

**DATASHARDS**

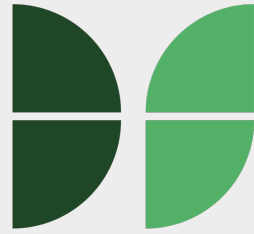
Secure, distributed storage primitives for the web



## DATASHARDS

`Secure`, distributed storage primitives for the web

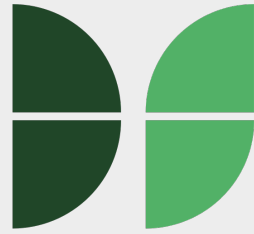
- Only intended recipients can see messages
- Safer for node operators to help network
- Secure against size-of-file-attacks



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Secure, distributed storage primitives for the web

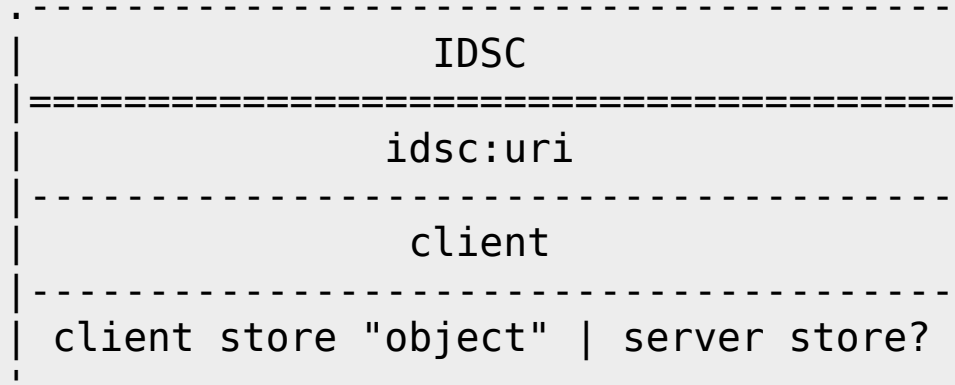
- Many different "stores"
  - A "Secure Data Hub" web store!
  - Your local filesystem!
  - USB keys!
  - Distributed over a gossip network/DHT!
- Nodes can host content, but don't know what it is

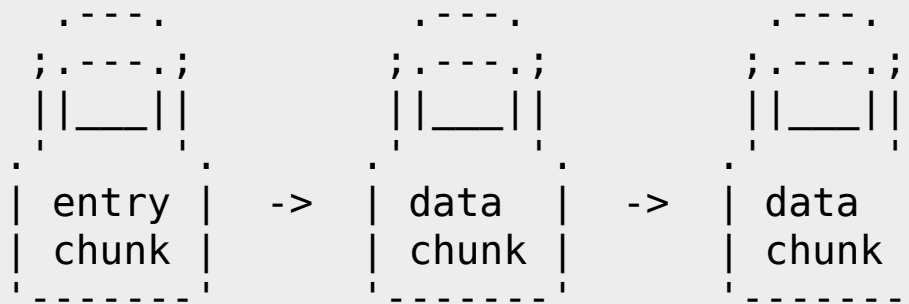
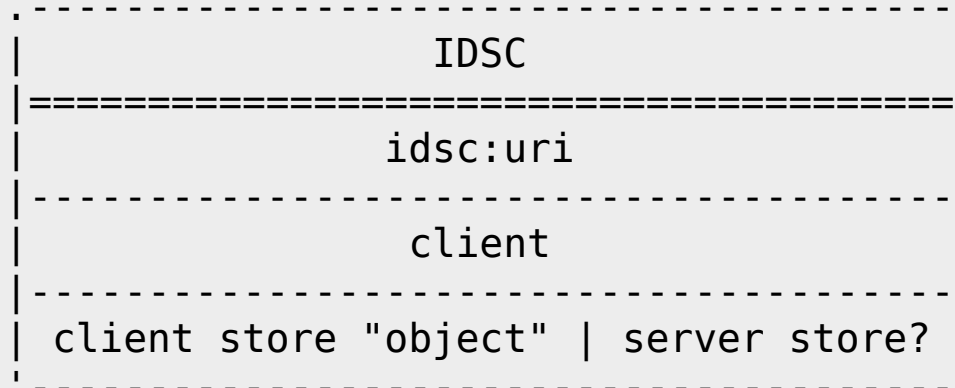


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Secure, distributed storage primitives for the web

- Meant to be foundational, the way http(s) is foundational for live content
- Two new URI schemas:
  - idsc: Immutable, unchanging data
  - mdsc: Mutable, updateable data
- Data can have the same name, but can live in many places



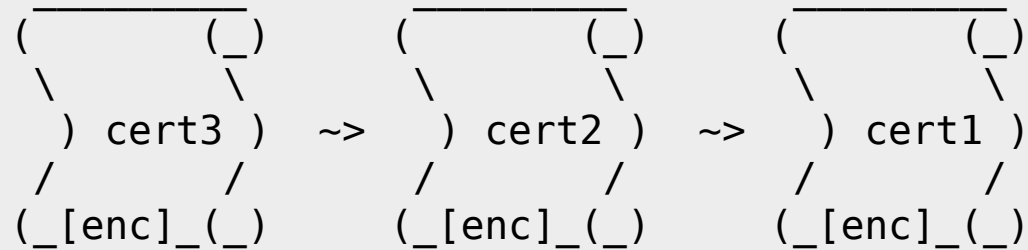
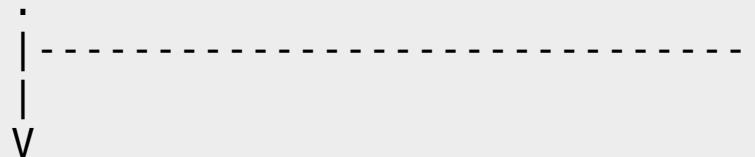
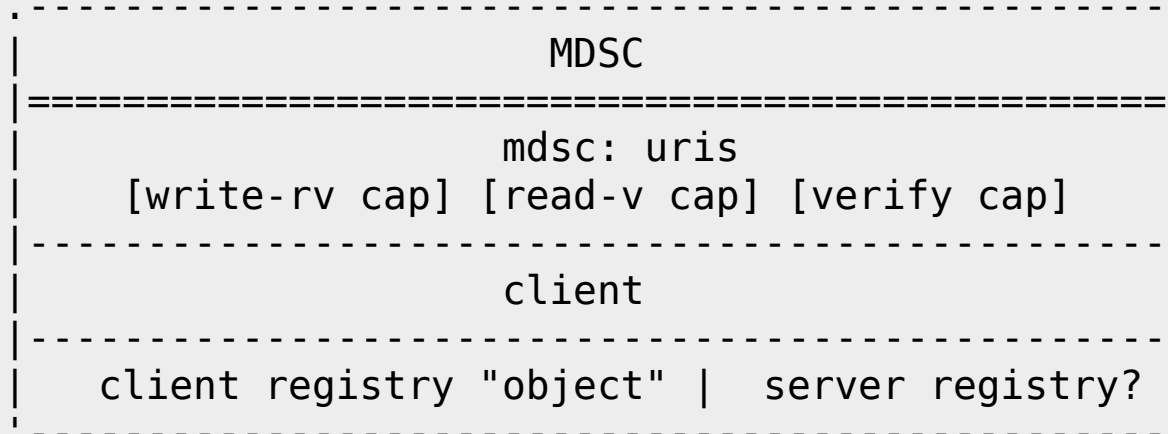


MDSC

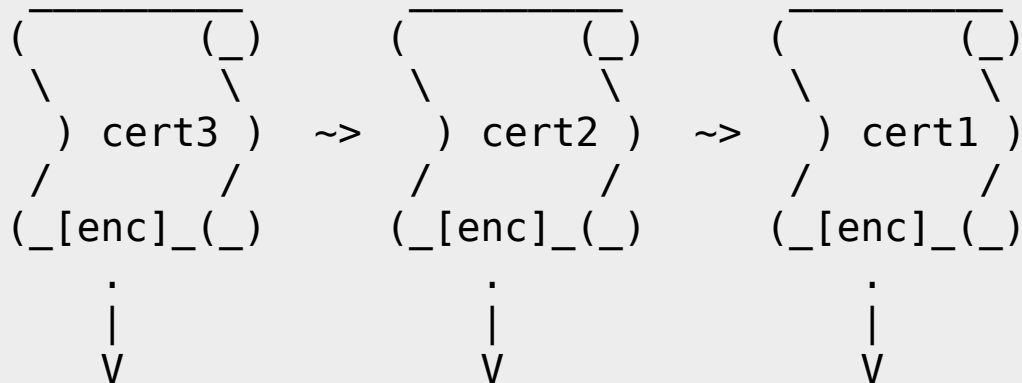
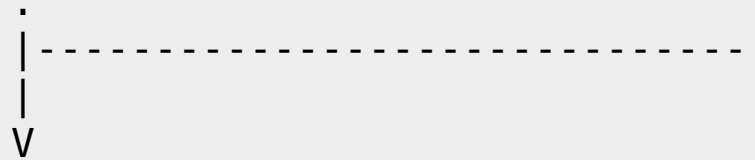
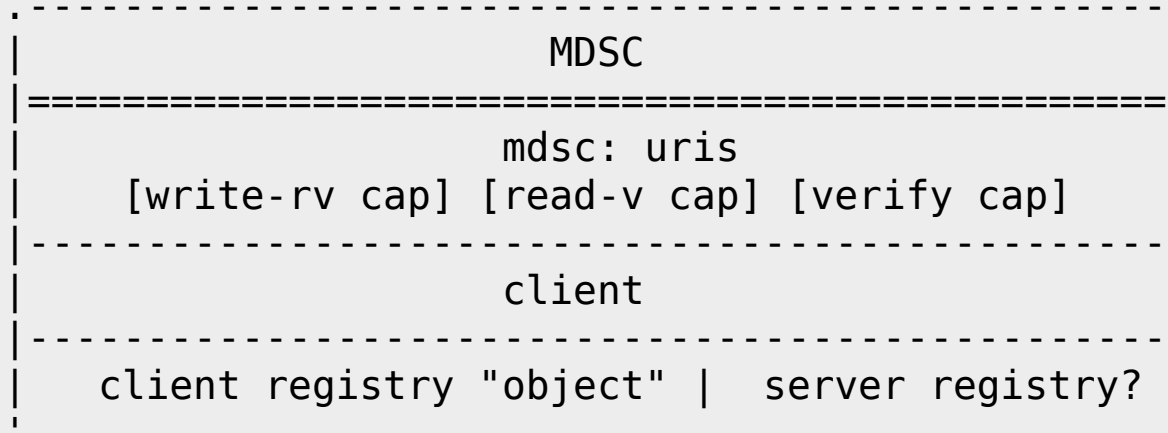
mdsc: uris  
[write-rv cap] [read-v cap] [verify cap]

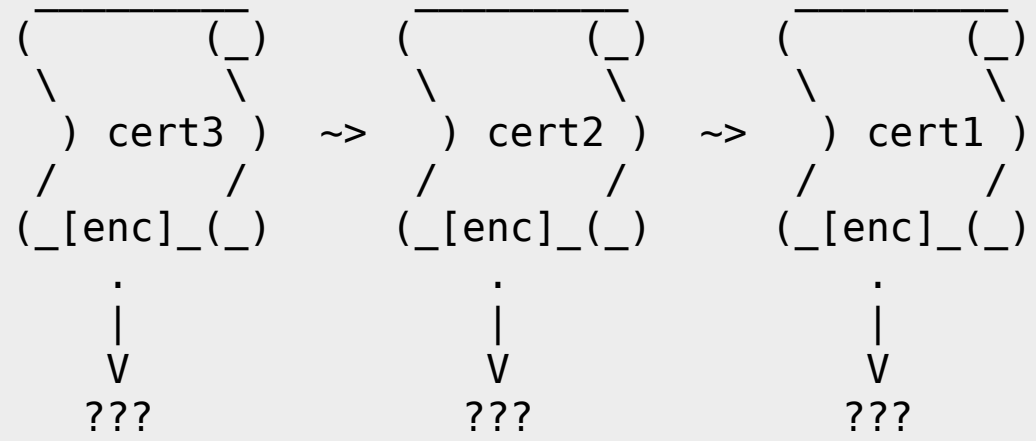
client

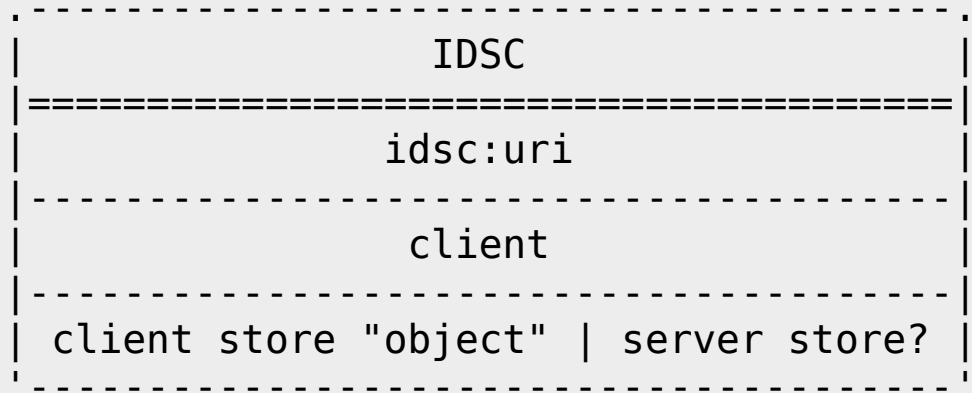
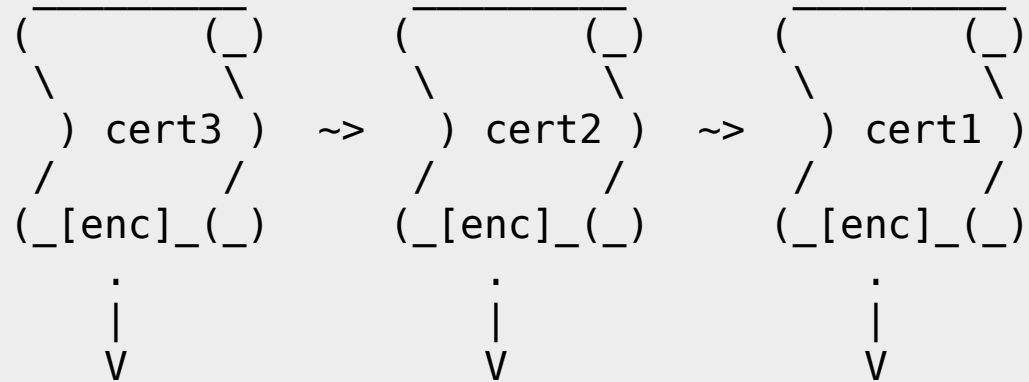
client registry "object" | server registry?

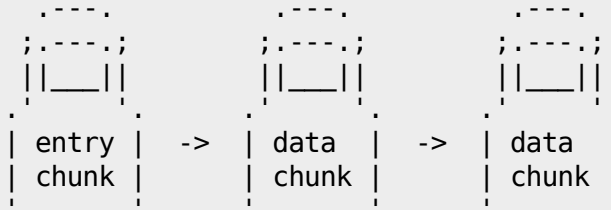
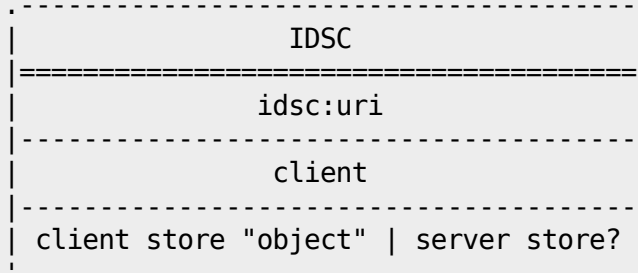
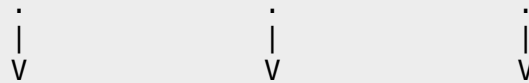
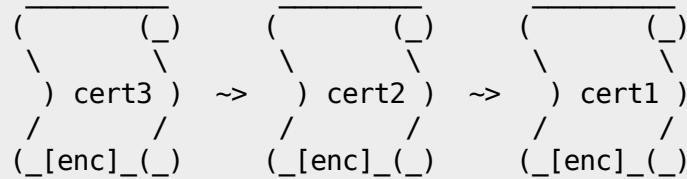
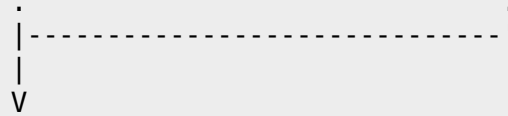
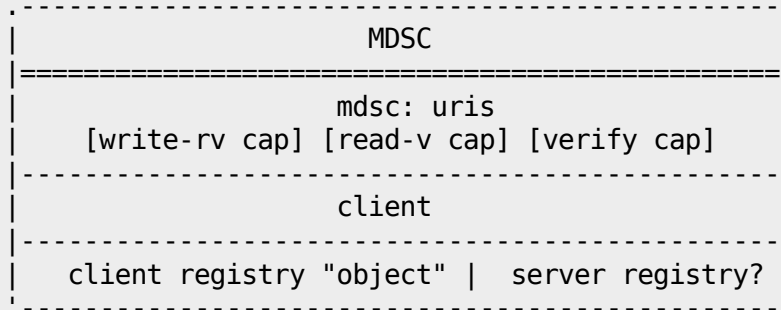












# Bonus background

- Datashards is based on the ideas from:
  - Tahoe-LAFS
  - Freenet
  - libchop
- Datashards grew out of the Spritely subprojects: Magenc, Golem, Crystal
- Let's talk about how to combine with ActivityPub!