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TECH NOTES

Summer 2016
Our New CIO: Dikran (Deke) Kassabian

West Chester University is pleased to welcome the new VP and CIO of Information Services, Deke Kassabian. We sat down with him one on one to learn a little more about our new leader. Here is what he had to say:

Q: Can you tell us a little about yourself, and how you got into the technology field?

A: “Happy to! I’m a second generation American. My grandparents were all born in Armenia and came to the US early in the 20th century, so my parents were first generation Americans. They were both college graduates and emphasized the importance of education throughout our lives for both my sister and me. They helped to get my college career started, but I put myself through school most of the way by working as a computer programmer, server administrator, and network designer. With the help of those jobs, I paid for my education at Long Island University, graduating in 1986 with a degree in computational mathematics. I then went to Rochester, New York, to lead a small staff of information technology professionals at the University of Rochester. While I was there, I earned a master’s degree in electrical engineering and telecommunications. Some of my graduate work included the study of TCP/IP networking and sliding window protocols. In 1995, I moved to the Philadelphia area and began a career at the University of Pennsylvania - leading a team of network engineers and network designers. I spent 20 years at UPenn designing networks and online services and leading information technology teams. During my time there, I took on the management of numerous IT teams and worked on national projects such as the design, development, and deployment of the national high-performance research and education network, Internet2, which supports the scholarly activities of a few hundred of the top US universities.

During the last few years, I went back to graduate school to work on a doctorate in education. My dissertation was on Massive Open Online Courses (MOOC’s) and how early adopter universities were using them to reach even more learners and to create more digital learning content. I then began teaching at UPenn, Drexel, and Chestnut Hill College in the areas of networking, distributed computing, and operating systems. That leads me to May of 2016 when I joined WCU, and I am thrilled to be here.

Beyond my education and career, I also want to mention my family. I’ve been married for 28 years. My wife, Tacey White, is a PhD in toxicology and works in support of drug development within the pharmaceutical industry. We have three sons, Stephen (25), and Richard (23), who are both graduates of Kutztown University, and Michael (18), who is on his way to the University of Pittsburgh in the fall.”
Our New CIO: Dikran (Deke) Kassabian

Q: What drew you to WCU?
A: “WCU really is a great university, one that is on the rise in terms of reputation and ranking. I wanted the opportunity to work with the exceptional students and faculty here as a university CIO. I am thrilled to have that chance and to join a great leadership team here. The interim president and the cabinet have welcomed me and helped me to learn about the University and our goals. I couldn’t be more proud to be here.”

Q: What are you enjoying the most about our campus thus far?
A: “Much of what I do at this early stage is meet with people, since I am a brand new employee. This has been great fun, and the faculty and staff have been welcoming and generous with their time. I look forward to having more of a chance to hear from students as the fall semester begins. I have so much to learn in these early days.”

Q: Do you have any visions in the future of what you would like to see with our campus and our division specifically?
A: “I am really impressed with the IS division, and the technology deployments that have been made by the division already. So much is already in place, serving the university well. Going forward, certainly there will be new tech projects undertaken to address new challenges. Right now, we are in the process of deploying new CRM software and a new document management system, both of which should help people around the university to be more productive. Looking farther into the future, I will be studying our approach to Identity and Access Management (IAM); online authentication and authorization and the tools that help us to achieve those goals with improved security and convenience. IAM evolutions such as multi-factor authentication and biometrics, for example, may make sense here. Many people use these techniques already such as when you use your thumbprint to open your iPhone, or when you use security questions when logging onto a banking service. I also want us to be looking into online cloud services. Those are just a few things we will be studying in the coming months.”

Q: Is there anything you would like our readers to know specifically?
A: “I’m thrilled to have joined IS&T at WCU, and I’m grateful as the ‘new guy’ for all the help I’ve been getting from people within the division and around the university. I strongly believe that when smart, motivated technologists get together to solve problems and collaborate to develop new capabilities, there is really no limit to what they can accomplish. I’m very lucky to have gotten the chance to join the team here at WCU!”
Think back, if you will, to technology in the year 2005. Did we know what an “app” was? I think not since Google Play and Apple’s App Store opened in 2008. In 2005, social media was just emerging. Facebook was new on the scene and was restricted to use by college students only. AOL Instant Messaging was popular. Netflix was still a DVD-by-mail subscription service, YouTube had just come online and Hulu would appear the following year. The average person connected one device to the internet, probably a computer, as most still carried flip phones. (The first iPhone came on the market in 2007.) Remember those days?

Good times …
Now, fast forward to 2016. Today’s youth consider Facebook old [if Grandma is on it ... I’m outta here] and have moved on to Twitter and Instagram. Netflix began streaming video in 2007 and DVDs have become antiquated with the popularity of high definition video streaming. YouTube boasts over 1 billion users and Netflix over 81 million Netflix subscribers. Users now connect an average of (4) devices to the internet!
The pace at which technology has evolved and continues to evolve is astounding, and our demand has increased proportionately. We expect internet access where we want it, when we want it and as fast as we want it. Most of us don’t think about how this is made possible; we give no thought to the infrastructure which must be in place to accommodate our ever-increasing expectations. Consider the demands placed upon the internet network at West Chester University with 16,000 students connecting their average of (4) devices simultaneously and most likely streaming HD video. Not to mention 80+ computer labs, as well as on-line learning and a vast array of other devices also drawing on the network.
RamNet: The Evolution of a Network

WCU’s Networking Team have made it a priority to stay ahead of demands on the network while holding to the following philosophy:

- Technology is a key factor in a student’s selection process for higher education
- Campus constituents demand “best-of-breed” technology
- “Always-on” technology systems need to be a core mission
- Keeping data secure is essential to meet our objectives
Let’s take a look at the evolution of the WCU network infrastructure. In 2005, there was (1) campus data center to which all campus academic buildings were connected. All residential buildings were connected to a centralized core router in the basement of People’s Building. Each of these “hubs” had its own internet circuit providing a total bandwidth of 69 Mbps. There were less than 100 wireless internet access points which provided connectivity for wireless devices only in popular campus areas.

In 2008, we decided that always-on active/active data centers needed to be built to meet the future technology needs of our constituents. And so the network redesign began…

Today, eight years later, ALL buildings (academic and residential) connect (at 10Gbps) back to (2) active data centers (Bull Center and Allegheny Hall) which provide for all systems and services we deliver to our constituents (for example, myWCU, email, web).
RamNet: The Evolution of a Network

This network architecture redesign was accomplished over the course of eight years, which included upgrading fiber optic cabling to most buildings on campus as well as deploying network routers in every building and connecting ALL buildings back to both data centers.

In addition to the campus backbone, WCU’s internet circuits have also been upgraded to dual 10G internet connections. Compared to 2005, internet capacity on campus has increased by nearly 30,000% (20 Gbps)! Today, there are over 2,200 wireless internet access points (both indoor and outdoor) and all residence hall dorm rooms are now completely wireless!
RamNet: The Evolution of a Network

New VP for Information Services Deke Kassabian says, “Over the past few decades we’ve seen an evolution from very basic campus networks connecting a few hundred end-stations together to large, high performance and fault tolerant networks. RamNet today interconnects tens of thousands of devices to campus online services and services on the Internet. RamNet has become an essential element supporting teaching and learning, research, and administration at WCU.”

It has been a journey; a journey that began with something affectionately known as “ChanNet” named after the networking team’s visionary leader, Richard Chan. But even “ChanNet” has continued to evolve into a stronger, faster and redundant network.
RamNet:
The Evolution of a Network

Many kudos to the networking team for a job well done! Special recognition to Richard Chan, Kevin Partridge, Michael Hushen, Rashed Kabir, Trevor Beach, Dan Brader, Scott Martin and Skip Nelson who have invested many hours of creative thinking and hard work into the network redesign and implementation.
Accessibility refers to the design of products, devices, services or environments for people who experience disabilities. Since the Department of Justice published the Americans with Disabilities Act Standards for Accessible Design in September 2010 requiring that all electronic and information technology must be accessible to people with disabilities, the Information Services Division has been working hard to make electronic and computing resources and learning experiences accessible to all of the WCU community.

There are many projects that have contributed to this effort, including:

**Collaborative efforts with other campus partners:**

- Information Services with the ADA committee and Office of Services for Students with Disabilities (OSSD) developed a captioning policy for the CAPC committee to review.
- The D2L team supported the Office of Services for Students with Disabilities (OSSD) by developing an accessible and confidential D2L page where OSSD approved “captioners,” or note-takers, post notes for their assigned students. This allows those students to have a central location for accessible notes regardless of the course or semester they are in.

**Equipment and furniture provided throughout campus:**

- Technical Services implemented Listening Devices/Carts for Mitchell Hall to assist the needs of OSSD students.
- Main 168 is outfitted with microphones, special speakers and headsets for the hard of hearing.
- Accessible work areas are available in various classrooms throughout campus with adjustable podiums and screens for those who need them.
Campus Electronic Publications and student systems:

- The Web Team continues to follow Web Accessibility/ADA Section 508 Compliance when coding all WCU web pages. All new features added to the website are tested using different screen readers before implementation. Several different tools are used to check for various degrees of how pages might look to someone who has a visual impairment.
- The Web Team maintains a “text only” version of the website via a tool called Assistive Website by Usablenet. This text only version strips out all of the interactivity and styling of the web page which enables screen readers to read the page.
- Administrative Computing implemented the ability to change myWCU into ADA Accessible mode. Students and staff that are visually impaired can personalize the look and feel of myWCU so that it displays the screens in ADA Accessible mode. In ADA mode, myWCU functions much better with screen readers such as Voice Over for Macs and Narrator for Windows. Visually impaired students can now schedule classes without the need for assistance. myWCU is officially “ADA Compliant.”

Training:

- FAST Training classes include instruction on how to make web pages and images ADA compliant using Contribute, Dreamweaver, and Photoshop. A BYOL (bring your own lunch) Creating Accessible Emails will be offered on August 17th. This session will help you create email messages in Outlook 2013 that are accessible to all users. To register email fast@wcupa.edu.

Course design and materials:

- Faculty are provided with resources to have recordings closed captioned through third party companies such as Automatic Sync Technologies. These recordings are editable and can be made available in a variety of formats.

Overall, the Information Services division, together with the campus community, has a goal to help make the learning experience at West Chester University accessible for everyone.
Have you ever wanted to flip your screen?

http://www.180techtips.com/005.html

Probably not! BUT – it can be handy if someone scans a document and sends it to you sideways. If you try to view it with a program that does not have a rotate button, you will get a stiff neck looking at it!

From the same source, there are lots of tech tips:

http://www.180techtips.com/001.html

There are many clever ways to use Google – try them!


Instant news: https://news.google.com/
• The Faculty and Staff Training (FAST) unit supports WCU faculty and staff in becoming proficient in various applications, in addition to providing best practices in trending platforms (i.e. Social Media, D2L, RamCloud). Courses are designed to accommodate all levels of learning and are run in succession, allowing users to build on acquired skills. FAST staff also produces reference documentation to support the training initiative. Browse through the FAST Course Offerings to access information about the classes, as well as the corresponding documentation.

• View the Training Schedule for the current month. All training sessions are held in Anderson Hall, room 24

• For more information, please visit the FAST website: www.wcupa.edu/fast

• UPK (User Productivity Kit) Online Tutorials are tutorials for myWCU, Employee Self Service (ESS), 25 Live, RamCloud, and more. The tutorials can be found at www.wcupa.edu/upk. Or enter UPK into the search box on the WCU Homepage.
Tech Trivia:
Sponsored by the Student Services Inc (SSI)

The winner will be chosen at random from those submitting all correct answers to Dr. Fabrey at jfabrey@wcupa.edu within 48 hours of the appearance of this issue of Tech Notes. Prize will be determined and awarded by SSI.

For this issue, different technology strategies will be required to find answers that are NOT technological in nature. For example, try looking up related sites and/or using quotes around several words to make sure that they appear next to each other. Try using our Library Digital Archives.

1. JUST FOR FUN!! What is the only state in the United States that can be typed on one row of a traditional English QWERTY keyboard?

2. Did Bill Gates ever receive a degree from Harvard? If so, what was the year?

3. What two scientists established the Control-Alternate-Delete combination for use in “rebooting” the computer or changing the user?

Answers to the Tech Notes Spring 2016 contest: 1. Claude Shannon is the man known as the “father of information theory”; 2. The first IBM hard drive had a 5MB storage capacity and leased at $3,200 per month; 3. Ray Tomlinson decided to put the @ symbol in email addresses. Winner: Maria Aquino!!!
# Contact Information

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<tr>
<th><strong>IT Help Desk</strong></th>
<th>x3350</th>
<th>021 Anderson Hall</th>
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<th>x3350</th>
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## VICE PRESIDENT’S OFFICE

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<th><strong>Vice President &amp; CIO</strong></th>
<th>Dikran Kassabian</th>
<th>Donna Beckett</th>
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<td><strong>Special Assistant</strong></td>
<td>James Fabrey</td>
<td>Kathleen Barimani</td>
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## DIVISION CONTACTS

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<th><strong>Client Services</strong></th>
<th>Paul Gargiulo</th>
<th>x3397</th>
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<td><strong>Administrative Computing</strong></td>
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