2.3.2.3 Public Networks

return to Network Access Control

Public networks are distributed and open, allowing participation in core activities of the network from any node sponsored by anyone. Participation includes joining, leaving, reading, writing, and auditing the activities on the network. There are no authorities or discrimination of nodes.

Benefits of Public Networks

- **Open Read and Write**[1]
  Anyone can participate by submitting transactions to the blockchain, such as Ethereum or Bitcoin; transactions can be viewed on the blockchain explorer.
- **Ledger Is Distributed**[2]
  The database is not centralized like in a client-server approach, and all nodes in the blockchain participate in the transaction validation.
- **Immutable**[3]
  When something is written to the blockchain, it can not be changed, in other words it is immutable.
- **Secure Due to Mining** (protection from the Fifty-One Percent (51% Attack)[4])
  For example, with Bitcoin, obtaining a majority of network power could potentially enable massive double spending, and the ability to prevent transaction confirmations, in addition to other potentially malicious acts.

[1], [2], [3], [4]
“Public Vs Private Blockchain In A Nutshell”, Demiro Massessi, 12 December 2018, https://medium.com/coinmonks/public-vs-private-blockchain-in-a-nutshell-c9fe284fa39f