

Technische Universität München Chair for Network Architectures and Services Prof. Dr. Georg Carle

**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.

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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.

Firefox and IE) and on common operating systems (Windows, OS X, Linux).

**Requirements** 

Topic

- 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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Further information and detailed topic descriptions: http://www.net.in.tum.de/en/theses

Rabat

Dublin

Cardiff London

Contact: haage@net.in.tum.de, schlamp@net.in.tum.de

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