

BALDWIN WALLACE FIBER NETWORK PROVES PREPARATION IS PARAMOUNT

Existing Network Infrastructure Supports University's Model for Future Learning, Disaster Recovery

During a time when seemingly anything could happen, Baldwin Wallace University has proven that readiness and preparation really do pay off when normal is no longer "normal."

Located in Berea, Ohio, Baldwin Wallace is an independent, liberal arts and sciences university offering bachelor's and master's degrees, certificates and professional education programs. The University has 3,400 undergraduate and graduate students plus hundreds of faculty and staff members.

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Greg Flanik, Chief Information Officer
Baldwin Wallace University

Baldwin Wallace's needs have grown considerably since it first purchased a 1 Gbps connection from Everstream. After some trial and error, the University's network infrastructure now includes two 10 Gbps Point-to-Point Ethernet circuits, which connect to two separate data centers to form a redundant fiber ring, a third 10 Gbps Ethernet circuit delivers network diversity, and a Dark Fiber connection.

"Everstream was committed to making it right and, for our team, that's where the value and the trust was earned," said Greg Flanik, Chief Information Officer, Baldwin Wallace University. "They've been a great partner."

READY FOR TOMORROW'S LEARNING TODAY

Without question, the COVID-19 pandemic has shifted learning models across the educational landscape. While there is no one-size-fits-all solution, the HyFlex Model is gaining traction within higher education both to meet the immediate needs of faculty and students while also planning for methods to implement in the next three to five years.

"We're already looking at what happens post-COVID, and how we engineer our network and our infrastructure to accommodate this shift," Flanik said.



**Baldwin Wallace
University**
Customer since 2014

SERVICES PROVIDED

Point-to-Point
Dark Fiber

CHALLENGES

Lack of Redundancy
Disaster Recovery Planning

OUTCOMES

Diverse Connections
High Capacity

With the HyFlex Model — known for its hybrid or high-flexibility approach, courses are delivered both in person and online at the same time by the same faculty member. The instructor and students each can choose to attend class in person or join remotely from one class to the next.

“The idea is to design a classroom where an instructor can see both worlds — the virtual class and the physical class,” Flanik said. Professors interact with in-person and synchronous online learners through platforms such as Microsoft Teams or Blackboard Collaborate.

For the Fall 2020 semester, Baldwin Wallace engineered 15 proof-of-concept classrooms that utilize Everstream’s backbone to deliver these HyFlex learning services.

“These classrooms have an 86-inch interactive screen that the instructor can write and draw on, a master monitor to control the view of the class, a wall-mounted display so that in-person students can see their remote classmates along with touchscreen monitors to access our learning management platform,” Flanik explained. “There are cameras on both the instructor and the class, a microphone array on the ceiling and an integrated speaker system. Plus, professors can record the whole session for students to view later.”

The University now plans to scale the model to the more than 150 remaining classrooms across campus. This investment in technology allows BW the opportunity to expand its reach and better serve adult students, graduate students or corporate workforces.

“To facilitate these initiatives, you need a robust network to be able to deliver the product — and Everstream does that for us,” Flanik said.

PREPARING FOR THE WORST

Baldwin Wallace’s redundant network was designed to solve for several business challenges — ranging from the impact on day-to-day growth and operations to disaster recovery planning.

“Roughly 55% of the services we run today are cloud-based and

we host close to 200 virtual servers. These are robust systems — a lot of databases, infrastructure management services and research computing applications,” Flanik said. “The redundant connection solved for moving a number of key administrative functions to the cloud and for our plans to continue to do so. We needed to create the diversity.”

Baldwin Wallace’s admissions, human resources and payroll platforms are hosted in the cloud and its virtual desktop environment is next on the list to migrate. A single point of failure would prove disastrous to University operations.

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While Everstream’s proposed network solution resolved this known concern, it also provided a safeguard for BW’s disaster recovery plan.

“We previously had one data center on campus and built a mini data center on the other side of campus,” Flanik explained. “The thought was if one campus building was impacted, the other facility had us covered.”

When the University began to plan for disaster scenarios that could impact operations more significantly — the EF5 tornado that destroys both, for example, Baldwin Wallace’s administration decided it was willing to make the investment and partner with an off-premise data center.

“Now, we back up our production sites in real time — every hour — and run at 50% capacity each at our on-campus data center and off-campus disaster recovery site,” Flanik said. “If there is a failure on campus, we could roll the remaining 50% over to the other site and vice versa.”

This comprehensive network has performed well for the University and strengthened BW’s relationship with Everstream.

“I wouldn’t think twice about re-signing with Everstream,” Flanik noted.