A Decentralised File manager

Backend:

- Is built on the hypercore-protocol(mainly hyperdrive).
- It uses hyperbee as a database to store data about the app like saved hyperdrive keys, hyperdrive corestore namespaces, core keys etc. Also, the hyperbee cannot be accessed through a network but only locally(for security reasons).
- It has a logger hypercore where the app's logs are stored
- It also has some endpoints served through expressjs
- All the magic happens in the backend.

Frontend:

It is a svelte-kit site using connectome to communicate with the backend.

It has three storage types:

1. File system: It is not connected to any network (no one can connect to your files through the app)
2. Public hyperdrives: Anyone with the drive public keys can connect to it;
3. Private hyperdrives: For now it is not connected to a network (meaning no one can connect to it even with your drive public key)

After running the app for the first time

- it will create a hyperbee which will be your database
- a hypercore logger which keeps your logs
- a public drive and private drive
- also, it will generate a settings.json file

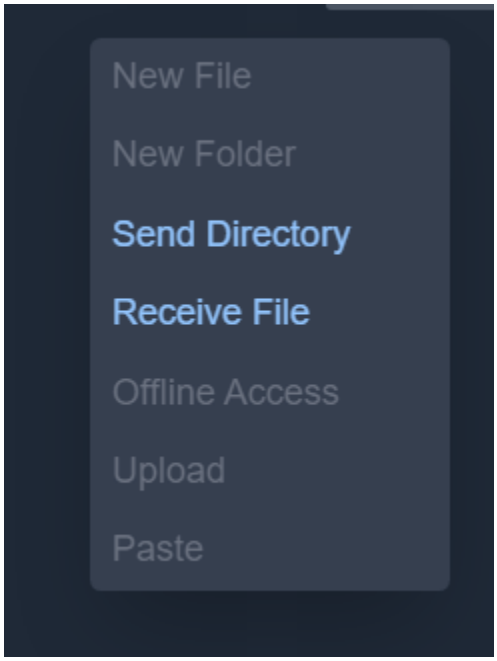
Editing setting.json file:

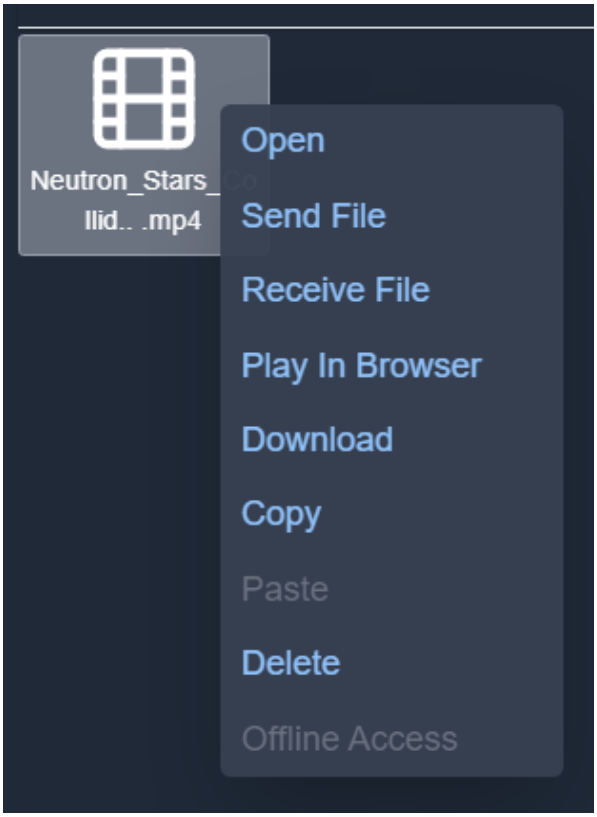
- You can change the file system mount point, it's set to root `/`
- Set `log` to `true` if you want to save logs to the logger hypercore
- Set `debug` to `false` if you do not want to see logs in the console
- Do not edit bee-key
- You can edit storage to the path you want app data to be saved, defaults to './.storage'
- Do not edit privateStorage
    - It is a relative path to the app storage
    - It changes after every app restart
- You can change publicStorage it is a relative path to app storage, defaults to 'public'

Navigating:

- Double click:
  Attempts to open a file or directory

- Right-click(tab and hold in touch screen):
  opens the custom menu which has all important options like:
  - Delete, Copy, Paste
  - Send and receive file or directory
  - Download etc.

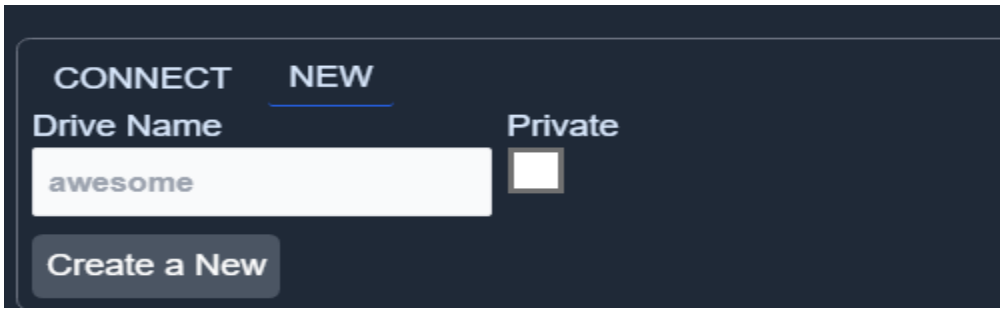




Uses:

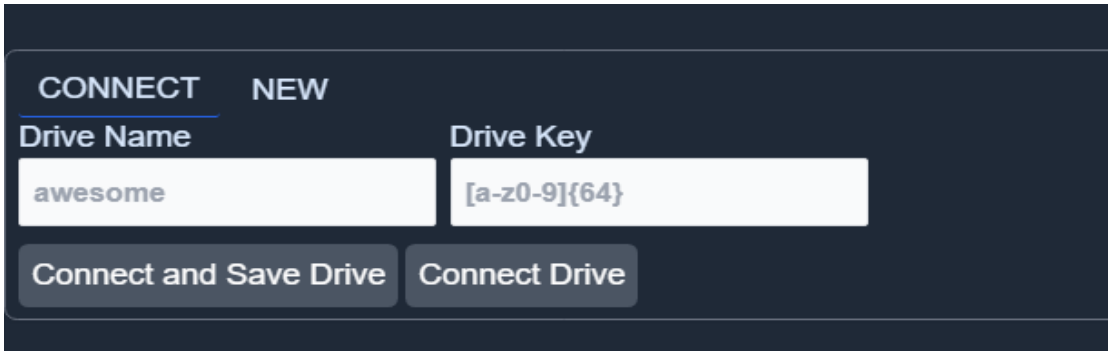
Create a hyperdrive:

- It can be public or private.



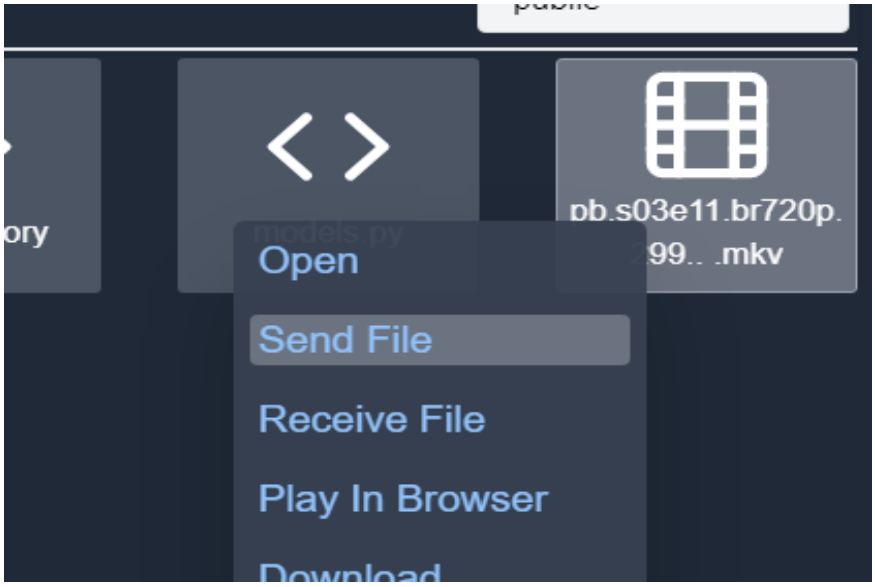
Connect to other hyperdrives:

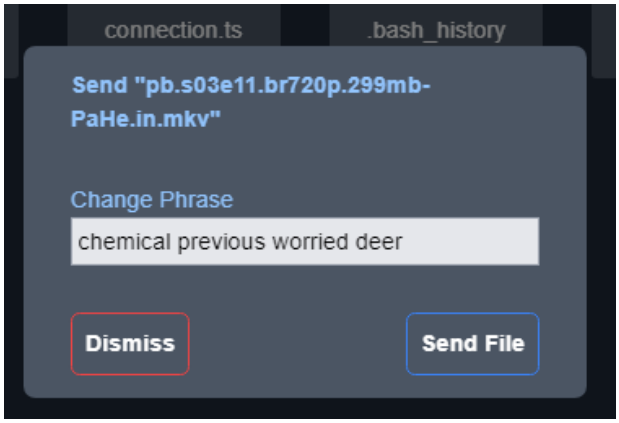
- [demo video]
- Connect to any hyperdrive networked with the new hyperswarm DHT
- Once connected you will have read-only(if you don't own it) access to all drive's files.
- The hyperdrives are in a sparse mode so meta-data or files are downloaded as requested
- But there's an option to make a file or directory offline

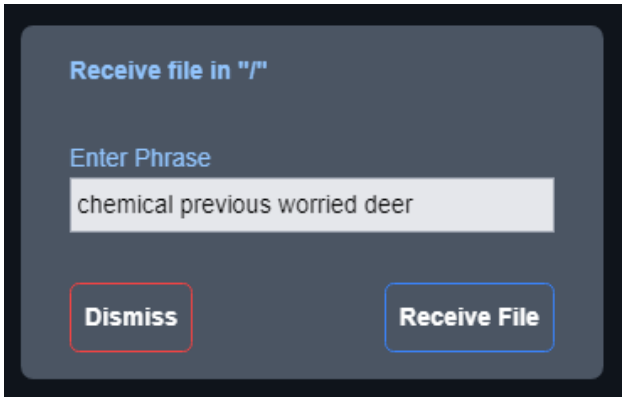


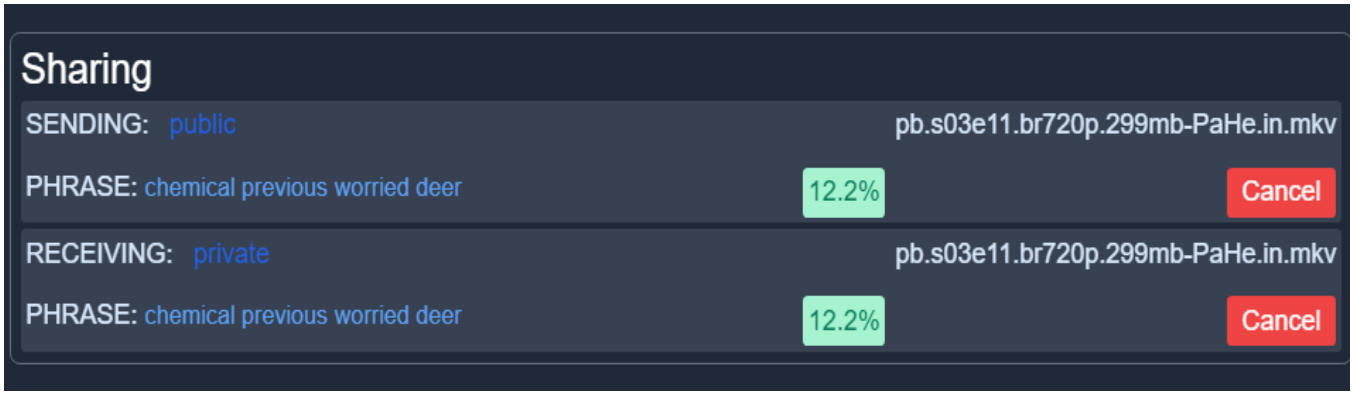
Share files:

- [Demo Video]
- Share any file or directory(as a zip file) from your file system or any drive that you have read access to anyone.
- But you will need to provide a secret phrase and the one receiving it can only receive it with that secret phrase(similar to hyperbeam).
- When sharing the sender creates a hyperswarm/DHT server listening on a keypair generated from the secret phrase; the receiver connects to that. Once the file is received the DHT connection is closed.


pb.s03e11.br720p.
.mkv
Open
Send File
Receive File
Play In Browser


connection.ts
.bash_history
Send "pb.s03e11.br720p.299mb-PaHe.in.mkv"
Change Phrase
chemical previous worried deer
Dismiss
Send File


Receive file in "/"
Enter Phrase
chemical previous worried deer
Dismiss
Receive File


Sharing
SENDING: public
pb.s03e11.br720p.299mb-PaHe.in.mkv
PHRASE: chemical previous worried deer
12.2%
Cancel
RECEIVING: private
pb.s03e11.br720p.299mb-PaHe.in.mkv
PHRASE: chemical previous worried deer
12.2%
Cancel

View text files:

- You can view almost any text file. code files are syntax highlighted.
  Demo video

- View code and render markdown or HTML files (source files are resolved). You can navigate a hyperdrive site and through it.
  Demo video

View pdf files:

- View any pdf file you have read access to from any drive or your file system

View photos:

- View any photo you have read access to from any drive or your file system

Stream Video:

- Stream video files in your file system or drives.
- Even if the video is not available offline yet.
- Also, you can seek through the video.
- It will only download the part of the video you are currently seeking.
- *If you have mpv installed it will by default open with mpv*
- For now, it only streams the exact video resolution. So it doesn't check if the network is strong or weak to switch streams(or resolutions).

Copy,paste,delete,download:

- Copy any file or directory(as a zip file) from your file system or from any drive that you have read access to.
- Paste any copied file or directory(as a zip file) to your file system or to any drive that you have to write access to.
- Delete any file or directory from your file system or from any drive that you have to write access to.
- Download any file or directory(as a zip file) from your file system or from any drive that you have read access to.

Current Todo:

Preview video or text files when receiving a file through direct file sharing

Private corestore:

- It is going to have network access.
- Every file in its hyperdrives will be encrypted
- Every value in the Hyperbee database is to be encrypted
- Every block in cores like the logger is also to be encrypted
- This is so that one can access one's private drives or cores or bees in one's other devices.
- It should be pretty simple like when connecting to its public key there will be an option to include a decryption key in case the drive is encrypted

Others:

- extract zip files
- upload files
- create new file or folder
- sort files/folders based on:
    - type
    - 0>9>a>z
    - z>a>9>0
- filter/search files/folders based on: regex, name, ext