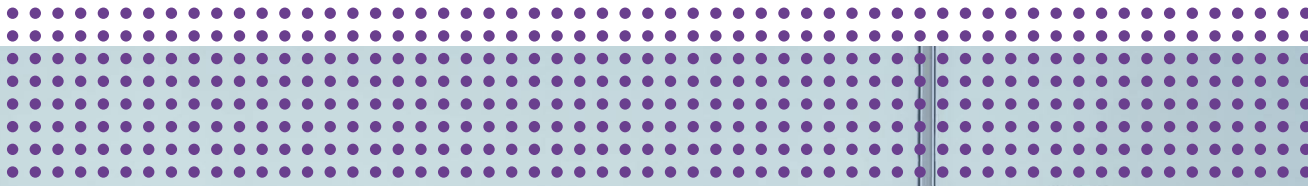




FLEXIBLE, FUTURE-ORIENTED HIGH SECURITY NETWORK

AT LEADING SWISS PLASTICS PROCESSING COMPANY



**RIWISA AG maximizes uptime and optimizes external network access
with "Auto Defending Network"**



RIWISA AG, a leading Swiss plastics processing company, has relied on an innovative communications infrastructure from Alcatel-Lucent for the past several years. Maximum security, full coverage with Wireless Local Area Network (WLAN) connections in the production area, improved external access to the network and increased uptime are among the benefits of this Alcatel-Lucent solution, implemented with the help of several Alcatel-Lucent partners.



CHALLENGES

- Provide high-security network with high flexibility
- Ensure that network is simple to supervise and administer
- Meet strict security conditions
- Work within limited budget
- Clear limitation of risk

SOLUTION

- Alcatel-Lucent **CrystalSec** Security Solution
- Alcatel-Lucent **OmniSwitch** 7700
- Alcatel-Lucent **OmniVista** Network Management
- Secured connection of Access Points to WLAN
- SSL VPN products from OEM partners Aruba, Fortinet and F5 Networks

BENEFITS

- High security
- Maximized uptime
- Flexibility
- Protected, future-proof investment
- Cost-effective solution

With a staff of over 300, RIWISA is one of the leading European manufacturers in the plastics processing industry. A family business with a pioneering spirit and innovative capability, RIWISA is situated in Hägglingen, Aargau, Switzerland.

The company operates worldwide in the areas of packaging and industrial products and the medical and pharmaceuticals sectors. RIWISA meets the highest demands with Class C clean-room conditions, enabling the company to match growing global competition in the medical sector. RIWISA is certified and its quality assurance and control processes provide seamless traceability.

NEW LEVELS OF SECURITY AND UPTIME

When it came to its in-house communications network, RIWISA applied that same innovative approach. Looking to achieve new levels of efficiency and security, RIWISA's management team decided to upgrade the company's existing mixed switch and hub environments to a new communications solution. Two important criteria in RIWISA's decision to implement an Alcatel-Lucent communication network were the high security offered by the solution, and its guaranteed uptime.

This was of particular importance for RIWISA AG, primarily for the connection between the computer center and the medical production area. Additionally, there was a further requirement for VoIP compatibility of the system.

For maximum security, an 'Auto Defending Network' was implemented at RIWISA AG. It's based on the Alcatel-Lucent **CrystalSec** Security Solution, and combines the Alcatel-Lucent **OmniSwitch** 7700 with a firewall from Fortinet, the Alcatel-Lucent **OmniVista** Network Management, Aruba WLAN, and a central SSL VPN Gateway from F5 Networks. The Open Standard Architecture (OSA) makes this combination of products from Alcatel-Lucent and its OEM partners possible.

A key to the success of this high-security solution is the OEM partnership. Aruba, F5 Networks and Fortinet are OEM partners of Alcatel-Lucent, which means Alcatel-Lucent can incorporate the strengths of these partners and at the same time provide a single solution from a single company. This approach also guarantees maximum flexibility, required in the course of the RIWISA implementation, and also a requirement for the relationship with RIWISA into the future.

The heart of the new Alcatel-Lucent solution at RIWISA is the computer center with a central server farm and an Alcatel-Lucent **OmniSwitch** 7700, with uptime of 99.999 percent. The central Alcatel-Lucent **OmniVista** Network Management operates as a management system for this and configures the components



and solutions of the other partners. The office and production buildings are networked over the existing glass fiber and copper cable. The shipping department has wireless access to the high shelving storage system via PDAs. All PDAs are specially authorized to have access to the high shelf storage (which queries hardware properties, among other things). All Access Points (AP) have a secured connection to the WLAN switch. Only from here is there a connection through the firewall to the internal network.

accessing an Internet banking solution), and they then have a protected FirePass SSL VPN Gateway from F5 Networks at their disposal. This box gets the authorization from the central directory service, after which an IP-VLAN is switched over the Fortigate-400 (IDS/IPS) via the Alcatel-Lucent switch. In so doing, an individual (layer 2 and IP-VLAN) network is released to this machine.

Flexible, but safe access to the network, both for the production and administration departments and for external partners and suppliers, was a primary goal.

If a hacker tries to get into the RIWISA company network, they end up in the Alcatel-Lucent Quarantine Network.

SECURE ACCESS FROM THE OUTSIDE

During the implementation, the wish was expressed for flexible, but safe access to the network, for the production and administration departments and for external partners and suppliers. Users can now access the company network from a computer anywhere in the world, following strict access authorization. Through a username, One-Time-Password (OTP) and certificate enquiry, visitors are authorized (similar to

An advantage of the Alcatel-Lucent solution is the so-called 'single sign-on'. Users are only checked once at logon and then obtain direct access to the IP-enabled machine they want – but only to that machine. Rule-based network access guarantees an unusually high level of security. Instead of the usual 'security on destination' (security check only on the target for the required server), the RIWISA system operates under a 'security on source' approach. The entire solution is based on the intelligent Alcatel-Lucent Operating System (AOS) of the switch. After identification, only that single server is available to the user. The Fortigate-400 Firewall plays an important role in this system; without it the solution would not be possible.



“The high security and 99.999 percent uptime gave the Alcatel-Lucent solution the edge.”

Stefan Geissmann, IT Manager at RIWISA AG

If a hacker tries to get into the RIWISA company network, they end up in the Alcatel-Lucent Quarantine Network. Unauthorized users are, in fact, enticed by a so-called ‘honeypot’ (a server with special software) and then banished to the Alcatel-Lucent Quarantine Network. They remain captured there, and their address is automatically registered.

HASSLE-FREE INSTALLATION

Although the project was very complex, conversion to the new solution took place seamlessly. As soon as the network was installed, the SSL VPN firewall was set up. After a further

extension, the installation was put into operation a few months after that. “The implementation ran in parallel, so that the administration and production operations were not affected,” says Stefan Geissmann, IT Manager at RIWISA AG. “The new solution could therefore be tested upfront, and it worked right from the start. In this project, extremely skilled experts were involved, and since the implementation we have had no breakdowns or problems with the network. The Alcatel-Lucent installation just keeps on running.”

The uptime of the company network was of crucial significance for RIWISA AG. If it is not guaranteed, this automatically causes a production stop. Uptime must be guaranteed, because of the traceability requirements, which should be in place 24/7.

Beyond the increases in uptime, Stefan Geissmann sees the biggest advantages for RIWISA in the new functionality, in the longevity and in the fact that the new solution is futureproof. “Flexibility really is a huge plus – and even monitoring the components is of great significance for our company,” he says. In addition, with the Alcatel-Lucent solution RIWISA also enjoys unrivalled value for money – a comparable high security solution at this price is simply not available on the market today.



Basler & Hofmann

BUSINESS PARTNER’S ROLE

Basler & Hofmann AG IT Communication – an Alcatel-Lucent Premium Business Partner – was in charge of project management at RIWISA AG. Stefan Geissmann has only praise for this company as well. “Even in the evaluation phase, we felt that we were understood and were very competently advised. We had confidence in them from the beginning.” After conversion to the new communication solution, Stefan Geissmann’s praise for Basler & Hofmann remains unchanged: “The support by Basler & Hofmann is as good as ever – everything requested by us was dealt with.”

BUSINESS PARTNER INFO

Basler & Hofmann IT Communication is a competence center for information technology, communications and security solutions. The company, based in Zürich, Switzerland and Esslingen, Germany, plans, achieves and operates company-wide solutions. Its close cooperation with leading manufacturers guarantees the high quality of its solutions.

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