Networks Assignment

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1 Tier 1 and Tier 2 ISPs

Tier 1 Although there is no authority that defines tiers of networks participating in the Internet, the most common definition of a tier 1 network is one that can reach every other network on the Internet without purchasing IP transit or paying settlements.
Companies:

1. ATT

2. Verizon

3. Sprint (Softbank Broadband)

4. Century Link (Qwest)

5. Level 3 (with Global Crossing now)

6. NTT/Verio

7. Cogent (maybe?)

8. Bharti

9. Reliance

10. Tata

11. VSNL

Tier 2

A network that peers with some networks, but still purchases IP transit or pays settlements to reach at least some portion of the Internet.
Companies:

1. Headstrong

2. Microland

3. MindTree

4. MphasiS

5. Sonata Software.

Tier 3

A network that solely purchases transit from other networks to reach the Internet. Companies:

1. CCS out of Austin, Texas

2. Rt. 66 Internet in New Mexico

3. Quik Internet in New Jersey

Source : https://secure.dslreports.com/forum/r24946459-What-is-a-Tier-1-2-and-3-service-provider-

2 What is RFC?

RFC is "Request For Comment"

Source: http://www.internetslang.com/RFC-meaning-definition.asp

3 What is a packet sniffer?

A packet sniffer simply captures all of the packets of data that pass through a given network interface. Typically, the packet sniffer would only capture packets that were intended for the machine in question. However, if placed into promiscuous mode, the packet sniffer is also capable of capturing ALL packets traversing the network regardless of destination.

Source: http://netsecurity.about.com/cs/hackertools/a/aa121403.htm

4 Nslookup for 5 hosts


```
~/networks-assignment(branch:master*) »  nslookup www.google.com
Server:         192.168.1.1
Address:        192.168.1.1#53

Non-authoritative answer:
Name:   www.google.com
Address: 74.125.235.17
Name:   www.google.com
Address: 74.125.235.20
Name:   www.google.com
Address: 74.125.235.16
Name:   www.google.com
Address: 74.125.235.18
Name:   www.google.com
Address: 74.125.235.19
```

Figure 1: google


```
~/networks-assignment(branch:master*) »  nslookup www.duckduckgo.com
Server:         192.168.1.1
Address:        192.168.1.1#53

Non-authoritative answer:
www.duckduckgo.com      canonical name = duckduckgo.com.
Name:   duckduckgo.com
Address: 46.51.216.186
```

Figure 2: duckduckgo


```
~/networks-assignment(branch:master*) »  nslookup www.joindiaspora.com
Server:         192.168.1.1
Address:        192.168.1.1#53

Non-authoritative answer:
www.joindiaspora.com    canonical name = akita-2665.herokussl.com.
akita-2665.herokussl.com        canonical name = elb001808-2103193605.us-east-1.
elb.amazonaws.com.
Name:   elb001808-2103193605.us-east-1.elb.amazonaws.com
Address: 23.23.127.115
Name:   elb001808-2103193605.us-east-1.elb.amazonaws.com
Address: 54.225.234.87
Name:   elb001808-2103193605.us-east-1.elb.amazonaws.com
Address: 107.21.94.218
```

Figure 3: joindiaspora


```
~/networks-assignment(branch:master*) »  nslookup www.prashant.org.in
Server:         192.168.1.1
Address:        192.168.1.1#53

Non-authoritative answer:
Name:   www.prashant.org.in
Address: 27.124.125.18
```

Figure 4: My site

Figure 5: dont track us