Teleconference notes for May 10 2012 SDN WG 5/10/12 Thursday - 2 pm ET In attendance: Dale Finkelson Joe St Sauver Tom Knoeller Kathy B Chris Robb Rich Crop Eric Boyd Dave Pokorney Scott Brim Dan Schmiedt Paul Schopis Will Jimmy K John Que Deniz Gurkan Shuman Huque **Greg Grimes** Matt Hoffman Andrew Lee John Moore **David Crowe** Jeff Bartig Akbar Kara Chris Griffen **Grover Browning** Nick Buraliago Bill Owens Agenda: 1) Agenda bash 2) Regular call schedule: every two weeks? When? 3) wg-sdn charter: what are we missing? See: SDN Collaboration Space 4) Stanford Joint Techs wg-sdn meeting 5) Open Networking Summit: recap, R&E outcomes, and discussion 6) Discussion: What is your institution/regional network doing with SDN? How can we best coordinate and collaborate?

7) Where do we want to be as a community in 3 months? Six? What are the deliverables?

Notes (taken by D. Finkelson and D. Gurkan):

Dan and Deniz started the meeting by introducing themselves and discussing their motivations for wanting to pursue SDN as a technology.

They then discussed how often and when to meet. The consensus was to start with once every 2 weeks at 1:30 pm ET. Thus the next call will be the afternoon of the 24th of May, Thursday, at 1:30 pm ET.

Deniz then reviewed the charter.

- John Moore asked if someone participated in the ONF? Right now that is Matt Davy. Deniz suggested that we might be able to foster closer ties with that group. The thought is that WG will be able to provide some guidance to the industry as a whole. John reiterated that it's important to have some influence on the standards bodies. The chairs will add a point about this to the charter. David Crowe also said he would send out a pointer to an IRTF group concerned with SDN:

wiki: http://trac.tools.ietf.org/group/irtf/trac/wiki/sdnrg

email list: https://www.irtf.org/mailman/listinfo/sdn

Standford JT's:

Dan stated that Clemson would be doing a presentation on what they were doing with OpenFlow. It would discuss OpenVswitch, how they were planning on doing a science DMZ using OpenFlow.

Eric pointed out that SDN is a special focus area for this JT's. The chairs of that are Matt Davy and Inder Monga. There is also a WG meeting planned.

Grover asked if it was worth while bringing up the inter domain issues associated with OF. The answer was yes, at least at the WG meeting.

All related questions and suggestion on the JT SDN-WG meeting agenda should be directed to Matt Davy.

Jimmy K asked if the way in which NDDI is evolving could be a topic for these calls? This is around connectivity options, inter domain issues, dynamic SDN etc. This is a good forum for those conversations.

Overall the thought was that this group is probably at the leading edge in investigating the technology. Should some basic sorts of issues get presented perhaps at the WG meeting? Should there be a discussion about the state of the standards right now? These all seemed good topics for discussion.

Where does SDN fit into our networks? Where would it be useful in our networks? These are among the questions that Dan will address in his talk.

Grover then pointed out that the user base is really critical to this endeavor and it would be good to see that aspect addressed more.

ONS:

Deniz reported that the big news was Google's announcement that they were using OF in their network extensively. She also pointed out that SDN provides a great sandbox for development options.

The main outcome of the meeting was that all the companies there are in fact very interested and are trying to work with the users to understand how to do this better.

Dan said that prior to this meeting most discussion was about SDN in the future. This time it was about real apps and real uses.

Eric agreed that the discussion moved from whether SDN could happen to when it could happen. But he thought there was still a lot of room for the R&E community to make an impact on the development and application side.

John Moore asked if people were really working on interoperability. Deniz though that Indiana University's InCNTRE (http://incntre.iu.edu/) was doing some of that. Jimmy expressed a concern about vendors doing a lot with extensions that were proprietary. If these sorts of features are useful they should get put into the standard. Perhaps this sort of information is part of what we can take to the vendors. For example, QoS support was listed under HP and Brocade's vendor-specific extension offerings – SDN WG can concentrate on what our community's needs/requirements should be.

Round Table:

There are certainly a lot of research projects out there and several interesting applications being considered.

Clemson listed a TCP application that enables data analysis and monitoring of the production network.

Rudra from NCSU listed his activities as senior design project that included OF controllers communicating with each other in sharing states. Infrastructure deployments are under progress and in discussion.

Will mentioned deployment of SDN as an overlay on the campus for researchers.

Grover mentioned replacement of L3 devices with L2 devices and coming up with a route server to look into path selection problems.

Trend has been mentioned as moving away from autonomous devices and coming up with centralization with autonomy.

Each approach comes with different operational challenges.

Dan ended by asking where does the community need to get to and how can this group effect getting to that end? This will evolve over time, certainly facilitating experimentation is important. He asked that people give this a bit more thought before the call in two weeks.