Campus Network
October 11, 2005

Present: John Wold, Barry Pederson, Roy Beard, Tony Houdek, Jay Smith, Corey Quirk, Kevin Danielson, Brent Logan, Harold Bruce, Jeff Cox, Jing Wang, Brad Miller, Michelle Rakoczy, Josh Jones and Bonnie Jundt
Absent: Don Larson, Larry Fisk, Dale Ricke, Chad Gratton, Carl Warrene, Doug Osowski, David Belgarde, Karl Martin, Corey Shock, and Renetta Johnson

Minutes from Sept. 13, 2005 – Approved

McAfee Entercept
Steve Ristau, ITSS Systems Administrator, is the contact for McAfee Entercept. He has it installed on one server and will be installing on more as he has time. If anyone is interested, please contact him through the Helpdesk or ITSS Department.

BitTorrent – Harold
Jeff asked if BitTorrent is one of the peer-to-peer applications that is limited by traffic shaping. According to Kevin, it is limited with all other peer-to-peer traffic at 2.5 Mbps for campus and 2.5 Mbps for residence halls. Jeff said that it’s been impossible to get SUSE Linux 10 ISO from Novell because the high demand. One of the ways to get it is with BitTorrent but it is extremely slow. It is a 3.8 gigabit image and will take days. Even though flexibility with traffic shaping is technically possible, the way peer-to-peer applications work would make it difficult to manage. John said that Aerospace may have the file and would open it up for downloads to others on campus. He offered to check into it for this file, as well as others, and would get back to this group.

Bandwidth (including update from problems reported in Sept.) - Kevin
After reports of bandwidth problems during our Sept. meeting we opened a case with Allot, the vendor for the NetEnforcer traffic shaper. We upgraded the software and rebuilt the configuration, which appears to have fixed the problems. Don Larson is still having problems with his IP VCR, which may not be related. Corey reported that everything appears to be fine with Breeze, but is still looking for input from students. There have been some problems with McAfee and with hard drives but the previous issues appear to be resolved. There was consensus that downloads are much faster.

Voice mail - Update of issues discussed at last meeting – Bonnie reporting for Larry
Larry believes the problems with voice mail noted at our last meeting have been resolved. If there is anything still outstanding we need to inform him. Please call or send him email.

Status and next steps with campus infrastructure upgrades
At this time we don’t have approval for the requested funding for ongoing campus infrastructure upgrades for this fiscal year.

- Cabling
  There is some carryover funding from FY05 for cabling within buildings. Work is still progressing with upgrades from sub-Cat5e to Cat6.

- Equipment
  Gigabit switches have most recently been installed between the core in Merrifield to Witmer, Abbot, Starcher, McCannel, OKelly and Huhes Fine Arts. The connections haven’t been completed because of a problem with the upgrade of the core switch. Kevin is working on it and when resolved these buildings will all have Gig connectivity to the core. EERC is being upgraded from 10 to 100 Mbps as these switches are removed from other buildings. Because Housing is not on the current list of buildings to be upgraded to Gigabit, they chose to fund a switch. It’s been ordered and should arrive in couple of weeks and will be installed shortly thereafter.

Managing wireless and open ports
A student employee in Network Services has been auditing open ports at the Union, Library, and various other places to identify and document which switch and port each is plugged into. The next step is to decide what should be required to access the network from these ports, such as authentication, or even checking for updates and antivirus software with Clean Access. These ports should require the same consideration as wireless, where both appropriate network security and ease of access are important for campus network users and guests. Michelle offered the Wilkerson wireless network as an area for testing with Clean Access. Harold suggested that we might put them behind a firewall and only allow HTTP and FTP. Kevin agreed and added that there could also be an authentication option for users who need additional functionality to gain wider access to more services.

Aerospace expects to implement 802.1x for authentication next summer. Each building now has its own wireless VLAN, all with the same access control list to limit access to the Internet and to services they need, while protecting the internal production networks.

**VPN**

Jeff and Kevin are working to set up VPN access for the College of Business. They will VPN into the campus VPN concentrator, but will have their own group name and password to get into the College of Business network behind firewall services. Users will be authenticated to the Business School’s LDAP database. When authenticated they will get an IP address on their subnet and have access to the services allowed by the College of Business. Other areas of campus desiring this type of service would need to work with ITSS Network Services to get behind the campus firewall and to define the VPN services.

Roy, Michelle, and Corey would like to do firewall planning with ITSS for their areas. They were encouraged to schedule a meeting with Kevin and the NS analyst whom they normally work with.

**IT Security update – Brad**

IT security policy development may involve some members of this group. Brad is currently considering a security review process to gain input from across campus. He encourages all of us to utilize his web site at itsecurity.und.edu to stay up to date with IT security development. Brad will visit with others to identify and prioritize IT security issues needing guidelines and policies. Once that is done he will want help from subject matter experts or people who are interested to develop draft documents. Depending on the topic, our sub-council might be given an opportunity for input and review. The draft would then be publicly released for comments. After the comment period it would typically be given to the UITC for approval prior to being published. Depending on the importance of strict compliance, it may become either a policy or a guidelines document. Guidelines may simply be a recommendation for best practices. Policy documents would need to be signed off by the president’s cabinet and require strict adherence. One of the first initiatives might be to develop a one page acceptable use policy for student's use of IT on campus. We currently have the NDUS 1901.2 Acceptable Use Policy, which we would use to create a short list of requirements for students. Michelle requested that she be included in the group which will work on this document.

Brad has also been asked to do a security assessment for vulnerabilities, or a risk analysis of our security posture on campus. This will involve identifying our critical systems and related risks. Again this will involve people in this group. We might start by targeting a couple of ITSS systems to come up with a plan. Once that is successful it could be done for other departments and systems, possibly doing a campus-wide assessment or providing it as a service to other areas of campus. Some of the things that are driving the need for assessment are regulations such as HIPAA, FERPA, GLBA, etc. Surveys will be used to learn more about where data exists that must meet these regulatory standards. There are tools available that can help with these surveys, use the data to evaluate the risks, and provide information and recommendations based on the collected data. The surveys require user authentication and encrypt the data for security and privacy. This would help determine where data exists that must meet the different regulatory standards.

Email was sent last week regarding an IT Security Conference in Fargo on November 3rd inviting everyone in this group. It is sponsored by NDSU and NDUS. Individual departments are responsible for the $75 registration fee, but ITSS (Brad) will arrange the transportation for those interested in traveling together.
Network update (accomplishments, projects, issues, Q&A)

**Roy**  
EERC has funding approval for one of the four new buildings that was proposed. The National Center for Hydrogen Technologies will be built. It will have some office space but will primarily consist of labs. Requisitions for about 40 new positions have been approved.

**Michelle**  
- If anyone is interested in attending the Server 2003 training, please let Michelle know. Adam Ramberg will be attending and there is a discount for multiple attendees from a location.  
- Michelle has a ResNet support technician position open and would appreciate referrals of students who might be interested.

**Corey**  
All available IP addresses for the Norm Skalicky Building have been used. Corey would like to take some from the DHCP pool for use as static numbers. They don’t use a lot of DHCP numbers and would like to convert some from DHCP to static. Kevin agreed to look into it right away.

**Jay**  
The Union ran out of IP addresses in the DHCP pool during the Beyond Boundaries Conference, requiring a new pool of numbers to be added at that time. We will continue to look at managing the available numbers. When the wireless network at the Union is put behind the firewall it will use private addresses rather than competing with other devices at the Union for DHCP addresses.

**Kevin**  
ITSS is moving forward with implementing a new DNS/DHCP appliance. DHCP for two VLANs were moved recently without any issues. Both the old and the new systems will be in place until all networks are converted. UND is implementing DNS appliance locally for our range of IP numbers. A policy change to give individual campus IT departments local control of their IP address ranges is going through NDUS approval processes. When that policy is in place we will work toward developing campus procedures. Aerospace is looking forward to resolving issues to move ahead with Active Directory and the Business School has issues with certificates for email servers.

**Jeff**  
We’re working with Kevin on VPN access for the Business School.

**Josh**  
Our new Dean is getting settled in so we’ll be reviewing our use of technology. The last of the issues with our new 32 station lab has been worked out. We’re also running short of DHCP numbers as more laptops replace desktop systems.

**John**  
- The T1 point-to-point frame-relay link to Emerado is working. The Buxton site will be exactly the same and will come into the same router at our end.  
- The Wireless LAN Solution Engine (WLSE) is running and will manage the Aerospace wireless networks. The floor plans have been entered and WDS has been enabled on all access points. Additional information for the specific areas in being entered. WLSE reports signal strength between access points, adjusts power, and detects rogue devices. It can send email notifications.  
- The PIX 525 firewalls are installed and have been updated to 7.0 code. The firewalls force VPN use for remote desktop.

**Bonnie**  
Email was sent to our List to invite anyone who is interested to an IBM pSeries presentation by MSI on Monday, October 17th, at 11:00 A.M. in UpsonII, room 371.

Next meeting – Nov. 8, 2005