Kelly Best, a Network Engineer working for the College of Southern Nevada, gave us a presentation on CSN’s current status and future plans. A copy of Kelly’s slide presentation has been included with these minutes.

Next month, Nevada State College and Great Basin College will be making presentations to the group.

Question & Answer

*You talked about increased interest in uptime and measuring reliability. How far along are you in measuring that and what tools are you using? (Jim Mueller – SCS)*

As a group, we are going to have to create operating procedures, and specify what we are going to provide. Sun Guard is requiring in their documentation that we have a certain amount of uptime monitoring. So the college will have to generate those statements – what our uptime is going to be and define those. At this time, those haven’t been formally sent off to be signed off on. We want to make sure that we provide the most uptime possible so that students accessing the online courses, etc. are not affected by outages.

*What kind of wireless system are you using? Do you have some type of authentication? Can you tell us a little more about that? (Dave Peers – UNLV)*

We have several SSIDs running. So depending on which network you are connected into, we are either using Mac Filtering on the part that allows you to get to more of the open network systems or an open network for students that have limited access inside to the additional systems. We are using a Cisco controller, and there are configurations out to each one of the access points, and then they talk back to the controllers. We have two sets of controllers, redundant, at the Cheyenne and West Charleston campus. There is no single point of failure on that. The two campuses maintain the access points and the capabilities for each LAN segment set up for users to be able to connect to.

*Are you finding a lot more traffic on the wireless side versus the wired side? Some of the reading I’ve done lately indicates that campuses are talking about going to strictly wireless. Are you seeing that trend or planning for that? (Jim Mueller - SCS)*

I’m not planning for complete wireless. My own personal philosophy is that if I have a hard wire connection, I can control it. With wireless, there are additional issues such as
structural integrity of buildings, how much signal is lost as a person walks from one room to another, what is absorbing the signal, etc.

I am seeing more and more users with devices that are Wi-Fi capable, but as far as moving for students to be all wireless, and the campus being wireless, at this point I’m not planning for that. If the trend continues, then that is something we might have to address in the future.

Do you have a more formalized process that you are going to go through for the biennial budget and some sort of strategic plan development? (Ed Anderson - SCS)

At my level, I submit to those higher up what I feel are critical needs to be addressed. It comes down to how much money the college gets for infrastructure improvements, and addressing each need based on the budget numbers.

My goal is to address our current shortages – redundancy to our West Charleston campus and redundancy to our internet connection. I’m looking at what equipment I need to be able to do 1 Gbps and 10 Gbps connectivity, and taking that into consideration when purchasing new equipment. I’m also looking at what our bandwidth usage is – what devices I can put in to control bandwidth or at least slow down some of the expansion of network and WAN utilization that is going on.

I ask because we want to make sure that whatever is going to be high on your priority list is also going to meld with whatever we’re proposing – not only with you, but with all the other institutions within NSHE.

As we consider replacing equipment that is becoming out of date, I’m looking at what type of equipment I can put in that is going to allow me to connect not only at 1 Gbps but up to 10 Gbps. As SCS and other colleges expand and increase their bandwidth, I’m asking myself what I need to do on my side to make sure I’m ready for those changes coming down the line.

**Network Projects Review** – Ed Anderson (SCS)

**Southern Commodity Internet Connection Upgrade**

SCS is in the process of upgrading the Southern Commodity Internet to 10 Gbps. We have signed and executed the agreement and submitted a service order. They are working on it and it should be a reality very shortly. We are hopeful we will have 10 Gbps capability in the South by the start of the spring semester.

**Utilization and Availability Metrics moving to web site**

SCS is developing utilization and availability metrics and will be making them available to the NSHE institutions – some of which have the capability to generate this information themselves, and others which don’t have that capability. We have been working to generate primary connection utilization and availability graphs that we plan to post to our web site on a monthly basis. (Right now, they are on our intranet site while we develop them and work out the formatting.) As part of our new external web site development,
we are going to post some of these graphs so that the institutions can have access to this information. We will let you know when they are available for viewing. This was something that was pointed out as being desirable and helpful in the past.

**Change Management/Inventory Control Tool**

We have also been working on a configuration/change management and inventory control tool acquisition. We brought three or four of the top products in-house, and we’ve done some bench testing to discover their strengths and weaknesses. As always, it is not a clear-cut choice. Each tool or application has its own pluses and minuses. Some are heavy on inventory control and others are heavier on the change and configuration management and system analysis. We will be happy to make any information that we’ve gathered available to anyone who is interested in pursuing a similar path, so you don’t have to reinvent the wheel.

Bill Flusek from SCS added the following:

We are hoping to wrap things up this week. We have been looking at four different tools. Right now, we are down to Net MRI and a product called Red Cell from Dorado Software. I am working with the tool from Dorado to build devices into their system that they don’t already include so that I can get some of our Foundry equipment in there and see how it reacts. It sounds like we will be moving toward doing the RFP to the venders as soon as we get through this.

**Economic Stimulus Grant Status (EPSCoR & RUS/NTIA)**

There were two EPSCoR grants. One we already have, which I’ve mentioned before. The second one we were working on was targeted toward upgrading the Las Vegas and/or Reno metro rings to 10 Gbps capability. That grant was submitted this last month, and we are now waiting to find out if it has been approved or not.

We are also still waiting to hear back about the proposal we submitted for rural Nevada which proposes fiber distribution access points along the US50 and I80 corridors. We got a shot in the arm this last week with a nice endorsement letter from Harry Reid. It says that he really wants to see this happen for Nevada. He sent the letter to the Feds who are actually doing the evaluation. Hopefully, this will give us a better chance at winning the grant. We anticipating hearing something by mid-December, which was the original target date for announcing awards.

**System Security Update**

Nobody was available from System Security to give an update.

**Systems Support Services**

Nobody was available from Systems Support Services to give an update.
**Client Services/Systemwide Software** – Susan Bunyan (SCS)

Nobody was available from Client Services to give an update.

**Information and Application Services** – Dodie Bryant (SCS)

It dawned on me that when I do talk about applications for SCS, unless I talk about legacy, I’m really only talking about some of the schools in the Shared Instance, because that’s really all we support. So make sure you talk with your IT staff on your campus, UNR and UNLV, if you want to know what’s going on.

Today, we are working with the Quest STAT consultant. Quest STAT is a change management tool that works with PeopleSoft Campus Solutions. UNR and UNLV are participating with us in this. We have a consultant who will be on site for three weeks.

We are also beginning to do integrations with all the vendor packages: R25, Angel, College Map, the pay system, the scheduling system, learning management. So, we are working closely with the IT staff and teams on those. Otherwise, the legacy systems seem to be doing great. We are also ready for W2s at the end of the year.

**Data Center and Facilities Planning** – Rich Ayala (SCS)

SCS is continuing our progress with the tower design for Las Vegas. We have had the design engineer on site within the last week. He and his team have been taking measurements, checking systems, and looking at where we are going to install a second tower. They are also putting together a proposal so we can agree on what the final configuration is going to look like.

We are continuing to install some additional remote monitoring equipment this week for the diesel generator. We are also concentrating on some winter maintenance on equipment. Because of temperature requirements, and requirements to keep some equipment up and running at full capacity, we can’t easily do this maintenance in the summertime. So now winter is becoming our work schedule for this.

There is a planned outage on December 16, because UNLV will be doing some electrical substation maintenance. The SCS building will be on generator for about four hours that night. We will probably start our generator an hour early just to do the switch over and to make sure everything is okay while we still have utility power available. I don’t anticipate any issues.

Regarding UNSOM’s collocation in the South, we have received a preliminary architecture of equipment from Tom Strahler, who is Mark Sexton’s counterpart. Tom is working with us to see what the final architecture will be. We will have to generate some documents – a project request and an SLA. Momentum is building behind this.
Operational Issues/Events

**Pahrump Failure Follow-up** – Ed Anderson
Last month we talked about an issue we had in Pahrump where the data stream was down for two days. We had a postmortem meeting with Cox, and they admitted that this was a travesty and that it shouldn’t have taken that long to get the data stream back up. Jeff Cox was in the meeting as well. Cox laid out a plan that documents more of their procedures, updates their contact list, and provides circuit maps with circuit IDs, etc.

There is a multi-link chain of responsibility from the SCS facility to Pahrump, with three or four different carriers involved. So far, I am reasonably satisfied that they are making the right moves toward insuring that this does not happen again.

**Other Issues**

None offered.