Rings 101 - What is Distributed Network

Ryan J. Kung
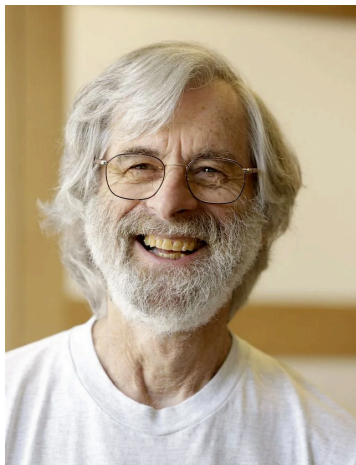Rings Network Dev Team

July 13, 2023

What is Distributed Network

- Definition: What is distributed system (1min)
- Definition: What is a distributed Network (1min)
- Is internet distributed? (1min)
- Intoduce to dWeb (1min)
- Implementation of dWeb (1min)

A system is distributed if the message transmission delay is not negligible compared to the time between events in a single process. [3]
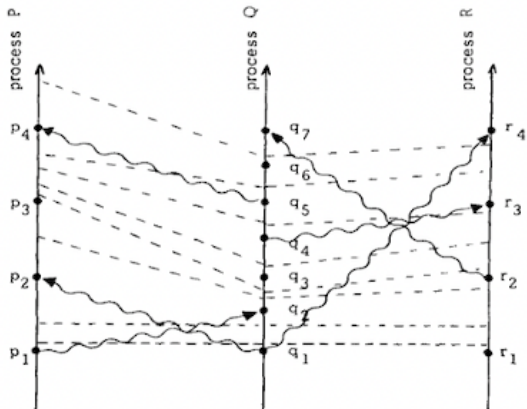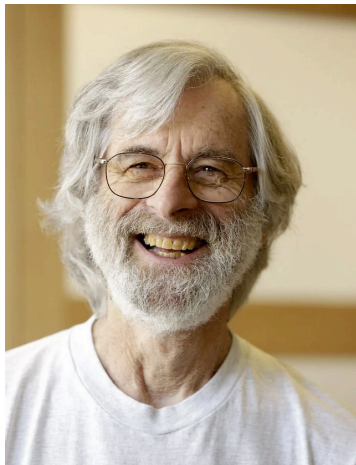
— Leslie Lamport, 1978

Operating Systems   R. Stockton Gaines
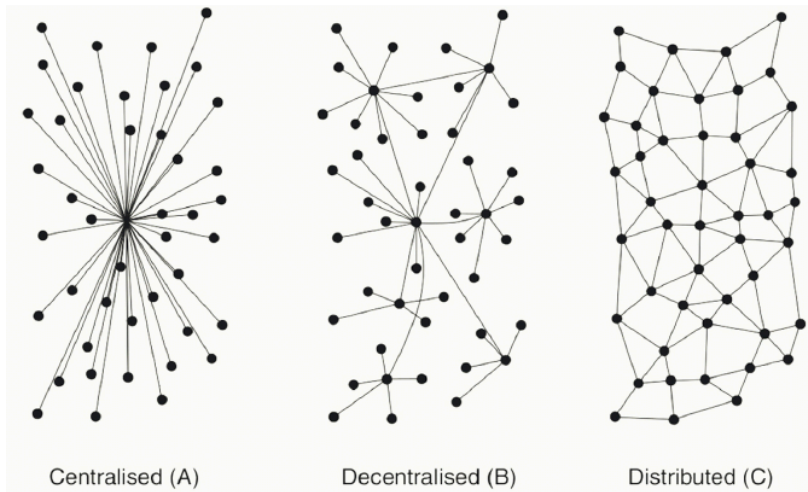Editor

Time, Clocks, and the Ordering of Events in a Distributed System

Leslie Lamport
Massachusetts Computer Associates, Inc.
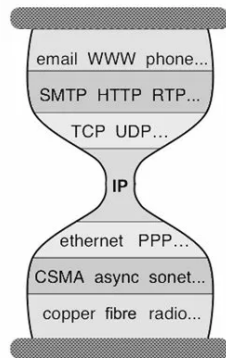
Logical Timestamp

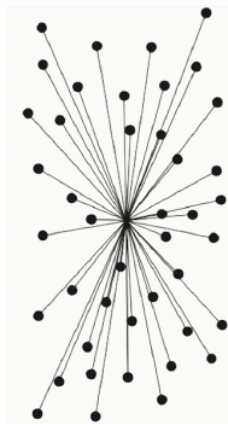# Definition: What is distributed network

Centralised (A)   Decentralised (B)   Distributed (C)

Is Internet distributed?

The system is failing.[2]
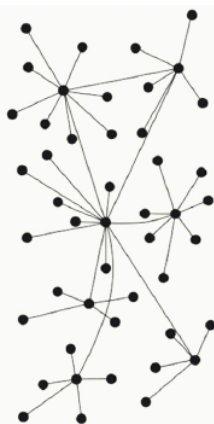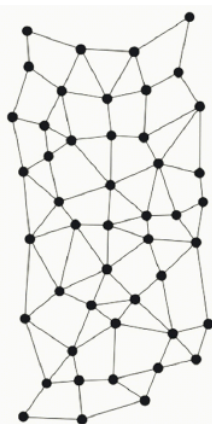
— Tim Berners-Lee, 2017

Intoducing to the dWeb

Centralised (A)   Decentralised (B)   Distributed (C) [1]

Implementation of dWeb

- Tor Project - Onion Relay, Hidden services
- GUNnet - DHT Based, structure p2p
- Rings Network - DHT and WASM, structure p2p

Thanks

Repository of this Slides:

Reference

📄 Dietrich Ayala.
Introducing the dweb, 2018.
[Online; accessed on 13-July-2023].

📄 Tim Berners-Lee.
The system is failing, 2017.
[Online; accessed on 13-July-2023].

📄 Leslie Lamport.
Time, clocks, and the ordering of events in a distributed system.
Communications of the ACM, 21(7):558–565, 1978.