



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich  
Spring Term 2014

# Operating Systems and Networks

## Assignment 11

Assigned on: **9th May 2014**  
Due by: **15th May 2014**

### Virtual Machines

- a) List all machine resources that must be virtualized and discuss why. List some uses of virtual machines.
- b) What is the difference between Native (type 1) and Hosted (type 2) virtual machines? Which might be more suitable for a data center (cloud provider) and which might be more suitable for your laptop?
- c) Discuss the differences between and the (dis)advantages of full- and para-virtualization.
- d) Discuss the functionality of ballooning. What problem is it trying to solve and how does it solve it?