IPFS - Toward The Permanet Web (DRAFT 1)

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ABSTRACT

The InterPlanetary File System (IPFS) is a peer-to-peer distributed file system capable of sharing the same files with millions of nodes. It features a completely decentralized architecture, secure and efficient peer-to-peer block distribution, and a path-based naming system supporting distinguishing mutable and immutable names. The Web today still uses HTTP as the main data transport. IPFS is capable of evolving the web to take advantage of versioning, p2p distribution, cryptographic operations, and decentralized publishing. Moreover, it presents an opportunity to construct a web whose links do not rot, whose files are deduplicated globally, and whose websites are no longer "sites". IPFS is a step toward The Permanent Web.