Working Group Call 12-January-09

Performance WG Call. 12-Jan-09

Attendees:

Carla Hunt, (Chair)
Azher Mughai, Cal Tech
Mike Van Norman, UCLA
Jason Zurawski, Internet2
Jeff Boote, Internet2
Aaron Brown, Internet2
Emily Eisbruch, Internet2 (scribe)

Performance News

Carla reported MCNC has deployed 3 measurement servers in a pilot to network POPs in Charlotte, Raleigh and Greenville, NC. They are working through the general schedule for rolling out the rest of the servers and determining how the visualization should look.

Mike reported that the CENIC community is trying to bring up measurement nodes at major campuses. Progress is somewhat slow. There are some nodes at UCLA, Riverside, Santa Cruz, and Berkeley.

Azher reported that Cal Tech had a perfSONAR server installed six months ago. He didn't yet have a chance to go through all the options or services it offers. Planning to do it before Joint Techs.

Aaron and Jason's Report

The development team is working to make a couple of software releases available before the February Joint Techs meeting in College Station. These include upgrades to BWCTL and OWAMP and a pilot version of PerfSONAR-BUOY.

Regional Networks Survey

Due to an email delay, the working group did not have a chance to review the US Regional Networks Survey. The group will discuss this survey at a future working group meeting or call.

https://spaces.at.internet2.edu/display/PerformanceWG/US+Regional+Networks+Survey

General Discussion

Mike said that the greatest interest in performance issues comes under two basic use cases.

- 1. Someone is planning on using the network for a specific purpose and wants to know what the network path looks like and what type of performance they can expect.
- 2. The network is not working well for a particular project and there is a need to localize where the issue is. The difficulty is that there is no good way for a researcher to easily build a profile of what a path looks like. Mike is hoping that eventually perfSONAR will solve this problem. There needs to be a comprehensive, consistent base of network measurement test points. Right now, Internet2 has test points, NLR has a different set, and Pacific Wave has none in place. Biggest problem is lack of a consistent community agreement on what test points should be in place and on how researchers should go about testing.

Carla: It may take some directed communication. One possibility is to contact people in the Perforamcne WG and ask "what are your plans for an end point and how should we interface with you if there is an issue in your domain?" Also, the US Regional Networks Survey survey asks some questions like that.

Azher noted that each organization has its own monitoring with different kinds of setups. There is a need for interoperability. Cal Tech looks after the US LHCnet. Currently, they use simple tools like Iperf and Netperf to see end-to-end network paths and availability. Cal Tech also uses Mona Lisa for monitoring, but they may integrate the perfSONAR toolkit along with Mona Lisa to see how they can get more benefit out of it. Use of DCN capability will cause Cal Tech to investigate perfSONAR more closely.

Mike said that he frequently gets calls from a campus to use Iperf. There is not an established way to do performance diagnostics. So people do ad hoc and fire up Iperf on two endpoints they care about. They do not test on intermediate points. Sometimes Mike asks people to use BWCTL and do the test themselves. But BWCTL is somewhat meaningless because they are not used to breaking down a path.

Jeff: is it an education thing? If we publicized all the places that have the performance tools available would people start to use them?

Mike: In early days of BWCTL, everyone had servers locked down and there was a need to establish test keys. It was not trivial to run tests. There are still a number of servers that appear to be restricted, where a test key must be established. Even in CENIC community, a key is needed to exceed certain time periods. There may still be a perception in community that keys are needed.

There's a need for an education component and also a need to have established conventions and expectations for the test points, to facilitate ad hoc testing. Without that, people fall back to doing what's easy.

Next Meeting

At Joint Techs in College Station, Texas Monday, Feb. 2, 12:30 pm - 1:45 pm, Central Time

If you can't be there in person, please dial in.

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