"HANDS-ON VLABS: CONFIGURING REGULAR TESTS USING PSCHEDULER CLI

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LAB SERIES: PERFSONAR

Lab Series: perfSONAR

- **Lab 1:   Configuring Admin. Information Using perfSONAR Toolkit GUI**
- Lab 2:   PerfSONAR Metrics and Tools
- Lab 3:   Configuring Regular Tests Using perfSONAR GUI
- **Lab 4:   Configuring Regular Tests Using pScheduler CLI Part I**
- **Lab 5:   Configuring Regular Tests Using pScheduler CLI Part II**
- Lab 6:   Bandwidth-delay Product and TCP Buffer Size
- Lab 7:   Configuring Regular Tests Using a pSConfig Template
- Lab 8:   perfSONAR Monitoring and Debugging Dashboard
- Lab 9:   pSConfig Web Administrator
- Lab 10: Configuring pScheduler Limits
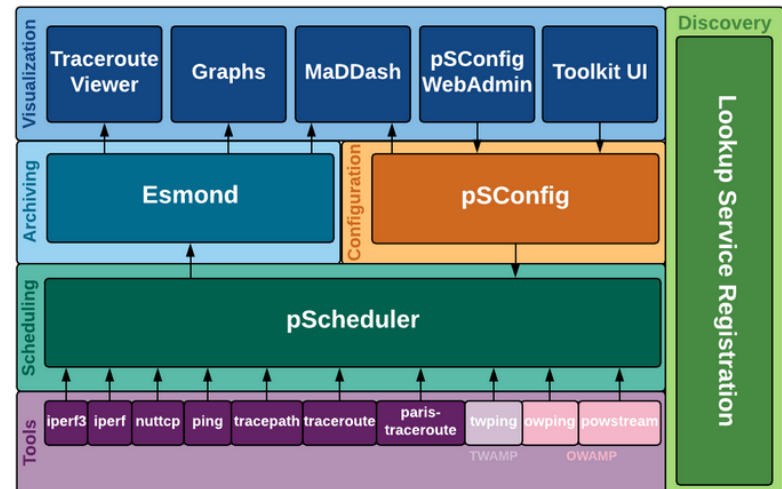
perfSONAR layers

Organization of Lab Manuals

- Each lab starts with a section *Overview*
  - ➤ Objectives
  - ➤ Lab topology
  - ➤ Lab settings: passwords, device names
  - ➤ Roadmap: organization of the lab
- *Section 1*
  - ➤ Background information of the topic being covered (e.g., fundamentals of TCP congestion control)
  - ➤ Section 1 is optional (i.e., the reader can skip this section and move to lab directions)
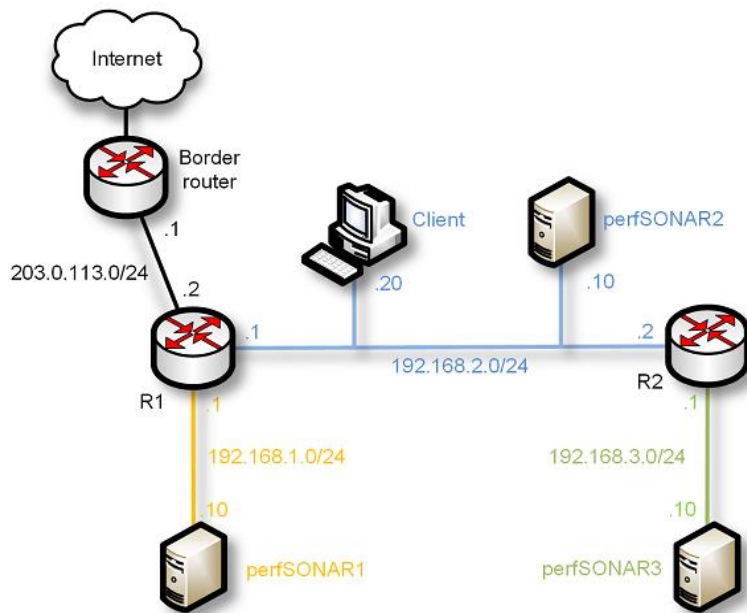- *Section 2… n*
  - ➤ Step-by-step directions

LAB 1: CONFIGURING ADMINISTRATIVE INFORMATION USING PERFSONAR TOOLKIT GUI

perfSONAR Toolkit GUI

- The user can configure regular test via perfSONAR Toolkit GUI as well as the administrative information about a perfSONAR node
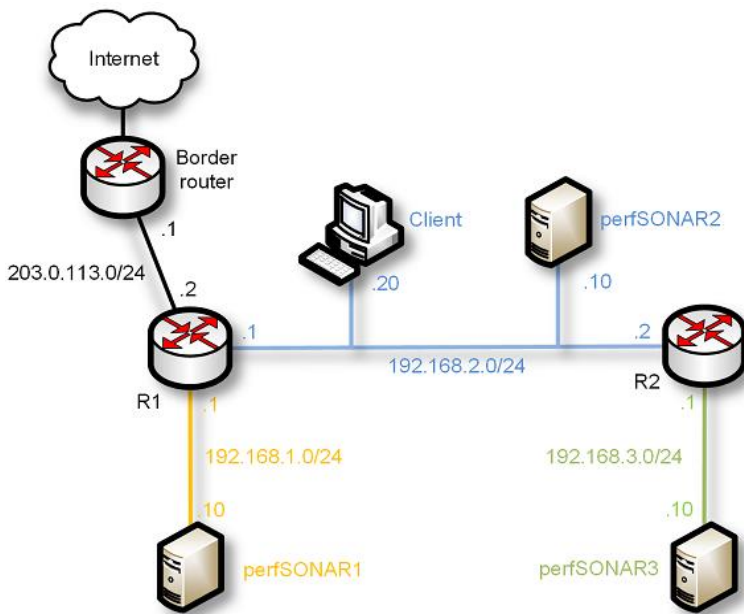

Training scenario

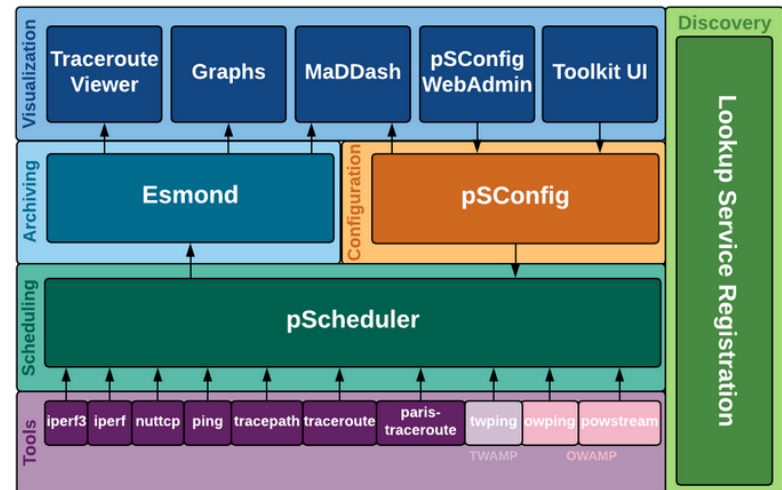perfSONAR Toolkit GUI

LAB 4: CONFIGURING REGULAR TESTS USING PSCHEDULER CLI PART I

pScheduler

- The pScheduler coordinates, executes, and optionally stores network measurements
  - ➢ E.g., latency, packet loss rate, throughput
- The pScheduler can be invoked via CLI or GUI

Training scenario

perfSONAR layers

The pScheduler Command

- The pScheduler command is used to create new tasks
- E.g.,

```
pscheduler task latency --source 192.168.1.10 --dest 192.168.2.10
```


Training scenario

Latency statistics

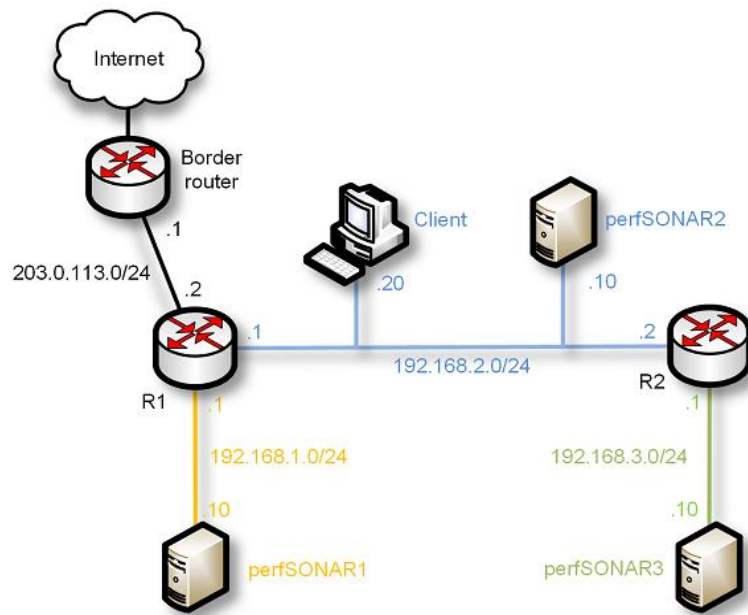# LAB 5: CONFIGURING REGULAR TESTS USING PSCHEDULER CLI PART II

The pScheduler Command

- The pScheduler command provides the options to repeat and visualize regular tests
- E.g.,

```
pscheduler task --repeat PT2M throughput --source 192.168.1.10 --dest 192.168.2.10
```


Training scenario

pScheduler monitor