



COMPUTER SCIENCE

DATAVETENSKAP

Programmable Congestion Control with P4

To share the data center infrastructure efficiently among their tenants, operators need to deploy their own congestion control scheme on the end hosts. Recent work has suggested deploying congestion control in the hypervisor which enables frequent updates as new congestion control schemes emerge. However, with NICs going from 10G to 40G, and 100G on the horizon, this approach cannot keep up with line rate at reasonable CPU cost. Thus, in this project, we develop solutions for offloading congestion control schemes to programmable NICs, using programmable dataplanes in P4.

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