WATCH ALONG V1.0.0

Inspiration - Lag free, ~0 ms Latency, on the go File Sync

Mainly two types of users: -

- a. On different IP's \rightarrow Each node gets their own data.
- b. On the same IP \rightarrow 1 node gets the data, and it is shared among other nearby peers (On the same IP).

Factors affecting the transmission (based on where the input is located): -

File on: -

- 1. Distant Node (Not on same IP) transferred to Distant Node
- 2. Distant Node transferred to Nearby Node (On the same IP)
- 3. Nearby Node transferred to Distant Node
- 4. Nearby Node transferred to Nearby Node

Methods used (Transfer Method)

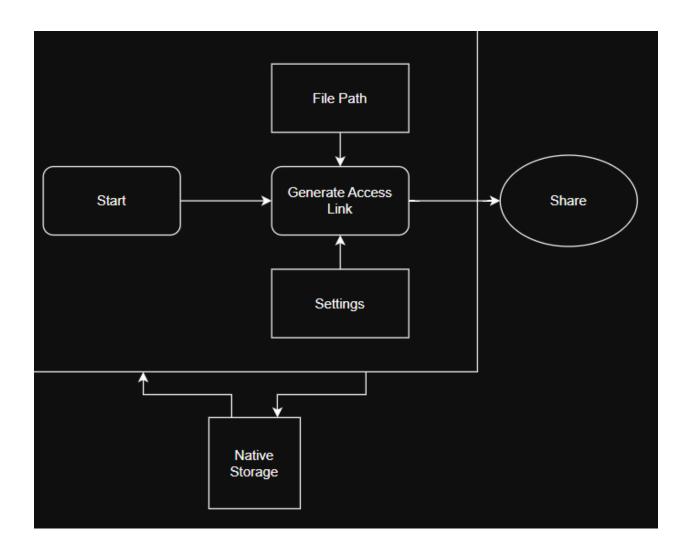
```
Case 1 - DN \rightarrow Private IP (VPN) \rightarrow DN
Case 2 - DN \rightarrow Private IP (VPN) \rightarrow NN \rightarrow HTTP Server \rightarrow NN
Case 3 - NN \leftarrow HTTP Server \leftarrow NN \rightarrow Private IP (VPN) \rightarrow DN
Case 4 - NN \rightarrow HTTP Server \rightarrow NN
```

^{*}To be implemented in V1.0.0 **To be implemented in V1.0.1

Software Details: -

- a. Host Node Broadcaster (Access Provider)
- b. Peer Node Receiver (Accesser)
- c. Host Node Planner

Broadcaster Details: -



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Receiver Details: -

Trivial Case - Access the Access Link

Working: -

- Host Shares an "Access Link" after setup*
- The access link carries certain information regarding the IP of host (The link is encrypted for security purpose)
- Client access through that link
- As soon a client joins the host is requested to add the IP of new client node
- Recursively distribute the list of available IPs among the peer group (Distribution Algorithm)**
- For any operation on the client side, a request to perform a similar operation on other nodes would be invoked.

Setup on the Host Node: -

Mount the folder containing the file using subprocesses.

Setup on the Client Node: -

Read the file from the shared link.