A visualization tool for geographic information of NTP servers

Jonatan Schroeder
University of British Columbia
Nov 14, 2007

Introduction
Domain Description
The Solution
Software Demo
Conclusion

Tasks
- Overall visualization of the geographic topology
- Deficient NTP servers identification
- Geographic topology and deficient NTP servers identification in a specific geographic region

Main Window
- Map of the region in focus
- Rectangle for each subregion
- Colour: delay
- Size: # servers
- Bottom: Histogram
- Colour and X-axis: delay
- Y-axis: # servers

Software Demo
- Demo
- Scenario of Use

 Screenshots
- Visualization tool for geographic visualization of NTP servers
- Search for good or deficient servers in a region

Conclusion
- Performance improvement (reduce latency and usage of CPU)
- Multiple filtering
- Detailed view of servers
- Filter by IP address

Future Work
- NTP survey in 2005
- Data query, collection and analysis
- http://www.ntpsurvey.unc.edu
- 1,290,819 unique addresses found
- 147,251 complete responses
A visualization tool for geographic information of NTP servers

Jonatan Schroeder
University of British Columbia

Nov 14, 2007