



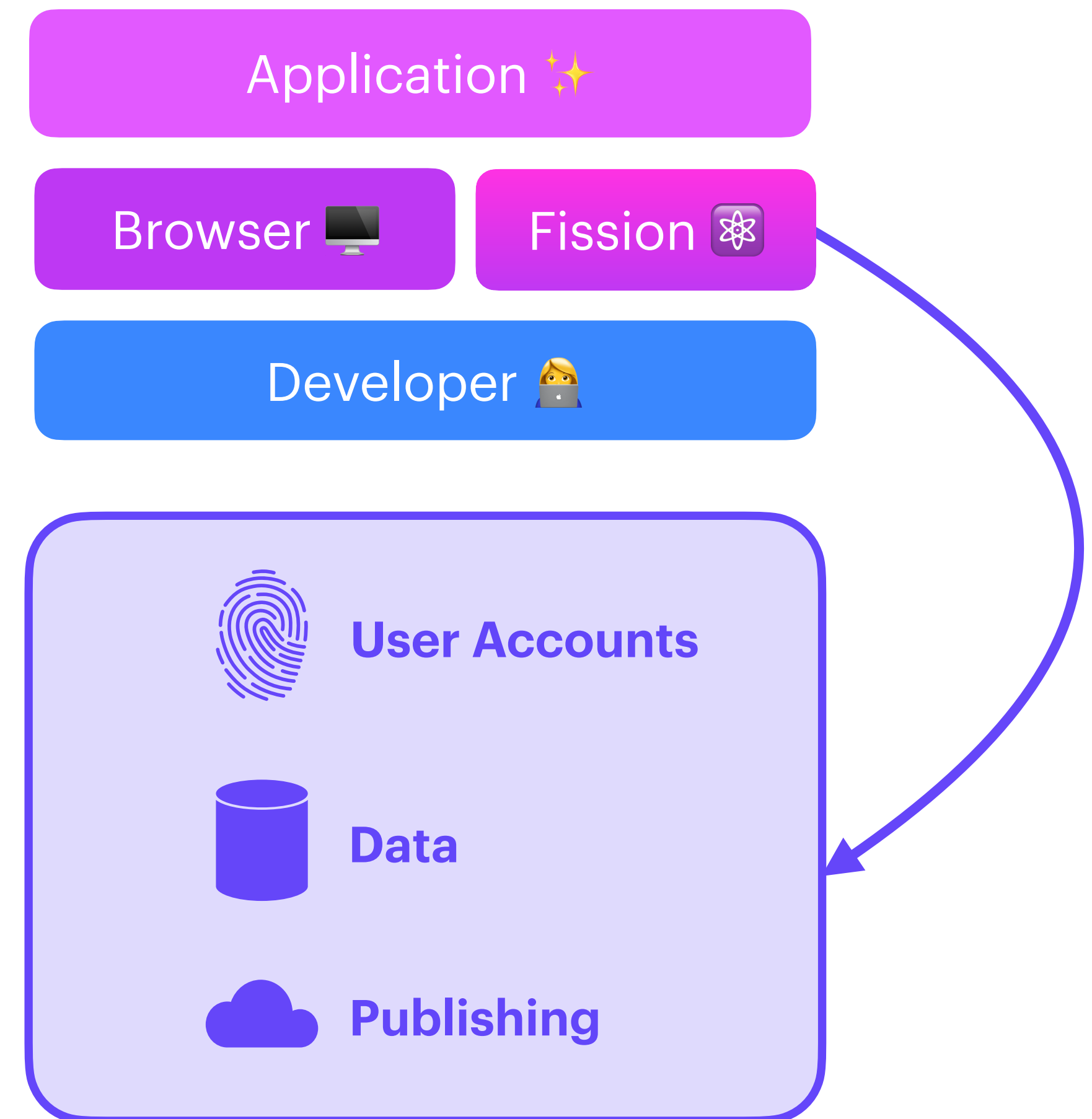
APRIL 2021 DEMO DAY

April 15th, 2021



WHAT IS FISSION?

- Fission is building a client side edge stack with identity & auth, user owned data, and a distributed file system on top of IPFS
 - Standardize and integrate “hard” things like privacy, security, sync & more
 - Individuals and teams can focus on full featured apps that act like desktop or mobile, including offline
- We’ve built our App Publishing Platform to showcase how things can be built in an integrated way
 - Sign up on the web, publish directly
 - Use the CLI, build locally, or Github Action to Publish
 - Subdomain, SSL, custom domains
- And: run our platform as a Constellation — developer platform in a box





EDGE IDENTITY & DATA

- Edge Identity:
 - Password-less Login
 - Decentralized Auth
 - Personal subdomain
 - Private Keys in the browser
- Edge Data:
 - End-to-End Encrypted
 - Versioning
 - Permanent "Archive" links with IPFS
 - Sync between devices



TECH BUILDING BLOCKS

- **IPFS:** a global “commons network” that anyone can participate in to share data and apps. Content addressing is awesome!
- **Browser APIs:** WebCrypto, PWAs and other browser features integrated so they are easy to integrate and include in your app
- **Decentralized Identifiers (DIDs):** portable accounts that can be user owned, plus Verifiable Credentials for data linked to accounts
- **UCAN:** a decentralized authentication specification
- **WNFS:** our Web Native File System, public + private/encrypted
- **WNDB:** adding full database capabilities to WNFS



TALK TO US!

- Tell us what you're trying to build
- Happy to look at code, work together on better building blocks
- Open source Elm, Svelte, and React code and app samples
- Plugins into other systems
- Book time with James: <https://calendly.com/walkah>



USING FISSION DRIVE TO SERVE FILES

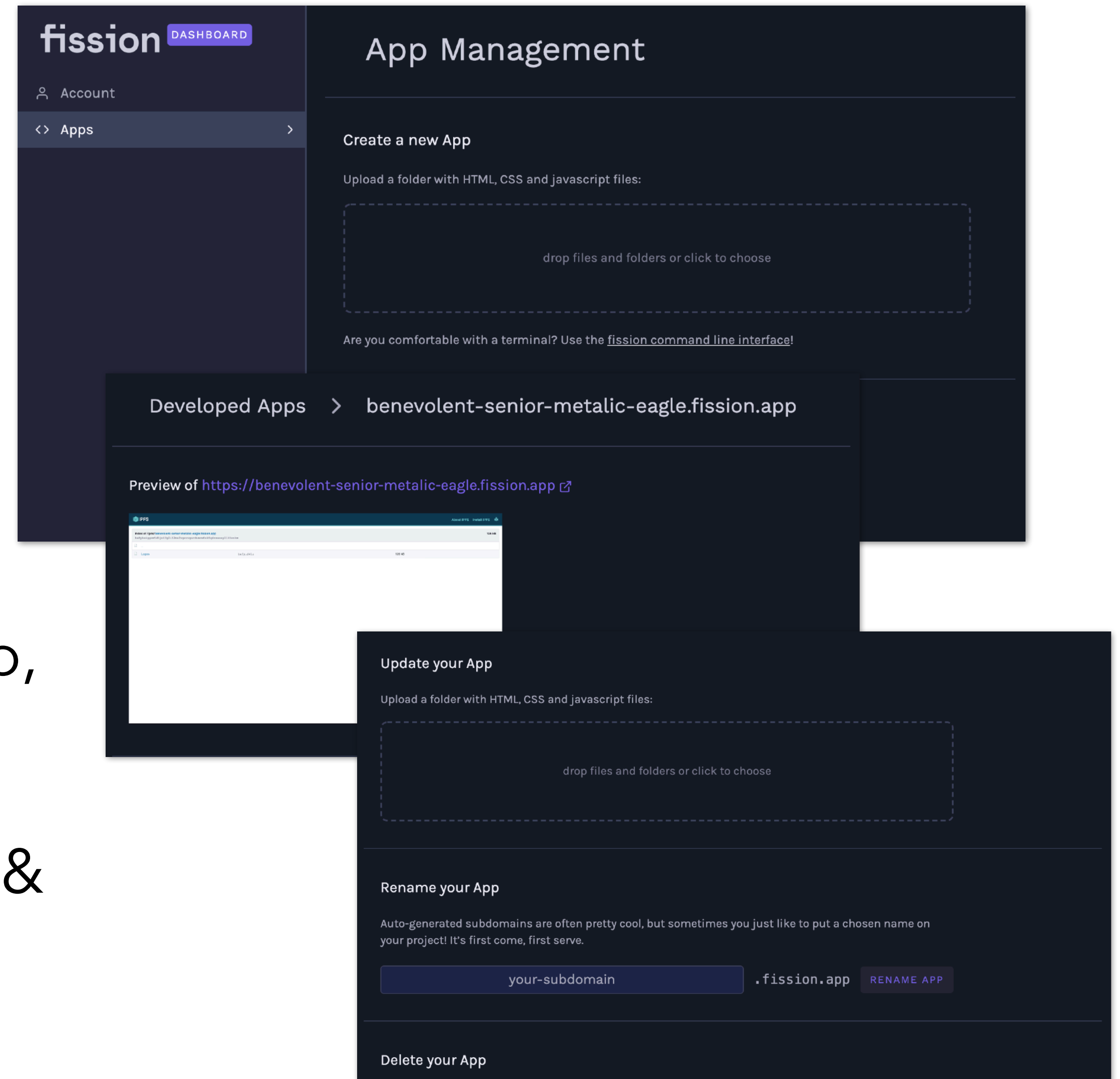
- Presented by: Brian
- Use Fission Drive to easily upload and manage files
- Pull public files out of Drive using IPFS directory listing and integrate them in a web app
- Demo: <https://glass-bear.fission.app/>





DASHBOARD & APP MANAGEMENT

- Presented by: Philipp
- Our platform UI is just another app
- We expose all of our APIs on the web, including app creation
- Check the guide for new Dashboard & Accounts section <https://guide.fission.codes> with beta link





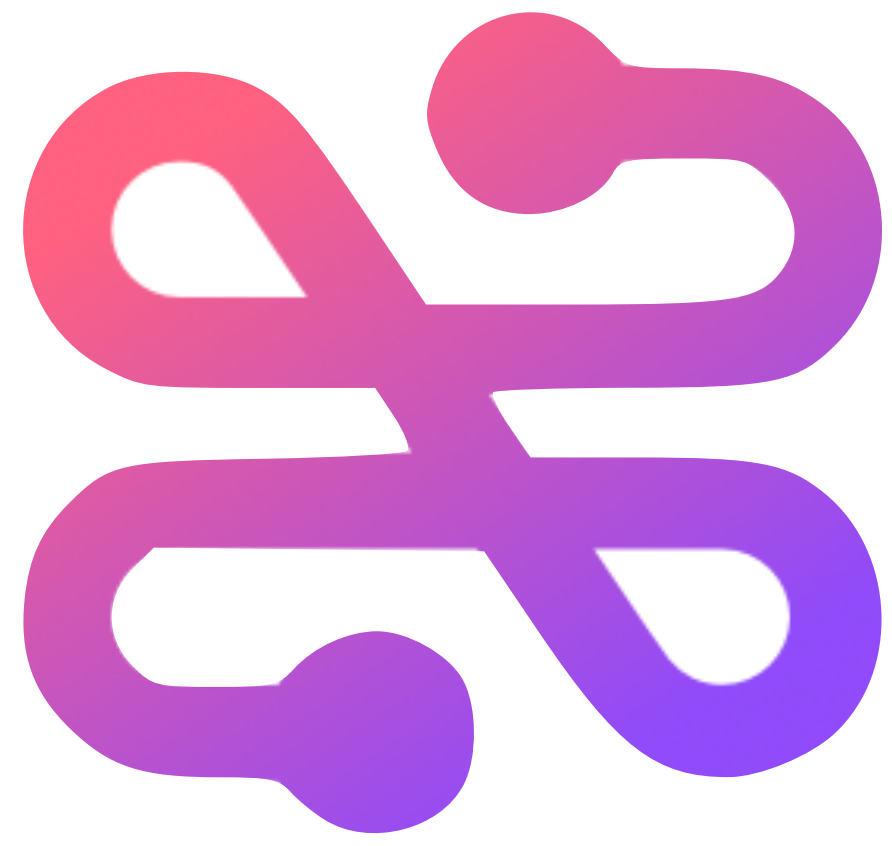
MICROSAAS: APPS THAT BUILD APPS

- Any app built on Fission can create new apps on behalf of the user
- Use this to build custom site and app builders of various kinds
- Every app gets a free subdomain `APPNAME.fission.app`, and you can sell custom domains to your users as well
- Build a MicroSaaS business on the Fission publishing platform



EVENTS

- April 22nd: My life in a Python Package: a Human Programming Interface, by karlicoss
- April 29th: Chiffre: Privacy First E2EE Analytics
- Booking for May!
- Recent <https://blog.fission.codes>
 - Overview and Demo of LogSeq w/Tienson Qin
 - An interview with Co-Founder Brooklyn Zelenka



fission

THANK YOU!

Github: [fission-suite](https://github.com/fission-suite)

Developer Guide & Docs:
guide.fission.codes

Technical Whitepaper:
whitepaper.fission.codes 🚧 🧑‍🔧 ✍️

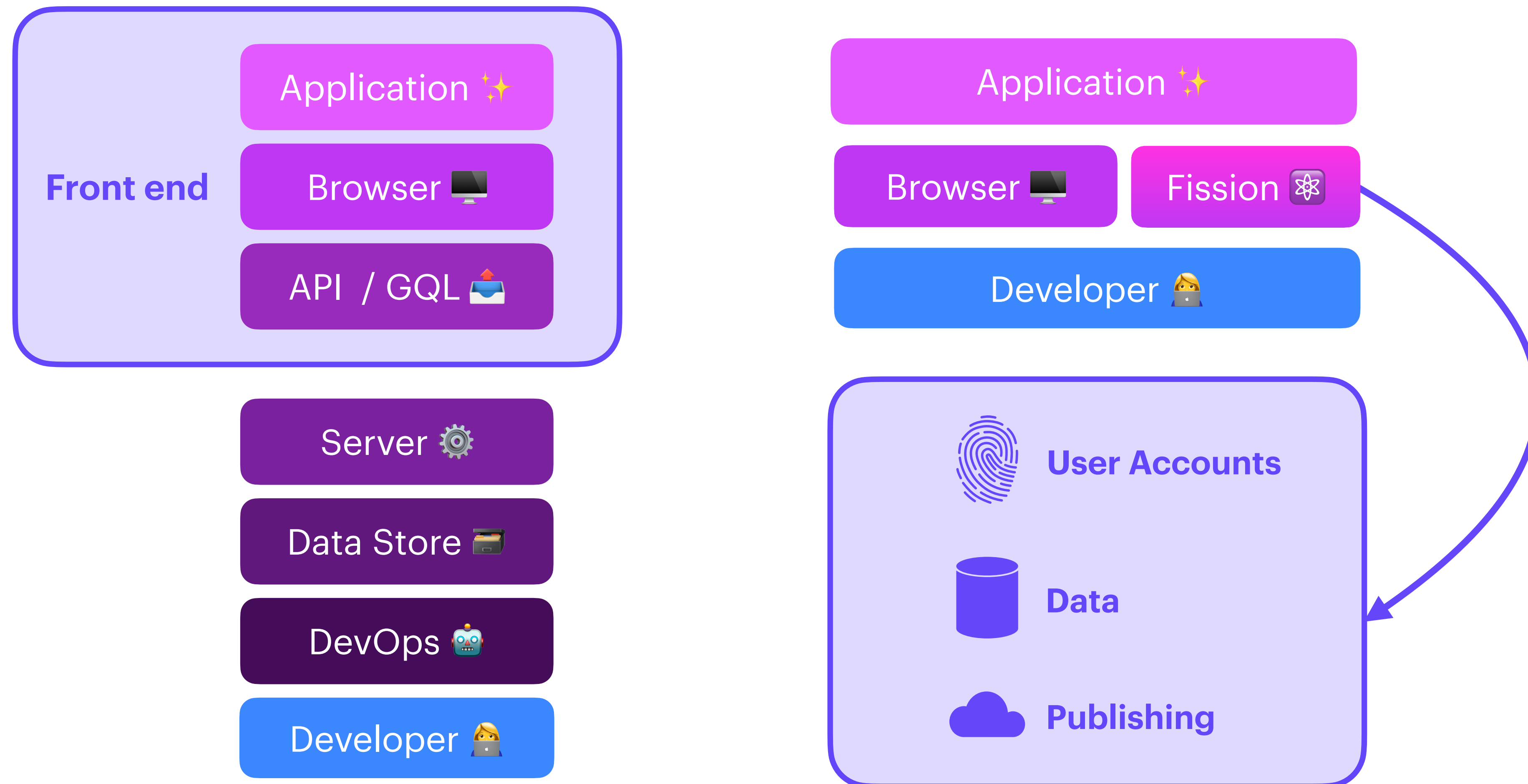
Home page: fission.codes

Discourse forum: talk.fission.codes

Discord chat: fission.codes/discord

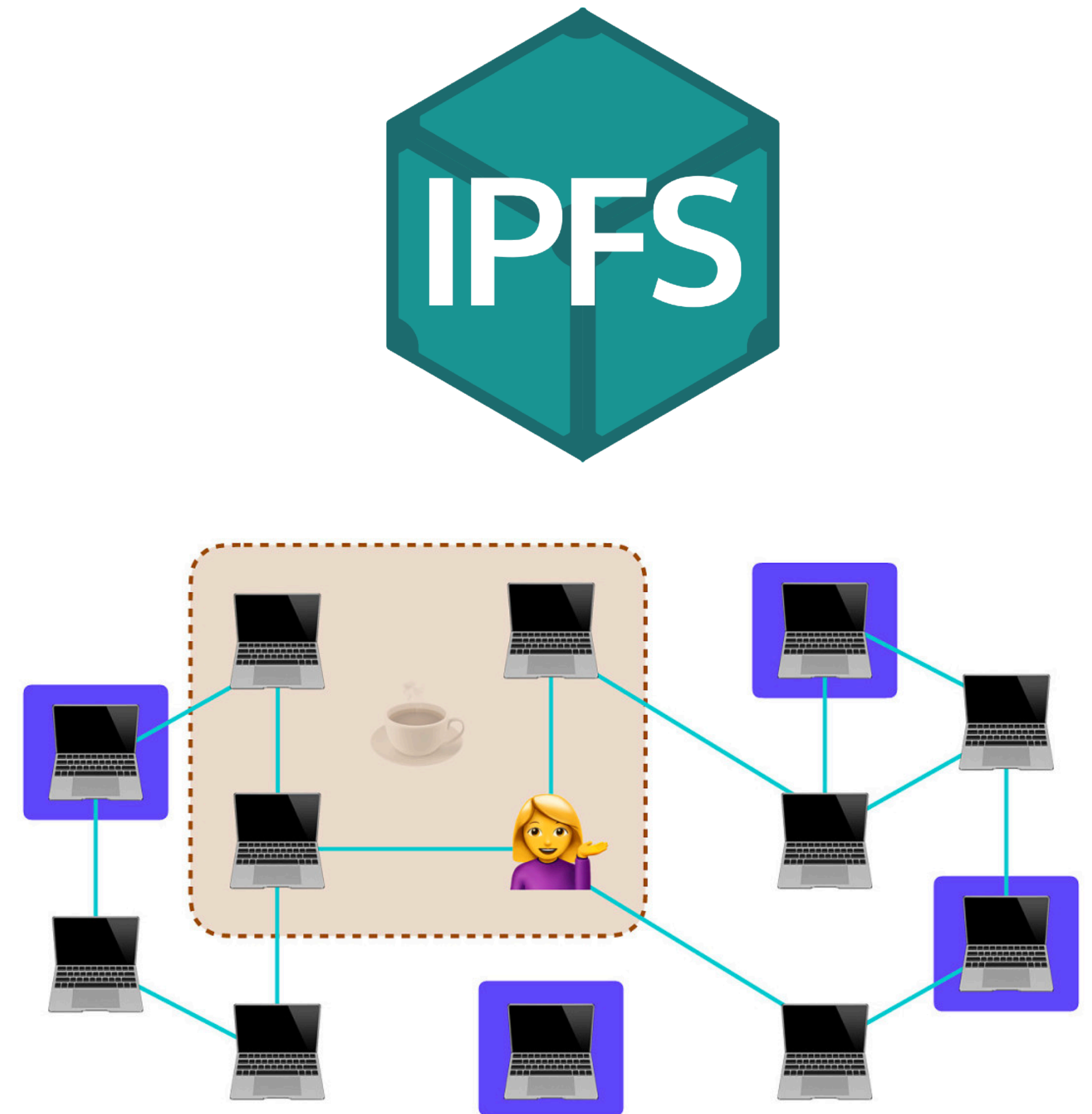
Twitter: [@fissioncodes](https://twitter.com/fissioncodes)

Fission turns front end into *full edge apps*



WHAT IS IPFS?

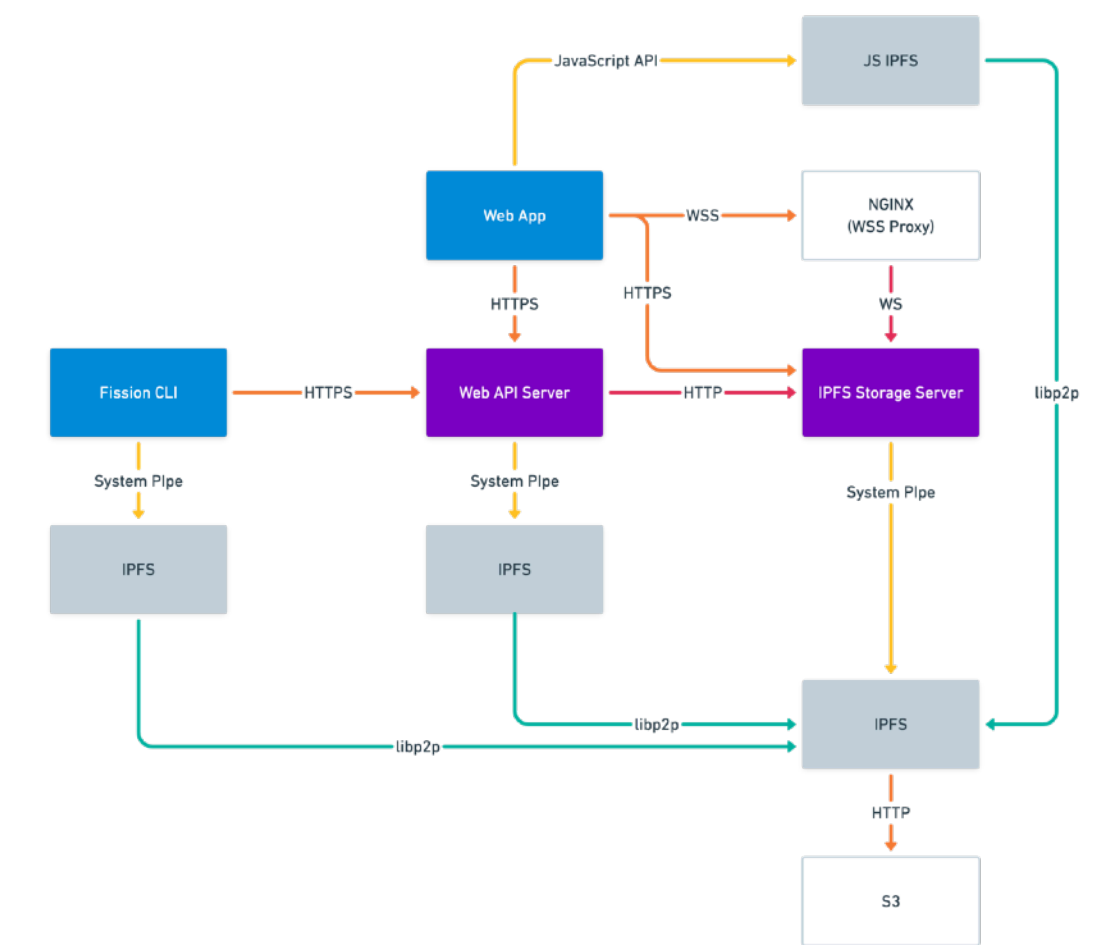
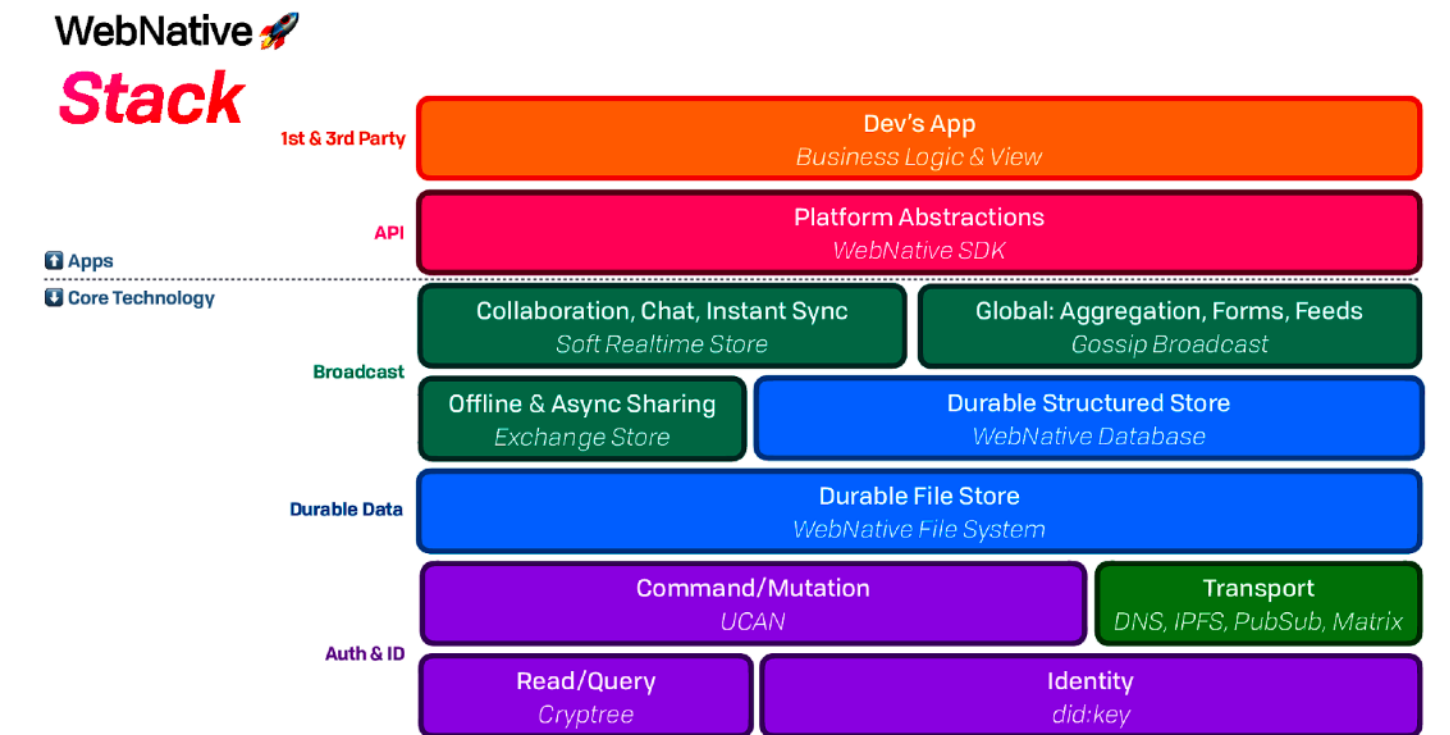
- InterPlanetary File System = IPFS
- A global “Commons Network” — anyone can help host it peer-to-peer: run a server on your desktop, a RPi, or in the cloud
- Files don’t have locations — they have content addresses, or content “IDs” == CID
- Works like BitTorrent plus Git — every directory & file broken into smaller blocks, all with CIDs, anyone can stream blocks to the file requester
- Find out more: ProtoSchool <https://proto.school/>





HOW DOES FISSION USE IPFS?

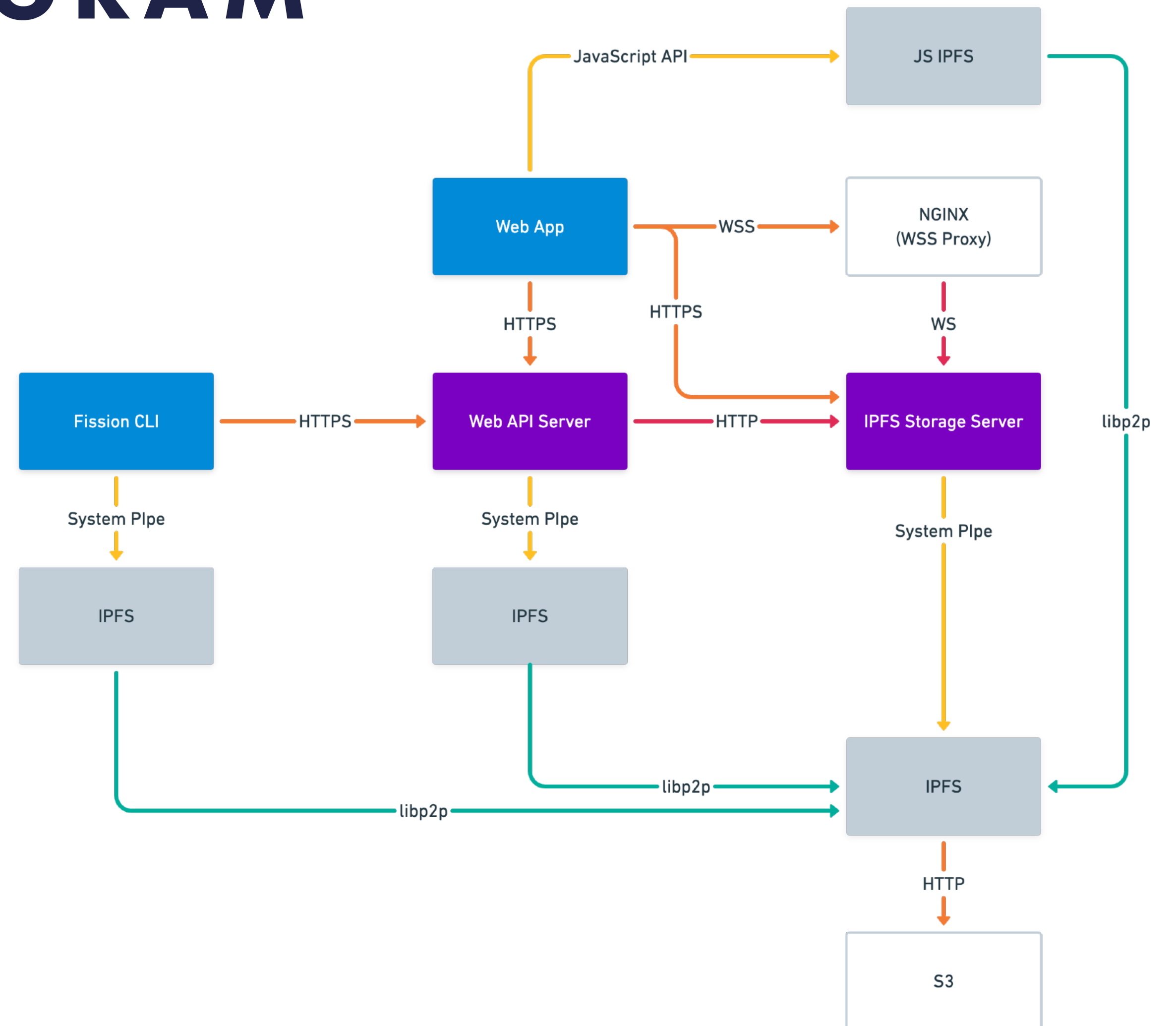
- IPFS content addressing is extremely important for us
 - Portable data, not tied to any app or service
- Webnative API helps run IPFS in the browser
 - Data is synced to your browser, and published out natively over IPFS
- Web Native File System (WNFS) built on top as a public + private/encrypted file system
 - Working on WNDB: potential for a global linked database
- We want to make IPFS *boring*





FISSION SYSTEM DIAGRAM

- Fission Web API (Haskell)
- Auth Lobby Web App (Elm)
- Fission CLI (Haskell)
- Drive Web App (Elm)
- Integrations, eg. Publish action on Github, Heroku Add-On, etc.



WebNative 
Stack

