Home Network Setup

Guide

Wireless Router Network Diagram

Internet

MP3 Player

HDD

Cable Modem

WEB Camera

Printer

Wireless router

Desktop PC

Media PC

Digital Camera

IP Camera

Wireless Media Player

Smartphone

Laptop

Entertainment System

CS ODESSA

Image Link

Table of Contents

Introduction

A. Purpose of the Document: This user-manual is intended to provide an in-depth guide for setting up and maintaining a home network.

B. Safety Precautions: This guide provides all information needed to install network devices, as well as connect other common devices to the network.

Before beginning, it is recommended to ensure there are no devices plugged into electrical outlets as this can cause harm to the user. It is also recommended to avoid installing any devices that use electronic components in wet or humid environments.

C. Tools and Equipment: Common tools that may be required are scissors or a knife for opening boxes, a Phillips head and Flat head screwdriver, and Zip Ties for cable management.

A toolkit like the one shown may also be helpful if more tools are required.

Toolkit Link

Pre-Installation

A. Workspace Setup: It is considered best practice to ensure the workspace where the network components are being installed is tidy and organized to ensure the network components are installed correctly.

B. Required Components: Modem, Router, Ethernet Cables, Devices to Connect

Installation of Main Components

A. Installing the Modem

    a. Unpack the modem for its packaging.

    b. Connect the modem to the Coaxial Cable coming from the wall.

Coaxial Cable Link

    c. Plug the modem's power cable into the modem, then into the wall.

B. Installing the Router

    a. Unpack the router from its packaging.

    b. Connect the router to the modem with an Ethernet Cable.

    c. Plug the router's power cable in the router, then into the wall.

Ethernet Cable Link

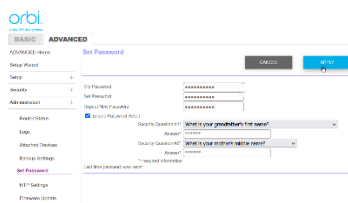# Connecting the Router to the Network

    A. Connecting the Router to the Network

        a. Plug an Ethernet Cable into one of the available ports on the back of the router.

        b. Plug the other end of the Ethernet Cable into a computer.

Configuring the Router

    A. Configuring the Router

        a. On the computer, go to a web browser such as Chrome or Firefox.

        b. In the search bar, type the IP Address of the router which can be found on the back of the router.

        c. Once, at the webpage for the router, configure the network name, password, and change the IP Address to something that is not the default.

        d. Once done, exit the web browser.

Network Configuration Link

Connecting Common Devices to the Network
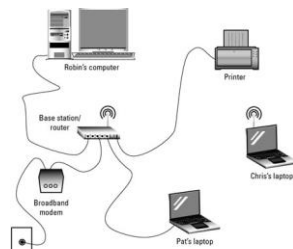
A. Connecting Wireless Devices to the Network

    a. From the wireless device, go to settings.

    b. Go to settings

    c. Under Wi-Fi settings, click the name of the network (The name you configured in the previous section).

    d. If prompted, enter the password for the network.

Wireless Device Link

B. Connecting Wired Devices to the Network

    a. With the device at hand, connect an Ethernet Cable from the device to the router.

    b. If prompted, enter the password for the network.

Wired Device Link

Configuring Common Devices

A. Configuring Wireless Devices

a. On the Wireless Device, go to settings.

b. Under Wi-Fi settings, click on the name of the network.

c. If prompted, enter the password for the network.

d. If needed, configure other Wi-Fi settings such as DNS and IP Address
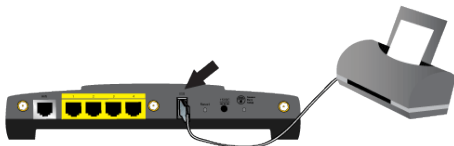
   i. However, this is not necessary

B. Configuring Wired Devices

a. On the Wired Device, go to settings.

b. Under Wi-Fi settings, click on the name of the network.

c. If prompted, enter the password for the network.

d. Configure any necessary settings such as DNS and IP Address

   i. However, this is not necessary

Connecting Printers to the Network

A. Connecting Printers to the Network

a. Connect an Ethernet Cable from the printer to the router.

b. If prompted, enter the password for the network.

Connecting Printers Link

Configuring Printers

A. Configuring Printers

  a. On the printer, go to settings.

  b. Under Wi-Fi settings, click on the name of the network

  c. If prompted, enter the password for the network.

  d. Configure and necessary settings such as DNS and IP Address

    i. However, this is not necessary

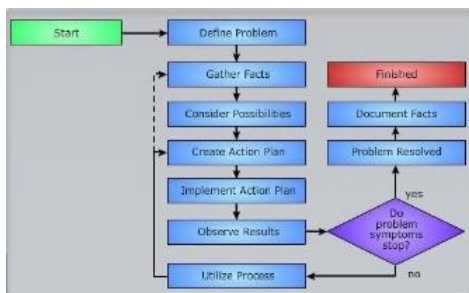# Testing and Troubleshooting

A. Ensure everything is properly connected

  a. Many issues arise from cables not being connected and even from them not being

  connected all the way.

B. Ensure there is power

  a. Ensure there is power to all devices. The network will not function if there is no

  power.

Troubleshooting Link

Frequently Asked Questions

1. Why is my network not working?

a. Ensure there is power to all devices in the network. Then, check to ensure everything is properly connected.

2. What if I run out of Ethernet Cables?

a. Simple! You can go to most stores to purchase them or even order them online.

3. What if any of my components get damaged?

a. Fortunately, most components are covered under a warranty. Unfortunately, if they are not covered by a warranty, you will likely have to buy new ones.

4. Is it important to keep the area where the router is clean?

a. Yes, it is very important to keep the area clean as dirt and dust may build up on the components causing them to overheat and possibly even start a fire.

5. What if my components don't match the images shown in the manual?

a. If your network components don't match the ones shown in the images in the manual, it would be a great idea to take a look at the manual that came with your components.

Conclusion

A. Maintenance Tips

a. It is very important to keep the area around the network clean as build ups of dirt and dust can cause the components to overheat or start a fire.

b. If a component stops working, DO NOT attempt to fix it yourself as this can lead to you being electrocuted. Instead, take the component to a licensed specialist and have them look at it.

B. Additional Resources

a. If you would like to change any components in your network and are not entirely sure how to, the internet is a great place to start, however, if you do not feel comfortable with ANY steps in a tutorial, consult a professional.