Benchmarksing and Evaluation of P4Runtime

P4 is a novel programming language for programming networking devices. It enables the network engineer to describe the behavior in a simple language. Switches via P4 still need to be communicated with a controller as in any SDN architecture, however, currently available. The latter is the reason for designing a new southbound interface, "P4 Runtime". The objective of this project is to evaluate the performance of the P4Runtime protocol and extend the existing SDN controller’s benchmarking tools. A detailed analysis of the results will be performed. The student wants to work on this project in collaboration with Nokia Bell Labs and get a great experience on the trends in networking and SDN. In addition,

Prerequisites

Motivation and good analysis skills, Programming skills: JAVA C++, SDN and programmable data plan knowledge is a plus

Advisors

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