Chair of Communication Networks
TUM Department of Electrical and Computer Engineering
Technical University of Munich

Assistant (Student), Bachelor's Thesis, Forschungspraxis

P4Update Improvement

The Paper P4Update describes a data plane mechanism during network routing updates. The goal is to ensure consistency and speed at the same time. It uses distance labeling, path segmentation, coordinated verification, and local scheduling methods to achieve the goal. This work requires the student to know the programmable data plane with P4, how to build a simulated network and basic performance evaluation knowledge. Then the next task is to improve the skeleton and perform proactive and reactive measurements. References:
[1] P4Update: Fast and Locally Verifiable Consistent Network Updates in the P4 Data Plane

Prerequisites

SDN, P4, Python, Linux

Contact

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