DAOs and the Web3 vision
Decentralized Autonomous Organizations
DAOs operate without clear individual liability
DAOs completely **break** the traditional **legal system**
DAOs may be operated by machines, not only humans.
DAOs destroy nation state’s monopoly on governance
Aragon is a project to **empower freedom** by creating tools for **decentralized governance**
Aragon 0.5, The Architect
<table>
<thead>
<tr>
<th>Status</th>
<th>Question</th>
<th>Total Votes</th>
<th>Result</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejected</td>
<td>Token Manager (n-go): Mint 1 tokens for 0xC43B0C4b6d22753C63280F7ffB3e624b2A632830</td>
<td>0%</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Rejected</td>
<td>ACL: Grants 0x214E3A17a5522C6d09B188e3677F3E2006b3E6C6 the ability to perform actions of role 0x5a08927c847d7a29dc35e10f59d8bde5c695139205d17c61cc5d17440e2f on 0xda3bAd5b5d6E870874efC72E2CB1FA73AdB87dA</td>
<td>0%</td>
<td>✓</td>
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<tr>
<td>Approved</td>
<td>Token Manager (n-go): Mint 3 tokens for 0x772080b0D480e808dbE0F4050083B0f9205F629</td>
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<tr>
<td>Approved</td>
<td>Token Manager (n-go): Mint 1 tokens for 0x3bD60babEa8A7768C6F4352A4CfE01701884F12</td>
<td>76.92%</td>
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<td>33.33%</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Rejected</td>
<td>Token Manager (n-go): Mint 1 tokens for 0x772080b0D480e808dbE0F4050083B0f9205F629</td>
<td>33.33%</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Approved</td>
<td>Token Manager (n-go): Mint 10 tokens for 0x772080b0D480e808dbE0F4050083B0f9205F629</td>
<td>33.33%</td>
<td>✓</td>
<td></td>
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</tbody>
</table>
## Permissions

### Browse by app

<table>
<thead>
<tr>
<th>App</th>
<th>Type</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kernel</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>ACL</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>EVM Script Registry</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>Token Manager</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>Voting</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>Finance</td>
<td>View</td>
<td>View</td>
</tr>
<tr>
<td>Vault</td>
<td>View</td>
<td>View</td>
</tr>
</tbody>
</table>

### Browse by entity

<table>
<thead>
<tr>
<th>Entity</th>
<th>Type</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any account</td>
<td>Account</td>
<td>Create new votes</td>
</tr>
<tr>
<td>0x0e02...02c9</td>
<td>Account</td>
<td>Create permissions</td>
</tr>
<tr>
<td>0x6d05...9812</td>
<td>Account</td>
<td>Create permissions</td>
</tr>
<tr>
<td>0x344b...dc7a</td>
<td>Account</td>
<td>Create permissions, Manage apps, Mint tokens</td>
</tr>
<tr>
<td>Voting</td>
<td>App</td>
<td>Create permissions, Modify quorum, Create new payments, Execute payments, Disable payments, Assign tokens, Revoke vesting, Mint tokens</td>
</tr>
</tbody>
</table>
import "@aragon/os/contracts/apps/AragonApp.sol";

contract Counter is AragonApp {
    // ...
    function increment() auth(INCREMENT_ROLE) external {
        value += 1;
        Increment(msg.sender);
    }

    function decrement() auth(DECREMENT_ROLE) external {
        value -= 1;
        Decrement(msg.sender);
    }
}
Smart accounts
Smart accounts (personal DAOs)

- Represents you + supports ENS
- Can have multiple apps (vault, fund recovery)
- Can have rich permissions between apps
- Multi-sig, two factor auth, etc. can be used for **much more than moving funds** around
A Key Split app that gives permission to a set of people to progressively access your funds if:
   a) You haven’t transacted for a month
   b) People can send valid signatures to the app
Smart accounts: Example 2

A Finance app that gives permission to a set of keys to progressively access your funds. Example:

- Key A (MetaMask) can access up to 1ETH/month.
- Key A + Key B (MetaMask + Parity Signer) can access up to 10ETH/month.
- Key A + Key B + Key C (MetaMask + Parity Signer + Ledger) can access all of your funds and change permissions in the DAO.
Smart accounts: Example 3

An **Identity** app that can forward posts to Peepeth on your behalf.
You can **re-use any governance mechanism** and give it **permission** over the Identity app.

Organization-controlled social media accounts. Boom!
osarrouy@macbook:test2 → pando init
initialized[/Users/osarrouy/test2]

osarrouy@macbook:test2 → pando config
? IPFS node URL: http://localhost:5001
? Ethereum node URL: http://localhost:8545
? Account type Unlocked account
? Account: 0xB8B6cccf6DbF56a51f04Ceee5c88ba7F0eBF783bB
[updated]

osarrouy@macbook:test2 → pando remote add origin 0x623c73ebcf1fededea302f728989d8631feccf76
[added]

osarrouy@macbook:test2 → pando pull origin master
[pulled]

osarrouy@macbook:test2 → ls
 test.md

osarrouy@macbook:test2 → nano test.md

osarrouy@macbook:test2 → pando stage test.md
[staged]

osarrouy@macbook:test2 → pando commit -m 'Modifications here'
[snapshot]zdq6yFZ5Ehe51ly51r4Jd9RtVYj5D47mPLUhogbSChV97Jf1D

osarrouy@macbook:test2 → pando push origin master
[error][You do not own PUSH role over remote 'origin']

osarrouy@macbook:test2 →
Aragon Network

An opt-in jurisdiction that facilitates more efficient interactions between blockchain-native digital entities using economic incentives. Users are required to stake digital assets in order to participate in governance and to collateralize subjective agreements. In the event of a dispute a decentralized court serves as an oracle to resolve and enforce agreements between participants. An algorithmic monetary policy manages reserves and issuance of ANT to incentivize participation and healthy growth of the network.

github.com/aragon/whitepaper
Semi-automated voting
“In February, Aragon asked us to do a code review for the aragonOS framework as well as the Finance, Voting and Token Holder applications. We were very impressed with the quality of the code. It is without question one of the most advanced smart contract systems in the space and makes extensive use of many new functionalities within Solidity and at the EVM level. Especially notable is the secure way to deploy a core controller that adds upgradability, the access control pattern (ACL) and its flexible execution engines.”

aragonOS audit by the Whitehat Group
(The guys who hacked The DAO hacker)
Experiment with governance at the speed of software