Extreme networks

ŠKODA

Executive Summary

Industry

- Manufacturing

Environment

- 140+ backbone/distribution switches
- 3,400+ access switches
- 160,000+ ports

Technology Needs

- Multiple networks needed to be condensed into one, Reduce costs and increase efficiency
- Continuous uptime to power staff and vehicle manufacturing
- Ease of management via automation capabilities

Extreme Solution Components

- Extreme Fabric Connect™
- ExtremeAnalytics™
- Extreme Management Center™

Results

- Eliminated risk of unplanned outages
- Virtual networks can be created and configured in one hour instead of one day
- Time required for service outages reduced by 50%
- Mitigated financial risks associated with outages
- Multiple separated physical networks converged into one fully virtualized network
- Established single pane of glass network management

Digital Transformation Efforts Powered by Network Automation, Simplicity, Security, and Intelligence

ŠKODA AUTO, based in Mladá Boleslav, is a leading industrial enterprise in the Czech Republic and one of the oldest carmakers in the world. Today, ŠKODA AUTO employs over 30,000 people, operating as part of the Volkswagen Group for nearly 30 years.

Recently, ŠKODA AUTO deliveries have increased substantially, with an expanding product portfolio. As a result of growth and expansion, the company outgrew its network infrastructure.

Their previous network infrastructure was complex, with operations spread across its main manufacturing base at Mladá Boleslav, assembly plants in Kvasiny and Vrchlabi, and various remote branches and office locations. To cover all sites, ŠKODA collaborated with Extreme Networks and deployed Extreme Fabric Connect.

Extreme Fabric Connect eliminates risk of outages and disruption and provides network virtualization solution poised to drive stability and scalability.

Since the implementation of Extreme Fabric Connect in 2013, the network has not experienced any unplanned outages. ŠKODA has seen an increase in staff productivity and no disruptions to the production line.

The Extreme Networks engineering team worked diligently to implement Extreme Fabric Connect, virtualizing the network entirely. "We needed a stable infrastructure, so virtualization was a must. Our IT team had to have a way to deploy new services quickly," said Martin Polak, Coordinator for Network Planning at ŠKODA.

Network Enhancement

The network enhancement project kicked off with the first upgrade of the backbone network at headquarters, as well as a simultaneous migration to the virtual infrastructure. From there, ŠKODA expanded the cloud solution across the backbone network spanning the remaining branch locations, in addition to access layer switches in its data centers.

"Automation of many activities is driving better productivity of the whole IT team. As an example, data from screw drivers have to be stored for 15 years. There is no need to configure the network if such device moves throughout the plant, all is automated and secured."

Josef Saska, Head of IT infrastructure ŠKODA AUTO

Simple, Secure, and Intelligent Virtual Networking

Post-implementation, results were immediate. "We removed the strain on our network that was hindering business growth and performance of our applications," said Polak. "Our new Extreme infrastructure optimizes staff performance across all areas of business."

Using Extreme`s virtualization solution, ŠKODA has reduced time to market. The company is now armed with the ability to upgrade or implement new services with no maintenance windows. Today, IT staff can easily perform changes. Further, thanks to simplified maintenance, technicians focus on innovation-driven projects to facilitate continued growth while keeping the network fine-tuned. "Now we manage everything online, without service outages. We have improved the performance and morale of our IT staff, and now they are able to operate much more efficiently," explained Polak.

In addition, Extreme Fabric Connect has merged multiple disparate networks into one network with logical separation of services. As a result, the network is easy to manage from a single glass pane using Extreme Management Center. The risk of human error has been reduced drastically because of automated fabric provisioning. ExtremeAnalytics is helping ŠKODA to monitor application performance across entire infrastructure and helps to improve user experience. It allows them to eliminate unwanted applications as well as improve overall security via integration with other deployed security technologies like firewalls, security information management or mobile device managements.

Today, ŠKODA is in the perfect position to exceed their goals for business growth while supporting employees and delighting customers.