1 References and Summaries from Software Defined Networks

Ethane: Taking Control of the Enterprise. In 2007, Casado et. al. published their experiences with *Ethane*, an early flow-based centralized controller framework to enable communication policy application over a network. They presented and outlined not only Ethane's implementation and performance, but also a policy language *POL-ETH*, for developing policies over *Ethane* controlled networks. They also outlined a group of the first fundamental principles of policy design and application over software-defined networks that can still apply today as well [1].

NOX: towards an operating system for networks. Gude et. al. in 2008 presented an ambitious idea to help control sprawling network architectures. Their original idea, embodied in the *NOX* system still in wide use today, was to develop an operating system of sorts for communication networks. NOX provides an abstraction for managing networks through which users no longer needed to use lower level mechanisms to control networks, increasing the level of management abstraction [2].

References

[1] Martin Casado, Michael J. Freedman, Justin Pettit, Jianying Luo, Nick McKeown, and Scott Shenker. Ethane: taking control of the enterprise. *SIGCOMM Comput. Commun. Rev.*, 37(4):1–12, August 2007.

[2] Natasha Gude, Teemu Koponen, Justin Pettit, Ben Pfaff, Martín Casado, Nick McKeown, and Scott Shenker. Nox: towards an operating system for networks. *SIGCOMM Comput. Commun. Rev.*, 38(3):105–110, July 2008.