

# perfSONAR

## perfSONAR central measurements management training

eduPERT training  
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## Meshconfig

perfSONAR

- Concept and structure
- Generation process
- Hands-on

## The concept

perfSONAR

- Introduction to the concept of a measurement mesh



[http://docs.perfsonar.net/release\\_candidates/4.0rc1/config\\_mesh.html](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

# Meshconfig structure

- Organization
  - Organization
  - Archiver
  - Host
    - no\_age
    - address
    - Attention

```
<organization>  
  description eduPERT  
  <measurement_archive>  
    type perfsonarbuoy/bwctl  
    read_url http://pertrcs01.pert.edu/esmond/perfsonar/  
    archive/  
    write_url http://pertrcs01.pert.edu/esmond/perfsonar/  
  </measurement_archive>  
</organization>  
<site>  
  <location>  
    city Amsterdam  
  </location>  
  <host>  
    address pertmp01.pert.edu  
  </host>
```

# Meshconfig structure

- Test specifications

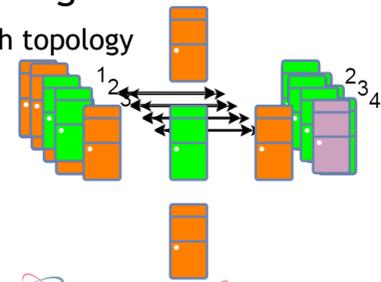
[http://docs.perfsonar.net/release\\_candidates/4.0rc1/config\\_mesh.html#defining-test-parameters](http://docs.perfsonar.net/release_candidates/4.0rc1/config_mesh.html#defining-test-parameters)

- Throughput Test: *type personarbuoy/bwctl*
- Streaming One-way Delay Test: *type personarbuoy/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 perfSONAR

- Dynamic Mesh Generation

[http://docs.perfsonar.net/release\\_candidates/4.0rc1/config\\_mesh.html#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 perfSONAR

- 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 perfSONAR

- Questions?

- Checkout the `shortcut.hints` file