

July 2, 2013
Connectivity Committee Meeting
MINUTES

Network Services – Ed Anderson (SCS)

Data Storage Project – Pam Burns & Jim McKinney (SCS)

All of the hardware for the Data Storage Project has been delivered and installed. The disk has been configured for open systems in Reno and partially configured in Las Vegas. We're starting to move systems over to the disk. The P740, which houses mostly Linux systems and some AIX Data Financial Warehouse will be moved first – the disk that can be moved non-disruptively. At some point we'll want to reboot those systems, just to make sure everything happened correctly. SCS will let you know beforehand and will coordinate the dates with you before we do that. SCS has done a lot of testing on moving those LPARs, and the actual move itself is non-disruptive including the operating system and the reboot. SCS will come up with a full schedule for when we will do the iNtegrate equipment. The disk for that can also be moved non-disruptively. When we move production systems, we'll give you a courtesy notification just in case you see any glitches. We've moved several LPARS, AIX, and Linux already (not for iNtegrate) as test cases and haven't seen any issues.

The backup systems have also been installed. The backups in Las Vegas have been moved to the new system backups. We will let the old tape backups age off over the next 90 days. Reno still needs to be configured for that to happen. That's for open systems. For the mainframe, the systems haven't been configured yet.

SCS has been doing prep work over the past 8 months to virtualize all the IO so we can do the LPAR moves without any disruption. Along with disk and backup, we also purchased encryption at rest, so basically everything on the disk is encrypted along with the tapes. In about 120 days, we're going to roll out all of the IBM old disks along with the 1930 tape unit. We traded in the 8100s and the disk unit for discounts. In both locations, the new equipment is taking up only a small percentage of the rack space of the old equipment.

Firewall Upgrades – Tom Nieva (SCS)

The Phase One in Reno for the Firewall has been completed. We're trying to schedule the Phase One in Las Vegas to do the 5585 Firewall on July 27 starting at 6:00am and running to about 10:00am. There should be about an hour of interruption that would impact UNLV. Lori Temple has the RFCA and was briefed at the IICG.

Phase Two has been postponed. NS staff were going to try to do the maintenance on the 6500 in Reno around August 1, but that is going to be pushed out by at least a month because of other work that is going on.

LV SA Office Move

There are a series of projects in regard to the Las Vegas System Admin move. We've made a little bit of progress on one of them. We did identify the appropriate fiber path, and we did get some fiber installed to provision the enhanced fiber plant for UNLV. But we're still treading water on the fiber bore piece of it. There were some issues associated with trying to get a civil engineer to do some drawings of the actual route and the elevations associated with the various aspects of the bore and trying to get it through the other utilities. We have verbal approval from NV Energy to let us encroach on their right of way, as long as we went underneath the existing NV Energy facilities. The UNLV project management team is trying to get written document to giving formal permission to do that.

There has also been some activity on the microwave backup link. There were some discussions about what was ultimately going to be on the antenna structure. There were some questions about how stout that connection would have to be if it was going to support some UNLV equipment as well as the SA equipment, etc. That discussion is still going on. UNLV is going to have a civil engineer look at that as well to make sure the antenna structure will be solid enough to hold whatever we decide to put on it.

Project Queue – Tom Nieva (SCS)

For the month of June, we received 7 new projects, completed 3, and cancelled one project. We have 52 projects in the queue, 17 of them are on hold for various reasons – funding, holding off until the start of the school year, etc. If you have questions about any project, please contact me.

Systems Support Services – Pam Burns (SCS)

Systems is focusing on the disk and tape replacements and migrating all the data. We did finally finish the AIX upgrades to Technology Level 8. We have also worked with Shared, UNLV, and UNR and moved them to their new production and development terminal servers in the iNtegrate environment and retired the old ones. The majority of the LPARS have been moved to their final locations, but we have a couple left to do.

Data Center Operations – Rich Ayala (SCS)

Since last time I was here, we have received our new Liebert cooling unit. This is going to be the fourth unit that I think we mentioned previously we were going to be putting in the Las Vegas data center. The unit is sitting in our warehouse now, and we'll be making plans to get that installed.

We completed some things that were related to the mass storage enhancement project. We installed some ladder racks in Reno and Las Vegas. We also ran some electrical power connections. Reno was a little more of a challenge because we had to hunt and

peck a little bit as well as remove some equipment that had been decommissioned. We got some of the old stuff out and made room for the new. When the storage project is over, we will actually reclaim some circuit breakers and electrical capacity.

We also had a sub-floor debris removal and inspection done and have gotten those reports. That was completed near the end of May and beginning of June. The reports look good. There was no unusual contamination found under the floor. It was a pretty thorough inspection, and we do have a couple of recommendations from those reports, which we will take action on.

We installed some new proximity card readers in Las Vegas and Reno. It's been a long standing desire to have just one access key card for both locations. We were able to accomplish the change expediently with very minimal disruption. Robert Prior did an excellent job of planning that and working with the vendor to get it done.

Just last week, we started to do a roundup of going through SLAs with our SLA occupants in the Las Vegas data center. We've covered UNR IT and Nevada Seismology lab equipment and the next one on the list is UNLV.

We've been seeing some high temperatures in Reno and Las Vegas. We always prepare for summer in advance, and knock on wood; we were ready for the sudden increase in temperatures. Systems are running and everything is where it should be.

Enterprise Licensing and Contracting – Chris Gaub (SCS)

The renewals that were due in the May to July 1, time frame have been invoiced and settled, and the orders have been sent to BCN Purchasing. We have one August 1, renewal that is waiting on payment from one of our institutions. Once that invoice settles, we will be able to place that order. We are beginning the October 1 renewal process. Most of these contracts are academic in nature (SAS, SPSS, etc.). We are gathering up the renewal quotes from the publishers and working with the NSHE Software Licensing Council to distribute the fees.

Client Services – Brian Anzalone (SCS)

There aren't any major projects that are institutional customer facing for Client Services at this time. I mentioned last time we're doing desktop/laptop equipment replacement within System Administration and SCS. We hadn't had a major equipment replacement initiative in a few years. I mentioned at our last meeting that we were in the middle of assessing needs and putting together an order. Our group is working on receiving equipment and starting to deploy it. We're replacing about a third of our primary workstations in the organization with this initiative – about half laptops, half desk tops running Windows 7. With that, we'll get a few people who are still holdouts on Windows XP.

System Security – Paul Mudgett (SCS)

This is a brief update on the Grant Thornton audit. I think last month I reported that the auditors were coming up with some additional questions. They asked for some additional clarification or some evidence on the PeopleSoft side from UNR. They didn't provide additional questions for UNLV or CSN. They have released their preliminary IT findings. Those have been distributed out to UNR, UNLV, CSN, and SCS. As soon as responses are provided back, we'll set up close-out meetings with the auditors. That should be happening within the next couple of weeks.

Last year we had no findings, but this year we had about six – nothing major. I don't think Grant Thornton realized that the System's folks and the PSAs were actually not just standard users. So they would list four or five users that had access to test and production on the system side. But since those people are system administrators, they need to have that access to be able to do things in production. I think the responses we can give will alleviate their concerns.

New Technologies – All

Renovo Testing – Ed Anderson (SCS)

We've been using the same company for scheduling software for the video conferencing service for quite a few years now. We purchased it because we wanted to get something a little more mainstream to replace an in-house system we were using. Unfortunately, over the last couple of years, The Vendor (Currently named Freeport Technologies) has started to diminish their support and investment in the product. They have eliminated user group meetings and support, and have let go some key support staff. They are now down to a single technical support resource. This situation is of concern to SCS.

In the evolution of this application there was a split in the product development. Two companies were formed. One ultimately became Freeport Technologies and the other resulted in a company called Renovo. At one point both companies relied on the same basic source code for their respective applications. Over time Renovo has been much more responsive, more innovative, and has kept the product fresh. They have user groups. The user groups that TC Reliance had disappeared over time. It may be time to make a transition to Renovo while the transition can still be done rather cleanly. If we were to make the transition from TC Reliance to Renovo, it would cost \$30,000 to \$50,000. When we originally bought the program we have now, it was almost \$200,000. So the price and the sophistication of what we're getting for our money is a lot more now than it was then. We're testing this program now. Because it's based on the same software platform, we haven't found and don't anticipate any show stoppers. After the testing, we'll be making a recommendation. If we go with Renovo, there will be training for all the schedulers, and we will try to make the transition as painless as possible.

Ring Central Roll out – Jim McKinney (SCS)

We currently have three phone switches: one that runs SCS Reno, one that runs System Administration in Reno, one that runs System Administration in Las Vegas. We get phone service in SCS Las Vegas through UNLV. We are in negotiations with an IP phone vendor in the cloud called Ring Central. Of the three switches we currently have, they are either at end-of-life or will be at end-of-life within the next year and a half.

Over the next two months, we will remove our current phone system and install an IP cloud-based phone system. This will give us free long distance, unified messaging, follow-me, all of the newer type features, which we have none of with our current system. It appears to be a solid product from the tests we've done so far. We haven't had too many issues associated with functionality or reliability. We have about 10 phones currently that we are testing in Reno and Las Vegas.

Operational Issues/Events – All

Battle Mountain HS – Equipment Temperature Issue – Ed Anderson (SCS)

Even before this most recent high-temperature period, we had some issues in Battle Mountain with some of the equipment in the high school. We put equipment in the room, then the school added air conditioning equipment, then a backup generator. They continued to add additional equipment without making any adjustments to the cooling requirements, so we were getting heat related alarms. We contacted the Battle Mountain School District about the problem, and their solution was to pull out a lot of the equipment from the room, but they haven't followed through on it yet. This is the only heat-related problem we've had so far this year.

UNLV iNtegrate Environment Outage – Jim McKinney (SCS)

Systems recently inadvertently took down UNLV's iNtegrate environment. In prep of the disk work, we had some storage groups we were cleaning up, and one of our employees forgot to uncheck a box. Luckily, the data was still there, just the container that it was in went away. We were able to get it back up, and the environment was down about an hour.

Getchell Building Demo Update – Jeff Wolff (UNR)

UNR is working on a plan to demolish Getchell. Originally they wanted us off the fiber by June 1. Now it looks like it will be past Thanksgiving, maybe toward the end of the Semester. We're still hoping to move some major services. We're waiting on some trenching and at least one purchase order to clear to do some splice work. Anyway, we hope to get some major pieces moved before the start of the fall semester. But we won't be able to move the last of it until the middle of fall probably. They are starting to do re-routes of major utilities, and they'll be dropping in a bunch of new conduits. We are only in one room that is critical, and they are going to leave that room until last for asbestos abatement. They will leave us a path to where the fiber is while they work on the rest of the building. Originally, they wanted to have it torn down this summer, and the president

didn't want them to run heavy construction during the semester. So they may demolish it and leave it in a big heap and then do mass haul-away between semesters. Eventually, we'll give SCS a schedule. SCS has a piece of fiber equipment in that building that will eventually move to Jot Travis.

Other

New Employee – Jeff Wolff (UNR)

Gordon Steinmann came to us with lots of experience with the National Guard. He filled in as an LOA for much of the fall semester after Keith Rinaldo resigned. In February, he became an official full time employee and is officially our senior network engineer now. We currently have six people. Gordon has quite a bit of experience coming from a deployment in Afghanistan.

New Area Code for Southern Nevada – Tom Nieva (SCS)

Las Vegas and Southern Nevada is going to get a new area code (725) in June 2014. It will be an overlay over the current 702 area code. Calls between and within the existing and new area codes will require 10-digit dialing (the area code plus the seven-digit telephone number).