Scalable Sensing Service

Sonia Fahmy, Ethan Blanton, Sriharsha Gangam (Purdue), Puneet Sharma (HP Labs), Sarbajit Chatterjee, Sumit Kala, Nagarjuna Reddy Chevuru, Deepti Sharma (HP)
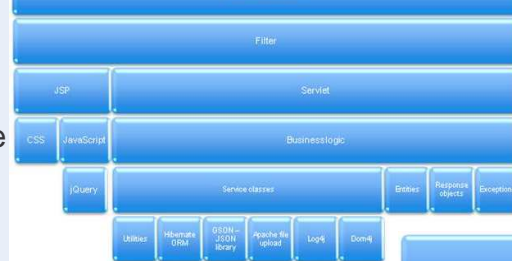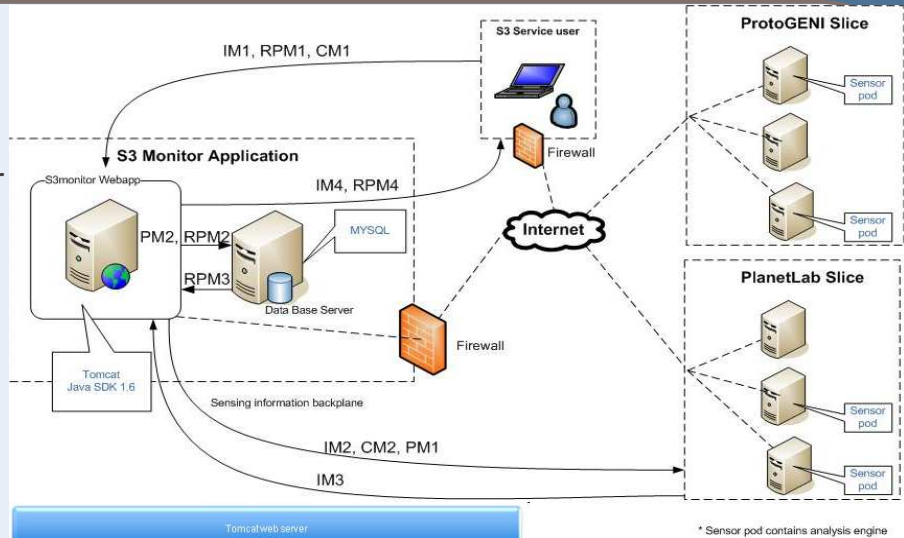
http://groups.geni.net/geni/wiki/ScalableMonitoring

Ø The Scalable Sensing Service (S^3 Monitor) provides basic management services for users to take *controlled measurements, e.g., available bandwidth, packet loss,* between GENI nodes.

Ø A *web interface* is provided to the user for scheduling and initiating measurements, managing ongoing measurements, and retrieving measurement results.

Ø The S^3 Monitor service manages the dissemination of schedules to nodes in the GENI slice and retrieval of measurement results on behalf of the user.

Ø Measurement results are stored by the system for later reference until purged by the user.

The S^3 Monitor web interface controls the sensor pods and interfaces with the measurement database.

The sensor pod runs CGI scripts on a BOA HTTP server. New sensors can be plugged into the sensor pod framework.

A GENI experimenter may deploy the S^3 Monitor service to a GENI experiment and use its facilities to collect network measurements within the experiment slices.