

ISWG_SMM2009Meet

Info

Information Services (IS) Working Group
Tues April 28 2009
EDT (UTC-5) 12:00pm - 1:15pm

Location: Jefferson Room
1700 Jefferson Davis Highway
Arlington, Virginia 22202 USA

[Session Info](#)

Agenda

- Charter Review
- perfSONAR Update
- Use Case Status
- IP Summarization
- Trust

Attendees

- Eric Boyd - Internet2
- Jeff Boote - Internet2
- Susan Evett - Internet2
- Martin Swany - UDeI
- Jason Zurawski - Internet2
- Andy Lake - Internet2
- Ezra Kissel - UDeI
- Evangelos Chaniotakis - ESnet
- Jon Dugan - ESnet
- John Volbrecht - Internet2
- Grant Miller - General Services Office
- Tomohiro Kudoh - AIST
- Takatoshi Ikeda - KDDI Labs

Notes

Welcome, Charter Review

Martin welcomes the group, and starts presentation from slides (attached).

perfSONAR Update

Jason gave a perfSONAR information services update (slide 4/5):

- gLS Locations
 - Internet2 (Ann Arbor MI, Washington DC)
 - University of Delaware (Newark DE)
 - ESnet (Berkeley CA)
 - Fermilab (Batavia IL)
 - RNP (Rio Brazil)
 - APAN (Tokyo Japan)
 - Geant2 (Poznan PL)
- hLS Span
 - ~50 Sites
 - USAtlas
 - CMS
 - perfSONAR Participants
 - DCN Participants
- Development Plans
 - Developers meeting Thurs/Friday of this week
 - Scalability
 - Query Style
 - Robustness
 - IP Summarization

Use Cases

Martin picked up after this with use cases. Current list of use cases:

- Control Plane
 - Host discovery
 - Service discovery
 - Pathfinding
- Performance Measurement
 - Archived data discovery
 - Measurement point discovery
 - *Network topology abstractions
 - "What is close?"
 - This includes proximity to the querier, proximity to a path, proximity to another resource

EC: In the DCN WG session today (and probably past events) we realized a need for a *directory* service (phone book?) type of service. Need to get more information than the host->urn mapping. Is this possible?

MS: Yes, model is defined to have more info in the *node* area that could be used for these purposes

JZ: Current website for registration only really takes into consideration the *relationship* that a urn/host have. Could use the node as martin says + make an enhanced web site that cares about the other features.

AL: We need to explore more of what is possible

JZ: What do you need (basic ideas):

EC/AL:

- URN
- Friendly Name
- Interface/Sub Interface
- VLAN (where applicable)
- Physical Location
- Contact Info
- Service Assignment (currently possible through relationships)

Some other discussion on the issue related to service tie in (need to do this at the topology level due to services being associated with nodes) and queries (e.g. be careful with arbitrary queries for information at the gLS level - not everything is summarized but the keyword concept could be clobbered).

Martin discussed the *phone book* idea a little further by mentioning the potential *ILS* (Index Lookup Service) that could help tie together gLS clouds at a higher level (albeit it brief) dataset. Examples including community/project specific information. Introduced the notion of data *views* (similar to DB concept of the same name) where a persistent query could be designed (and optimized) to offer specific needs of certain groups.

JV mentions the need to *hide* information. Martin offers two suggestions:

- Don't summarize and register an hLS (private hLS)
- hLS would need to offer controls on what could and should be summarized and shared

These two are pre-AAA suggestions (the landscape will change completely when we have this available).

JV brings up service discovery (in the context of DCN) and asks about the IDC need to advertise and locate different domains. AL describes that this is currently in the dataset of what an IDC registers. JV thinks that this would be valuable at both the data and control plane levels.

EC mentions an issue regarding our current host mapping scheme. For instance some domain 'C' (see slides) may have an end host connected via domain 'B' but no topology of it's own. What happens when this host changes topology? AL brings up the example of NYSERNET - before they had an IDC they *lived* in the Internet2 space. After they lived in NYSERNET space and converted *only* URNs, not friendly names.

EC muses about *policy* as something that should be registered and shared. JZ cautions that policy in the hLS would not work (should be kept pure - topology only). JZ does not rule out a special service to share/deal with topology with the gLS level advertising the location of these services. Martin thinks about policy as something that *Decorates* a network graph.

IP Summarization

Martin gave an update on IP Summarization work. See also [the perfSONAR-PS Wiki](#) . Current status:

- Trying new heuristics to better prune the tree
- Considering ipv6
- Considering ASN

Trust

Small discussion regarding the trust model for information sharing/validation. This is a larger topic that there was not much time for. Some basic ideas:

- Still considering trusting hosts/actors vs data
- Will change with the adoption of a AAA infrastructure
- Required for DCN