

# Lab 3

## Introduction to Cloud Computing

### -- Live Migration

Prof. Zichen Xu

# Lab 3: Live Migration

Dear Docker Lovers

- After practicing some basic scripts, you shall obtain some basic senses on control the environment using your code
- Now it is time to do super cool, or as French would say, super cool, things
- Migrating docker images and doing it lively

# Goal for Lab 3

- Objectives:
  - Understanding the basic techniques for VM migration
  - Using docker container as an example to test your migration skill
  - Understanding the concept of checkpoint and restore
  - Successfully migrate your image from one host to another
  - Writing a decent report

# To Start

- Learn to do live migration in docker
- Using Checkpoint and Restore (CRIU) tool in docker to do this job
  - [https://criu.org/Live\\_migration](https://criu.org/Live_migration) is your source to check
- Ask one of our friend/roommate and migrate your Golang job (with your ID or name) to his/her place
- Measure the duration of migration and collect all other runtime statistics

# Hints and Remarks

- It is a fairly easy experiment to test, thus please do your best to finish on your own
- DO NOT copy others' words since it will not work anyway
  - If I found out duplicated submission from two individuals, you may guess what would happen
- CRIU tool is your best way to make it happen or you may implement your own code to do it
- More information can be found in docker-engine maillist and GitHub issues

# Lab 2: Submission Requirement

- Use the provided basic Markdown template for your lab report online
- Fill the report with the Markdown template, including all your test procedure
- Compile it and submit it to [ncuhomework@ncu.edu.cn](mailto:ncuhomework@ncu.edu.cn)
- Subject shall be Course Z6110X0035 CC Lab 3 #name #ID
- The tentative deadline for this lab is postponed to **Apr. 21<sup>th</sup>, 11:59PM (Hard Deadline)**