

DCN Working Group Meeting
Jackson Room
Tuesday, April 22, 2008
7:30-8:45 am

Attendees: 26 participants (names & emails added to DCN-Announce mailing list, except for Kevin Miller)

John Vollbrecht went over the tentative agenda and welcomed folks to the first meeting of the DCN Working Group. Described the purpose of the group – place to talk, meet at MMs, JTs, and monthly or weekly calls – plus calls whenever needed. This would be supported by a mailing list for discussions (to supplement the announce email list). John provided a visual of all the existing connections around the world (show the graph).

John gave an overview of the state of the art – IDC's created, lots of interest, static and dynamic connections) and turned it over to Tom to talk about DCN around the world. He provided details on the Internet2 DCN provisioning. Fundamentally, they're Ethernet circuits, w/SONET intermingled. This all came out of OSCARS (IDC) and DRAGON (DC). Essentially the IDC talked to the DC that talks to your environment (GMPLS, MPLS, management plane, etc.) – IDC is a standardized effort via DICE that helps users connect across different DCs and systems. He further explained the methods by which the DRAGON and OSCARS pieces work on Internet2's DCN and gave a status update.

Discussion of how the OPN will be supplemented w/the DCN – Shawn and Phil talked about how they planned to share between Tier1 and Tier2 sites via DCN – the OPN is only T0 to T1 not below or sharing among. Phil talked about LambdaStation and Shawn about TeraPaths and how they're going to converge these efforts.

Aaron talked about using NDT to determine the status of the circuit – NDT is a web-based performance tool that relies on Web100 data; it operates on any client using a java applet to test from your machine to a known good machine. It can't tell you where in the network the problem is, or how other servers/clients perform; it gives you data (traceroute) to tell you what the performance of your machine at a fixed point in time and makes some guesses about what is limiting your performance (firewalls, buffer-limited, etc.) that you can use to begin troubleshooting.

Harvey asked if NDT could be made available (Aaron said it is already available) – he suggested having network versions that are available to setup client server tests between any two points so you can push the problems out to the edge. Shawn commented that US Atlas has required every location to have an NDT server; Rich informed the group that there were NDT servers at all Internet2 PoPs, NLR PoPs, on the IP network – John noted that the decision to have one at every DCN node has not yet been made – Harvey said it would be very useful to have it there. Rich also informed Harvey that the tool is readily available via a Knoppix disc (w/the correct Web100 version) so the server can be brought up on an as-needed method. He also gave some information on NPAD (a similar edge-tool).

Aaron provided information on the hardware requirements (fairly modest) and that this has been actively pursued by ATLAS and we're hoping CMS would follow suit. Having more locations publicized would be good. John noted that this group would be a good place to discuss the need for performance monitoring. Harvey Newman commented that we want to propagate those tools but that uses up resources. However, if we can track this and have tests that are quickly run, you can more easily bring up circuits for shorter periods of time – at this point, you need to request longer time so that you can be sure the testing is done in time to allow the data transfer to complete.

John asked for consensus on the need for a working group; he said we'd send out a note on DCN-Announce to collect preferences for call times/frequency. He said this would replace the HOPI calls (that have been eliminated). He wanted to get a discussion on how frequently people wanted to meet. Susan suggested putting that selection on the poll as well. Bill Owens suggested every 2 weeks as a start to keep the momentum going.

John also asked folks for input on agendas – this is not a policy group – and we'd see how to go forward.

Meeting ended at 8:32 am.