Indian Institute of Engineering Science and Technology, Shibpur

Department of Computer Science and Technology

Computer Network Lab (CS 3272)

Assignment 1: Networking basic commands

Time: 2 weeks

The aim of this assignment is to make you familiar with few network commands and tools. Prepare a report based on your understating and findings.

1. Read the man pages of ifconfig, ping, traceroute, arp, dig, nslookup, and netstatand write their utilities in brief.

2. Find the IP and hardware addresses of your machine using ifconfigcommand.

3. Use “ping <AnyURL>” command and find out

i. the average RTT(round trip time).

ii. the %packet loss.

iii. size of packet that is sent to <AnyURL> server.

iv. size of packet that is received by your machine.

4. Use “dig <AnyURL>” command and find out

i. theIP address of <AnyURL>.

ii. theIP addresses of local DNS servers of IIEST.

5. Use “traceroute <AnyURL>” and find out

i. number of hops in between your machine and <AnyURL> server.

ii. the IP address of your network gateway of your subnet.

6. Use “arp” command to find out the MAC address of the device that is performing as your network gateway.

7. Use “nslookup <AnyURL>” command and find out the IP address of <AnyURL>. Use “nslookup <IP address>” command and perform reverse domain lookup.

8. Use netstat command and find out the active connections of your machine.