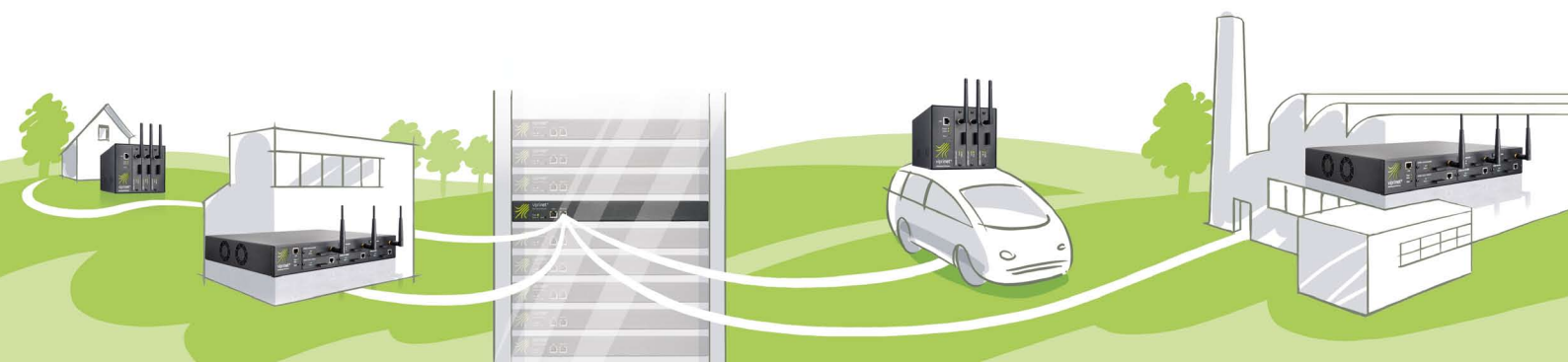viprinet®

CASE STUDY
RELIABLE INTERNET FOR STUDENTS

The THM Technische Hochschule Mittelhessen, formerly Fachhochschule Gießen-Friedberg, with its three campuses continuously attracts an increasing number of students. Especially THM's dual study programs offered by the cooperative StudiumPlus are very much appreciated. By enlarging the campus by three additional locations, the constant growth is met structurally. However, the interconnection of the new buildings and institutes posed a notable challenge. The transferred data is in part very sensitive and extensive, which is why the connection not only has to guarantee system stability but also encrypted data transmission and high bandwidths. At the same time, running costs should stay low. To meet all these demands with only one single solution, the Technische Hochschule Mittelhessen opted for the Viprinet technology.

OVERVIEW OF BENEFITS

- VPN encryption for safe data transfer
- Easy remote maintenance of the branch campuses
- Highest stability of the Internet connection
- Low running costs

THE TASK

Especially in the field of research and education, highly reliable internet connectivity is essential. Not only while researching but also during seminars and lectures, the Internet turns out to be the most important information resource. Above that, the predominant part of scientific communication takes place electronically. Thus, system stability, high bandwidth and data security thus were the most important requirements for the linkage of the three satellite campuses to the campus network of the Technische Hochschule Mittelhessen. Furthermore, the system had to enable safe secure remote maintenance of the individual locations. And finally, the used technology should help avoid high monthly fixed costs on behalf of the students.

IMPLEMENTATION

Due to the specific requirements of a campus network regarding stability and performance, the actual implementation was preceded by a testing over several months, which took place in the university's own computer center in Friedberg. There, a Multichannel VPN Hub 2000 and a Multichannel VPN Hub 5000 were installed and connected to a Multichannel VPN Router 2610 with two ADSL modules via VPN client. In the following months, the Viprinet technology was able to fulfill these requirements. As a result, the single satellite campuses were gradually connected to the campus network. For that purpose, one router per campus was equipped with two hot-plug modules for bonding two DSL lines, which ensured the required bandwidth for about 100 Internet users at each campus. Beginning in October 2010, the three networks were successively integrated on a monthly basis.

RESULT

Via the Viprinet technology, the three new branch campuses of the Technische Hochschule Mittelhessen could be reliably linked into the existing campus network. At the same time, data security is guaranteed by an encrypted VPN and an easy to handle remote maintenance via a computer center is also provided. Thus, THM students are now able to access their study material cost-efficiently at high bandwidth.