

Computing Infrastructures
Laboratory

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Abstract

The course topics are:

- Hardware infrastructure of datacenters:
 - Basic components, rack structure, cooling.
 - Hard Disk Drive and Solid State Disks.
 - RAID architectures.
 - Hardware accelerators.
- Software infrastructure of datacenters:
 - Virtualization: basic concepts, technologies, hypervisors and containers.
 - Computing Architecture: Cloud, Edge and Fog Computing.
 - Infrastructure, platform and software-as-a-service.
- Methods:
 - Scalability and performance of datacenters: definitions, fundamental laws, queuing network theory basics.
 - Reliability and availability of datacenters: definitions, fundamental laws, reliability block diagrams.

Contents
