# Node discovery

Tessera peer discovery works in a similar way to peer discovery in [Hyperledger Besu](#) and [GoQuorum](#) . Tessera nodes share their list of peer URLs, and the public keys of those peers. In this way, nodes joining the network can discover other nodes in the network, and the public keys of other participants.

Nodes in the network do not all need to have the same list of [configured peers](#) . You can think of this list as the starting point for discovering other nodes, similar to bootnodes in [Hyperledger Besu](#) or [GoQuorum](#) .

The [partyinfo API method](#) returns nodes with which Tessera has a current active connection.

[Configure peer discovery](#) in the Tessera configuration file.

## Under the hood

Tessera maintains two node lists, PartyStore and NetworkStore . NetworkStore lists nodes with which an active connection has been established. PartyStore lists URLs from the [peer entry in the Tessera configuration file](#) and URLs discovered from remote nodes. If Tessera can't communicate with a node, the peer is removed from both the PartyStore and NetworkStore lists.

If all peers are removed from the PartyStore and NetworkStore lists, the PartyStore list is repopulated from the [peer entry in the Tessera configuration file](#) .

A dropped remote peer is added to the NetworkStore list only after establishing direct communication with the peer. That is, discovering a dropped remote peer is not enough for a node to be added to the active peer list.

## Recommended configuration

We recommend that all nodes have multiple other nodes configured as peers. This is necessary for peers to find each other, especially when nodes are restarted.

Example: If node A fails to connect to node B (for example, node B hasn't started up yet), A removes B from its list. Then when B start up, it's B's responsibility to search for A and initiate the peer connection. Further, if B has no peers configured then it won't search for any peers on startup.

## Multi-tenancy

Adding a new key to a multi-tenant Tessera node (and restarting that node) results in the new key being propagated to other nodes in the network via peer discovery. [Edit this page](#) Last updatedonOct 9, 2023 bydependabot[bot] [Previous Enclave types](#) [Next Privacy groups](#)