

Datacenters

Inside the cloud

Different Roles

- Hosting
- Managed Services
- Campus
- Datacenter

Workloads

- Virtualized machines
- Centralized applications
- Distributed applications
- Big compute

Timesharing vs. Parallelizing

Characteristics

- Latency
- Bandwidth
- Storage
- Compute
- Oversubscription
- Availability
- Power
- Autodeployment

Large-scale Design Concerns

- Efficiency
 - Power
 - Cooling
- Workload placement
- Protocol Improvements
- Resource Management