

Peer to Peer

Hardware Requirements

- A connection between various computers called *peers*
- Computer
- An internet connection should peers be connected via internet

Software Requirements

- P2P Server software such as Kazaa, Limewire, and Bearshare if peers are connected over the internet

A Peer to Peer (P2P) network is a network where each computer system, called a *peer*, functions as a client as well as a file server. Each peer must have a connection to other peers whether it be via the internet, cables, or even a USB drive. The most basic example of a P2P network is where files are transferred between computers via a USB drive. The most popular example of a P2P network are Virtual Private Networks (VPNs). VPNs encrypt data, divides them and sends them to a variety of peers so that if hackers managed to snatch one packet of data, the whole data set is not put at risk. P2P contrasts to the wide array of central server networks and comes with its pros and cons.

Pros	Cons
<ul style="list-style-type: none">. Costly central servers are not required with each peer being a file server	<ul style="list-style-type: none">. Data files cannot be centrally backed up
<ul style="list-style-type: none">. Disruptions are minimal if one server fails	<ul style="list-style-type: none">. P2P networks' only form of security is the permission granting of each peer
<ul style="list-style-type: none">. Hacking is very hard as P2Ps do not use central servers	<ul style="list-style-type: none">. Slows down performance of a peer when another peer is accessing its files
<ul style="list-style-type: none">. File transfers are faster without a central server	<ul style="list-style-type: none">. P2P networks are the basis of the infamous illegal BitTorrent Protocol

Works Cited:

P2P. (n.d.). Retrieved March 24, 2017, from <https://techterms.com/definition/p2p>