

Exercise 1 – Review of Lecture I

1. Motivation for SDN (20P)

- a. (20P) Please explain the problems current, large-scale production networks experience.

2. History of SDN? (60P)

Please review the history of programmable networks in general:

- a. (15P) What goals did the historical networking techniques discussed in the lecture (e.g., active networking) have?
- b. (15P) What means did they propose to achieve these goals?
- c. (15P) Why did they fail?
- d. (15P) What are their intellectual contributions that are similar to SDN?

3. Software-defined Networking - Basics (20P)

- a. (10P) Please briefly describe the main characteristics of SDN.
- b. (10P) What does a Network Operating System do in the context of SDN?