedes Benz and Daimler Truck entities, Daimler Truck required its own infrastructure and systems and needed to migrate its systems and applications from Mercedes Benz's (MB) Azure tenant to its own Azure tenant.

Challenges Faced

- **Techno-Functional Documentation**

  Techno-functional documentation was not readily available, requiring a deeper dive into the code level to define various integrations accurately. Subsequently, the documentation was updated to reflect these integrations, with any information gaps being documented separately for clarity.

- **Azure Infrastructure Versioning**

  The versions of Azure utilized were not up to date, posing potential issues as the current infrastructure was nearing the end of support. To mitigate this risk, collaboration with Azure support was initiated to resolve version conflicts and ensure the infrastructure's stability and security.

Our Approach

Efficient Azure Component Deployment and Tracking

The objective was to utilize infrastructure as code (IAC) for efficient deployment and tracking of Azure components, leveraging Terraform while challenges of the complex infrastructure with outdated configurations. Terraform modules were created for standardized deployment, and CI/CD pipelines were established for automation. A detailed data migration plan was executed with minimal downtime, ensuring all components were up-to-date and properly configured. Continuous monitoring and optimization were implemented to maintain system efficiency, ensuring enhanced version control, improved security, reduced deployment time, and seamless integration with existing systems.

Strategy

- **Infrastructure as Code (IaC) with Terraform:** Deployed infrastructure using Terraform, with all code stored in a central GitHub repository, enhancing traceability and resilience.
- **Resource Extraction:** We generated a comprehensive list of all resources currently deployed in Azure for each subscription, ensuring that no resources are overlooked during the migration process and helping in creating an accurate inventory for subsequent steps.
- **Identify Dependencies Between Resources to Determine Deployment Order:** Analyzed the exported configurations to identify every dependencies between resources.
- **Configuration for Specific Subscription Using Terraform:** Develop Terraform modules for each resource type. These modules serve as reusable templates that define the necessary infrastructure components and their configurations, facilitating consistent and repeatable deployments.

- **Automated CI/CD Pipelines:** Set up pipelines to automate the deployment of Terraform configurations, ensuring controlled and auditable changes. These pipelines streamlined the deployment process, enforced version control, and ensured that all changes go through a controlled and auditable process.
- **Zero Downtime Approach:** To minimize disruption, we first migrated all data up to the planned cutoff date to the new infrastructure, ensuring a substantial portion was securely transferred before any scheduled downtime. Sunday was selected for this operation due to application's lower activity levels, reducing user impact and migration was completed within four hours, successfully restoring all data with new connections.

Business Outcomes

Deployment Efficiency and Time Reduction

Infrastructure as Code significantly reduces deployment time. By adopting a modular approach and creating templates for resource types, deployment time for 100 VMs can be reduced to ten to fifteen minutes, minimizing risk of errors.

Better Traceability

Enabled better management and visibility of deployed elements via a centralized code repository.

Modernized Infrastructure

Transformed the existing infrastructure into a more modern, responsive, and future-proof setup.

ABOUT CUBASTION

Cubastion helps global companies run their mission critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across platforms. Some of the world's largest companies and Indian Public Sector Undertakings trust Cubastion to deploy services to drive new levels of performance, competitiveness, and customer experience.

Over 17 years, Cubastion has built solutions that impact over 500+ million people around the globe working in different demographics across different cultures. earn more about Cubastion at **www.cubastion.com**

Key Areas of Expertise Demonstrated

• Infrastructure as Code

- **Version Control:** Infrastructure as Code enables version control, allowing for better management of application changes.
- **Rollback Functionality:** With Infrastructure as Code, rollback functionality becomes feasible, providing a safety net for changes.
- **Improved Access Control:** Deployment through pipelines enhances access control, eliminating the need for individual-level rights modifications. Changes occur systematically through the pipeline, enhancing access control efficiency.

• Cloud Infrastructure Management

Showcased the ability to assess, document, and transform complex cloud infrastructures.

• Continuous Integration and Delivery (CI/CD)

Implemented automated pipelines for controlled and efficient deployment processes.

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