FACTOM GOVERNANCE

DOC 001

V.1.3 2018-06-17
Chain ID: 957477d3dd8564cb15fcbed377b50f3ada7ef52c8ac7dc6be25155121f96cda6

Version Control

VERSION	DATE	CHANGED BY	CHANGES
0.1	2018-03-16	Jay Smith	First draft for community review.
0.2	2018-03-24	Paul Snow	Updates from the Town Hall
0.3	2018-03-24	Jay Smith	Further Town Hall Updates
0.4	2018-03-26	Paul Snow	Formating, restructuring, clarifications
0.5	2018-04-03	Paul Snow	Added detail about DPoS used in Factom. Added a proposed Oracle Master to record data and maintain the Entry Credit Exchange Rate. Added more detail on Grants.
0.6	2018-04-06	Paul Snow	Added clarification on Guides
1.0	2018-04-07	Community	Final document for ratification
1.1	2018-04-17	Factom Guides	Version 1.1
1.2	2018-05-04	Factom Guides	Version 1.2
1.3	2018-06-17	Factom Guides	Guide remuneration Section 4.5 added and ratified. Version 1.3

Table of Contents

Definitions

Protocol

Unless explicitly modified to refer to other protocols, the term protocol in this document refers to the Factom protocol, which is implemented in software, and run upon servers run by many independent users and parties. The protocol's definition is substantially defined by the software run by the authority set. The protocol creates an immutable record of data, and distributes it over the participating nodes on the network.

Governance

Governance is the process by which a distributed group of entities design, implement, deploy, execute and promote the protocol, and the ecosystem around the protocol. Much of governance centers on the protocol code that in turn generates and provides incentives in the form of tokens, and distributes those tokens by the rules embodied in the code. The Guides aid in managing this process.

Community

Community in this document refers to the community of users, developers, investors, traders, and organizations that have an interest in building, running, promoting, and using the the Factom protocol, and other protocols building upon or dependent upon the Factom protocol. Community is central to Factom as everyone with an interest in Factom has an opportunity to play a role in maintaining, developing, and promoting the Factom protocol.

Factom Community Testnet Network

The entirety of the Testnet Network including all operating nodes and the community of users who support the Testnet Network.

Testnet Authority Pool

The group of Qualified Authority Nodes, including nodes currently operating as part of the Authority Set of the Community Testnet.

Federated Server

A node that is authorized to create directory blocks and write to the blockchain. The Federated servers use a consensus algorithm to agree on what to include in the blocks.

Audit Server

The Audit Servers operate in the same manner as the Federated Servers; in practice, they do the same work, but are not authorized to write to the blockchain. If a federated server is removed from the federated server Set, an Audit server is promoted to take its place, and the Federated Server becomes an audit server.

Authority Set

The complete set of Federated Servers and Audit Servers. These are the servers that run and serve as the backbone of the protocol.

The Factom Mainnet will include 65 servers in the Authority Set after Milestone 3 (33 Federated servers and 32 Audit servers).

All Audit and Federated Servers share equally in the tokens issued by the protocol.

Digital identity

Digital identity and digital identities in this document refer to a set of chains in the protocol used to define a digital identity. In some places, we simply refer to an identity, or a protocol identity. In this document, all of these terms refer to Digital Identity. Digital identities are central to governance, roles, voting, standing, and auditing in the protocol.

Grant Pool

The protocol will allow the authority set to signal a higher efficiency, by specifying a distribution less than the maximum distribution. Tokens left over due to the efficiency of the servers are placed into the grant pool within the protocol. The grant pool will be used to promote the protocol, subsidize infrastructure, and fund development of the protocol.

Efficiency

Efficiency in this document refers to how much we can reduce the cost of running the protocol. To the degree we can increase efficiency (reduce costs of running the protocol), we can increase the support of the grant pool. As such, the higher an Authority Node's deferment to the protocol, the higher its efficiency.

Standing Party

A party that has standing in the protocol to support a given outcome in any process. These processes include selection of guides, authority set members, and/or grant proposals.

Guides

Guides are a group of entities charged with facilitating orderly operation of the protocol. Guides are selected by the standing parties, and work with the community to promote and maintain the protocol. A guide can be an individual, or an organization that is represented by an individual. Guides have very limited responsibilities in the protocol.

Protocol Support Budget

The protocol support budget is a set of tokens generated at 72933.12 tokens per month. A month is defined as 4383 blocks, and a year is defined as 52596 blocks.

Proof of Stake (PoS)

Proof of Stake refers to using opportunity costs to secure a blockchain. Parties with tokens locked up are thought to be committed to the blockchain due to their exposure to the value of the blockchain, and thus can be trusted to make decisions within the blockchain. How stake is defined varies over blockchains.

Proof of Work (PoW)

The grandfather of blockchains, proof of work is usually done by hashing, where a nonce allows the miner to change the value of the hash by changing the nonce. Work is measured by non-random leading digits, usually zeros. More zeros, more work was done to find an appropriate hash.

Delegated Proof of Stake (DPoS)

Pretty much the same as PoS, but those with stake can delegate their voting power to other entities. This allows something of a more representative form of governance.

1. Introduction

1.1. The following documents the governance model for the Authority Servers and the protocol.

1.2. The network will be initially governed by a set of Guides entrusted with promoting the best interests of the protocol and the community depending on the continued orderly operation of the protocol.

1.3. The long term plan is to automate many of the objective components, the weighting driving decision making, and other aspects of protocol governance. As an interim step, the Guides will provide governance, allowing a period of experimentation where policies can be swiftly adjusted to meet the needs presented by running the protocol in a real world setting. As governance is fundamentally a human process, it is likely that not all aspects can be fully automated.

1.4. The Authority Set, Guides, Developers, and Community will work to develop and refine workable processes. Once agreed upon, these processes will be implemented into the protocol.

2. Guides

Guides are a group of entities charged with maintaining orderly operation of the protocol. Guides are selected by the Standing Parties, and work with the community to promote and maintain the protocol. Guides have very limited responsibilities in the protocol. No group or entity is to be allowed to provide a majority of the guides.

The responsibilities of the Guides will be phased out over time as the functions they provide are automated into the protocol.

The Guides will provide flexibility and the ability to respond quickly during the startup of the autonomous network. Governance approaches will be tried using the Guides prior to deployment of new features, versions, and updates of code to the protocol. The governance rules in this document and administered by the Guides will be built into the protocol as the processes are proven to be workable through the real world running of the network.

2.1. Guide eligibility standards

2.1.1. Guides should demonstrate independence in thought, leadership, and business. Two guides should not have entangled business, political, or social connections that might call into question decisions and actions that might best serve the interest of groups of people over the interests of the protocol.

2.1.2. A Guide can be an individual, or group represented by an individual. The individual (or if a group, the group and representing individual) must be of good moral character with a demonstrated interest in the long term best interests of the protocol, willingness to serve the community of users, and history as a leader in the community.

2.1.3. Guides can be removed by a vote of no confidence initiated by at least 10% of the standing party weight, and voted upon over 30 days. A 51% vote to remove a guide is required.

2.1.4. A motion of no confidence initiated by 50% of the standing party weight, and passing with 60% of the standing party weight will take effect immediately.

2.2. Guide responsibilities

2.2.1. Guides will make themselves available to the community.

2.2.2. Guides are charged with maintaining the orderly operation of the protocol network and facilitating the relationships between standing parties and the community.

2.2.3. Guides will be responsible for overseeing the application of the protocol governance to the operation of the protocol. To be fair, everyone involved are responsible for adhering to governance, but in practice, the Guides will be in the best position to provide guidance.

2.2.4. Maintaining the orderly operation of the network includes ensuring an adequate number of applicants to run a large enough pool of servers to ensure 65 servers are always available for the Authority Set. The guides will be in close communication with the Testnet, and monitor the performance of members of the Testnet Authority Pool.

2.2.5. Guides will meet at least once a week. Guide meetings do not have to be in person. A valid meeting has at least three of the five Guides, and will be public.

2.2.6. Minutes of the weekly Guide meeting will be published on the protocol, including attendance.

2.2.7. Guides will provide oversight and coordination of the grant process, execution, and evaluation.

2.2.8. Guides will document conflicts of interest in the minutes of guide meetings, and recuse themselves from decisions where they have a conflict of interest.

2.3. Guide team makeup

2.3.1. Initially, the Guide team will be made of of 5 people drawn from the various groups and interests involved within the protocol.

2.3.2. The initial set of Guides will be nominated by the various stakeholder groups drawn from the Testnet Authority pool, protocol development and the community.

2.3.3. The initial set of guides will oversee a great deal of the needed infrastructure for Factom. Initially guides may not be properly supported by the Standing Parties as the Standing Parties are not yet properly formed, and we may not have the software available to allow the community to properly participate. At

such time as the technology, infrastructure, and community is ready to properly execute the guide selection, the initial guides will stand down and allow guide selection via proper processes. The initial Guides will be eligible for re-election.

2.3.4. In the near term, protocol development can include infrastructure development, since there are very few protocol developers at this point. The testnet community and the development community will each be asked to provide their two nominations by April 7th, 2018.

2.4. Ratification of the Initial Guides

2.4.1. The Initial Ratification process for Guides will be done by affirmation at the Governance Convention on April 7, 2018.

2.5. Voting

2.5.1. Once the infrastructure is in place, subsequent Guides will be selected by voting, generally in a staged set of elections, with one Guide elected per election. Ratification of votes by Guides will be done initially until confidence in the infrastructure has developed.

2.5.2. Voting will be done on the protocol using a digital identity. To vote, a digital identity must be registered and have standing to vote. The digital identity will be able to vote the weight associated with the identity.

2.5.3. Potential Guides will be registered as candidates, then will gather support by the standing parties. On certain blocks, the support is calculated, and the Guides with the most support are selected. The vote will be ratified by the Guides not up for election, and recorded on the blockchain. On a designated block after results are ratified, the Guides are changed out.

2.5.4. A Guide's service will be of a limited duration. They may be limited for a number of blocks, or using a support discount that favors new Guides after some number of blocks.

2.6. Guide remuneration

2.6.1. Guides will be compensated for their time by the award of tokens from the Grant Pool. Each Guide position is allocated tokens from the grant pool by the protocol itself.

2.6.2. Guides will be awarded via the grant process for their service. The details of grants should be worked out as an amendment to this document, and maintained over time to adjust for workload, FCT price, and other factors.

3. Authority Set

Due to imperativeness of timely M3 launch, for the first election, Guides will subjectively evaluate candidates based-on both technical and non-technical potential contributions to the Factom Protocol. Metrics may or may not include, and are not limited to, the future criteria below. Once the tools for proper elections are built, membership will be granted and removed as a result of campaigns and performance running the protocol, with support of the Authority Set. Initially Guides will sign the messages the protocol recognizes for changes in the Authority Set. Such changes must be inline with the will of the Standing Parties, and the process will be further automated over time.

3.1. Campaigns

Campaigns are the process by which applicants wishing to be authorized to run an Authority Set node publish their desire to participate and document their qualifications.

3.2. Campaign document

3.2.1. Applicants wishing to have a node considered for promotion to the Authority Set will publish a campaign document that sets forth for the community the applicant's qualification in terms of the campaign factors discussed below.

3.2.2. In the initial months, the Standing Parties are developing and a pure support basis for selecting the Authority Set will not be possible. In the initial months, the Guides will take into account the Campaign factors as well as the general standing of the applicant in the community in deciding which servers to promote into the Authority Set. Once developed, the standing parties will define the general standing of applicants.

3.2.3. The decision making process, criteria, evaluation matrix, and other processes for selecting authority sets will be documented in the minutes of the Guide meetings.

3.2.4. The roadmap to Standing Party selection of the Authority Set will be documented as development progresses in the minutes of the Guide meetings.

3.3. Campaign factors

3.3.1. The following are some factors that will be considered as indicators to begin with when deciding which entities running servers on the protocol to promote into the Authority Set.

3.3.2. A matrix of the these factors and their weights will be ratified external to this document, and used by the guides to document their processes.

3.3.3. Node reliability

3.3.3.1. The applicant will demonstrate the ability of the entity or organization campaigning to reliably run a node by having run an authority server as a member of the Testnet Authority Set.

3.3.3.2. Nodes demonstrating the highest reliability will be given first priority. This also includes planned availability of a maintenance team. (Note: Some objective criteria will need to be documented.)

3.3.3.3. Proposed weight is 16%.

3.3.4. Support of Protocol

3.3.4.1. Applicants commitment to the support of the Factom protocol will be a factor considered.

3.3.4.2. An application can pledge a level of efficiency.

3.3.4.3. Proposed campaign influence weight is 15%.

3.3.5. Node technical specification

3.3.5.1. Nodes with the highest performing technical specifications will be priority for promotion to the Authority Set. (There is some question as to there being a minimum specification and this being a “yes/no” on the minimum specification. The argument against this is the minimum spec will be a moving target and the cost of servers will always be a natural restraint.)

3.3.5.2. Plans for hot backup servers and guard node networks.

3.3.5.3. Minimum and Maximum configurations will be ratified for the initial Authority Set configurations, and updated as a live process going forward.

3.3.5.4. Proposed weight is 15%.

3.3.6. Location

3.3.6.1. Having Authority nodes spread out over different geographies, jurisdictions, ASNs, and service providers will help keep the network running through localized failures.

3.3.6.2. Proposed weight is 5%

3.3.7. Standing Parties

3.3.7.1. Standing Parties will be the human element that reads the campaign document and any other provided information, performs pertinent research, and support upon a host of variables that cannot be easily quantified such as team, plan, budget, or anything else that differentiates one entity from another.

3.3.7.2. Proposed weight is 49%

3.4. Authority set removal

3.4.1. Non-responsive nodes and nodes that do not maintain a minimum up-time or capacity (to be defined) will be removed from the Authority Set.

3.4.2. Removed nodes can campaign to re-enter the Authority Set once the issues are resolved. Additional removal processes have yet to be defined.

3.4.3. A withdrawal of support by Standing Parties can trigger the removal of an authority.

3.4.4. If a single organization is running a number of servers disproportionate to their contribution, they will yield the extra slots to new candidates as determined by their support, and as facilitated by the guides. By April of 2020, each node will be operated by an independent organization. This goal may be reached earlier.

3.5. Authority Independence

Authorities are considered independent if they have no organizational or contractual ties to other individuals or organizations running authority nodes. Independence is also measured by sector. For example, the more nodes that are run by organizations in the financial sector, the less independent those nodes are, even if the organizations seem to qualify as being independent.

Independence must be enforced socially through campaigns. We can't measure independence on the blockchain.

3.6. Authority node ratification

3.6.1. Initially, the protocol will have limited standing parties to manage the protocol. As such, the initial authorities will be evaluated by their support, and approved by the guides. As authority servers come online, they will provide additional support to back subsequent appointments.

3.6.2. Once the standing parties have built up their support, they will drive the process of authority node maintenance, with the guides documenting the ratification process.

4. Protocol Support Grants

A Grant Pool of tokens will be maintained by the protocol to support upkeep, enhancement, and promotion of the protocol.

The pool will come from efficiency commitments made by Authority Set members as a part for their campaign to join the Authority Set. The details of the token rewards and the grant pool are discussed in the section on **Token Supply**.

4.1. Grant Proposals

4.1.1. Proposals for grants may be made by anyone with a digital identity within the protocol.

4.1.2. Grants are required to advance the protocol, through building infrastructure, promotion, development, education. Grants must go for either having done work for the protocol, or to support future work on the protocol.

4.1.3. Grants cannot be issued as part of a lottery, or any other game or chance, pyramid type reward structure, etc.

4.1.4. A grant proposal itself must have a digital identity, and a chain to receive support from standing parties.

4.1.5. A grant proposal will specify what is to be accomplished with the tokens awarded, a time frame for accomplishing the aims of the grant, a general description of how the aims will be achieved, and a measurement by which success of the grant can be measured.

For complex efforts, grant awards will be issued on completion of milestones specified in the grant proposal. When a grant has multiple payments, 2x or more of the tokens should be set aside to manage currency risk (falling or rising FCT values) that might cause under paying or over paying the grant.

A sponsor or sponsors selected from the guides, or willing standing parties may be appointed to validate milestones. This administration should be part of the proposal itself, with the support of the parties that would have to oversee the grant.

4.1.6. Working groups made up of guides, standing parties, authority set, etc. can be formed to guide the process, and communicate to the community.

4.2. Grant Approval Process

Grants will be awarded based on proposals that receive a score of 60 or more out of 100. The score comes from using the following weighted set of support categories. To influence the rewarding of a grant, one must be a standing party.

Support is divided into a number of categories, and weighted independently to limit opportunities for gaming.

4.3. Grant Support

Grants first must accrue support from the standing parties. To be considered, a grant must receive a score of 60 or more, of 100 using the following weighted set of factors. Where more grants qualify than the grant pool can support, the highest scoring grants will be awarded.

Multiple different factors will be used to limit gaming. The standing parties can lend their support to a grant by signing their support on an entry on the grant.

Weight of each of the categories will be as follows;

- 25% Proof of stake
- 20% Proof of use
- 20% Authority Set
- 15% Efficiency
- 20% Grant success

4.3.1. Grant award process

4.3.1.1. Grants will be awarded on a regular cadence (to be defined) by the Guides based on the scoring above.

4.3.1.2. On the award date, grant applications will be sorted by the grant score, and then application date, and the top applications will be awarded until there are no longer enough remaining tokens available to fully award the next grant.

4.3.1.3. Awards are documented on chain, and do not activate for at least 72 hours to give the community time to review.

4.3.2. Sunset

4.3.2.1. This grant approval process will be revised and ratified in Q3 of 2018. This will be facilitated by the guides, and by the standing parties. Any modifications to the protocol to support any revisions will be scheduled at that time.

4.4. Initial Grants

The protocol needs to support a number of activities immediately as part of the grant funds. This section provides some suggested projects that would potentially make up the first three quarters of funding and be hard coded into the protocol.

4.4.1. Guides

Guides are initially paid 200 FCT per month for the first two months and their payout will be reviewed thereafter.

4.4.2. Anchor master

The anchor master project would fund the development, maintenance, and execution of the code to build and write anchors into Bitcoin, Ethereum, and other chains. At the same time, an independent anchor monitor should be funded to inspect and report on the performance of the anchor master.

Details of how to define and manage these roles can be refined over time. Issues to consider in more detail:

- Varied cost of anchoring
- Pricing of the roles
- Number of supported chains, and those costs
- Redundancy in the event of failures
- Number and responsibilities of anchor monitors

4.4.3. Protocol development

In 2018, the protocol needs to be rapidly built out to scale to support the onboarding of enterprise applications and other uses. Development should be targeted at needed features

such as new transaction types (time locked transactions, multisignature, etc.), sharding, and other protocol refinements.

Details of how to define and manage supported protocol development can be refined over time. Issues to consider in more detail:

- Reporting requirements
- Setting Development priorities
- Consideration for Expertise and experience
- Funding design and planning efforts

4.4.4. Wallet and Security

Building infrastructure requires funding and oversight. This grant would focus on developing better software wallets, hardware wallets, tutorials, and other infrastructure and resources.

4.4.5. Oracle Master

Exchange rates for FCT to Entry Credits are important in order to maintain a target price for entry credits of 1/10 of a cent. As determined by the Standing Parties and the Authority Set, the Oracle Master will record into Factom relevant market information to establish the trading price of Factoids. They will then submit a record to be signed by the Guides adjusting the Entry Credit exchange rate.

The exchange rate should be updated within 8 hours of a 20% divergence or more from the target price.

The exchange rate should be updated on a regular schedule for divergence less than 20% but greater than 5% from a running average to keep the Exchange rate as close as possible to the target price.

The target price for entry credits and the standard used (USD, Yen, Euro, etc.) can be modified via a proposal and vote by the Standing Parties. The Oracle Master is tasked with carrying out these directives.

Other data may be considered useful by the protocol. The Oracle Master may be tasked to collect and record such data.

4.5. Guide Remuneration Grant

Guides will be compensated 600 FCT per month via the grant pool. Guide remuneration will start the 8th of June 2018 and will be reviewed three months from that date.

5. Token Supply

The Token supply will grow through a fixed set of awards that amounts to a 10% inflation of the Factoid supply in the first year, without considering usage of the protocol (which burns Factoids).

The protocol support budget is fixed at about 72933.12 tokens per month, where a month is defined as 4383 blocks. (365.25*24*60 / 10 / 12)

In many blockchains, Proof of Work accounts for much of the rewards issued for the security of the blockchain. In other words, most of the resources are expended on energy costs rather than development, maintenance, and infrastructure. As the protocol uses anchoring, resources can be expended on a sort of “Proof of Development,” extending and developing the protocol and the ecosystem around the protocol. This is the motivation around the Grant Pool design.

5.1. Token Rewards

5.1.1. The Protocol issues tokens for each server in the Authority Set. The issuance would be fixed at .256 Factoids per Authority Server per block. If one assumes a year to be 365.25 days, 10 minute blocks, and 65 servers in the authority set, then 72933.12 tokens will be created per month, and 874,598.4 tokens per year. This is roughly a 10 percent inflation rate for the first year of token distribution. The protocol has been running for 30 to 31 months with no inflation, waiting on M3.

5.2. Grant Pool Allocation

5.2.1. While Authority Servers can specify all 0.256 Factoids be issued by the protocol, these servers compete to provide lower cost service to the protocol. As such, a server can specify a lower share, say 0.2 Factoids, or 0.13 Factoids per block.

5.2.2. Tokens not distributed to an authority server are allocated instead to the grant pool.

5.3. Grant Rewards

5.3.1. Grants will be rewarded through a proposal process that involves all standing parties in the protocol. Grants are awarded to parties to build infrastructure, sponsor events, develop new technology, maintain the code, write documentation, etc.

5.3.2. Grants will be qualified by the standing parties. This can be done with process utilizing the guides, the authority set, and even contracted agents (paid through the grant process).

5.3.3. All decision making in the grant process will be permissionless, and governed by standing parties where no single entity controls the influence of a majority of the standing parties.

5.3.4. Token awards from grants will be automatic, paid to protocol Identities, via the protocol. No award of grants as a part of governance will come from an individual organization or entity. Instead, the decision making process will be evaluated in the protocol, and each grant award identified, and added to a coinbase transaction, by all the software running the protocol.

5.4. Authority Set Veto

5.4.1. The Coinbase transactions, and thus all issuance of new Factoids have the ability to be vetoed by a majority of the Authority Set. Due to protocol bugs or issuance of Factoids that would be detrimental to the protocol, the Authority Set can prevent a particular pending Factoid issuance.

5.4.2. Coinbase issuances are proposed 1000 blocks (normally ~7 days) before they become active in the Factoid block. The majority of the Authority Set can cancel any output in any coinbase between when it is proposed and when it is issued.

5.4.3. The majority of the Authority Set would create digital signatures to specify a coinbase output to cancel. If a majority of the Authorities at the time publish their signatures on the blockchain, the specified output will not appear in the Coinbase.

5.4.4. The balance of the canceled Coinbase is returned to the Grant Pool to allow an orderly rectification of the error at a future time.

6. Standing Parties

A Standing Party (one that has standing in the protocol to vote in a protocol process) must qualify in some way. The protocol has a number of mechanisms to define standing parties.

Factom uses DPoS to define the Standing Parties and how support is collected and measured. This is done by defining how the PoS is defined, then how it is distributed.

PoS is not as simple as it might first seem. When people can use tokens to stake to make decisions, the game theory is complex, with many unintended outcomes and incentives.

Factom intends to use a number of distinct categories that combine to define a voting weight for various issues within the protocol. The idea is to introduce tradeoffs that can be adjusted to ensure behaviors like bribery and influence pooling do not yield the optimal outcome for individuals.

Some categories like Efficiency and Entry Credit purchases seek to provide influence to parties actively engaged in using and running the protocol. The value of these activities is ranked high at the time of execution, and reduces over time. Other categories like staking tokens provide influence to those willing to commit resources to the protocol. As time goes on, staking gains influence as long as the tokens are not touched.

The interesting observation is that each of the categories that tend to either burn tokens (EC buys) or relinquish tokens (Efficiency) get their influence up front because once committed, the tokens are not available to the Standing Party. On the other hand, Staking provides the tokens to the Standing Party, so they are not lost. The value to the protocol is in keeping them staked, so their influence grows over time.

Tokens can not be used for multiple categories, by their nature. You can't leave tokens in the grant pool, and stake them. Or buy Entry Credits with them. And a bribe removes the tokens from your control, and can only gain influence if other parties are not engaged in such behavior.

6.1. Requirements for a Standing Party

6.1.1. A standing party has a digital identity.

6.1.2. The digital identity must have an entry that defines a voting signature. This voting signature can be changed by a properly signed entry with one of the digital Identity's signing keys.

6.1.3. The digital identity must be registered in the Standing Party Registration chain.

6.1.4. A Standing Party must have one or more categories of support.

6.2. Support Categories

Each Standing Party has a number of categories of support. For voting for different processes, these categories can be weighted differently. This is a matter to be determined.

The following sections detail each of the possible support categories.

6.2.1. Support category: Proof of stake

6.2.1.1. To collect support from proof of stake, tokens are assigned to the standing party chain via a properly formed entry that details the address holding the tokens, and is signed by that address.

6.2.1.2. Retrospective staking

6.2.1.2.1. Any change to the tokens at that address invalidates the proof of stake vote. An address can only be staked once. To be staked again, the tokens must be moved to a new address, which has not been staked to any standing party.

6.2.1.2.2. Tokens allocated to a proof of stake address assigned to a standing party will accrue additional voting weight equal to 5% of the original token count each month they are left in the proof of stake address until 24 months. After 24 months, no further weighting will accrue. (Note: Additional tokens will not accrue, just additional voting power.)

6.2.1.3. Prospective Staking

6.2.1.3.1. Tokens can be sent to an address which doesn't allow tokens to move from it for a predefined period of time.

6.2.1.3.2. Token locking functionality is not yet implemented in the protocol. The need and implementation schedule for token locking will be developed in Q2 of 2018.

6.2.2. Support category: Proof of use

6.2.2.1. To collect support from proof of use, entry credit purchases are assigned to the standing party chain via a properly formed entry that details the entry credit address, and properly signed with the entry credit address.

6.2.2.2. At the point of purchase, entry credits bought are weighted at 100%. With each month, the weight of an entry credit purchase is reduced by 20%, such that entry credits purchased more than six months back provides no support.

6.2.3. Support category: Guide

6.2.3.1. A Guide is a protocol identity, and a properly formed Guide identity has a voting signature. Being a Guide is a category of support.

6.2.4. Support category: Authority set

6.2.4.1. An authority server is defined by a digital identity, and a properly formed authority identity has a voting signature. Being an authority server is a category of support.

6.2.5. Support category: Efficiency

6.2.5.1. Additionally, an authority server can specify an award of less than the maximum tokens issued to authority servers. Doing so is an indication of efficiency, and the unclaimed tokens are diverted to the Grant Pool.

6.2.5.2. Calculating the value of support for efficiency uses a sliding scale with those levels of efficiency (the difference of the draw and the maximum token issue) in the last 30 days weighted at 100%. With each month, the weight of efficiency is reduced by 20%, such that efficiency greater than six months back provides no support.

6.2.5.3. Efficiency support is calculated on the number of tokens left to the grant pool. An authority server's ability to earn efficiency support is capped at 50%. An authority server can earn efficiency up to a maximum of 50% of the maximum tokens budgeted for an authority server.

6.2.6. Support Category: Grant success

6.2.6.1. The successful handling of grants in the past provides support over 24 months. A grant is weighted by the factoids issued, on the dates issued, or milestone complete. Grant success will be combined from the following factors, to be tracked in the protocol. Voting power is not granted until the grant is closed by the Post Mortem.

6.2.6.1.1. 30% Milestones completed (10 points for each milestone, up to three milestones.)

6.2.6.1.2. 30% Project completed

6.2.6.1.3. 40% Post Mortem grading of the grant by standing parties

6.2.7. Support category: Contribution

6.2.7.1. This is a theoretical idea, but for which we have no solution as of yet.

6.2.7.2. We may consider mechanisms for contributing to the grant pool without being an authority server. This is more complex from an accounting/legal perspective.

6.2.7.3. We may consider mechanisms for creating grant weight for direct support of protocol advancements, infrastructure development, conference sponsorship, protocol promotion, business development, security improvements, etc. This is hard because these activities are in the real world, not within the protocol.

6.3. Delegation

Delegation allows parties that don't have too much influence to lend their influence to parties that can spend more time thinking and researching issues regarding the protocol.

The disadvantage is the possibility of forming cartels and political parties. Bribery, regional conflicts, and other disruptions are encouraged when people can form stronger political movements in an organization than they can as individuals. We see this in governments today with entrenched political parties. Voting outside the parties is considered by most as a waste of time.

6.3.1. Delegation Process

An individual's standing is defined by their digital identity and entries on that digital identity that provide cryptographic proof of stake, Entry Credit purchases, Efficiency, etc.

Delegation is done by a Digital Identity signing and adding a delegation record entry in the receiving Digital Identity. This entry includes a numbered weight of each category. The support is withdrawn by adding a withdrawal entry added to the receiving Digital Identity.

6.3.2. Delegation Penalty

When standing is delegated, it loses some of its voting power as follows:

- 10% from an original Standing party to another.
- 20% from a second party to a third.
- 30% from a third to a fourth.
- 30% on any additional delegation.

The purpose is to make individual support more powerful than the same standing parties would be if they delegated their support.

7. Amendments

The Governance Document is a living document that will need to be amended on a regular basis. Amending the governance document will be done socially on Discord, and managed by the guides and the authority set. For the first 60 days, changes can be made by a ⅘ vote of just the Guides. Changes to the Guide section require a community vote within Discord where ⅔ approval margin of voting community members is required. Thereafter, changes will require ⅘ approval of the Guides, and ¾ of the Authority Sets, and will be recorded into Factom and the minutes of the Guide meetings.

7.1. Amendment procedures:

7.1.1. Anyone seeking an amendment makes the suggestion in the, “Governance Chat” channel on Discord for public debate.

7.1.2. If an amendment appears to have support, it is written into the Governance Document by any Guide as a potential edit.

7.1.3. If the amendment is to the Guide section, a channel will be setup where the amendment is debated and the vote is tallied. If the motion passes, the change is ratified.

7.1.4. For amendments that are not to the Guide section, at the next Guide meeting it is further debated and voted upon. If ⅘ of the Guides vote for the change in the first 60 days, it passes. After 60 days, if ⅘ of the Guides vote for the change, it goes before the Authority Set.

7.1.5. If an amendment reaches the Authority Set, if ¾ vote for it, it passes and becomes part of the Governance Document.