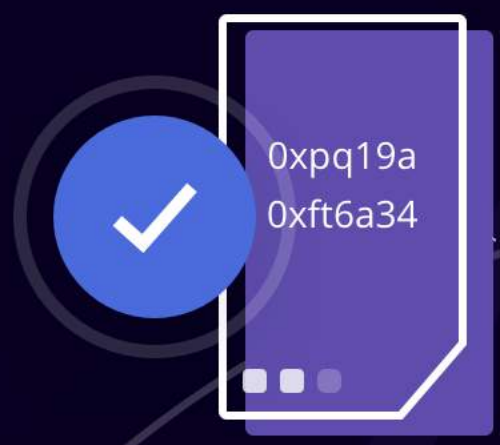
# Verifiable Credentials

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FAQs hosted on GitHub

# Introduction

The internet has transformed every aspect of our daily lives and all of global commerce. It's brought us so far but there are still a lot of limitations that inhibit progress.

What we have today is a world of misinformation, unnecessary intermediaries, and non-compatible systems that reward the abuse of our personal information. Web 2.0 centralization has restricted the machine-to-machine processing potential of the internet, creating unnecessary inefficiencies at great costs.

Blockchains promise the ability to create privacy-protected content with trustless verification, removing intermediaries and producing the necessary conditions for wide-spread, frictionless record sharing and validation anywhere in the world.

Dock is on a mission to bring these promises to reality with an autonomous network making it simple for organizations to issue blockchain-anchored records and take advantage of the transformative power.  The Dock network unlocks universally verifiable data, standards-compliance for interoperability and empowers individuals with ownership and control of important personal data.

# Existing Landscape

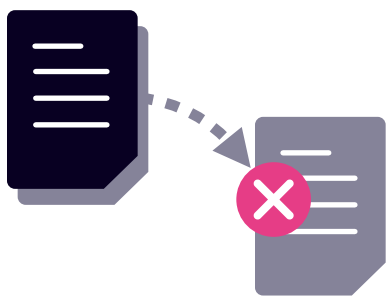
We have identified four points of failure in existing data solutions.

### Inaccurate information

The internet is filled with false claims and inaccurate information which is nearly impossible to track and verify in existing systems.

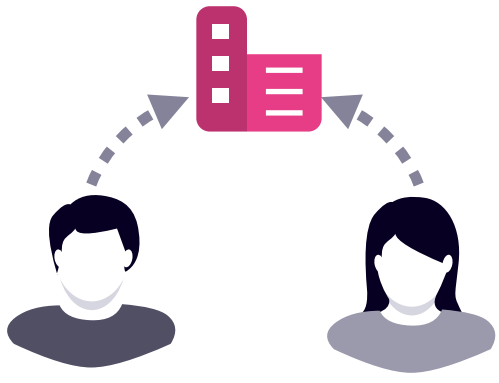
### Intermediaries

Centralized databases create gatekeepers who choose what, where and when, creating friction, slowing down processes and increasing operational costs.



### Lack of compatibility

The vast majority of data online does not adhere to common standards or schemas making data incompatible with other systems.



### No control for users

Internet users are at the mercy of for-profit corporations with sensitive personal information that often gets exploited and abused.

# Our Mission

Enabling an internet of trust - by producing verifiable data and returning control to owners.

# Our Approach

The internet today is a world of misinformation, unnecessary intermediaries, and non-compatible systems that reward the abuse of our personal information.

Dock is changing this by:

- Promoting collaboration and efficiency.
- Enabling organizations to seamlessly produce interoperable and universally verifiable data.
- Returning control to users and data owners.

# Dock Blockchain

In designing Dock's technology stack, priority was given to solution leaders in interoperability, modular and portable code, developer tools and support, scalability, developability and the ability to create seamless experiences for users of the system.

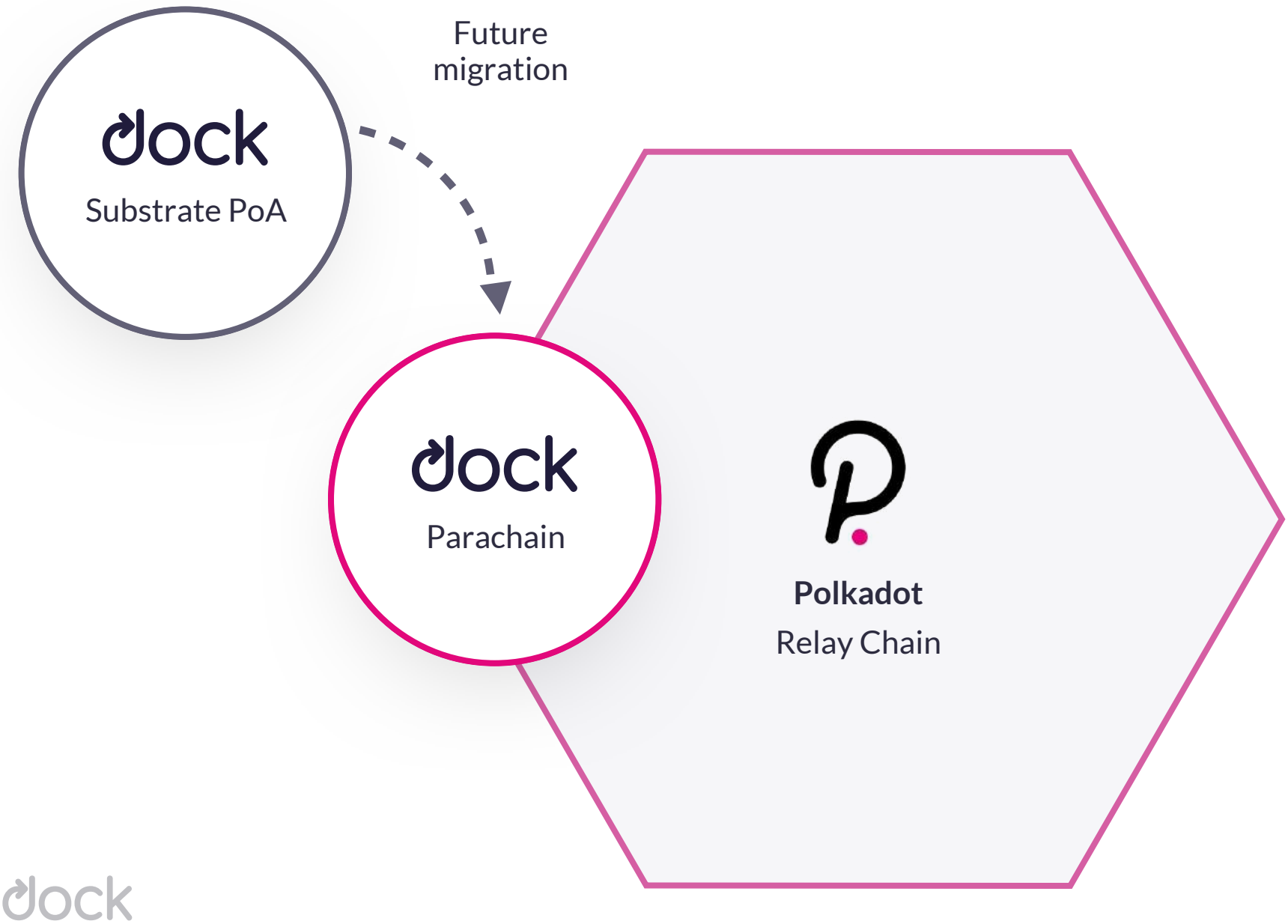
These considerations and a vote from the Dock community, DGP 2, concluded the Polkadot interchain ecosystem would be optimal for Dock. As Polkadot, and the entire ecosystem, are still under active development, our current development roadmap reflects this through a Substrate solochain as the basis for a custom parachain implementation.

## Dock Blockchain

# Consensus

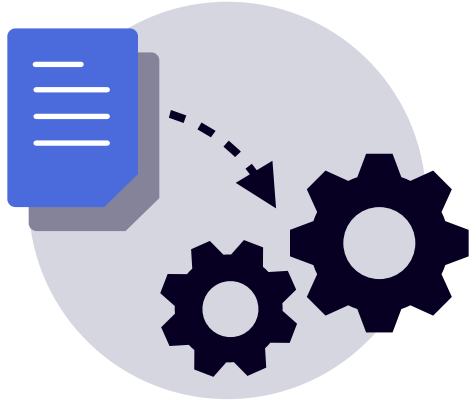
The first incremental release of the Dock network will ship as a Proof-of-Authority(PoA) Substrate solochain implementation prior to a Proof-of-Stake(PoS) “hot-swap” and subsequent custom parachain based on the evolution of the Polkadot network.

Substrate’s on-chain upgrade mechanism enables this evolution from PoA, simplifying development requirements and enabling the Dock network to soft-launch and begin driving value to ecosystem participants without dependencies.



Dock Blockchain

# Participant Roles



## Issuer

Places order for records to be issued.

## Issuing Operator

Executes order as they are placed by Issuers.

## Validator

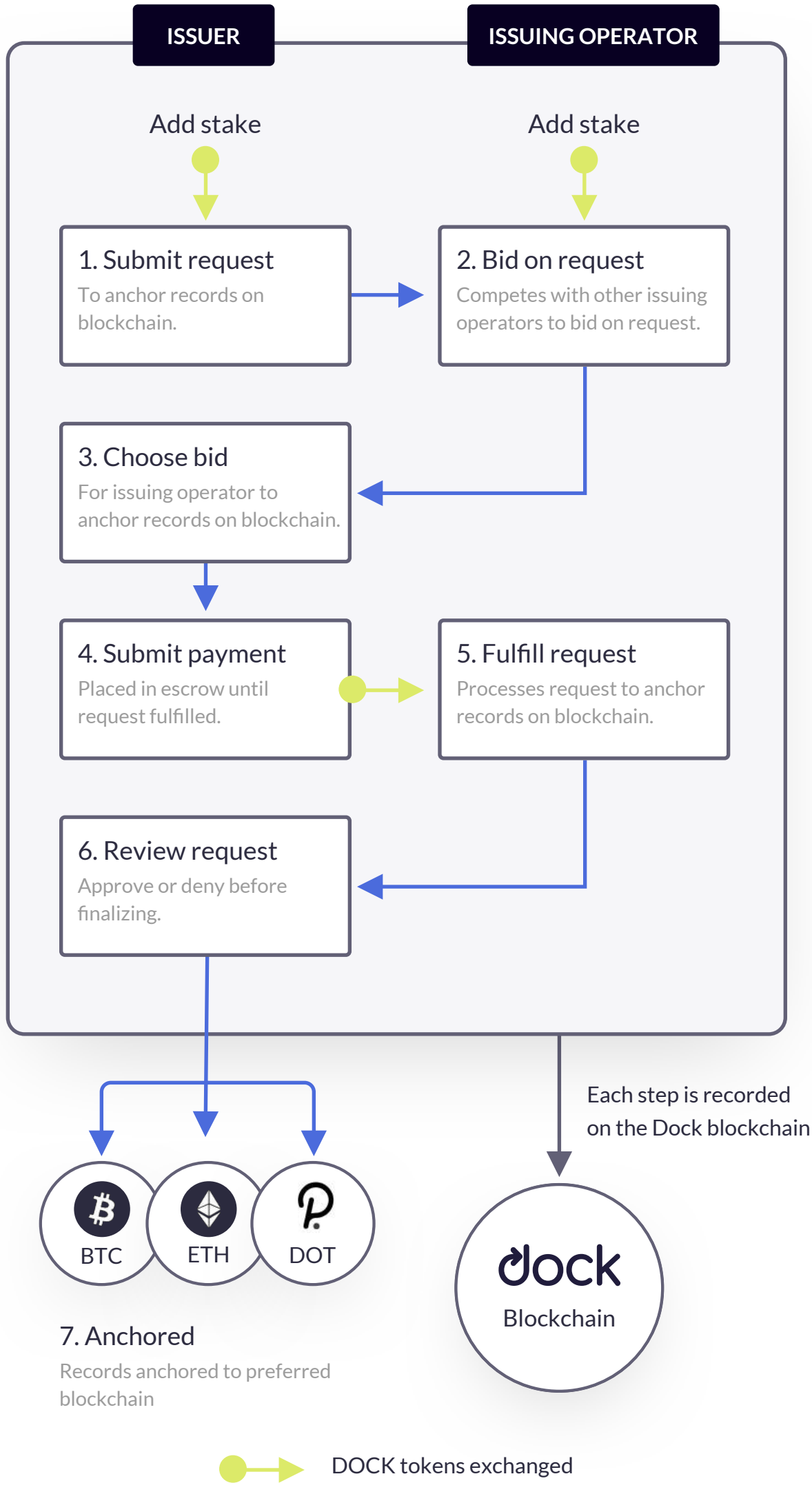
Validates transactions in the network and participates in consensus.

## Voter

Any Dock token holder has the right to vote on proposals and participate in consensus.

Dock Blockchain

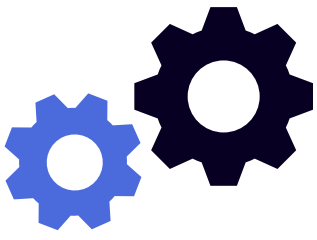
# How it Works



# Dock Token

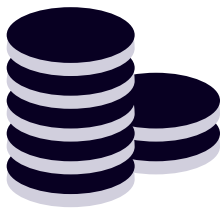
## Governance

Token holders are able to submit proposals and vote on decisions contributing to network governance.



## Operations

Good actors are rewarded for contributing to the network and bad actors are punished by losing stake.



## Transactions

Network participants use tokens to bond and for payments to place requests for issuing and executing those requests.

# Governance

Governance is a vital element of building a decentralized network and Dock is committed to iterating towards a decentralized state.

## Proposals and Voting

Community members are able to submit proposals, as outlined in DGP 1, while DOCK holders cast their votes for decisions that directly influence the success of the Dock network.

## DAO

The ultimate goal of the Dock network is the evolution to a Decentralized Autonomous Organization(DAO) for the issuance of universally verifiable records and claims. The DAO will be directly responsible for the administration, operations, and evolution of the blockchain. This progression towards DAO governance will take some time but we will work closely with best practice solution leaders such as Aragon to accelerate these efforts.

# Use Cases

## Education

Transcripts, exam results, course completion, certifications, awards

## Trade Associations

certifications, trainings, awards, merits

## Government

ID’s, passports, birth certificates, social security docs, death certificates, marriage certificates

## Healthcare

Healthcare records, exam results, licenses

## Workforce

Skills training, awards, industry certification

## Legal

Licenses, patents, wills, court verdicts

# Roadmap

Dock is currently aiming for a Polkadot Parachain implementation in 2020. Here is a breakdown of the current plan for this progression:

## 2019

### Q3-Q4

#### Substrate Core Module Integration

This will begin the integration of modules into our Proof-of-Authority chain for two tokens; a DOCK representation as utility and a proxy token as a temporary stablecoin.

#### Job Scheduler Runtime Module

This runtime module will process job requests, fire events, and accept bids for issuers, delegate jobs and settlement of jobs for  issuing engines.

#### Issuing Engine

This is the core engine implementation for job acceptance, bid response, award acceptance, job fulfillment and escrow management.

#### Staking and Slashing Module

Implementation of core chain and job staking and slashing mechanisms.

## 2020

### Q1

#### Proof-of-Authority

This will be a test chain producing production ready credentials and anchoring to a chain choice for network participants.

### Q2

#### Proof-of-Stake

This is the first stage of evolution from the Proof-of-Authority Solochain to Proof-of-Stake consensus.

### Q3-4

#### Polkadot Integration

Pending network developments by Polkadot we anticipate to be integrated in the Polkadot network at this stage.