

P&V Elektrotechnik eliminates delays from its projects

P&V Elektrotechnik, a Belgian engineering and assembling company processes huge amounts of data during its digital manufacturing operations. Each manufacturing plan requires numerous interactions with the database and file server, that caused numerous delays. Thanks to Huawei's solution, this is not a problem anymore.

Background

P&V Elektrotechnik is the largest independent electronic panel builder in Belgium. The company produces both customized and standard products for industry, utilities, OEMs, system integrators and installation companies. For example, P&V Elektrotechnik recently provided 4,500 switch panels to Infrabel, manager of the Belgian railway infrastructure. The panels are being used, among other things, for the new European ETCS train control system. Other projects have included Nike's new European Logistic Campus distribution centre in Laakdal, Belgium, that coordinates logistics between some 200 factories and 200,000 delivery addresses, and the Princess Elisabeth Antarctica "zero emission" research station, where P&V Elektrotechnik managed the power supply of solar panels and wind turbines.

Key Challenge

P&V Elektrotechnik's R&D department has been making its production processes more automated and efficient in its evolution to Industry 4.0. For instance, digital plans permit interactive feedback, enabling the engineering team to plan in advance. The company also built a cabling robot to automate the wiring process of industrial switch panels. The engineering system gets all its information from the Enterprise Resource Planning (ERP) system that is integrated with the component catalog.

The previous IT infrastructure relied on a 10/100 Mbit/s network and a single non-redundant data centre. Due to the high number of interactions between the database and the file server, the engineering department encountered delays — up to 20 seconds to include a new component in the plan — that was unacceptable, since a plan usually contains hundreds of components. Speed had become an issue.



Customer

P&V Elektrotechnik

Industry

Elektrotechnical Engineering

Huawei Solution

S5700 series gigabit enterprise switches (S5700) are energy-saving switches that meet the demand for high-bandwidth access and Ethernet multiple-service aggregation. The S5700 is used in various enterprise network scenarios. For example, it can function as an access or aggregation switch on a campus network, a gigabit access switch in an Internet data centre, or a desktop switch to provide 1,000 Mbit/s access for terminals. The S5700 is easy to install and maintain, and reduces the workload for network planning, construction, and maintenance. The S5700 provides high reliability, security, and energy conservation technologies that help enterprise customers build next-generation IT networks.

Business Needs

Redundancy and faster network

Results

- No system delay
- Uptime close to 100%
- Limited need for management, allowing more focus on the business

Erik Diris, ICT Manager: "IT plays a major role in our company because we have embarked on a business-to-IT alignment process. We can't afford to have the system break down any more. We also plan to invest heavily in our ERP system. At the same time, we wanted the best possible uptime and decided to invest in a new data centre and a new network."

Case Study



Solution

P&V Elektrotechnik selected a Huawei network system with two server rooms in active/active configuration. Records stored on the primary data centre are simultaneously mirrored on the second data centre (featuring a nested, or "hybrid" RAID10 level, with VMware). This virtualization software provides the necessary redundancy. Every switch (total of four) is connected to each core. A core is one side of the system and consists of a server (24 CPUs, 198 GB ram) and a SAN. This enables a speedier network and a significant reduction in response time. The architecture was built in co-operation with Data Unit, an integrator of network and security. The rollout took a mere day and a half, thanks to good preparation. The employees didn't even notice it.

Erik Diris: "I had invited several renowned communications companies to submit proposals for this project. Our partner, Data Unit, introduced us to Huawei, drawing our attention to the fact that major local telecom operators also use Huawei solutions in their own Big Data centres. From these trustworthy references, it was clear Huawei delivers and provides real value for money."

Customer Benefits

Installation took place in 2013 when the new ERP system went live. The system has now been operating for two years, and P&V Elektrotechnik has become a showcase of the advantages provided by the Huawei solution. Speed, redundancy, uptime, and management... everything is running smoothly.

According to Erik Diris, the greatest benefit is the IT department no longer has to deal with sour faces from the engineering team. When performing queries or storing data there are no delays. A project used to suffer an average delay of one and a half hours that is no longer the case. Infrastructure is not the limiting factor anymore. System monitoring shows that the system load does not exceed 10 or 15 percent, while network and server uptime is close to 100 percent.

What's more, users don't experience any inconvenience, even when an external failure occurs.

"The entire system and the infrastructure don't require much management. Upgrading and configuring the switches is easy, freeing up more time for the IT department. This allows them to focus on the business and users' needs."

Erik Diris, ICT Manager P&V Elektrotechnik

Case Study



About Huawei Enterprise Business

Huawei Enterprise Business Group ("Huawei Enterprise") is one of the three business groups of Huawei, a leading global Information and Communications Technology (ICT) solutions provider. Leveraging Huawei's strong R&D capabilities and comprehensive technical expertise, Huawei Enterprise provides a wide range of highly efficient customer-centric ICT solutions and services to global vertical industry and enterprise customers across government and public sector, finance, transportation, electric power, energy, commercial businesses, and ISPs. Huawei Enterprise's innovative and leading solutions cover network infrastructure, Unified Communications and Collaboration (UC&C), cloud computing and data centre, enterprise information security, and industry application solutions.

For more information, please visit: www.enterprise.huawei.com

About P&V Elektrotechnik

P&V Elektrotechnik was founded in 1986 and focuses on one core activity: the design and assembly of low-voltage industrial switch panels. P&V Elektrotechnik is the largest independent electronic panel builder in Belgium and currently employs 180 staff. P&V specializes in custom-designed panels for complex projects and made-to-order panels for OEM customers (for example, switch panels for Atlas Copco generators).

For more information: www.pnv.be

