



**IPFS on in  
over in  
loves is the Web  
around**

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Browsers+Platforms, Protocol Labs



The **world wide web** is both the *biggest deployment vector and least tractable surface* for IPFS.

There are opportunities and major challenges to bringing IPFS support in web **rendering engines and browsers**, to web content served through **gateways**, to IPFS network access from HTTP **web apps** and **browser extensions**.

This track will have talks on: current and future browser implementations, approaches to **managing and publishing IPFS content on the web**, building apps that connect to the IPFS from within HTTP contexts and much much more.

Browsers

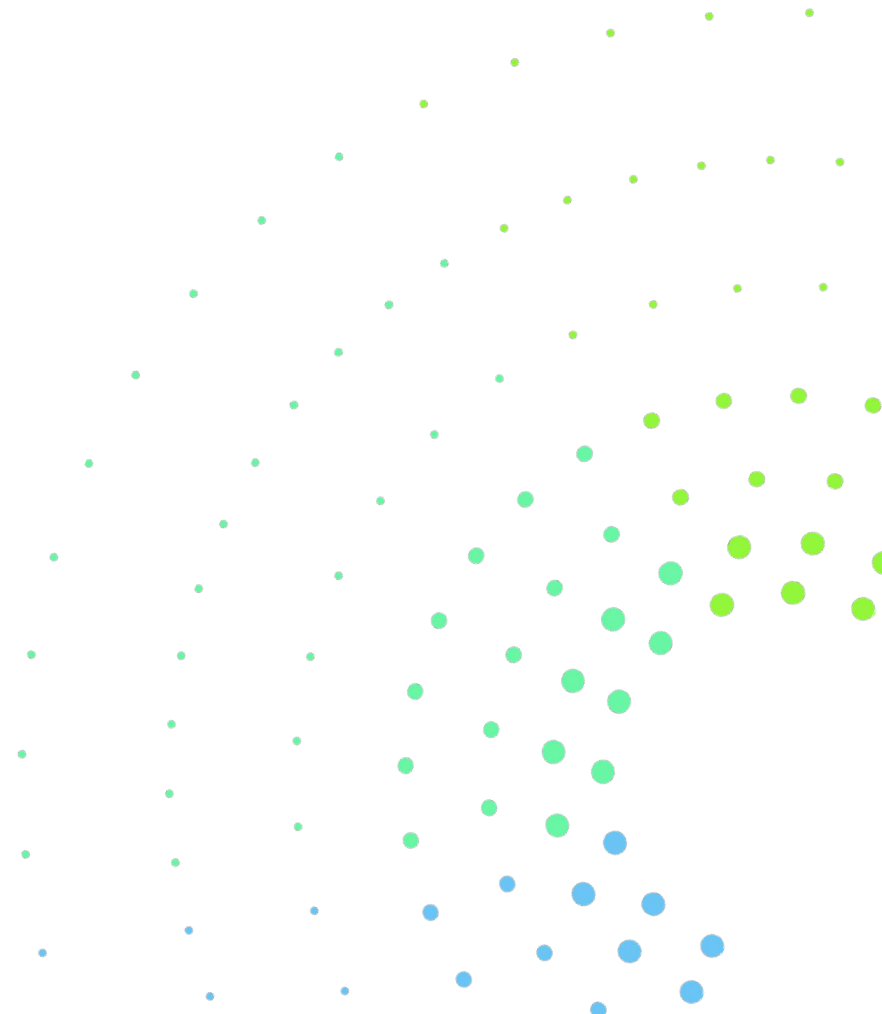
and

Platforms

(

and Standards

)





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@dietrich

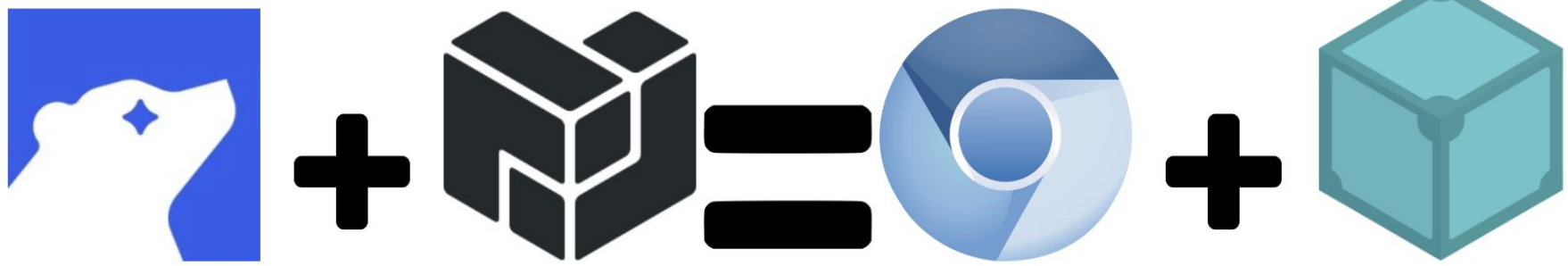


Leaked slide from secret internal meeting.

1 2 3 4 5 6 7 8 9

	Q1 Lookback	Q2 Priorities
Browsers & Platforms	<ul style="list-style-type: none"><li>● Chromium IPFS implementation proof-of-concept</li><li>● Brave NFT pinning implementation</li><li>● Brave FVM implementation (mostly)</li><li>● IPFS specs website launched</li><li>● IPFS principles published</li><li>● MetaMask FIL Snap e2e test automation &amp; CI</li><li>● [REDACTED] Apple is shipping Ed25519 early. Igalia has mostly landed it in Chromium, still waiting on Firefox.</li><li>● Chrome [REDACTED] will support extension-based custom protocol handlers</li></ul>	<ul style="list-style-type: none"><li>● IPFS Thing 2023 (mid Apr)</li><li>● Brave FVM finish and launch (Apr 6)</li><li>● Brave NFT pinning launch (May 4)</li><li>● MetaMask FIL Snap FVM support</li><li>● Durin iOS/Android launch announcement</li><li>● Multiformats at IETF chairing and kickoff</li><li>● Chromium [REDACTED] announcement</li><li>● Lockheed Martin [REDACTED] (May)</li><li>● Igalia Web Engines Hackfest (TBD June)</li></ul>

# Multi-Gateway Client for Chromium



[IPFS](#) is the preeminent protocol suite for [content-addressed networking](#). If you'd like to run a [node](#) and participate in the peer-to-peer network, by all means [give it a try!](#)

The most important thing to get: with IPFS you can fetch something based on its Content ID ([CID](#)), which tells the computer what it is, not where it's coming from.

The other way of fetching things from the IPFS ecosystem is through [IPNS](#), which allows someone to cryptographically sign a reference to a CID, then you can request whatever content that person/organization is currently pointing to as their site.

Essentially, `http://` specifies "where" to find it, `ipfs://` specifies "what" to find, and `ipns://` specifies "whose" content to find.

What about people who don't know about IPFS, and just run across a [link](#)? What if they'd like to be able to use that link in their browser? This is what we mean by clients - software that can talk to nodes to fetch the content they want, but without running one yourself.



## Settings

Get started

Appearance

New Tab Page

Shields

Brave Rewards

Social media blocking

Privacy and security

Sync

Search engine

Extensions

Default base cryptocurrency

BTC

Show Brave Wallet icon on toolbar



Enable NFT discovery

Automatically add NFTs you own to the Wallet using third party APIs. [Learn more](#)



Automatically lock Brave Wallet

The number of minutes to wait until the Brave Wallet is automatically locked

5

Automatically pin NFTs

NFTs which are added to the Brave Wallet may be automatically pinned to the local IPFS node. Note: IPFS daemon may be started for the pinning purposes so your local node will share cached data and pinned NFTs to the IPFS network.



Wallet Networks

Wallet networks customization



Clear wallet transaction and nonce information

Clearing transactions may be useful for developers or when clearing state on a local server





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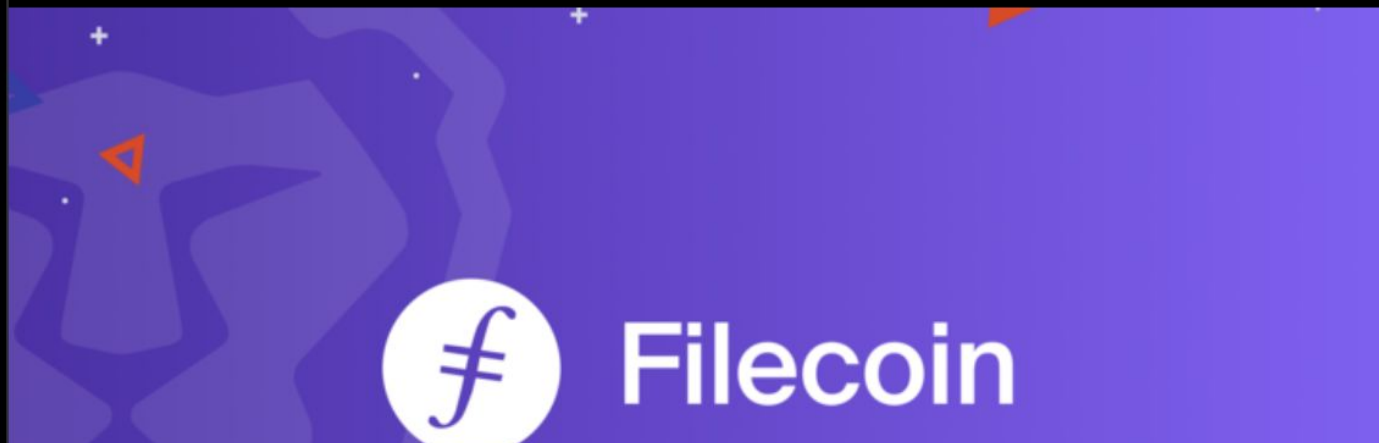
Brave x FVM - your browser, your data and your compute all just got a bit closer together.



**Brave Software** 🏆 @brave · Apr 5

.@Filecoin EVM (FEVM) is now a pre-loaded network in Brave Wallet on desktop (v1.50), making it easier for developers to start building with and using the Filecoin Virtual Machine (#FVM)!

[Show this thread](#)



Relev





# IPFS Standards

The purpose of *IPFS Standards* is to foster interoperability between independent implementations of the IPFS stack by producing Internet-grade specifications and test suites.

## Specifying IPFS and the InterPlanetary stack.

The technology that powers the content-addressable web is being standardized here.

## Specifications

The specifications are broken up into multiple areas that cover the stack.



# IPFS Principles

28 March 2023

status **reliable**

## Editor

Robin Berjon (Protocol Labs) [✉](#) [🔄](#) [🐦](#) [@](#)



The IPFS stack is a suite of specifications and tools that share two key characteristics:

1. Data is addressed by its contents using an extensible verifiability mechanism, and
2. Data is moved in ways that are tolerant of arbitrary transport methods.

This document provides context and details about these characteristics. In doing so it defines what is or is not an IPFS implementation. This is a **living document**; it is expected to change over time as we define more of the principles that guide the architecture of IPFS or find clearer ways of describing those we have already defined.

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# FilSnap

ci passing yarn >=3 Node.js >=16

Snap to enable MetaMask users interaction with filecoin instructions see our [wiki](#).

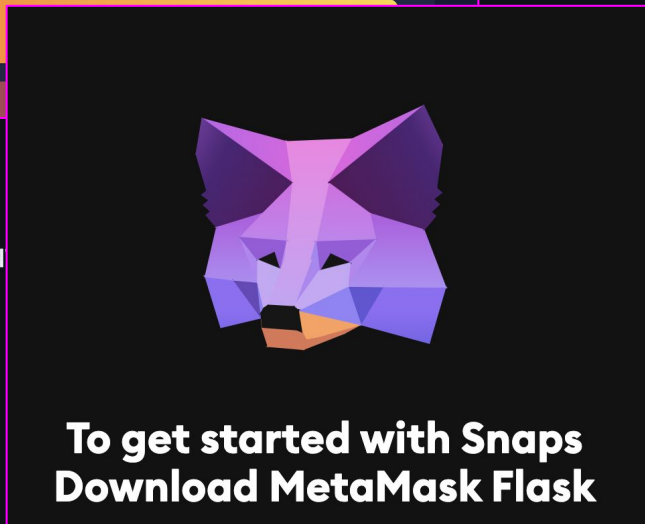
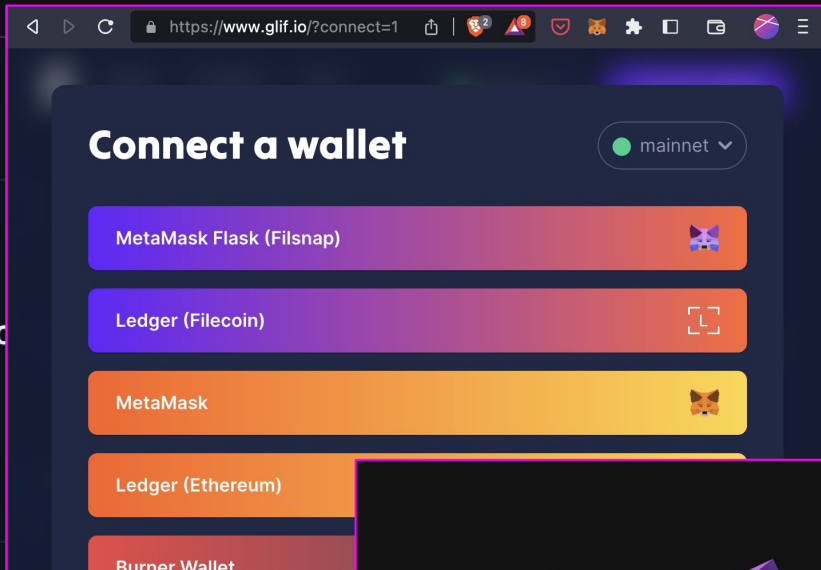
## Testing FilSnap

### MetaMask Flask

Snaps is pre-release software available in MetaMask Flask, a canary distribution with access to upcoming features. To try Snaps [install MetaMask Flask](#).

### Live demo dapp

Test FilSnap inside [our demo dapp](#).







**To get started with Snaps  
Download MetaMask Flask**

ed25519

For information on the search syntax, [view the search documentation](#)

Showing 6 tests (1224 subtests) in WebCryptoAPI from the latest master test runs for chrome[experimental], edge[experimental], firefox[experimental], safari[experimental]

[LINK](#) [EDIT](#)

Path	 Chrome 114 Linux 20.04 6cf13f9 Apr 15, 2023	 Edge 114 Windows 10.0 6cf13f9 Apr 15, 2023	 Firefox 114 Linux 20.04 6cf13f9 Apr 15, 2023	 Safari 167 preview macOS 12.6 6cf13f9 Apr 15, 2023
^	^	^	^	^
<a href="#">generateKey/</a>	736 / 736	736 / 736	648 / 736	736 / 736
<a href="#">import_export/</a>	488 / 488	488 / 488	0 / 488	468 / 488
<b>Subtest Total</b>	1224 / 1224	1224 / 1224	648 / 1224	1204 / 1224



## Availability



Durin is an iOS and Android app for exploring IPFS use-cases. Initially with read and share flows, but a place where we can experiment with light client protocol implementation, proximity transports and the "where's my stuff" problem.

## Project Details

README.md

# IETF Multiformats Working Group

Multiformats are a collection of self-describing data formats that consist of an inline data header and a data value. Multiformats have binary and text-based representations and are used to express base encodings (multibase), cryptographic hashes (multihash), cryptographic keys (multikey), network addresses (multiaddr), and a variety of other binary serialization formats (multicodec).

The scope of this Working Group is to discuss these formats as they relate to standardization at the IETF. Specifically, the group is currently focused on the standardization of two Multiformats: Multibase and Multihash. The input documents for these two Multiformats are:

- <https://datatracker.ietf.org/doc/draft-multiformats-multibase/>
- <https://datatracker.ietf.org/doc/draft-multiformats-multihash/>

Outputs for the group will be:

- A Multibase specification
- A Multihash specification
- A registry for Multiformats with initial entries for Multibase and Multihash

The outputs from this Working Group are currently being used by various groups, including the W3C Verifiable Credentials Working Group, W3C Decentralized Identifiers Working Group, Conexus Age Verification Working Group, W3C Dataset Canonicalization and Hashing Working Group, GS1 Verifiable Credentials, and online communities such as the W3C Credentials Community Group and Interplanetary File System developer community. The Multiformats Working Group will communicate progress and seek input and review from the Working Groups listed in this section as well as other relevant groups as the work progresses.

Items that are out of scope for the group include:

Unlicense license

1 star

1 watching

1 fork

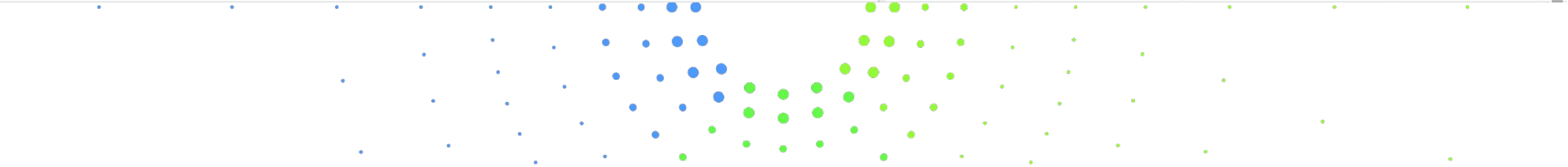
Report repository







1	WELCOME + OPENING	Dietrich	Ayala	Browsers & Platforms Lead, Protocol ...
2	What Is The Web?	Robin	Berjon	Standards & Governance, Protocol La... <a href="#">htt</a>
3	A better web: secure, private, p2p apps with user-owned data and identity	Ian	Preston	Ian Preston, Peergos <a href="#">htt</a>
4	WNFS: Versioned and Encrypted Data on IPFS	Philipp	Krüger	Protocol Engineer @ Fission, WNFS W... <a href="#">htt</a>
5	Improving the Web security model with content based addressing	Fabrice	Desré	Fabrice Desré, Capyloon <a href="#">htt</a>
6	LUNCH			
7	Hello Helia	Alex	Potsides	Alex Potsides, IP Stewards <a href="#">htt</a>
8	JavaScript performance - how to wring the most out of your Helia deployment	Alex	Potsides	Alex Potsides, IP Stewards <a href="#">htt</a>
9	Connecting everything, everywhere, all at once with libp2p	Prithvi	Shahi	Prithvi Shahi, Protocol Labs
10	The Incredible Benefits of libp2p + HTTP: A Match Made in Decentralization Heaven	Marten	Seemann	Marten Seemann, Protocol Labs
11	BREAK			
12	The Name Name Service – Discoverable, Verifiable Names for Decentralized Infrastructur...	Blaine	Cook	Blaine Cook, Fission <a href="#">htt</a>
13	Building decentralized websites on IPFS	Ryan	Shahine	Portrait <a href="#">htt</a>
14	ODD.js, a technical overview.	Steven	Vandavelde	Engineer of things, Fission
15	IPFS native frontend development using Importmaps	Dilip	Shukla	CEO, fullfrontal <a href="#">htt</a>
16	Announcing Browsers Platforms & Standards team blog	David	Justice	David Justice, Browsers Platforms an... <a href="#">htt</a>





Thank you.

**IPFS PING**

**Brussels, Belgium**

2023