

Lab 5

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Command Prompt
Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix  . : fios-router.home
IPv4 Address. . . . . : 192.168.1.240
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :

C:\Users\abarney>tracert www.webawards.com.au

Tracing route to www.webawards.com.au [104.31.82.67]
over a maximum of 30 hops:

  1  1 ms  1 ms  1 ms  Fios_Quantum_Gateway.fios-router.home [192.168.1.1]
  2  8 ms  8 ms  *  104.31.82.67
  3  61 ms  12 ms  14 ms  B3308.WASHDC-LCR-22.verizon-gni.net [130.81.217.82]
  4  *  *  *  Request timed out.
  5  12 ms  12 ms  9 ms  0.et-7-1-5.BR1.IAD8.ALTER.NET [140.222.226.17]
  6  9 ms  10 ms  8 ms  tbd.BR1.IAD8.ALTER.NET [204.148.11.177]
  7  16 ms  20 ms  17 ms  cloudflare-gw.cr4-was1.ip4.gtt.net [69.174.23.102]
  8  13 ms  9 ms  12 ms  104.31.82.67

Trace complete.

C:\Users\abarney>
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any OS states did your packet go through. How many

7:20 PM
3/24/2019

1. What is your computers IP address?
192.168.2.240

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Command Prompt
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C:\Users\abarney>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . : fios-router.home
    IPv4 Address. . . . . : 192.168.1.240
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

C:\Users\abarney>
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2. With reference to private/public IP addresses. What type of IP address is the first IP from your traceroute result.

Private IP - 192.168.1.1

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Command Prompt
Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . : fios-router.home
    IPv4 Address. . . . . : 192.168.1.240
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

C:\Users\abarney>tracert www.webawards.com.au

Tracing route to www.webawards.com.au [104.31.82.67]
over a maximum of 30 hops:

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  1  8 ms    8 ms    *    104.31.82.67
  2  61 ms   12 ms   14 ms  B3308.WASHDC-LCR-22.verizon-gni.net [130.81.217.82]
  3  *       *       *    Request timed out.
  4  12 ms   12 ms   9 ms  0.et-7-1-5.BR1.IAD8.ALTER.NET [140.222.226.17]
  5  9 ms    10 ms   8 ms  tbd.BR1.IAD8.ALTER.NET [204.148.11.177]
  6  16 ms   20 ms  17 ms  cloudflare-gw.cr4-was1.ip4.gtt.net [69.174.23.102]
  7  13 ms   9 ms   12 ms  104.31.82.67

Trace complete.

C:\Users\abarney>
```

3. With reference to private/public IP addresses. What type of IP address is the second IP from your traceroute result.

Public IP - 104.31.82.67

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Command Prompt
Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix  . : fios-router.home
IPv4 Address. . . . . : 192.168.1.240
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix  . :

C:\Users\abarney>tracert www.webawards.com.au

Tracing route to www.webawards.com.au [104.31.82.67]
over a maximum of 30 hops:

  0  1 ms    1 ms    1 ms  Fios Quantum Gateway.fios-router.home [192.168.1.1]
  1  8 ms    8 ms    *    104.31.82.67
  2  61 ms   12 ms   14 ms B3308.WASHDC-LCR-22.verizon-gni.net [130.81.217.82]
  3  *       *       *    Request timed out.
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  5  9 ms    10 ms   8 ms  tbd.BR1.IAD8.ALTER.NET [204.148.11.177]
  6  16 ms   20 ms  17 ms cloudflare-gw.cr4-was1.ip4.gtt.net [69.174.23.102]
  7  13 ms   9 ms   12 ms 104.31.82.67

Trace complete.

C:\Users\abarney>

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- In a tabular format (use table example below), and in sequential order. Indicate the location of each IP address (include state for US states) and the organization that owns the IP address. (Use <https://www.ultratools.com/tools/ipWhoisLookup> to look up IP address whois information). Add a row for every single IP in your traceroute result page.

Hop Count	IP Address	Organization (IP Owner)	Location (US state)/Country
1	192.168.1.1	IANA	CA State / United States
2	104.31.82.67	Cloudflare, Inc	CA State / United States
3	130.81.217.82	Verizon (MCI Comm)	VA State / United States
4	time out	time out	time out
5	140.222.226.17	ANS CO+RE Systems	NY State / United States
6	204.148.11.177	ANS Communications	VA State / United States
7	69.174.23.102	GTT	Neu-Isenbug / Germany
8	104.31.82.67	Cloudflare, Inc	CA State / United States

- In your own words, explain everything you just did, and what route did your packet took from source to destination. How many US states did your packet go through? How many countries if any?

The tracert command used increasing time to live (TTL) to determine the route the packet used to reach the destination of webawards.com.au. Once it reached the webawards.com.au it discarded the packet and sent the ICMP acknowledging the route. The packet first used the private IP 192.168.1.1 before leveraging the public IP address of 104.31.82.67. It went through 6 US states and one foreign country on its route.