



# **Tools & Concepts for (Cloud) Deployments**

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## **Motivation**

In this practical hands-on you will learn how to work with Cloud computing from Infrastructure as a Service towards Platform as a Service.

#### **Prerequisits**

- You should be familiar with Linux and Bash, and have a basic understanding of networking with Linux
- The course assumes that you have access to an OpenStack cloud.

### Before we take off ...

The overall course consists of a set of exercises (see overview below). Each Exercise contains at least one lesson, which itself has steps like Task (practical hands-on), Research (look up information), or Question (validate yourself). Exercises build on top of each other - meaning, to make use of these exercises, stay on track. Let's go!

#### **Exercises Overview**

- Exercise 1: OpenStack basics
- Exercise 2: Monitoring and Vertical Scaling
- Exercise 3: Horizontal scaling and load balancing
- Exercise 4: Automating Cloud Deployments
- Exercise 5: Container Basics
- Exercise 6: Container Orchestration