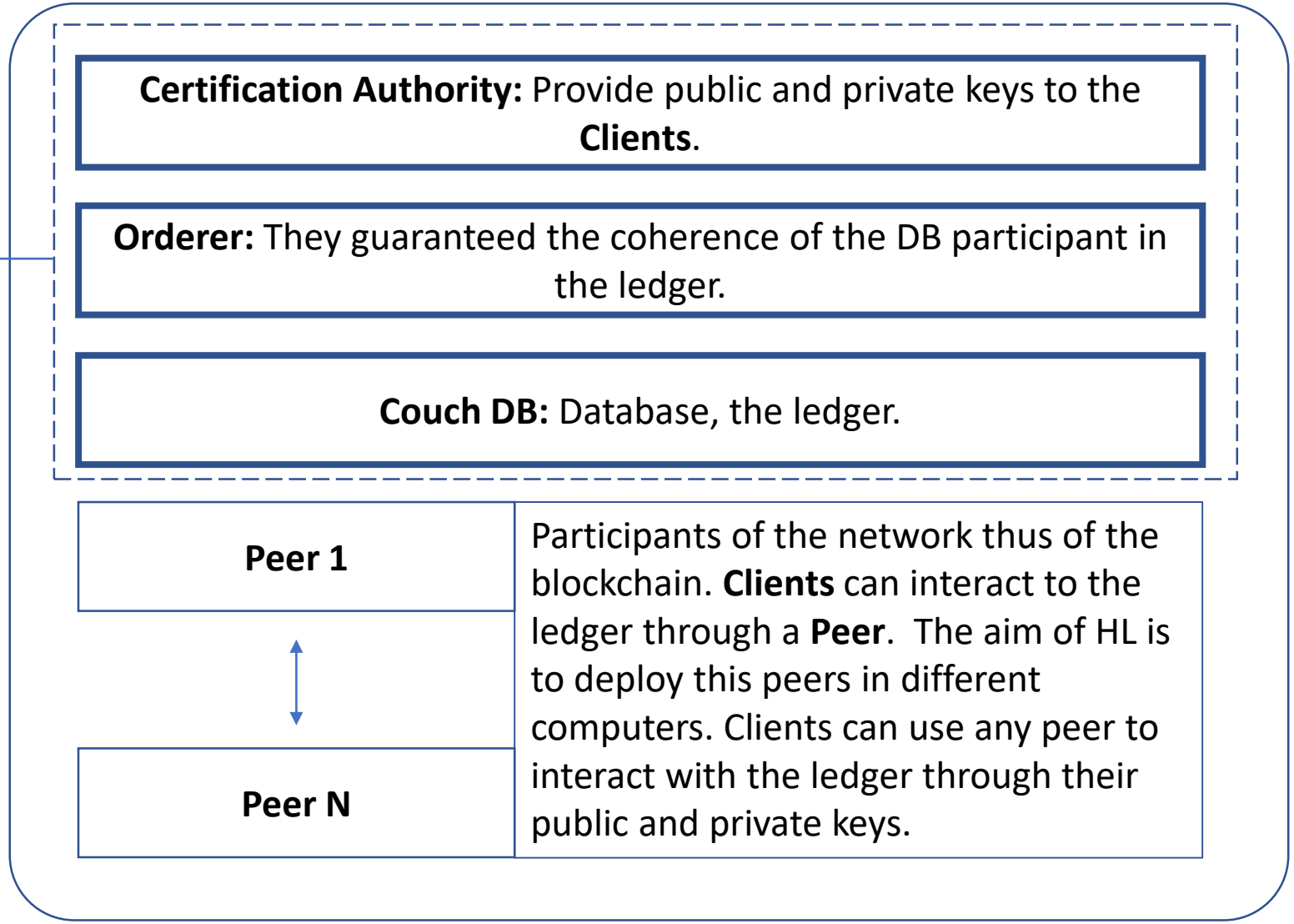
Hyperledger Fabric Network Structure

To run a HL network, at least one of each of this entities is needed but there could be as many of them as wanted.



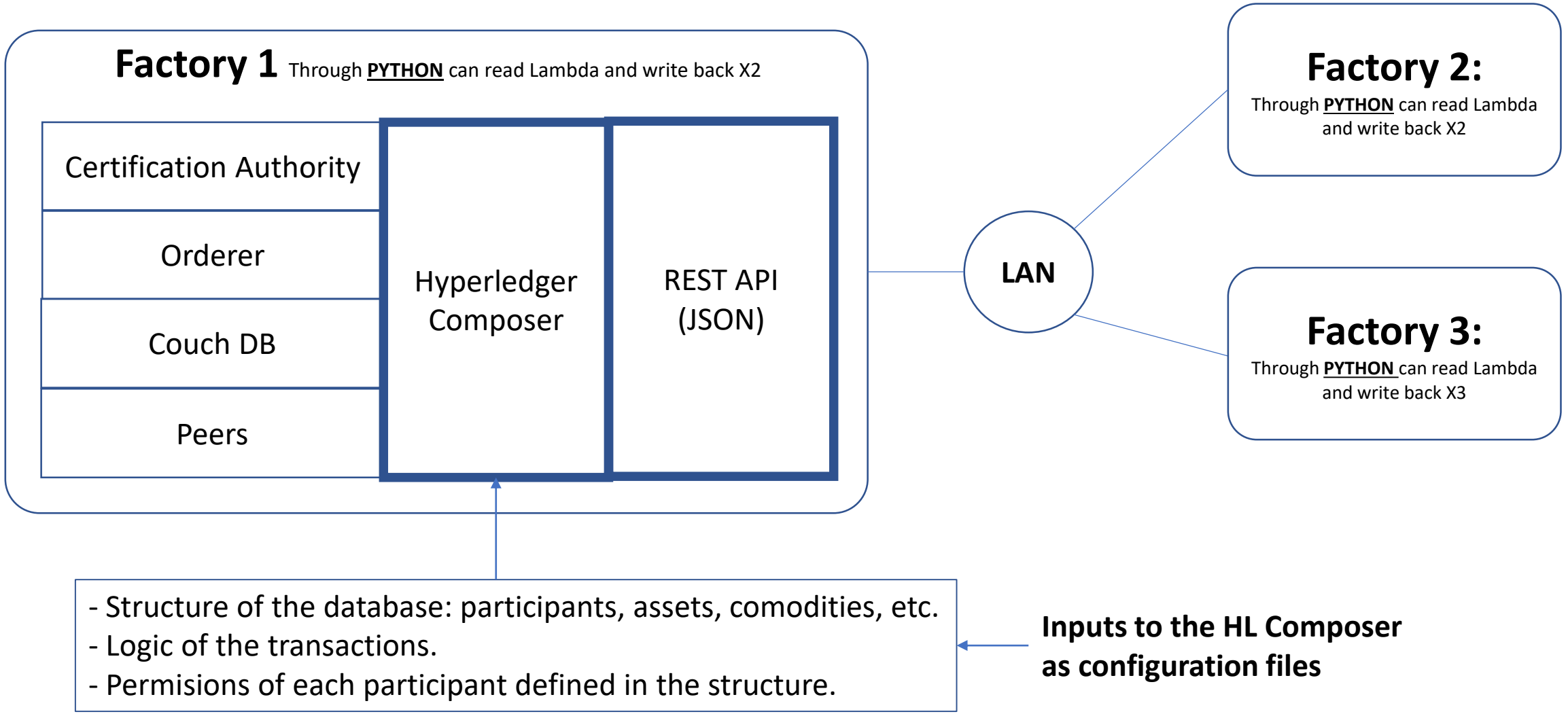
Clients: Final users, „Humans“ who for their own benefit interact with the ledger.

Hyperledger Fabric Network Structure proposed as a solution.

Clients and Peers merge in one entity called Factory: Final users, here „Factories“ that have a PC in their facilities through which they can read and write back to the ledger.

SO FAR; THIS SOLUTION CAN NOT WORK AMONG DIFFERENT COMPUTERS BECAUSE OF DIFFICULTIES WHILE DEPLOYING PEERS.

Hyperledger Fabric Network Structure proposed as a solution walk around: HL Composer



HL Composer installed over the HL Fabric Network allows to deploy a REST API where „Fabrics“ on the same LAN can access to

Observations:

- HL=hyperledger, HLF= HL Fabric, HLC= HL Composer
- In the HLC structure, the number of peers is not relevant. All the participants are definded in the structure of the HLC database.
- Currently, the HLC solution is deployed to one of the computers participant in the network and the others acces to the ledger through this computer. However, this behaviour is only because the HLF Network is embedeed in one computer. If we achieve to deploy the HLF peers in diferent computers and then install the current HLC solution in that network the expectation is that the REST API to be replicated in each machine that hosts a peer. Then, for each factory the interactions to the ledger is like to interacte to a local DB which in turns is replicated and consolidated across the HLF network.
- To achieve the previous point, there is no need to change anything in the HLC files, or add additional code. Only to deploy the HLF network to different computers.