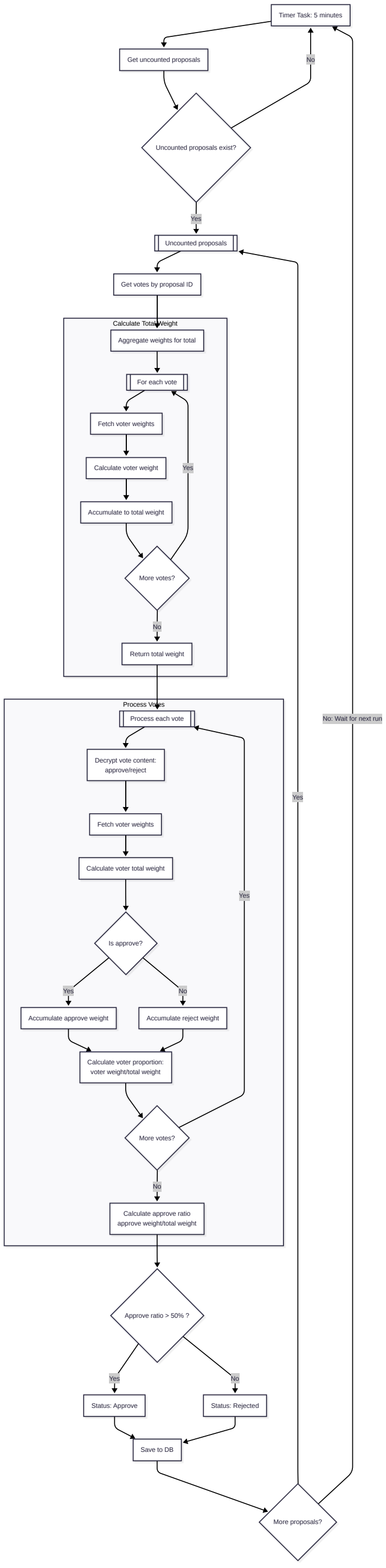
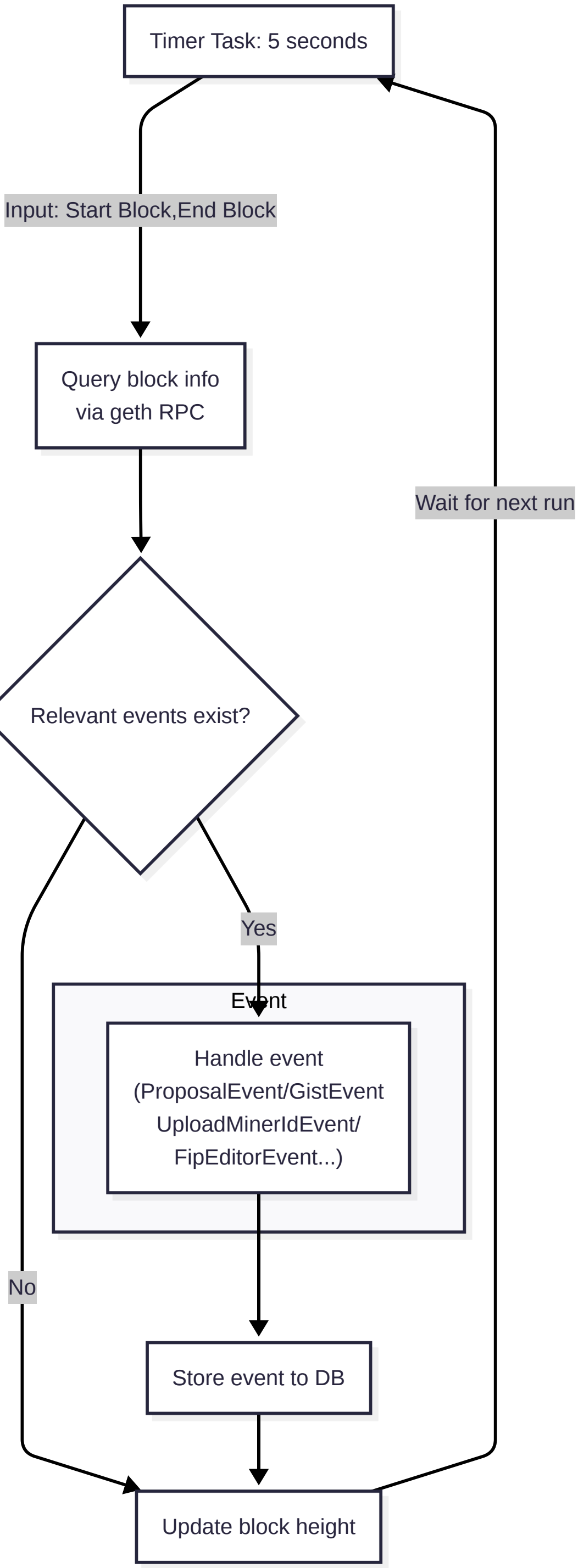
# Flow Chart

## Backend

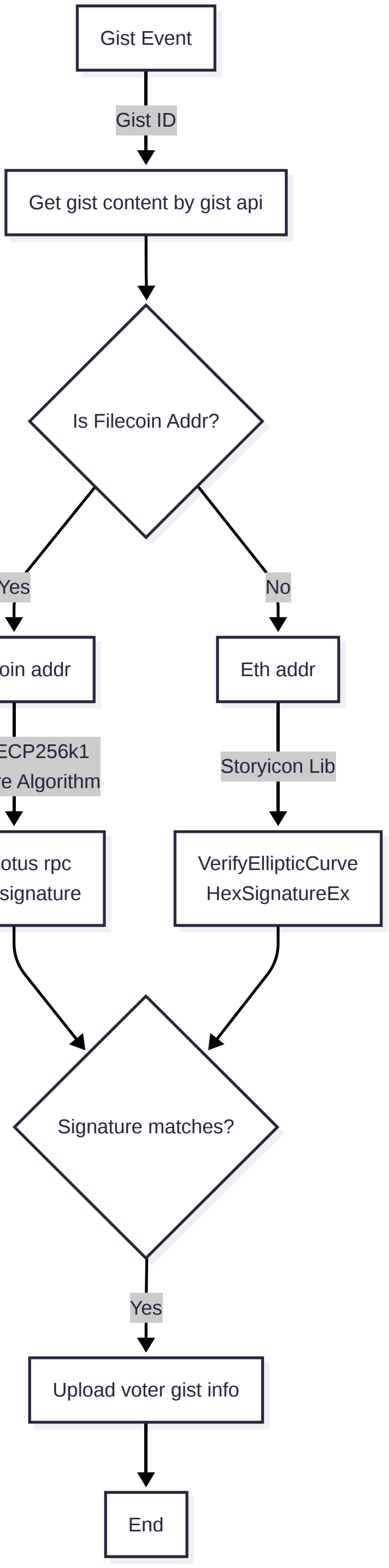
### Voting counting process


Timer Task: 5 minutes
Get uncounted proposals
No
Uncounted proposals exist?
Yes
Uncounted proposals
Get votes by proposal ID
Calculate Total Weight
Aggregate weights for total
For each vote
Fetch voter weights
Calculate voter weight
Yes
Accumulate to total weight
More votes?
No
Return total weight
Process Votes
Process each vote
Decrypt vote content: approve/reject
Fetch voter weights
Calculate voter total weight
Is approve?
Yes
No
Accumulate approve weight
Accumulate reject weight
Calculate voter proportion: voter weight/total weight
More votes?
No
Calculate approve ratio approve weight/total weight
Yes
Approve ratio > 50% ?
Yes
No
Status: Approve
Status: Rejected
Save to DB
More proposals?
Yes
No: Wait for next run

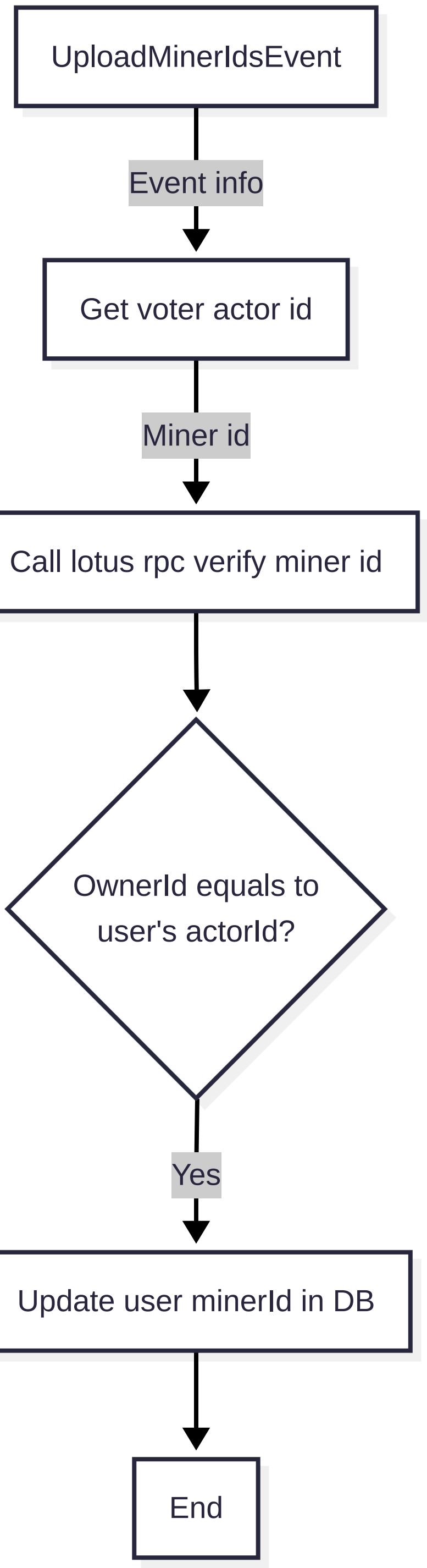
# Sync event


Timer Task: 5 seconds
Input: Start Block,End Block
Query block info
via geth RPC
Relevant events exist?
Yes
Event
Handle event
(ProposalEvent/GistEvent
UploadMinerIdEvent/
FipEditorEvent...)
No
Store event to DB
Update block height
Wait for next run

# GistEvent

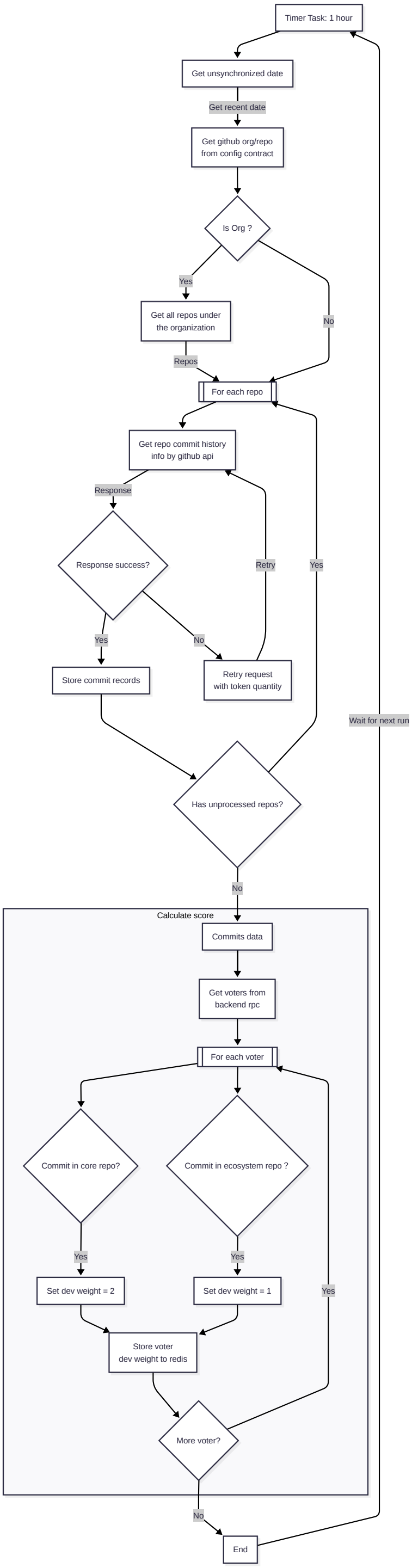

Gist Event
Gist ID
Get gist content by gist api
Is Filecoin Addr?
Yes
No
Filecoin addr
Eth addr
BLS/SECP256k1
Signature Algorithm
Storyicon Lib
Call lotus rpc
verify signature
VerifyEllipticCurve
HexSignatureEx
Signature matches?
Yes
Upload voter gist info
End

## UploadMinerIdEvent


UploadMinerIdsEvent
Event info
Get voter actor id
Miner id
Call lotus rpc verify miner id
OwnerId equals to user's actorId?
Yes
Update user minerId in DB
End

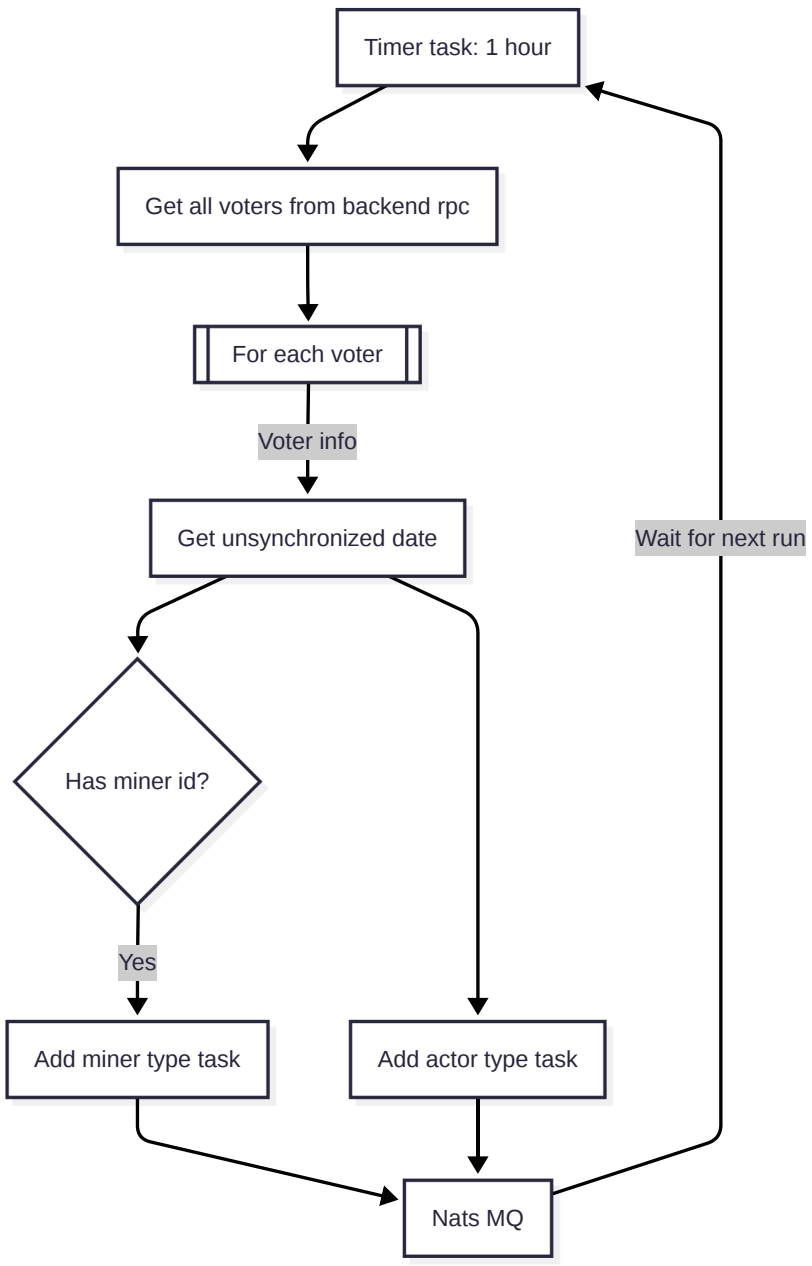
# Snapshot

## DeveloperPower

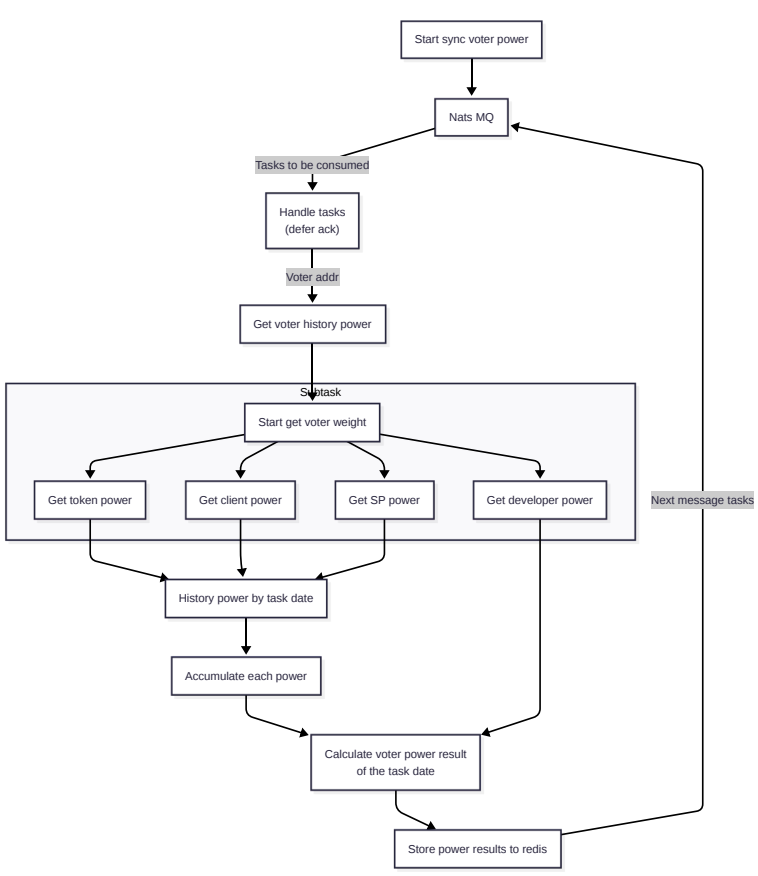

Timer Task: 1 hour
Get unsynchronized date
Get recent date
Get github org/repo from config contract
Is Org ?
Yes
Get all repos under the organization
Repos
No
For each repo
Get repo commit history info by github api
Response
Response success?
Retry
Yes
Yes
No
Store commit records
Retry request with token quantity
Wait for next run
Has unprocessed repos?
No
Calculate score
Commits data
Get voters from backend rpc
For each voter
Commit in core repo?
Commit in ecosystem repo ?
Yes
Yes
Set dev weight = 2
Set dev weight = 1
Yes
Store voter dev weight to redis
More voter?
No
End

# Sync Power

## Add task to message queue

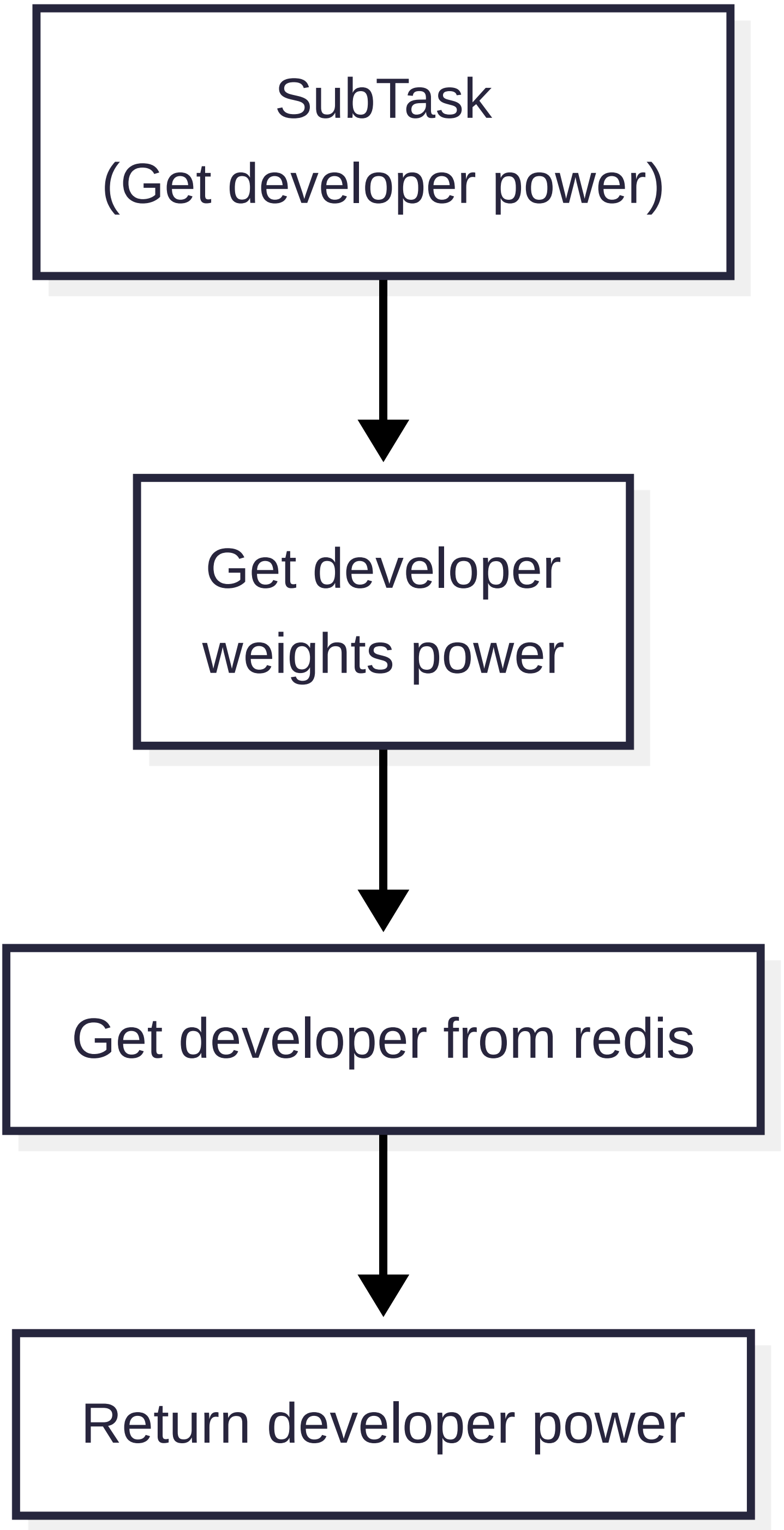



## Sync voter’s power logic

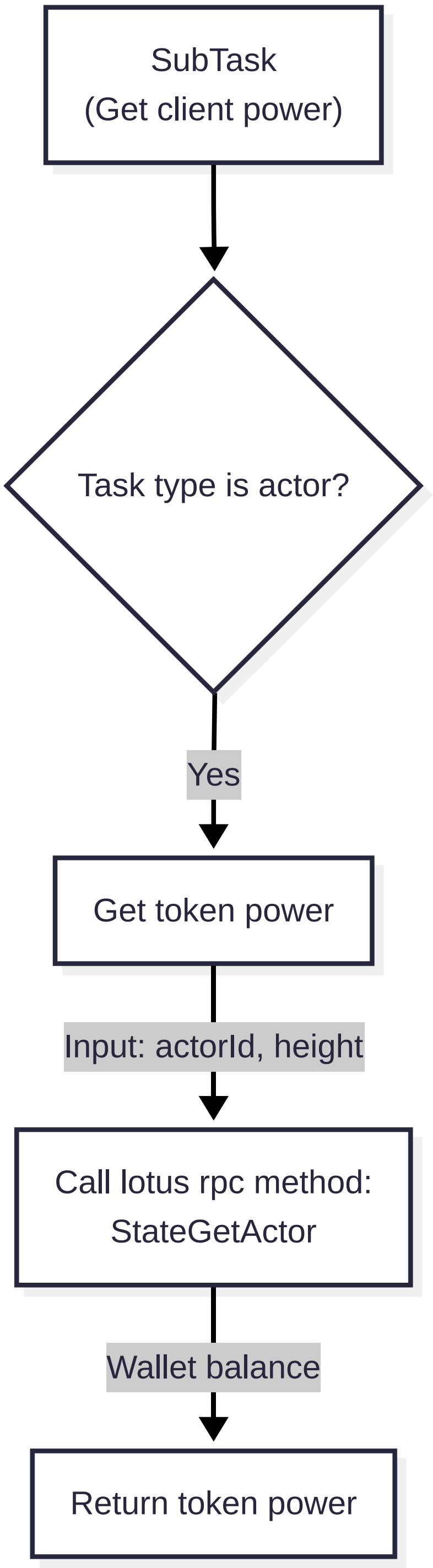


## SubTask

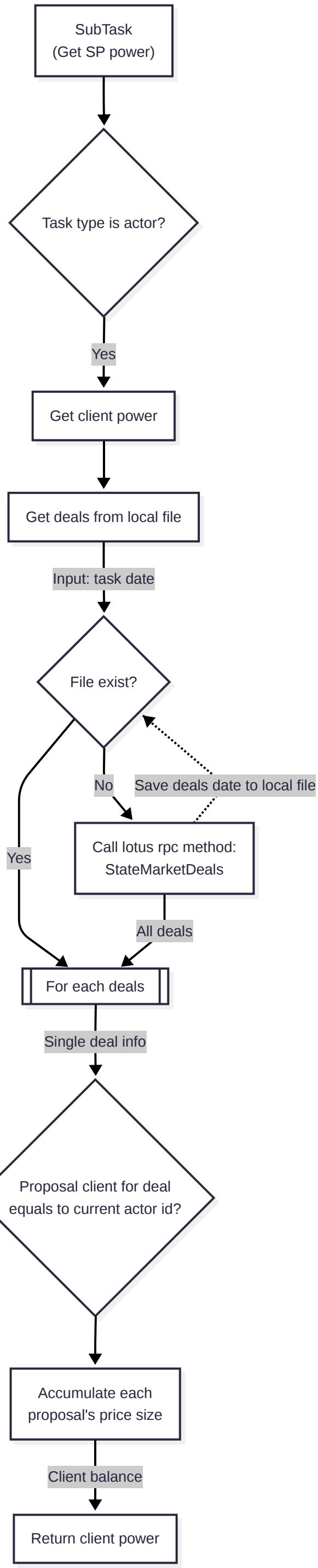
- **Developer power**


SubTask
(Get developer power)
Get developer weights power
Get developer from redis
Return developer power

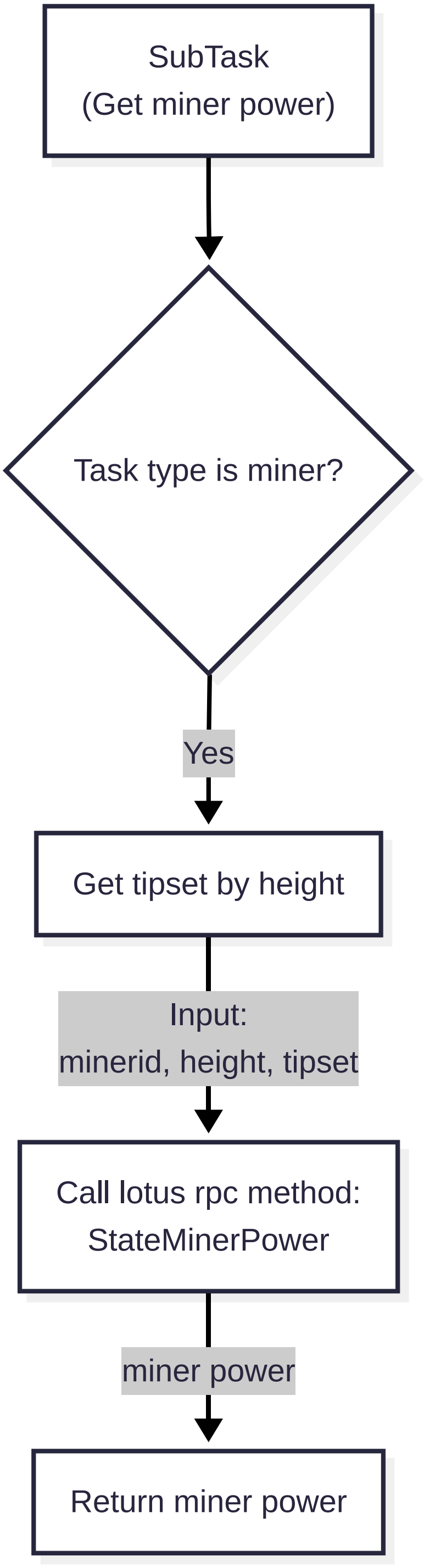
- **Client power**


SubTask
(Get client power)
Task type is actor?
Yes
Get token power
Input: actorId, height
Call lotus rpc method:
StateGetActor
Wallet balance
Return token power

- **SP power**


SubTask
(Get SP power)
Task type is actor?
Yes
Get client power
Get deals from local file
Input: task date
File exist?
No
Save deals date to local file
Call lotus rpc method:
StateMarketDeals
Yes
All deals
For each deals
Single deal info
Proposal client for deal
equals to current actor id?
Accumulate each
proposal's price size
Client balance
Return client power

- **Miner power**


SubTask
(Get miner power)
Task type is miner?
Yes
Get tipset by height
Input:
minerid, height, tipset
Call lotus rpc method:
StateMinerPower
miner power
Return miner power