

Customer Profile



Region: Austria

Branche: Education

Employees: 37 teachers & 300 students

Company

The Höhere Technische Bundeslehranstalt (HTL) Perg provides the subjects of data processing and organization, finishing with a qualification equivalent to A-Levels, and a technical college for IT. The school pursues a clear specialist orientation as a preparation for the later professional life of the students.

Initial situation

The HTL Perg was founded in 1999. The IT infrastructure was optimized after the move in 2007. For IT security, a solution was required which was easy to integrate into the existing Microsoft administration environment and easy to maintain as well as fitting in with the school's budget. The main focuses were on dealing with the hacking activities of the students and protecting them from illegal websites.

The solution and its benefits

The HTL Perg uses the SecureGUARD TMG950 appliance based on the Forefront Threat Management Gateway 2010 from Microsoft. All security features of the solution such as edge firewall, forward proxy (IP address- and user-based, i.e. with authentication), secure Web publishing, VPN access, IPS, malware inspection, URL filtering, monitoring and reporting are used.

The administration of the school works in a Microsoft environment. During user authentication, the TMG 2010 directly accesses the active directory. This saves time when configuring the firewall and minimizes the probability of errors. The convenient maintenance and administration features are a definite advantage.

Microsoft Forefront

Threat Management Gateway 2010: Security Solutions

The Enemy Within

"The students of today are the IT experts of tomorrow. Our IT security infrastructure based on SecureGUARD and the Microsoft Forefront Threat Management Gateway has to prove day in day out that it lives up to the inventiveness and imagination of the students."

Werner Schöller, IT manager of HTL Perg and teacher for network engineering and operating systems

300 young people aged between 14 and 19 are trained to be skilled IT experts at the Höhere Technische Bundeslehranstalt (HTL) Perg. The HTL in Perg is a higher technical college which can be completed with the equivalent of A-Levels or a technical college qualification and provides well-founded IT knowledge of immediate practical relevance. For the security infrastructure of this Upper Austrian training centre not far from Linz, this means being in a constant state of alert: in contrast to normal companies, which mainly have to protect themselves against risks and attacks coming from the outside, the danger at the HTL in Perg comes from the inside. This is because the inventiveness of the students knows no bounds as far as outwitting their school's IT system is concerned. It's quite a challenge for the security infrastructure too – the students of today are the IT experts of tomorrow, after all. The sparring partner of these sophisticated students is the SecureGUARD appliance based on the Forefront Threat Management Gateway 2010 from Microsoft. This reliably ensures that no damage can be done and that students cannot go beyond certain limits.

"The decision for a security solution for our training centre fell on the Secure-GUARD TMG series because there is no other security solution which can be integrated into our system so seamlessly, thus ensuring optimum protection."

Werner Schöller, IT manager of HTL Perg and teacher for network engineering and operating systems

Foto: HTL Perg



Industry in Upper Austria and the regional capital Linz prefer to recruit their IT experts from the HTL Perg. And for a very good reason: this training centre rounds up young technophiles of 14 and up and gives them a solid theoretical and practical IT training. This concept of the institutes of higher education in Austria followed by the HTL PERG has proved its worth for many years now: it gives the young people a good general education with subjects such as languages and mathematics, German or history. Then there is a main focus – at the HTL Perg this is chosen from the fields of IT, data processing and organization in the higher department. The students are given extensive knowledge of programming, IT and security infrastructures. The qualification acquired is either the technical college qualification or the equivalent of A-Levels, which gives access to advanced university studies.

The HTL Perg is therefore an important, highly qualifying factor for the local economy. "The local companies fight to get our graduates, often even preferring them to university graduates," says Werner Schöller, IT manager of the school and teacher for

network engineering and operating systems. No wonder, then, that his students have a level of knowledge comparable to that of university graduates as well as a lot more practical experience. Theoretically and practically, therefore, HTL graduates are anything but naive.

300 clever kids are a challenge for IT security

3½ years (or 5 years depending on the programme) are a long time for the approx. 300 students, and IT is their main concern. They are about 14 or 15 years old when they start. "It's amazing the nonsense they get up to with their notebooks sometimes," says Schöller with a sigh. But this "nonsense" is precisely what makes such high demands on the security requirements of the school:

"Whereas the manager of a normal company can safely assume that most of his employees don't necessarily want to do any harm to the company, the opposite is the case in schools," says Schöller to explain the situation. However, there is an unmistakeable undertone of satisfaction in his voice as he says this – after all, this "bad behaviour" is precisely what shows how interested and

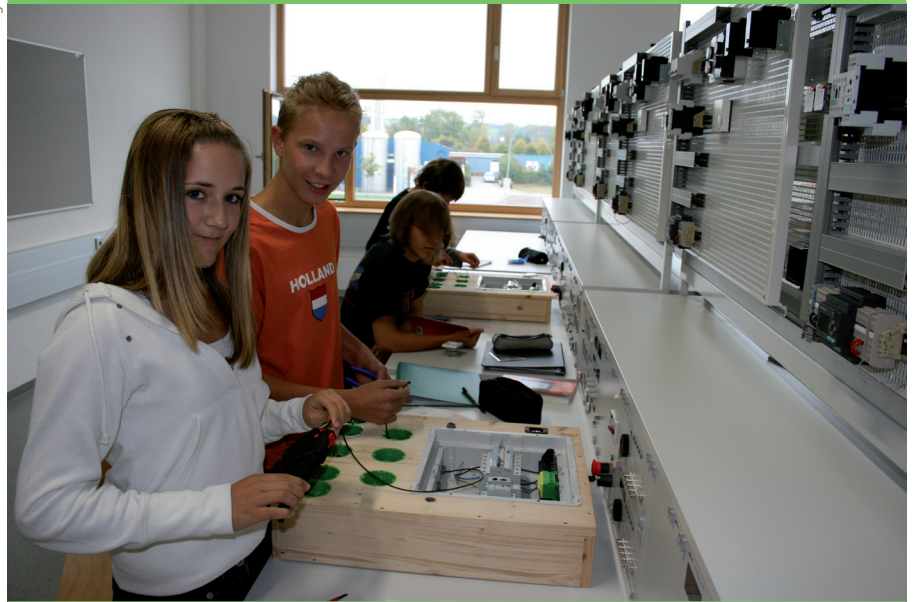


The technology in a nutshell

The Microsoft Forefront Threat Management Gateway (TMG) is the next generation of network security solutions from Microsoft and is based on the tried and tested technologies of ISA Server (Internet Security and Acceleration Server). As an integrated security gateway for the company network, TMG provides secure connections to the inside and outside, simplified maintenance and protection from numerous Internet-based threats. It functions as a Web gateway security solution which protects the company and its employees from Web-based threats and comprises a firewall, forward/reverse proxy scenarios, VPN, intrusion prevention, HTTPS inspection, malware inspection (antivirus), URL filtering and a number of other things.

All functionalities of the powerful Microsoft gateway TMG 2010 are "packed up" in an optimized hardware appliance from SecureGUARD. With it the customer acquires a pre-installed solution which is ready for use in about 15 minutes. It guarantees disturbance-free operation of the security solution without any collisions with BIOS, network components or RAID controller when updates are made as well as providing easy, convenient maintenance and administration.

Foto: HTL Perg



Höhere Technische Bundeslehranstalt Perg

committed they are. For example, if Thomas from 5b, Fabio from 3b or Daniel from 5b go on a hacking spree, it shows that they have been paying attention in the lessons. You see, there's nothing more exciting for the students at the HTL Perg than to circumvent the official security measures and infiltrate into taboo areas only accessible to teachers and not to students.

This constantly pits security at the school against the students. "We take this very seriously. Of course, the aim is not just to protect the administration from unauthorized access. As an educational institute, we are committed to protecting our students from political, pornographic or other illegal sites," Schöller stresses. Ansgar Heinen, Product Marketing Manager Identity and Security at Microsoft Germany, even welcomes this situation, considering it to be a kind of quality check for the firewall. "The students are the security experts of tomorrow, after all. Even today, they are experimenting with methods which will dominate the scene in future. Our solution can only profit from this."

Optimum protection and uncomplicated operation

The HTL Perg used to be called HTL Leonding, Expositur Perg, and was founded in 1999. In 2007, the new premises in Perg were completed and equipped with a high-quality IT infrastructure. A long time before the move, Schöller was already having a good think about this - and about security too: "We started planning the network and security infrastructure as early as 2005 in order to be really optimally equipped on the new premises." The classrooms are connected via future-proof Cat. 7 cabling. Each classroom has 24 to 36 workstations equipped with PCs for the lower grades. From the 3rd grade onwards, the students bring their own notebooks and connect them here. Over 1,000 network connections are distributed around the building.

In order to safeguard his school network, Schöller examined the solutions provided by a number of different manufacturers. The decision fell on an appliance from SecureGUARD: the TMG950, which works on the basis of the Forefront Threat Management

Further Information

Customer

HTL Perg
Werner Schöller
Machlandstraße 48
4320 Perg, Österreich
fon.: +43 (0)72 62 53 926
fax: +43 (0)72 62 53 926-6
email: w.schoeller@htl-perg.ac.at
www.htl-perg.ac.at

Microsoft-Partner

SecureGUARD GmbH
Industriezeile 35
4021 Linz, Österreich
fon.: +43 732 601440
email: office@secureguard.at
www.secureguard.at

Customer Relations

Microsoft Deutschland GmbH
Konrad-Zuse-Straße 1
85716 Unterschleißheim
fon.: 0180 5 672330*
fax: 0180 5 229554*
email: btob@microsoft.com

*0,12 Euro/Min., deutschlandweit



Further Success Stories

www.microsoft.de/kundenreferenzen

© 2010 Microsoft Corporation. Alle Rechte vorbehalten.
Namen und Produkte anderer Firmen können eingetragene
Warenzeichen der jeweiligen Rechteinhaber sein.

xxxx-xxxx-xx XX 08/10

Gateway 2010 from Microsoft. Apart from the feature allowing the connecting of branches, the school uses all security functions of the solution, such as integrated URL filtering on firewall level, VPN and forward proxy. The seamless, uncomplicated integration of the SecureGUARD solution into the existing Microsoft infrastructure of the school provided an important impulse for our decision. "For the purposes of user authentication, TMG directly accesses the entries in the active directory. This saves a lot of time when configuring the firewall and also minimizes the probability of faults occurring," explains Helmut Otto, manager of SecureGUARD GmbH. The customers were also convinced by the prompt commissioning and uncomplicated maintenance. "Microsoft provides us with most functions useful to us at a far more reasonable price than other competitors do," Schöller confirms. He openly advocates Cisco, which is why virtually all components in his computer centre are from this manufacturer. With the firewall, however, SecureGUARD won out in the end – for understandable

reasons, Schöller believes: "The TMG provides a lot of necessary functions out-of-the-box too, especially for the education field. This makes it an ideal, reasonable solution, and it integrates perfectly into the Microsoft environment."

Software and Services

- Microsoft Forefront
Threat Management Gateway 2010

Partner

- SecureGUARD GmbH

Features of TMG used at the HTL Perg

- Edge Firewall
- Forward Proxy
- Secure Webpublishing
- VPN Access
- Intrusion Prevention System (IPS)
- Malware Inspection
- URL Filtering
- Monitoring and Reporting
- Comprehensive service and maintenance package
- Software Assurance Service for Research & Training