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Lab 7.3.1 Editing the HOSTS File in Windows

Objective

- Edit the local HOSTS file on a Windows PC to map a name to an IP address for easier identification.

Background / Preparation

You are employed at an ISP. You have been sent to a customer location to troubleshoot an issue with one of the customer's servers. There is a user on the network who constantly needs to access the server to administer a development website that the company is working on. Currently, the customer does not have any local servers that perform the function of associating a name to the server's IP address. However, the website that the customer is working on requires the use of a name in the URL to access the site properly. Since this is the only workstation that needs to access the server based on a name, you decide to use the local HOSTS file on the Windows workstation to resolve the issue with name resolution. Your plan is to edit the local HOSTS file and add a name mapping for the web server. You will test the functionality of the name resolution using the **ping** command from the command prompt.
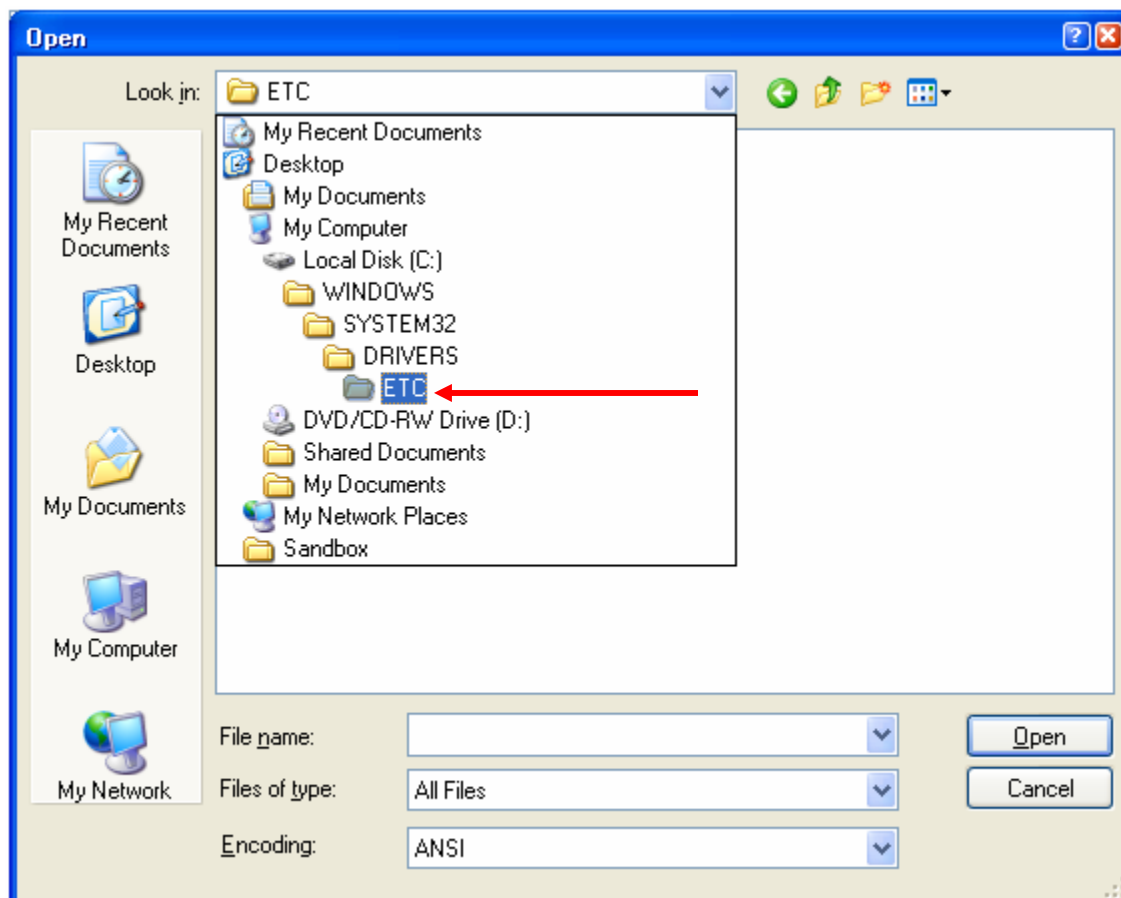
The following resources are required:

- PC running Windows XP
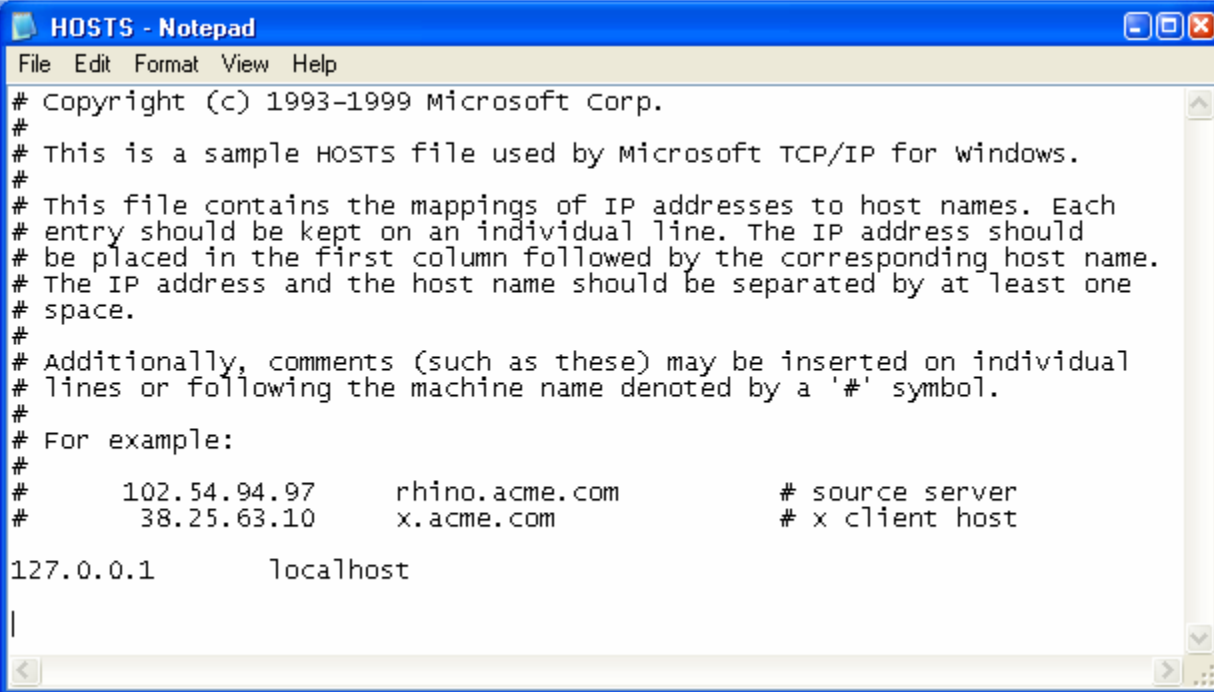
- Administrator privileges on the PC

NOTE: The screen layout of your Windows-based operating system may be slightly different than what appears here, but the procedure is the same.

Step 1: Locate the HOSTS file in Windows

a. Click the **Start** button and choose **All Programs** > **Accessories**, and then click the **Notepad** program.

b. In Notepad, choose **File > Open**. Change the **Files of Type** to **All Files** to be able to see files other than text files. Navigate to C:\WINDOWS\SYSTEM32\DRIVERS\ETC.

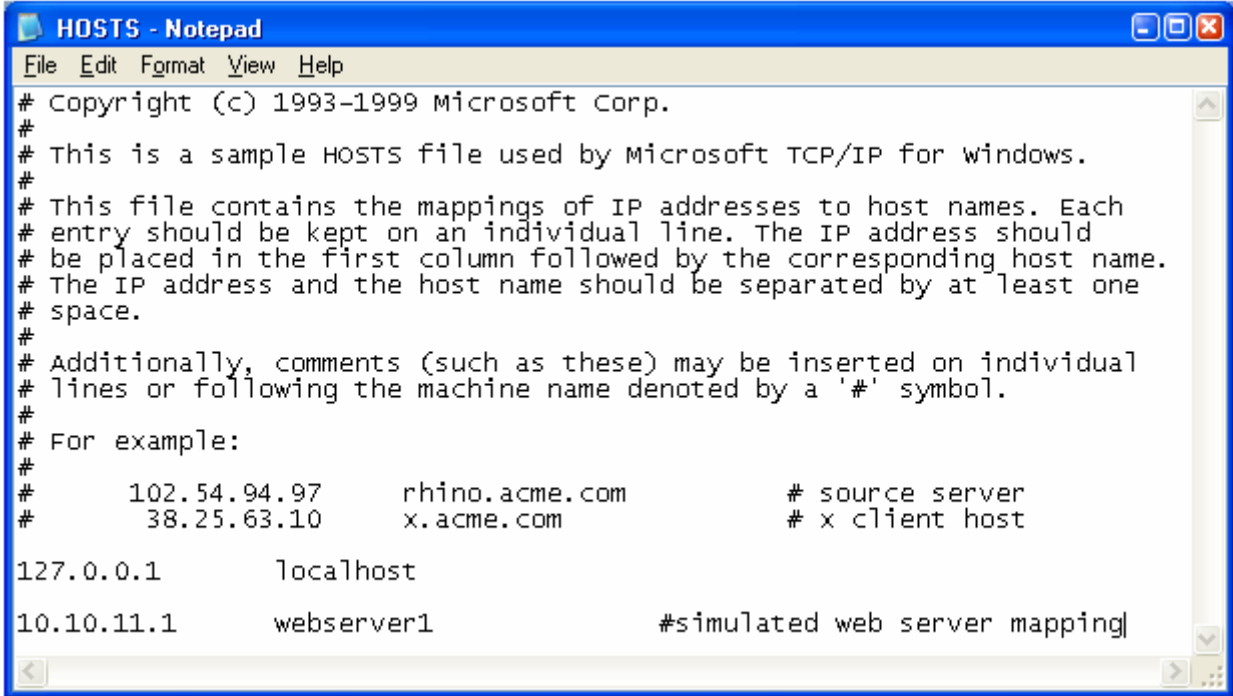c. Select the **HOSTS** file and click **Open**.

The **HOSTS** file opens in Notepad.

```
HOSTS - Notepad
File  Edit  Format  View  Help
# Copyright (c) 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97      rhino.acme.com          # source server
#       38.25.63.10      x.acme.com              # x client host

127.0.0.1       localhost
```

Step 2: Edit the HOSTS file

    a.   At the bottom of the **HOSTS** file, there is a list of hosts that have already been recorded. Add a new entry for the web server. Enter **10.10.11.1**, press the Tab key, and then enter **webserver1**. Press the Tab key again, and add a comment preceded by a # sign. The # sign is used to signify a comment.
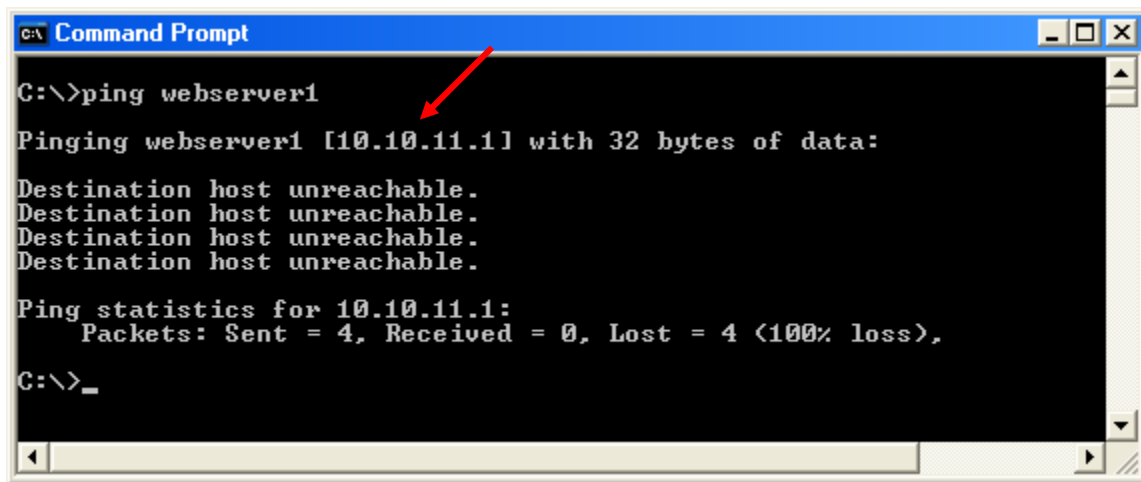
```
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# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97     rhino.acme.com          # source server
#       38.25.63.10     x.acme.com              # x client host

127.0.0.1       localhost

10.10.11.1      webserver1              #simulated web server mapping
```

    b.   Save the updated **HOSTS** file.

Step 3: Test the new name mapping

a. To open the command prompt, click the **Start** button and then click **Run**. In the **Run** dialog box, type **CMD** and then click **OK**. Alternately, you can choose **Start** > **All Programs** > **Accessories** > **Command Prompt** to open a command window.

b. In the command prompt window, type **ping webserver1** and press the **Enter** key.

The name **webserver1** was resolved to **10.10.11.1** just before the subsequent echo requests were sent out. This indicates that the **HOSTS** file was modified correctly and is functioning correctly in the name resolution process on this workstation. Since this is a simulation and there is no real webserver1, the destination host is unreachable. If there were a webserver1 that could be reached from this host, it would most likely have replied to the ping.

```
Command Prompt                                              _ □ ×

C:\>ping webserver1

Pinging webserver1 [10.10.11.1] with 32 bytes of data:

Destination host unreachable.
Destination host unreachable.
Destination host unreachable.
Destination host unreachable.

Ping statistics for 10.10.11.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>_
```

Step 4: Reflection

a. Which other files are located in the **\ETC** folder with the **HOSTS** file?

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b. Which character is used to comment out description text in the **HOSTS** file?

_____