

Google Earth and Google Maps perfSONAR Integration

Background

Google Earth and Google Maps have proven to be very intuitive to use and flexible enough as an architecture to provide very useful representations of most geographic information.

This project aims to prototype visualisation of network data gathered using perfSONAR into the google earth and google maps projects.

Specifics

perfSONAR is a framework where network information such as capacity, utilisation, one-way latency, etc can be gathered using standard NMWG XML that is wrapped around perfSONAR specific metadata.

An example of the capability of the googlemaps framework for network representation is shown at

```
http://packrat.internet2.edu/gmaps/gmaps.cgi
```

This project is focused on making such perfSONAR data more interesting and useful for network engineers and network users.

Goals

- provide useful indepth documentation

Googlemaps

- understand current architecture of gmaps and offer and implement suggestions for scalability, flexibility and usability.
- extend the googlemaps application to support more metrics in a modular and flexible way.
- provide facilities to conduct client side graphing of the network data.
- provide dynamic lookup service integration

Google Earth

- investigate more interactive and animated methods for representing perfsonar network data into google earth.
- determine necessary frameworks to easily integrate/retrieve network data for direct representation into google earth.
- integrate utilisation information from RRD MAs in a modular way.

Contact

Yee.