Technische Universität München
Chair for Network Architectures and Services
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Bachelor Thesis 2010

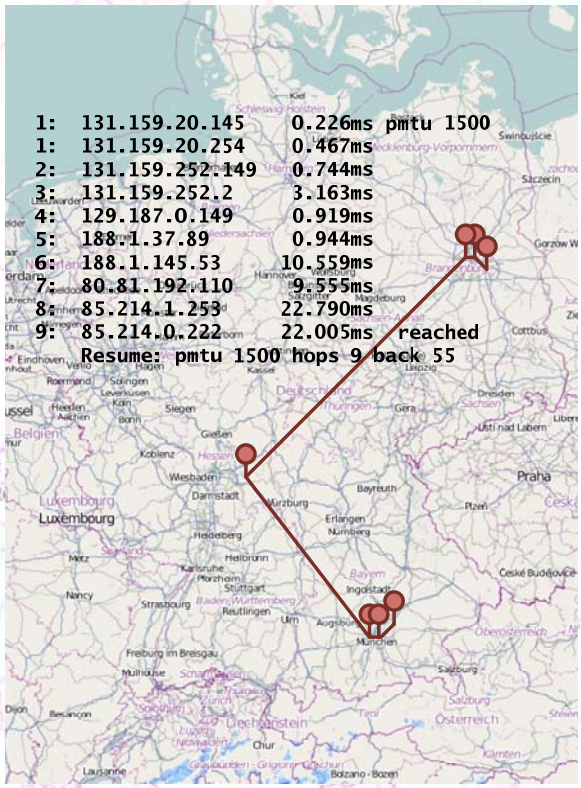
Visual Traceroute

Motivation

Traceroute is still the administrators instrument of choice to find out more information on a network connection. Yet, it misses an easy to use, intuive interface for the standard user.

Furthermore, services like google maps/ open street map and geoip provide additional information that could be used to provide a meaningful view to the user.

Putting the measurement results of all user into one map gives a distributed view of the Internet.



Topic

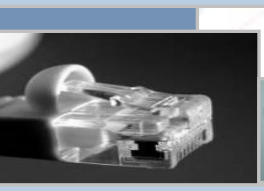
Creating a webapplication that uses a IP geolocator and a online map to visualize the routes between several computers is the main target of this thesis. Additionally, the service should store measurement result in a database backend to allow the visualization of parts of the internet at once. A time axis could also allow the visualization of changes in network delays over time.
The implementation should run within common browser (at least Firefox and IE) and on common operating systems (Windows, OS X, Linux).

Requirements

- Explorative nature
- Programming skills (e.g. C/C++ or Python)
- Advanced knowledge on computer networks
- AJAX programming

Keywords

Network measurement, traceroute, visualization





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