Teleconference notes for May 24 2012

Internet2 wg-sdn call minutes. May 24, 2012, 1:30 pm ET

Attendees: Chris Small, Dan Schmiedt, Deniz Gurkan, Michael Lambert, Steve Wallace, David ?, Chris ?, Bill Owens, Shumon Huque, Jeff Bartig, Akbar Kara, Brett Miller, Paul Schopis, Rich Cropp, Grover Browning

Dan and Deniz started the meeting by asking the attendees if there were any additional agenda items they would like to bring up.

Steve Wallace announced a training on OF: At JointTechs (the day before and after), $250 for education community, commercial $450, e-mail Steve for more info at ssw at indiana dot edu. Training assumes no knowlege of OF but does assume basic networking background, covers OF adoption status, merchant Si integration, OF 1.0 protocol, differences between OF 1.0 and 1.1, hands-on workshop with a login to VM that has 2 interfaces to controllers. Usage of controller and flowvisor is covered. NOX, OVS, and maybe others.

Deniz suggested to jump to number 3 and come up with some action items to feed into the workgroup's short-term and long-term goals since interoperability and inter domain issues have been the main topic of discussion during listserve e-mails. She requested input from the community on what applications would be important to address the interoperability challenges between OF switch vendors and implementations. Or, an interoperability and compliance testing service may be expected to come out of the center at the Indiana University.

Steve Wallace: interoperability between the members of the InCntre is being tested. There is no pass/fail OF certification available yet - maybe, guidelines will come from ONF. The constraints of beta version software implementations are dominating the discussion at this time. This community may benefit from a web resource on the experiences with devices on general availability of features. NDA agreements challenge the sharing of information on interoperability issues. For example, HP switch did not have a feature to manipulate VLAN tags - if such information is available in the community it can benefit all users.

ACTION item: A capability list from the standard with a feature list from switch implementations should be populated by this community to better inform the WG.

ACTION item: All feature lists should include what switch+controller pairs are used.

ACTION item: It is also useful to have the applications and functions under consideration when we include experiences with features.

Discussion on QoS and OF standard: Steve Wallace mentioned that OF 1.3 is very complicated on this topic. There is a meter concept similar to ATM and it required substantial study to understand.

ACTION item: A pointer to the specifications can be provided as the WG-SDN community's interests evolve. For example, a pointer to the section on QoS can be provided.

Dan called for input on where we would like to be in the near term (3-6 months) as a community: he shared his experience with a meeting with a vendor. Vendors and corporate networking enterprises are excited about SDN but see that leadership from R&E community is critical and that student+faculty integration is critical to truly leverage the potential of SDN. (Give the same old folks a programmable network, and they will build one that looks and works just like the non-programmable one we have today)

Steve Wallace: SDN+OF has been used extensibly in the data center environment. Therefore, there is a focus on the DC applications among the vendors. However, for large-scale ISPs (such as Verizon, etc), the applications of SDN are not very similar to the campus network environment. Enterprise environment might be the key factor that makes campus environment the leader in SDN deployments. BYOD concept is becoming wide spread just recently - campuses already have been familiar with this.

Dan: Campus should be the key. Finding smart use cases where OF makes sense and demonstrating them. In the future, maybe virtualize part of a network and realize some functions.

Grover: interim steps in campus tests are definitely good transition points. Core will also benefit greatly from OF.

Akbar: technology research cycle issues are important.

Dan: example purchase at Clemson - OF support on the edge switch requirement.

Deniz asked what the main bottleneck is during the campus transition to SDN:

Dan: people. Talented network engineers do not see SDN as real as the legacy networking approaches. That's why students are key since they do not know otherwise. Academic training process becomes the key to making people think outside the normal box.

Grover: Training is an issue.

ACTION item: Utilize wg-sdn calls to train the community on interesting applications in SDN. First one will be on QoS. 15 min ppt/discussion by IU on June 7th.

Deniz asked input from the wg on vendor participation in these activities.

Akbar: risks?

ACTION item: Steve suggested we can request information from vendors from time to time during the calls on specific topics. All agreed.

Deniz asked if there is any OFConfig implementation that anybody knew of.

Steve: probably included in the OVS. OFConfig is leveraging activities around Netconfig and OVS to realize configuration of OF devices in ways not possible through OF.

ACTION item: Deniz volunteered to cover developments and the content of OFConfig in another call.