“Our goal is clean and sustainable mobility. To achieve this, we are making the heart of every vehicle – the powertrain – smart and consistently electric,” says Andreas Wolf, CEO of Vitesco Technologies, about the mission his Regensburg-based company has defined for itself. The demand for sustainability is increasing. Vitesco Technologies delivers the powertrain technologies for it: clean, smart, and electrified. Headquartered in Regensburg (Bavaria, Germany) and employing 37,000 workers at around 50 locations worldwide, the company aims at playing a leading international role in vehicle electrification. To achieve this, Vitesco Technologies is pursuing a clear strategy focused on sustainability and living its company and brand values – passionate, fair, and pioneering. Vitesco Technologies was formerly a unit of Continental AG. Continental then decided to consolidate its expertise for powertrain technology in a separate company and perform a spin-off. The new company consequently had to stand on its own. This also affected the IT systems, which are key for the value creation of the company.

As a strategic IT partner, T-Systems supported Vitesco Technologies in building its IT landscape. In addition to management and operation of its SAP systems, this also involves the operation and further development of the Windchill PLM (product lifecycle management) system.

At a glance
- Spin-off: Fast provisioning of a separate PLM system
- The Windchill PLM system is critical for business operations
- Data cleansing
- Approved migration to the AWS cloud
- Full operation of infrastructure and application
- Application management and enhancements
- User-friendly architecture for fast data access
- Rapid realization with no need for investment
- Scalability
The challenge

More than 3,700 employees at more than 20 locations worldwide use the central system. The Windchill system from PTC is a highly customized system that supports the entire development process at Vitesco Technologies. It has to be reliably available from all locations. The company has used the existing system at Continental AG since starting its business activities. But – due to legal requirements for the spin-off – that had to change: Vitesco Technologies needed its own PLM system. The company wanted this to be run in the AWS cloud. There are several reasons for this strategy: Firstly, the new company wanted to avoid investments into its own infrastructure as much as possible and purchase the IT as a service instead. Secondly, the system was needed quickly. Thirdly, Vitesco Technologies wanted to have the option of scaling the system to be able to react to future business developments quickly. The company was looking for an experienced partner for the migration, operation, and further development of the system – one with AWS cloud expertise, experience with operating PLM systems, and capable of providing solid support in the automotive environment.

The solution

Vitesco Technologies and T-Systems agreed on a gradual approach for the journey to a separate PLM system in the public cloud. Initially, Vitesco Technologies was provided with a 1:1 copy of the on-premise system running at Continental, to commence its business activities. In the second step, the project team cleansed the database. The database now only contains the relevant data for Vitesco Technologies, but still includes millions of parts and descriptive documentation. PTC only certifies one database vendor for installations of this magnitude: Oracle. Based on the previous experience of Vitesco Technologies and the support for Oracle databases, the system was migrated to AWS (Amazon Web Services). Vitesco Technologies now provides the infrastructure capacity through its own AWS account. T-Systems delivers the full managed service of both the AWS resources and the PLM system running on the AWS cloud. A lift and shift approach is being used for the data transfer. The PLM system is provided failsafe, from two availability zones of a European AWS region. Since the system also has to stage extremely large files (including CAD drawings), the development units at Vitesco Technologies in North America, Europe, and Asia each have their own (regional) vault systems in the cloud, to provide rapid data access. This increases user-friendliness. T-Systems will not only take care of operations of the full system, but also of the application management, which includes service desk (with tickets and SLAs), maintenance, monitoring, optimization, release management, system tuning, and data backups. T-Systems will also coordinate development services for the ongoing customization and further development of the PLM system. With additional end-to-end responsibility for the SAP systems, T-Systems will also ensure seamless integration between the PLM system and the SAP systems, to transfer the requirements to production.

Customer benefits

By moving to the AWS cloud, Vitesco Technologies not only got its own PLM system off to a quick start, but is also capable of scaling it at any time, in line with business development. No capex for proprietary infrastructure is needed. The system architecture delivers an excellent user experience for the developers, with low latency. Proven migration procedures enabled the smooth transfer of the system to the AWS cloud, enabling the developers to avoid any interruptions in Windchill operations. T-Systems supports the entire value-added process at Vitesco Technologies – from development to production. Vitesco Technologies not only benefits from T-Systems’ experience in operating PLM systems, but also from their profound SAP expertise. Since they also run the SAP systems, permanent integration and robust cooperation among the central systems are guaranteed.