



SDN + NFV Seminar

Lecture 2

- Recap
- Discussion on Topics
- Report Template

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Recap

- Objectives
 - How to read/review/write/present a technical paper
 - Confidence to work on research problems in SDN+NFV
- SDN – Software-defined Networking
 - Separation of Control and Data Plane
 - Design and Manage Communication Networks
- NFV – Network Function Virtualization
 - Virtualized NFs
- Topics



What is the relation between SDN and NFV?



Discussion on Sample Papers

A Clean Slate 4D Approach to Network Control and Management

Ethane: Taking Control of the Enterprise

Enforcing Network-Wide Policies in the Presence of Dynamic Middlebox Actions using FlowTags

B4: Experience with a Globally-Deployed Software Defined WAN

SDX: A Software Defined Internet Exchange

Ananta: Cloud Scale Load Balancing

Onix: A Distributed Control Platform for Large-scale Production Networks

CoVisor: A Compositional Hypervisor for Software-Defined Networks

ClickOS and the Art of Network Function Virtualization

Forwarding Metamorphosis: Fast Programmable Match-Action Processing in Hardware for SDN

OpenNF: Enabling Innovation in Network Function Control

Rollback-Recovery for Middleboxes

The Design and Implementation of Open vSwitch

Frenetic: A Network Programming Language

Scalable Flow-Based Networking with DIFANE



Other Papers



Topic Selection

<https://docs.google.com/spreadsheets/d/1aOP4lunZEE-76x0SUV4bmmVb0awZtITbJA02MGTKBKs/edit#gid=0>



Report Template

- Write a **report** (about 7-8)
 - page count does not include references, title page, toc, and blank pages
- 40 % Grade for report
- Template
 - sig-alternate-10pt.cls
 - Sample tar ball available on course home page



What is in a report?

- Why is the topic important?
- The main approaches in the literature
- The main idea/argument of the papers
- Possible directions



Agenda from next week till 14.10

- 20-40 minute video on keynote/conference paper
- Discussion on paper/talk
- Discussion on topics