October 1, 2013
Connectivity Committee Meeting
MINUTES

Network Services – Ed Anderson (SCS)

LV SA Office Move – Stanton Gurr (SCS)
Steve Zink and I did a walk through a couple weeks ago. Contractors are actively putting up the walls and getting things ready. They were putting in the conduits for the Cat6 drops, and SCS was a little concerned about where the drops were going because we hadn't seen them on the floor plan. I've sent a document forward on where I think the APs need to be positioned relative to the room, and the UNLV design team is supposed to be working on that. Steve Zink is addressing the fiber bore with them.

There was movement on the microwave backup link. A quote was received to do the antenna mount that will be on the SEB building. That quote was forwarded yesterday, and the antenna materials should be ordered in the next couple of weeks.

SCS/SA Building Re-wiring – Kirk Fitzgerald (SCS)
SCS is going to get the Reno data center building as well the northern System Administration building rewired with new Category 6 cabling. This work will be done by contracted external resources. Right now, the RFP is on the street. SCS will have a pre bid walk-through with the potential vendors next week.

Firewall Upgrades – Kirk Fitzgerald (SCS)
The Reno data center was finally moved off the old firewall service module, to some new Cisco ASAs. The northern data center has now completely moved over iNtegrate and Legacy servers to the new firewalls. In Las Vegas, the iNtegrate servers have been moved to the new firewall but SCS still needs to move the Las Vegas legacy environment. This move will be made in December or January.

Project Queue – Tom Nieva (SCS)
In September, we had 9 new projects, 3 projects were completed, and 5 had to be cancelled. The balance in the queue is 49. Year to date, we have 61 new projects added to the list. 59 were completed and 11 were cancelled. We have 15 projects on hold for various reasons.

Systems Support Services – Pam Burns (SCS)

The backups are completed on the new storage systems now. So we're currently making arrangements to shred the old tapes or sell them and have the data destroyed. But all backups are now on the new EMC systems.

We are also working on migrating the remaining data off of the old DS8100s. Last week, Vion was here working with us to show us how to move the windows data. We've

moved all but one production system off of the iNtegrate platform and that one is moving tomorrow. That move will completely clear all the data off of the iNtegrate DS8100 in Reno.
Fortunately, we now have a process put together that will speed up the migration process. We will be scheduling the outages required to do that for the production systems.

The other project we have going is the upgrade all AIX systems to service pack 3 on technology level 8. Some of the DR systems have already been done. There are about 120 AIX systems that will be affected. They all need to be rebooted. We're working with moving through the non-production, and then we'll schedule all the production moves after that.

Another project we have going is the update of all the firmware on the P Series systems. All the P570s are done. We have two P740s, one in Reno and one in Las Vegas, and we have two P770s. In order to install that firmware, the whole box has to come down. So we're working with each of the affected institutions to come up with dates that will work. We have some dates tentatively picked out, but nothing's in concrete yet, but it will be within the next two months.

The cabling has been completed for the backup server for disaster recovery for Shared and UNR, but we haven't moved things over yet. It will be UNR LPARS and UNLV LPARS that are going to be moved, so we'll be coordinating that with them.

Data Center Operations – Rich Ayala (SCS)

Last time we met, SCS/DCO was talking about putting in the replacement CRAC in the Las Vegas data center on September 20 & 21. Due to unforeseen circumstances, we had to reschedule that. It's now scheduled for October 11 & 12. It's the same scheme of going in and taking out the old unit, putting in the new one, and doing all the things that have to be done in between. They'll be done the same way, just on a different date.

Regarding the heat pump project, I mentioned before that we had a fire alarm panel upgrade that was going to have to be completed before we actually got into some of the other parts of the installation of the heat pumps. The fire alarm panel project is going to start work this week on Thursday morning.

We also completed in September was the installation of ladder racks in the Reno data center to support the infrastructure upgrade mentioned that was just mentioned.

Regarding the heat pump project bid, we had a planning meeting this week and it looks like that bid may be out by October 14. Work will start once we go through the process of getting pre-bid meetings and Purchasing putting out a contract probably by late November at best. We'll see how it goes.

Things often slow down a little during the holiday part of the year. Actually, it could work to our advantage since some of this work may be able to be done during the day

instead of at night to avoid impact to the staff and the rooms that are being served by some of these units that are going to be replaced.

Client Services – Brian Anzalone (SCS)

The last couple of meetings, I've been talking about the Board of Regents initiative to move to an iPad and iPhone application for the regents to follow the BOR meeting agenda. It was mentioned officially by a regent during the last board meeting in Elko. I had thought we would have another shorter meeting in September to see the pilot move forward a little, but that meeting was cancelled. The next special meeting will be in October at UNLV. As mentioned only one regent used the new interface to follow the meeting in Elko, but we're continuing with the product and still have confidence to move forward. It's just going to be a relatively slow implementation.

Robert Prior will talk a little later about Ring Central and developments in that arena, but I wanted to make sure that everyone was aware that there have been some phone number changes at SCS South. If you go to our website, www.scs.nevada.edu, all the HR data that feeds our staff directory has been updated and is correct. But if you've been calling someone at SCS South, just be aware that their number has changed.

UNLV is about half way through the request to cancel and forward some of those numbers, but I'm sure that within the next day or two, they'll all be changed. Just be aware that if you're used to dialing 702-895 to reach someone, you're going to get a message for the next couple of months that says this number has changed, press 9 to get to our dial by directory. This also means our service desk number has changed for 702 area code users. We will continue to forward that 895-4585 Service Desk number in Las Vegas for some time, at least 6 months or so, and UNLV is assisting us with doing that. The new official main number of 702-720-3300 is going up on our website and will be on the signature line for emails and on HRMS screens etc. We left UNLV with their block of 895 numbers and SCS South was the one area where we had to secure a new block of numbers.

Enterprise Licensing and Contracting – Chris Gaub (SCS)

Chris was not available to give an update this time.

System Security – Paul Mudgett (SCS)

Paul was not available to give an update this time.

New Technologies – All

Renovo Implementation – Bill King, Jim McKinney (SCS)
As you know, we have been working on a replacement for the TC Reliance automated

video scheduling software application. We're currently cleaning up the old database from TC Reliance, and it should be completed this week. It will be copied and sent to Renovo, and they will build the new database, which we hope to have installed on our server in a couple of weeks. Training will start next month, and we will issue a schedule for that soon.

There will be a production server and a test server in Reno, and a backup server installed in Las Vegas. Tim Sullivan let us know this week that it's all ready to go. As we go through the releases, we can test it, and if we're happy with it, we can roll it to production. But we still have this other warm server, so if we have a problem, we can flip over to the other location.

Ring Central Roll out – Robert Prior (SCS)

At our last meeting we reported that SCS Las Vegas was up and running on their new phones. At this time, Reno and Elko are also using their new phones. The old phones remain forwarded until the phone numbers are ported from ATT to Ring Central which is scheduled for tomorrow, October 2. After the port of phone numbers occurs, the old phones will be removed from the desks.

In SCS Las Vegas, one of the challenges we had was converting the front entry call box as well as the phone outside the back dock. Both of these were setup with analog dial down circuits but the conversion to digital went rather smoothly thanks to our Network group lab testing what they could prior to installation. The vendor who installed the call box was also on site to provide assistance.

We have done a site survey of the System Administration building in Las Vegas. Their phone order has been forwarded to Chris Gaub for purchase. Several meetings have occurred with key staff members to learn processes and answer questions. The actual roll out date will be determined once the phones arrive. System Administration Reno will follow and phones have been ordered for them.

Operational Issues/Events – All

Brocade Issues – Kirk Fitzgerald, Jim McKinney (SCS)

Before registration, we had two major issues, one on the RX line and at the same time, a different one on the MLX line. It affected all of iNtegrate. Everybody was slow during that week to week and a half prior to the start of classes. We were using some new MRJ21 high connectivity cards on the RX8s 48 port. If you were to connect any two servers off the same card and needed to run traffic between them, they maxed out at 10 Mbps. We had 4 new cards like that in 4 RXs, and they all did that. So we had to re-cable and get off those cards. We didn't even have time to RMA them. I didn't want to RMA them because having that many cards go bad at once, new ones might be bad. We had different kinds of cards that we knew worked. We just re-cabled and got off those cards. When we did that, it got a little bit better, but the traffic was still slow.

The MLXs had a different kind of a hairpin routing and it was limited to a 100 Mbps. And those were trunks, so that was all server data combined. It had to do with them

checking for ICMP redirects on every packet, so every packet got punted to the CPU and they drove the CPU usage up on the boxes. Once we found that, we back revved the OS on all 4 MLXs and finally got that traffic moving for iNtegrate, and that was right before registration.

The other issue is one we have seen at least 5 or 6 times before. It's our black holing issue on the backbone router in Las Vegas. This time they think it was a 10 gig line card, and it the router was just black-holing i.e. not passing traffic packets again. Once again, we had to shut it off and manually route around it. We're waiting for the replacement 10 Gbps line card right now.

We've escalated this with Brocade. A Brocade engineer was on-site in Las Vegas last Thursday and Fridayand they were actually able to see the black-holing on a router that wasn't carrying traffic. Ed Anderson contacted the regional director again yesterday and requested three entirely new boxes. Brocade understands our frustration and has promised to do whatever it takes to solve the issue permanently. We have a meeting with them this afternoon (10/1/13) to see where it goes. Going with other vendors is high on our priority list. As it stands, we cannot continue to rely on this equipment at the core of our network.

Cisco ASR Failure - Elko – Chuck Stout (SCS)
There was a bug in the IOS that was disabled after several hours of critical alarms
We had a failure of an ASR cisco router that was caused by a bug in the IOS that after several hours of critical alarms was disabling cards. So there was no work-around. The fix was an IOS upgrade, which we did Thursday evening about 7:00 that appears to have taken care of the problem.

Network Infrastructure Upgrade at TMCC – Randy Miller (TMCC)
TMCC is doing a network infrastructure upgrade, including the core and the access layers. One of our proposals was MLXEs from Brocade, so I'll have to talk to Kirk Fitzgerald and get some more details.

UNR Data Center Outage – Bird Vilseck & Jeff Wolff (UNR)
We'll be shutting down our primary data center on October 12 for electrical upgrades. So you might see something show up on your equipment. It'll be down until roughly 10:00am Sunday. We intend to keep the core out if our diverse power works. Basically, we're losing the protective power, so we're going to another power source out of the data center to keep certain critical core order, wireless, and other things going, but the bulk of the data center is going to be down. Essentially, we're putting in a redundant generator and UPS systems.

Other

Special Board of Regents Meeting – Ed Anderson (SCS)
We have an upcoming special Board of Regents Meeting on October 18 at UNLV, and we will be setting up for that on October 16 & 17. SCS will have our contingent of support personnel there.