

## Exinda helps Virginia's Bluefield College align with the newly defined Higher Education Opportunity Act while saving on bandwidth charges and ensuring high performance of critical applications.

Looking for a more affordable solution to replace Packetshaper, Bluefield College turned to Exinda to manage bandwidth allocation for application and internet traffic. Like all U.S. higher education institutions, Bluefield College needed to consider how to comply with components of the HEOA – namely to demonstrate a pro-active strategy to combating the exchange of copyright material on their network.

Located in southwestern Virginia, Bluefield College is a privately-funded higher education institution. Founded more than 80 years ago, the College sits on 82 acres of land, consists of 14 buildings, offers 22 majors of study, and provides on-campus living for half of its traditional students. The College embraces technology as demonstrated in its 10 computer labs across campus, wired residence halls, and the availability of video conferencing in a distance learning facility.

### The Challenge

Like many educational institutions, Bluefield College faces the challenge of providing academic and student bodies with unregulated access to the Internet while maintaining a high-performance network for academic and administrative applications. Adding to these challenges are students living on premises who, through proximity, naturally place large demands on the network. Student dorms providing internet access experience a high rate of recreational traffic driven by bandwidth heavy P2P traffic.

P2P traffic poses several challenges for Bluefield College:

- Guaranteeing adequate network resources to support the performance of critical applications
- Balancing an open-access-to-resource-philosophy while being mindful of the associated bandwidth charges (particularly important to privately-funded institutions)
- Ensuring that the College demonstrates its diligence in preventing the exchange of copyrighted material over the network

Having upgraded bandwidth from two T1s to 15 Mbps, and beyond the capacity of the Packetshaper, Bluefield College set out to find a solution that solved these complex issues, but was straightforward to

deploy, trouble-free to manage, and cost-effective.

### Network Overview

About half of the 400 traditional student body resides on campus, with another 400 adult degree completion students leveraging their curriculum remotely via the college's online resources. Having used Packetshaper in the past, Bluefield College had been able to segment bandwidth to provide administrative and academic resources with the dedicated bandwidth required to ensure performance of critical applications.

What was becoming increasingly obvious was that students living on campus were consuming disproportionate amounts of bandwidth by using BitTorrent and other P2P and gaming applications.

"Every two or three months it was something new," comments Annie Blair, assistant vice president for operations and infrastructure at Bluefield College.

"Streaming video and audio were saturating the network pipes. We can't and won't 'police' student activity, but there were just so many high bandwidth applications that we had to take action to manage network resources."

### The Solution

After conducting its research, Bluefield College chose to evaluate Exinda and a competitive product to get a sense of how they would stack up against one another.

"We quickly disqualified the competitive product based on the set-up alone," said Eric Wohlford, manager of network services for the College. "Like any educational institution, we have a number of VLANs set up to segment the students. This product couldn't recognize the segmentation and would literally force us to 'un-segment' our users. It simply wasn't going to work."

Exinda automatically recognized and conformed to the network configuration in use by Bluefield College. "This was huge for us," said Wohlford. "We simply put the Exinda box on the network and within an hour were up and running".

Simplicity and ease of deployment are cornerstones of the design and architecture of Exinda. Within 15 minutes of implementation, Wohlford was able to see what traffic was on the network and where it was coming from.

Policy-setting has ensured that academic and administrative traffic has ample bandwidth to perform without degradation and that student recreational traffic is managed, not controlled or policed. These policies help to prevent network saturation and greatly reduce the likelihood of illegal file exchange.

"As an IT organization it is our mandate to ensure the College abides by the Higher Education Opportunity Act," Blair said. "The Exinda box demonstrates our diligence in hindering any attempts to exchange copyrighted material on the network."

Moreover, should a file be called into question, Exinda arms the College with the ability to trace the source and destination of the file. Recognizing that many students are ignorant of the consequences of exchanging copyrighted material, Exinda reporting assists the College in tracking down the (often oblivious) offender prior to any legal action occurring.

"It's really peace of mind," remarks Blair. "Exinda reporting provides instant visibility. It's easy to use the drill-down capabilities to allow us to be as granular as we need."

With the network humming, there is no stopping this private college in Virginia. In fact, there is still room to grow. With the Exinda box in place, performance of academic and educational network traffic remains high, while remote and on-site students continue to leverage the network for education and recreation. Ultimately, Exinda allowed the College to leverage its bandwidth with such efficiency that there still exists plenty of capacity, ensuring no expensive bandwidth upgrade is needed in the near future.

### About Exinda

Exinda is a global provider of WAN optimization and application acceleration products. Exinda has helped over 2,000 organizations worldwide reduce network operating costs and ensure consistent application performance over the WAN. The Exinda Unified Performance Management (UPM) solution encompasses application visibility, control, optimization and intelligent acceleration – all within a single network appliance that is affordable and easy to manage.

To learn more about Exinda's award-winning solutions for enterprise, education and service provider clients, contact your local reseller or visit [www.exinda.com](http://www.exinda.com).



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