

August 7, 2012
Connectivity Committee Meeting
MINUTES

Network Services – Ed Anderson (SCS)

Northern Network Upgrades – Kirk Fitzgerald (SCS)

A lot has happened in the last month in regard to northern metro ring and data center upgrades. We've upgraded the entire Reno metro optical ring. Ultimate capacity is has been increased from 10 X 1.0 Gbps to 40 X 10 Gbps. We've got 10 of those waves lit right now. The Carson ring still needs to be upgraded. It's still at OC48 and it's going to go to OC192 later on this year. There wasn't a big push for that at this time due to adequate near term capacity availability.

All of the core and Internet routers on the northern ring got upgraded as well to Brocade MLXEs, and we now have a 20 gig backbone around Reno. We have 20 gigs to the XMR internet routers, and now all of our external customers are off the VXMR. They are all consolidated on the XMR here and XMR in Las Vegas, which should be much more stable and able to handle more routes and more customers. We are using MPLS now to connect virtually anybody that is on the ring to anywhere else on the ring. That's how we're doing the BGP connections North/South. Earlier this year SCS completed a similar effort to upgrade the southern metro ring and with the completion of these projects the entire metro backbone on both rings have been upgraded.

Project Queue Status – Tom Nieva (SCS)

For July, we picked up 8 new projects, completed 3, and cancelled 5. So far for the calendar year, we have had 66 new projects added to the books, we've completed 51, and cancelled 16. We have 7 on hold and about 70 in the project queue.

Systems Support Services – Pam Burns (SCS)

SCS/SSS has been doing a lot of operating systems upgrades. We've completed all the upgrades for UNR. We're working with the UNLV instance to complete theirs. They just have production left.

We are also working with the Shared Instance to upgrade their remaining LPARS. We are also working with the Shared Instance moving them from P570 equipment to new 770 equipment, which gives them more memory and more cpu's available. We've completed all of the moves off of the old equipment, but some of the application pieces are still being upgraded.

We've also been doing some mainframe work. We did an internal DR test last month where we moved HR and Financial from the machine in the South to North, and we were able to test all of the online processes and everything moved and looked fine. We did see for running batch processes that we were missing some files, so we're going to circle back around and make sure everything else gets completed and then we'll probably do another test in 4 to 6 months.

System Security – Paul Mudgett (SCS)

PCI has come up again. Annual reviews have been requested by Wells Fargo Bank, which takes care of Visa and MasterCard. So I've been working with the director of banking and finance in the System office. We're going to be doing campus visits. Most of the campuses don't have a requirement for quarterly scans. There are just a couple that do, but all of that information has to be collected and turned over to the bank annually, so we're in the process of doing that again. Nevada is the only state in the nation that has codified PCI. It's usually an industry standard, but now its state law. We'll be looking to the end of August to start visiting down South. You may be seeing me on your campuses soon.

Data Center Operations – Rich Ayala (SCS)

Last time I mentioned that we had a thermography inspection done on some of the major electrical systems on the UNLV building. We've started to correct some of the deficiencies that were identified. In the process of looking at our diagrams and the electrical drawings we've been using to potentially isolate different parts of the system, we thought it would be a good idea to start revisiting some of those drawings just to make sure that they're accurate. So we are looking at working with the contractor to come in and do a survey of our system and give us an updated one line diagram. It's costly to go back to the original drawings and update all of them, but we thought this was a good step in conjunction with what we were looking at.

Last time I also mentioned that we put in a main control panel and some new actuators in our cooling system monitoring and operating controls, and that's working real well. So far, there have been no major glitches. A few adjustments have had to be made, and we still have a couple more things to add to that control systems monitoring agenda. We have a heat pump project in Las Vegas just starting up this month. We'll be replacing about 15 of the 26 heat pumps that are in the building that are end of life. That's a big project that will be completed within a year. The funds for this are coming from the HECC SHECC funding available for maintenance projects that have to be deferred because of cost.

We've also started looking at how the equipment is arranged in those rooms currently; seeing if we can get them into a better arrangement to utilize cooling resources more efficiently. We are evaluating drawings and establishing what we have now.

Long range, what we would like to do is, as equipment is replaced, to put racks in different locations and populate them with new equipment to eventually get to the configuration we want. A forklift effort would be hard and too disruptive for the systems that would be affected. We'll do this piecemeal. It will just take awhile to get to the end.

We are also looking at a web campus project with UNLV to put some more UNLV equipment in the Las Vegas data center. This initiative may provide the impetus to begin the equipment rack re-alignment effort.

Client Services – Richard Ayala (for Brian Anzalone) (SCS)

As you know, SCS has migrated from Lotus Notes to Google. Lotus Notes is no longer provided for NSHE/SA email, calendar, and contacts. The final steps in the Lotus Notes to Google

migration are complete. We've migrated all the archives and delivered all the un-migratable mail. All that is left to do is remove Lotus Notes clients, which we will do using KACE over the next couple of weeks. This week James Unfried will go to WNC to assist their techs with migration questions since they are also migrating to Google. We hope to give them the benefit of some of our lessons learned and tools and techniques we've used.

System Licensing and Contracts – Chris Gaub (SCS)

Since we last met, the multi-institution Autodesk license has been renewed. We are in the process of distributing new license keys and figuring out how our Term to Permanent license will impact us, especially when applying keys.

The SAS contracts have been renewed. In the case of the new Administrative Contract, we have received confirmation from SAS that the contract is in place. On the balance of the contracts, SAS is waiting for payment before providing new license keys.

The last big renewal during the month of July was SPSS. We submitted our order to IBM for the renewal. IBM's contract processing center identified an error in the IBM supplied renewal documents. IBM is asking us to reprocess our renewal documents. We have a 45 day grace period, but as soon as we can get the documents from IBM, we will see that they are reprocessed.

New Technologies

KACE Implementation – Rober Prior (SCS)

The KACE self serve functionality should be rolling out this week. We're just finalizing a few last items. SCS will be rolling this out in waves, hitting different groups at different times. We initially had a beta, and then ran a second beta shortly after that. We got some input from upper management that required a fairly sizeable overhaul to the system. This second overhaul is what we've been finishing up recently. It looks good, and I think it is going to be well received.

This is just another method for our customers to get in touch with us. SCS has never had a self-serve piece available to its customers, so this will be a first for them. Using the self-serve should save people time by utilizing the web. It will go directly into our ticket system and directly assign to a group, which people may find more beneficial. It will be much faster than email, which is the primary way that tickets are generated now. Our ultimate goal is that this self-serve trouble ticket/service request process will be a faster way for our customers to get service. The first part should roll out this week to a select number of customers, and we'll be expanding it over the next several weeks as we see how it goes.

Operational Issues/Events

Southern Internet Router Failure of 7/31/12 – Kirk Fitzgerald (SCS)

On 7/31, SCS had the same backbone router in Las Vegas fail with the same problem that it had before. It was blackholing traffic. Two days before we were going to install the second new

backbone router in Las Vegas, we had an outage again. This time, we opened a TAC case with Brocade. Although it was exactly the same thing, instead of letting them troubleshoot it for two or three days, this time Stanton Gurr just swapped out the whole router with the one he was going to put in as Backbone Two.

We convinced Brocade to RMA the whole router – chassis, almost every card, just about everything. Stanton replaced the router and it's been stable ever since. So Backbone Two is now Backbone One. Stanton did get a replacement for the failed unit and he has installed that one as Backbone Two.

We now have two new routers in Las Vegas, and the one that kept going bad has been sent back. We still don't have a root cause from the vendor for the original failure. At this point all we can surmise is that it was a chassis problem or a grounding problem or something wrong with that chassis and card combination. We are hopeful that we have it covered now that we've replaced the whole thing. If we have a future occurrence, it should have less impact because of the increased redundancy we have now.

We have the capability of shutting down a router now that is blackholing, and there is another router right next to it take over the connections. Even if we lose a router now, we could have the back-up unit up and running in twenty minutes or less.

Ed Anderson asked how the communication surrounding the outage was experienced by those present. There were a variety of responses ranging from those who called the Help Desk or other SCS numbers they had, but weren't able to immediately connect with anyone or get any information on what was going on, to those who were called by the Network Services management team and felt they were being kept very up to date.

Ed responded that they tried to return every call that they were aware of. He acknowledged that they were not as timely in returning every call as they would have liked to, and that SCS is committed to continued improvement of the process to keep the communication flow open.

Other

None offered.
