# **Client API for PerfSONAR**

### Background

Whilst the use of XML for the communciation of network statistics allows flexible mechanisms for gathering and finding network data easy, quite often it would be simpler to have a client interface to get at such data rather than forming and reparsing XML data.

This project should look into creating a flexible and extensible mechanism to query for important perfSONAR MA's/MP's and LS's. It should hide the complexities of the NMWG and perfSONAR XML specifications to provide an efficient and easy to use interface.

## **Specifics**

Factory Classes should be created to allow the simplist interface to gather the network data. It is recommended that one factory class be created for each type of network data; for example, one to get all perfsonar nodes, one to gather utilisation data, one for latency data etc.

The object design should enable modular addition of the various different types of metrics which are possible from the perfSONAR framework.

You should work closely with teh visualisation team(s) to satify their use cases and requirements.

#### Goals

- Extensive and useful documentation
- · Creation of a flexible, efficient and easy to use API for the gathering of perfSONAR data. Implementation in both perl and java.
- understanding of the xml nmwg and perfsonar messages.
- testing with various applications for visualisation.

#### Contacts

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