



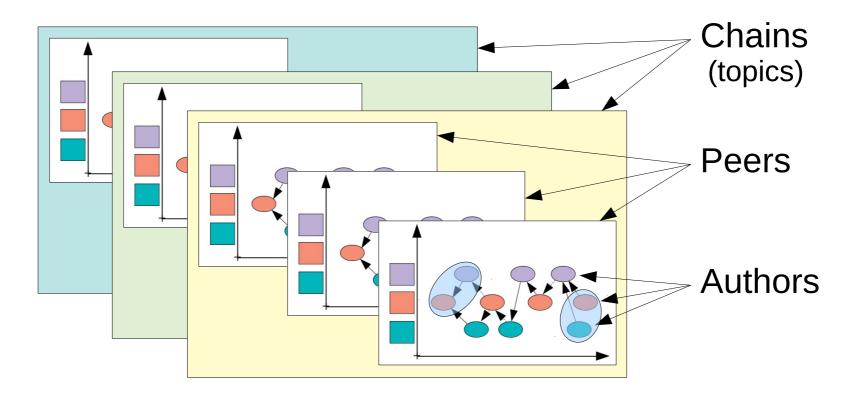




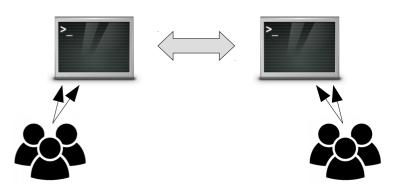


peer-to-peer content dissemination

- Persistent publish-subscribe topic-based model
- Peer-to-Peer gossip dissemination
- Happened-before best-effort partial order
- Per-topic reputation system for healthiness



- Open-source software for PC and mobile
- Standalone daemon listening for peers
 - local users perform actions
 - remote peers synchronize
- User interfaces:
 - command line
 - kotlin library
 - textual protocol

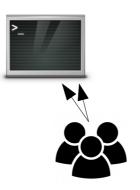


Setup

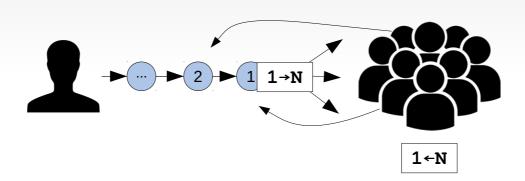
\$ freechains-host start /var/freechains/ &





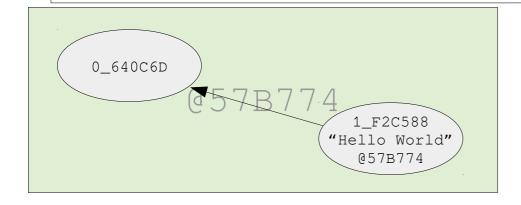


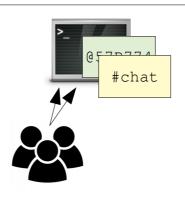
Public Identity (1→N / 1←N)



Public Identity (1→N / 1←N)

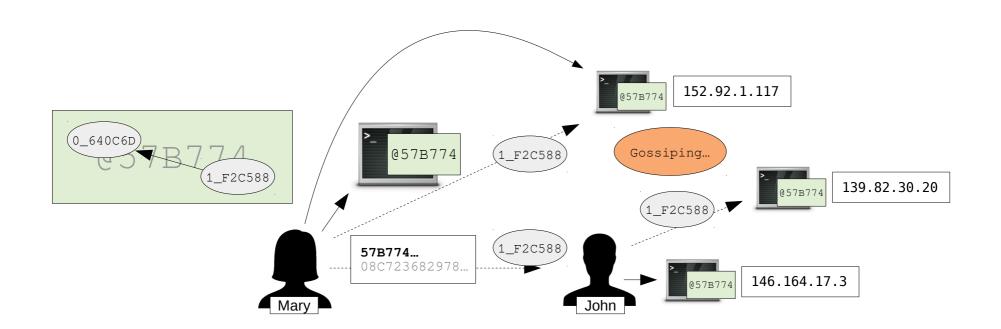
- \$ freechains crypto pubpvt <passphrase>
 57B774... 08C723682978...
- \$ freechains chains join "@57B774..."
- \$ freechains chains join "#chat"
- \$ freechains chain "@57B774..." genesis
- 0_640C6D...
- \$ freechains chain "@57B774..." post inline "Hello World!" --sign=08C723682978...







- \$ freechains crypto pubpvt <passphrase>
- \$ freechains chains join "@57B774..."
- \$ freechains chain "@57B774..." post
 inline "Hello World!" --sign=08C723682978...
- \$ freechains peer 146.164.17.3 send "@57B774..."
- \$ freechains peer 152.92.1.117 send "@57B774..."
- \$ freechains peer 139.82.30.20 send "@57B774..."

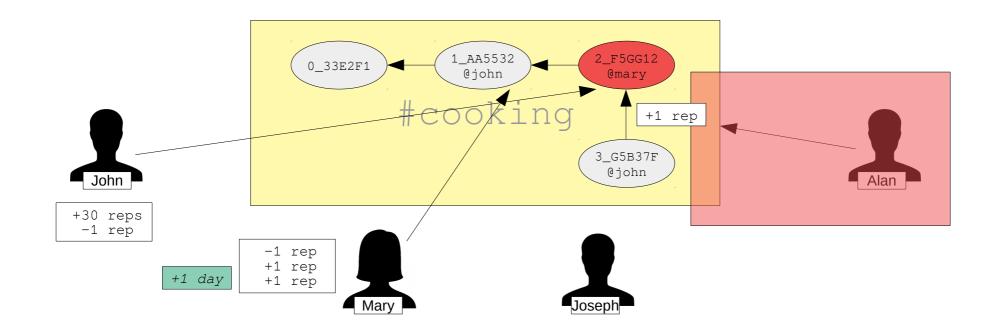


Public Forum (N↔N)



Reputation System

\$ freechains chains join "#cooking"
\$ freechains chain "#cooking" post inline
 "Post your best recipes..." --sign=7A553D12EE9A...
\$ freechains chain "#cooking" post inline
 "Cut half of a lime..." --sign=08C723682978...
\$ freechains chain "#cooking" like 2_F5GG12...
 --sign=7A553D12EE9A...



Reputation System

- First author is 30 days ahead in reputation
 - he shapes the initial community development
 - multiple first authors cannot synchronize
- New authors require community approval
 - reputation growth is slow
- New posts are initially penalized
 - authors must "choose words" wisely
 - posts volume is not rewarded (but quality is)
- Old posts are the community wealth
 - only form of "production"
 - limited to 1/day/author in 30-day window
 - still subject to moderation











peer-to-peer content dissemination