

MaidSafe

& THE SAFE NETWORK



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INTRO

Massive array of internet disks, secure access for everyone

The SAFE Network is an alternative Internet infrastructure and development platform for decentralising storage and communication where privacy and security are priority.



serverless

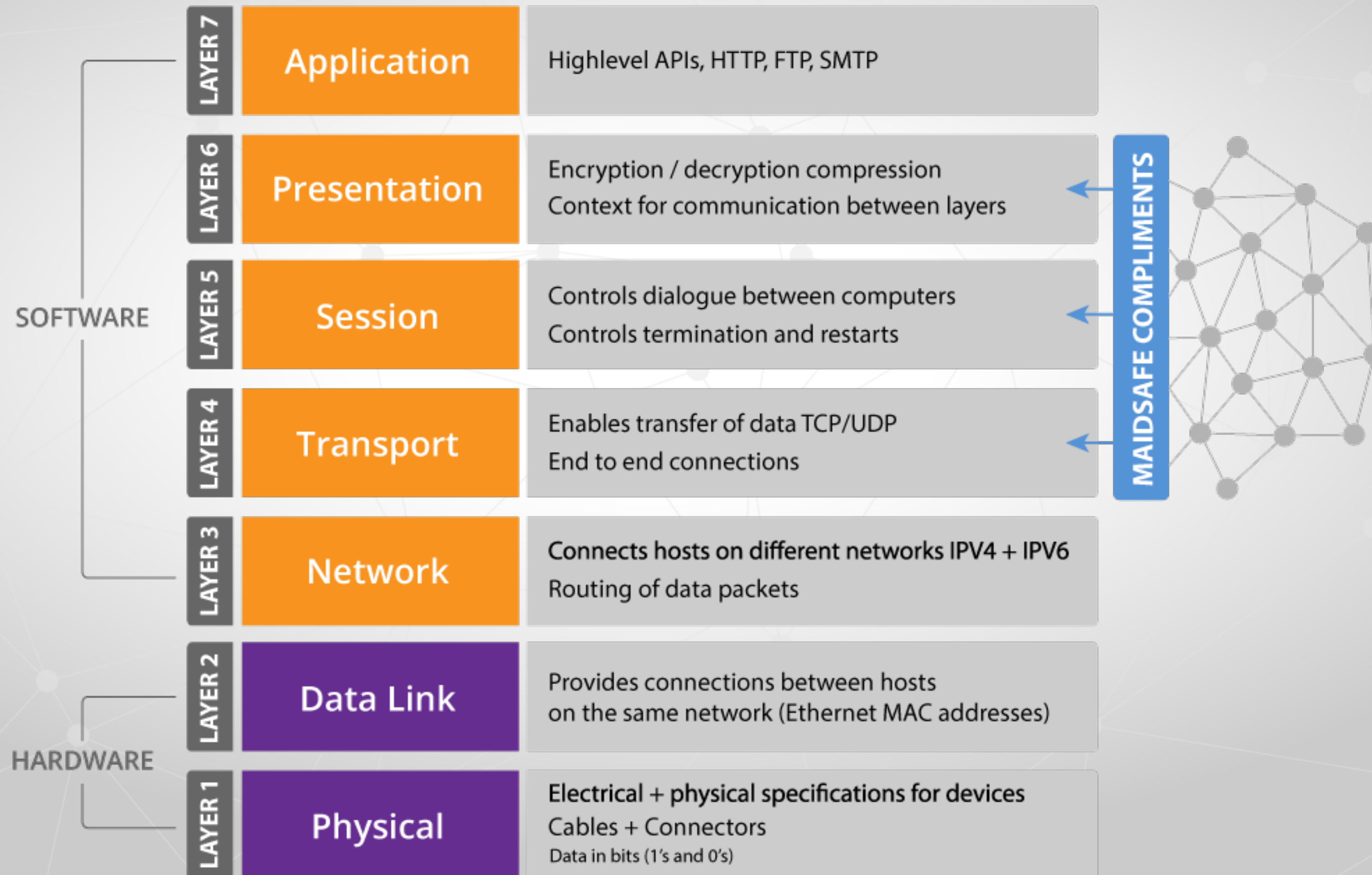
crypto secured

personal, private or public data

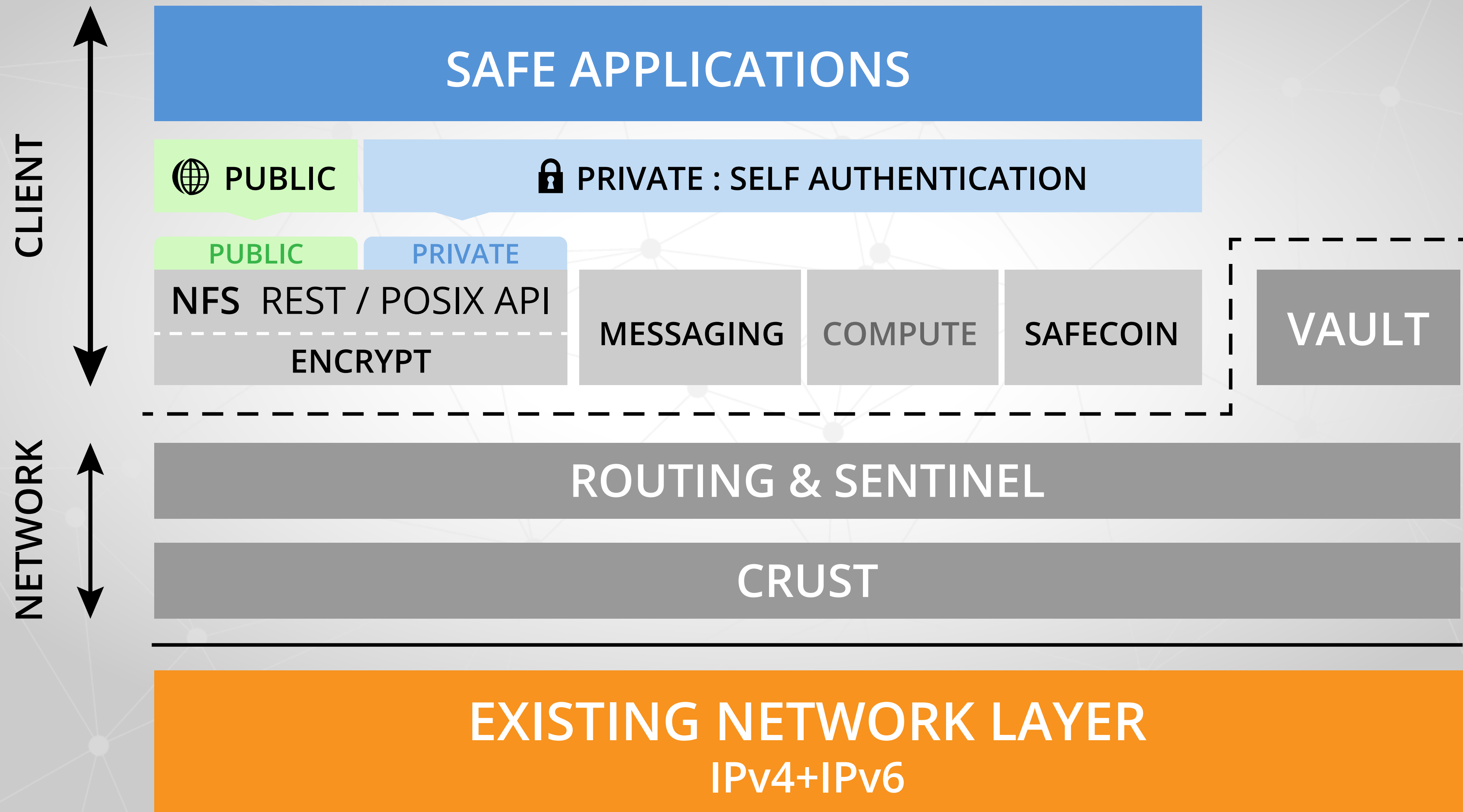
autonomous



STACK

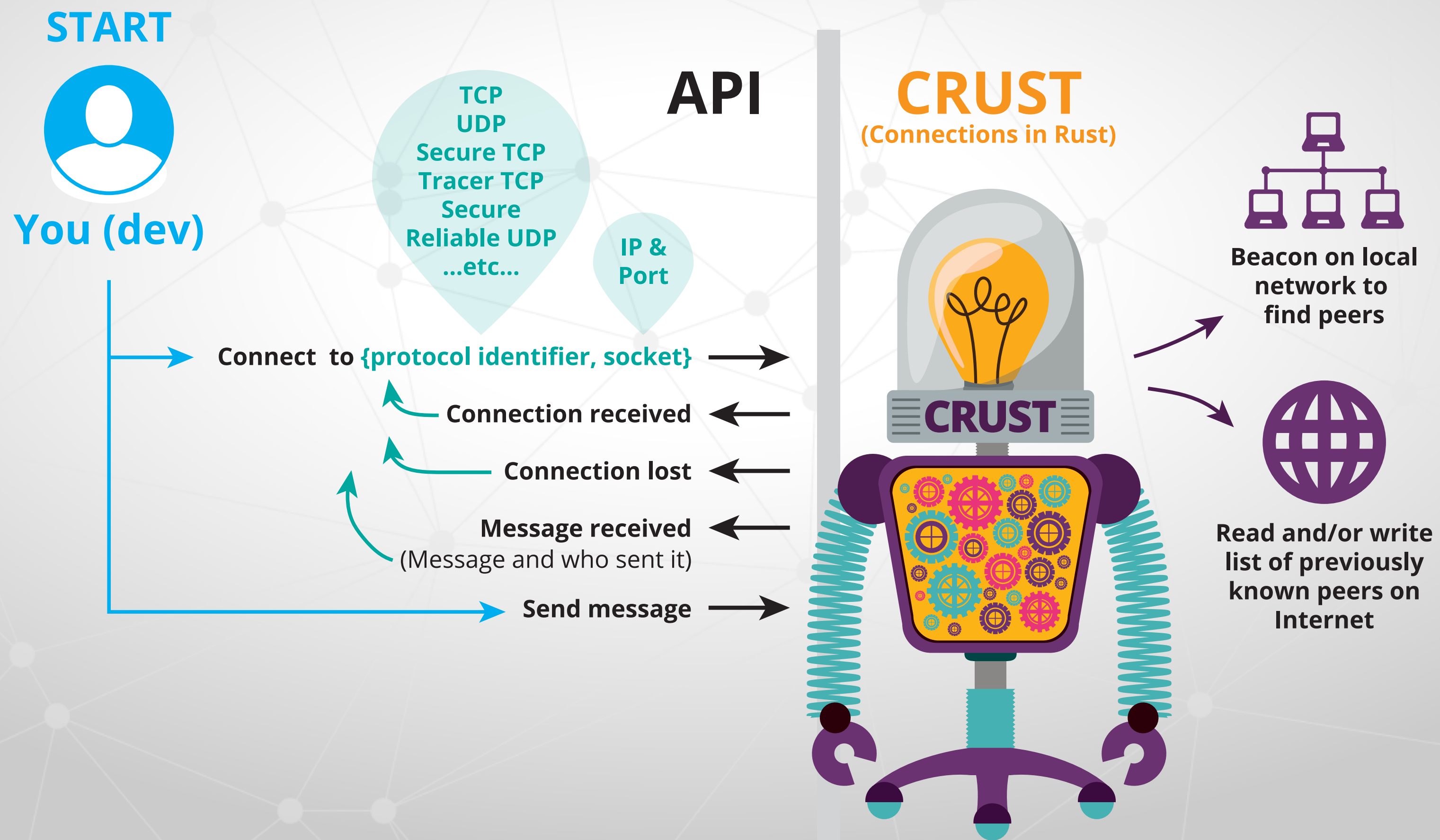


STACK



CRUST

PEER 2 PEER NETWORKING MADE EASY



ROUTING + SENTINEL

Modified Kademlia DHT
(with public key infrastructure)

DHT PKI determines namespace and
XOR distance for node authority

Language of the network

- persona/roles
- messages (data type id, persona id)
- group consensus (quorum)

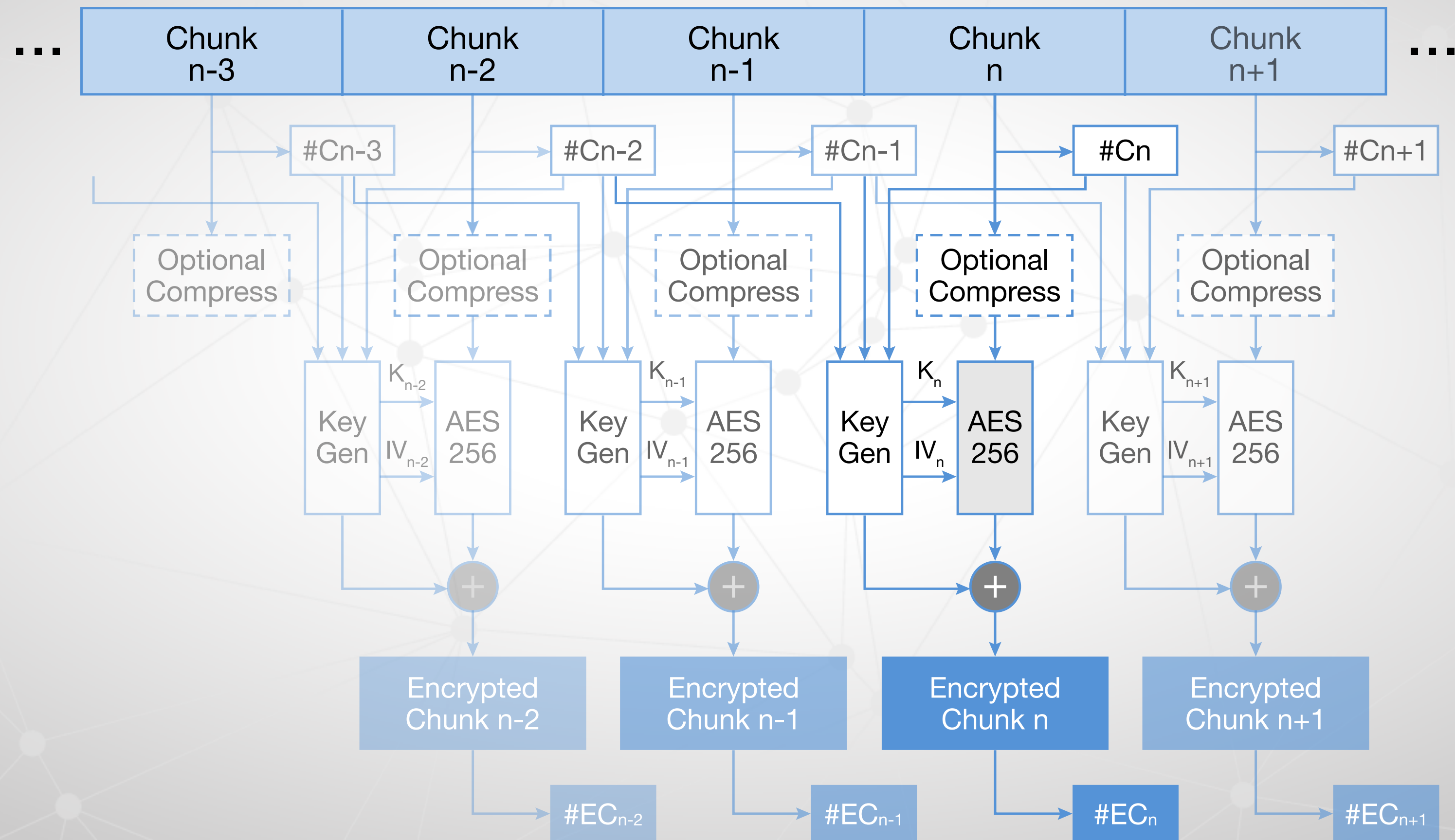
NETWORK LANGUAGE

Put

Client -> ClientManager<->NeaManager->NodeManager->ManagedNode

- Client sends message to his own address on the network
- ClientManagers receive this and check it is a client he has available storage
- They send to the DataManagers which check the from Authority is a ClientManager group and look to see if data is already stored. If so then Finish, else...
- DataManagers send to a PmidManager group.
- PmidManagers check from authority was DataManagers and they store in a node close to the address of the group.
- PmidNode receives this Put and checks the from authority was his PmidManager group.
- Pmid Node stores data. Finish.

SELF ENCRYPTION



TECHNICAL OVERVIEWS

CRUST

https://www.youtube.com/watch?v=Zdt_8c1bWDk

Routing

<https://www.youtube.com/watch?v=ao7ODM7Ndd8>

Sentinel

<https://www.youtube.com/watch?v=VwV1yar6PMw>

Vault

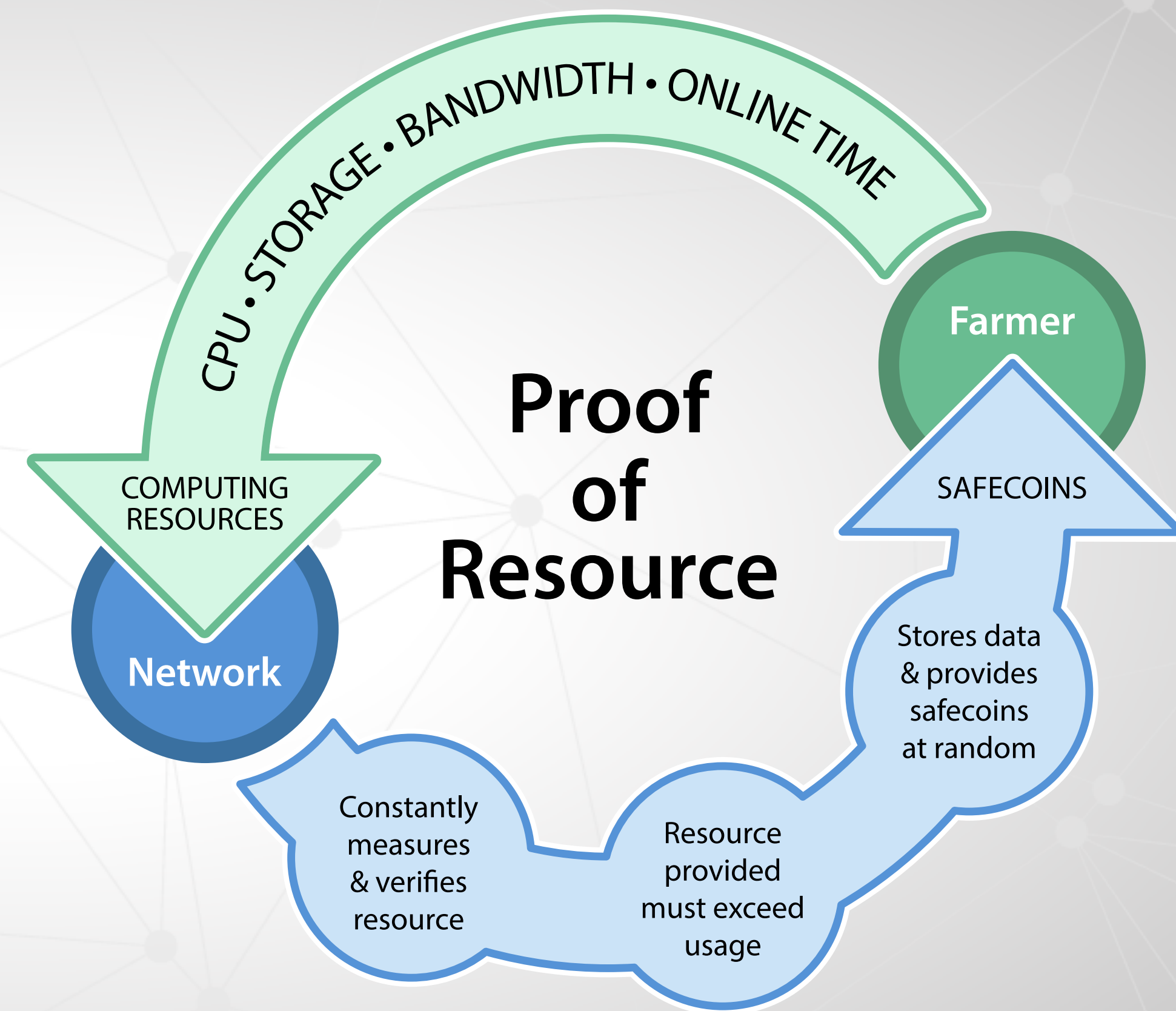
<https://www.youtube.com/watch?v=sKI8i4P66IA>

ECOSYSTEM

Proof of resource

Safecoin

Developer rewards



ECOSYSTEM

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ECOSYSTEM

Proof of resource

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+



HISTORY

Founded in 2006 by David Irvine

Lots of R+D, refactoring

Crowdfunded

Code bounty system

RFC

open source, open development (GPLv3)

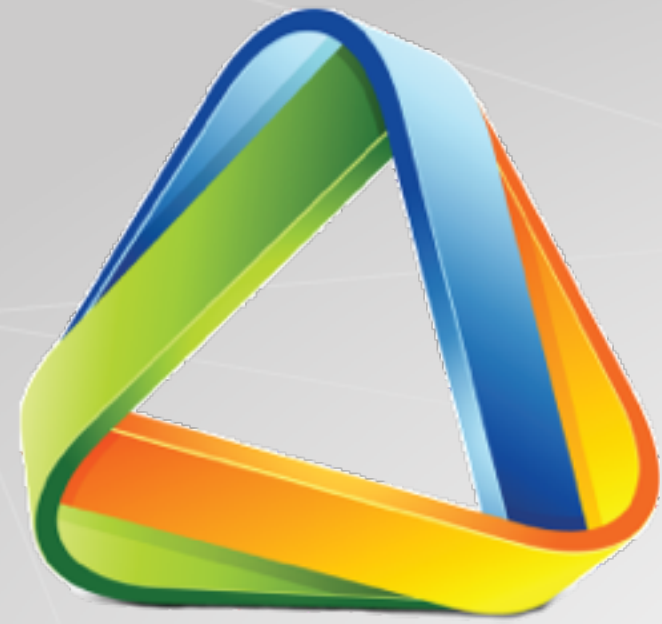
ALL IN ON RUST

10x smaller codebase (and that's after the initial refactoring)

...we cannot short circuit / alter the system of tests/build etc. so we need to work harder to test really. Otherwise we go back to the land of spaghetti and complexity where nobody knows what is happening. We are not going back there ;)

Empowerment of front end developers

Outside contributors



github.com/maidsafe

maidsafe.atlassian.net

crates.io/search?q=maidsafe

forum.safenetwork.io

maidsafe.net



Thanks!!

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