



2013-01-14, Performance BoF

Aaron Brown

# Centrally-Managed perfSONAR tests

# perfSONAR Toolkit Model

- Each perfSONAR Toolkit is a testing island
  - The Configuration GUIs are focused on configuring the tests that this host should perform
  - The Graphing GUIs only display results for tests that this host is performing

# Virtual Organization Model

- Each perfSONAR Toolkit is a part of a group, or multiple groups, of hosts
  - Needs to look at the performance of the system as a whole
  - Needs to ensure the individual instances are performing appropriate tests

# perfSONAR Mesh Configuration

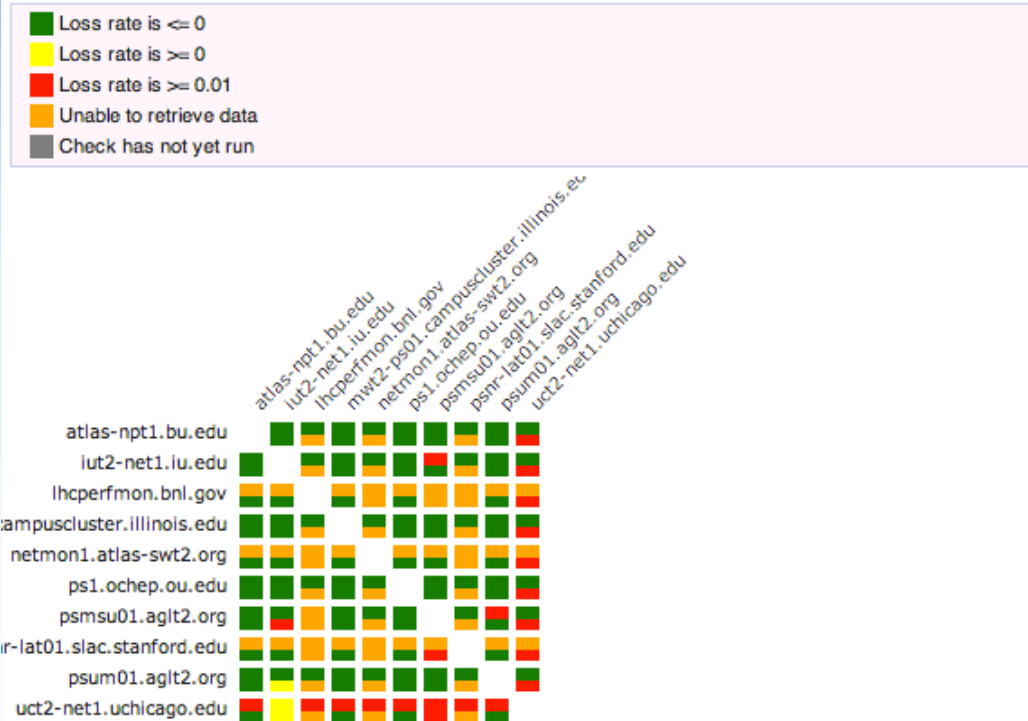
- Central description of the “Mesh”
  - Contains descriptions of the organizations, sites and hosts involved
  - Contains the set of tests to be performed by each host
- Each Toolkit is configured to download the central description, and perform the tests that the host has been told to perform
  - Regularly, regrab the Mesh description, and update the set of tests to be performed

# perfSONAR Mesh Configuration

- Benefits
  - Allows for centralized configuration
  - Enables GUIs that better understand the mesh
  - Gives users, and administrators insight into what the mesh should be doing

# Centrally-Managed perfSONAR Tests

USATLAS Mesh - OWAMP Test Between USATLAS Latency Hosts



# Centrally-Managed perfSONAR Tests

- A GUI to build meshes

**perfSONAR Mesh Configuration**

Home  
Meshes  
Hosts  
Organizations  
Administrators  
Measurement Archives

Home

**Meshes**

Name	Actions
Internet2	<a href="#">View</a> <a href="#">Delete</a>
USATLAS	<a href="#">View</a> <a href="#">Delete</a>

**All Hosts**

Description	Organization	Site	Address(es)	Actions
Atlanta latency host	Internet2	Atlanta POP	64.57.16.98, 2001:468:1:12::16:98	<a href="#">View</a> <a href="#">Delete</a>
Atlanta 1GE throughput host	Internet2	Atlanta POP	64.57.16.82, 2001:468:1:101::16:82	<a href="#">View</a> <a href="#">Delete</a>
Atlanta 10GE throughput host	Internet2	Atlanta POP	64.57.16.66, 2001:468:1:11::16:66	<a href="#">View</a> <a href="#">Delete</a>
Chicago latency host	Internet2	Chicago POP	64.57.17.34, 2001:468:2:12::17:34	<a href="#">View</a> <a href="#">Delete</a>
Chicago 1GE throughput host	Internet2	Chicago POP	64.57.17.18, 2001:468:2:101::17:18	<a href="#">View</a> <a href="#">Delete</a>
Chicago 10GE throughput host	Internet2	Chicago POP	64.57.17.2, 2001:468:2:11::17:2	<a href="#">View</a> <a href="#">Delete</a>
Houston latency host	Internet2	Houston POP	64.57.16.162, 2001:468:3:12::16:162	<a href="#">View</a> <a href="#">Delete</a>
Houston 1GE throughput host	Internet2	Houston POP	64.57.16.130, 2001:468:3:11::16:130	<a href="#">View</a> <a href="#">Delete</a>
Houston 10GE throughput host	Internet2	Houston POP	64.57.16.131, 2001:468:3:11::16:131	<a href="#">View</a> <a href="#">Delete</a>
Kansas latency host	Internet2	Kansas POP	64.57.16.226, 2001:468:4:12::16:226	<a href="#">View</a> <a href="#">Delete</a>
Kansas 1GE throughput host	Internet2	Kansas POP	64.57.16.210, 2001:468:4:101::16:210	<a href="#">View</a> <a href="#">Delete</a>

# perfSONAR Mesh Configuration Plans

- Agent software supported on the next Toolkit release
  - Dashboard GUI may not be integrated, but should be available immediately
- GUI to build mesh configuration files
- Improved dashboard GUI



# Beta Testers

- We're very interested in getting folks to test. If folks are interested and willing to help, send email to [aaron@internet2.edu](mailto:aaron@internet2.edu)



## **Centrally-Managed perfSONAR Tests**

2013-01-14, Performance Working Group

Aaron Brown

For more information, visit [www.internet2.edu](http://www.internet2.edu)