

Decentralised Direct Democracy

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Abstract

Direct democracy is a form of democracy with a very important contrast to representative democracy. The direct form does away with representative intermediaries between the people and power. The way power has been concentrated in representative democracies has obvious disadvantages in that it's prone to corruption, physical and virtual attacks. One additional adverse effect is alienation with things that are outside the mental bounds of the representatives in power.

By transitioning over to a direct democracy running on as a decentralised system, one might distribute governance of the system as well as distribute power fully to the people. For the system to be trusted by everyone, every fragment of it should be fully inspectable. Corrections for faults in operation should be distributed through the system to its nodes and the most valuable part, the information stored, should never be tampered with.

Keywords

Direct democracy, distributed systems, immutability, dynamic, data driven, information driven, citizen rights, minimal solution

System properties

The system uses well thought out and simple building blocks. By using simple building blocks, one ensures that it's operation is actually inspectable and possible to comprehend in a practical sense. The system is not just open and incomprehensible.

The system is layered as most good systems are, but has some properties which makes it unique.

Longevity

The implementation of different aspects have been placed where they belong. This makes it possible to make use of mature technology which actually have been proven to last for a long time. This is in stark contrast to most systems that has been written to fill a need in government, or for the public in the large or on a personal level.

Resilience

Distribution of communications and replication are important properties for resilience. Since aspects of the system, which give rise to its properties, have been placed where they belong in the stack of software, hardware, networks and people - it should be trivial to scale up and scale down when needed. Scaling down or up in the sense of number of nodes, or covered land mass for operation.

Electrical power

By building the system with simple building blocks and running them on the most effective hardware, it's possible to make it cheap in a lot of ways to actually run a lot of nodes on trivial infrastructure.

Information driven

The term in wide spread use, which used to mean something, is "data driven". Since the term has been hijacked for profit and watered down, the term "information driven" is used here.

All building blocks are built for minimal maintenance. Such maintenance and the changes they might require, is most likely expensive in terms of resources and in terms of time to make the system stabilise operations in a new fashion.

The blocks should listen to what the other blocks provide in the form of instructions generated from the accessible information. This property is crucial for long living systems.

Self-sovereign identity

A lot has been written on the subject so it will not be elaborated here. Self-sovereign identity, which is owned by the individual alone, is a great protection against the fall of banks and governments. It should be chosen as the only way to identify someone, for its longevity alone.

Protection of the system, the runtime and the people

The software license available today that protects both people writing systems as well as the ones using them, is the GNU Affero General Public License (GNU AGPL). In its current form, version 3, it states clearly that all software that is used locally should be free (in terms of liberty), and all software it touches through a network should also be free (as in liberty). Everyone that has access to the software has rights instead of restrictions. This ensures against someone closing down the system and hijacking it for their own purposes.

With clever use of cryptography and physical security, the runtime instances of building blocks ensures operation and availability. Since it's decentralised, no central updates needs to be done - and no sudden downtime is necessary.

A fair number of nodes lowers the risk of somebody else owning the system, in the simple sense, and their eventual unpredictable behaviour. One good government is only good as long as it remains in power. Foreign power seizing control over all information on people, is a disaster waiting to happen. Good protection against such threats, is not letting governments or corporations hold anything on the individuals behalf.

References

- Permacomputing
- Direct democracy
- Self-sovereign identity
- GNU AGPL