

What is Decred?

Decred is an autonomous digital currency that is [governed directly by its voting stakeholders](#)¹. Stakeholders vote to decide whether changes to the consensus rules are adopted. Decred's development is funded by a portion of the block reward, and stakeholders decide how these funds should be spent.

Why is Decred needed?

Decred was born out of its [founders' experiences with Bitcoin's governance](#)². Company 0 developed a Bitcoin full node implementation called btcsuite but became **disillusioned by the process through which the Bitcoin protocol was being governed**. The Bitcoin Core developers and Proof-of-Work miners are strong constituencies that can effectively veto any change to the consensus rules — other stakeholders in the Bitcoin ecosystem have minimal influence. The absence of a clear method of making decisions results in protracted disputes, sometimes culminating in a chain split, whereby a sub-community breaks off and creates an alternative version of the currency, weakening network effects.

Decred [iterates on Bitcoin](#)³ by laying a **foundation of strong governance** to build on, with a formal method of making decisions about the consensus rules baked into the protocol. Decred **avoids over-reliance on specific developers** by allowing the blockchain to fund its own development. It **curtails the power of PoW miners** by establishing a new constituency (PoS voters) to validate their work.

How does Decred work?

“Decred’s killer feature is good governance, and with good governance, you can have any feature you want.” — Joel Monégro & Chris Burniske, [Placeholder VC](#)⁴

Decred uses an innovative **hybrid Proof-of-Work (PoW)/Proof-of-Stake (PoS)** system which capitalizes on the strengths of each approach. PoW in Decred serves the same purpose as in Bitcoin, but miners only receive 60% of the block reward. 30% of the Decred block reward goes to PoS voters, and 10% goes into a project treasury to fund development.

Holders of the Decred currency can participate in PoS voting by time-locking funds in exchange for **tickets**. Tickets confer voting rights, and ticket voting determines:

1. Whether a change to the network's consensus rules is adopted.
2. Whether the work of PoW miners is accepted (thus giving PoS voters power over PoW miners).
3. Which projects the Decred treasury should fund.

The time-locking mechanism ensures that voters have “skin in the game”, and the PoS portion of the block reward incentivizes participation.

Why is there value in Decred?

“Best-in-class governance paired with perpetual funding and an open and collaborative environment with users and developers is the DNA that could achieve a breakthrough in blockchain development. If Decred can achieve this, it can not only become one of the major cryptocurrencies, but a much richer core chain with a thriving ecosystem around it.”
— [BlueYard Capital](#)⁵

1. <https://docs.decred.org/governance/governance/>
2. <https://blog.companyzero.com/2015/11/bitcoins-biggest-challenges/>
3. <https://blog.companyzero.com/2015/12/iterating-bitcoin/>
4. <https://www.placeholder.vc/blog/2018/5/12/decred-investment-thesis>
5. <https://medium.com/@BlueYard/decred-82b284b4a795>

Decred launched in February 2016, following two years of initial work by Company 0. At launch, [8% of the total supply was pre-mined](#)⁶, with 4% being used to compensate the developers for their work prior to launch (at a rate of \$0.49 per DCR) and 4% being freely air-dropped to people who signed up (2,972 participants each received 282.63795424 DCR).

In the early stages of the project, the focus was on implementing and honing the [process for amending the consensus rules](#)⁷. The power to change a blockchain's consensus rules can overrule any other decision within the system. Once the blockchain is up and running, it is likely impossible to change the method of making these decisions, because whoever holds that power is unlikely to relinquish it voluntarily.

The first change to Decred's consensus rules to be adopted was approved by ticket-voters in June 2017, marking the first occasion when any cryptocurrency upgrade was deployed automatically following a user voting approval process.

With the process of adopting changes to the consensus rules working well, Decred's focus shifted to building [Politeia](#)⁸, a platform for governing the project treasury and setting a course for Decred's future development. Politeia is built to deliver critical features for a decentralized governance platform, like transparent and accountable censorship, and a voting system tied to PoS tickets.

The custodians who have administered the project treasury thus far have done so frugally, with an attitude that major expenditures should wait until they can be formally approved by stakeholders. The result is a [treasury](#)⁹ with considerable savings — greater than 570K DCR, which is worth more than \$20 million at September 2018 prices, and represents around 80% of the DCR that has accrued to the treasury from the block reward thus far.

Decred is poised to accelerate its development, in the direction set by its stakeholders. The treasury's large balance will amplify the effect of DCR price increases on its spending power, and its continual replenishment means that long-term developer support is guaranteed.

`“Remarkable characteristics that are a testament to the DNA of the team behind Decred: there was no sale of DCR to investors, no venture funding, and no payment to exchanges to be listed—underscoring that the Decred team and contributors are all about doing the right thing for long-term (as manifested in their constitution for the project).”`
— [BlueYard Capital](#)¹⁰

Decred's hybrid PoW/PoS system also makes it more resistant to majority attacks than pure PoW cryptocurrencies, because both the PoW and PoS components would need to be subverted. To make an apples to apples comparison with Bitcoin (i.e., assume the same market cap, hashrate, and cost of mining equipment), the cost of mounting a majority attack on Decred would be around 22 times greater than Bitcoin.

Decred's **strong resistance to chain splits** also makes this kind of attack much harder to execute in practice, because “secret mining” is not possible. The active participation of PoS tickets is required in every Decred block. The protocol is **hostile to any chain which does not have the ongoing and active support of Decred ticket-holders** — whether that's a temporary chain used to execute double-spend attacks or an attempted hard fork that doesn't have stakeholder support.

6. <https://docs.decred.org/faq/general/>
7. <https://docs.decred.org/getting-started/user-guides/agenda-voting/>
8. <https://docs.decred.org/governance/politeia/>
9. <https://explorer.dcrdata.org/address/Dcur2mcGjmENx4DhNqDctW5wJCVyT3Qeqkx>
10. <https://medium.com/@BlueYard/decred-82b284b4a795>

How is work on Decred organized?

Decred uses a novel **autonomous contractor model** that allows for new individuals, groups, and companies to be paid for contributing to the project. Decred's longstanding developers are open source software veterans and enthusiasts, and so Decred's way of organizing and funding development is designed to fit with the open source ethos. Autonomy of contributors and meritocracy are the key principles around which work on Decred is organized.

Decred's treasury funds are purely for the advancement of the project, free of any other constraints. It is unprecedented for open source projects to have access to this kind of funding. One of the big advantages of [commons-based peer production](#)¹¹ is that contributors can efficiently select pieces of work that fit with their skills and interests. Decred aims to unlock the true potential of this approach by developing a funding model tailored to this new way of working.

Current contributors include:

- 36+ [developers](#)¹² who contribute new code, maintain current code, and implement roadmap features in [Decred's open source software repositories](#)¹³.
- 15 contributors to maintaining and developing various community and media channels.
- 4 marketing professionals who handle event organization, public relations, and digital marketing.
- 8 designers who work alongside the developers and marketing contractors to develop solutions in disciplines of (1) UX/UI, (2) identity, and (3) visual communications.

Decred in Q4 2018

SPV Wallet Support — Instead of taking the typical wallet service approach where wallets connect to a centralized server, we have added support for a proper SPV mechanism that uses compact filters and works over the P2P network, an approach which does more to protect the privacy of users.

Network Security — A large number of ASIC manufacturers have released or announced ASICs for Decred in 2018, and the network's PoW hashrate has increased from around 300 Thash/s in September 2017 to over 100,000 Thash/s in September 2018 - a 333x increase.

Politeia — Decred's governance proposal submission, discussion, and voting platform is almost ready to go live. Politeia is built around the concept of transparent censorship, giving users who are censored the power to prove what was censored and hold administrators accountable. This robust public record of governance proceedings provides a solid foundation upon which to build up the Decred Decentralized Autonomous Entity which will ultimately govern the treasury and the project's direction.

Lightning Network — Lightning Network support is being developed. The two projects' respective lead developers work closely together — LND and Decred are based on btcsuite, which was also developed by Decred's founding developers.

Enhanced User Privacy — This highly anticipated project within the Decred community has been kept under wraps thus far, however the details and an initial implementation are expected to be revealed soon.

11. https://en.wikipedia.org/wiki/Commons-based_peer_production

12. <https://github.com/orgs/decred/people>

13. <https://github.com/decred/>

Get into Decred

The Decred [beginner's guide](#)¹⁴ outlines how Decred works in greater detail, linking to the other documentation pages that explain the various important concepts. It also includes links to where the Decred [community](#)¹⁵ can be found, along with many of the things they are working on.

The Politeia [proposals site](#)¹⁶ is the place to go to see what's currently being decided in relation to the Decred treasury. The [voting page on decred.org](#)¹⁷ shows the latest status of any open consensus rule change proposals.

The [Decred Journal](#)¹⁸ is a community-produced digest cataloging significant developments in the Decred project and wider ecosystem each month.

The [press page on decred.org](#)¹⁹ has links to press coverage and releases.

14. <https://docs.decred.org/getting-started/beginner-guide/>

15. <https://decred.org/community/>

16. <https://proposals.decred.org/>

17. <https://voting.decred.org/>

18. <https://xaur.github.io/decred-news/>

19. <https://decred.org/press/>