perfSONAR is a services-oriented infrastructure for network performance monitoring, making it easier to solve end-to-end performance problems on paths crossing several networks.

It contains a set of services delivering performance measurements in a federated environment.

- Measurement Point Service
- Measurement Archive Service
- Information Service
- Authentication Service
- Transformation Service
- Resource Protector Service

The Information Service (IS) is used for service registration, service discovery, and topology representation. It is the aggregation of the Lookup Service and Topology Service, together forming a general network cyber-infrastructure.

The perfSONAR Messages

perfSONAR services exchange NMWG messages.

The NMWG schema is used to describe measurement data and to exchange data between services.

The messages are carried in a SOAP message, over HTTP.

Some perfSONAR numbers (Jan 26, 2010):

- 400+ Downloads of perfSONAR ISO per month
- 7 Global Lookup Servers
- 154 Home Lookup Servers
- 300+ Active Measurement Points
- 200+ Active Servers