

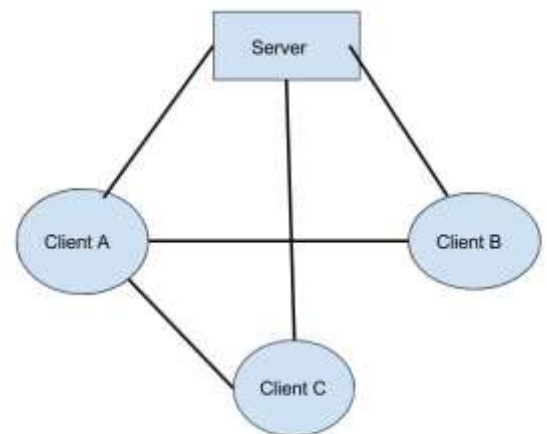
Distributed File Sharing System

Design - sync

The following is the sequence of steps that occur during a SYNC operation,

- When a user requests a SYNC operation. The host sends a SYNC request to the master server.
- The master server on receiving a SYNC request forwards this SYNC request to all the registered hosts.
- Each host when it receives the SYNC request from the server, puts the files in its directory to only the peers connected to it.

In a connection like the one shown in the diagram, on receiving a sync request from the server client A sends its files to client B and C. Client B sends its files only to Client A. Client C sends its files to client A. Thus the files will be synced as per the requirement.



Preventing other hosts from getting files outside a host's home directory, this done as follows,

- A host on receiving a get request for a checks the filename for a forward slash '/'.
 - If a '/' is present in the filename, the host sends the file corresponding to the string after the last '/'. If there is no such file an error message is returned
 - Since '/' is not a permitted character in a file name, this method works.
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