Gateway and DNS server used in different part of campus LAN

- 1. Zanskar Hostel
 - a. Default Gateway: 10.251.216.1
 - b. DNS server: 10.10.1.2 (dns.cc.iitd.ernet.in), 10.10.2.2 (dns1.cc.iitd.ernet.in)
- 2. Bharti Building
 - a. Default Gateway: 10.208.20.1
 - b. DNS server: 10.10.1.2 (dns.cc.iitd.ernet.in), 10.10.2.2 (dns1.cc.iitd.ernet.in), 10.208.20.2(desh.cse.iitd.ernet.in), 10.208.20.19(desh2.cse.iitd.ernet.in)

Utility used:

- 1) Window: ipconfig /all, nslookup
- 2) Linux: cat /etc/resolv.conf, host

Hosts and servers discovered on Zanskar Hostel Lan

- 1. Out of 256 hosts scanned using "nmap –n 10.251.216.0/24", 43 hosts were found running.
- 2. On determining OS running on these server, we observed:
 - a. Microsoft Windows 2008 14 servers
 - b. Microsoft Windows 7 8 servers
 - c. FreeBSD 6.X 6 servers
 - d. FreeBSD 6.X 1 server
 - e. For remaining server OS could not be determined. It was mainly because all the port of server were closed. Also for the same reason, we cannot guarantee that scanned results are reliable.
- 3. We also determined various services running on various port :
 - a. http 80
 - b. https 443
 - c. ssh 22
 - d. telnet 23
 - e. Microsoft RPC 135
 - f. Other services were microsoft-ds,wsdapi, netbios-ssn. Some services were unknown.
- 4. Most of the services were over TCP/IP protocol.

Graph of Number of host online vs Time

We tracked number of host online over Karakoram LAN for a week and observed following:

- 1. Graph is periodic.
- 2. Early morning, number of hosts are the least (Due to fact that most of students get up late in morning). This number gradually increase during with time and there is a peak observed during noon, after which number decline.
- 3. The number is maximum during the night. And after 1:00 PM, it reduces to 0. (LAN BAN)