

LM0
client
app

consumer
endorsing
peer

LM0
endorsing
peer

producer
endorsing
peer

ordering
service

public grid
endorsing
peer

PRIVATE TX PROPOSAL & ENDORSEMENT

Scheduler triggers the invocation of the clearAuction TX

client queries all private state databases and aggregates all orders into an object which is passed within the transient input of the TX proposal

TX proposal: with all order details

simulate TX: calculate MCP based on transient input data as well as a hash of each order's private details, return a read/write set, and sign the proposal if valid

return TX proposal

IF invalid

break

pack positive signed TX response to an endorsement

send endorsed transaction with hash of private data to the ordering service

order TX and pack it into a block

ORDERING & PACKAGING

VALIDATION & COMMIT

new block is delivered to all peers in the network

every peer checks if the endorsement policy was met, if TX is valid or invalid, and tags it accordingly

the TX is added to the blockchain and, if valid, the write-set is used to update the world state

market participants' peers check the output of the clearAuction TX and compare the hash of their order details with the value in their private state database