

Motivation

Technische Universität München, Department of Informatics

Chair for Network Architectures and Services

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Thesis B.Sc.

Thesis

M.Sc.

GE Practical Course

IDP, Guided esearch

Is IPv6 faster than IPv4?

Many hosts on the Internet run on both IPv4 and IPv6 simultaneously in a so-called dual stack setup. This means that there are often two different ways to reach a service: via IPv4 and via IPv6. Both ways may take a completely different route through the internet.

Devices often try to use the fastest path by opening both an IPv4 and and IPv6 connection at the same time and using the connection that is established first.



http://www.worldipv6launch.org

You are not the first person to perform such measurements; similar measurements can already be found in the literature. However, the most recent direct comparison is older than 5 years – and 5 years is a long time on the Internet.

Your Task

Your first task is reading the related work about measurements to figure out what has already been done and where exactly your results will fit in.

Your task is to perform Internet-wide measurements comparing path lengths (traceroute) and latencies of various web services (e.g. Alexa top 1 million websites). These measurements should be performed from different IPv6-capable vantage points, e.g. using PlanetLab or NLNOG.

The exact tasks depend on the type of the thesis (e.g., B.Sc. or M.Sc.).

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