IPFN

International Pinned File Number



Live Evidence Demonstration

A web-native identifier for creative work.

Controlled registration. Publicly verifiable evidence.

Version 2.0 | 1 November 2026

A Light Across the Canyon | Kilian Liptrot

LENS-yc.3pfn.xyz | ipfn.net/experience

IPFN Live Evidence Demonstration

Follow the original photograph all the way to its public commitment

Version 2.0 | Evidence observed 1 November 2026 | Blinding Visuals Press / IPFN

The result

We independently downloaded the actual registered JPEG for **A Light Across the Canyon**, LENS-yc.3pfn.xyz. Its 1,591,834 bytes produce the exact SHA-256 fingerprint recorded in both the IPFS certificate and the daily ledger. The certificate's 467 bytes reconstruct its recorded IPFS CID. The complete ledger's hash matches the exact input of a successful Base transaction, and the RPC's reported finalized head has passed that transaction's block.

That is a complete byte-comparison example, from this original file through the certificate and ledger to the public commitment. It establishes those relationships. It does not decide who made the photograph or owns its copyright.

Start the demonstration

Open https://ipfn.net/experience . The page follows the same real work through five scenes. Use Next/Back or the arrow keys. Presentation mode expands the scene for a room. Nothing registers a new work, uploads a file or sends a transaction.

Photograph: see the real landscape and its recorded name. **Number:** open the registration through its assigned IPFN web address. **Fingerprint:** calculate SHA-256 over the actual original JPEG in your browser. **Certificate:** reconstruct the IPFS content address from the certificate bytes. **Anchor:** hash the complete canonical ledger and compare it with the public Base transaction input.

The page starts with a dated, retained evidence snapshot. Run the browser checks to calculate the comparisons; use Refresh live evidence to retrieve current public sources. Saved, live, unavailable and mismatched results have different labels. A retained successful result is not a claim that a live service was reached today.

Prove that the comparison can fail

On the final scene, change a local ledger copy. The demonstration adds one space to the downloaded bytes. JSON still reads as the same data, but its SHA-256 changes. The changed digest no longer matches the original transaction input. Restore the original bytes to recover the match. The published ledger is never altered.

The technical fixtures also test an altered original JPEG, changed certificate bytes, failed transaction receipt, wrong chain, wrong transaction, wrong block, changed transaction input, missing or duplicate registration, unavailable artifacts and an unreached finalized head. A source that cannot be reached produces **unavailable**, not a failed cryptographic comparison.

The values

Item	Independently observed value
IPFN	LENS-yc.3pfn.xyz
Photograph	A Light Across the Canyon
Recorded claimant	Kilian Liptrot
Registration authority	ARTSSN
Exact original JPEG	1,591,834 bytes
Certificate	467 bytes, single-block DAG-PB UnixFS File
Daily ledger	IPFN-LEDGER-2026-10-31
Ledger schema / count / bytes	1.3.0 / 113 registrations / 43,758 bytes
Public chain	Base mainnet, chain ID 8453
Transaction result	Successful, status 0x1
Anchor block	53,351,386
Block time	2026-11-01T00:15:19Z
Observed sender	0x20ce5b8aaf38c647a42cfc6dc038a12a12648f6e

Exact original-file SHA-256

```
938e065ecc9b7ff0b40ccd604d1c9ddcb4c0f70e03b35e5d89efdd749c1279f2
```

IPFS certificate CID

```
QmQEWUWBh6afkwW8ByiBUyCpWrmG9RLxo8QqUHf9R5rYsE
```

Complete daily-ledger SHA-256

```
94c4ba61af14f74dd15bdc3cd10d210b055671a3172ae9ca58153d49a9f9f9ba
```

Base transaction

```
0x25b1532e64f3af4d363cf21df71ee56b189a5644876f9139ec5c310ba57f8251
```

Exact UTF-8 transaction input

```
FILECHAIN V2 VOL=IPFN-LEDGER-2026-10-31
SHA256=94c4ba61af14f74dd15bdc3cd10d210b055671a3172ae9ca58153d49a9f9f9ba
PREV=707bddd8ee62114e4dae0d38db02ac5f85f15f7b865d98e9356135b77e7549cc
```

What each comparison means

The original-file fingerprint tells you whether the supplied file has exactly the registered bytes. Re-encoding the same visible photograph can change that fingerprint. It is not a perceptual match or plagiarism verdict.

The certificate CID identifies the certificate's encoded IPFS block. For this small certificate, the verifier builds a UnixFS File with its type, data and length, wraps it in a DAG-PB node, hashes that block and encodes its SHA-256 multihash as CIDv0. Hashing the plain certificate file alone would give a different representation.

The ledger comparison establishes that this entry is included once in the downloaded complete volume and that the volume's exact bytes agree with the public commitment. The ledger is a full linear volume, not a Merkle inclusion proof. Its inclusion does not prove no other registration was omitted.

The Base receipt and block establish that the selected transaction succeeded on the reported chain and that its block references agree across the responses. The finalized-head check uses one public RPC provider. It is not independent Ethereum L1 derivation or a consensus audit.

The sender address was recovered from the signed transaction and agrees with both the RPC sender and the operator-declared notary address. The declaration was read through the existing authenticated FileChain state reader and is also present in its pinned implementation. This establishes agreement with the operator's declared address; it does not independently certify historical key ownership, rotation or legal notary status. The browser compares the RPC sender with that declared reference.

Public source links

1. Interactive experience: https://ipfn.net/experience

2. Registered record: https://ipfn.net/verify/LENS-yc.3pfn.xyz

3. Exact original bytes, retained unchanged for this demonstration: https://ipfn.net/ipfn/experience/canyon-original.jpg

4. Certificate: https://ipfn.net/api/ipfs/QmQEWUWBh6afkwW8ByiBUyCpWrmG9RLxo8QqUHf9R5rYsE

5. Volume reader: https://ipfn.net/ledger/IPFN-LEDGER-2026-10-31

6. Original canonical ledger bytes: https://images.blindingvisuals.com/filechain-ledgers/production/IPFN-LEDGER-2026-10-31.json

7. Public transaction: https://basescan.org/tx/0x25b1532e64f3af4d363cf21df71ee56b189a5644876f9139ec5c310ba57f8251

8. Reproduction bundle: https://ipfn.net/ipfn/papers/2026-11-01-r2/ipfn-verification-bundle.zip

Reproduce independently

The bundle retains public evidence bytes, raw RPC observations, a dated summary and a Python standard-library verifier. It is a read-only verifier, not a registrar or an implementation license. Run the included verifier as documented in its README. A failed assertion exits unsuccessfully; no transaction is sent.

A minimal manual check is to download the original JPEG and canonical ledger and run SHA-256 on each. Compare the photograph's result with the certificate and selected ledger entry. Compare the ledger's result with SHA256= in the decoded transaction input. Download the certificate separately to reconstruct its CID under the stated profile.

IPFN controls registration and issuance through its authorities. Public evidence can be checked without an ARTSSN account, without a wallet, and without permission to issue identifiers.

Stage preparation and remaining limits

Open the page and load the photograph before the meeting. Run the browser checks and attempt a live refresh while connected. Keep the dated paper and evidence bundle available. A retained snapshot supports an explanation during a service interruption; it is not a guarantee that a venue's network, display or browser will work.

This exercise did not observe the original capture or historical upload. It does not verify a claimant's identity, a licence or copyright ownership. No real disputed or pending registration was created for testing. Those service states require their own live acceptance exercise. Storage, DNS and continued publication need an operator. The photograph's exact original was checked here; the prior edition's preview-only limitation is superseded for this selected specimen.

Sources and custody

The original registered JPEG, certificate text, full ledger and dated Base transaction/receipt/block/finality responses are retained with the independent verifier. Browser WebCrypto repeats the exact-file and ledger hashes; the bounded certificate routine supports this specimen's single-block CID profile, not every possible IPFS DAG.

Official specifications: https://specs.ipfs.tech/unixfs/ ; https://docs.ipfs.tech/concepts/content-addressing/ ; https://docs.base.org/base-chain/api-reference/ethereum-json-rpc-api/eth_chainId . Implementation sources and the controlled-authority model are detailed in the accompanying technical white paper.