University of Jaffna - LAN WAN Network

Network Operating Center
University of Jaffna

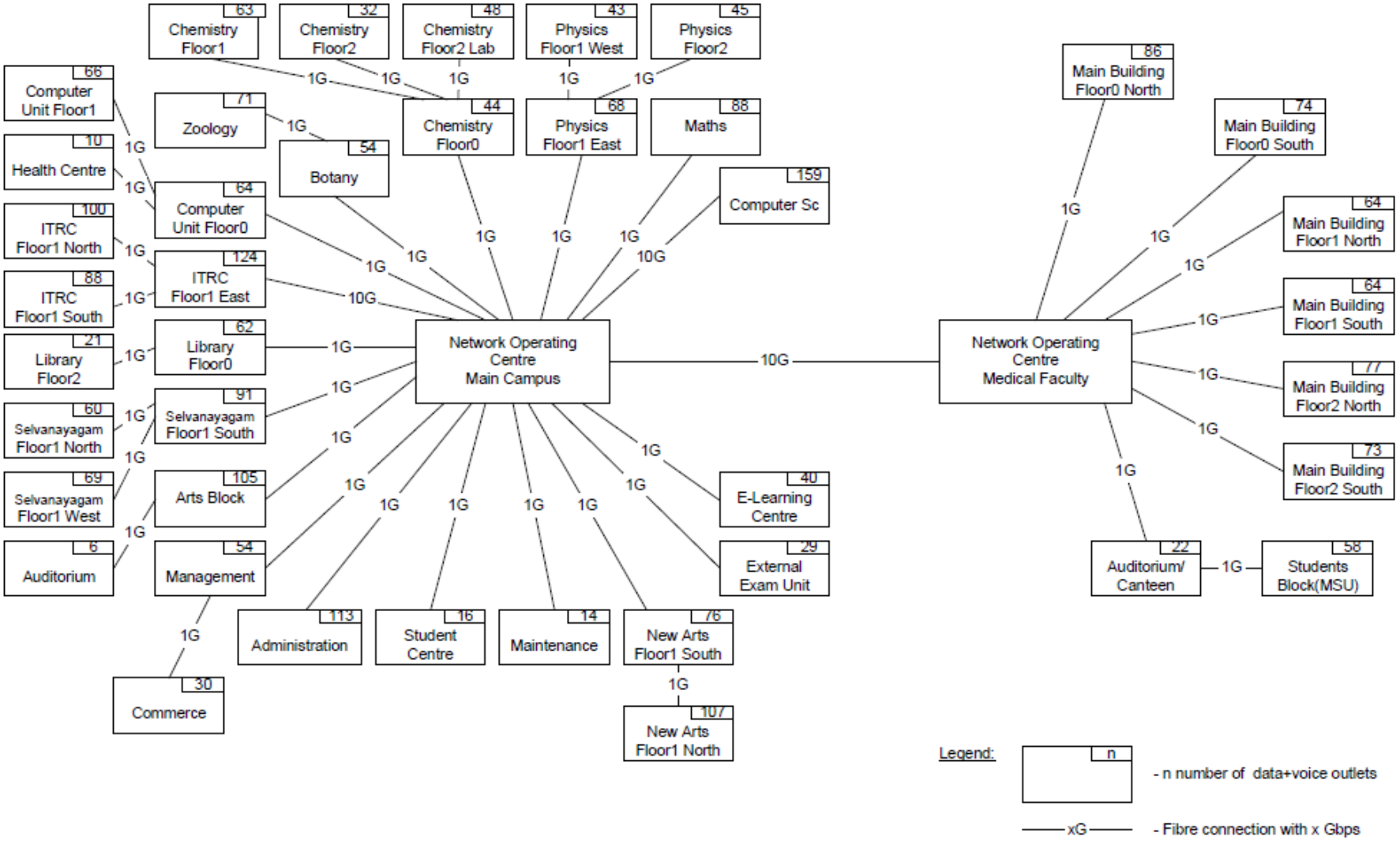
P.Kobikrishna

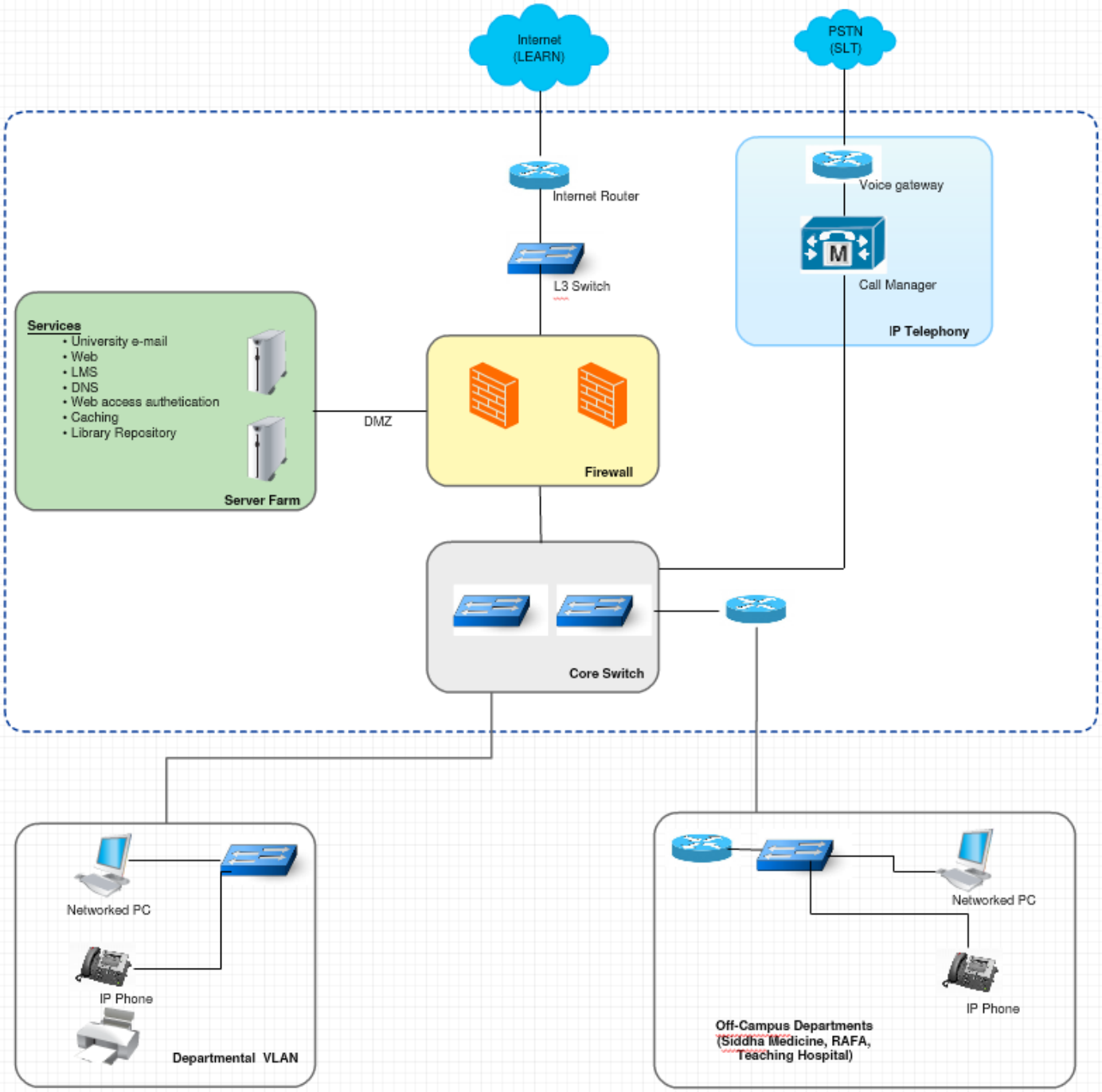
NOC – University of Jaffna

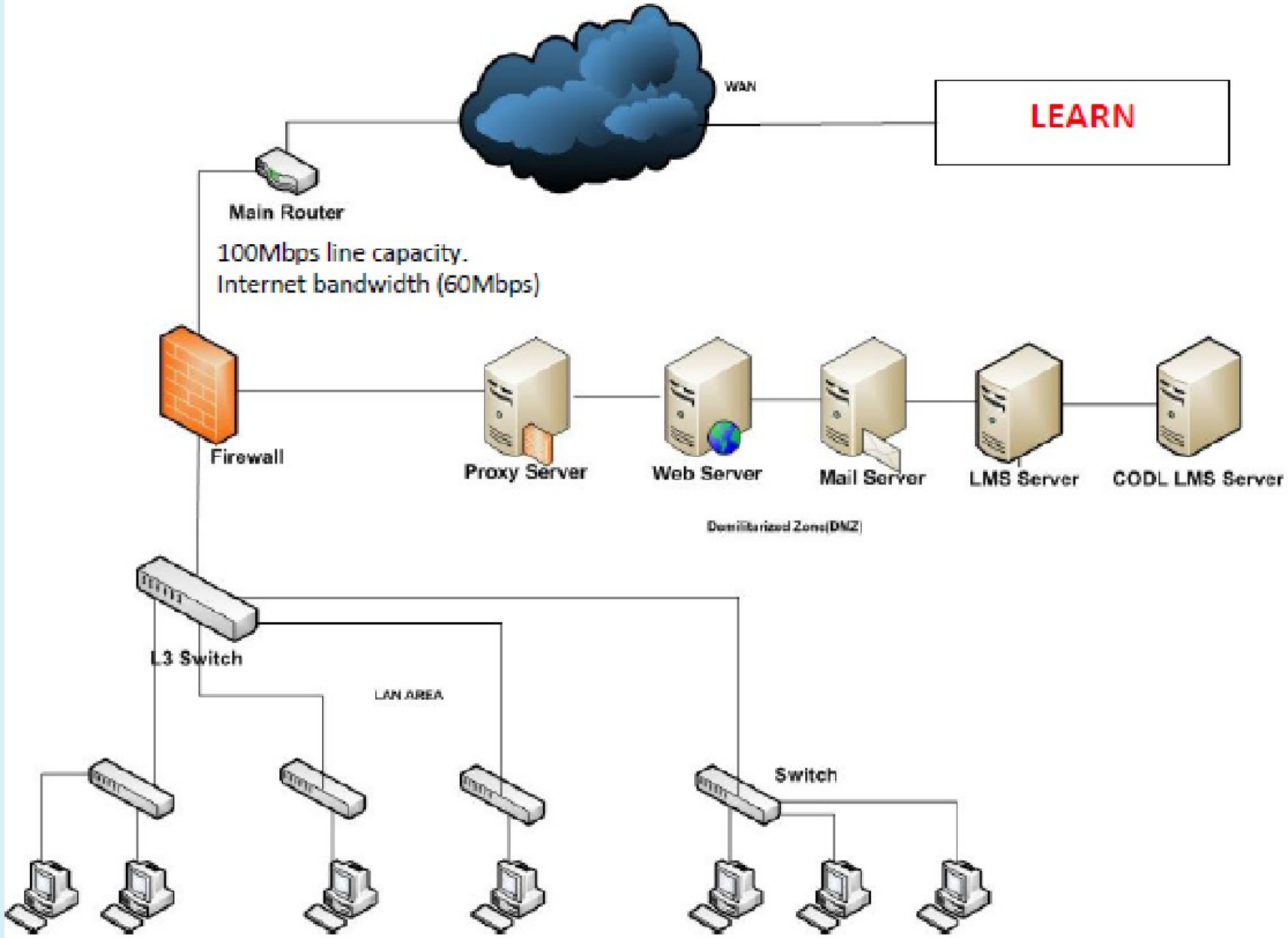
Features of the Network

- All the permanent buildings have access to the network.
- IP phone facilities for all departments
- All buildings are connected by underground fiber optic cable.
- Faculty of Medicine is connected via fiber optic cable of length around 1 km.
- Three point -to-point connections for Siddha medicine, RAFA, Teaching Hospital
- Sharing of resources with faculties at Kilinochi through VPN

Structure of the Network




Internet
(LEARN)
PSTN
(SLT)
Internet Router
Voice gateway
L3 Switch
Call Manager
IP Telephony
Services
• University e-mail
• Web
• LMS
• DNS
• Web access authetication
• Caching
• Library Repository
Server Farm
DMZ
Firewall
Core Switch
Networked PC
IP Phone
Departmental VLAN
Networked PC
IP Phone
Off-Campus Departments
(Siddha Medicine, RAFA,
Teaching Hospital)


WAN
LEARN
Main Router
100Mbps line capacity.
Internet bandwidth (60Mbps)
Firewall
Proxy Server
Web Server
Mail Server
LMS Server
CODL LMS Server
Demilitarized Zone(DMZ)
L3 Switch
LAN AREA
Switch

Size of the Network

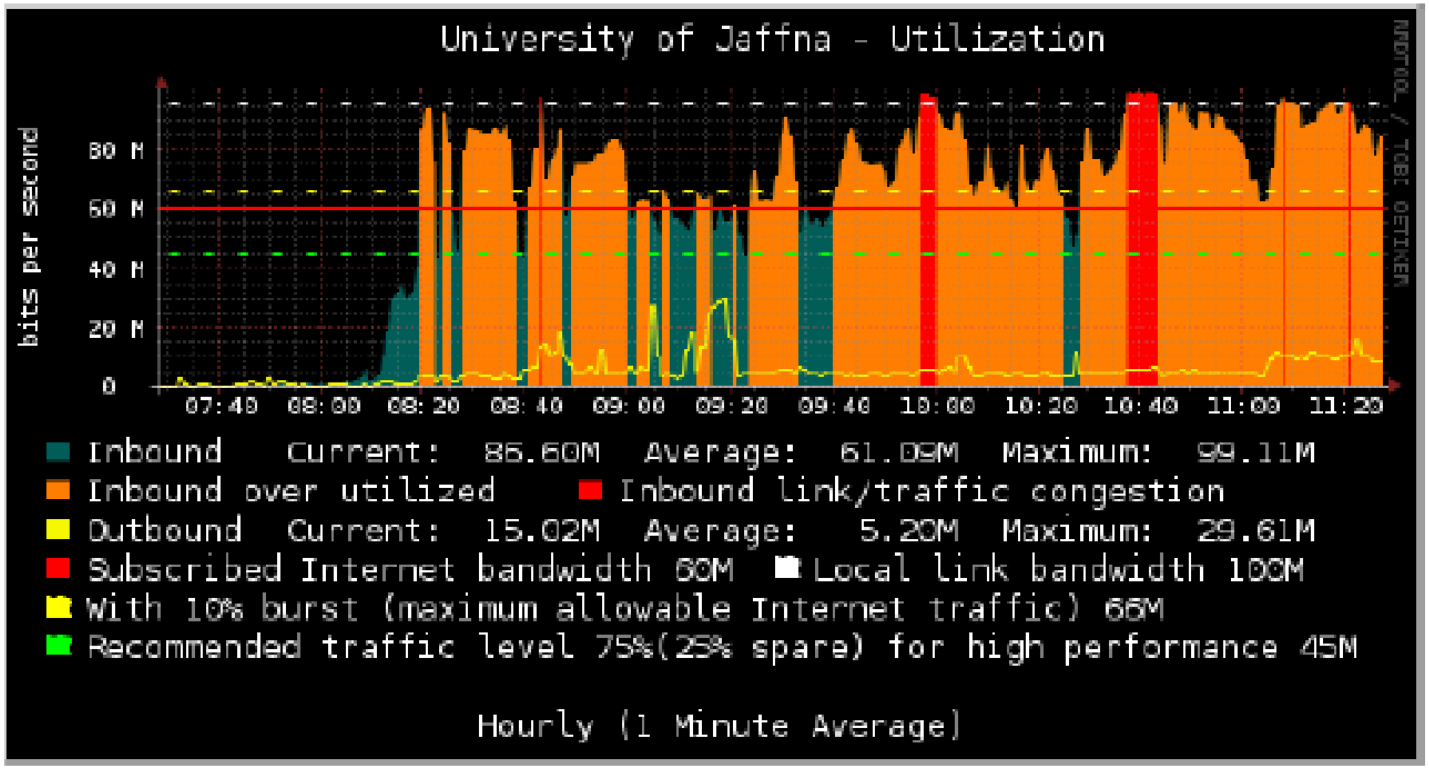
No of Network Points	***2790***
No of Switches (3com/CISCO/H3C)	***105***
No of IP Phones	***257***
Servers	***LMS Server*** ***Web Server*** ***Mail Server*** ***Voice Sever***

Power Supply - NOC

Our Server room power supply has 3 phase supply line together with UPS **(2 x 10kVA**) protection for sudden power failures. And also we have generator backup and power supply to provide the service to maintain the continuous services.

Network bandwidth (D28160)

- We have subscribed Internet bandwidth 60M (60Mbps). We shared our bandwidth equal for each device.



Our Services

- Web server maintenance
- LMS server maintenance
- Mail server maintenance
- Network /Switch management
  - Configuration
  - Repairing
  - Installation

Future development plans

- Expanding the network to new buildings and faculties
  - Natural Science Building
  - Faculty of Graduate studies
  - Faculty of Management studies and Commence
- Expanding Wi-Fi Facilities for Students & Staff
- Increasing bandwidth (In process – 180 Mbps)
- Security enhancement for NOC.
- Security alarm system to NOC.
- Increase the power backup facilities.

Thank You