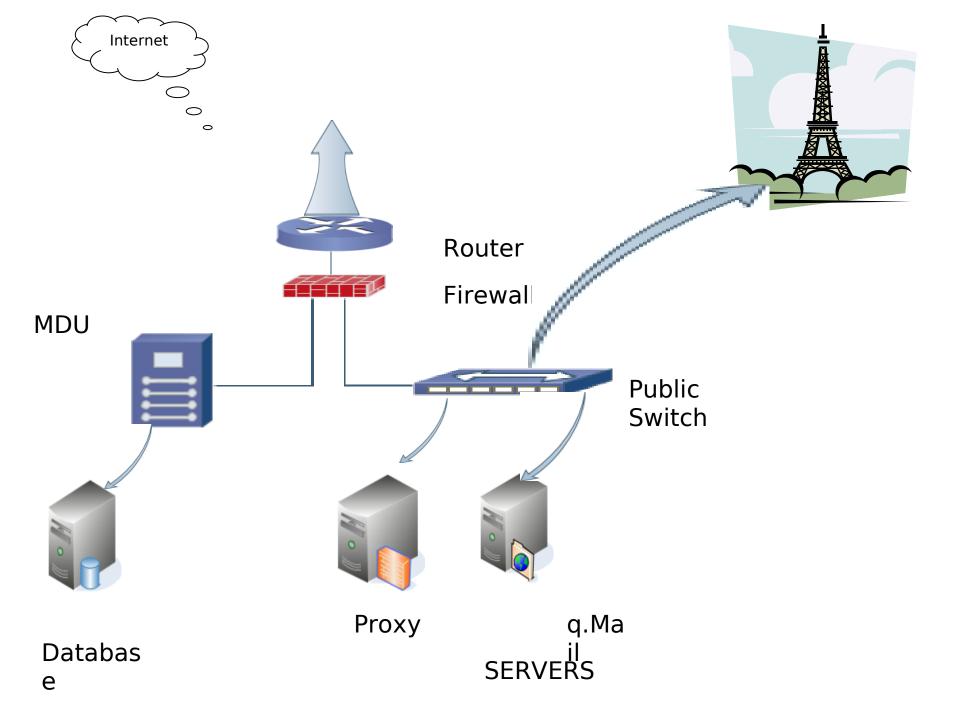
A brief Description of the University Network

By John G. mwangi Senior Network Administrator Jomo Kenyatta University of Agriculture and Technology



Firewall

I can check the top users from the firewall in terms of:

- The IP address
- The website
- Protocol

Firewall continued

Helps in content filtering.

- Acts as my default gateway
- Blocking websites that are consuming bandwidth,p2p traffic video and audio streaming

Security-sends regular updates on who is messing the network

07/24/2009 07:55:25.704 - SYN flood attack dropped - Source:69.13.198.234, 3251 - Destination:41.204.187.3, 3128 - - 07/24/2009 07:55:29.096 - ICMP packet dropped - Source:78.145.166.6, 3, WAN - Destination:41.204.187.2, 3, WAN - Dest Unreachable, Code: 3 - 07/24/2009 07:55:37.464 - IP spoof dropped - Source:172.20.20.250, 137, LAN - Destination:172.20.17.189, 137, DMZ - MAC address: 00.16.EC.02.EC.1A - 07/24/2009 07:55:45.560 - ARP timeout - Source:0.0.0.0 - Destination:41.204.187.2 - - 07/24/2009 07:55:55.032 - TCP FIN packet dropped - Source:99.245.234.14, 39813, WAN - Destination:41.204.187.2, 1335, WAN - 07/24/2009 07:56:02.448 - ICMP packet dropped - Source:201.94.229.157, 3, WAN - Destination:41.204.187.2, 3, WAN - Dest Unreachable, Code: 3 type=3 code=3 - 07/24/2009 07:56:08.848 - Out-of-order command packet dropped - Source:87.109.166.148, 21, WAN - Destination:172.20.14.43, 1620, LAN - -

Public switch

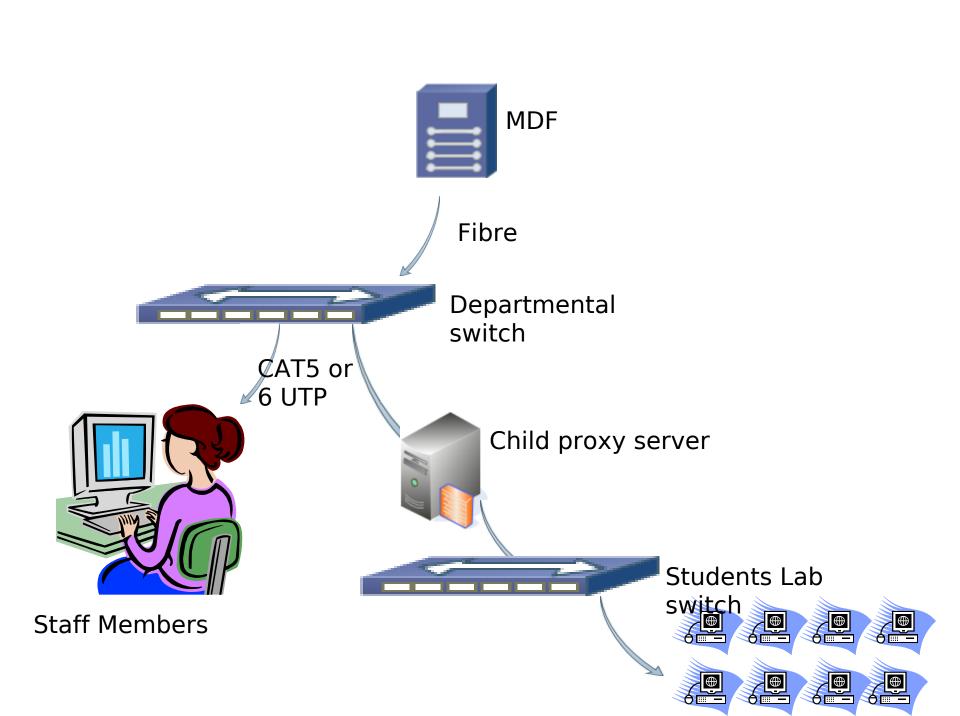
- This contains equipment with public IP addresses, mail, proxy server
- I have done NAT with my private IP Addresses.
- The wireless network is also connected in this switch. Outside my LAN, ubiquiti equipment nanstation2

Proxy server

- Runs fedora 8.0
- squid
- Caching keep local copies of frequently requested resources
- Content filtering
- Ntop installed
- To keep machines behind it anonymous

MDF/MDU

- Where all the university fibre network is terminated
- Has got our core switch
- 25 fibre terminations(with media converters) from different buildings, engineering, computer science,adminstration,library.
- Mixture of both single mode and multimode fibre cables



Thank you