

2012-10-04

Aaron Brown

Internet2

# Centrally-Managed perfSONAR tests



**FALL 2012**  
INTERNET2 MEMBER MEETING

Philadelphia, PA  
September 30-October 4

# 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

# Mesh Dashboard

## USATLAS Mesh - TCP BWCTL Test Between USATLAS Bandwidth Hosts

■ Throughput  $\geq$  900Mbps
 ■ Throughput  $<$  900Mbps
 ■ Throughput  $\leq$  500Mbps
 ■ Unable to retrieve data
 ■ Check has not yet run



## USATLAS Mesh - OWAMP Test Between USATLAS Latency Hosts

■ Loss rate is  $\leq$  0
 ■ Loss rate is  $\geq$  0
 ■ Loss rate is  $\geq$  0.01
 ■ Unable to retrieve data
 ■ Check has not yet run





# 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

# perfSONAR Mesh Configuration 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

Aaron Brown

Internet2



**FALL 2012**  
INTERNET2 MEMBER MEETING

Philadelphia, PA  
September 30-October 4