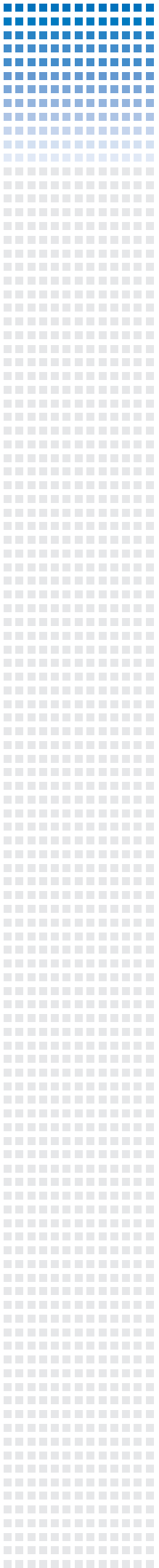


Xtera Successful Story of **Agrolab**

Xtera Communications, Inc. The Application-optimization Provider





Executive Summary

Agrolab depends heavily on VPN to deliver mission critical applications. Due to its rapid business growth, the company wanted to boost Intranet performance with effective and affordable ISP redundancy. AscenLink, the leading WAN traffic management solution, was selected for its unique tunnel routing feature, highest price performance ratio, constant reliability, and ease of deployment. With AscenLink, the company established a fully meshed and redundant network backbone to deliver fast, secure, and reliable network services.

Background

Agrolab, headquartered in Bruckberg, is an innovative leader in agricultural analysis services with more than 500 employees and many branch offices throughout Germany and Europe.

Challenges

Agrolab's contemporary laboratories depend heavily on the Internet, so that streamlining communications between the laboratories is significant to business success. The company planned to establish a load balanced and fault tolerant VPN environment between the headquarters and the three branch offices in Eching and Stuttgart, Germany and Deventer, Netherland.

The headquarters in Bruckberg deployed a 2-MBit SDSL line, a 2-MBit leased line, and a 6-MBit ADSL line to host business critical applications and provide remote offices with secure access to corporate data. Each of the three branch offices deployed a 2-MBit SDSL line to access the corporate network via IPsec VPN. The existing network infrastructure, however, was problematic in several ways:

Challenge 1: Poor VPN performance due to potential single point of failure

The R&D team in each branch office depended on the availability and reliability of VPN services to deliver critical analysis data and implement web-based mission-critical applications; however, the IPsec VPN suffered the risk of single point of failure, which could threaten business success.

Challenge 2: Limited bandwidth due to lack of bandwidth management

Since a variety of web-based applications were running over the Internet and sharing limited bandwidth without any prioritization and management. The availability of critical applications was not guaranteed.

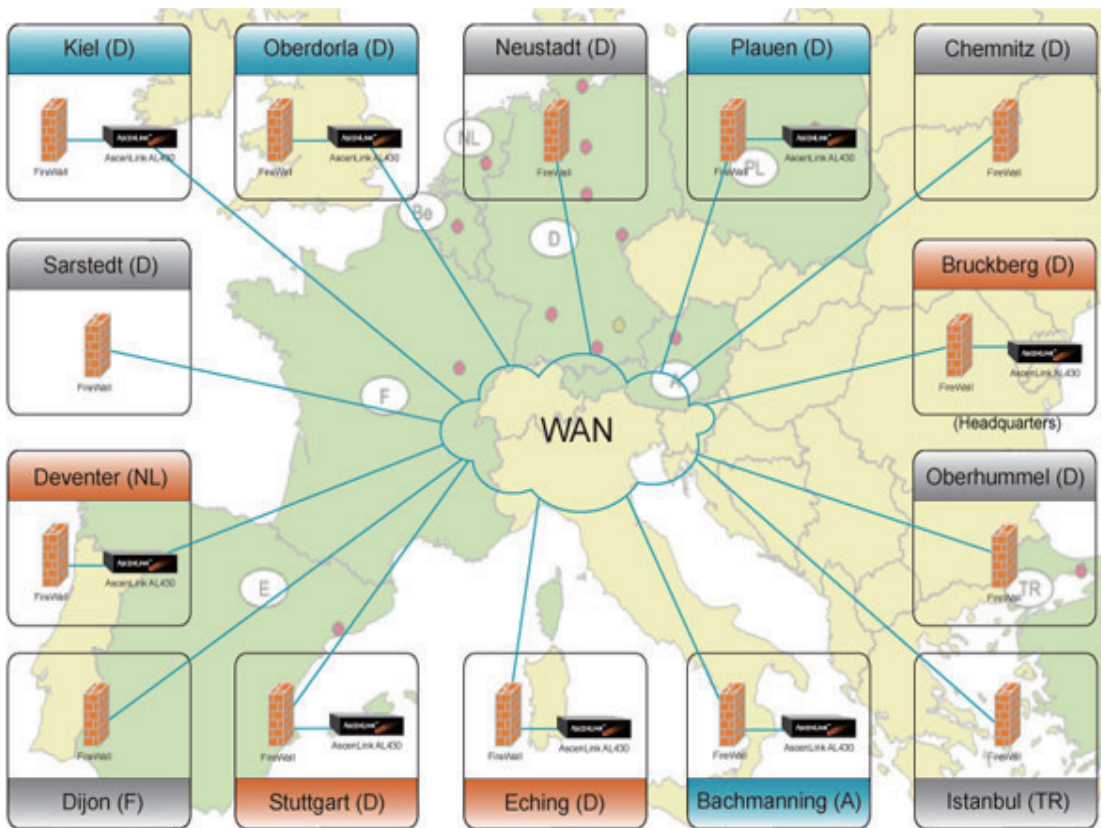
Challenge 3: High costs on network management and maintenance

Agrolab's branch offices are geographically dispersed around Germany and Europe. The company paid high costs each year for network management and maintenance to ensure the performance of the entire corporate network infrastructure

Solution

After extensive study on products of various network solution vendors, Agrolab chose AscenLink as the WAN optimization solution to boost WAN performance and provide remote offices with a fast, secure, and reliable Intranet environment.

As illustrated in the figure below, the company deployed an AscenLink unit in the Bruckberg headquarters to aggregate the 2-MBit SDSL line, the 2-MBit leased line, and the 6-MBit ADSL line for constant reliability and maximum capacity of the corporate network. The branch office in Eching deployed another 2-MBit leased line aggregated with the original SDSL line through AscenLink for VPN load balancing and fault tolerance. The branch office in Deventer added a 10-MBit leased line to expand the network throughput and boost mission-critical application performance. In Stuttgart, the branch office planned to deploy another WAN link coupled with the existing SDSL line and AscenLink to cope with increasing business needs. In the near future, Agrolab will deploy AscenLink at other branch offices to achieve total Intranet optimization.



Agrolab Network Topology



The specific configuration key points and benefits of the AscenLink solution are:

1. VPN load balancing and fault tolerance

AscenLink aggregates multiple WAN links from different ISPs in a single VPN tunnel to deliver inbound and outbound Intranet VPN traffic across multiple links. In the event of a link failure, AscenLink can automatically and transparently redirect traffic to available links to prevent service downtime. Furthermore, AscenLink automatically detects the recovery of the abnormal link, and then takes full advantage of all available links for maximum WAN link utilization.

2. Improved performance of mission-critical applications with expanded bandwidth and granular bandwidth management

Expanded bandwidth guarantees streamlines performance of Agrolab's jitter-sensitive applications such as voice over IP and video conference. In addition, AscenLink's flexible bandwidth management feature reserves sufficient bandwidth and assigns a higher priority for mission-critical applications. Moreover, AscenLink's granular control over inbound and outbound traffic enables MIS personnel to manage traffic based on service, user, IP, time, and grouping to improve efficiency of administration.

3. Fully meshed and redundant network

Deployment of AscenLink at all sites forms a fully meshed and redundant backbone for Agrolab, to provide branch offices, remote users, partners, and even clients, available and reliable VPN services.

4. Central management

AscenLink's central routing feature enables suburban or small branch offices to access the Internet via the gateway at the headquarters; MIS personnel at the headquarters can easily control and manage the Internet access of branch offices through resilient policy settings. Thus, the costs of WAN link deployment and maintenance expenses at branch offices are reduced.

5. Transparent deployment

AscenLink's transparent deployment mode enables Agrolab to seamlessly integrate AscenLink at the headquarters and each branch office without significant changes to existing network configurations, and consequently helps the company reduce costs and labor on network migration and maintenance.



Summary

“With AscenLink, our mission critical applications are delivered much faster than before. Besides, the central management solution helps us save significant network administrative and management costs associated with branch office IT support,” said the IT manger of Agrolab.

AscenLink enabled Agrolab to achieve a load balanced and fault tolerant Intranet and improve the performance of web-based mission-critical applications. The versatile functions helped the company achieve a robust and accelerated network environment with improved productivity while reducing the total cost of ownership.

Other benefits of AscenLink are:

1. Improved security level against network and virus attacks

AscenLink’s connection limit coupled with the network attack defense module can effectively block the bursting of subsequent connections possibly caused by virus or DOS attacks.

2. Comprehensive statistic and reporting tool

LinkReport, AscenLink’s companion reporting tool, is an offline traffic analysis tool to help network administrators fully understand network conditions, and make proper configurations for optimal network performance.

About Xtera Communications

Xtera Communications provides network solutions enabling communications companies to profitably deliver high-bandwidth tailored services at the lowest sustainable cost per bit. Xtera delivers value by combining sound business practice with compelling advantages in capacity, reach, simplicity and service. Further information is available online at www.xtera.com.

About Xtera’s IP Division

AscenVision Technologies was founded in August, 2000, and acquired by Xtera in October, 2007 and became Xtera’s IP Division. The IP Networking Division uses innovative L4-L7 WAN solution to provide comprehensive, world-class solutions for network management, security, and performance. Visit www.xtera-ip.com for more information.