5.3.2: Providing Resources in a Network

Networks of Many Sizes

Networks are the foundation enabling access and communication. Home networks allow families to share resources like printers and files. They also enable remote work access to a corporate network. Small office and home office networks do the same for entrepreneurs and remote employees.

For businesses, office networks increase productivity and efficiency. They connect employees to tools, resources, and information needed to collaborate and do their jobs effectively. Networks also link office locations for company-wide communication.

Companies rely on their corporate network to connect all of their devices and allow employees to:

- Stay connected to the Internet to complete their work.
- Have the ability to send and receive data fast.
- Can send small and large quantities of data globally via any device connected to the internet.

Whether at home, school, or work, networks bring people, devices, and systems together to share resources, collaborate, and exchange information.

Clients and Servers

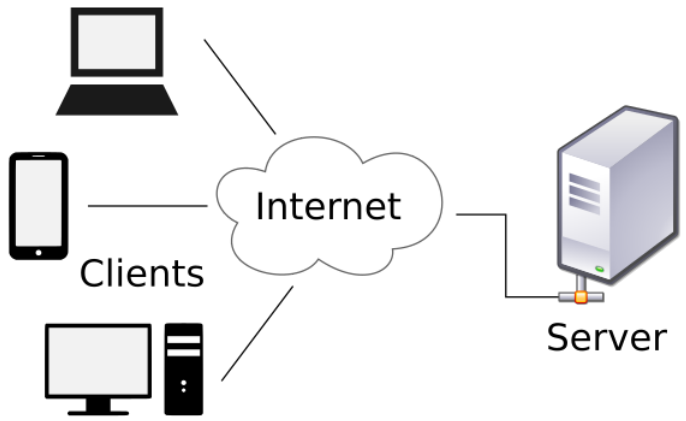

Figure 5.3.2.1 Client Server Model. (GNU Lesser General Public License ; Gnome-fs-client: David VignoniGnome-fs-server.svg: David Vignoni derivative work: Calimo, LGPL <http://www.gnu.org/licenses/lgpl.html>, via Wikimedia Commons)

All PCs associated with a network are named hosts. Hosts are also called end devices.

Servers are PCs with programming that empowers them to give data, like emails or website pages, to other network devices called clients. Each assistance requires separate server programming. For instance, a server requires web server programming to give web administration functions to the network. A PC with server programming can offer types of assistance at the same time to one or numerous customers. Furthermore, a solitary PC can run numerous sorts of server programming. It might be vital for one PC to go about as a document server, a web server, and an email server in a home or private company.

Clients are PCs with programming introduced that empowers them to ask for and show the server's data. A case of client programming is an internet browser similar to Chrome or Firefox. A solitary PC can likewise run different kinds of custom programming. For instance, a client can browse email and view a site page while texting and tuning in to Internet radio.

Peer-to-Peer

Client and server programming ordinarily run on discrete PCs, yet it is also feasible for one PC to simultaneously complete the two jobs. In private companies and homes, hosts work as servers or clients on the network. This sort of system is known as a shared

network. An example would be several users connected to the same printer from their individual devices.
