README.md 1/9/2022

Notes on papers

big-switch-core-and-pod-design

Provides an overview of Pods and a discussion of factors considered in their design. Also discusses Arista's Big Switch pod design.

Facebook's Altoona Fabric

This post describes Facebook's Altoona fabric, including how racks within a pod are interconnected internally and how the pod interfaces with the datacenter's core network.

singh15jupiter

Describes the evolution of Google's in-house networking hardware, which provides both cost reduction, increased scalability, and better manageability.

choid18fboss

Describes Facebook's networking hardware and the FBOSS software switching platform.

firestone18azurenics

Describes Microsoft's Azure NICs (network interface cards), which can offload networking tasks to purpose-specific hardware on NICs, improving performance and freeing up CPU on the server.

schlinker15condor

Proposes a model to declare, evaluate and compare datacenter network topologies conforming to prespecified constraints (e.g., bandwidth and redundancy requirements).

roy15fbtraffic

Presents a description of traffic within a Facebook datacenter, characterizing east-west traffic (Figure 5) and flow properties.

facebook-katran

Facebook implemented its own network load balancer, Katran, and open sourced it. [Here][fb-katran] is a post describing Katran.

google-green-energy

This white paper details Google's plans for transitioning to 24/7 green energy by 2030.