Static information about host and access point

Host is my laptop. My laptop is a Windows XP machine

It connects to an access point in my home (SSID: spectrawlan).

The TCP/IP settings are:
"Obtain an IP address automatically" and "Obtan DNS server address automatically"

Output of ipconfig from my laptop at home:

```
bash-3.2$ ipconfig

Windows IP Configuration


Ethernet adapter Wireless Network Connection:

        Connection-specific DNS Suffix  . :
        IP Address. . . . . . . . . . . : 192.168.0.7
        Subnet Mask . . . . . . . . . . : 255.255.255.0
        Default Gateway . . . . . . . . : 192.168.0.1

Ethernet adapter Local Area Connection 5:

        Media State . . . . . . . . . . : Media disconnected

Ethernet adapter Local Area Connection:

        Media State . . . . . . . . . . : Media disconnected
```

Screenshots of the various configuration screens of my access point

beetel

Status	Interface Setup	Advanced Setup	Access Management	Maintenance

Device Info | System Log | Statistics

Device Information

Firmware Version : STERLITE V4
MAC Address : 94:d7:23:7b:e1:90

LAN

IPv4

IP Address : 192.168.0.1
Subnet Mask : 255.255.255.0
DHCP Server : Enable

IPv6

Link local IP : fe80::1/64
Manual Global IP :
Dynamic Global IP :
DHCP Server : Disabled

WAN

Interface : WAN0 ▼
Service : 0 ▼
Connection Type : Dynamic IP

IPv4

Status : Connected
IP Address : 180.151.244.118   [renewIP] [releaseIP]
Subnet Mask : 255.255.254.0
Default Gateway : 180.151.244.1
Primary DNS : 180.151.151.151
Secondary DNS : 180.151.151.152

IPv6

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Logout

Ethernet Router

| Interface | Interface Setup | Advanced Setup | Access Management | Maintenance | Status | Help |

| Internet | VPN | LAN | Wireless |

Router Local IP

IP Address : 192.168.0.1

IP Subnet Mask : 255.255.255.0

Alias IP Address : 0.0.0.0   (0.0.0.0 means to close the alias ip)

Alias IP Subnet Mask : 0.0.0.0

IgmpSnoop : ⦿ Activated   ○ Deactivated

Dynamic Route : RIP1 ▼ Direction None ▼

DHCP Server

DHCP : ○ Disabled ⦿ Enabled ○ Relay

Start IP : 192.168.0.2

IP Pool Count : 100

Lease Time : 259200   seconds   (0 sets to default value of 259200)

Physical Ports :

☑	☑	☑	☑
LAN1	LAN2	LAN3	LAN4
☑	☑	☑	☑
WLAN1	WLAN2	WLAN3	WLAN4

DNS

| Interface | Interface Setup | Advanced Setup | Access Management | Maintenance | Status | Help |

| Internet | VPN | LAN | Wireless |

Interface

DNS

DNS Relay ● Automatically ○ Manually

Primary DNS : N/A

Secondary DNS : N/A

Add DHCP Reservation

IP Address : [   ]   MAC Address : [   ]

| Index | IP | MAC | Drop |

DHCP Clients List

#	HostName	IP	MAC Address	Expire Time
1	android-9aab63b4ad40e32a	192.168.0.8	5C:0A:5B:76:5C:ED	2days 14:21:16
2	android-9d9529b2d88c0e86	192.168.0.3	20:54:76:DE:20:D7	2days 17:32:7
3	android-3154e89270ace568	192.168.0.4	5C:F8:A1:07:84:F1	2days 2:9:54
4	Chromecast	192.168.0.5	6C:AD:F8:1B:0A:55	2days 20:25:23
5	ProfVarshaApte	192.168.0.7	00:22:FA:2B:4F:50	2days 23:57:28
6	jitenapte	192.168.0.11	00:27:10:71:C5:00	2days 12:12:11
7	android-8684fd57cf63acba	192.168.0.6	E4:92:FB:EF:98:E7	2days 18:12:12
8	Piano-Mans-iPad	192.168.0.9	60:69:44:11:FC:F6	2days 23:39:11
9	PianoMan	192.168.0.10	24:FD:52:1F:12:6A	1days 20:26:3
10	android-75d817a353150272	192.168.0.2	94:D7:71:C1:EC:DD	2days 23:12:51

More...

OUI

OUI Device : ● STB ○ VoIP

Index : [1 ▼]

OUI : [000000]

IPv6 Address

Output of route command from my laptop

```
 route PRINT
===================================================================

==========
Interface List
0x1 .......................... MS TCP Loopback interface
0x2 ...00 22 fa 2b 4f 50 ...... Intel(R) Wireless WiFi Link 5100 - Packet

Miniport
0x3 ...00 1c 7e ec a5 bb ...... Intel(R) 82567V Gigabit Network Connection -
Packet

Scheduler Miniport
0x4 ...00 ff cc 93 71 1a ...... TAP-Win32 Adapter V9 - Packet Scheduler
Miniport
===================================================================

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===================================================================

==========
Active Routes:
Network Destination        Netmask          Gateway       Interface  Metric
          0.0.0.0          0.0.0.0      192.168.0.1    192.168.0.7      25
        127.0.0.0        255.0.0.0        127.0.0.1      127.0.0.1       1
      169.254.0.0      255.255.0.0      192.168.0.7    192.168.0.7      20
      192.168.0.0    255.255.255.0      192.168.0.7    192.168.0.7      25
      192.168.0.7  255.255.255.255        127.0.0.1      127.0.0.1      25
    192.168.0.255  255.255.255.255      192.168.0.7    192.168.0.7      25
        224.0.0.0        240.0.0.0      192.168.0.7    192.168.0.7      25
  255.255.255.255  255.255.255.255      192.168.0.7    192.168.0.7       1
  255.255.255.255  255.255.255.255      192.168.0.7              3       1
  255.255.255.255  255.255.255.255      192.168.0.7              4       1
Default Gateway:       192.168.0.1
===================================================================

==========
Persistent Routes:
None
```

Scenario when lab05trace1 was taken

Wireless was turned off, laptop was rebooted.

Trace started
Then wireless was turned on

Following commands given:
ping www.net.princeton.edu
Destination unreachable

```
ping www.princeton.edu
PING www.princeton.edu (128.112.132.86): 56 data bytes
64 bytes from 128.112.132.86: icmp_seq=0 ttl=49 time=208 ms
64 bytes from 128.112.132.86: icmp_seq=1 ttl=49 time=211 ms
64 bytes from 128.112.132.86: icmp_seq=2 ttl=49 time=204 ms
64 bytes from 128.112.132.86: icmp_seq=3 ttl=49 time=207 ms
64 bytes from 128.112.132.86: icmp_seq=4 ttl=49 time=228 ms
64 bytes from 128.112.132.86: icmp_seq=5 ttl=49 time=208 ms


----www.princeton.edu PING Statistics----
6 packets transmitted, 6 packets received, 0.0% packet loss
round-trip (ms)  min/avg/max/med = 204/211/228/208
```

Then visited www.cse.iitb.ac.in/~varsha (103.21.127.134) from the browser

Then
ssh varsha@login.iitb.ac.in -p 5022n nets

Executed the following on surya:
netstat > netstat.out   //Download the file to view it properly

Traceroute from and to www.slac.stanford.edu
traceroute from www.slac.stanford.edu to my laptop
Output of the trace route

Trace file: lab05ToStanford
packet capture when running traceroute from my laptop to www.slac.stanford.edu

Tracing route to www1.slac.stanford.edu [134.79.197.200]
over a maximum of 30 hops:

```
Output:
  1     3 ms    <1 ms     4 ms  192.168.0.1
  2     7 ms     9 ms     9 ms  180.151.244.1.reverse.spectranet.in
[180.151.244.1]
  3    10 ms     9 ms    11 ms  125.63.82.209.reverse.spectranet.in
[125.63.82.209]
  4    13 ms     8 ms     9 ms  182.19.88.106
  5   126 ms   127 ms   130 ms  182.19.126.25
  6   136 ms   128 ms   135 ms  xe-7-0-1-xcr2.lsw.cw.net
[166.63.217.41]
  7   209 ms   207 ms   217 ms  ae11-xcr1.lns.cw.net [195.2.25.206]
  8   208 ms   206 ms   207 ms  ae5-xcr2.ash.cw.net [195.2.25.2]
  9   203 ms   207 ms   251 ms  ae0-xcr1.ash.cw.net [195.2.30.45]
 10   209 ms   208 ms   224 ms  eqx-ash.es.net [206.126.236.137]
 11   208 ms   205 ms   207 ms  washcr5-ip-b-eqxashrt1.es.net
[134.55.221.70]
 12   229 ms   233 ms   231 ms  chiccr5-ip-a-washcr5.es.net
[134.55.36.45]
 13   236 ms   240 ms   240 ms  kanscr5-ip-a-chiccr5.es.net
[134.55.43.82]
 14   275 ms   274 ms   276 ms  denvcr5-ip-a-kanscr5.es.net
[134.55.49.57]
 15   274 ms   275 ms   275 ms  sacrcr5-ip-a-denvcr5.es.net
[134.55.50.201]
 16     *        *        *     Request timed out.
 17   276 ms   276 ms   275 ms  slacmr2-ip-a-sunncr5.es.net
[134.55.36.22]
 18   274 ms   274 ms   275 ms
rtr-border1-p2p-slac-mr2.slac.stanford.edu

[192.68.191.246]
 19     *        *        *     Request timed out.
 20     *        *        *     Request timed out.
 21     *        *        *     Request timed out.
 22     *        *        *     Request timed out.
 23   274 ms   272 ms   275 ms  www1.slac.stanford.edu
[134.79.197.200]

Trace complete.
---------------------------------------------------------------------
```

Traceroute from and to 118.244.151.180 (Japan)

Trace route from 118.244.151.180 (in japan) to my Laptop.
Output:

```
nslookup:
118.244.151.180.in-addr.arpa domain name pointer
180.151.244.118.reverse.spectranet.in.

traceroute:
 1  [AS4685] hirnij31.asahi-net.or.jp (124.155.65.228)  2.661 ms  2.666 ms
1.692 ms
 2  [AS4685] hirnirb-ge0.asahi-net.or.jp (124.155.65.254)  2.637 ms  2.952 ms
2.666 ms
 3  [AS4685] tkybi5-v9.asahi-net.or.jp (124.155.64.1)  15.646 ms  15.914 ms
15.647 ms
 4  [AS4685] tkyni92.asahi-net.or.jp (202.224.32.92)  26.654 ms  25.954 ms
16.660 ms
 5  [AS2914] xe-0-2-0-30.r01.tokyjp05.jp.bb.gin.ntt.net (61.120.145.165)
16.630 ms  17.022 ms  16.665 ms
 6  [AS2914] ae-12.r20.tokyjp05.jp.bb.gin.ntt.net (129.250.4.110)  16.639 ms
16.220 ms  16.635 ms
 7  [AS2914] ae-0.pccw.tokyjp05.jp.bb.gin.ntt.net (129.250.66.14)  17.629 ms
17.614 ms  16.665 ms
 8  [AS3491] TenGE13-3.br01.sin01.pccwbtn.net (63.218.162.165)  112.628 ms
101.326 ms  90.511 ms
 9  [AS3491] vodafone.te13.1.br01.sin01.pccwbtn.net (63.218.163.170)  91.577
ms  101.442 ms  86.539 ms
10  * * *
11  * * *
12  * * *
13  * * *
14  * * *
15  [AS55410] 182.19.88.105 (182.19.88.105)  142.802 ms * *
16  [AS10029] 125.63.82.210.reverse.spectranet.in (125.63.82.210)  147.784 ms
146.541 ms *
17  [AS55410] 182.19.88.105 (182.19.88.105)  140.804 ms * *
18  [AS10029] 125.63.82.210.reverse.spectranet.in (125.63.82.210)  144.601 ms
142.508 ms  143.556 ms
19  * * *
20  * * *
21  * * *
22  * * *
23  * * *
24  * * *
25  * * *
```

trace route from my laptop to 118.244.151.180

```
Output:
Tracing route to 118.244.151.180 over a maximum of 30 hops

  1     1 ms     1 ms    <1 ms  192.168.0.1
  2     3 ms     9 ms     9 ms  180.151.244.1.reverse.spectranet.in
[180.151.244.1]
  3     2 ms    10 ms     9 ms  125.63.82.209.reverse.spectranet.in
[125.63.82.209]
  4     4 ms     9 ms    25 ms  182.19.88.106
  5    61 ms    70 ms    68 ms  182.19.115.237
  6    75 ms    63 ms    68 ms  te13.1.br01.sin01.pccwbtn.net [63.218.163.169]
  7   310 ms   307 ms   315 ms  cnc.pos2-1.br01.hkg05.pccwbtn.net
[63.218.145.146]
  8   299 ms   304 ms   307 ms  219.158.97.1
  9     *         *         *    Request timed out.
 10   249 ms     *       258 ms  219.158.100.169
 11   295 ms     *       250 ms  124.65.194.86
 12     *         *         *    Request timed out.
 13   257 ms   244 ms   260 ms  61.148.159.34
 14     *         *         *    Request timed out.
 15   260 ms   239 ms   240 ms  219.239.92.194
 16   308 ms   317 ms   312 ms  124.202.11.62
 17   290 ms   291 ms   275 ms  124.207.18.126
 18     *         *         *    Request timed out.
 19     *         *         *    Request timed out.
 20     *         *         *    Request timed out.
 21     *         *         *    Request timed out.
 22     *         *         *    Request timed out.
 23     *         *         *    Request timed out.
 24     *         *         *    Request timed out.
 25     *         *         *    Request timed out.
 26     *         *         *    Request timed out.
 27     *         *         *    Request timed out.
 28     *         *         *    Request timed out.
 29     *         *         *    Request timed out.
 30     *         *         *    Request timed out.
```

traceroute to www.google.com

```
Tracing route to www.google.com [173.194.36.16]
over a maximum of 30 hops:

  1    15 ms    12 ms    10 ms  192.168.0.1
```

```
  2      9 ms     14 ms     70 ms   180.151.244.1.reverse.spectranet.in
[180.151.244.1]
  3     27 ms     62 ms     59 ms   125.63.82.209.reverse.spectranet.in
[125.63.82.209]
  4     13 ms     10 ms     14 ms   203.92.38.106.reverse.spectranet.in
[203.92.38.106]
  5     43 ms     17 ms     21 ms   203.92.38.109.reverse.spectranet.in
[203.92.38.109]
  6     12 ms     18 ms     17 ms   182.19.88.106
  7     12 ms     13 ms     12 ms   103.29.44.7
  8     21 ms     26 ms     30 ms   103.29.44.4
  9     24 ms     36 ms     32 ms   72.14.211.218
 10    529 ms    727 ms    150 ms   209.85.241.52
 11      7 ms     22 ms     16 ms   209.85.241.187
 12     40 ms     35 ms     26 ms   bom04s01-in-f16.1e100.net [173.194.36.16]
```