NETWORKING 101

WEST VIRGINIA NETWORK (WVNET)

Leading the Charge in Collaboration and Network Innovation

"By deploying the first Cisco GENI Rack in the United States, WVNET has displayed thought leadership and is well positioned to attract economic development and secure future funding opportunities. I'm especially proud of how our staff rose to the challenge—demonstrating our engineering expertise and making West Virginia shine."

—Dan O'Hanlon,
Director of WVNET

Client Success Summary

Organization:
West Virginia Network (WVNET)

West Virginia NETWORK
www.wvnet.edu

Industry:
Higher Education
State/Local Government

Solution:
Global Environment for Network Innovations (GENI) Rack

ROI:
Enhanced collaboration and innovation, transformed service delivery, established thought leadership

WVNET Turns to *ePlus* for Its First GENI Rack

Organization:
+ WVNET is the West Virginia Network, a dynamic service organization providing telecommunications and computing services within West Virginia. WVNET was created in 1975 to provide central computing facilities and wide-area network communications linking its "central site" computing resources in Morgantown with the campus computing systems at most of the colleges and universities throughout the state. Today, WVNET has also grown to provide services for K-12 schools, government, and non-profit agencies.

Business Challenges:
+ Wanted to participate in GENI, a project sponsored by the National Science Foundation (GENI is a virtual laboratory that provides collaborative and exploratory environments for academia, industry, and the public to understand, innovate, and transform global networks and their interactions with society)
+ Sought to provide these capabilities to the research community, both within West Virginia and around the country

Solution:
+ WVNET, ePlus, and Cisco collaborated to develop the first GENI Rack based on Cisco technologies.

+ The WVNET GENI Rack includes:
  • Cisco Unified Computing System (UCS) and networking equipment
  • NetApp storage array (SAN)
  • GENI software provided by RENCI's ExoGENI project
+ ePlus provided installation and support services.

Why *ePlus*:
+ Expertise of staff and in-depth knowledge of next-generation networks
+ Experience serving state/local and educational entities
+ Status as a Cisco Gold Certified Partner and NetApp Star Partner
+ Ability to coordinate collaboration between all partners involved

Customer Benefits:
+ Provides unprecedented access to next-generation networking and compute resources— for WVNET constituents as well as research scholars across the country
+ Transforms service delivery and enables innovations in the areas of healthcare, education, and public safety
+ Displays thought leadership and positions WVNET to attract economic development and secure future funding opportunities

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In this issue:

WVNET BECOMES AN APPROVED GOOGLE GLASS DEVELOPER

Google Glass is a wearable voice activated Android computer with an optical head-mounted display, microphone and camera. WVNET's Media Services team is an approved Google Glass Developer. We have been given early access to this amazing new device and plan to develop educational applications for both students and teachers.

"I have been using Glass for about two weeks and have been very impressed with what it can do," comments Media Services developer Chris Reed *(pictured above)*. *"Google Glass is intuitive and easy to use. Setting up the device took less than 5 minutes. Voice recognition is very accurate. It can pair via Bluetooth with any smartphone to make calls and send text messages, but to access all of Glass's features you need the MyGlass app that is currently only available for Android."*

From getting instant access to lesson materials for students to helping teachers present those materials in more interesting and interactive ways, the potential of Glass for education is enormous. WVNET is exploring ways that we can leverage this cutting edge technology to improve education in West Virginia.

WVNET BLACKBOARD HOSTING AVERTS OUTAGE AT FAIRMONT STATE

Fairmont State University experienced an Internet and phone outage on November 20th. Fortunately Blackboard Learn 9, the learning management system that houses their online classes is hosted by WVNET. Students taking online classes could still complete their coursework from home and other non-campus locations. Because WVNET is hosting the Blackboard instance for Fairmont State University, students can reach their online class material independent of FSU's internet connection status. Using their home internet connection, students access their data housed at WVNET through its reliable, dual-homed network. WVNET has worked hard to provide a secure, redundant, dependable data center for FSU and all of higher education to host Blackboard and other applications.
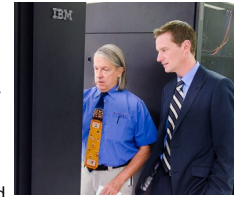
DELEGATE RANDY SMITH VISITS WVNET

Delegate Randy Smith *(District 53, Preston and Tucker Counties)* dropped by WVNET for a brief visit on November 21. Pictured above is Delegate Smith in the foreground and WVNET staff member Booker Walton in the background. Delegate Smith serves on the technology and government organization committees and has co-sponsored several bills coming from the education committee. Randy was born and raised in Terra Alta and still lives there with his wife, Patty. He has been a coal miner for 35 years and is currently a foreman. In an email to WVNET staff member Dianne Sisler after his visit, Delegate Smith said, *"Thanks, Dianne. I had a great visit and it was very informative. Tell everyone thanks and they were all great!"*

DEPARTMENT OF EDUCATION CTO STERLING BEANE VISITS WVNET

WVNET was honored to have a visit by Mr. Sterling Beane, newly-appointed CTO for the Department of Education (K12) in Charleston. Mr. Beane toured the WVNET facility and data center and met briefly with the general staff and managers. Quick overviews were provided of WVNET's wireless service, media services, web hosting and applications' services, help desk services, disaster recovery, email/office 365 services, purchasing services, and analytics service offerings. In an email to WVNET Director Dan O'Hanlon regarding his visit, Mr. Beane said *"I was very impressed by the level of expertise demonstrated by your staff in a wide range of areas. I was not aware of the breadth of your services offerings. They are a wonderful group and a great asset to the technology community in West Virginia."*

NO SHAVE NOVEMBER

Seven WVNET staff members participated in WVNET's first annual "No Shave November" beard growing contest. Congratulations are in order for Network Operator Tony White who won the contest. Director of Human Resources Bob Roberts reports that contestants completely shaved their facial hair on October 31 and were judged when they returned to the office after the Thanksgiving holiday. Web Designer Chris Reed was a close runner up while the rest of the contestants fell far behind.

Participating employees were: Michael Stern, Scott Hofer, Chris Reed, Tony White, Bob Roberts, George Tilko and James Wolff. *"The contest was all in good fun"* stated Bob Roberts, the event's organizer.

Editor's Note: Stay tuned for some type of calamity in December involving a "Rock, Paper, Scissors" competition also organized by Bob Roberts. Seriously, he's like a kid but we'll keep him anyway. After all, to quote Dr. Seuss, "Adults are obsolete children."

WVNET WRAPS UP SUCCESSFUL 2014 UNITED WAY CAMPAIGN

All We Need Is U was the theme of the 2014 United Way of Monongalia and Preston Counties campaign. WVNET is fortunate to live in a community that cares for its neighbors. The United Way of Monongalia and Preston Counties is working to create sustainable community change. United Way provides funding to support 52 programs at 30 health and human service agencies throughout Monongalia and Preston counties. Every dollar raised stays right here in Monongalia and Preston counties. United Way Employee Coordinator Fran Barnes wrapped up WVNET's campaign just in time for Thanksgiving and reminds everyone that a gift to United Way can really make a clear difference in the lives of others. Way to go WVNET!!

Fran Barnes

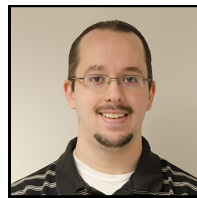*Follow @ wvnet*

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FROM THE DIRECTOR

December is a time for reflection on the year just ending. And it has been a wonderful year at WVNET. We saw the retirement of several long-time employees, but also saw several talented newcomers join us. We put on a wildly successful MOOC, several terrific conferences and built a GENI Rack. With the assistance of Senator Robert Plymale, WVNET has embarked on a huge Analytics project to help our schools and their students find the best path to a degree and help them finish school on time. WVNET spun up several Virtual Machines for schools and agencies who wanted backup versions of their critical servers. We set up a northern and southern data center for failover capability of our Disaster Recovery services. We began providing Managed Wireless services inside of many schools so that students, administrators and faculty could all safely bring their own devices to our network. And we saw several employees reach new heights of certification in their chosen areas of expertise. In short, it's been a great year at WVNET for both our employees and our customers. On behalf of all of us at WVNET, we wish you a Merry Christmas and a very Happy New Year! ~Dan O'Hanlon, Director

EMPLOYEE SPOTLIGHT—AARON DANIELS :)

Meet team member Aaron Daniels, Systems Programmer, in WVNET Systems. Aaron lives in Morgantown, West Virginia (Monongalia County) and has worked for WVNET and the State of West Virginia for 1 year and 7 months. He has a Bachelor of Science Degree in Computer Science and previously served as a WVNET Systems Specialist *Intern*.

Aaron provides primary support for our staff's desktop computers and helps administrate a number of staff-oriented resources. Aaron says that *"Even during my relatively short time at WVNET, technology has moved toward bring your own device (BYOD) and the cloud in a big way. The last figure I heard was that mobile computing like smartphones and tablets will make up the vast majority of computing purchases over desktop and laptop machines."*

Aaron enjoys reading and writing, Linux and programming. His desire is to expand his skills in Linux and Windows system administration, and never stop learning.

EMPLOYEE SPOTLIGHT—LAVONNE DOLJAC :)

Meet team member LaVonne Doljac, Accounting Assistant II, in WVNET's Business Office. LaVonne lives with her husband and four year old son in Uniontown, Pennsylvania, and has worked for WVNET and the State of West Virginia for 1 year and 3 months.

Some of LaVonne's main functions include maintaining the MyLeave System, management and payment of invoices, back-up of the receptionist/front office and assisting HR. She was previously a Network Operator with WVNET. LaVonne loves to read, bake and cook and likes to travel but doesn't get to do it often enough. She and her husband spend most of their free time playing with Superheroes, Play-Doh, Candyland, etc. --- whatever makes their four year old son happy.

Family is LaVonne's first priority but being loyal and dedicated to her job is very important to her as well. Her goal for herself is to be forever changing as their lives change. LaVonne comments she always tries to be friendly and positive and she strives to find new ways to do things when she can; she loves to learn and grow.