CLIENT SERVER NETWORK: ADVANTAGES AND DISADVANTAGES

What are the advantages and disadvantages of client-server networking?

Earlier we saw what is a client/server architecture? and its main difference from peer to peer network, i.e. in client server there was one powerful computer (known as server) which acts as a provider of information to other sub-ordinate workstations (called client). Now Let us discuss the benefits and drawbacks of Server-Client computing over P2P computing:-

Advantages of Client Server Networks over Peer to Peer Networks

1) Centralization : Unlike P2P, where there is no central administration, here in this architecture there is a centralized control. Servers help in administering the whole set-up. Access rights and resource allocation is done by Servers.

2) Proper Management : All the files are stored at the same place. In this way, management of files becomes easy. Also it becomes easier to find files.

3) Back-up and Recovery possible : As all the data is stored on server its easy to make a back-up of it. Also, in case of some break-down if data is lost, it can be recovered easily and efficiently. While in peer computing we have to take back-up at every workstation.

4) Upgradation and Scalability in Client-server set-up: Changes can be made easily by just upgrading the server. Also new resources and systems can be added by making necessary changes in server.

5) Accessibility: From various platforms in the network, server can be accessed remotely.

6) As new information is uploaded in database, each workstation need not have its own storage capacities increased (as may be the case in peer-to-peer systems). All the changes are made only in central computer on which server database exists.

7) Security: Rules defining security and access rights can be defined at the time of set-up of server.

8) Servers can play different roles for different clients.

Disadvantages of Client Server Architecture v/s P-2-P Technology

1) Congestion in Network: Too many requests from the clients may lead to congestion, which rarely takes place in P2P network. Overload can lead to breaking-down of servers. In peer-to-peer, the total bandwidth of the network increases as the number of peers increase.

2) Client-Server architecture is **not as robust** as a P2P and if the server fails, the whole network goes down. Also, if you are downloading a file from server and it gets abandoned due to some error, download stops altogether. However, if there would have been peers, they would have provided the broken parts of file.

3) Cost: It is very expensive to install and manage this type of computing.

4) You **need professional IT people** to maintain the servers and other technical details of network.

It can the summarized that client-server model is not used in small scale networks and networks where security is not a big issue.

Source: http://www.ianswer4u.com/2011/05/client-server-network-advantages-and.html#axzz3Qs5RV0Sb