

CAP Theorem and KeePassXCIPFS

CAP Theorem states that in a distributed database system can only comply with 2 of the 3:Consistency, availability and partition tolerance. I KeePassXCIPFS we cannot compromise partition tolerance as we cannot afford that failure of entire network if a single node malfunctions. Therefore we need to select between consistency and availability. Practically speaking it is not possible for all the nodes to be online all the time and therefore we need to select consistency over Availability in our case. Once the node is online it would have synchronized data and that fulfills the require for consistency. To deal with availability every user needs to upload separate files once they are edited as overwriting the already present file will make the offline nodes lack the changes if any are made during their non-availability period.