

## STABLE AND SECURE ENTERPRISE NETWORK ENHANCES THE PROSPERITY OF OMS COMPANY

COMPANY:

**OMS, spol. s.r.o.**

LINE OF BUSINESS:

production of industrial and designer lighting, design and implementation of complex lighting solutions both for interior and exterior

NUMBER OF EMPLOYEES: **1008**

### 2 Solution

- \* Comprehensive upgrade of the network core and data center
- \* Redesigning of the network access layer in administration and technological premises
- \* Securing the network – protection of e-mails and data transfers
- \* Building a Wi-Fi solution in the high-availability mode with permitted drop-out within 3 seconds

At present, the OMS Company is one of the leading lighting companies in Europe. Since 2008, it has employed four hundred people and almost doubled its revenues. In 2012, the number of its employees exceeded one thousand and revenues reached the level of 70 mil. EUR.

Similar rapid developments of companies are often accompanied by issues related to IT infrastructure. OMS Company was not an exception. In the second half of the last decade, the company IT did not meet requirements for security and smooth operation. What is more, it was not prepared for such expansion, which occurred in the following years.

### 1 Requirements

- \* To build a modern and stable IT infrastructure prepared for future development of the company
- \* To eliminate drop outs, weak throughput, and network response
- \* To protect company network from viruses and other harmful malware
- \* To ensure continuous production and operation of the company
- \* To simplify IT infrastructure management and disburden the IT department of labour-intensive and time-consuming maintenance

### 3 Results

- \* IT infrastructure, which supports business activities of the company and enables its operation without drop outs, and thus without administration and production downtimes
- \* Setup of conditions for effective automation and monitoring of production and logistics
- \* Elimination of threats in the form of virus-infected e-mails and presence of malware
- \* Improvement of the network response and throughput to increase comfort, labour efficiency, and productivity of employees
- \* Stability of the network enabling its administrators to focus on important tasks instead of troubleshooting of common problems

## Original state

Formerly, the original server room was located close to areas with water piping and the main water stop. This place had insufficient air-conditioning system and there was no possibility to connect to back-up power supplies and to ensure adequate arrangement for data backup.

The original design of the network was adjusted several times and amended by necessary components to extend it. Due to this process, the network was full of “patches” and

has not already provided suitable support for increasing demands of our customer. There were components in the network infrastructure, whose drop-outs might significantly influence the system functionality, or even cause collapse of the entire infrastructure. Time-consuming data copying and improperly designed data flows caused by narrow throats in the system, resulted in frustration of users. There were not only problems with the network throughput, but they involved also security of the entire network infrastructure, which faced many attacks from outside.



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**Ján Vacula**  
IT Manager of OMS

Overall bad state of the IT infrastructure negatively influenced company’s productivity. In the worst case, when a disc array in the server room collapsed, company faced huge data loss and inevitable stop of the production for several days. Not only because of slow responses at data accessing and copying process, but also due to labour-intensive and time-consuming cleaning of tens of working stations from malware, OMS management decided to radically redesign the network infrastructure.

OMS managers could not predict the rapid development of the company in time, when it was smaller by half compared to the present state. “We realized that the company needed a stable and reliable IT infrastructure, which would work almost without care and with minimum maintenance cost,” Ján Vacula, IT Manager of OMS says, “We saw a big potential in the solution by Soitron, as the designed infrastructure is so modern and stable that it is able to provide us with continual running of our production even in case of further expansion of the company.” A possibility to easily expand and adapt the infrastructure to future demands of the company was considered by OMS management a nice and appreciated bonus.

## SOLUTION

Soitron, which has completely rebuilt the hardware IT infrastructure of the producer of industrial and office lightings from Dojč, focused on fulfilment of these expectations. “From the beginning, we have used premium components, which are stable and do not require extraordinary maintenance and investment,” Maroš Rajnoch, Product Manager of Soitron, sums up.

### Reliably, carelessly...

At first, we started with reconstruction of the primary network infrastructure and data center in OMS. “New data center not only complies with strict safety criteria, but due to virtualisation it can be significantly more easily and comfortably managed,” Bruno Veselý, Account Manager of Soitron says. Tens of virtual servers were created on the disc array and three new HP servers, which replaced two previous ones. For instance, new information system recently implemented by OMS runs on twenty of them. Whenever it is necessary to launch a new application in the company, IT department just creates new virtual server,

which takes no more than several hours.

The architecture of the network, which is based on the high quality hardware from Cisco, is designed in a way that its drop-out does not influence running of the company and its continual production. "The network has no so-called "single point of failure", i.e., for instance, if the network switch fails, the operation of the company is not affected. Thanks to regular monitoring we are able to identify the problem and remove it within four hours as stated in our service contract," M. Rajnoch explains. Stability of the network is extremely important, as production equipment is connected to it, receiving instructions for its operation. Eventual drop-outs could then negatively influence smoothness of the production process.

### ...and securely

After new network infrastructure design, our specialists paid attention to security issues. The history showed that

the original software solution, serving for protection of important business communication channels, was not sufficient. It resulted in problems with virus-infected mailboxes and end stations. It was very complicated to exactly determine the malware spread and what enters and comes out the network.

"Firstly, we arrange the network perimeter, i.e., its periphery to prevent infiltration from outside," M. Rajnoch explains. New Cisco firewalls protect the network and enable effective and secure remote access to the company applications or data, when a company manager wants to work from home or during his/her business trip.

In the second stage, we implemented application gates Cisco IronPort, which control and secure e-mail and web communication. Our customer had an opportunity to try the equipment free of charge prior its installation. As they were satisfied with high efficiency of catching the threats, they decided to buy proposed solution.

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**Maroš Rajnoch**  
Product Manager of Soitron



## USED TECHNOLOGIES

- \* Storage: HP Storagework P2000
- \* Servers: 2x HP ProLiant DL358 G6, 1x HP ProLiant DL380 G7
- \* Back-up Library: HP StoreEver MSL4048 Tape Libraries,
- \* HP DL380e Backup Server

### Management

- \* Cisco Prime Infrastructure
- \* Cisco Adaptive Security Device Manager
- \* Cisco Content Security Management Appliance

### Switching

- \* Cisco Catalyst 3750X w\ powerstack
- \* Cisco Catalyst 2960S

### Security

- \* Cisco ASA 5500-X Series Next-Generation Firewalls
- \* Cisco AnyConnect VPN Client
- \* Cisco Identity Services Engine
- \* Cisco Email Security Appliance
- \* Cisco Web Security Appliance

### Wireless

- \* Cisco 5508 Series Wireless Controller w\ High Availability
- \* Cisco 2500 Series Wireless Controllers as a guest anchor
- \* Cisco Access Points 2602
- \* Cisco Access Points 3502
- \* Cisco Outdoor Acces Points 1552

IronPorts enable OMS IT department to set various rules and access policies, for instance, assign or reject rights for access to specific web sites to a certain group of users. The equipment is fully autonomous – it is enough to set it once. No daily maintenance is required, which was found beneficial for disburdening IT administrators of the company.

In the last stage of IT infrastructure development in OMS, we built a wireless network in both administration and production premises. Due to the wireless infrastructure, employees may directly scan each components on site or in the production premises by special readers. This process makes the logistics more clear and automated, and the OMS management has anytime at their disposal the overview on what production phase the products are actually in. Interesting fact is that OMS Wi-Fi is the first customer's network built by Soitron in the high availability mode with allowed drop-out within 3 seconds.

“ The real benefit of our solution is securing the stability and smooth operation of everyday business of the company, concerning the production, sales, or R&D department as well. ”

**Bruno Veselý**  
Account Manager of Soitron

## ACHIEVED RESULTS

At first glance, the result of complex rebuilding of the company network and its data center in administration and production premises of the OMS Company is represented by new, modern IT infrastructure with high throughput, minimum drop outs, and resistance to external threats. “The real benefit of our solution is securing the stability and smooth operation of everyday business

of the company, concerning the production, sales, or R&D department as well,” Bruno Veselý adds.

A big advantage is also readiness of the data centre and company network for further modernisation of the

company, as, for instance, recent introduction of the new information system and wireless readers for monitoring of stock movement, and also for eventual future expansion of the company.



### OMS, spol. s.r.o.

OMS Company is one of the leading lightning companies in Europe. It is a designer and producer of industrial and designer lighting, and offers comprehensive solutions both for interior and exterior. Its products are distributed to more than 120 countries worldwide.

It is a modern company, which is a trend setter in the field of design, technology, and responsibility towards the environment . It is proud of its own development and research center, and internal department of design, which in combination with above-the-standard technical background enables the company to set new trends in the field of lighting.

The company OMS has been operating in the market since 1995.

**“It is not the great defeating the small, but rather the fast defeating the slow. Those with superior quality defeating those who lack it, the courageous prevailing over the cowardly.”** Vladimír Levársky, CEO OMS, spol. s.r.o.

[www.omsighting.com](http://www.omsighting.com)

## SOITRON\*GROUP

### SOITRON Group SE

The company has long been active in the European market as a systems integrator in the areas of IT Infrastructure, Unified Communications, Customer Interaction, Content Management, Security, IT Services and Outsourcing. Since 1991, Soitron has been helping companies such as Tatra banka, Slovenská sporiteľňa, Orange, E-On, J & T, Hewlett Packard and many others to grow their business. Its philosophy is to continue moving forward; that makes the company the leader in implementing unique technologies and innovative solutions. This is reflected in Soitron Group annual turnover of 108,9 million EUR in 2013.

The greatest reward for the company is customer satisfaction, but they truly appreciate official awards as well, for example Cisco Architectural Excellence Collaboration Partner of the Year 2013, Cisco Best Partner of the Year 2012, and inclusion among the Big Five in the Deloitte Technology Fast 50 (2011). Soitron has implemented several important projects in the commercial and public sectors – the most significant are Mobile Police Force for Ministry of Interior SR, Voice biometrics for Tatra banka and Air Traffic Control in Romania.

Company has currently more than 650 international experts, including professional teams in Slovakia, Czech Republic, Romania, Turkey, Bulgaria and United Kingdom.

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