



[dacash.org](https://dacash.org)

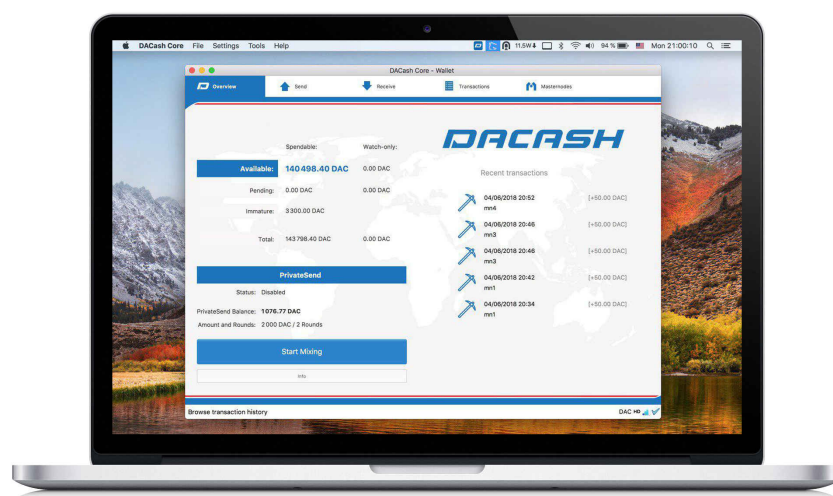
# EXORDIUM

Every day, more and more people understand the change and benefits that cryptocurrencies bring to our world. Cryptocurrency is inherently a morally-neutral technology. By aligning incentives in the morally-neutral nature of cryptocurrencies can be transformed into a positive and powerful force of change in our world. DACASH is an open source cryptocurrency that's designed to offer a greater level of accessibility and user-friendliness than many existing crypto-assets. DACASH is Digital Cash builds on Bitcoin feature set and offers InstantSend payments that confirm in less than one second. DACASH also offers immense security, with all transactions confirmed by of X11 ASIC computing power on distributed servers. The end result is a currency that's easy to use, fast and secure. Since its launch in June 2018, DACASH has built its network and now features about 1000 masternodes around the world. As its known, the decentralisation of cryptocurrency is achieved by the fact that each node of the network is capable of validating transactions independently by storing of its own replica of the blockchain that it can use without relying on other services. Users can share their nodes for connection to others, which is important for network enlargement and speed of initial synchronisation of new connecting nodes and speed of message distribution. At the same time, users do not have to do this, leaving the right to keep their node in a passive mode without publishing it.

The X11 algorithm used to secure the blockchain utilises multiple rounds of 11 different hashes, thus making it one of the safest and more sophisticated cryptographic hashes in use by modern cryptocurrencies. The increased complexity and sophistication of the chained algorithm provides enhanced levels of security and less uncertainty for a digital currency, compared to single-hash PoW solutions that are not protected against security risks like SPOF (Single Point of Failure). Given the speculative nature of digital currencies and their inherent uncertainties as a new field, the X11 algorithm can provide increased confidence for its users and potential investors that single-hash approaches cannot. Chained hashing solutions, like X11, provide increased safety and longevity for store of wealth purposes, investment diversification and hedging against risks associated with single-hash currencies.

DACASH wallets for Linux, Windows, MAC operating systems, in the development of multi-currency wallets for iOS, Android.

DACASH has one of the lowest commissions and high bandwidth. When the DACASH network is under load, the fee is only 0.00001 DAC. Also, there may be no commission if the transaction is sent at a time when the network does not have a high load.



# MASTERNODES

In addition to plain user nodes (wallets), the DACASH network also has an additional layer of services provided by so called masternodes. Masternodes are the same nodes of the network, running the same code as any user's node. They also store a chain of blocks, provide relaying of blocks, transactions, and perform their validation on the same terms as any other network members. In addition, masternodes can provide additional services, the appearance of which makes the DACASH network two-storing, rendering the processing of these services on a separate layer of nodes instead of loading the entire network in total by them. Masternodes provide such services as InstantSend and PrivateSend. In addition, they can vote for governance proposals to distribute reserved budgets to proposal owners. The reward mechanism motivates masternode holders to provide guarantees of their increased accessibility.

Any node can become a masternode. The activation process takes place in two stages: first of all, it's necessary to transfer exactly 1000 DAC, so called collateral, to any own address of this node with one transaction, not more or less. The transaction will get into the blockchain, and the whole network will make sure that this address is capable to sign service messages as a masternode. The next step is to broadcast the masternode data to the whole network via directly connected peers. Those peers, in turn, are checking the validity of the message, and if all is good, they relay the announcement to all their peers. Quite so the masternode data is distributed throughout the network. From this moment the network recognises the existence of a specific masternode and includes it into the voting and reward lists. For the correct operation of the provided services as well as for the honest distribution of rewards from mining across all network masternodes, an untainted way is needed to agree on which of the masternodes will be required to undertake these tasks. In DACash this problem is solved by the algorithm of queue predetermination and the principle of achieving non-trusted quorum. One of services that masternodes provide is **InstantSend**. It relied on the generation of masternodes quorum according to the principles described earlier: determination of the list of the nearest masternodes in the queue, and sending the InstantSend request to all of the nearest nodes in the 10-node queue. The masternodes take a request to create a transaction lock so that the same input could not be used twice in another transaction, but only in the sending transaction. The blocking of the transaction takes for about 4 seconds on the average. Any subsequent attempts to send the transaction with the same output, but inconsistent to the previous transaction id, will be perceived as invalid and will be ignored by the network until the confirmation of the previous already sent instant transaction. InstantSend transactions get 5 confirmations instantly and the next block found provides the final, 6th confirmation. This will be displayed both for the sender and for the recipient.

Another masternode service is **PrivateSend**. It is a service of mixing payments, which is integrated into the DACASH client program (wallet). PrivateSend includes a number of procedures. Preliminary denomination – payments are split into equal parts: 10, 1, 0.1, and 0.01, which prevents tracking by explicit amounts. Every part goes over its own stages of anonymization

- Not all amounts are mixed, but only some of them.
- Exclusively matching by value denominations are being mixed.
- On each step a new mixing masternode is selected.

Mixing happens preliminary. After mixing the amount goes back to the owner into new anonymous addresses, and can be used when it's needed.

The most interesting thing about the masternodes network is that people can freely come and go, that's why the success of this network does not depend on the specific users. It makes the network a decentralised structure. You have to invest 1000 DAC to become a masternode and not to use these coins while the masternode is active and gets paid for its services. It means that you shouldn't withdraw, convert or even send this amount somewhere from your wallet. As soon as you destroy the

result of collateral transaction, your masternode becomes expired; you will lose the right to vote and getting masternode rewards.

## REWARD SYSTEM

Miners and masternode holders get paid for providing network services. Miners secure the blockchain by running Proof-of-Work algorithm using ASIC hardware and paying electricity bills. Masternodes provide other services to the network and also get paid for their availability, paying for servers and resources used. The DACASH block reward is 100 DAC (Decreases by 6.25% per month since block 210000) initially and is split into 50% of reward for the miner found the block, and 50% of reward to the masternode in the payment queue, and total supply is projected to be around 50M DAC.

## ECOSYSTEM

DACASH has established itself as a reliable and at the same time simple system, Reliability in Simplicity!!! DACASH open source code implies one of the most important principles in cryptography, striving for improvement, because mission from remains the same - freedom money. This goal goes beyond the DACASH platform to extend our main ideal. That is why we started to form several different directions for the DACASH ecosystem and begin to develop these directions. Regardless of the different areas that are necessary for the proper operation and scalability of the DACASH ecosystem (Exchange and rating agencies, wallets, mobile applications), each helps to fulfill our mission. In the first part of the DACASH ecosystem, we present a brief overview of DACASH BL & IoT Labs. Over the next few months, we will explain in more detail what each component does to achieve the most important goal: financial freedom for all. DACASH Core is the first stage of work, how the freedom of money looks: safe, secure and fast. From the first day, DACASH offered to present the best way for people investing in cryptocurrencies, be it a beginner or a full active member of the blockchain community, for those who have just begun to show interest.

DACASH BL & IoT Labs: Incubator for Blockchain & Internet of Things projects and Industrial Internet of Things.

DACASH BL & IoT Labs, this support system is holistic it includes all the necessary actions: from incubation and creating new ideas, obtaining initial funds, necessary recommendations and development resources, which DACASH supports, ultimately to connect all nodes and ecosystem forms. We are very pleased to be participants in the next wave of innovative projects that will emerge from DACASH BL & IoT Labs in order to use the full potential of Blockchain & Internet of Things technology, the goal of which is to create convenient and understandable conditions for using these technologies in the world and by any member of the global community. DACASH team is committed to create a globally influential open source community by cooperating with other blockchain communities, third-party developers, and technical innovations. The Ultimate goal of DACASH is to bring blockchain technology into the Internet of Things (IoT), and other industries. Data feeds in conjunction with the logic of regulation are to bridge the real world to the blockchain world. As an open source community, the DACASH team has built a platform that is secure, reliable, and compatible with the Dash community and the Bitcoin system. It also integrates on-chain and off-chain data through technical and conceptual innovation. In order to ensure the sustainable development of the DACASH, the team will refer to investment practices to perform industry analysis and selections and to choose the appropriate industries to implement DACASH technology.

There are some tasks we have to implement first. At the moment we can tell that one of our research areas is the Internet of Things. The number of IoT devices increased 31% year-over-year to 8.4 billion in 2017 and it is estimated that there will be 30 billion devices by 2020. The global market value of IoT is projected to reach \$7.1 trillion by 2020. The Internet of Things (IoT) is the network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect and exchange data, creating opportunities for more direct integration of the physical world into computer-based systems, resulting in efficiency improvements, economic benefits and reduced human intervention. IoT frameworks might help support the interaction between "things" and allow for more complex structures like distributed computing, consumer applications, infrastructure applications, enterprise applications. IPv4 address space is limited (4 bytes). MAC address space is a bit better (6 bytes), but IPv6 is practically endless. DACASH Core supports IPv6 as well as Tor/Onion wallets/nodes. We have some ideas regarding IoT devices connected to DACASH Core nodes using IPv6. Currently, some IoT frameworks seem to focus on real-time data logging solutions, offering some basis to work with many "things" and have them interact. DACASH Core provides this type of functionality for the Internet of Things. Currently, scientific research has been completed and the project is moving to the next phase of development and testing of the DACASH BL & IoT module for a complex solution based on the IIoT and blockchain.

## IIOT

Industrial Internet of Things (Industrial Internet of Things, IIoT) - or the Internet of Things for corporate / industry use - a system of integrated computer networks and connected production facilities with built-in sensors and software for data collection and exchange, with the possibility of remote monitoring and control in an automated mode, without human intervention. The industrial IIoT ecosystem is formed by all the components and players necessary to ensure its functioning - manufacturers of sensors and other devices, developers of application software and platforms, system integrators, telecom operators and customers (consumers) of solutions.

The key driver for the implementation of the IIoT concept is the possibility of increasing the efficiency of production and technological processes, while reducing capital expenditures. Technologies allow enterprises to reduce downtime (up to 10%), reduce maintenance costs, and improve forecasting procedures and prevent equipment failures (by 10%). Ultimately, the introduction of IIoT contributes to increased productivity, having a significant impact on the economy.

Under the influence of IIoT, all economic models of building supplier-consumer interaction are being transformed. As a result, effective self-optimizing chains from supplying companies to end-user companies can be organized; sharing models can be launched, etc. Management and decision-making functions are transferred from human to intelligent systems, which lead to a change in the "paradigm" of technological development, also called «the fourth industrial revolution». The integration of operating and information technologies will enable the transition to new business and service models, such as Digital Twins, and equipment as a service. At the same time, the demand for complex solutions is being formed on the basis of IIoT.

One such solution is the DACASH BL & IIoT modules and software for provider-to-consumer interaction based on open source code that implements the IPv6 layer on top of IEEE 802.15.4 and the PLC, which is an open protocol standardized by the IETF, is considered particularly important for the development of the "Internet of Things", which makes it possible to use blockchain (BL) & IoT to reassess cryptocurrency scalability in real sectors of the economy. Which will be major breakthrough in adopting blockchain technologies for corporate / industry use.

# RESEARCH

Research from the blockchain shows that the DACASH network is similar to Dash network can scale on-chain, to over half of PayPal's current transaction levels with ease.

The newly-released research paper, titled Block Propagation Applied to Nakamoto Networks, explores the viability of scaling the Dash network to mass levels on-chain primarily through increasing the block size. The paper specifically explores propagation techniques to minimize the orphan rate at high levels.

Our research concluded that DACASH analogically Dash can easily scale to 10mb blocks with only a 0.1% orphan rate. DACASH block interval is 2.5 minutes, compared to Bitcoin 10, making this block size roughly equivalent to a 40mb block size for Bitcoin, this would increase DACASH capacity to rival major global payment networks.

10 MB blocks would be able to process around 120tx/sec. This is just over half of what PayPal processes on average.

If some software optimizations are thrown in we feel DACASH can support much more without a major hardware upgrade. Of course, DACASH ace up our sleeve is that if hardware upgrades are ever needed, the resources will be available for DACASH.

Considered that on-chain scaling is a viable solution and that over the next few years we will find that on-chain scaling is more viable than other scaling techniques being explored.

The majority of research on blockchain networks has been on the specific subject of Bitcoin, from which other similar cryptocurrencies have drawn their own conclusion, but just as important that it is important to have this type of research done specifically for certain cryptocurrencies such as DACASH, rather than simply apply Bitcoin-specific research.

DACASH like other cryptocurrencies needs dedicated research if it is ever to be widely trusted as a global payments network by businesses and users around the world, it wouldn't be advisable to build a global payment network without knowing what the saturation limits are. Ideas that look good in theory need to be tested experimentally in order to prove their potential.

Consumers using a particular technology today might just as easily migrate to any other technology if they don't get the best or don't feel secure about the future, which can easily be achieved by a hybrid system of consensus PoW / MN in combination with the DACASH BL & IoT module, do not require increased Plug and Play knowledge, which for most users is not enough, many are repelled by the complexity of all processes or do not understand the trivial ones, and studies show that women are more interested in both business and technologies, which, in turn, can give a new impetus to the introduction of technology by the majority in the business and, thus, facilitate the use of technology in various business areas, in order for them to invest in and use a global payment DACASH for their daily payments, they must know that the developers is investing their time to provide an experimentally and pragmatically scalable network.

# EVOLUTION

Will be many applications and end-user solutions developed using the DACASH. DACASH Core will provide support for business development by using industry focused consensus mechanism and incorporating regulatory requirements. DACASH also can support many industry application requirements, such as finance, logistics supply chain, social and gaming, charity, digital assets, stocks, etc. Through collaboration with business partners and integration of resources from companies, businesses, technology communities and governments, the DACASH will make the most efficient use of shared resources to achieve synergetic development with society.

In order for crypto active to be classified as currencies, they must correspond to the basic functions of money - to be a unit of accounting, means of accumulation and exchange.

Contrary to popular belief about stability, if a cryptocurrency wants to gain broad acceptance, volatility is needed. The price of DACASH is the best and most transparent way to determine the health of an ecosystem.

Volatility shows the world that something is happening, whether it is rising or falling prices.

The market price of DACASH will be quite volatile in the initial stages. Since it is a PoW/MN blockchain, it always needs some investment into the mining hardware and electricity. Thus, miners should not allow dropping the price, which in turn does not interfere with make dropping prices the MN holders. Expected to make x11 ASIC mining DACASH attractive. We refuse aggressive advertising, believing in our ways and goals set for DACASH. The advertisement campaign should be clear and smooth, targeted at miners and potential investors first, end users next. We are interested in slow but stable growth of the DACASH community. We don't like an idea of SPAM ads, cheap crypto-forum ads, off-topic ads, aggressive social network ads. Instead, we prefer a quiet launch and gradual access to the crypto currency market in order to justify the hopes of people who believe in DACASH and see the perspective in the system as a whole. We are interested in global strategic partners, who in the early stages will be able to render invaluable support to the DACASH start-up, in any information direction, in development, integration, scalability. In turn, we suggest that early partners become masternode operators in order to take full participation in the further joint development of the project. DACASH have a budget of 1'000'000 DAC for listing to exchanges, financial and masternode monitoring sites, advertisement, supplemental services, software development (own and contract/freelance developers). The preferred way of payment is in DAC unless there is an established scheme (particularly, for exchange listings). DACASH ultimate goal is to stay in the crypto-currency industry for a long time.

## PRIVACY

DACASH Core team takes privacy seriously. This is due to the fact that the team appreciates the confidentiality of individuals and organizations. Recently, fake and deliberately false news about a number of well-known projects or team members, which negatively affect the project, often results in direct or indirect losses ordinary users of the ecosystem, against the background of such shocks, at many users and government is created the impression that the crypto industry in general is unreliable.

By very nature of the blockchain, it is extremely important that the teams take precautions that limit the impact of any factor that could adversely affect the development of the projects.

DACASH team believes that it is extremely important to be as careful as possible in the modern world of technologies where factors of publicity may not contribute to the development of a confidential decentralized blockchain project, and only vice versa turn it into a centralized and vulnerable project, if you can influence the developer by any legal or illegal methods, Consequently you can manipulate the project, which is contrary norms to privacy and freedom of opinion. DACASH (DAC) created by enthusiasts and real fans of blockchain technologies from different parts of the world. No investors, No ICO, the project was completely created at the expense of developers. Also, work is actively underway to fulfill the goals set in accordance with the roadmap.

DACASH (DAC) not Security or Utility token, DACASH (DAC) coin based on open source code.

According to the Howey test, the Token will be considered securities subject to the fulfillment of all three points listed below:

1. Confirmed the fact of investing money.
2. to a common enterprise.

3. with the expectation of making profit mainly as a result of the activities of other persons.

The characteristics DACASH (DAC) coin does not fulfill the conditions of all the points, but have three main advantages of decentralized digital currency:

1. Resistance to censorship.
2. Impeccable transactions.
3. Confirmed history.

SEC - Bitcoin and similar coins are not securities - "Bitcoin can replace the dollar, the yen or the euro, so we cannot attribute it to the class of securities"

## OPEN SOURCE

In the DACASH team we believe in openness and transparency, we support the open source idea, all of our developments will be made available to everyone on our GitHub repository

(<https://github.com/dacash-official/dacash>). Open sourcing our project will help to promote innovation. We welcome contributions from anyone who wishes to improve the project.

This project would not be possible without the previous work of the Bitcoin and Dash development teams. We appreciate their efforts greatly. We are excited to belong to an open source community and appreciate the opportunity to contribute to this growing technological field. In addition, we thank the passionate members of the DACASH community who have grown this project and participated actively in the evolution of DACASH.

## RISK FACTORS

The purchase of DACASH (DAC) coin may be associated with a high degree of risk. To protect the interests of DAC coin potential purchasers, the DACASH team conducted an analysis of such potential risks and outlined the result of this analysis in this chapter. IMPORTANT: THE LIST OF RISK FACTORS DESCRIBED BELOW IS NOT EXHAUSTIVE. IN ADDITION TO THE RISKS DISCLOSED IN THIS WHITEPAPER, THERE MAY BE EXISTING OTHER RISKS WHICH OUR TEAM AT PRESENT CAN NOT REASONABLY FORECAST. These risks can materialise in other forms of risk than those specified here. Prior to acquiring coins, each potential coin purchaser is advised to carefully review all the information and assess the risks of such purchase, including but not limited to, the risks set forth in this document and to decide upon purchase of coins based on such assessment.

- 1) Technical and technological risks.
- 2) Regulatory Risks.
- 3) Business risks.

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The logo for DACASH, featuring the word "DACASH" in a bold, blue, sans-serif font with a slight italicized or slanted appearance.