

perfSONAR WG Meeting  
Jefferson Room  
Wednesday, April 23, 2008  
7:30-8:45 am

Attendees: 12

Evangelis Chaniotak, Phil Demar, John Vollbrecht, Maxim Grigoriev, Warren Matthews, Carla Hunt, Jeff Boote, Cees de Laat, Joe Metzger, Jason Zurawski, Aaron Brown, Ezra Kissel, Martin Swany, Matt Zekauskas, Susan Evett.

Jason Zurawski provided an introduction to the perfSONAR effort, with focus on the rationale for global networking (especially the need for inter-domain data transfers) and the plans to make this easy to install and deploy.

This Working Group is trying to include greater membership participation; they are also attempting to get materials into a format for standards – Jason reported on an OGF standards track BoF scheduled for OGF23 (June 2008). Matt Zekauskas commented that, as someone who's been involved in standards processes before, he feels the plan is very exciting and aggressive but warned the group to expect some delays. Jason reported that the group expected to meet with some resistance to the standards but were ready to compromise and work with others in the space.

Current services in Release 0.9 include: an SNMP MA, a Lookup Service (LS), a link/circuit status service, a topology service, PingER Measurement Archive (MA) and Measurement Point (MP), perfSONAR-BUOY service, an OSCARS MA, and several Visualization services. This release is available through CPAN and RPM. Some of the visualization services include: DCN Weathermap, DCN Web Administration, perfSONAR-PS Fusion (a way to interact both the DCN world and the SNMP MA, LS, and Topology Service – so they can get a view of when circuits come up/down as well as how they performed), ESnet Interface Monitor, Google maps, and traceroute/ utilization mapping.

Jason ran through several demos:

1. DCN weathermap as of 7:35 am – nothing happening except at ESnet @ Brookhaven. Matt felt that, if Jason were to package it, people would use it.
2. DCN Administrative Tool – eventually the software will be able to automate the data table
3. DCN Fusion – describing the interaction between the DCN software and the performance monitoring software. Because most don't use SNMP, they're looking at TL1 monitoring, topology service, and direct tracking of DCN circuits. Jason noted that there is a need to demonstrate control plane knowledge (OSCARS MA), information discovery (LS), and continuous data monitoring (SNMP MA).
4. Gmaps – this is integrated into the DCN Administrative Tool; each of the points on the map can be clicked on to show a variety of data about the traffic at that location.
5. PingER (Presented by Maxim) – anyone can install the Pinger MA, UI, and MP; Maxim is working to make this easier to deploy. This includes network performance graphs (RTT and loss, etc.).

6. ESnet Interface Monitor (Presented by Joe) – The utilization browser showed the extent of the MAs that are up and sharing data (a good many, especially in Europe). Unfortunately, you need to know the location of the MA you are interested in – plan is to link this to the Gmaps so that you can click on a location, see all the MPs/MAs associated, and drill down to this data (1 minute, 30-minute, 1 hour, 2 hour, 1 day averages).
7. Traceroute/Utilization Mapping—This analyzes each line of a trace to determine the view of the trace over a pre-determined period of time. Currently, this is a statically-configured tool; once there is more dynamically configured options, this will become more useful and will be integrated into the ESnet Interface Monitor.

Cees de Laat asked about the on-line weathermaps, specifically what resembled errors – Jason reported that, since the system is doing frequent polling, calculation can lead to errors in the observed counter values (e.g. reading a counter frequently before an update can lead to false delta readings).

Joe Metzger asked about how much manual configuration was needed to make Fusion work – Jason said about as much as with the weather maps but this could be useful as soon as the topology is available. Aaron Brown reported that he has a plug-in for perfSONAR-UI; the biggest difficulty is that no one has latitude or longitude... Matt asked if there was anything he could do to get more data for this; Jeff Boote reported that the data is available but the schema needs to reflect the data that is recoverable. Joe said the whole thing just needs some glue.

Matt asked if there was any Internet2 data available via the ESnet Interface Monitor. Jason said that we have only 4 RAs so you can see a few seconds to a few days but it is too much data. Matt asked for specific intervals of I2 data – Joe feels this could be programmed into the tool such that it collects only the data it needs to crunch the data.

Jason closed with the Future Plans – the development team currently has 4 Google Summer of Code students: working on NPToolkit improvements – Jason reports the group is having lower level work done first but some perfSONAR features will be added – perfSONAR web administration – pluggable web map to manage perfSONAR services – and python IDC API – working with Andy Lake and John Vollbrecht. Also, the students are working on the infrastructure (info service improvements as well as other work), analysis (DCN/ perfSONAR integration)s, and visualization (Perl TK/web-based improvements).

Jason made a call for community involvement and urged people in the community to get involved. (<https://wiki.internet2.edu/confluence/display/PSPS/Home>)

Meeting ended at 8:37 am