Using Windows Command Prompt to Determine the IP Address of a Connected Device

Objective

An IP address (Internet Protocol Address) is a label given to a device that is used to identify and locate other devices. These addresses allow devices to communicate on and between networks. To access the web configuration utility, you will need to find the IP address of the device you are using. The objective of this document is to show you how to determine the IP address of a device that is internet capable.

Alternative Option: To quickly access the configuration utility of various devices, the software FindIT is available on the Cisco website. Find the software here:

http://software.cisco.com/download/release.html?mdfid=282833583&softwareid=283453334&release=1.0.0

Note: This article is only applicable to devices that use Windows XP, Vista, 7, and Windows 8 as the primary operating system.

Applicable Devices

• All Windows Based Networking Devices

How to Determine the IP Address of a Device

Step 1. Navigate to the start menu and choose All Programs > Accessories > Command Prompt. The Command Prompt window opens:

Note: The gray rectangle indicates the user’s home directory.

Step 3. Type `ipconfig` and then press Enter to display the applicable current TCP/IP configuration values.
Note: Type `ipconfig /all` to display all of the TCP/IP values.

The Wireless and Local Area Connection values are displayed.

```
Wireless LAN adapter Wireless Network Connection:
  Connection-specific DNS Suffix . . . . : soe.ucsc.edu
  Link-local IPv6 Address . . . . . . : fe80::bcba:ad21:4b49:ece9%12
  IPv4 Address . . . . . . . . . . . . : 10.10.10.101
  Subnet Mask . . . . . . . . . . . . : 255.255.255.0
  Default Gateway . . . . . . . . . . : 10.10.10.1

Ethernet adapter Local Area Connection:
  Connection-specific DNS Suffix . . . . : soe.ucsc.edu
  Link-local IPv6 Address . . . . . . : fe80::785c:36f1:363d:b8ba%11
  IPv4 Address . . . . . . . . . . . . : 10.10.10.100
  Subnet Mask . . . . . . . . . . . . : 255.255.255.0
  Default Gateway . . . . . . . . . . : 10.10.10.1
```

- Connection-specific DNS Suffix - A DNS suffix that is assigned to an adapter.
- Link-Local IPv6 Address - The IP address assigned to the interface.
- IPv4 Address – The IP address of the device that you are currently using.
- Subnet Mask - Used to describe which portion of the IP address refers to the subnet and which refers to the host.
- Default Gateway – The IP address of the device that you are currently connected to.
Note: Your values may differ from those specified in the above image. In some cases, certain devices may have a default IP address, which can be found in the specific device's product documentation.

Step 4. (Optional) If you are having connectivity issues, one possible solution is to refresh the current IP address of the computer. First, type `ipconfig /release` and then press **Enter**. This will let go of the currently held IP address.

Once your computer is finished releasing the current IP address, type `ipconfig /renew` and then press **Enter**. This will assign a new IP address.
**Note:** Once the computer has finished operations, you can check your current IP by typing `ipconfig` and then pressing **Enter**.

Step 5. If you have a wireless connection, proceed to Step 6. If you have a wired connection, skip to Step 7. If you have both a LAN and a Wireless connection simultaneously, only one of the two connections will be used.

Step 6. If you are connected to a device wirelessly, the *Wireless LAN adapter Wireless Network Connection* section will display the applicable values. The IP in the *Default Gateway* field will be the IP you will use to access the Configuration Utilities for most devices.

```
Wireless LAN adapter Wireless Network Connection:

Connection-specific DNS Suffix   : soe.ucsc.edu
Link-local IPv6 Address         : fe80::beba:ad21:4b49:ece9%12
IPv4 Address                    : 10.10.10.101
Subnet Mask                     : 255.255.255.0
Default Gateway                 : 10.10.10.1
```

Step 7. If you are connected to a device via a wired connection, the *Ethernet adapter Local Area Connection* section will display the applicable values. The IP in the *Default Gateway* field will be the IP you will use to access the Configuration Utilities for most devices.

```
Ethernet adapter Local Area Connection:

Connection-specific DNS Suffix   : soe.ucsc.edu
Link-local IPv6 Address         : fe80::785c:36f1:363d:b8ba%11
IPv4 Address                    : 10.10.10.100
Subnet Mask                     : 255.255.255.0
Default Gateway                 : 10.10.10.1
```

Step 8. Type the Default Gateway IP address into your web browser. The web configuration utility page will open.