



University of Colombo School of Computing



History

- UOC is the oldest university with a 97 years of service
- One of the first three institutions established network with dialups in 1991
- In 1998 university was connected with LEARN via 64Kbps leased circuit



History

- The connection was jointly managed by ICT (Institute of Computer Technology) and Department of Computer Science (Science Faculty)
- In 2003 server room was expanded and UCSC LAN was upgraded to 1G fiber core network infrastructure



2010

- UCSC server room had been hosted 70+ physical servers
- Majority of them were rack mounted servers and few desktops
- Capacity of UPS increased to two 30KVA UPS
- Cooling capacity was increased to 150,000BTU
- 3 Core switches were deployed to manage connectivity



Today UCSC

- Moved from individual physical servers to virtual servers with VMware
- VMware vCenter Server provides a centralized platform for managing our VMware Esxi Hypervisors
- An agreement has been signed with VMware for Cloud solutions as the first government institute in the country to have a virtual data center solution



Today UCSC

- The LAN has being upgraded to duel redundant core with CISCO 9300 Series
- HP IMC, Cati and several other tools are being used for monitoring
- Hosting three high performance clusters
- Two VC units are being in operation
- PfSense is deployed for students for web filtering



Today UCSC

- Each lab contains a separate Vlan for not more than 50 computers
- Students are centrally authenticated using AD
- Two separate WiFi systems
 - Staff wifi (Aruba 3400 Series)
 - Student wifi (Aruba 7010 Series)
- Eduroam facility
- Deploys a network based CCTV system



Recent Upgrades

- Fortinet Firewall has been replaced with dual redundant Dell SonicWall
- Network expansion in UCSC South wing with
 - dual redundant Cisco Catalyst 3850 XS 10G
 - Cisco Catalyst 2960 & PoE+
- Network expansion in Administration Establishment building with
 - HPE 1920S Series
- Network based CCTV system expansion with
 - 40+ Hikvision cameras
 - Hikvision NVR



Upcoming Upgrades

- Move From separate AC system and UPS system to a rack mounted in-built AC,UPS system.
 - FusionModule800 Smart Data Center



Thank You!

