

Thesis
B.Sc.

IDP

Packet I/O for Parallelized Network Monitoring

Motivation

Network monitoring is crucial for network and service providers to detect potential problems early. With increasing network loads the performance requirements of monitoring tools are on the rise. Zeek is a commonly deployed tool for traffic analysis but it can sometimes be too slow for faster networks.^a

The goal of this theses is to speed up Zeek by changing the packet I/O subsystem to DPDK. DPDK is a collection of userspace network drivers by Intel.^b



^a<https://www.zeek.org>

^b<https://www.dpdk.org>

Your Task

- Implement a DPDK-based packet I/O module for Zeek
- Design a test setup in our 10 Gbit/s testbed to evaluate performance
- Compare performance of your implementation to the original Zeek

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