



CASE STUDY

MAJOR UNIVERSITY'S NEED FOR HIGH PERFORMANCE CONTENT SECURITY IN COMPLEX NETWORK A STRONG FIT FOR ANCHIVA

With nearly 30,000 students and hundreds of faculty and staff, this major university with several graduate schools and multiple research centers recognized that an unprotected Internet gateway was a weak point in their IT security strategy. Since many of the faculty, staff and students use a web-browser to access the university's network from their own laptop, the university was unable to enforce the regular updates of desktop antiviral, anti-spam and anti-spyware software. Establishing a content security management system at the edge of the network became a priority to protect the university's data from users who may not have malware protection. Protection at the gateway eliminated all malware before it entered or left the network.

The university IT group had already deployed enterprise-class unified threat management (UTM) devices, which offered a firewall, network security and content inspection in a single device. However, they discovered that the UTM could not meet their requirements for content inspection at the Internet gateway. They began to search for a security system that could protect against spyware, viruses and spam without network performance degradation.

"The main problem areas with the UTMs were performance levels and traffic routing," said the IT director. "Another issue, but just as important, was the size limitations of the content security signature database. The capacity of the signature database was only a fraction of the known number of viruses and spyware. We were very concerned that the product's limited protection was leaving the students' and university data vulnerable."

• At A Glance

Principal Challenges

- **Students and faculty with laptops**
- **Enterprise-class UTMs unable to scale content protection at the edge**
- **Vulnerabilities from UTMs' limited viral signature database**
- **Two ISP connections with asymmetrical routing**

Key Benefits

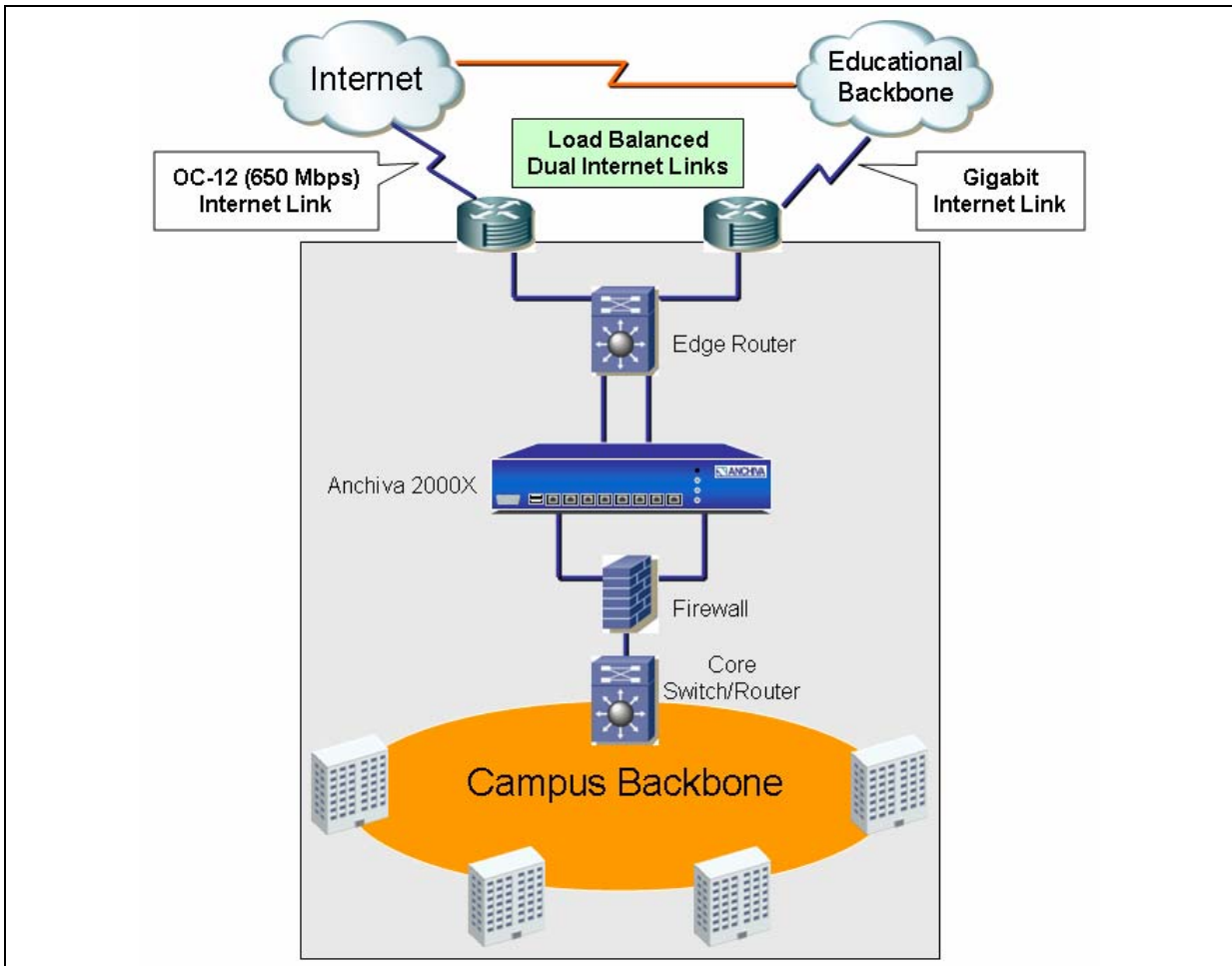
- **No viral or spyware infections**
- **Secures university's web traffic**
- **Session handling protects high volume traffic with no network performance degradation**
- **Easily manages complex network routing requirements**

Infection Prevention - First 30 Days

• Virus	7,660
• Spyware	1,448

To accommodate the bandwidth needs of tens of thousands of university users, the IT group was simultaneously managing two Internet Service Provider (ISP) connections, each 1 GB, which required asymmetrical routing at the network's edge.

“The UTMs we had purchased could not operate in an asymmetrical routing environment,” said the IT director. “It overwhelmed the two boxes, which we had purchased for scalability and fail-over redundancy measures. We were satisfied with the firewall capability, but found the content inspection feature couldn't protect the high traffic volume requirements at the network's edge.”



The Anchiva Systems Content Security Management System

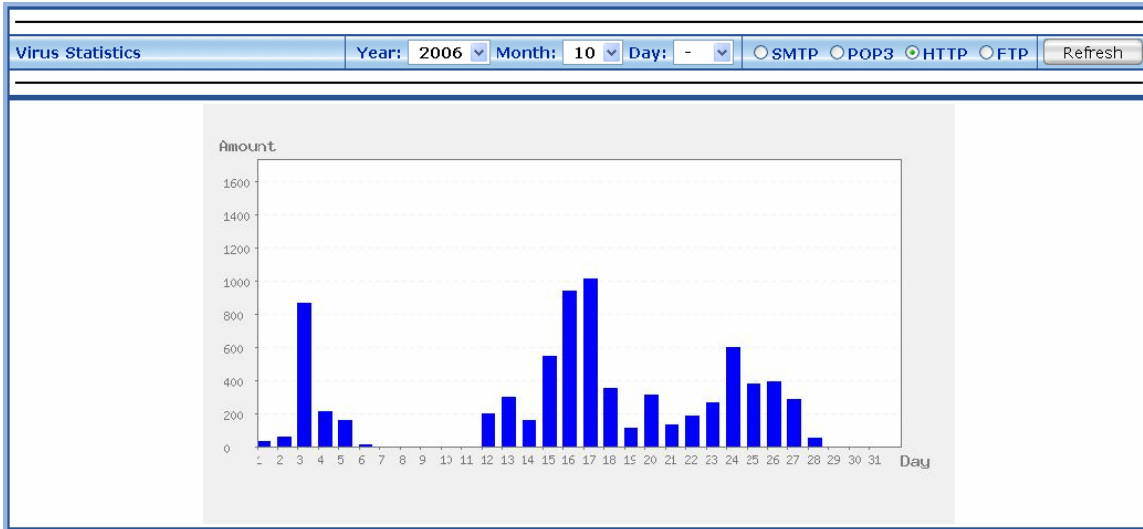
The Anchiva system's network routing features and its ability to protect 500-600 Mbps of Internet traffic in real time were attractive to the university. Anchiva completed all the pre-planning and configuration for the test run. Installed at the network's edge, the Anchiva system protects all Web traffic for students, faculty and staff across the campus.

To date, the Anchiva System has accomplished all the goals of the test run:



- No viral or spyware infections since installation
- No network performance drop
- Easily managing the asymmetrical routing with high volume traffic

[HTTP Virus Monthly Outbreak report]



[HTTP Virus and Spyware reports]

Total	7660	1.2 GB
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Top 10 Virus	Amount
trojan.qhost.he	1011
Trojan.Clicker-1	996
Trojan-Downloader.Win32.IstBar.pk	972
Generic.PUP.a.application	561
adware.bdsearch.ap	463
Trojan.PSW.Win32.Delf.w	408
Trojan.Downloader.Small-2322	363
Trojan.Downloader.Win32.Agent.ci	310
CompressionBomd.RAR	225
Trojan.Downloader.Adload-76	215

Total	1448	336.2 MB
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Top 10 Spyware	Amount
As.Trojan.trojan-downloader-asdbiz.biz	517
As.Adware.cnsmin	499
As.Adware.180searchAssistant	94
As.Adware.hotbar	87
As.Adware.HotBar	56
As.BHO.UnknownTrojan	34
As.RAT.UltraVNC	32
As.BHO.TopSearch	21
As.HackerTool.Flooder.AOL.Ikobur	17
As.Adware.winantispyware	15