Exercise: Find your IP

Introduction

You now know that all devices on a network need an IP address to communicate with other devices. Later in this course, you will learn how to assign IP addresses to devices. However, you first need to learn how to find out what the IP address of a device is, which is what this exercise is all about.

Case study

Sam's office has a network; however, the devices cannot communicate at this point. You suspect this is because the network has no IP addresses for the devices. You need to inspect the laptops to find out if this is true. One is a Windows computer, and the other is a Mac book. In this exercise, you will find out how to check whether a device has an IP address by finding the IP address of your own machine (Windows/Mac) and also how to do this on an Android and Apple device for future reference.

Instructions

Step 1: Identify the device type (Windows/Apple/Android)

Begin by checking what machine you are using, as finding the IP address differs on a Windows and Mac machine. If it is a Mac device, typically, an Apple logo shows when you switch it on, and if it's a Windows machine, a Windows logo will appear.

For the iPhone at startup, you will see the Apple logo on the screen or for an Android phone the Android logo could appear. Alternatively the manufacturer's logo will display.

Step 2: Identifying an IP address on a Windows computer

To find the IP address of a Windows machine, you need to launch the Command prompt. The Command prompt is an application available in most Windows operating systems. It's used to troubleshoot or solve certain kinds of Windows issues. It has a black background where you can type commands which tell the computer to perform specific tasks. Follow these steps to open the Command prompt and get your IP address:

- 1. Click the Windows Start button in the taskbar that will be at the bottom of your screen when Windows is set to defaults. A menu that includes a search bar will appear.
- 2. Type **cmd** in the search bar. A thumbnail for the Command prompt app should now appear in the menu.
- 3. Click on the thumbnail to open the Command prompt app. An app with a black background will load.
- 4. Type **ipconfig** in the black space and press enter.
- 5. You should now see your machine's IP address listed under an adaptor which is the connection you use to connect to the network. Depending on your machine's connection, this could be a wired or wireless adaptor.

6. Copy your IP address.

Step 3: Identifying an IP address on a Mac

To find the IP address on a Mac machine, you need to launch the Terminal app. The Terminal app is a command line interface (CLI) for the operating system (OS) used by Macs. Network administrators typically use the Terminal to initiate an action that is not supported by the operating system's graphical user interface (GUI). It has a white background where you can type commands instructing the machine to perform specific tasks. Follow these steps to open the terminal app and get your IP address:

- 1. Use Spotlight to search for the terminal app. Select it to launch the app.
- If there is a cable connecting your device to the network, type the command ipconfig
 getifaddr en1 in the white space to find your local IP. If your machine connects to the
 network wirelessly (through Wi-FI), type ipconfig getifaddr en0 in the terminal app.
 Your IP address should now display.
- 3. Copy your IP address.

Step 4: Identifying an IP address on an Apple device

To find an IP address on an iPhone you will need to launch the Settings app. Follow these steps to find the IP address on an iPhone.

- 1. Find and open the **Settings** app.
- 2. Tap Wi-Fi
- 3. Tap the information icon, a blue i next to the active Wi-Fi network, and scroll down to display the IP address.

Step 5: Identifying an IP address on an Android device

To find an IP address on Android follow these steps.

- 1. Open Settings menu and tap on About phone
- 2. Tap Status
- 3. You should now see the general information of your device, including the IP address.

Conclusion

This exercise guided you through finding the IP address of the device you are using. You can use this knowledge to help Sam determine if their devices have IP addresses. As you progress through this course, you will learn how IP addresses can be assigned and used.