



# **F**roximity

Cryptocurrency and digital  
distribution platform  
White Paper

Revision 0.1 December 25 2018  
[proximity.cash](http://proximity.cash)

## Content

<b><i>What is Proximity?</i></b> .....	<b>2</b>
<b><i>What do we offer?</i></b> .....	<b>3</b>
<b><i>Proximity coin specifications</i></b> .....	<b>4</b>
<b><i>Proximity block rewards</i></b> .....	<b>5</b>
<b><i>Store Market Analysis</i></b> .....	<b>6</b>
Modern app stores: .....	6
Origin.....	6
Uplay .....	7
GOG.com.....	7
Epic Games Store.....	8
Itch.io.....	8
Steam.....	8
<b><i>DRM Market Analysis</i></b> .....	<b>10</b>
Denuvo Anti-Tamper .....	10
Valve DRM .....	11
Uplay DRM .....	11
Origin DRM .....	11
<b><i>Proximity Shop features</i></b> .....	<b>12</b>
<b><i>Proximity DRM features</i></b> .....	<b>13</b>
<b><i>Algorithm, masternodes, earn PROX</i></b> .....	<b>14</b>
Quark.....	14
Masternodes .....	15
<b><i>Anonymity</i></b> .....	<b>17</b>
<b><i>Maximum supply</i></b> .....	<b>18</b>
<b><i>Exchanges and trading</i></b> .....	<b>19</b>
<b><i>Strategy</i></b> .....	<b>20</b>
<b><i>Pre-mine, ICO</i></b> .....	<b>21</b>
ICO roadmap .....	21
<b><i>ROI</i></b> .....	<b>22</b>
<b><i>Target markets</i></b> .....	<b>23</b>
<b><i>Our links</i></b> .....	<b>24</b>



## What is Proximity?

**Every year** the number of digital distribution increases.

Many manufacturers have finally abandoned the sale of their product on carriers.

At the same time, there is still no convenient platform where you can legally and conveniently pay for applications and install them on your PC or mobile.

Windows Store and App Store cannot fully cover the market due to the slow moderation system and the reluctance of software vendors to add their software there in order not to lose profits.

Therefore, each manufacturer has its own distribution platform, which causes inconvenience to all consumers.

At the same time, there are a lot of DRM systems on the market that most of them use an inconvenient license checking system through the company's server, so most software does not work in offline mode.

According to research, many users use pirated content, not because it is free, but because it is much more convenient than looking for a platform to download software.

At the same time, we are launching a coin to service our platform.



## What do we offer?

**We are creating the largest market** for distribution, which will include not only software and PC games, but also software and mobile games, music, images and movies.

The distribution client will have a built-in system for digitally signing content so that each developer can upload his product to the platform, but also prove ownership of the product.

How it will work will be described below.

## Proximity coin specifications

<b>Type</b>	PoS/MN
<b>Coin name</b>	Proximity
<b>Ticker</b>	PROX
<b>Algorithm</b>	Quark
<b>Block time</b>	60 sec
<b>Supply</b>	40.000.000
<b>Premine</b>	300.000 (0.7%)
<b>MN Collateral</b>	4000 PROX

## Proximity block rewards

**80% MN**

**20% PoS**

<b>Block 0 – 2</b>	Premine (300.000 PROX ~0.7%) / Blockchain tests
<b>Block 3 – 500</b>	1 PROX (10.4 Days) (PoW)
<b>Block 500 – 2000</b>	3 PROX (PoW)
<b>Block 2000 – 5001</b>	3 PROX (PoS start)
<b>Block 5.001 – 30.000</b>	5 PROX (10.4 Days)
<b>Block 30.001 – 45.000</b>	10 PROX (10.4 Days)
<b>Block 45.001 – 60.000</b>	15 PROX (10.4 Days)
<b>Block 60.001 – 75.000</b>	20 PROX (10.4 Days)
<b>Block 75.001 – 90.000</b>	25 PROX (10.4 Days)
<b>Block 90.001 – 100.000</b>	35 PROX (10.4 Days)
<b>Block 100.001 +</b>	5 PROX (~76 Years)

## Store Market Analysis

### Modern app stores:

- a) Origin
- b) Uplay
- c) GOG.com
- d) Epic Game Store
- e) Itch.io
- f) Steam
- g) Windows Store
- h) Apple App Store

**Origin** is an online gaming, digital distribution and digital rights management (DRM) platform developed by Electronic Arts that allows users to purchase games for PC and mobile platforms. A macOS client was released on February 8, 2013.

Origin contains social features such as profile management, networking with friends with chat and direct game joining along with an in-game overlay, streaming via TwitchTV and sharing of game library and community integration with networking sites like Facebook, Xbox Live, PlayStation Network, and Nintendo Network. In 2011, Electronic Arts stated that it wanted Origin to match Valve Corporation's Steam service, Origin's primary competitor, by adding cloud game saves, auto-patching, achievements, and cross-platform releases. By 2013, Origin had over 50 million registered users.

It cannot be our competitor, because it sells only games from EA.



Of the benefits can be noted subscription system for access to all games

Relevant only because the EA games can only be found in Origin.

**Uplay** is a digital distribution, digital rights management, multiplayer and communications service developed by Massive Entertainment to provide an experience similar to the achievements/trophies offered by various other game companies. The service is provided across various platforms (PC, PlayStation 4, Xbox One, Wii U, PlayStation 3, Xbox 360, Facebook, iOS, Android, Windows Phone, OnLive). The Uplay app for the Wii U was released after the launch of the console on 1 December 2012 on the Nintendo eShop. Uplay is used exclusively by first-party Ubisoft games, and although some third-party titles are sold through the Uplay store, they do not use the Uplay platform.

Responses to the platform have been generally negative, with coverage comparing it negatively to its competitors and calling it the worst part of Ubisoft's games.

**GOG.com** (formerly Good Old Games) is a digital distribution platform for video games and films. It is operated by GOG Sp. z o.o., a wholly owned subsidiary of CD Projekt based in Warsaw, Poland. GOG.com delivers DRM-free video games through its digital platform for Microsoft Windows, OS X and Linux. In March 2012, it began selling more recent titles such as Alan Wake, Assassin's Creed and the Metro Redux series, among many others.



**Epic Games Store** is a digital video game storefront operated by Epic Games. It launched in December 2018.

Appeared as a rival Steam.

Pros - low shop commission, lower commission for games on the UE engine, direct connection with the developer.

Cons - direct moderation of comments, closed system of moderation of ratings and comments, no client for Linux

**Itch.io** is a website for users to host, sell and download indie video games. Released in March 2013 by Leaf Corcoran, the service hosts nearly 100,000 games and items as of February 2018.

Unpopular store and has only indie games.

**Steam** is a digital distribution platform developed by Valve Corporation for purchasing and playing video games. Steam offers digital rights management (DRM), matchmaking servers, video streaming, and social networking services. Steam provides the user with installation and automatic updating of games, and community features such as friends lists and groups, cloud saving, and in-game voice and chat functionality.

The software provides a freely available application programming interface (API) called Steamworks, which developers can use to integrate many of Steam's functions into their products, including networking, matchmaking, in-game achievements, microtransactions, and support for user-created content through Steam Workshop. Though initially developed for use on Microsoft Windows operating systems, versions for macOS and Linux were later released. Mobile apps with connected functionality with the main software were later released for iOS, Android, and Windows Phone in the 2010s.



The platform also offers a small selection of non-video game content, such as design software, anime, and films.

The Steam platform is the largest digital distribution platform for PC gaming, estimated in 2013 to have 75% of the market space. By 2017, users purchasing games through Steam totaled roughly US\$4.3 billion, representing at least 18% of global PC game sales. By early 2018, the service had over 150 million registered accounts with a peak of 18.5 million concurrent users online. The success of the Steam platform has led to the development of a line of Steam Machine microconsoles, which include the SteamOS operating system and Steam Controllers, and various virtual reality devices using SteamVR such as the HTC Vive.

**Pros** - a large selection of products, an open system of ratings and comments, a simple system of return of goods, VAC (Valve Anti-Cheat), an application for all platforms. Own DRM system.

**Cons** - high commission of the store, new games are lost and practically have no opportunity to break into the top and get advertising, there is no subscription system.

**The main competitor.**



## DRM Market Analysis

**Denuvo Anti-Tamper, or Denuvo**, is an anti-tamper technology and digital rights management (DRM) scheme developed by the Austrian company Denuvo Software Solutions GmbH, a company formed through the management buyout (MBO) of Sony DADC DigitalWorks.

The most popular digital distribution protection system. Used in most modern games and applications. Uses a permanent encryption system, which complicates hacking the system.

Pros (from denuvo.com website):

1. Best-of-breed technology provides longest crack-free release window compared to competitors
2. Fastest and easiest implementation without an SDK or the need to change the source code
3. Cross-platform technology solution compatible with desktop, mobile, IoT, console and VR devices among others in order to meet unprecedented security challenges.
4. Flexible solution protects any type of Application
5. No limitation or effect on the legitimate user

Some consumers have alleged that Denuvo Anti-Tamper shortens the lifetime of solid-state drives (SSDs) by writing an excessive amount of data to the drive. Denuvo Software Solutions claims that "Denuvo Anti-Tamper does not constantly read or write any data to storage media," calling it a "wrong rumor," since it doesn't perform read or write operations. Games with Denuvo Anti-Tamper state in EULA that "certain files of the anti-tamper technology may remain even after the product is uninstalled from your computer."



An issue with Denuvo arose in 2018 in the game Tekken 7, where Katsuhiro Harada, the director of the game, confirmed that it was indeed Denuvo which was causing drastic frame-rate drops in a recent update to the game, causing an outcry among the gaming community. Another issue with Denuvo appeared in July 2018 in the game Sonic Mania Plus. The developer Sega released a new update for Sonic Mania that features a new version of the Denuvo anti-tamper tech. According to users, this new change caused slowdowns when navigating certain menus.

**Valve DRM**

**Uplay DRM no details. Build-in DRM.**

**Origin DRM**

## Proximity Shop features

We analyzed the market and will use all the most successful cases.

1. Payment by Fiat and Cryptocurrencies
2. Subscription system
3. Offline access to content
4. Own DRM system
5. Transparent comments and ratings system.
6. 100% protection against account compromise due to blockchain entries
7. Clients for all large platforms
8. 7% fixed commission
9. Marketplace
10. DRM system

## Proximity DRM features

1. Opportunity to get a digital signature for free
2. The cost of an DRM is 1% of the product revenue per month.
3. No load on the device
4. Blockchain authentication
5. Free transfer of the DRM system in case of updating

## Algorithm, masternodes, earn PROX

**Quark** is an algorithm for mining cryptocurrency based on a one-level hash function, which consists of 9 levels of encryption by six different cryptographic algorithms. Quark is not demanding for large amounts of RAM. Also, the Quark has a high 64-bit protection against hacker attacks. Quark is remarkable for its low power consumption.

Quark algorithm was developed by Jean-Philippe Aumasson, Willi Meier, Maria Naya-Plasencia and Luke HanseDom in 2013. A distinctive feature of Quark is the parallel use of 6 hash functions, namely:

- Grostl;
- Blue Midnight Wish;
- Keccak;
- JH;
- Skein;
- Blake.

The need to create a Quark is explained by the needs of application developers working with the RFID Protocol, which requires a lightweight hash function. For example, the Protocol used in SHA-3 aimed at software for personal computers.

The Quark algorithm is used in consensus-building mechanisms Proof-of-work and Proof-of-stake to increase security and certainty while maintaining the health of the cryptocurrency ecosystem. Comparing with the algorithm Bitcoin SHA-256, Quark is protected from the danger of a single point of failure (SPOF – Single Point of Failure), which is able to stop the entire system. If you identify the problem part in the

Quark algorithm, the vulnerability can be eliminated by replacing the hash function.

It is important to add that at the core of their cryptocurrency are objects of investment, and the use of the algorithm Quark, provides confidence in the safety of digital assets, as well as guarantees a high level of security.

**Masternodes**, once unique to the Dash network, are now becoming popular as the technology is forked into other blockchains.

Simply put, a masternode is a server with a full copy of the blockchain, which guarantees a certain minimum level of performance and functionality to perform certain tasks related to block validation, as well as PrivateSend and InstantSend, as the anonymity and instant transaction features. The masternodes are paid for this service, using a concept known as Proof of Service. This is in addition to the Proof of Stake done by miners to secure the blockchain. Masternodes are also allowed to vote on governance and funding proposals, with each masternode receiving one vote (yes/no/abstain) on each proposal submitted to the system.

Anyone can run a masternode. The objective is to have enough decentralization to ensure that no single person controls a significant fraction of the masternodes. However, to avoid bloating the network with unnecessary masternodes or encouraging reckless operators, there is one condition that needs to be fulfilled: proof of ownership of 4000 PROX. The coins don't need to be in the masternode, but they need to be kept in a certain way that is transparent to the entire network. If the owner moves or spends those coins, the masternode stops working and payment ceases.





Masternodes are paid by the network for the PrivateSend, InstantSend and governance services they provide. 80% of the block reward is paid out to the masternodes, 20% to miners. Masternodes are selected for payment in each block (approximately every 1 minute) from a deterministic masternode list, and moved to the back of the list after payment. As more masternodes are created, the duration between payments increases. If the collateral behind a masternode is spent, or if a masternode stops providing services to the network for more than one hour, it is removed from the list until normal service resumes. In this way, masternodes are given incentive to provide efficient and reliable services to the network.

## Anonymity

**Proximity payments can be if needed**, completely anonymous using ZeroCoin protocol. This is done by breaking up a payment into multiple parts and combining the parts with other transactions. Most cryptocurrencies while they do provide a layer of simple anonymous capabilities, can eventually be traced. This is true of Bitcoin and most of the major altcoins, but Proximity takes anonymity to a very deep level providing complete protection from detection.

## Maximum supply

**The maximum number of coins that will ever exist for Proximity is approximately 40 million.** This means that after all coins are created, no more coins can ever be made. This stands in stark contrast to fiat currencies, that are inflationary and are printed “as needed” by the US Central Bank which creates a destabilizing effect on the value of the US Dollar and has led to a number of financial crises. Proximity (PROX) is celebrated by supporters and admonished by skeptics because of its finite supply. There are only approximately 40 million PROX that can ever be minted, regardless of the earth’s population and its corresponding demand for PROX. Once all 40 million have been minted, there will never be any new PROX (unless a change to the protocol is made to increase the supply). It is estimated that minting will continue for approximately 80 years and provide an extended time period as an incentive to stakers and masternode holders to continue to secure the network and process transactions.

## Exchanges and trading

**Cryptocurrencies** are speculative, highly volatile and very risky. They may also be illegal where you live. We encourage you to consult a licensed financial advisor and legal counsel before investing in cryptocurrencies of any kind and do your own research. PROX coins will be available for purchasing and trading on multiple exchanges and will become more available as we continue to advance our network reach.

At the time of this writing, PROX roadmap planned like this:

1. Crex24 (1 BTC)
2. CoinExchange (3-5 BTC)
3. CryptoBridge (3-5 BTC)
4. Coinbase (No fee)
5. Investors vote



## Strategy

**At the time of writing, we have a clear vision of the development strategy for the first half of 2019.**

First we need to hold a successful presale. You can find a plan for spending and income in the chapter "pre-sell".

We need to develop a PR company, establish contacts with publishers and developers, release an alpha version of the platform.

One team will work on contracts and contracts with developers and publishers.

The second team will be engaged in PR company on third-party sites that are of interest to publishers.

The third team will develop the store.

Throughout the development and support of the project, we will publish news in our social networks.

At the end of the presale company, we will increase the headquarters of developers.

## Pre-mine, ICO

Pre-mine for Proximity will be 0.7% (around 300.000 PROX).  
For ICO stage pre-mine will be used for staking to prevent DDOS attack and for blockchain stability.

### ICO roadmap:

1st masternode 0.15 BTC  
5 masternodes 0.2 BTC  
5 masternodes 0.25 BTC  
5 masternodes 0.3 BTC  
5 masternodes 0.35 BTC

Total: 21 masternodes  
Earn: 5.65 BTC

Funds will be spend for:

1. **Crex24.com** 1 BTC
2. **MNrank.com** 0.09 BTC
3. **Masternodes.online** 0.35 BTC
4. **KYD verification** 0.1 BTC (5000 KYD current price)
5. **CoinExchange.io** 3 BTC
6. **Coinbase** (no fee)
7. **Marketing company.** One of most important and expensive parts.
8. **Hiring workers.** Developers, designers and moderators.  
About 2 BTC.

*Rest part of PROX pre-mine will be spent for bounties, rewards and early marketing.*



# ROI

MN/Reward	1	3	5	10	15	20	25	35	5
1	3456	10368	17280	34560	51840	69120	86400	120960	17280
2	1728	5184	8640	17280	25920	34560	43200	60480	8640
3	1152	3456	5760	11520	17280	23040	28800	40320	5760
4	864	2592	4320	8640	12960	17280	21600	30240	4320
5	691	2074	3456	6912	10368	13824	17280	24192	3456
6	576	1728	2880	5760	8640	11520	14400	20160	2880
7	494	1481	2469	4937	7406	9874	12343	17280	2469
8	432	1296	2160	4320	6480	8640	10800	15120	2160
9	384	1152	1920	3840	5760	7680	9600	13440	1920
10	346	1037	1728	3456	5184	6912	8640	12096	1728
15	230	691	1152	2304	3456	4608	5760	8064	1152
20	173	518	864	1728	2592	3456	4320	6048	864
25	138	415	691	1382	2074	2765	3456	4838	691
30	115	346	576	1152	1728	2304	2880	4032	576
35	99	296	494	987	1481	1975	2469	3456	494
40	86	259	432	864	1296	1728	2160	3024	432
45	77	230	384	768	1152	1536	1920	2688	384
50	69	207	346	691	1037	1382	1728	2419	346



## Target markets

**Cryptocurrencies** are invariably associated with software. In our store, each user will be able to find the software he needs, from cryptocurrency wallets to his favorite movies and music. Publishers of software, games, music labels, film studios are interested in distributing their products. Many publishers are forced to open their own distribution stores, because other sites have huge commissions and this is not profitable for them. From this we can conclude that everything is interested in the development of our store, from users to developers and publishers.



## Our links

Discord: <https://discord.gg/XEcrE2Y>

Github: <https://github.com/proximity-cash>

Telegram Chat: [https://t.me/Proximity\\_Chat](https://t.me/Proximity_Chat)

Telegram News: [https://t.me/proximity\\_news](https://t.me/proximity_news)

Twitter: <https://twitter.com/ProximityCash>

Youtube:

<https://www.youtube.com/channel/UCLuyvXSTnsloKXAmfFgObLA>

Google+:

<https://plus.google.com/u/3/communities/101503143364545459879>

