

### 4.2.2 Checking an IP Address

This section describes how to view the IP address of the current machine.

See the following sections for more information:


- ◆ "Windows" on page 72
- ◆ "Linux" on page 73

#### 4.2.2.1 Windows

*To get an IP address on a Windows machine:*

→ **Windows 7 or Windows 10 computer**

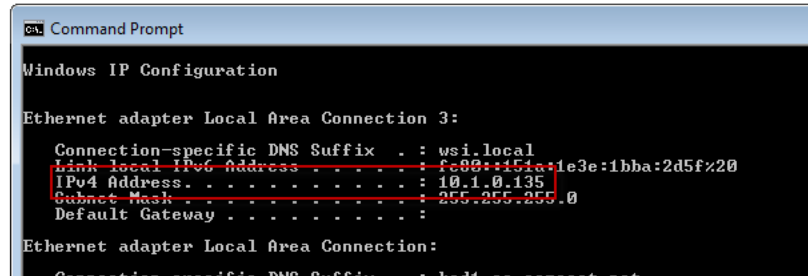
- 1 Check prerequisites:
  - ✓ None
- 2 Windows 7:
  - a Click the Windows Start icon.
  - b Go to the next step.

 See more results



**Figure 4-5** *Open a Command Window*

- 3 Type **cmd** in the search box and then press ENTER. A command (DOS) window opens.
- 4 Type **ipconfig** and then press ENTER. The IP address information for the computer is displayed. Look for the **IPv4 Address** entry.



```

c:\> Command Prompt

Windows IP Configuration

Ethernet adapter Local Area Connection 3:

    Connection-specific DNS Suffix  . : wsi.local
    Link-local IPv6 Address . . . . . : fe80::4c7a:1e3e:1bba:2d5f%20
    IPv4 Address. . . . . : 10.1.0.135
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . :
  
```

Figure 4-6 IP Address in Command Window

#### 4.2.2.2 Linux

*To get an IP address on a Windows machine:*

→ **Linux computer**

- 1 From the Linux command line, type **ifconfig** and then press ENTER. The IP address information for the computer is displayed.
- 2 Look for the **inet addr** entry. For example:  
inet addr:192.168.1.29 Bcast:192.168.1.255 Mask:255.255.255.0

#### 4.2.3 Checking Connectivity with Ping

This section describes how to verify that an IP address is reachable using the ping utility. Ping works from a Windows (DOS) or Linux command line. This section describes using ping in Windows.

*To ping an IP address:*

→ **Windows 7 or Windows 10 computer**

- 1 Check prerequisites:
  - ✓ Network connection to the IP address is available
- 2 Windows 7:
  - a Click the Windows Start icon.
  - b Go to the next step.
- 3 Type **cmd** in the search box and then press ENTER. A command (DOS) window opens.
- 4 Type **ping** and the IP address, and then press ENTER. For example, 8.8.8.8 is a Google DNS server, type the following and then press ENTER:

```
ping 8.8.8.8
```

If the address is reachable, the window displays the reply time as shown in the following figure. If the address is not reachable, the window displays a time out.

```
C:\Users\kgriffin>ping 8.8.8.8

Pinging 8.8.8.8 with 32 bytes of data:
Reply from 8.8.8.8: bytes=32 time=24ms TTL=47
Reply from 8.8.8.8: bytes=32 time=23ms TTL=47
Reply from 8.8.8.8: bytes=32 time=24ms TTL=47
Reply from 8.8.8.8: bytes=32 time=24ms TTL=47

Ping statistics for 8.8.8.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 23ms, Maximum = 24ms, Average = 23ms
```

**Figure 4-7** Windows Ping Response

### 4.2.4 Setting a Static IP Address

This section describes how to set a static IP address. See the following sections for instructions:

- ◆ Windows 7
- ◆ Windows 10

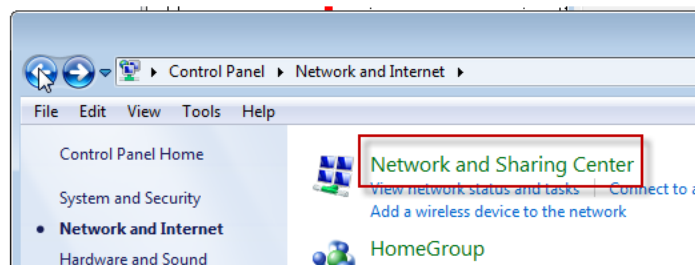
#### 4.2.4.1 Windows 7

This section describes how to set a static IP address in Windows 7.

**To set a static IP address:**

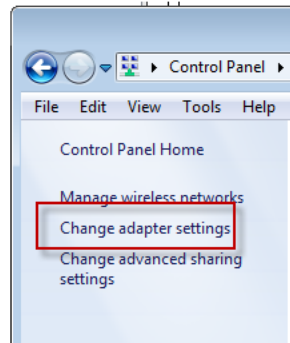
→ **Windows 7 computer**

- 1 Check prerequisites:
  - ✓ None
- 2 Click the Windows Start icon.
- 3 Select **Control Panel**. The **Control Panel** window opens.
- 4 Select **Network and Internet**.
- 5 Select **Network and Sharing Center**.



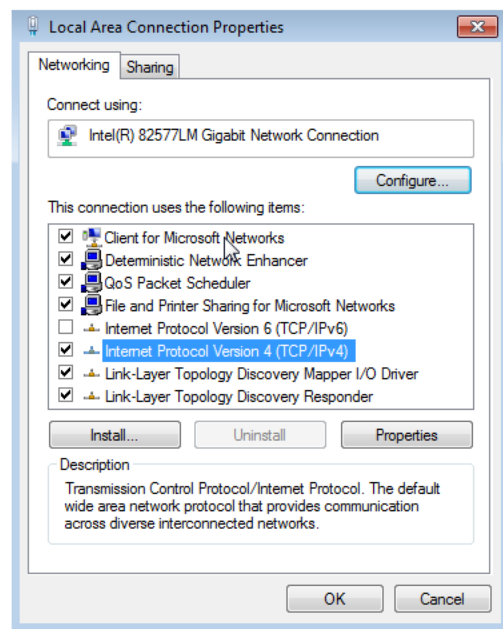
**Figure 4-8** Windows Network and Sharing Center

- 6 In the left pane, click **Change adapter settings**.



**Figure 4–9 Windows Change Adapter Settings**

- 7 Right-click **Local Area Connection** and then click **Properties**.



**Figure 4–10 Windows Network and Sharing Center**

- 8 Select **Internet Protocol Version 4 (TCP/IPv4)** and then click **Properties**.
- 9 Select **Use the following IP address**. Enter the following:
  - IP address
  - Subnet mask
  - Default gateway
- 10 Select **Use the following DNS server addresses**. Enter the following:
  - Preferred DNS server
  - Alternate DNS server

- 11 Select the **Validate settings upon exit** check box.
- 12 Click **OK**.
- 13 Click **Close**.

### 4.2.4.2 Windows 10

This section describes how to set a static IP address in Windows 10.

*To set a static IP address:*

→ **Windows 10 computer**

- 1 Check prerequisites:
  - ✓ None
- 2 In the Windows search box, type **control** and then click **Control Panel**. The **Control Panel** window opens.
- 3 Click **Network and Sharing Center**.
- 4 In the left pane, click **Change adapter settings**.
- 5 Right-click **Local Area Connection** or **Ethernet 2** and then click **Properties**.
- 6 Click **Yes** at the security prompt.
- 7 Click **Internet Protocol Version 4 (TCP/IPv4)** and then click **Properties**.
- 8 Select **Use the following IP address**. Enter the following:
  - IP address
  - Subnet mask
  - Default gateway
- 9 Select **Use the following DNS server addresses**. Enter the following:
  - Preferred DNS server
  - Alternate DNS server
- 10 Select the **Validate settings upon exit** check box.
- 11 Click **OK**.
- 12 Click **Close**.