Mandatory Assignment 3

Gossiping with PeerSim

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Conclusions

We think the better topology to bootstrap such a P2P system is the star topology. The simulation seems to take a lot longer time when we run this topology, but based on the graphs, this seems to be de most ideal topology of the two.

When the cache is bigger, the average path length get smaller, which means that the communication costs and time becomes smaller. On the other hand, a bigger cache means a bigger average clustering coefficient, which gives a higher chance of network partitioning, and a higher number of redundant message deliveries. A higher cache also means that the average node will have a higher in-degree value (the number of edges ending at the node in a directed graph) than it would for a smaller cache.