2022 Update

Latest developments and news

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3rd European perfSONAR User Workshop
24-25 May 2022

 perfSONAR is developed by a partnership of

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A quick look back...

... Zoom, April 2021
2\textsuperscript{nd} European perfSONAR Users Workshop

- Online (Zoom) in April 2021, hosted by GÉANT
- 15 presentations from 11 organisations
- Around 70 participants in total

You asked for:

- Continued OS support
- Easier access to data
- Improve documentation and guides
- And more…
What happened since then?

- New maintenance releases
  - 4.4.0 to 4.4.4
- 2nd perfSONAR day hosted by Internet2 in November 2021
- No 5.0-beta release …
  - … yet
- But working on it
  - Lots of discussion, meetings, calls …
  - … and clearly some development work!
Deployments update

Around 2000 public nodes around the world
Software update

Latest releases
perfSONAR 4.4.0 - 4.4.4

● A few minor new features:
  ○ Loopback throughput tests
  ○ AS numbers lookup in pScheduler limits
  ○ Graphs Archive Whitelist
  ○ New RabbitMQ archiver

● Bug and security fixes when required

Thank you for your reports!
2\textsuperscript{nd} European pS Users Workshop

Online, April 2021
2nd European perfSONAR Users Workshop

We discussed:

- perfSONAR installations and usage
  - From 10Gbps mobile testing to scaling up a pS deployment
  - From Central Management server setup to CNaaS deployment
- New tools and usage
- pScheduler plugins development
- OS Support
Addressing your requests

- ✔ No OS lock-in
- ✔ Continue Ubuntu support
- ✔ Different architectures
- ✗ Stay near the edge instead of well behind
- ✔ Scriptable configuration
- ✔ Containerisation
- ✔ Simple installs
- ✔ And even simpler for on-demand testing
- ✔ Easy export of measurement data

Improved OS Support
Continued Ansible Support
Continued Docker Support
Upcoming 5.0 release
OS Support

- Workshop poll and follow up discussions
- Long term need to move away from CentOS, and go towards:
  - Rocky / Alma Linux
  - Debian / Ubuntu
- Continue looking at CentOS / RedHat evolution
OS Support: What happened so far?

- Discontinued Ubuntu 16
- Unfortunately no Ubuntu 20 support yet
- Continued investigation
- Porting code with a new unified build mechanism
  - Unibuild
Unibuild

- Create a unified setup to build any perfSONAR repository
  - Support both RPM and Deb formats
  - OS aware (builds, dependencies, …)
  - Snapshot and release builds
- Initially developed for pScheduler builds
  - Then generalised for the other perfSONAR repositories
  - Currently being integrated in the general build process
- Then using Docker and QEMU to build for different architectures
Upcoming 5.0 Release

- New backend: OpenSearch
- Middleware to transition: Elmond
- Opening up possibilities
  - Easier access to data
  - Different displays
  - Correlations with other data sources
psGUI: on-demand measurements

- Help network engineers work with pScheduler / perfSONAR

Create a GUI...

...To do perfSONAR On-Demand measurements
psGUI: 1st implementation

- Source and destination from a MaDDash grid
- Most used measurement types:
  - Latency
  - Throughput
  - Trace
  - RTT
- To enter public beta soon, stay tuned!
throughput: ps02.aco.net -> psmall.st.carnet.hr (iperf3)

https://ps02.aco.net/pscheduler/tasks/c5301e91-66a7-45aa-a3f9-760adb65e633/runs/first

Throughput : 909.83 Mbits/sec
latency: ps02.aco.net -> psmall.st.carnet.hr (100 packets)
https://ps02.aco.net/pscheduler/tasks/a9df94db-3616-4544-96c8-81b680560273/runs/first
psGUI: 1\textsuperscript{st} implementation

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Tracking progress and engagement

- Issue tracker
  - [https://github.com/perfsonar/](https://github.com/perfsonar/)
  - Add your own bug report or feature request
- User lists reports and discussions
- Dev meetings and standups
  - Bi-weekly standups, weekly QA call, weekly automation and containers call
  - Fortnightly 1 hour open Dev call alternating with Docs & Training call
  - Yearly Developers meeting
- perfSONAR day, Workshops, Infoshares, Conferences
3rd European perfSONAR Users Workshop

- 1st day: Users experience, use cases
- 2nd day: Developers corner, new features, work in progress
Thanks!

For more information, please visit our web site:
https://www.perfsonar.net