

FLIC Manifests

Goals

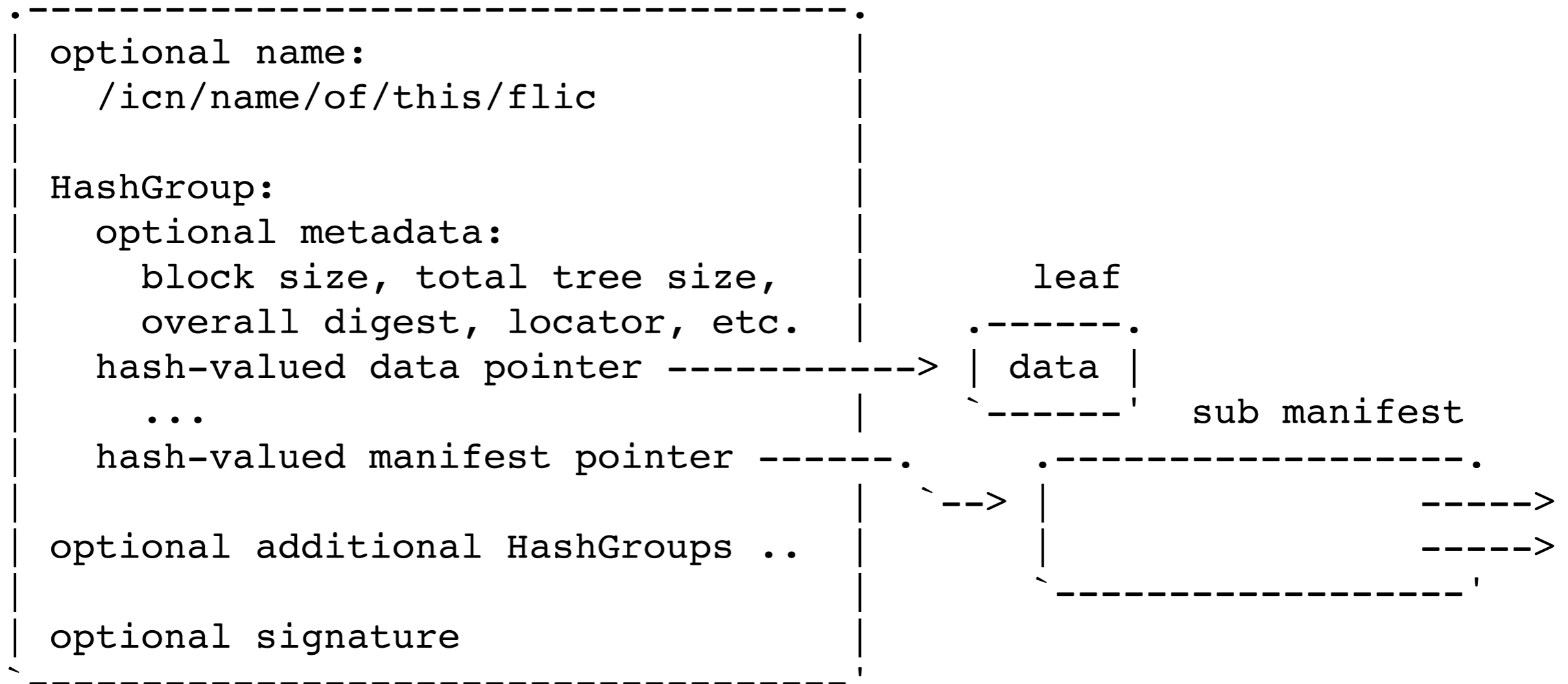
- Copy UNIX inode concept
 - Index tables and memory pointers
- Adaption to ICN
 - Hash values instead of block numbers
- Advantages
 - Single root manifest signature that covers all children nodes
 - No need for explicit chunking
 - Supports block-level de-duplication

Limitations

- All data leaves must be present at creation time

FLIC Overview

root manifest



FLIC EBN

```
ManifestMsg := Name? HashGroup+
HashGroup   := MetaData? (DataPointer | ManifestPtr)+
DataPointer := HashValue
ManifestPtr  := HashValue
HashValue    := OCTET[32]

MetaData := Property*
Property := Locator | DataBlockSize | OverallDataSize |
           OverallDataSHA256Digest | ...
```

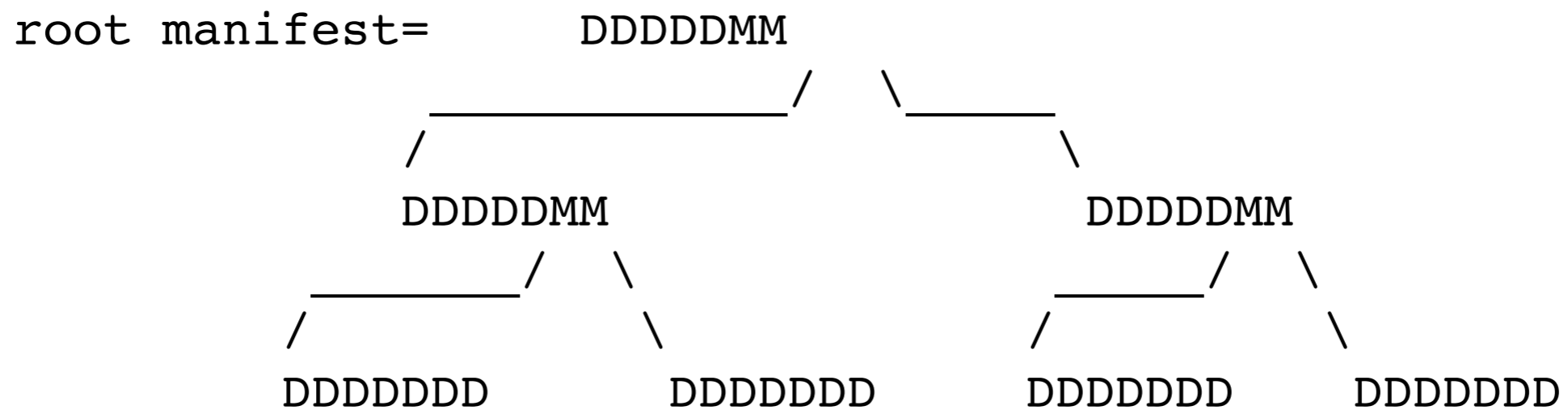
FLIC Trees

- Skewed (similar to a list)

DDDDDDM--> DDDDDDM--> DDDDDDM--> DDDDDDD

- Balanced

- application data is all at the bottom of the tree



Use Cases

- Block-level reduplication
- Growing ICN collections
- Republishing under a new name
- Data chunks of variable size