

HANDS-ON PROJECTS



Project 1-1

In this project, you will use the ping utility to obtain the IP address of a Web site. Ping sends four packets out to the remote computer, and receives four responses if the remote computer is connected to the network.

1. Click **Start**, and then click **Run**.
2. Type **Command Prompt** in the text box if you are using a Windows 95 or Windows 98 computer. If you are using a Windows NT or Windows 2000 computer, type **cmd**. An MS-DOS window opens.
3. Type **ping www.visualinterdev.org**, and press **Enter**. You will see four responses that identify the IP address of the Web server, and the time that it took to receive the response. Read the IP address that is displayed. What is the IP address for the Web site?
4. Try to ping other sites (just once per site).
5. On some sites you will see "Request Timed Out". Write a short statement to explain what this response means.



Project 1-2

In this project, you will use the tracert utility program to trace the route of an Internet packet across hops on the Internet.

1. Click **Start**, and then click **Run**.
2. Type **Command Prompt** in the text box if you are using a Windows 95 or Windows 98 computer. If you are using a Windows NT or Windows 2000 computer, type **cmd**. An MS-DOS window opens.
3. Type **tracert www.visualinterdev.org**, and press **Enter**. You will see up to 30 responses that identify the IP address of each hop (or router) that the packet was delivered to and the time that it took to receive the response.
4. Read the IP address that is displayed. What is the IP address for the Web site? (*Hint: It is the last IP address displayed, because it is the final destination of the packet.*)
5. Repeat the above steps for the same Web site from another computer. Is the packet routed the same way? Why, or why not?
6. Try to tracert other sites (just once per site). Repeat the above steps for another Web site. Some hops will display **"*"**. Explain what the asterisk means.