

IT Essentials 5.0

6.8.3.16 Lab - Test the Wireless NIC in Windows XP

Introduction

Print and complete this lab.

In this lab, you will check the status of your wireless connection, investigate the availability of wireless networks, and test connectivity.

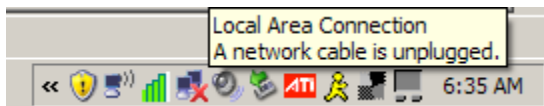
Recommended Equipment

- A computer with Windows XP installed
- A wireless NIC installed
- An Ethernet NIC installed
- Linksys E2500 Wireless Router
- Internet connectivity

Step 1

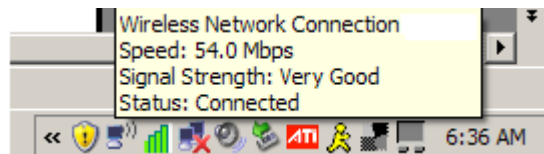
Disconnect the Ethernet patch cable from your computer.

A red “X” appears over the “Local Area Connection” icon.



Hover over the “Wireless Network Connection” icon in the tray.

What is the Speed and Signal Strength?



Open a command window.

Ping 127.0.0.1.

How many Replies did you receive?

```
C:\WINDOWS\system32\cmd.exe
C:\>ping 127.0.0.1
Pinging 127.0.0.1 with 32 bytes of data:
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Ping statistics for 127.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

Use the **ipconfig** command.

What is the IP address of the default gateway?

```
C:\WINDOWS\system32\cmd.exe
C:\>ipconfig
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Media State . . . . . : Media disconnected

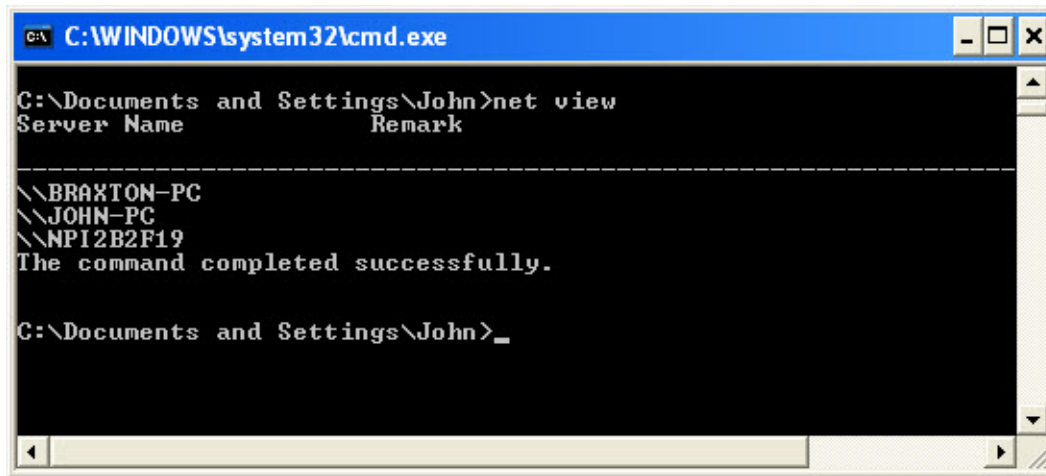
Ethernet adapter Wireless Network Connection:

    Connection-specific DNS Suffix  . :
    IP Address. . . . . : 192.168.2.3
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.2.1
C:\>
```

Ping the default gateway.

```
C:\WINDOWS\system32\cmd.exe
C:\>ping 192.168.2.1
Pinging 192.168.2.1 with 32 bytes of data:
Reply from 192.168.2.1: bytes=32 time=1ms TTL=64
Reply from 192.168.2.1: bytes=32 time=1ms TTL=64
Reply from 192.168.2.1: bytes=32 time=1ms TTL=64
Reply from 192.168.2.1: bytes=32 time=1ms TTL=64
Ping statistics for 192.168.2.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 1ms, Average = 1ms
C:\>_
```

A successful ping indicates that there is a connection between the computer and the default gateway.



```

C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\John>net view
Server Name          Remark
-----
\\BRAXTON-PC
\\JOHN-PC
\\NPI2B2F19
The command completed successfully.

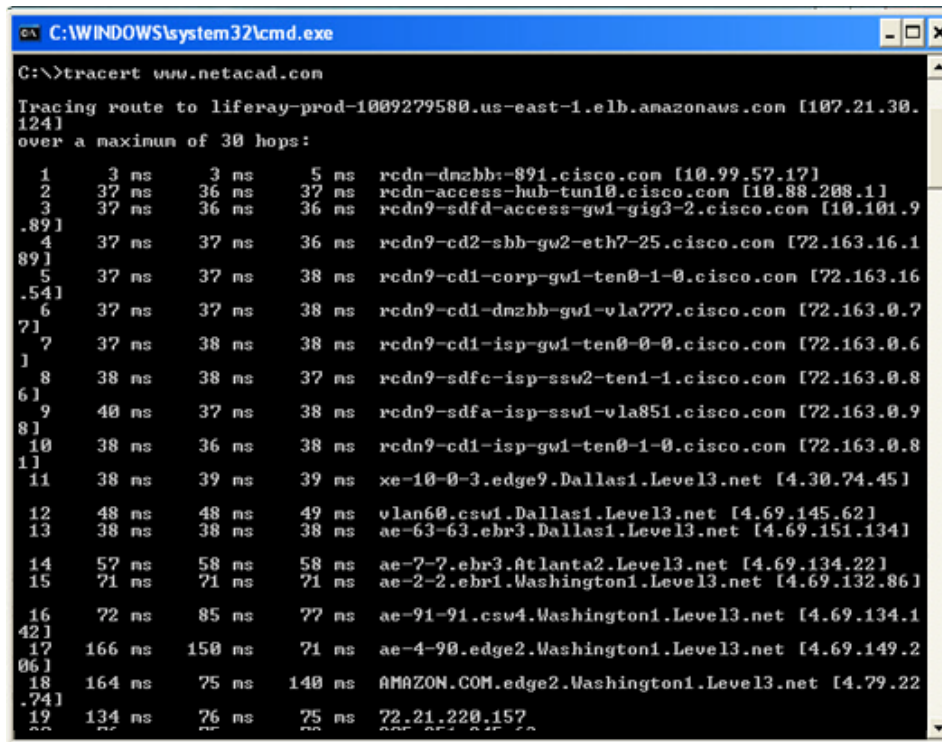
C:\Documents and Settings\John>_
  
```

Type **net view**.

List the computer names that are displayed.

If you have an external connection, try the following commands.

Use the **tracert** command along with your schools Web site or the Cisco Networking Academy Web site. Example: type **tracert www.netacad.com**.



```

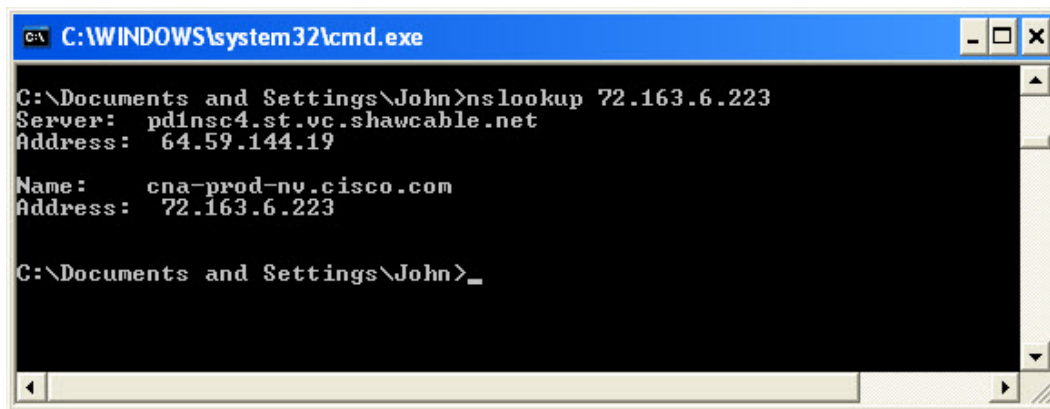
C:\WINDOWS\system32\cmd.exe

C:\>tracert www.netacad.com

Tracing route to liferay-prod-1009279580.us-east-1.elb.amazonaws.com [107.21.30.124]
over a maximum of 30 hops:
  0  0 ms  0 ms  0 ms  0 ms  rcdn-dmzbb-891.cisco.com [10.99.57.17]
  1  3 ms  3 ms  5 ms  rcdn-access-hub-tun10.cisco.com [10.88.208.11]
  2  37 ns  36 ns  37 ns  rcdn9-sdfd-access-gw1-gig3-2.cisco.com [10.101.9
.89]
  3  37 ns  36 ns  36 ns  rcdn9-cd2-sbb-gw2-eth7-25.cisco.com [72.163.16.1
89]
  4  37 ns  37 ns  36 ns  rcdn9-cd1-corp-gw1-ten0-1-0.cisco.com [72.163.16
.54]
  5  37 ns  37 ns  38 ns  rcdn9-cd1-dmzbb-gw1-vla777.cisco.com [72.163.0.7
7]
  6  37 ns  37 ns  38 ns  rcdn9-cd1-isp-gw1-ten0-0-0.cisco.com [72.163.0.6
6]
  7  37 ns  38 ns  38 ns  rcdn9-sdfc-isp-ssw2-ten1-1.cisco.com [72.163.0.8
6]
  8  40 ns  37 ns  38 ns  rcdn9-sdfa-isp-ssw1-vla851.cisco.com [72.163.0.9
8]
  9  38 ns  36 ns  38 ns  rcdn9-cd1-isp-gw1-ten0-1-0.cisco.com [72.163.0.8
1]
 10  38 ns  39 ns  39 ns  xe-10-0-3.edge9.Dallas1.Level3.net [4.30.74.45]
 11  48 ns  48 ns  49 ns  vlan60.csv1.Dallas1.Level3.net [4.69.145.62]
 12  38 ns  38 ns  38 ns  ae-63-63.ebr3.Dallas1.Level3.net [4.69.151.134]
 13  57 ns  58 ns  58 ns  ae-7-7.ebr3.Atlanta2.Level3.net [4.69.134.22]
 14  71 ns  71 ns  71 ns  ae-2-2.ebr1.Washington1.Level3.net [4.69.132.86]
 15  72 ns  85 ns  77 ns  ae-91-91.csv4.Washington1.Level3.net [4.69.134.1
42]
 16 166 ns 150 ns  71 ns  ae-4-90.edge2.Washington1.Level3.net [4.69.149.2
06]
 17 164 ns  75 ns 140 ns  AMAZON.COM.edge2.Washington1.Level3.net [4.79.22
.74]
 18 134 ns  76 ns  75 ns  72.21.220.157
 19
  
```

What IP address was returned?

Use the **nslookup** command with the IP address you just discovered.



```
C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\John>nslookup 72.163.6.223
Server: pdlnc4.st.vc.shawcable.net
Address: 64.59.144.19

Name:   cna-prod-nv.cisco.com
Address: 72.163.6.223

C:\Documents and Settings\John>
```

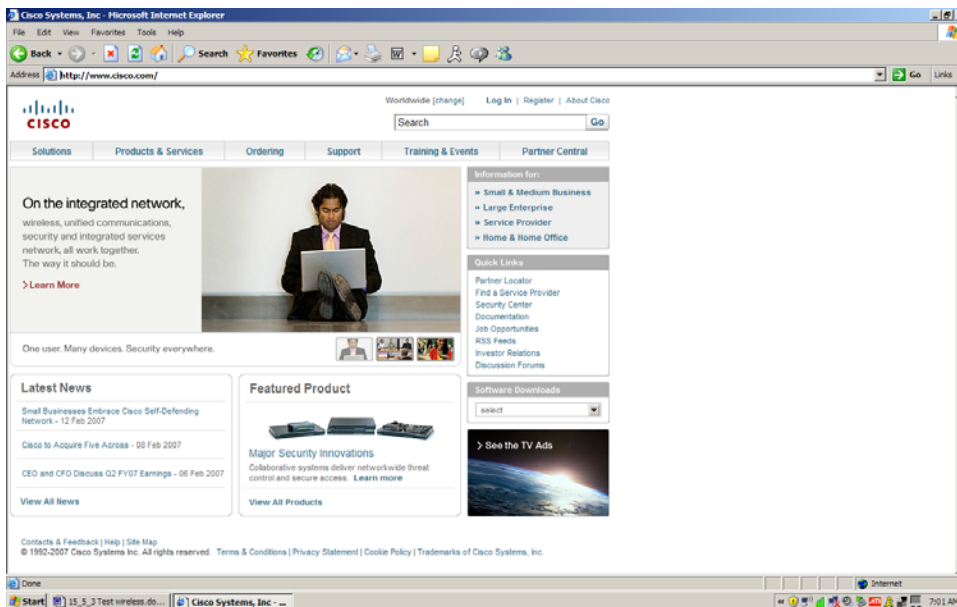
Type **nslookup 72.163.6.223**.

What name was returned?

Step 2

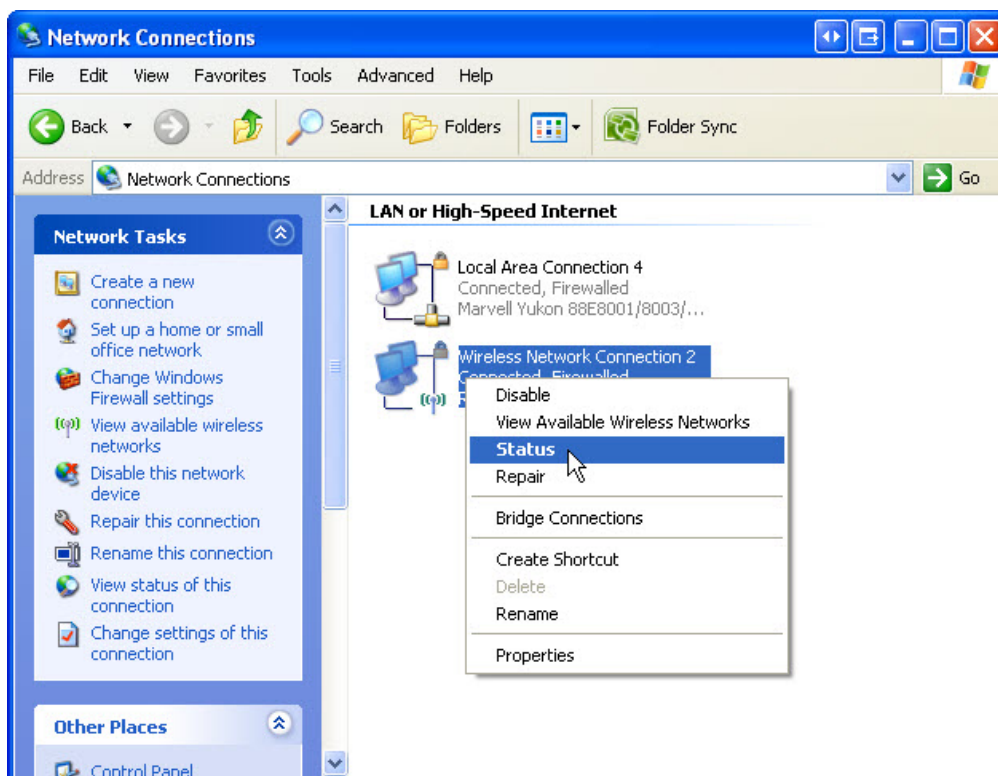
Open a web browser.

Type **www.cisco.com** in the “Address” field, and then press **Return**.

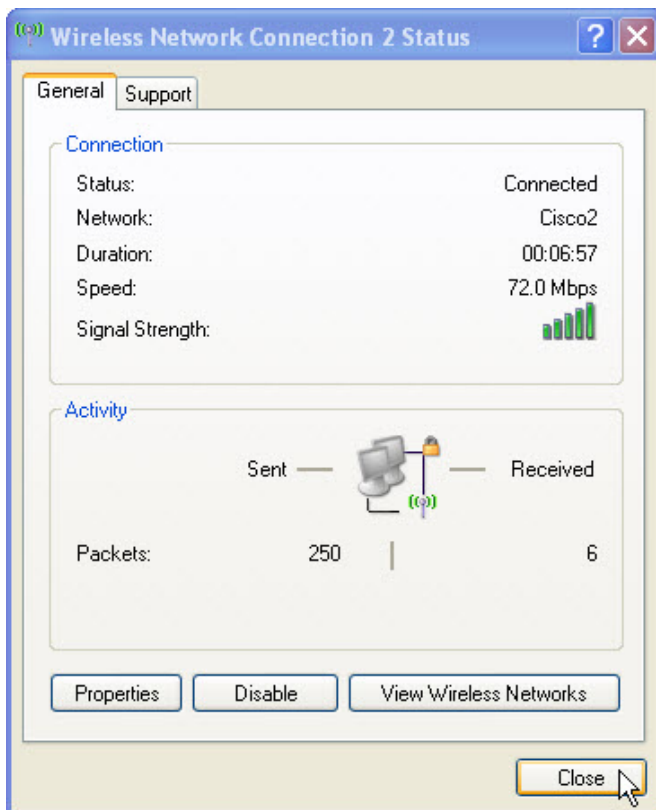


Step 3

Open the **Network Connections** window.



Right-click the **Wireless Network Connection** icon > **Status**.

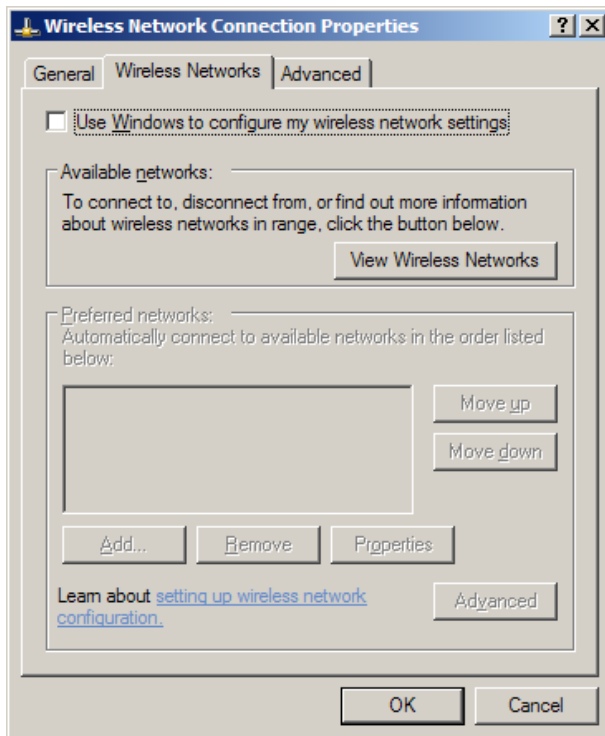


The "Wireless Network Connection Status" window opens.

Click **Close**.

Right-click the wireless connection and select **Properties**.

Click the **Wireless Networks** tab.



Click the **View Wireless Networks** button.

What are the names of the wireless networks that are available?