# PORSCHE INFORMATIK IMPLEMENTS NEW SOFTWARE-DEFINED DATA CENTER TO STRENGTHEN ITS DIGITAL LEADERSHIP

PORSCHE INFORMATIK

**CUSTOMER**
PORSCHE INFORMATIK GMBH

**WEBSITE**
WWW.PORSCHEINFORMATIK.COM

**INDUSTRY**
AUTOMOTIVE TRADE

**LOCATION**
SALZBURG, AUSTRIA

**CHALLENGES**

- Increasing complexity of processes and services due to trends such as connected cars or e-drive
- Enhancing time-to-market and slow provisioning of resources for software developers
- Securing the company's own IT system against increasing cybercrime maintaining highest security standards

**ACTION**

Supported by VMware software-defined data center solutions, Porsche Informatik was able to find a solution for complex challenges and to implement a technology ensuring flexibility and agility as success factors for the company in the future.

**RESULTS AND IMPACT**

- Securing leading position in automotive retail industry through a forward-looking, highly integrated IT concept
- Reduced time-to-market due to process automation and rapid availability of computing resources across locations
- Innovative security concept including latest disaster recovery systems and firewall system for the network

Porsche Informatik, a subsidiary of Porsche Holding, has been under the umbrella of the Volkswagen Group since March 2011, developing leading software solutions for the future of mobility. To face the latest digital challenges in the automotive industry, Porsche Informatik's IT infrastructure needed updating. Porsche Informatik chose to modernize its data center with long-term partner VMware. With VMware's Software Defined Data Center (SDDC) solutions, it were able to raise its IT infrastructure to a new level of performance. The network must be available 24/7 in 27 countries to make sure new cars can be configured, spare parts ordered, and logistics controlled. Based on VMware SDDC solutions, Porsche's network continues to be world leading.

Porsche Informatik GmbH, headquartered in Salzburg, Austria, has been shaping the digitalisation of the automobile business since the 1960s and considers itself a trendsetter and innovation driver. As a subsidiary of Porsche Holding and part of the Volkswagen Group, Porsche Informatik is responsible for developing and operating internal IT applications – whether services at the garage, online car configurators, or logistics of spare parts supply. The company's tailor-made applications create a clear competitive advantage for car dealerships, importers and financial service providers who rely on Porsche IT systems worldwide. The company's products – 160 complex software solutions – are available 24/7 for users in 27 countries on four continents. 570 employees at the locations in Salzburg and Vienna combine decades of expertise in IT and car trade with a holistic vision for the digital transformation.

## Challenge

Part of VW Group, Porsche Informatik is facing complex challenges. "E-drive, connected cars and autonomous driving: all new developments in the automotive industry increasingly rely on digital know-how – with growing pressure to succeed on Porsche Informatik software solutions," said Peter Friedwagner, Head of Infrastructure and Common Platforms at Porsche Informatik, as he described the market context. For this reason, internal processes needed to undergo a revision. From the IT management point of view, time to market for software products took too long. Provisioning time of IT resources for software developers in the business units was not ideal, waiting times had to be reduced in order to support and optimize solutions that are active in 27 countries.

IT security and availiabilty was another urgent priority on the agenda of Peter Friedwagner's team. The company infrastructure needed to maintain the highest possible security and availiabilty standards. Data center downtime would be a disaster: potential buyers would not be able to configure cars online

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PETER FRIEDWAGNER
HEAD OF INFRASTRUCTURE AND COMMON PLATFORMS
PORSCHE INFORMATIK

**VMWARE FOOTPRINT:**

- VMware vSphere®
- VMware vSAN®
- VMware NSX® Data Center
- VMware vRealize® Automation
- VMware vRealize® Orchestrator
- VMware vRealize® Operations
- VMware vRealize® Log Insight™
- VMware vRealize® Network Insight™

**APPLICATIONS VIRTUALIZED**

- Windows and Linux Application Servers
- Openshift Container Platform
- Oracle Databases
- SQL Databases
- SAP HANA

**PLATFORM**

- HPE Synergy Composable Platform (16 Frames)
- 100+ HPE Synergy Blade Systems (SYN480)
- 500+ Flash Disks for vSAN AllFlash Configuration

**PARTNER**

BECHTLE

and delivery of spare parts would be delayed. "Customers want to bring their car to service and it cannot be carried out due to a system outage - definitely a worst-case scenario," explains Peter Friedwagner. That's why the team wanted to address the following queries: How to improve infrastructure reliability? How to reduce downtimes to an absolute minimum?

In the era of digitalization and increasing complexity, software is the key element to drive innovation, creating new challenges for Porsche Informatik. The company was looking for a solution to handle larger capacity and additional requirements with the same number of IT employees.

## Action

VMware has been a trusted partner of Porsche Informatik for 15 years. Porsche Informatik was very pleased with VMware's approach and concept addressing the company's multiple challenges. Within just four months, a new VMware SDDC platform with computing, storage and network virtualization was implemented to meet the requirements of the future. Existing products from the old platform were brought up and running. In phase two and three with a duration of 12 months further components were migrated into the system.

With VMware vRealize Automation, time-to-market was significantly reduced. The cloud automation tool provides real-time test systems for internal and external developers. Infrastructure costs and manpower can be saved due to fewer tickets to IT administrators, fewer emails back and forth and shorter waiting times. Performance benefits of VMware SDDC were immediately visible.

"In order to meet the performance requirements and keep downtimes to a minimum, Porsche Informatik relies on the best and most flexible storage solution currently available based on hyper-converged infrastructures, VMware vSAN. This makes it possible to respond individually to customer requirements and meet Service Level Agreements (SLA). In addition, vSAN enables an autonomous disaster concept across different data center locations", explains Johannes Strasser, Virtualization Architect at Porsche Informatik. VMware NSX Data Center protects the IT systems from criminal hackers, being the preferred solution against "lateral movement" – internal spreading of malware to other systems. NSX enables micro-segmentation providing each virtual machine with its own firewall. The corresponding firewall rules were defined by VMware vRealize Network Insight providing detailed, graphically well-prepared analyses for the entire network.

vRealize Automation and vRealize Orchestrator increase efficiency by automating complex IT tasks and optimizing efficiency of service provisioning, operational management and IT agility. "Today, Porsche Informatik employees realize more projects in the same amount of time – and boost the company's productivity considerably," summarizes Gerald Nezerka, Team Lead Virtualization & Storage at Porsche Informatik.

## Results and Impact

The aim of the project has been to provide a strong foundation for Porsche Informatik's software developers and employees in order to drive digitalization of the automotive industry. With its georedundant structure, VMware solutions ensure availability of processing power at both locations. Bottlenecks have been eliminated and a high-performance and agile infrastructure is available 24/7. Increased system efficiency through automated processes balances growing demand for new software solutions.

"VMware solutions are the engine powering our infrastructure."

PETER FRIEDWAGNER
HEAD OF INFRASTRUCTURE AND COMMON PLATFORMS
PORSCHE INFORMATIK

With its advanced and smart solutions, Porsche Informatik is supporting Porsche Holding in maintaining its leading and progressive position in the automotive retail business. Investing in this new infrastructure means investing in new technologies to expand competitive advantage. This modernization project created a strong foundation for container as a service ,artificial intelligence, big data, or virtual reality.

Cyberattacks cost companies all over the world billions of dollars per year and the trend is rising. "As leading automotive retail group, we are the target of criminal hackers. That's why the innovative firewall concept as part of the VMware project was so important for us," explains Lisa Siegesleitner, Security Specialist at Porsche Informatik.

Peter Friedwagner takes stock of the entire VMware project: "In the long term, our main concern is to reduce complexity – and VMware solutions fit perfectly due to their high degree of integration. No other company was able to offer us this technological advantage."And he adds, "VMware solutions are the engine powering our infrastructure."

## Looking Ahead

Mega Trends in the automotive industry such as e-drive, sharing economy, connected cars and progressing digitalization require a flexible and reliable infrastructure foundation at Porsche Informatik. The Software-Defined Data Center is an important step in this direction. Further topics Peter Friedwagner and his team want to consider in the future are increase usage of container platforms and development of Porsche IT products in co-creation with customers. From an internal point of view Porsche Informatik wants to enhance its working culture with product-oriented, self-responsible team structures and innovative working environments.

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