

# Overview of Computers



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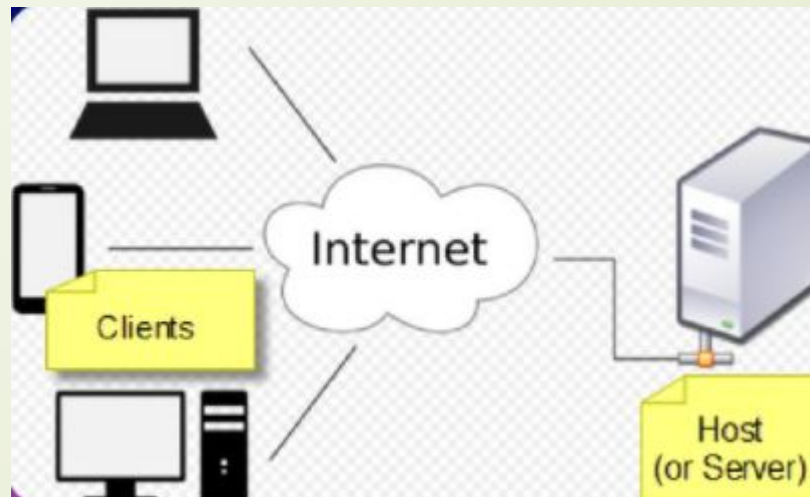
# Server



- ❑ You may have heard the term server before, but what exactly is a Server?
- ❑ A Server in its most basic form:
  - ❑ Is a computer device that provides a service to another computer program and its user
- ❑ These server programs range in variety depending on what the server is designed for
- ❑ Using internet technologies, devices are able to establish a connection to a server to access it and make use of the resources or programs on the server

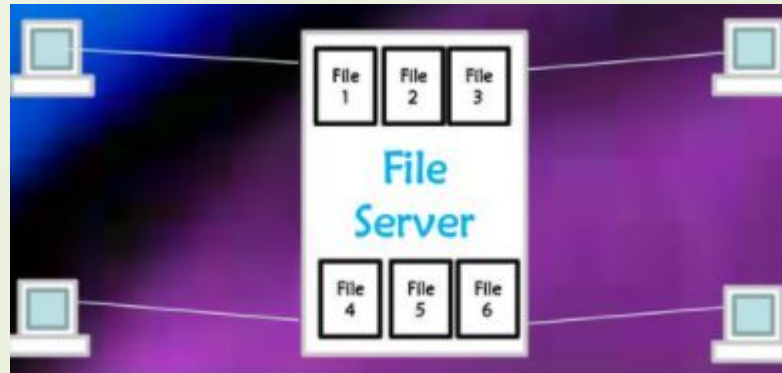
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- ❑ The essential point is that a server offers a “service” to devices connected to it
- ❑ On a network, a server is known as a host
- ❑ The devices that are connecting to the server are known as clients



# Server Example

- ❑ The example shown below is known as a **File Server** because this server holds files that are shared around the business
- ❑ Instead of storing these files on their own computers, they can log into any computer that can access the server
- ❑ From here they can look for the file on the server, open it, edit it, save it, etc; and if another member is looking for the file they can connect to the server and access that same file





# Server



- ❑ Servers can come in many shapes and forms.
- ❑ Technically any computer with a suitable server operating system / software installed, and a way for devices to connect to it, is capable of being a server
- ❑ However in most cases, servers are specialized computers which are designed and built for the specific task of being a server:
  - ❑ Servers are designed to be running 24-7
  - ❑ The processing power of servers can generate a lot of heat
  - ❑ They need to be capable of computing and handling the tasks they are built for
  - ❑ They need to be able to cope with the number of clients that are accessing it

# Server

- ❑ For this reason you will find that servers often don't look anything like a typical desktop computer, laptop or mobile device.
- ❑ This is an image of a server that a company or organization may use.



- ❑ This server has server racks mounted inside a data center server cabinet





# Types of Server

- ❑ There are many different types of Servers that are used for a range of purposes, below are a few common uses for servers:
- ❑ **File Server:** Stores files that can be accessed and shared with many clients
- ❑ **Web Server:** Holds and stores webpages for clients to access
- ❑ **Database Server:** Similar to a file server, but stores and holds a database system, again for many clients to access
- ❑ **Application Server:** Holds applications for clients to access
- ❑ **Game Server:** Holds a game/games for clients to access and share. Typically used for online gaming



# Bootloader

- ❑ A bootloader or bootstrap loader, is a computer program that is responsible for booting a computer.
- ❑ When a computer is turned off, its software—including operating systems, application code, and data—remains stored on non-volatile memory.
- ❑ When the computer is powered on, it typically does not have an operating system or its loader in (RAM).
- ❑ The computer first executes a relatively small program stored in ROM to initialize RAM and load operating system into RAM.