What is Quorum transaction?

Transaction

- Transactions are the proposals that update the ledger.

- Quorum transaction uses an extended model of the Ethereum Transaction Model.

- Ledger evolvement happens while applying transactions.

- Quorum Transaction is propagated to the rest of the network using the standard Ethereum P2P Protocol.

Types of transactions:

- **Private Transaction:** Transactions whose payload is only visible to the authorized network participants for that transaction.
- **Public Transaction:** Transactions whose payload is visible to all participants of the same network.
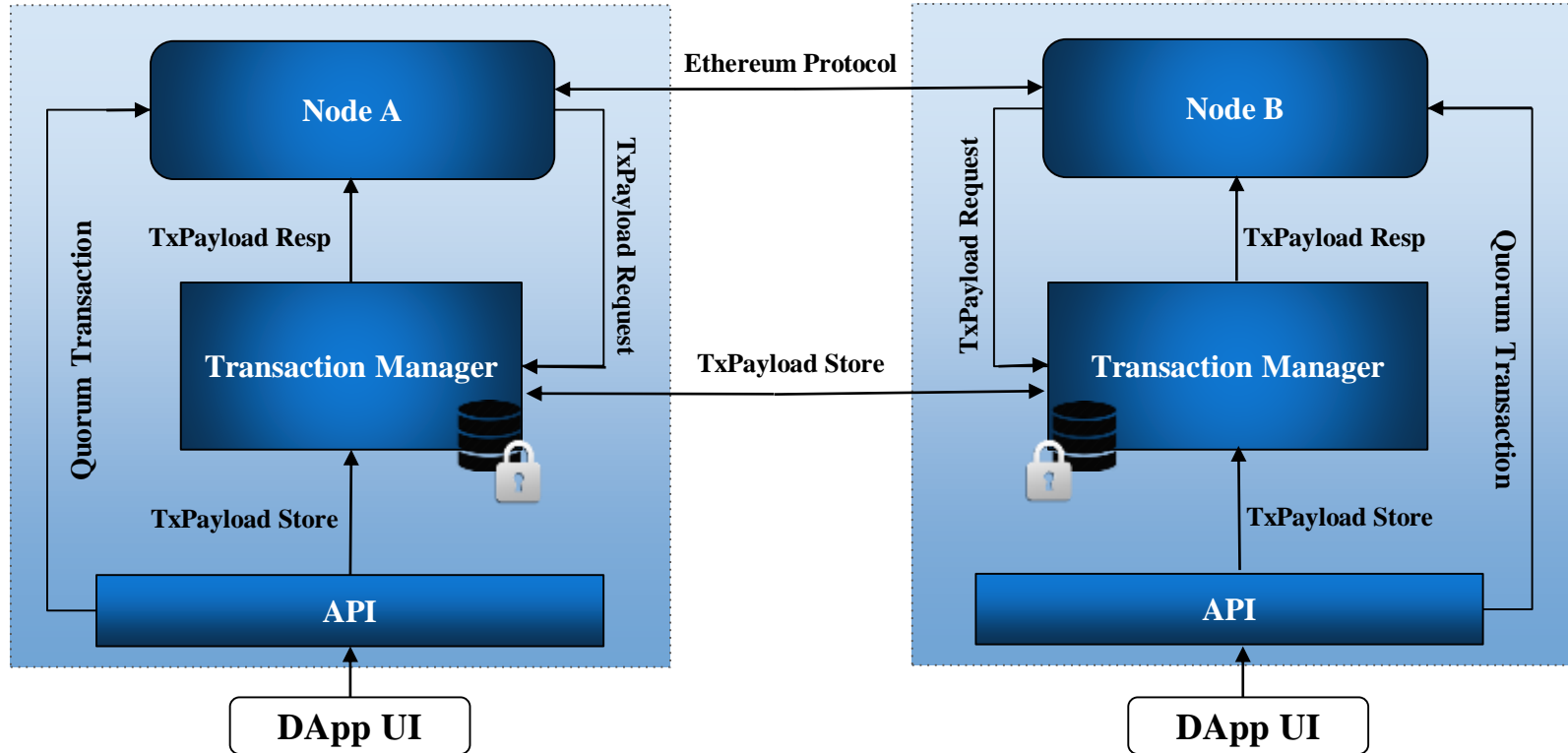
Public Transaction

- Transaction Payload is visible to all participants of the same Quorum network.

- Created as per the standard Ethereum Transactions.

- Ethereum transaction supports three types of transactions:

  - **Ether assignment from one party to another.**
  - **Creation of a smart contract.**
  - **Transacting with a smart contract.**

Private Transaction

- Private transactions are facilitated through an API revealed to the Dapp that originates the transaction.

- It has a 256-bit hash in the data field.

- Not executed as per the Ethereum standard.

- EVM does not support encryption or decryption operations.

How a Transaction is Committed?

Transaction Manager

- Transaction Manager stores and enables access to encrypted transaction data, exchanges encrypted payloads with the transaction managers of other peers.

- It is responsible for transaction privacy and managing local data stores.

- It does not have access to any sensitive private keys.

- It utilizes the enclave for cryptographic functionality.

- Stateless in nature and it can be load balanced easily.

THANK YOU!

Any questions?
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