Containers & Public Clouds

Lab. 4

Outline

- Compare performance of containers with Xen
- Use docker
- Deploy in Amazon EC2 a complex workload

Task1: LXC (20%)

- Using LXC repeat task 3 of Lab 3
  - For simplicity desired “SLA” is 75%

- Figure out how to mimic scheduling policy in LXC

Task2: DockerFile (20%)

- Deploy SpecJBB using a DockerFile

Task2: Docker (20%)

- Deploy SpecWeb* in 3 docker container (webserver, client, BeSim) using incremental images
  - Feel free to use any approach to the initial container (use other distro, use official apache or ngnix dockers, …)
- Run the benchmark an compare with ”best” Xen
- Upload the containers to dockerhub “privately”

Task 3: GCE/Amazon EC2 (20%)

- Deploy the containers created in Task 2 in separate AMI in Amazon EC2 or Google Compute Engine

- Measure performance

Grading

- 25 % Presentation and Memo
- 75 % Results
  - 20% LXC
  - 20% DockerFile
  - 20% SpecWeb Docker
  - 20% GCE/AWS