

perfSONAR

Performance Monitoring Infrastructure

SC07

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What is perfSONAR?

- Performance Middleware
 - perfSONAR is an international consortium in which Internet2 and GÉANT2 are founders and leading participants
 - perfSONAR is a set of protocol standards for interoperability between measurement and monitoring systems
 - perfSONAR is a set of open source web services that can be mixed-and-matched and extended to create a performance monitoring framework

But what is it really...

- perf
SO
NAR is a Service Oriented Architecture (SOA)
 - Independent services capable of interacting via a common protocol to accomplish measurement and monitoring goals
- perfSONAR consists of software services written for different architectures and in different languages

perfSONAR Software Is...

- Measurement Points
 - Perform and collect a variety of measurements
- Measurement Archives
 - Store the results of historic measurements
- Discovery
 - Locate perfSONAR Services
- Protection
 - Authorize/Authenticate users and services
- Visualization
 - View the results of measurements

perfSONAR-PS

- Perl-based development of perfSONAR standard
- Complete compatibility with other development efforts in Java and Python
- Target audience: US based NOC/PERT staff, US institutions, end users
- Simple deployment and configuration

perfSONAR-PS Software

- SNMP MA - Present collected SNMP based measurements (Octets, Errors, Discards)
 - Works in tandem with monitoring (Cacti, Cricket)
- LS – Allows query and discovery of perfSONAR services
- Topology Service - Store and query network topology data
- Circuit/Link Status MA - Monitor the “status” (up/down/administrative/error) of dynamic circuits or static links
- Visualization - Several exciting visualizations we plan on displaying to present the data in useful and thought provoking ways.



perfSONAR-PS Visual Demonstrations

- Google Maps Utilization Overlay
 - Developed by SLAC
- perfAdmin
 - Administrative tool for managing perfSONAR LS services
- perfSONAR-UI
 - Developed by National Research and Education Network Bulgaria
- perfSONAR Powered Weathermaps
 - Dynamic Circuit Network/Phoebus/perfSONAR Deployments

perfSONAR is a Collaboration between:



perfSONAR-PS is a Collaboration between:



We would also like to acknowledge some organizations providing data for this demo:

