

## Store New Chunk

First Client

Peer Vault

Chunk Info Holders x16

Client Account Holders x16

Vault Account Holders x16

Watch List comprises:

- \* list of PMIDs of current 4 paying clients
- \* further list of reserve watchers
- \* count of total watchers
- \* checksum of current watchers
- \* chunk size
- \* minimum rank required of chunk holders.

Check we have enough space in our account

Kademlia FIND\_VALUE

Nack

For each Chunk Info Holder...

ADD\_TO\_WATCH\_LIST\_REQUEST

Validate request.

AMEND\_ACCOUNT\_REQUEST (Space Taken Inc)

Prepare to create new Watch List.

Ack (Store x copies) / Nack

### Loop

[Loop until x copies uploaded]

Wait till online.

Select peer vault - use rank, stated space available and RTT to decide.

STORE\_PREP\_REQUEST

Ack/Nack in Signed Contract

Validate signed response & signed contract. If Nack or failed validation, send signed Nack with contract to Peer Vault Account Holders & restart store loop.

STORE\_CHUNK\_REQUEST

Ack/Nack

ADD\_TO\_REFERENCE\_LIST\_REQUEST

Ack/Nack

Finalise creation of new Watch List.

Ack/Nack

AMEND\_ACCOUNT\_REQUEST (Space Given Inc)

Ack/Nack

As this is the first time the chunk has been stored, client must pay 4x for it. So this message requests 4x original space be deducted from client's account.

Check 16 requests are from valid Chunk Info Holders by doing a Kademlia FIND\_NODES and checking sender is in list of near nodes to value.