

### **Platform Outline**

### General information

\*\*\*UPDATE - Sept 21, 2019 - We are very close now! A testnet is now live for about a month. There were some changes needed to the overall function listed in this document, which have been made. Another post will be made regarding all the changes and updates soon.

The function of QORT is now going to contain the ideas for QORA2 as well, which include social media, blogs, web hosting, and decentralized apps. On top of the trade portal function.

We are very excited to get things finished and get everyone over to the QORT chain. Stay tuned!

-crowetic

Just FYI - This document is old, outdated, and not meant to be used for any reference to the existing Qortal Blockchain Platform. This was simply the original outline document. MUCH OF THIS INFO has CHANGED. If you are looking for up-to-date information regarding the project, that can be found in 1 of 3 locations... - <a href="https://qortal.org">https://qortal.org</a> - main website... <a href="http://wiki.qortal.org">http://wiki.qortal.org</a> - main wiki... and the Qortal Project Discord server (where all new announcements are made immediately. So if you're looking to be 'in the know', join the discord.) A link to join the discord is located at the top of the main website. Thank you! -crowetic (March 11th, 2020)

Qortal (the first of many clones of the codebase being referred to as 'generation 2' / 'gen2', a completely re-written version of the original QORA codebase) is a crypto platform meant to be a totally decentralized trade portal, and a 'connector' or 'bridge' between multiple other gen 2 clones, other coins with the CIYAM AT system, and supported coins on the platform. (The 'supported coins' at first will be at least BTC, but there are others that will be announced as time progresses, and decisions are made by the founders and community.)

As of a couple weeks ago, the decision was made to add the functionality of QORA2 into QORT, making QORT a single platform that has all the functionality of the ideas of both platforms. This should provide a single very strong platform and less confusion.

The project is in active development, and will be launching soon in its 'alpha' phase.

The 'alpha phase' will be the time for the platform to begin building its network, and getting the QORA users out of QORA and into QORT. The whole platform is built with the ideals of a community focused fully open source project, where anyone and everyone can equally contribute, and bear the fruit of the platform's rewards.

Aiming towards ease of use, and function rivaling that of the centralized exchanges that users are currently used to, Qortal will be similar in function, but vastly improved in security, decentralized nature, and community guided advancement.

#### **Basic FAQ information:**

- ★ There will be no 'swap' from QORA (not in the traditional sense), however, users will be able to obtain coins via a described method (below) where QORT will be divvied out to users that previously held QORA in wallets with full private key ownership. Importing your QORA private key into QORT, will entitle you to a 1:1000 'swap' (since there is no better word for it) into QORT from QORA. Every holder of QORA, will be able to take part in this.
- ★ In regard to users who were not able to get their coins from Poloniex, or OpenLedger, due to their policies and/or misuse of proper methods of backing up private keys, etc... It has been decided that the only way OpenLedger coins will be credited, is if OpenLedger themselves come to us and create some solution by providing a 'buyout' on behalf of the 'lost' coins that belonged to users. Everyone will need to speak to Ronny from OpenLedger, and urge him to contact the dev team, to form this agreement. Apparently the Poloniex team may enabled withdrawal at launch, so that could be resolved in its own way. But the private keys of QORA accounts are the only REAL method of ensuring your QORT coins will be acquired at this point.

- ★ QORA as it sits, will eventually be 'rendered useless', the chain may continue to run, but will not be of consequence to anyone in any way, whether the chain continues or ends up stopping completely, is ultimately up to each and every person currently running a node. As we know, a blockchain cannot 'die' unless every node ultimately stops running, and in the case of QORA, forging. Therefore we will essentially merely consider QORA as 'the one that started it all', and nothing more. Its use will cease completely upon the move to Qortal platform by its current community.
- ★ We (as the development and promotional team working for QORA and QORT) will make no further efforts to ensure running nodes, etc... for QORA (generation 1 running now) once Qortal platform has been deemed solid, and running stable.
- ★ QORT is the first of many 'generation 2' clones to come. The platform is a long time (multiple years) in development (and planning, ideation, etc...) with some very talented developers and community members looking to assist in the furthering of the already great progress made on the platform. We will be releasing an initial 'alpha' version, with basic function and structure, that will start building the overall network. Later making modifications and new software releases as deemed necessary and voted into reality.
- ★ The platform initial genesis and thereafter timeframe, is meant to get the network started, get nodes running, and make the platform as large and secure as possible, prior to the completion of the trade portal UI. The trade portal UI still has time needed for completion of development, and as such will not be in the initial release at all. Once it is, it is the hope of the team that the network will be strong and viable enough for the trade portal to run in its intended fashion, without any potential issues from lack of nodes, etc.

We hope you all enjoy QORT very much!

# Minting

### Minting nodes:

Minting Nodes are the nodes that will 'power the chain'. They are the only nodes that will be rewarded for helping the network move. Every minting node must be SYNC'D and ENABLED in order to be able to receive rewards.

Minting nodes are limited in multiple ways, as far as getting the ability to be a minting node. Basically, the creation of minting accounts is a process that will be protected in multiple ways.

★ Minting nodes can only be created by either a founder at launch, or by 'earning the right' in a method described below called 'delegation'

- ★ Minting nodes are the only nodes to receive rewards from the block reward at launch.
- ★ When the trade portal itself is completed development wise, and as such Proof Of Liquidity implemented, the block reward distribution will change, and liquidity providers will also be able to obtain a portion of the block reward, on top of the 'fees' of the trade portal.

Initial creation of Minting nodes, (or accounts with minting status running nodes) will take place via founder account gifting the ability to those users who supported the QORA blockchain by forging.

Users who moved the chain by having 'forging' enabled and forged during the time that QORA was considered 'dead', and after QORA's block rewards had been fully distributed (thus giving no reward to forging block finders) will be rewarded by obtaining a minting account at a higher level than those users who forged outside of that time. All users who have forged on QORA, however, will get a minting account.

To obtain an initial minting account, users will verify with the account that had forged blocks on QORA to a given account maintained by the development team. The team will calculate the amount of blocks forged by the user total (via calls to QORA API), and the amount of forged blocks between blocks x and x when QORA was no longer rewarding users, and was widely considered 'dead' or an 'abandoned' project.

A number will be given to each account, that will then be turned into a starting 'level' for the minting account. (Levels are described in more detail below.)

### Minting levels:

Every Minting account, will contain a 'level'. (Think of this in such a manner as a video game, where your character, as you obtain more experience, gains levels.) This level will be indicative of the amount of each block reward, the account will obtain each block.

The block reward will have a 'split' which gets paid out evenly to every various level 'set' every block.

Below you can find the 'brackets' and their definition in regard to the overall block reward distributed to them. All users of each 'bracket' share the reward of the given percentage (of overall block reward.) For example... all of the level 1 and level 2 minting accounts who are running nodes (thus becoming 'minting nodes') will be given an equal split of 5% of the overall block reward.

The following chart is for the initial alpha phase of the project. Changes to the overall percentages are possible in the future with voted propositions through the system.

- ★ Levels 1 and 2 minting accounts will obtain 5% of the block reward.
- ★ Levels 3 and 4 will obtain 10% of the block reward
- ★ Levels 5 and 6 will obtain 15% of the block reward
- ★ Levels 7 and 8 will obtain 20% of the block reward
- ★ Levels 9 and 10 will obtain 25% of the block reward
- ★ Founders will obtain 25% of the block reward
- \*\*during the time that QORA users are being transitioned over to the QORT chain, these numbers above will be reduced by 25% total, where 25% total will go to the people who held QORA. If the total percentage is lowered due to not enough accounts in each level to get to 100% total, the 25% comes from the 'extra', then remainder goes to founders. More detail on this described below.\*\*
- \*\* in the beginning of the project, when the number of accounts doesn't contain levels 1-10, the remaining percentage of the block reward will go to the founders to support development. (aside from that which goes to the 'move' from QORA for the QORA holders)
- ★ considering giving a 'bonus' to the initial minters as well as the founders in the beginning, instead of giving the entirety of the 'extra percentage' to the founders, give a portion to the higher level minters, to increase the probability further that the people coming in from QORA, will wish to attain a higher level single account, as opposed to attempting to attain multiple lower level accounts, as the benefit will even more greatly outweigh that of the multiple smaller accounts.

Every block in QORT will be split in this fashion, whereas every minting user is rewarded equally and fairly for their contribution to supporting the overall network, based on their account level and 2-level 'bracket' therein.

Minting is <u>not</u> reliant upon having a fast CPU/GPU, or benefitted by having multiple accounts. In fact, a minting account is difficult to obtain, and it will be very rare for anyone entity to obtain more than one. \*\* need to consider a further modification here to allow users to 'combine' somehow... making it further beneficial to have only 1 minting account. I believe the 'chunk system' below will do that nicely, as a user can decide to run multiple nodes with their single minting account, and thus have a higher chance of finding more blocks, and winning the next chunk at a higher reward rate. Is this 'enough'? We need to discuss this as a community. \*\*

### **Proxy Minting \*new\***

Proxy Minting is a new term that our team has come up with for a method of enabling accounts to 'mint on another's behalf securely'. Essentially, what proxy minting is, is the ability for a minting account to 'delegate their rewards' to

another account. However, there is a new feature here that has never been done in another platform to our knowledge... This is the ability for the proxy account itself, to have its own private key. This private key is then completely secured against theft. Even if the key is stolen, the only thing it can be used for, is minting for the original owner accounts. So a thief may steal it, but it would be useless for anything other than minting coins on behalf of the true owner.

This system provides a whole other level of security to the platform. Minting accounts can be securely minting without ever having to expose their private keys to the system. Nodes will be setup with the private keys of the proxy accounts, and they will then mint fo the initial account, and pay to whichever account they pair with.

More detail on proxy minting and how it will be put into the QORT platform will be posted shortly.

#### 'Mint boost'

Minters 'find' blocks, however, finding blocks is not what counts in terms of rewards. Every block reward is distributed to minters based on the above chart with levels and percentages. Blocks found, though, will be utilized to create a fun way to obtain a 'level boost' for accounts coined 'mint boost'. A given number of blocks will be referred to as a 'chunk', during any given chunk, the minter that finds the most blocks, will be rewarded with a boost in level temporarily, for the entirety of the next 'chunk'.

ie: If a level 1 finds the most blocks a chunk, It will be given the rewards of a level 3-4 minter during the next chunk.

Minting is only influenced by account level in terms of the rewards. The account level does not increase or decrease your chance of finding a block, but it does play a role in the calculation of the number that ultimately determines if you're a block finder or not. Blocks are 60s guaranteed. The block finder is randomly chosen based on the algorithm, has nothing to do with 'speed' of the computer. However, if you're a minter that is running on multiple nodes, that could increase your chances of being a block finder, as you will have 'more lottery tickets'.

The finder bonus resets every chunk, and a single minter cannot win more than 2 times in 10 chunk period.

#### 'Chunks'

A 'chunk' is a term given to a set number of blocks (which is likely to start with 14,400 blocks, or '5 days'). This set number is defined so that minters are able to obtain the 'mint boost' explained above. Whereas the minter can temporarily obtain the 'status' of the 'group' above them in terms of rewards, for the next chunk. Giving incentive to minters to run a single minting account only, even if they run this minting account on multiple nodes. It is much more beneficial to have a single strong minting account, than it is to have a bunch of smaller ones, seeing as the higher

level your minting account is, the more of the block reward you're able to obtain, and the less total other minting accounts are in the group that obtains that amount of the reward.

Simply put, it's much better to be a level 5 minter, obtaining the 15% split of the block reward, with other level 5 and level 6 minters, as there will not only be more rewarded, but less people in the group to split with. Therefore you're obtaining a level 5 account makes much more sense than splitting the 5% multiple times with multiple level 1 accounts, and there will be many more level 1-2 accounts since they're easier to obtain, taking much less overall time and requirements.

Adding to this, the 'mint boost' allows your level 5 account (in this example) to obtain the 20% portion of the block reward (that is given to 7-8 level minters) for the next chunk, if your account was the one that found the most blocks in the previous chunk. This really gives incentive to be a single minting account, maybe even a single minting account running on multiple nodes, so that minting account then finds more blocks due to being 'cloned' to multiple actual computers.

### Leveling

In order for a minting account to gain a level, they must be online, sync'd, and minting enabled for a given number of blocks. Essentially, they must be supporting the network. The whole point of the levelling system, is to give users who support the network more, more influence and more of the block reward for assisting the network in running, and providing the services it will ultimately provide.

The amount of blocks needed to level will increase as the system gets older. Everything in terms of blocks, as 'time' doesn't exist on a blockchain. In order for accounts to level, the following chart comes into play...

- from level 1 to 2 **129,600** blocks (or roughly 45 days of being sync'd and enabled to mint)
- from level 2 to 3 **259,200** blocks (or roughly 90 days of being sync'd and enabled to mint)
- from level 3 to 4 **345,600** blocks (or roughly 120 days of being sync'd and enabled to mint)
- from level 4 to 5 **488,000** blocks (or roughly 200 days of being sync'd and enabled to mint)
- from level 5 to 6 **691,200** blocks (or roughly 240 days)
- from level 6 to 7 **1,036,800** blocks (or roughly 360 days)
- from level 7 to 8 **1,382,400** blocks (or roughly 480 days)
- from level 9 to 10 (max level) **1,728,000** blocks. (or roughly 600 days)

The above information is preliminary and could change.

### Minting account 'tiers'- Founder Tier

The 'tier' of any minting account, is the 2 level 'bracket' that the account is assigned to for distribution therein of the block reward. Tiers are only needed for easier understanding of the reward distribution. The only tier that is 'special' in any way, is the 'founder' tier, which is comprised of the initial 25 accounts that is formed of the people who contributed substantial effort towards the creation and development of the platform, as well as those who have dedicated extensive time to promotion, community development, ideation, and facilitation of completion of the platform's various necessary avenues.

There will only be 25 (or less... final number will be posted at launch.) of these accounts ever created. The 'founder' tier does not 'level up' like every other account. Instead, they start and stay at 'founder' level. A special delegation structure, including the mandatory 25% dev fee when accounts are not getting the entirety of the block reward in the system, ability to accept delegation immediately, and 'level 12' voting influence, are the 'bonuses' given to the founders. Other than that, the founders are only there to ensure the platform is not able to be gamed when it is small, and just beginning. Ultimately the founders will not be that much different than any other level 10 account, once the system has been running for a longer period of time.

For voting, founders get influence given to a level 10 account, plus 20% founder influence. Essentially they vote as if they were a level '12' account.

### Mint account 'Creation Delegation'

Minting accounts are not simply 'made'... They are a limited and coveted account on the platform.

In order to obtain one, there are only a couple methods:

- Obtain a Minting account by proving you were a staker on QORA chain as described above.
- Delegate to a founder, or another minter that is level 5 or higher, with delegation acceptance enabled, and pay a fee, then wait required time of being online and sync'd and proving that to the delegation node you're delegated to.
- Delegate via utilization of the 'delegate QORA' checkbox for those users who have QORA asset from holding QORA on the old chain.

#### Once a user has 'delegated', they are now in the queue to become a minter.

A small fee is required to delegate to be a minter, as well as a set number of 'live blocks'. What 'live blocks' are, are blocks that you have been both online, and sync'd. This will be proven through contact with the node to whom you are delegated. The delegation-acceptance enabled node will query the node delegated to it, which will reply 'I'm here,

I'm sync'd, this is the current block'. Along with a verification hash to prove it isn't faking the information. The system also keeps track of 'node uptime', which will be part of the query.

The total required blocks needed to be submitted with the above verification to be an activated minter, will be modified as the system grows and more users are available, and interest in the system grows as well. Initially the number will be 14,400 blocks, at 30 seconds per block, comes out to 5 days.

at **518,400** block, the blocks proven to become a minter increase to **57,600 blocks, or 20 days**. (this is 6 months after launch.)

at **1,036,800** block, the blocks proven to become a minter increase to **129,600 blocks, or 45 days**. (This is 1 year after launch.)

at **2,073,600** block, the blocks proven to become a minter increase to **172,800 blocks, or 60 days**. (This is 2 years after launch.)

The maximum number of blocks that will ever have to be proven to become a minter once delegated, will be **259,200** blocks, or **90 days**. This will take place at block **4,147,200** and will be the last modifier for the blocks needed to become a minter once delegation has taken place by that account. This will sufficiently limit becoming a minter to those who are actually dedicated to it, and would really like to do so. The last modification is 4 years after the launch of the network.

Once the delegate has proven the required number of blocks, and paid the delegator fee, (or in the case of QORA holders, simply held the QORA asset that represents old QORA on the new chain) they will then become a minter, starting at level 1. (Keep in mind, only minting accounts have levels, and only minters are able to vote on the QORT network.)

### Minting 'Reward Delegation'

A minter may 'delegate' to a founder, or to another minter who has enabled 'receive delegates'. Delegation by Minters creates a method for those minters to form a 'fund' together. Each Minter decides how much of their own rewards they will delegate to the 'fund' upon issuance of the delegation request.

The account that is receiving the delegations, is owner of the fund, or in case of a 'multi-sig fund', multiple accounts in the delegation group (maximum 75% minimum 10%) vote in order to allow the funds released.

The fund can be utilized for any purpose described by the delegator in the delegation information section. The founders initially, will create their delegation fund for use of development payment. Down the line, the delegation

funds can be thought of as 'automated crowdfunding' or 'savings accounts' or 'investment portfolios' or a whole plethora of other potential things.

There will be a single initial delegation development fund, but since the developers are also founders, the donation to this fund will not be required, but if users feel like they would like to further contribute, they are able to initiate delegation to the fund.

### Minting Structure and block reward 'split'

The block reward split (that is defined above in the level description) remains in effect until the implementation of the Proof of Liquidity algorithm, which will reward liquidity providers on the trade portal. Since we are all aware that the liquidity of a decentralized trade platform is essential to not only its use, but its life.

(The implementation of Proof of Liquidity will take place at a date yet to be decided, as the development of the portal UI must be completed first. It is estimated to be 1-2 months after the network launch. It will be top priority once the QORT network has launched, and is beginning to get stronger.)

# **QORA** transition

### Forging block finders of QORA

forging block finders of QORA will be able to obtain a minting account that will be assigned a level up to 5, based on their previously forged blocks on the existing QORA chain. The forging accounts that have supported the chain during the time that the chain was considered 'dead', will be given a higher starting level.

Determination of the starting level will take that as the main factor. The numbers of blocks minted total, and the numbers of blocks minted after the 'block reward' of QORA was depleted, will be the overall factors, with 4 times the 'value' placed on the blocks forged post block reward ceasing.

# Holders of QORA

Users who held QORA but did not stake, or forged AND held together, regardless of their forging, will be able to delegate their QORA on the new chain.

QORA on the new chain will be comprised of an 'asset'. The asset will not be able to be 'used' in any other way aside from 'enable QORA delegation', which will randomly delegate the account to one of the live founder accounts on the chain, which will in turn place that user's account into a 'queue' that will receive their portion of the 25% overall of the block rewards.

#### The split of the overall block reward will pay the users at 1000x less QORT to QORA held.

Importing the user's private key into the QORT platform, will automatically contain the QORA asset credit in their account. Only importing the private key will initiate the QORA asset availability.

The user will not be able to 'use' the QORA asset in any way, other than to delegate it to obtain QORT from the 25% block reward split.

The amount of the 25% obtained by the user, is directly related to the quantity of QORA they hold. The larger the amount of QORA held, the larger the piece of the 25% the user will obtain each block.

To clarify a bit here, the QORA asset holders will delegate either 100% or 0%. However, if they do NOT delegate, they will not be in the pool to obtain the 25% block reward delegation for the moving to QORT from original QORA. The users must enable the 'switch' in order for the system to recognize them as a person that will receive the 25% block reward pool. If they do not, they will not be in that pool. If they delegate, and also keep their node alive and sync'd, they will earn time credit towards becoming a minter as well as being given the portion of the 25%.

QORA asset holders are the ONLY ones who can receive rewards without minting, as they are merely being given a reward for being a previous holder of QORA. Any other account, in order to receive rewards, MUST be a minter, sync'd, and with minting status, in order to obtain any of the block reward.

The 25% will go on until the necessary time as to delegate the overall amount of QORA total, therefore there will be users that are able to obtain an amount past their 1000x number of QORA, if they are delegated quickly, and remain so.

Delegation of QORA, also enables the user delegating, to turn their account into a minting account, in the same fashion as if they were to pay for the right, with QORT. So, if a user wanted to become a minter on top of simply obtaining their QORT from delegation of QORA, they can.

Minting on top of QORA delegation, entitles the user to the portion of the 25% as well as their account's tier portion of the overall block reward. So, running a node and minting on top of simply getting your QORA delegation, is double beneficial.

# **QORT Network**

#### **Transaction Fees**

There are no transaction fees on QORT network for the sending of QORT coins. Users may send QORT for free, regardless of the size of the transaction. However, in order to issue a transaction on the QORT network, user must run an algorithm and make some 'proof of work'. This is to prevent the network from being 'spammed' with multiple free transactions, and elimination therein of a potential attack vector. The algorithm is a custom algo built by the CIYAM developers.

The only 'fees' that will come into play, arise from the fees associated from utilization of the trade portal. The trade portal fees will simply be a slight 'adjustment' of the order placed, fees will be paid by the seller only. Buyers of QORT portal, will not pay fees.

Buyers will be able to utilize Proof of Liquidity, to obtain further reward by being the top 25% of the order book on any given BUY side, as well as influenced by the size of the order. Those two factors, will provide the basis of the Proof of Liquidity algorithm, and the right for that user to obtain a portion of the fees associated with the utilization of the trade portal.

#### **Network and Overall Information**

The network of QORT is extremely important, as it is the basis of the function of the entire portal, and the value therein provided to the community and holders of QORT tokens.

Therefore, the network being strong is a point that we have structured the platform to value very highly. The network support by the community in maintenance of 'Minting Nodes' will be extremely important to the success of the platform, and therefore the reward given to these 'minters' is taken in account and valued highly in terms of the way the development team structured the platform.

Anyone is able to become a supporting node for QORT network, and those of the community that supported QORA, will be supported in return by becoming the starting minters on the platform, or in the case of those that went 'above and beyond' typical methods of support, and put in a lot of effort towards the completion of the platform, becoming a 'founder' of the platform, and getting rewards in regard to that status in the network.

The ideas in the structure of QORT platform have been coming to fruition over the period of many years, and we as the team currently pushing the development forward, are extremely excited to see many years of work coming together now.

The platform we hope will be one that is cherished and loved by every supporting node and user, and that we get a lot of community engagement and ideas submitted once the base platform is running and able to be utilized.

# **QORT** community

### **Community focus**

The QORT network will have a large community focus. The only way the system will be successful ultimately, is by engagement of the community. We as the development team moving the project forward, are all about the support of the community, engagement of the community, and backing the community 100%. This platform is built to give the power back to the community in regard to control over their coins when trades are executed.

Centralized exchange platforms have caused continual and extremely disruptive damage to the overall crypto community, and QORT aims to be one of the main platforms to assist in resolution therein of this persistent issue.

We have seen from even QORA's past, the destructive tendencies of centralized exchanges. As QORA itself was hit by Poloniex delisting and the loss of nearly 10% of the overall coin supply by the so-called 'DEX', OpenLedger.

It is still unclear if either of these centralized entities will ever make the community whole for their disregard in security that caused the loss of these QORA coins to take place.

### **Open Source Movement support**

The support of Open Source development is of high regard in all things we have built into the structure of QORT. It is the belief of the team that Open Source technology is the only way forward, and that sooner or later, nearly everything in the world will be Open Source. We as the development team moving QORT forward, look to put out only open source products, both hardware and software, for the Open Source community to then utilize however they see fit.

It is our hope that our technology makes a large impact in the lives of many Open Source community users and supporters, and that it is then made use of to the best possible ends by as many people as possible.

### Votes and economy

The community focus of QORT will be such an integral part of the platform, that a 'voting mechanism' will be a main method for implementation of changes and new ideas into the platform. The mechanism will be built so that the people and users who have given more to the network, will be the ones that get a higher influence placed upon their votes.

The minters, which are the 'foundation' of the decentralized network that supports the functionality of the platform and provides the useful services for the community, will be the ones who are then able to put votes towards ideas put into the voting system.

The influence of the votes is not as it is in many other platforms, weighted by coin count... but instead, it will be weighted based on the level of the minting account.

We as the development team currently leading the QORT platform development, believe there is too high a reliance upon the amount of coins held in many other voting systems of other platforms, and as such, hope by making the vote weight reliant upon another portion, and contribution to the network being placed highly on that, will effectively begin a voting system that is actually fair in regard to the function of the system itself.

'Proposals' will be put to a vote when any major change or issue getting addressed is needed within the community. The votes of the community will ultimately decide the outcome of the given proposal. This system will also undergo changes as necessary, to ensure the highest level of fairness is always in play regardless of any other factor.

### Voter Influence per Level

As a minter's level increases, so does his influence in terms of votes cast and their effect on the outcome of the proposal.

A minter of level 1 votes with a 1x weight multiplier.

A minter of level 2 votes with a 2x weight multiplier.

A minter of level 3 votes with a 3x weight multiplier with addition of blocks found counting as additional weight (this continues from level 3 on.

A minter of level 4 votes with a 4x weight multiplier, and block count additional modifier.

### Other systems in the future

Future systems in QORA2 will be devised based on other methodology as well, which we have been creating over the past few years between the members of the current development team.

#### Anti-Game measures

There are multiple measures implemented into the QORT system, that will effectively disallow the methods of those looking to take advantage of systems. The network will be extremely secure in every way, thus being rid of the potential for negative influences to take advantage of anything.

The 'passing of time' in the form of number of blocks, being used to initiate the level system, and increasing it, is a huge measure of anti-gaming.

### Scalability

QORT platform, being rebuilt almost completely, from its start as the QORA codebase, is built so that scalability is of extreme importance. The CIYAM developers have come up with an incredible method for scaling, which will be seen in the platform as more users become active on the network. The system will get stronger as more people join, it will not slow down with more users.

Seeing the failure of ETH, and even arguably BTC in scaling to meet demands of the Blockchain space overall, is something that ultimately lead to this decision.

The idea in our platform, is structured so that the larger the platform gets, the more it can support, the faster it becomes, and stronger the security becomes.

#### Plans and the future

There will be many things that come in the future of the platform. Initially we will be getting the network going, then building out the trade portal UI. Implementing Proof Of Liquidity, and going from there. The platform itself is capable of quite a bit, but most of that we will implement in a clone, when we build QORA2.

Every clone of QORA-CORE (new codebase Gen 2) will be default compatible with QORT trade portal, and therefore it was essential for us to build out the trade portal prior to building out any other platform. Then when the others are started, they will be default on a trade platform, and will not have to hassle with getting listed on centralized exchanges. This will provide default value to any of the future clones built.

### Trade Portal

#### Structure and Info

The 'trade portal' is essentially the 'purpose' of the entire platform. Though, as it may have been represented already clearly enough, the platform is capable of much more. The trade portal will be built so that it 'looks and feels' like a traditional centralized exchange. However, the trades themselves will need NO intermediary at all. The orders, will be placed by the users, and stored on the blockchain in a similar fashion to the way that trades on the 'asset exchange' are stored.

Once a user has placed an order, any other user may accept the order, thus executing the cross-chain trade. The trade is then made utilizing a pre-configured Smart Contract on the chain, and the coins are traded directly from one user to another without ever needing to be in control of a central party.

The Smart Contract that controls the trades, is automated, gets created by the user upon creation of the order, and everything on the backend is handled automatically. There is never any need for the user to make multiple steps in the trade, as is required in other truly decentralized exchanges.

The goal is to make the exchange as easy to use as a typical exchange, with a similar UI to a centralized exchange, simply without the need for any centralized nature to it whatsoever.

### **Proof of Liquidity (PoL)**

Proof of Liquidity is the term for the algorithm that will be implemented into the system to reward the users who provide any 'buy support' on the market pairs. The way this will work, is the top 25% of the orders, will be weighted based on their price and size. This weight will then be utilized in the algorithm, to calculate the overall portion of the fees that the liquidity provider will obtain. It is our hope that the Proof of Liquidity system will entice a lot of liquidity to be introduced into the system, and maintained.

#### Trade Execution

As mentioned in the section above, the execution of trades will be done in a completely cross-chain fashion. Never will any coin be in the hands of anyone other than the persons involved in the trade. All orders will be automatically carried out in a truly decentralized cross-chain fashion. Done with Smart Contracts in the system built by the CIYAM developers and the QORT core developers. They will be done automatically and users will not even need to execute multiple clicks for the trade to take place.

Orders are placed, another user accepts, then the order is cross-chain transferred directly to the order taker.

#### **Order Placement**

In order to keep in accordance with the 'as easy as a centralized exchange' idea, the placing of orders on the Trade Portal, will be extremely simple and done as automated as possible in regard to all of the back end work that goes on for the trade to actually be executed without a central party.

Placing an order will be just like placing an order on any centralized exchange. If you have the coins in your private wallet on QORT, (which has no access by anyone but you) then you are able to place an order in one of the given trade pairs. The pairs will be such that the BTC pair is always the 'base pair', and anyone placing orders on the side of 'buy' on any market (placing BTC to buy QORT for example...) will be involved in the 'Proof of Liquidity' algorithm, and thus potentially able to acquire some of the 'fees' of the trades.

The user placing a 'sell' order (I.E. trading QORT for BTC) will incur the 'fee' automatically. The 'fee' is simply a slight modification of the order placed, to include a small extra piece, that is the fee itself. (Exact details on the 'amount of the fee' will need to be devised at a later date.

#### Fees of the Trade Platform

The 'fees' on the trade platform will come from a slight modification on any 'sell' order placed on the order books. These 'fees' will then be pooled and paid to the Proof of Liquidity algorithm's 'participants'. (The users on the 'buy side' that are providing the much needed liquidity for the platform.)

### Coin Structure

**Total supply:** There is no 'total supply' in QORT. There is a limit on the growth rate. The 'overall existing supply' is what will be taken into consideration by the markets in determination of the price. The lack of a 'hard cap' will ensure that the block rewards continue to provide reward to those of us who decide to support the network by minting. This will ensure the network stays strong for the foreseeable future.

**Block reward:** 10 coins per block at start. Decreasing every **518,400** blocks by 5% until reaching 5 coin per block and staying there. The number is 6 months in blocks. So you can think of it as every 6 months, the block reward will decrease until the 5 coin mark is hit, 5% decrease every 6 months, until 5 coins is the reward. Then the reward will stay at 5 coins until a vote potentially changes that. (With eventually a modifier being input for changing overall new coins into the sytem.)

**Block minter split:** As described above, the split of the block reward is based on your account level, each 2 levels are put into a 'group' that is then given a percentage of the block reward. This percentage increases as you get into the next 2-level group. Details above.

**Block Rewards structure:** The structure of the block rewards is to allow for a continual block reward to keep the network strong, and keep coin coming into the system to be utilized for the trade portal itself, while at the same time not introducing too many coins into the system new at any given time. This will keep the overall increase in supply at 5,256,000 coins during the first 6 months, then the reward will decrease by 5% for the next 6 months, and again by 5% 6 months later.

**Block Time:** 30s (blocks will always be 30 seconds)

**Block reward modification structure:** Every 518,400 blocks, reward will decrease by 5%. Once reaching 5 coin per block the reward will stay there.

**Overall growth rate:** At 5 coin per block, 14,400 coins will be introduced into the system daily. Initially, at the 10 coin reward, 28,800 coins per day will be introduced into the system. Every 518,400 blocks, that reward then decreases by 5% until the 5 coin block reward is made.

**Modifying growth rate:** Not immediately, but down the line at a future update, the ability to vote the block reward up or down will be implemented. The reward will only be able to increase by up to 1 coin in 0.25 coin intervals. It will be able to be voted down to a low of 2 coins per block by .5 coin intervals.

# **Ending notes**

QORT platform will be continually growing, changing, and being developed over the foreseeable future. There are many ideas that will be implemented over time, and as such everyone should be aware when utilizing QORT, that it is ultimately experimental, and that changes will definitely take place as time goes on and the platform's ideas are tested. When something comes about that we believe (as a community) is something that should be addressed and potentially modified, that will be something that then takes place (after a vote is taken and the overall opinion of the community taken into consideration.) We will adapt as needed, change what isn't working as expected, and continually grow to meet demands of an ever-changing overall blockchain space demands.

# References (descriptions / definitions)

As some of the wording in this document may be of a kind never before seen, the presence of this legend is available to further grasp certain terminology.

QORA -	This is in reference to the existing QORA coin. The blockchain that is currently at max supply, 10b coins. It is what we refer to as 'generation 1' as far as the codebase it is built on.
QORA (asset on Qortal)	The 'import' of QORA to Qortal chain. The QORA asset will exist in the Qortal chain, but will only be a reference to show the users that held QORA on its own chain. This will be utilized to give users a 1000x lower amount of QORT coins via 'QORA asset delegation' described in this document. The asset will not be transferable, sellable, or usable in any way other than to show 'proof' of previous holding of QORA. It will be auto input into the chain via genesis asset creation method built in gen 2 codebase.
CIYAM -	CIYAM is a platform built by the CIYAM developers. It is an incredible platform and has been in development for a very long time. It is capable of what is called 'software manufacturing', a process that will allow the creation of full platforms via a few clicks. This mention of CIYAM in terms of the document here is only to make reference to the CIYAM Automated Transaction system, which is the basis for the SmartContracts in QORA, Qortal, and any other gen 2 codebase clone. It is what makes the cross-chain coin transfers possible for Qortal Trade Portal. Paired with a completely custom SmartContract written by CIYAM developers and cat (QORA/Qortal development lead.)
QORA2 -	This platform has been 'rolled into QORT'. QORT will have functionality of QORA2 and QORT. There will no longer be a separate platform for QORA2.
Minting -	Minting is the term given to the block creation and chain movement process of Qortal. It is described above in detail. It makes use of a CIYAM developer created algorithm that doesn't favor any system, and provides equality. The minting process will be used to determine the block finders of the chain, but the block finders will be inconsequential in terms of actual block rewards distribution. The distribution takes place via the tier system described in this paper. However, the block finder count will be utilized as well, which is also described above. The system is meant to bring 'total fairness' to the block find/reward system of Qortal platform. To remove the reliance on 'coins' in terms of 'power' (like PoS does) and bring a system unlike any seen until Qortal release.
Forging -	Forging refers to the method that QORA original chain was powered. Forging will not be implemented in Qortal chain. It is only made use of in regard to the verification of the forged blocks on the QORA chain.
Trade Portal -	The 'trade portal' is reference to the system which is the main 'focus' of Qortal platform (also its namesake ideation.) It will ultimately be a 'truly decentralized trade platform'. We are not utilizing the term 'DEX' as we believe that too many others have bastardized the term to death. Most every 'DEX'

	that exists, is not really decentralized. Thus, we have opted to go with a different term that has not been bastardized in such a fashion.
Qortal -	Qortal is the overall blockchain platform of Qortal. It refers to everything encompassed inside the scope of the project, the coin of the platform, which is a service token, is QORT ticker, pronounced as the word 'quart' would be. However, the 'trade portal' is also going to be called Qortal. Though, we may add the word 'Trade' behind it when actually on the UI for the trade portal itself. The trade portal will be inside the wallet of Qortal. As will be support for BTC and other supported coins. This is the way that cross-chain transfers can take place, leading way to everything on the platform never requiring anyone to give up control over the coins they wish to execute in trade posts on the order books of the platform.