perfSONAR central measurements management training

eduPERT training
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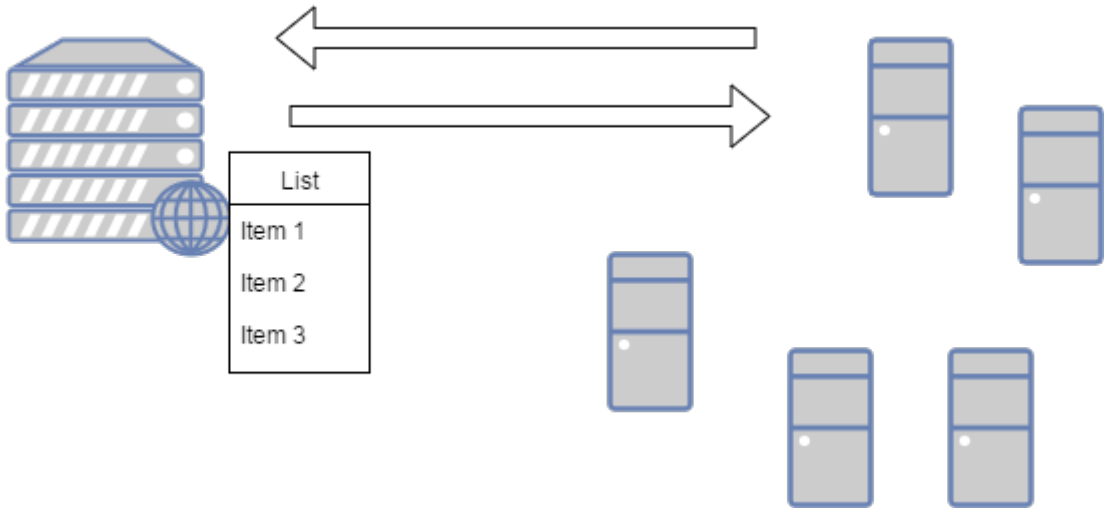
Meshconfig

- Concept and structure
- Generation process
- Hands-on

The concept

- Introduction to the concept of a measurement mesh



http://docs.perfsonar.net/release_candidates/4.0rc1/config_mesh.html

Meshconfig structure

- Sections
  - General description + optional
  - Mesh archivers
  - Organization
  - Test specifications
  - Test groups with topology
  - Test assignments

Meshconfig structure

- General description elements
  - Description: used by MaDDash
  - Administrator

M

- Organizati
  - Organiza
  - Archivers
  - Host
    - no_age
    - address
    - Attenti

```
<organization>
  description    eduPERT
 <measurement_archive>
  type        perfsonarbuoy/bwctl
     read_url     http://pertcs01.pert.edu/esmond/perfsonar/archive/
     write_url    http://pertcs01.pert.edu/esmond/perfsonar/archive/
 </measurement_archive>
<site>
  <location>
    city  Amsterdam
  </location>
  <host>
    address      pertmp01.pert.edu
  </host>
```

Meshconfig structure

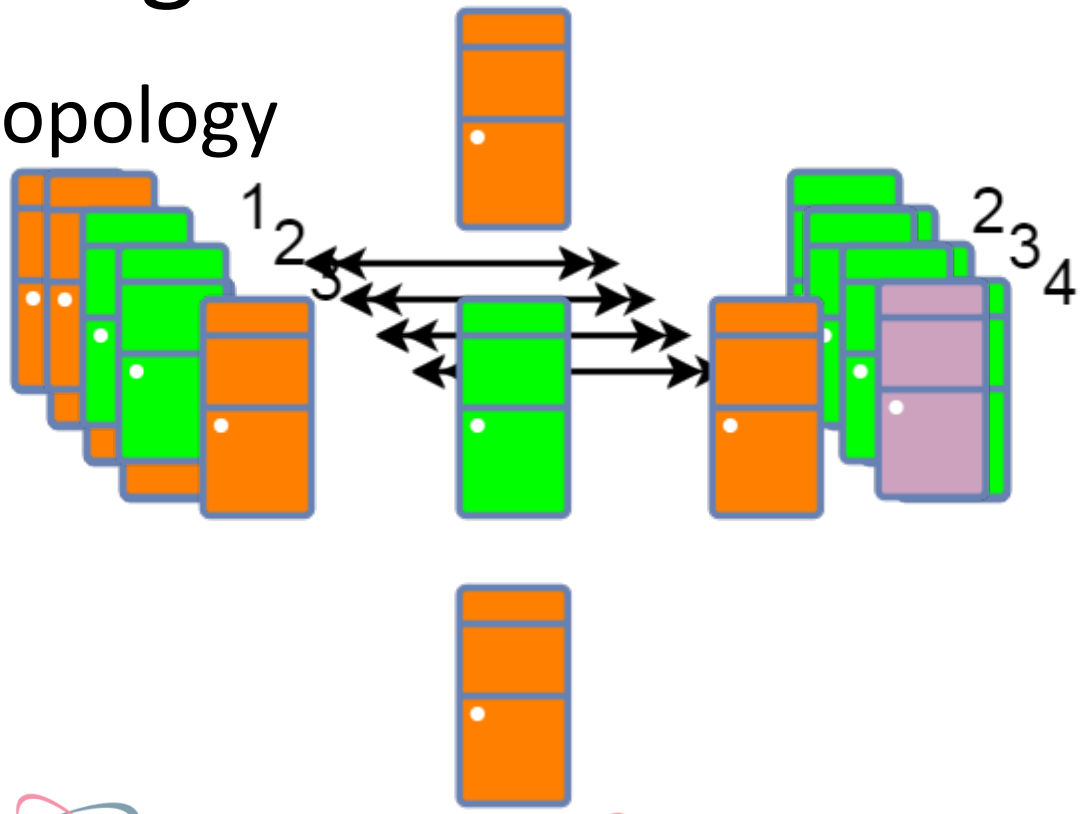
- Test specifications

http://docs.perfsonar.net/release_candidates/4.0rc1/config_mesh.html#defining-test-parameters

  - Throughput Test: *type perfsonarbuoy/bwctl*
  - Streaming One-way Delay Test: *type perfsonarbuoy/owamp*
  - Ping Test: *type pinger*
  - Traceroute Test: *type traceroute*

Meshconfig structure

- Test groups with topology
  - mesh
  - disjoint
  - ordered_mesh
  - star



Meshconfig structure

- Test assignments
  - Description: used by MaDDash
  - Groups
  - Test specification

Meshconfig structure - Advanced

- Dynamic Mesh Generation

http://docs.perfsonar.net/release_candidates/4.0rc1/config_mesh.html#dynamic-mesh-generation

  - <host_class>
  - Host
    - <address>
    - tag

```
<address>
   address 10.0.1.1
   tag latency
</address>
```

Generation process

- XML config -> JSON -> publish web
- Central server
  - xml templates in centos home folder
- /usr/lib/perfsonar/bin/build_json -o output.json mesh-config.xml

Hands-on

- Questions?
- Checkout the **shortcut.hints** file