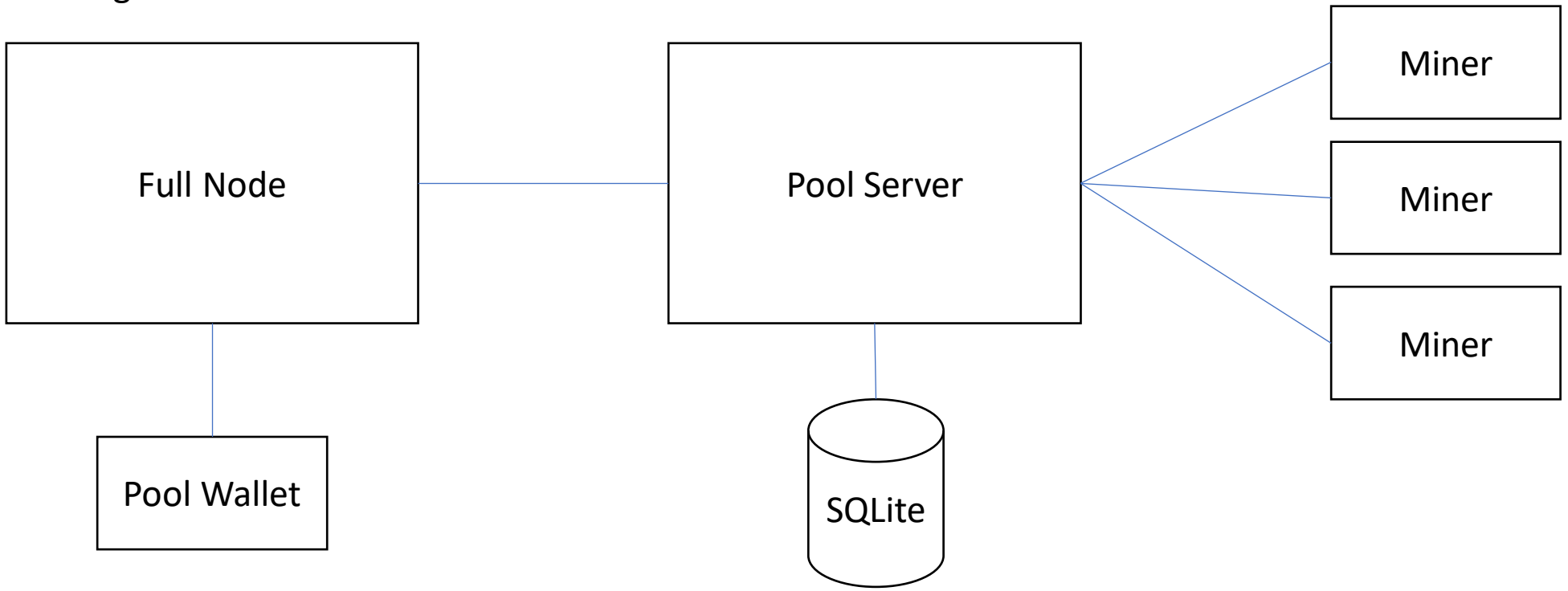
Pool software design



Mining workflow

Miners connect to pool and request block to mine
Pool requests block from full node
Pool provides block but with “fake” difficulty (much lower than mainnet)
Miner mines block and submits to pool
Pool credits miner with share
If difficuly meets mainnet, pool submits to the fullnode

Payout workflow

Periodically job runs to check balance of full node wallet
If wallet balance is > 0.00001:
Pool calculates and pays fee to profit wallet
Pool calculates % each miner contributed by number of shares
Pool sends each miner their % allocation if it is over the min threshold
Pool stores anything under min threshold in a pending payment table
Pending payment table is evaluated after each run – if > min, payment is sent

Quick setup:

Install full node software and sync blockchain

Opening port 6432 inbound and setting maxpeers to ~30 will increase sync speed

*Set maxpeers lower (<10) after initial sync to keep the blockchain decentralized

Make a directory for your mining pool software and copy the pool install files

https://github.com/dynamofoundation/mainnet-binaries/tree/main/windows-x64/mining_pool

Using either the CLI or QT client, make a wallet and create a receive address

> this where the shared mining pool coins will be mined to

* remember you need to load the wallet after each restart of the full node or set a default wallet in your dynamo.conf file

Settings.txt explanation

"PoolListenerEndpoint" – this is where the pool will listen on – miners will point their rigs to this

"FullNodeRPC" – this is the URL to your full node which has the shared mining wallet

"FullNodeUser" : "user“ – RPC username (set in dynamo.conf)

"FullNodePass" : "123456“- RPC password (set in dynamo.conf)

"DatabaseLocation" – full path and name of the sqlite database

"FeePercent" – the fee charged by the pool

"SecondsBetweenPayouts" – how often the payout logic runs

"MinPayout" – minimum amount that will be paid out (less will be stored for next payout round)

"MiningWallet" – address of the shared mining wallet (should be hosted by the full node above)

"ProfitWallet" – address where to send the fee amounts to (**do not use the same as mining wallet**)

Settings.txt must be in the same directory as the executable and must be a valid json file.

SQLite database tables

share – miner shares and share status (pending or paid)

reward – each block which was submitted to the full node (e.g. difficulty <= mainnet)

payout – all payments sent to profit address and miners

pending_payout – amounts which were < min threshold being held for later payment

settings – system settings, only holds last payout run date currently