

# PerfSONAR Tasks

## PerfSONAR

1. Middleware
  - a. Document User API for perfSONAR: Asif, Qasim
    - i. how does this differ from perfsonarui?
  - b. Study the perfSONAR NMWG request/response schema [Done 5/1/07]: Qasim
    - i. Document NMWG request/response schema on wiki (append to existing docs): Qasim
  - c. Output from some script (mtml.pm?) is unintelligible (e.g. control characters) need help from Asif, Nauman will send snapshot o Asif (5/10/07)
  - d. **Having Java socket error, maybe firewall problem: Asif**
  - e. **Add updated code into SVN: Asif**
2. Make traceroute.pl (reverse traceroute and ping server) perfSONAR compliant.
3. Visualisation
  - a. Provide 3-dimensional spinning (interactive) globe interface like with mona-lisa in java
    - i. integrate into Asif's topoviz frontend: QasimB
      1. Will send screen shots (7/26/06): QasimB
      2. Consider GoogleEarth for 3D Topology visualization: QasimB
    - ii. integrate into perfsonarUI: TBA
      1. Map relevant links & paths perfSONAR node information (see <https://svn.internet2.edu/svn/nmwg/trunk/nmwg/schema/rnc/topo> for schema) .
      2. Integrate into perfSONAR libraries Asif was working on
        - a. Get documentation on perfSONAR user libraries: Asif
    - iii. Make useful for PingER?
      1. Display mon & remote sites
      2. Mouse overr provides site details
      3. Mouse click on monitor provides sites-per-country.html like output for monitor node
      4. Select metric & ticks src dest submit pingtable request and get plot.
  - b. [Googlemaps](#)
    - i. Download and understand code from internet2 svn
    - ii. install locally
    - iii. Investigate google maps API's and extensions to provide 'traffic' like visualisation (look at google maps at the Bay Area for example)
  - c. Ping summary table: Nauman
    - i. status? (was first thing ever assigned to nauman)

## PerfSONAR-UI

1. General: Qasim Bilal, Yee
  - a. **Study the [link](#) and documentation of PerfSONAR (available online): Qasim**
  - b. Application Requirements
    - i. Get the data from MA for Pinger
    - ii. Parse it to show mesh
    - iii. Draw utilization graph for site(s) selected
    - iv. Check for schema deficiencies
2. PerfSonar Java Libraries for Backend: Qasim
  - a. PerfSONAR user libraries - i.e. libraries that will make it easy for others to gather and consume data from perfsonar services. the specific requirments are to integrate the Topology Service, Lookup Services, the RRD/SNMP MA's, and Status MA's
    - i. Using XQuery or templating library query the schema.
    - ii. Study and understand XQuery
    - iii. Implement it using the schemas given [here](#)
3. 3D User Interface for Pinger and Perfsonar: Qasim, Les, Yee
  - a. Create nodes (with colour/icons) and links (with either arrows or a moving animation of direction, with colour)
  - b. Automated spinning
  - c. Zooming and panning
  - d. Conversion from 3D Globe to 2D image
  - e. Integration of this code with PerfsonarUI and also maintain separate copy.