2026

Canton Foundation- Technology & Operations Committee

Monthly Meeting Date/Time/Zoom:
https://us06web.zoom.us/j/82314742406?pwd=ggbT2lhG3mJFXSnyV83OMukIXvxeV2.1
Passcode: 534016
Every Other Monday at 9:00am ET

- Mailing list: tech-ops@lists.sync.global
- Documentation repository: Google Drive
    - Voting
        - Alex Chen DRW/Cumberland
        - Eduardo Furtado T-RIZE Group
        - Jonathan Mayeur IntellectEU
        - Melvis Langyintuo Canton Foundation
        - Shaul Kfir Digital Asset
    - Alts
        - Ali Abrar - Obsidian Systems
        - Evan Varsamis - Temple Digital Group
        - Heslin Kim - Zenith
    - Security
        - Edward Newman (Digital Asset)
        - Jean-Michel Mas (Ledger)
        - Richard Domikis (MPCH)
    - Core
        - Ratko Veprek (Digital Asset)
        - Vinh Nguyen (Five North)
        - Divam Narula (Obsidian Systems)
        - Timothy Golding (Tradeweb)
        - Norbert Vadas (Zenith)

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Background Docs

Operations: GSF Google Drive Organization
GSF GitHub repositories - Update
Validator Applications
Featured App Request (Responses)

Standing Agenda

- Node as Service requests
    - Node-as-a-service operators are expected to provide details on the following aspects of their service as part of the Tech Ops review process.
        - Confirm whether hosting validators or (private) supervalidators or both
        - Industry attestations (full year annual SOC2 Type 2) or certificates (ISO27001)
        - Hardening practices for the NaaS service; penetration tests
        - Description of Disaster Recovery plans. Backup and recovery plans for Validator nodes
        - KMS / HSM support
            - Specifically how the customer is provided with options for node keys and external signing keys
            - AWS/GCP HSM or custom driver for node keys
        - oAuth / Ledger API authentication options
        - What monitoring is in place for node and availability
        - Regions / availability zones for hosting
        - Demonstrate that node hosted on DevNet, TestNet and MainNet for a minimum of 30 days with fewer than 50 rounds missed and all upgrades performed correctly.
- Ongoing Audits
- Feedback that has come up

July 27, 2026

Agenda/Minutes:

- New Validator Operator Request — Applied Blockchain
    - KMS
        - Not in place
        - Using docker setup in kubernetes
        - Going to use AWS
        - Only ssh port open and whitelisting
    - Edward happy to talk offline
    - Consensus: to come back
- Instanodes
    - Some questions on KMS

    - Runs a lot of nodes for other networks.
    - Questions on what driver they are using and how backups are considered
    - Consensus:
        - Run a Validator Node on MainNet for 30 days and then walk through the process.
        - Come back with the Canton specifics
- https://sv-cal.canton.foundation/
    - Global Synchronizer Versioning
- Quantstamp Audit update
    - Found 2 low and 2 info in the completed draft
    - Soon to be published
- Minimum Security Standards for SVs
    - Edward working on a draft currently
    - Goal to have a bar for SVs to use.
    - Draft nearly ready
- Discussion around setting recommended standards for validators as well
    - Have not started yet. Anyone else willing to work on this?
    - Matt Shilston can help with this
- Feedback that has come up
    - Lexy intro

July 13, 2026

Agenda/Minutes:

- New Validator Operator Request — StakeCraft LLC
    - Confirm whether hosting validators or (private) supervalidators or both
        - Validators currently
    - Industry attestations (full year annual SOC2 Type 2) or certificates (ISO27001)
        - Not in place yet
    - Hardening practices for the NaaS service; penetration tests
    - Description of Disaster Recovery plans. Backup and recovery plans for Validator nodes
        - Has this in place and well documented
    - KMS / HSM support
        - MPCH helped with this
    - oAuth / Ledger API authentication options
        - Using Auth0
    - What monitoring is in place for node and availability
        - Using pager Duty with full time coverage
    - Regions / availability zones for hosting
        - Baremetal moving to kubernetes

    - Demonstrate that node hosted on DevNet, TestNet and MainNet for a minimum of 30 days with fewer than 50 rounds missed and all upgrades performed correctly.
        - Met as shown on ccview
    - Questions
        - Single or multi tenacy
            - They are divided by namespaces
    - Consensus: Good to go
- New Validator Operator Request — Applied Blockchain
    - KMS
        - Not in place
        - Using docker setup in kubernetes
        - Going to use AWS
        - Only ssh port open and whitelisting
    - Edward happy to talk offline
    - Consensus: to come back
- Quantstamp Audit update
    - First draft coming by EOD
    - (Annual review of Splice, including token V2)

June 29, 2026

Agenda/Minutes:

- (Edward) Audits in CIP proposals
    - CIP-0065 – Add Layer Zero, Wormhole, and Chainlink as SVs at Weight 3 each
        - And who does the audit, pays for the audit etc.
        - Chainlink did one by themselves - scope not ideal
            - Some aspects had risk acceptance that was internally accepted
                - Should these be broader
                - Risk acceptance should go through tech-ops for work paid for by dev-fund and CIPs
        - LayerZero looking for guidance
            - ACTION: Amanda to work with Edward on requirements
    - Proposal that all CIPS going forward have some aspect of costs for security audit going forward.
    - Production code should have milestones of security audit as part of the proposals
        - ACTION: put on security subcommittee agenda for discussion on practices done around when to require audits
- Minimum Security Standards for SVs
    - Edward working on a draft currently
    - Goal to have a bar for SVs to use.
    - Once draft is done will share to SVs for consideration
- Discussion around setting recommended standards for validators as well

    - There is risk of exposure for validator choices however they only impact the company level and not network.
- Elections Update
    - OpaVote email ballots

June 15, 2026

Agenda/Minutes:

- Welcome Barb
- Node as Service requests
    - Instanodes
        - Some questions on KMS
        - Runs a lot of nodes for other networks.
        - Questions on what driver they are using and how backups are considered
        - Consensus:
            - Run a Validator Node on MainNet for 30 days and then walk through the process.
            - Come back with the Canton specifics
    - BitGo
        - Using AWS for KMS
        - Bring your own Validator and Bitgo is providing that validator
        - Using Catalyst service in back end
        - Consensus: Good to go
- Shaul: Update on Elections schedule
    - Monday, June 15th – June 21st
        - Use the Tech&Ops forum to submit nominations for membership on these subcommittees
            - Nomination forms here:
                - Voting Group
                - Security Subcommittee
                - Core Contributors Group
                - Foundation Operations subcommittee
        - Discussion:
            - Question on % in rotation
                - Not formalized
                - Recommendation is for voting to continue in current form
                - Security and Core are under engaged and recommend some new candidates.
                - For Foundation Operations subcommittee recommend Minimum/Maximum rotation
- Wayne: New LSU scheduled
    - Introduce CantonBFT
    - DevNet and TestNet in July

    - MainNet Friday-Saturday August 7th - 8th
- Amanda: Update on Grants
    - Started Report as required by CIP-0100
    - Switching to focus area grants
    - Details still coming

June 1, 2026

Agenda/Minutes:

- Node as Service requests
    - None
- LSU schedule - Need a recommendation
    - Weekend or weekday
    - Which specific day for freeze and upgrade
    - Constraints / Tradeoffs:
        - Nodes that want to participate in the upgrade need to install the new Splice version in advance
            - Will have access at least a week before the upgrade (hoping for longer)
        - Topology freeze starts 24 hours before the upgrade event
            - This freezes
                - Package vetting (installing or upgrading new Daml apps)
                - Party onboarding
                - Party hosting / replication
                - Validator node onboarding
        - Actual upgrade involves Validator nodes processing transactions that point them from the current to the new synchronizer
            - Then a transaction to restart topology transactions.
            - Daml transactions may pause for a few seconds up to a few minutes at this switchover event
        - Timeline constraints:
            - Today: SVs need to submit an onchain vote to adopt the Daml models that will allow the upgrade event to be configured onchain.
            - Wednesday June 3rd: Practice LSU on DevNet (no protocol change)
            - Wednesday June 10th: Actual LSU on DevNet (protocol 34 to protocol 35)
            - Wednesday June 17th: Actual LSU on TestNet (p34 to p35)
        - Operational constraints / alternate views:
            - View 1: Downtime during highest volume business hours is never justified if there is an alternative
            - View 2: This will involve minimal downtime unless something goes wrong, and if something goes wrong we want the best possible access to the widest range of operational staff across all SV nodes

        - Discussion
            - Thoughts that we will eventually move this type of thing to a less busy time like a Saturday and might as well start that precedent now
            - Wednesday is the worst time.
            - Saturday is outside the traditional working hours, however many businesses have shifted to being comfortable working on Saturday.
            - Concerns on downtime over the week which is when some use as crucial testing time.
            - NOTE: non-protocol upgrades will still happen during the week, this is for the breaking upgrades that require downtime.
            - For days of the week, Friday would not be ideal. Monday is generally upgrades, Wednesday is a busy day. So ideal would be freeze on Wednesday and upgrade Thursday as one proposal.
            - Another proposal is freeze Sunday and upgrade Monday so that if there are any issues they can be addressed during the week.
                - Splice team says the work time will be the freeze so this is probably not ideal.
            - The 24 hour freeze is for caution and probably only need 12-14 hours, ideally with more testing can get these type of freezes to be shorter.
            - Optics that doing this on a weekday are better as it is business as usual.
            - From a trad-fi perspective breaking changes in business hours would not be ideal.
            - Topology freeze transfer needs to be monitored until complete.
            - Recommendation 1 (Tradeweb) Freeze 8pm ET Friday and upgrade Saturday
                - Seconded by DA
            - Recommendation 2 (Cumberland): Freeze 10am ET Monday and upgrade on Tuesday
                - Seconded by SBI
- Vote Proposal:
    - Proposal
    - Vote performed by voting members (results in a recommendation), or SV node owners (results in a final decision).
    - Votes
        - Digital-Asset-1 - Recommendation 1
        - Digital-Asset-2 - Recommendation 1
        - Five-North-1 - Recommendation 1
        - Global-Synchronizer-Foundation - Recommendation 1
        - Proof-Group-1 - Recommendation 1
        - Tradeweb-Markets-1 - Recommendation 1
        - C7-Technology-Solutions-Limited - Recommendation 2

        - Cumberland-1 - Recommendation 2
        - Cumberland-2 - Recommendation 2
        - Liberty-City-Ventures-1 - Recommendation 2
        - MPC-Holdings - Recommendation 2
        - Orb-1-LP-1 - Recommendation 2
        - SV-Nodeops - Recommendation 2
    - Quorum was not established. This decision has already been delayed by significant time.
    - New proposal: Move Recommendation 1 to 9 am ET
        - Recommendation 1 (Tradeweb) **Freeze 9 am ET Friday and upgrade Saturday 10 am**
            - Seconded by DA
        - Recommendation 2 (Cumberland): Freeze 10am ET Monday and upgrade on Tuesday
    - Votes
        - C7-Technology-Solutions-Limited - Recommendation 1
        - Cumberland-1 - Recommendation 1
        - Cumberland-2 - Recommendation 1
        - Digital-Asset-1 - Recommendation 1
        - Digital-Asset-2 - Recommendation 1
        - Five-North-1 - Recommendation 1
        - Global-Synchronizer-Foundation - Recommendation 1
        - Proof-Group-1 - Recommendation 1
        - Tradeweb-Markets-1 - Recommendation 1
        - Liberty-City-Ventures-1 - Recommendation 1
        - MPC-Holdings - Recommendation 1
        - Orb-1-LP-1 - Recommendation 1
        - SV-Nodeops - Recommendation 2
    - **Approved: Freeze 9 am ET Friday and upgrade Saturday 9 am**
        - **Friday June 26th will be the day to implement.**
- AOB
    - Concerns on the frequency of upgrades
    - Desire to have more visibility into what the upgrades are
        - The Google Doc Cal has visibility on https://sv-cal.canton.foundation/
- (tabled) Tech-Ops Sub Committee Voting Timeline
    - Voting group is up and running well with all members actively contributing
    - Security has ⅔ active members
    - Core has mixed engagement
    - Recommendation - do a new election for Security and Core group after operating for 3 months.
- (tabled) Sanctioned entities

May 18, 2026

Agenda/Minutes:

- Node as Service requests

    - None
- (continued) Bug Bounties
    - ACTION: Edward to work with Jesse (BitSafe)
    - Mixed feedback on bug bounties vs rewards.
    - Will continue conversation
- Ongoing Audits
    - Quantstamp for updated splice audit to start May 25th and has token V2
    - On track with other features as well.
- Feedback that has come up
    - Wayne Collier: Transaction timeouts over the past week
    - Question on how many SVs are SOC 2 Certified
        - Ask SVs who has certification, could make CIP to enforce SOC 2 Type II
            - Concerns on being SOC vs ISO vs ?
        - A GSIB was inquiring on needs for validators
            - All vetting would need to be done by that SV
            - Validators should be able to join without checks (right now limit due to scale)
        - Future discussion on unblocking transactions when a required validator is falling to validate. DA to work with Michael Gaare.
- Dev-Fund Update
    - Maintenance Grants quarterly review meeting last week of June
        - Concerns that quarterly is too frequent for meetings but should have quarterly evidence.
        - In this review process decide on frequency and see if need them quarterly.
        - Could have only meetings when evidence is not sufficient.
        - ACTION: Set up meeting with maintenance grant recipients+tech-ops+voting
- AOB
    - Request for feedback on https://github.com/canton-foundation/canton-dev-fund/pull/78 and https://github.com/canton-foundation/canton-dev-fund/pull/94
    - Listed wallets deferred to next meeting

May 4, 2026

Agenda/Minutes:

- Node as Service requests
    - None
- listed wallets program
    - David Richard's presenting
    - Having a self certify set of criteria for wallets to have
        - With evidence
    - Request to have these discussions under Tech-Ops

    - Concerns on this being a gate for FA status
    - Concerns on resources for 3rd party audits
    - Concerns on purview of the committee regarding FA
    - WIll take this and come back with more later
    - Important that the foundation is not the auditor
    - Should be separate policies
    - Needs problem statement - balance speed and compatibility.
- Bug Bounties
    - Can use AI to find bugs and pay for them to fix/repair?
    - Had some security researchers want programs
    - Case study: cUrl
    - Blockdaemon has done one successfully recently.
    - ACTION: Edward to work with Jesse
- Ongoing Audits
    - Quantstamp for updated splice audit to start May 25th and has token V2
- Feedback that has come up
    - CIP-0105 implementation and getting things working
        - Needs to be in the splice code
        - Obsidian is working on this currently
            - Would be potential lead based on experience
        - Core Contributors might be able to give guidance here
- Dev-Fund Update
    - In a few weeks go over review/pipeline
- AOB
    - None

April 20, 2026

Agenda/Minutes:

- Node as Service requests
    - Liquify - Came April 6th
        - Not quite at the 15 days in Main/Test
        - Need to clarify their KMS once ready
            - Using AWS for KMS, everything else inhouse
        - Consensus: good to go
    - Validation Cloud
        - AWS using for KMS
        - Provided complete answers
        - Consensus: good to go
    - Meria
        - Consensus: good to go
    - NodeOps
        - Consensus: good to go
- Validator Allocations up to 35 / week

    - We are getting less than 35 a week on Dev so wait for MainNet is a few weeks or less
- Dev Fund updates
    - https://github.com/orgs/canton-foundation/projects/3
    - Need Champions to highlight proposals that are useful
- AOB
    - Vulnerabilities
    - Should have more best practices for security / hardening
- Feedback that has come up
    - None

April 6, 2026

Agenda/Minutes:

- Node as Service requests
    - Nodeinfra
        - Consensus: ready to go
    - Stakin by The Tie
        - Consensus: ready to go
    - SenseiNode
        - Consensus: ready to go
    - Liquify
        - Not quite at the 15 days in Main/Test
        - Need to clarify their KMS once ready - Two weeks from today
    - Bulk statement- NaaS should also look at how they are upgrading. NaaS need to show weekly updates
- Wayne: General topics
    - Special Interest Groups
        - First place for grant applicants to go for support & advice
        - Advise grant applicants on how to strengthen their applications
            - Guidelines coming from Canton Foundation operations (Amanda)
        - Support the Core Contributor group in its recommendations to the Voting group
        - Dev Fund Board https://github.com/orgs/canton-foundation/projects/3/views/1
        - SIG Directory https://github.com/canton-foundation/canton-dev-fund/pull/164/changes
        - SIG Guidelines https://github.com/canton-foundation/canton-dev-fund/pull/165/changes
        - SIG sign up Canton Foundation Special Interest Groups
        - Wayne: Should we go ahead and push forward with the SIG groups?
            - Evan: ok to make the process public.
                - Need to improve the process for rejecting proposals.

        - Much of the grant discussion is in the Tech-ops slack channel (#cf-tech-ops) as they are still establishing what is a quality proposal.
    - Scaling
        - Validators
            - Still adding only 25 Vaildators weekly
            - Expect to be able to expand to 50 / week starting in July
            - MIght be possible to lift the requirement for reviews, but unclear whether that would produce a major jump in the future
            - DA will work to remove IP whitelisting over the next few months
                - Next step: SVs issue an auth token to any onboarding Validator
                - Will explore the possibility of self-service tokens, but we have to be realistic about scaling
            - Unclear what scale we're going to need to support over the long term
                - Thousands on the gSync seems certain
                - But:
                    - How many distinct node operators?
                    - How many total nodes?
                        - 10^4? 10^6?
        - Parties
            - Bottleneck is topology management
                - Currently at over 700k parties in MainNet
        - Tps:
            - Now at about 40, was at 7 a few months ago
            - 50 in July
            - Plans to go much higher eventually
                - Thousands?
                - 10^4 if everything is done right for an app via multi synchronizer
                    - Multi-sync will become more used over time
                        - Sub nets with higher TPS get discounts when interacting with global-sync
        - PG has a load testing center that is getting good results

Mar 23, 2026

Agenda/Minutes:

- Node as Service requests
    - Nodeinfra
        - Tabled
    - Kaleido
        - Application submitted Mar 23
        - Kubernetes with KMS packed

        - Consensus: They are good to go
- Ghost Hosting
    - Infrasingularity
        - Not able to run until they are an Standalone SV
- Shaul/Wayne/Ops Committee: Grant Proposal Champions and Special Interest Groups
    - Voting Committee has asked for Champions to work with grant applicants to improve the quality of their proposals.
        - We would like to ask Tech & Ops committee members to be the first line here if possible, starting with the Core Contributors group but the invitation is extended to all members of this Committee
        - We also propose extending this invitation to the broader community, inviting both Foundation members and non-members to engageTe. To give structure and to help expertise develop, we propose forming special interest groups (SIGs) in a variety of technical and use case areas
        - SIGs will be a resource for the Core Contributors group to draw on
        - Tech & Ops committee members should all join one or more SIGs
    - Preliminary list here: https://docs.google.com/document/d/1JQ4STFi9aySf5Or7xDivu9QkBhdZwWMBbXb7CKW83YI/edit?tab=t.mybqmsbo1xqa
        - Sign up to be a champion
- Dev Survey
    - Could feed into grant proposals
- Ongoing Audits
    - Need to redo the splice one (scheduled for May potentially)
- Feedback that has come up
    - None
- AOB
    - Slack - Get this started

Mar 9, 2026

Agenda/Minutes:

- Node as Service requests
- Dev Survey
    - In early Feb, our dev rels did a developer survey to assess the gaps we have with their build experiences across Canton. Below are the results. - https://discuss.daml.com/t/canton-network-developer-experience-and-tooling-survey-analysis-2026/8412
    - From here, we compiled the set of dev tools that we need built to fill the dev experience gaps between DAML and SVM/EVM. We will end up crafting RFPs for the community to build some, via the grants program.

A consolidated wishlist of the most requested tools and features from developers, reflecting their desire for parity with established ecosystems and streamlined workflows.

- Unified CLI Framework (Hardhat)
- Visual Debugger (Tenderly)
- Typed SDKs & Language Bindings
- Standardized Wallet Adapter
- Consolidated Documentation
- Package Manager & Operational Dashboards (Cargo)

Additional Developer Tooling Opportunities

- **Typed Client SDK & Code Generator:** Developers currently spend days manually extracting hash strings from compiled files (.dar) and hardcoding them into their frontends. They also struggle significantly with implementing JWT authentication middleware, which is a repeated friction point for “Hybrid” and “TradFi” teams.
- **Pre-Flight Resource & Cost Profiler:** Developers often deploy “blindly,” only discovering that their transactions are too large (hitting byte-size limits) or too expensive after they fail in a testnet or production environment.
- **Network Topology Visualizer:** Developers find it difficult to confirm if their Participant node is correctly “handshaking” with the Mediator and Sequencer, often relying on complex terminal commands to diagnose connectivity issues.
- **Unified Developer Knowledge Hub:** Documentation is currently fragmented across multiple distinct sites (Daml language, Canton protocol, Drivers, Open Source repos), making it difficult for new developers to form a mental model of the full stack.
- **Standardized Wallet Adapter & Reference Extension:** The current requirement to build custom signing services or custodial implementations is a barrier to entry for dApp builders.
- **Daml Dependency & Package Manager:** Managing dependencies is currently a manual, file-based process. Developers are manually downloading files, moving them between folders, and struggling to resolve version mismatches.
- Also regarding the liquidity seeding vertical for the dev fund, my team has created the below document evaluating the current structures implemented by other networks to bootstrap DeFi lending/borrowing & vault products.... and we also highlighted our current ecosystem's protocols and partners in this group (screenshop below) ...
  https://docs.google.com/presentation/d/1drtqug4lKtb48EwoEC0Y38BJnp3hua_3MMupyJ88r48/edit?slide=id.g3cbe56140d1_0_5#slide=id.g3cbe56140d1_0_5

The DeFi Liquidity Stack

5 layers	1 layer
Each depends on the others	exists on Canton today. The rest needs to be built.

Layer	Role	Examples	Exists on Canton?
Asset Issuers	Produce the RWA collateral that flows through the stack.	Hashnote (USYC), Tether (XAUt), SG-FORGE (EURCV), BlackRock (sBUIDL), Ondo, Midas, Centrifuge	Y
Lending, Trading & DEXs	Demand side. Borrowers pay interest, perp trading results in delta neutral opportunities. This is where yield originates.	Aave, Euler, Morpho (lending). dYdX, Hyperliquid, Uniswap, Curve (DEXs. Hello Moon ACME live March 2nd.	Almost
Vault Infrastructure	Supply side. Platforms where curators deploy and manage strategies.	Morpho Vaults, Pendle, Fluid, Euler Vault Kit	N
Strategy Curators	Build yield strategies, set risk parameters, curate vaults on the infra above.	Gauntlet, Re7, Steakhouse, Sentora, MEV Capital, Concrete, Edge Capital	Not Deployed
Capital / LPs	Supply assets into curated vaults and provide protocol liquidity.	Wintermute, FalconX, GSR, Flowdesk, DRW, Galaxy, Laser Digital	N

-
- Dev Fund
  - Reaching out for Tech and Ops Champian
  - How do we give ecosystem a way to get into the system with building
    - Slack channel cf-outreach or app-dev
    - dev-fund@canton.foundation
      - ACTION: Amanda to add to github repo and other visible places
        - Also list grants-discuss@lists.sync.global for those not ready for a full PR yet but looking at ideas
  - Priority (roadmap) is needed to give ecosystem guidance
    - Currently voting members are busy with backlog and would not have time to go into a forum type discussion
  - Grant approval
    - Grants officially opened March 2nd
    - The original statement was 2 weeks until first are approved (March 16)
    - Code implementation can start to pay out grants in about a month.
- Ongoing Audits
  - Edward to follow up with Quantstamp
- Feedback that has come up
  - None
- AOB

Feb 23, 2026

Agenda/Minutes:

- Node as Service requests
  - New Validator Operator Request — WolfEdge Labs

        - Recommendation to do back ups periodically
        - Consensus is they are ready to proceed
- Dev Fund / CIP-0100 Implementation
    - There is a 3 way tie for the alternates
        - Recommendation expand the alternates to 3:
            - Ali Abrar - Obsidian Systems
            - Evan Varsamis - Temple Digital Group
            - Heslin Kim - Zenith
    - Voting
        - Alex Chen DRW/Cumberland
        - Eduardo Furtado T-RIZE Group
        - Jonathan Mayeur IntellectEU
        - Melvis Langyintuo Canton Foundation
        - Shaul Kfir Digital Asset
        - ACTION: Amanda to announce and send out process for alternate selection when main not there
        - Each committee needs kick off/cadence/organization
            - Operate at guidance of voting - that one should go first
            - Later this week - async set up
    - Security
        - Edward Newman (Digital Asset)
        - Jean-Michel Mas (Ledger)
        - Richard Domikis (MPCH)
    - Core
        - Ratko Veprek (Digital Asset)
        - Vinh Nguyen (Five North)
        - Divam Narula (Obsidian Systems)
        - Timothy Golding (Tradeweb)
        - Norbert Vadas (Zenith)
    - Budget
        - Proposal submitted by Shaul
        - No objections with proposal- voting members to review later
    - No vote on the operations subcommittee as it has been meeting for >1year
        - After this we should have a vote to add 2 members (and entire committee)
        - Timeline ~2months
- Technical Review
    - None
- Ongoing Audits:
    - Discussions started on next audit with Quantstamp regarding splice
- Feedback that has come up
    - None
- Bug Bounty
    - Traditional bug bounties are no longer feasible with AI slop

    - Community support should be encouraged
        - Can be prioritized and funded
            - Jonathan to make a proposal
    - Dev fund can incentivize some fixes
    - Some sentiment is the ROI on such bounties is not ideal unless handled very well.
    - Require a more structured proposal
        - Edward to consider this for feasibility
- AOB

Feb 9, 2026

Attendees:

1. Amanda Martin (Canton Foundation)
2. Bart Wessels (POPS)
3. Ben Stolman
4. Cameron Nili
5. Chris Matturri
6. Eduardo (T-RIZE)
7. Edward Newman
8. Evan V. (Temple Digital Group)
9. Heslin Kim
10. Jack Charlesworth - LayerZero
11. Jesse Farese
12. Jonathan
13. Justin Peterson
14. Lucas Naundorf
15. Maciej (RedStone)
16. Malik Faizullah
17. Matt Shilston (MPCH)
18. Melvis Langyintuo
19. Michael Gaare
20. Mirella Guglielmi
21. Muskan
22. Shaul Kfir
23. Sonal Patel (Canton Foundation)
24. Soph N (POPS)
25. Stas German (SBI)
26. Thibaut HOUEDAN (Lithium Digital)
27. Vignesh Iyer
28. Vinh Nguyen
29. Wallace Kelly (DA)
30. Wayne Collier
31. Yash

32. Zhe Li (Gateway.FM)

Agenda/Minutes:

- Dev Fund / CIP-0100 Implementation
    - Overview
        - Feedback that quarterly is very frequent
        - Any change can be done with a CIP vote
    - Voting Group
        - Explanation of responsibilities
        - Review of nominees
        - Members: 5 voting, 2 alternate
            - Via rank choice starting Tuesday 5:30pm PST
            - Voting Closes Friday 5pm PST
        - Voting tool
            - OpaVote
        - Voting procedure
        - Vote timing
    - Core Contributors Group
        - Explanation of responsibilities
        - Review of nominees
        - Agreement on number of members
            - Recommendation 5 in each slate
        - Propose and discuss membership slates
        - Voting procedure
    - Security Subcommittee
        - Explanation of responsibilities
        - Review of nominees
        - Agreement on number of members
            - Recommendation 3 in each slate
        - Propose and discuss membership slates
            - Any new slate should be sent by Wednesday 5pm PST
        - Voting procedure recommendation
            - OpaVote for rank choice for slate acceptance starting Wednesday 5:30pm PST
            - Voting Closes Friday 5pm PST
            - Results announced to Tech and ops mailing list Friday night
    - Operations Subcommittee
        - Explanation of responsibilities
        - Current members (five)
        - Timing of nominations and votes for additional two members
        - Recommendation to keep current members as is:
            - Wayne, Itai, Taras, Amanda, Stas
    - Mechanism for submission
        - Schedule for first submissions

        - Establish submission template
        - Establish process for submissions
        - Announcement for proposals is March 2
        - First grant approval on March 16
        - Feedback
            - Everything public unless security related (exception)
            - **Consensus:** for this proposal to move forward.
- Technical Review
    - None at this time
- Node as Service requests
    - (tabled) Node as a Service Application: ANGELHACK PTE. LTD.
    - (tabled) New Validator Operator Request — WolfEdge Labs
    - (tabled) Node as a Service Application: DLTA Solutions Ltd.
    - (tabled) BNPP - Validator Operator Request
    - New Validator Operator Request — P-OPS Team - Coming Feb 9th
        - **Consensus:** Ready to go
    - New Validator Operator Request — Alchemy Inc- Coming Jan 26th
        - Using AWS KMS
        - Missing TestNet node - need 15 days
        - **Consensus:** after 15 days of TestNet with less than 50 rounds they are ready, this needs to be confirmed in an announcement to the SVs they have passed all requirements.
- Ongoing Audits:
    - Thinking of the next review of Splice - should come up soon
- Feedback that has come up
    - Everyone wants everything to be faster
    - Demand for 80-100 TPS currently (year end might hit this)
    - More incremental improvement coming sooner.
- Bug Bounty
    - Tabled for future meeting

Jan 26, 2026

Attendees:

33. Alchemy team
34. Alexandru Gheorghe (Alchemy)
35. Aman Goyal
36. Amanda Martin (Canton Foundation)
37. Ankit Malhotra
38. Anthony Woolley
39. Ben Stolman
40. Chris Matturi
41. Eduardo (T-RIZE)

42. Jatin Pandya
43. Jesse
44. Jesse Farese
45. Jitin Jain (InfraSingularity)
46. Jonathon
47. Justin Peterson
48. Kiryl (NODERS)
49. Levgen Zubkov
50. Lucas Naundorf
51. Maciej (RedStone)
52. Malik Faizullah
53. Melvis Langyintuo
54. Muskan
55. Norbert Vadas
56. Omri Maya
57. Parth Chaturvedi
58. Rahul Meena
59. Richard C
60. Richard Domikis (MPCH)
61. Sonal Patel (Canton Foundation)
62. Stas German (SBI)
63. Teagan Buckley
64. Valentin Stavetski
65. Vitesh Mallhotra
66. Wayne Collier
67. Yash
68. Yuval Carmel (Ownera)
69. Zhe Li (Gateway.FM)

Minutes:

- Dev Fund
    - CIP-0100
    - Next steps should happen soon- perhaps for next meeting
        - Justin and Bernard are meeting to discuss.
    - Conducted a high level review on the call to start gaining familiarity.
    - Before, the SVs agreed that any unminted CC below the max minting curve, would become part of the unminted pool that could be minted by the Canton Foundation with approval from SVs.
    - 5% of the mind will start to be assigned to an unminted pool for the CF to mint out, the SV will authorize a party with the CF to mint out of the pool.
        - This is being set up now.
    - This is the governance for how to disperse from the fund for SVs doing development.
        - 5% to be dispersed as grants for development.

    - The proposal is outlining how the governance will work with the Tech & Ops Committee.
    - This will be focused on quality code being submitted and reviewed through a high trust process, and ensures the high priority needs of the network are met.
    - Ideally will see 5-10 teams form that do full time work from this pool, and splice.
        - Members should consider companies they have in mind or build a team to dedicate to this work, and apply for the grants.
- Technical Review
    - None
- Validator Meeting (Amanda)
        - Meet the DevRels
        - Network status and validator landscape
            - Long Term calendar
        - CIP-0096 liveness rewards phase-down and April 30 implications
        - (March) Dev Fund information
        - Evolving validator role and expectations
        - NaaS and validator onboarding guidance
        - Application activity and network utility alignment
        - Governance, operations, and upcoming actions
        - (wait for new docs to be live) Docs
            - How to collaborate in the docs
        - Spotlight - on how validator runs their node
        - CIP Process - why is it important
        - Apps to install - how to find
            - **Marketing with app builders**
            - **Multi application networks and collaboration**
        - How to get on MainNet
    - Cadence of monthly (or less) conference style meeting
        - **ACTION:** Amanda and Wayne will meet on this.
    - Many members in the group are interested in an in-person meeting.
- Rebranding Github Org to Canton-Foundation
    - The org level will take place on January 28, and then enterprise level 2 weeks later.
    - Splice rebrand will be in the future.
- Node as Service requests
    - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
    - New Validator Operator Request — WolfEdge Labs
    - New Validator Operator Request — P-OPS Team
    - Node as a Service Application: DLTA Solutions Ltd.
    - BNPP - Validator Operator Request
    - New Validator Operator Request — Ownera- Coming Jan 26th
        - Uses AWS KMS, getting DFNS integrated for other wallet infrastructure
        - **Consensus:** ready to go
    - New Validator Operator Request — InfraSingularity- Coming Jan 26th

        - Running on all 3 networks since Sept
        - **Consensus:** ready to go
    - New Validator Operator Request — Noders LLC - Coming Jan 26th
        - Also using gitops
        - Dashboard for user control
        - **Consensus:** ready to go
    - New Validator Operator Request — Alchemy Inc- Coming Jan 26th
        - Using AWS KMS
        - Missing TestNet node - need 15 days
        - **Consensus:** after 15 days of TestNet with less than 50 rounds they are ready, this needs to be confirmed in an announcement to the SVs they have passed all requirements.
- Ongoing Audits:
    - None
- Feedback that has come up
    - None
- Bug Bounty
    - Tabled for next week - not discussed yet in this committee.
    - Comment was made that it needs to be kept in mind that the rise of AI is causing a flux in bug bounties.
- Zenith update
    - Not going to hit milestone - for accountability?
    - TestNet rollout needs more speed.

Jan 12, 2026

Attendees:

1. Amanda Martin
2. Chris Matturi
3. Colin Schwarz
4. Daniel Schrader
5. Eduardo
6. Hatcher Lipton
7. James Sherborne
8. Jesse Eisenberg
9. Jonathon Mayeur
10. Jose Velasco
11. Justin Peterson
12. Levgen Zubkov
13. Malik Faizullah
14. Matt Shilston
15. Melvis Langyintuo
16. Michael Gaare
17. Nobert Vadas

18. Parth Chaturvedi
19. Richard Domikis
20. Sebastian Lindner
21. Tea (Pending full name)
22. Thibaut Houedan
23. Vinh Nguyen
24. Wayne Collier

Minutes:

- Dev Fund
    - Report from IEU on work to complete 5% fund
        - Setting up the governance around the funding by IEU
        - First Jose is finishing the technical machinery for the fund to accumulate
            - The goal is to complete by March 5
                - Going to be a UI to disperse the funds from the Foundation
                - Assigned to a partyID for just those funds
                - Control over the coupons that the funds can be minted
            - The goal is to have a UI the group can provide feedback on in February
        - Then to assign the funds to a party that is agreed on
        - After that need to approve the governance procedure done via a CIP
            - CIP still in CIP-Discuss
- Technical Review
    - CIP-0086: Native ERC-20 Middleware for Canton Network is requesting a weight release of 3, their presentation is visible here.
        - In reviewing the API the Accountability Committee wanted a review from Tech and Ops to make sure it meets the requirements as listed in the CIP especially "API interface schemas for the ERC-20-compatible middleware."
        - Here is a link to a video demo of their middleware api.
            - https://drive.google.com/file/d/17iD1oLtIPGDWLGzSDay-Bxs8d4-U3KNP/view?usp=drivesdk
        - Initial feedback is that the API needs some more work to be in line with the API
            - More of a bridge rather than a direct API
        - DA and Chainsafe to work together via Slack
    - Zenith provided an update
        - A new primitive called ‘External Core’ has been added, with a PR submitted and feedback provided by a few members that are being worked on
        - A design template and document have been created
        - The latest updates and design document will be pushed soon, potentially tomorrow
        - Support on the environment is requested

                - The CIP specifies Testnet for the first milestone
                - Will work together with Wayne to create a scratch net
            - The EVM side of the stack and SDK are being worked on, with completion intended for the milestone deadline (late Feb, early Mar)
            - The conversations are taking place in Slack
- Node as Service requests
    - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
    - Node as a Service Application: Saxon - came Nov 17 + Jan 12th
        - KMS driver- writing and want to opensource the driver to others
        - Scaleway is heavily used in there system.
            - Completed (as of Jan 12th) via a private repo
            - There was prior discussions on open sourcing this work
                - Happy to go in this direction just need to know the steps on this
                - Jonathan M and Saxon to discuss asynchronous
            - Would like allocation to work with before have clients
                - Pending on approval from Tech-Ops
        - **CONSENSUS:** Ready to host validators
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - New Validator Operator Request — WolfEdge Labs
    - New Validator Operator Request — P-OPS Team - Coming Jan 12th
    - Node as a Service Application: DLTA Solutions Ltd. - Coming Jan 12th
    - New Validator Operator Request — Noders LLC - Coming Jan 12th
    - BNPP - Validator Operator Request
- Ghost Escrow
    - Ghost Escrow 5North - Coming Jan 12th
    - Vinh Nguyen walked through the escrow weight hosting setup process.
    - **Consensus:** They are ready to host ghost SVs
- Ongoing Audits:
    - None
- Feedback that has come up
    - Halving coming in about 2 hours

2025

Canton Foundation- Technology & Operations Committee

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Examples of types of actions that are prohibited at Canton Foundation meetings and in connection with Canton Foundation activities are described in the Canton Foundation Antitrust Policy and Checklist. If you have questions about these matters, please contact your company counsel.

Background Docs

Operations: GSF Google Drive Organization
GSF GitHub repositories - Update
Validator Applications
Featured App Request (Responses)

Standing Agenda

- Node as Service requests
    - Node-as-a-service operators are expected to provide details on the following aspects of their service as part of the Tech Ops review process.
        - Confirm whether hosting validators or (private) supervalidators or both
        - Industry attestations (full year annual SOC2 Type 2) or certificates (ISO27001)
        - Hardening practices for the NaaS service; penetration tests
        - Description of Disaster Recovery plans. Backup and recovery plans for Validator nodes
        - KMS / HSM support
            - Specifically how the customer is provided with options for node keys and external signing keys
            - AWS/GCP HSM or custom driver for node keys
        - oAuth / Ledger API authentication options
        - What monitoring is in place for node and availability
        - Regions / availability zones for hosting
        - Demonstrate that node hosted on DevNet, TestNet and MainNet for a minimum of 30 days with fewer than 50 rounds missed and all upgrades performed correctly.

- Ongoing Audits
- Feedback that has come up

Jan 12, 2026

- There is a new tab for 2026

Dec 15, 2025

Attendees:

1. Aman Goyal (SBI)
2. Amanda Martin (Canton Foundation)
3. Anthony Woolley (Ownera)
4. Charles Desmonty (Kaiko)
5. Chris Matturri (ProofGroup)
6. Eduardo Furtado (T-RIZE Group)
7. Kojiro Hirate (Hinode Technologies)
8. Luke Streckenbach (Figment Inc)
9. Maciej (RedStone)
10. Matthew Shiltston (MPCH)
11. Melvis Langyintuo (Canton Foundation)
12. Michael Gaare (Denex)
13. Norbert Vadas
14. Parth Chatvuredi
15. Prashant Kandel (Hinode Technologies)
16. Sonal Patel (Virtual Inc)
17. Thibaut Houedan (Lithium Digital)
18. Vinh Nguyen
19. Wayne Collier (Digital Asset)
20. Yash (Launchnodes)

Minutes:

- Future: Blockdaemon detailed discussion on tradeoffs for baremetal vs. kubernetes; potential for tooling tuned to bare metal
    - Reduce costs for large-scale validators like wallets & app providers
    - Request for splice docs on baremetal
        - 3 SV have tried BM deployment - showed slower responses
        - Potential work group to create request to splice team
        - **Hold until Blockdaemon asks for this**
- Tested the Dfns wallet for SV rewards and other external wallets - none work for SV rewards

        - What is the issue with external wallets, what is needed from those providers, etc.
        - At least 3-4 SVs what to use such wallets
            - In once case using external caused reward loss as we didn't know this was an error
        - Will not work until implementation of CIP-0073 is finished
            - This is as expected
            - Needs a delegation contract to work otherwise which is built into 0073
            - CIP-0073 does not have a solid date of delivery, design doc is nearing completion.
                - Optimistic that it will be in less than 2 months
                - Obsidian can report on status
- Node as Service requests
    - New Validator Operator Request — Next Finance Tech - Coming Dev 1
        - Need a node on TestNet - for 2 weeks
            - Then can be approved.
    - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
    - Node as a Service Application: Saxon - came Nov 17
        - KMS driver -writing and want to opensource the driver to others
        - Scaleway is heavily used in there system.
        - When they are ready with KMS then come back and represent
            - Also have some Canton Apps that want to have allocations
    - Node as a Service Application: DLTA Solutions Ltd.
    - Node as a Service Application: Hinode Technologies - Dec 15th
        - Using AWS to manage KMS
            - Written own KMS driver
        - Consensus: that they can move forward.
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
- Ongoing Audits:
    - None at this time
- Feedback that has come up
    - Weekend was tough on SVs to keep up
        - No known reason yet - still exploring
        - DA is following up with team
- Meetings
    - Cancel December 29th
        - Consensus to cancel

Dec 1, 2025

Attendees:

1. Justin Peterson (Tradeweb), Chair
2. Amanda Martin (Canton Foundation)

3. Amaury Perez (GS)
4. Aman Goyal (SBI)
5. Chris Matturri (ProofGroup)
6. Edward Newman (DA)
7. Ievgen Zubkov (Intellect EU)
8. Jonathan Mayeur (Intellect EU)
9. Maciej B
10. Malik Faizullah (Moody's)
11. Melvis (Canton Foundation)
12. Michael Gaare (Denex)
13. Rajesh Sinsha (Launchnodes)
14. Richard Curtis (Calastone)
15. Richard Domikis (MPCH)
16. Robert Soldner
17. Sonal Patel (Virtual)
18. Wayne Collier (DA)
19. Yash (Launchnodes)
20. Zhe (Gateway.FM)
21. Soichiro Tokuriki (Next Finance Tech)
22. Yoshiki Kurihara (Next Finance Tech)
23. Shinya Tsuchida (Next Finance Tech)

Minutes:

- Splice contributions
    - External parties are accepted.
    - Mostly Obsidian and IEU working on CIPs
    - PixelPlex is working with a new CIP on DApp API standards
    - Would like to work on identity verification and party metadata
        - Essentially a directory service
    - Process
        - CIP is the base agreement on the splice contributions
        - Generally non-breaking changes
            - SV normally accept these
        - Breaking changes are DAML model upgrades and protocol changes
            - New functionality requires a CIP process
    - Slack channel called **splice contributions** (right now under DA)
        - Those in active development can join.
        - Currently Developer relations are mostly under DA and are transitioning to the Foundation as there is more SME on the Foundation side.
    - Priorities can come from each team.
        - DA sets based on whole of SVs, currently **scale, security and App dev tooling**
        - Other priorities from parties are encouraged through the CIP process and implementing those CIPs

    - CTA: People should get involved in the CIPs so more parties have this knowledge to move forward and expand the network.
        - Currently IEU and Obsidian are great parties that have set this example, though could expand the number of people in each organization.
        - SBI also helped with configurations and governance inside Splice.
    - IEU has a CIP implementation for the 5% Dev Fund (tentative before Feb)
        - CIP-0082: Establish a 5% Development Fund (Foundation-Governed)
        - Anyone can submit CIPs for that Dev Fund
        - Way to expose prioritization to request the funding
        - Encourages cross organizational engagement with sharing the resources.
        - Tech-Ops may be part of reviewing those CIPs from a technical perspective (pending a CIP defining governance of this fund)
    - Question on creating a CIP for the hardware compensation for SVs
        - Offset the costs of running
        - Needs to be proposed through a CIP that the SVs vote on since it changes the governance of the funds
- Node as Service requests
    - New Validator Operator Request — Next Finance Tech - Coming Dec 1
        - Need a node on TestNet - for 2 weeks
            - Then can be approved.
    - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
    - Node as a Service Application: Saxon - came Nov 17
        - KMS driver -writing and want to opensource the driver to others
        - Scaleway is heavily used in there system.
        - When they are ready with KMS then come back and represent
            - Also have some Canton Apps that want to have allocations
    - Node as a Service Application: DLTA Solutions Ltd.
    - Node as a Service Application: Hinode Technologies - Dec 15th
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: GlobalStake -came sept 22
        - Consensus- needs to come back with KMS solution
            - MPCH will reach out with a solution for this with Ryan
- Ongoing Audits:
    - None at the moment
- Feedback that has come up
    - Latest release
        - 3.4.8 had initial trouble - now resolved.

Nov 17, 2025

Attendees:

1. Justin Peterson (Tradeweb), Chair
2. Alex Gorelik (Cantor8)
3. Amanda Martin (Canton Foundation)
4. Amaury Perez (Goldman Sachs)
5. Andrew Howell (Blockdaemon)
6. Ben Stolman (CF)
7. Chris Matturri (ProofGroup)
8. Edward Newman (DA)
9. Ian Lawrence (Saxon)
10. Ievgen Zubkov (IEU)
11. James Henry Sherborne (Saxon)
12. Jonathan Mayeur (Intellect EU)
13. Maciej B
14. Melvis (Canton Foundation)
15. Michael Gaare (Denex)
16. Robert Tera (BitSafe)
17. Sonal Patel (Virtual)
18. Vinh Nguyen (5N)
19. Yuval Carmel (Ownera)

Agenda:

- Node as Service requests
    - Edgevana Request to Host Validator Nodes on Behalf of Third Parties
        - Emailed more information
        - Consensus: Good to go
    - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
    - Node as a Service Application: Saxon - came Nov 17
        - KMS driver -writing and want to opensource the driver to others
        - Scaleway is heavily used in there system.
        - When they are ready with KMS then come back and represent
            - Also have some Canton Apps that want to have allocations
    - Node as a Service Application: DLTA Solutions Ltd.
    - Node as a Service Application: Hinode Technologies
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: GlobalStake -came sept 22
        - Consensus- needs to come back with KMS solution

        - MPCH will reach out with a solution for this with Ryan
- Ongoing Audits:
    - Should we get another one around Splice
        - Quantstamp has agreed to yearly
    - Tool to look at Saas scanning on DAML
    - Ping Edward if anyone wants to discuss AppSec
- Feedback that has come up
    - Node allocations are an issue
    - Performance and transaction throughput
        - Should be monitors / dashboards / outputs of these performance tests
        - DA has a strong focus on scalability and testing
        - CF is partnering with ecosystem partners to make this more publicly available
        - Validator performance is not coupled with sponsored SV
    - **Next**: making it behave more like a public network
        - Splice contributions (Open Source through LFDT)
        - Roadmap and prioritization
        - Wayne invite for next

Nov 3, 2025

Attendees:

1. Justin Peterson (Tradeweb), Chair
2. Amanda Martin (Canton Foundation)
3. Avi (Pier Two)
4. Ben (CF)
5. Ben Latz (The Tie)
6. Chris Matturri (PG)
7. Edward Newman (DA)
8. Eduardo Furtado (T-RIZE)
9. Heejin Lee
10. Maciej B
11. Melvis (CF)
12. Miyeon Choi
13. Ievgen Zubkov
14. Joonkyo Kim (DSRV)
15. Malik Faizullah
16. Sarah Jimin RyuJoonkyo Kim (DSRV)
17. Seamus McNab (Pier Two)
18. Seunkkon Hwang
19. Wayne Collier (DA)
20. Vinh Nguyen (5N)
21. Yuval Carmel (Ownera)
22. Zhe Li (Gateway)

Agenda:

- Party scaling
    - Engineering fixes removed excess validator confirmations during party onboarding and resolved bottlenecks.
    - Tested on Splice 0.4.22. Practical ceiling increased from roughly 70,000 total parties to about 250,000 total parties.
    - Primary constraint is the total active contract state per single party. Keep any single party at or below about one million UTXO contracts.
    - The DSO party currently holds the largest contract set because it co-signs every Canton Coin UTXO. Migration of a one-million-contract state takes about four hours. Some super validators may see up to five hours.
    - Major upgrade window target is four hours. This is an exception to the earlier three-hour target.
    - Available headroom through the planned December 10 upgrade is about 180,000 additional parties.
    - Weekly onboarding target is about 30,000 parties network-wide.
    - Split of weekly capacity
        - First 15,000 reserved for regular background onboarding across wallets and apps
        - Second 15,000 reserved for major campaigns
    - Catch-up policy
        - Aim for about 1,000 parties per app per week
        - If the first 15,000 is under-used, remaining capacity is reallocated to apps that already met 1,000 in that week
    - Proceed with accelerated onboarding under the 30,000 per week network target and the two-pool allocation approach.
    - Maintain the single-party contract ceiling near one million to keep upgrade windows within tolerance.
    - Adopt the auto-merge guidance and ensure wallets and apps align before any airdrop or drip activity.
- Node as Service requests
    - Node as a Service Application: DSRV - came Nov 3
        - Consensus: Ready to go
    - Node as a Service Application: Pier Two - came Nov 3
        - Consensus: Ready to go
    - Node as a Service Application: Gateway.fm -came sept 22 - Came Oct 20 - came Nov 3
        - Uses HashiCorp Vault - Others have also used this but still need to write the driver
            - Still work in the process
        - Update Oct 6 - They are using a Enterprise License from Digital Assets
        - Consensus: Come back with how keys are managed
            - Within a few weeks this will be ready

                - Consensus: come back in 2 weeks to the next meeting
            - New application: https://gateway-fm.notion.site/Gateway-FM-NodeOps-application-external-29fd1078e4968005a3d5e89616c040b9
            - Consensus: Ready to go
        - Node as a Service Application: SenseiNode
            - Unsure with KMS
                - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
        - Node as a Service Application: GlobalStake -came sept 22
            - Consensus- needs to come back with KMS solution
                - MPCH will reach out with a solution for this with Ryan
        - Node as a Service Application: ANGELHACK PTE. LTD. - Coming Nov 17
        - Node as a Service Application: Saxon
        - Node as a Service Application: DLTA Solutions Ltd.
- Ongoing Audits:
    - DA next is network components
- Feedback that has come up
    - Increased traffic on chain taking longer to index
        - Hashnote transaction and app marker rate highly increased
            - DA reached out
            - Splice team is looking at ways to make app marks faster
            - Backlog of app markers for SVs to work through
            - 8 TPS background
            - Send app is one that encourages transfers
        - This will be a long term issue across many realms.
    - Validators might not have the full picture and could use some SV outreach to them on common issues like load / memory / etc
        - Scalability team is looking at future states based on current
        - 3rd rec still works for high scale apps
        - App providers probably know more than SVs on hardware requirements.
    - Partner with smart audit partners to help apps launch
    -

Oct 20, 2025

Attendees:

23. Justin Peterson (Tradeweb), Chair
24. Amanda Martin (Canton Foundation)
25. Alex Gorelik
26. Alexey Bychkov
27. Amaury Perez (Goldman Sachs)
28. Ben Latz (The TIe)
29. Chad Hodges unit410
30. Chris Matturri (ProofGroup)

31. Chris Pereira unit410
32. Edward Newman (DA)
33. Eduardo Furtado (TRIZE)
34. Fiona Zhang
35. Kevin Li
36. Kevin Ko
37. Jonathan Mayeur (Intellect EU)
38. Jesse Eisenberg (Bitsafe)
39. Josh Mercer-Deadman (LayerZero) dial in
40. Levgen Zubkov
41. Maciej B
42. Malik Faizullah (Moody's)
43. Matthew Shilston (MPCH)
44. Michaael Roberge
45. Michael Gaare
46. Nick Haskins unit410
47. Richar Domikis
48. Ryo Shimotsu (SBI)
49. Steven O'Connor (Edgevana)
50. Wayne Collier (DA)
51. Vinh Nguyen (5North)
52. Yevhenii Shchybria
53. Yuri Martynenko (Everstake)
54. Zakhar Goncharenko
55. Zhe Li

Agenda:

- Node as Service requests
    - Node as a Service Application: Edgevana - ready for Vote - Came Oct 20
        - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
            - Need more clarity on wallet provider (building their own wallet?)
                - What is plan for external signing for multi parties on single node
        - Docs
        - Moving from postGres to AWS
        - Not quite complete with migration
            - A quick demo when ready would be nice
        - Consensus: approved withstanding video in production shared offline
    - Node as a Service Application: K2F Labs - Came Oct 20
        - K2F NaaS Application Demo.mp4
            - Very standard set up
            - Consensus: Ready to go

    - Node as a Service Application: Everstake - Came Oct 20
        - Would like async review
            - Want to attend a meeting
            - Consensus: Ready to go
    - Node as a Service Application: Gateway.fm -came sept 22 - Came Oct 20
        - Uses HashiCorp Vault - Others have also used this but still need to write the driver
            - Still work in the process
        - Update Oct 6 - They are using a Enterprise License from Digital Assets
        - Consensus: Come back with how keys are managed
            - Within a few weeks this will be ready
            - Consensus: come back in 2 weeks to the next meeting
    - Node as a Service Application: Unit 410 coming Oct 20
        - Comprehensive set up with all the requirements although they use custom docker compose
        - Very interesting wallet integration
            - Consensus: Ready to go
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: GlobalStake -came sept 22
        - Consensus- needs to come back with KMS solution
            - MPCH will reach out with a solution for this with Ryan
    - Node as a Service Application: Pier Two
    - Node as a Service Application: DSRV
    - Node as a Service Application: DLTA Solutions Ltd.
- Ongoing Audits:
    - DA next is network components
- Feedback that has come up
    - Increased traffic on chain taking longer to index
        - Hashnote transaction and app marker rate highly increased
            - DA reached out
            - Splice team is looking at ways to make app marks faster
            - Backlog of app markers for SVs to work through
            - 8 TPS background
            - Send app is one that encourages transfers
        - This will be a long term issue across many realms.
    - Validators might not have the full picture and could use some SV outreach to them on common issues like load / memory / etc
        - Scalability team is looking at future states based on current
    -

Oct 6, 2025

Attendees:

56. Justin Peterson (Tradeweb), Chair
57. Amanda Martin (Canton Foundation)
58. Eduardo Furtado (T-RIZE)
59. Melvis (Canton Foundation)
60. Luke Streckenback (Figment)
61. Matthew Shilston (MPCH)
62. Edward Newman (DA)
63. Ben Stolman (Canton Foundation)
64. Chris Matturri, Rep (ProofGroup)
65. Michael Gaare (DeNex)
66. Vinh Nguyen (5North)
67. Maciej Bohusz (RedStone)
68. Richard Domikis (MPCH)
69. Wayne Collier (DA)
70. Ryo Shimotsu (SBI)
71. Cameron Nili (LayerZero)
72. Malik Faizullah (Moody's)
73. Eduardo Furtado (T-RIZE)
74. Jesse Eisenberg (Bitsafe)
75. Ben Latz (The TIe)
76. Aman Goyal (SBI Digital Asset)
77. Mirella Guglielmi (Figment)
78. Teagan Buckley (Canton Foundation)

Agenda:

- [15 min] MPCH
    - KMS demo
    - Still in testing
        - Part of the SV Deliverables
        - ACTION: Amanda to find MPCH commitment letter
    - Consensus: MPCH has met the requirements for providing a native MKS solution
- Node as Service requests
    - Node as a Service Application: Edgevana - ready for Vote?
        - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
            - Need more clarity on wallet provider (building their own wallet?)
                - What is plan for external signing for multi parties on single node
    - Node as a Service Application: K2F Labs - ready for Vote?
        - K2F NaaS Application Demo.mp4

            - Want to attend a meeting
    - Node as a Service Application: Everstake - ready for Vote?
        - Would like async review
            - Want to attend a meeting
    - Node as a Service Application: Gateway.fm -came sept 22
        - Uses HashiCorp Vault - Others have also used this but still need to write the driver
            - Still work in the process
        - Update Oct 6 - They are using a Enterprise License from Digital Assets
        - Consensus: Come back with how keys are managed
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: GlobalStake -came sept 22
        - Consensus- needs to come back with KMS solution
            - MPCH will reach out with a solution for this with Ryan
- Escrow SV Process Overview - Feedback Request
    - ACTION: Matt to send up updated deck
    - Consensus: This is a good approach going forward
- Ongoing Audits:
    - NA
- Feedback that has come up
    - NA
- Training with AngelHack - CantonCoreAcademy@sync.global
    - Looking for judges and mentors
    - See email thread https://lists.sync.global/g/tech-ops/topic/canton_core_academy_judges/115616976

Sept 22, 2025

Attendees:

79. Justin Peterson (Tradeweb), Chair
80. Alex Gorelik (DigiK)
81. Aman Goyal
82. Amanda Martin (GSF & Linux Foundation)
83. Aman Goyal (SBI Digital Asset)
84. Anthony Wooley (Ownera)
85. Anoosh Arevshatian
86. Chris Matturri (ProofGroup)
87. Charles Desmonty (Kaiko)

88. Chandra Kiran (Luganodes)
89. Dan Simerman
90. David Petrie (4m Group)
91. Edward Newman (DA)
92. Eduardo Furtado (T-RIZE)
93. Jan Hoenisch (Lukka)*
94. Kris (Luganodes)
95. Malik Faizullah (Moody's)
96. Matthew Shilston (MPCH)*
97. Melvis (Canton Foundation)
98. Richard Domikis (MPCH)
99. Ryan Haczynski (GlobalStake)
100. Sanjeev
101. Srikanth (Gateway.fm)
102. Stephane Loeuillet (Kaiko)
103. Thomas Chaffee (GlobalStake)
104. Tom Kiblin (GlobalStake)
105. Vinh Nguyen (5North)
106. Wayne Collier (Digital Asset)
107. Will (GlobalStake)
108. Zhe Li

Regrets

109. Aki Balogh (Bitsafe)
110. Amaury Perez (Goldman Sachs)
111. Andrew Howell (Blockdaemon)
112. Bala Rajagopalan (Tradeweb),
113. Brad Turner (Blockdaemon)
114. Brett Hornung (BCW)
115. Caleb Bolden (Blockdaemon)
116. Carlos (Sensei Node)
117. Chris Kelly (IEU)
118. Chris Zuehlke (Cumberland)
119. Daniel Schrader(Fiona)
120. Demo Skalkotos (Blockdaemon)
121. Dmitry Shienok
122. Hossein Khoshtaghaza (Republic)
123. Ivan Reif (Tenkai)
124. Jared (Figment)
125. Jaydeep Korde (Launchnodes)
126. Jesse Eisenberg (Bitsafe)
127. Joao Moreira (LightShift)
128. John Waters (Blockdaemon)

129. Jonathan Mayeur (Intellect EU)
130. Jonathan Reisman (P2P)
131. Joseph Chua
132. Joseph Chua (GS)
133. Josh Mercer-Deadman (LayerZero)
134. Kushagra Jindal
135. Luca Burlando (Republic)
136. Lucas Naundorf (Fiona)
137. Luke Streckenback (Figment)
138. Lyutskan (Fiona)
139. Maciej Bohusz (RedStone)
140. Michael Gaare (DeNex)
141. Mirella Guglielmi (Figment)
142. Philip (DigiK)
143. Prakash Neelakantan (Broadridge)
144. Prashant Malik (HSBC)
145. Puneet Bharti (Fiona)
146. Rajesh Sinha (Launchnodes)
147. Teagan Buckley (Canton Foundation)
148. Tim Pelzer (Fiona)
149. Timothy Rahman
150. Tornike Machavariani (BCW)
151. Viktor Kuzenkov (P2P)
152. Yash Bhavas (Launchnodes)
153. Yuval Carmel (Ownera)

Agenda:

- Node as Service requests
    - Node as a Service Application: Sekoya Labs
        - Would like async review - sent Sept 9
            - For node administration, we run on EKS managed node groups and treat nodes as immutable (we replace, not repair). SSH is closed (no SSH keys in AMIs). When we need console access, we use AWS Systems Manager Session Manager with short-lived, least-privilege IAM roles unique to each client. EKS audit logs and CloudTrail are enabled and retained.
            - For key management, we'll run Canton Enterprise and enable the AWS KMS integration for the participant private store. As such, keys remain non-exportable in each customer's AWS KMS and fully under their control. Canton calls the KMS for signing and public key retrieval via our EKS workload's IAM role (IRSA) with a per-tenant AssumeRole and scoped KMS grant. Keys are isolated per environment and all usage is logged in CloudTrail.
                - Licensed to used a solution

                - Consensus: No objects - ready to go
        - Node as a Service Application: GlobalStake
            - Coming sept 22
            - Consensus- needs to come back with KMS solution
                - MPCH will reach out with a solution for this with Ryan
        - Node as a Service Application: Luganodes
            - Coming sept 22
            - Says they use AWS KMS Enterprise (Canton Enterprise Driver for KMS)
            - Consensus: No objects - ready to go
        - Node as a Service Application: Gateway.fm
            - Coming sept 22
            - Uses HashiCorp Vault - Others have also used this but still need to write the driver
                - Still work in the process
            - Consensus: Come back with how keys are managed
        - Node as a Service Application: K2F Labs
            - K2F NaaS Application Demo.mp4
        - Node as a Service Application: SenseiNode
            - Unsure with KMS
                - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
        - Node as a Service Application: Edgevana
            - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
        - Node as a Service Application: Everstake
            - Would like async review
            - On Hold
- KMS
    - MPCH has a solution that others can look into.
- Ongoing Audits:
    - None
- Feedback that has come up
    - None

Sept 8, 2025

Attendees:

1. Justin Peterson (Tradeweb), Chair
2. Wayne Collier (Digital Asset)
3. Alex Gorelik (DigiK)
4. Aki Balogh (Bitsafe)
5. Amanda Martin (GSF & Linux Foundation)

6. Anthony Wooley (Ownera)
7. Andrew Howell (Blockdaemon)
8. Caleb Bolden (Blockdaemon)
9. Chris Matturri (ProofGroup)
10. Demo Skalkotos (Blockdaemon)
11. Dmitry Shienok
12. Bala Rajagopalan (Tradeweb),
13. Brad Turner (Blockdaemon)
14. Edward Newman (DA)
15. Eduardo Furtado (T-RIZE)
16. Jesse Eisenberg (Bitsafe)
17. Jonathan Reisman (P2P)
18. Jonathan Mayeur (Intellect EU)
19. John Waters (Blockdaemon)
20. Joseph Chua (GS)
21. Joao Moreira (LightShift)
22. Maciej Bohusz (RedStone)
23. Malik Faizullah (Moody's)
24. Melvis (Canton Foundation)
25. Mirella Guglielmi (Figment)
26. Matthew Shilston (MPCH)*
27. Rajesh Sinha (Launchnodes)
28. Richard Domikis (MPCH)
29. Teagan Buckley (GSF)
30. Timothy Rahman
31. Teagan Buckley (Canton Foundation)
32. Vinh Nguyen (5North)
33. Viktor Kuzenkov (P2P)
34. Yuval Carmel (Ownera)

Regrets

154. Prakash Neelakantan (Broadridge)
155. Amaury Perez (Goldman Sachs)
156. Alex Gorelik (DigiK)
157. Richard Domikis (MPCH)
158. Ivan Reif (Tenkai)
159. David Petrie (4m Group)
160. Charles Desmonty (Kaiko)
161. Jonathan Mayeur (IntellectEU)*
162. Viktor Kuzenkov (P2P)
163. Kushagra Jindal
164. Jan Hoenisch (Lukka)*
165. Michael Gaare (DeNex)

166. Philip (DigiK)
167. Mirella Guglielmi (Figment)
168. Carlos (Sensei Node)
169. Joseph Chua
170. Stephane Loeuillet (Kaiko)
171. Josh Mercer-Deadman (LayerZero)
172. Jaydeep Korde (Launchnodes)
173. Yash Bhavas (Launchnodes)
174. Luke Streckenback (Figment)
175. Lyutskan (Fiona)
176. Puneet Bharti (Fiona)
177. Lucas Naundorf (Fiona)
178. Tim Pelzer (Fiona)
179. Daniel Schrader(Fiona)
180. Will White (Republic)
181. Luca Burlando (Republic)
182. Hossein Khoshtaghaza (Republic)
183. Tornike Machavariani (BCW)
184. Brett Hornung (BCW)
185. Jared (Figment)
186. Aman Goyal (SBI Digital Asset)
187. Chris Kelly (IEU)
188. Chris Zuehlke (Cumberland)
189. Prashant Malik (HSBC)

Agenda:

- [15 min] Tradeweb pentest results
- [10 min] DA BFT proposal
    - Wayne: Digital Asset has built a new BFT back end to provide global ordering
    - Primary objectives:
        - Resolve the latency caused by CometBFT when a node goes down
        - Increase overall throughput
    - Key milestones:
        - Security audit
            - Complete
        - Scale testing
            - Underway
            - Current status:
                - Expect to surpass CometBFT scale and stability over the next three months.
                - Slated for rollout in Canton 3.5 in early 2026.
- Node as Service requests
    - Node as a Service Application: Lightshift (coming Sept 8)
        - Presented set up

        - No objections
        - Consensus: Ready to go
    - Node as a Service Application: Blockdaemon (coming Sept 8)
        - Blockdaemon started out cloud native and moved to bare metal for cost optimization
        - Canton's docs and tooling emphasize cloud native, so Blockdaemon adopted cloud native for Canton
            - RPC and egress on the Cloud are expensive
            - For Canton specifically, they had to decide whether to reverse engineer the docs & tooling (which are very good for k8s) or go with kubernetes
                - Chose kubernetes for velocity
            - ACTION: Should invite back for discussion on the comparison of Canton with other networks - Andrew Howell + Brad Turner
                - Added point to "Next", above
        - Consensus: Ready to go
    - Node as a Service Application: P2P Staking (coming back Sept 8)
        - Presenting
            - Consensus: No objections raised
    - Node as a Service Application: Launchnodes (coming back Sept 8)
        - Consensus: needs to come back with plan on kms
            - Now has a license to the DA KMS driver
            - Also has built their own proprietary KMS driver
                - Uses Google Cloud KMS
        - Consensus: Ready to go
    - Node as a Service Application: Gateway.fm
        - Coming sept 22
    - Node as a Service Application: SenseiNode
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: Edgevana
        - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
- Ongoing Audits:
    - [tabled] Tradeweb: Will present next week
    - Digital Asset:
        - Engaging Cure53 to do whitebox / source code level security audits of Canton and Daml
            - Previously completed audits on Daml and Canton in 2023
            - Currently going through a new set:
                - DA BFT
                - Ledger API
                - JSON API

                - Two more scheduled
                    - Cryptography
                    - Topology management
                - More planned for the coming year
            - DA has reviewed and responded to the Quantstamp audit of the Splice Canton Coin and Governance Daml models
            - Continuing to engage with additional partners that perform web3 audits
                -
            - Findings:
                - Only found low or informational issues
                    - DA BFT
                    - Ledger API
                - Will take action on these, and report on findings from upcoming audits
- Feedback that has come up
    - The Tie's onboarding has brought up some processes that can help others in the future
        - Mid-October can present a better solution for wallet/app/node management
        - Ben Latz can give tips

Aug 25, 2025

Attendees:

35. Justin Peterson (Tradeweb), Chair
36. Chris Matturri (ProofGroup)
37. Melvis (LF)
38. Wayne Collier (DA)
39. Eduardo Furtado (T-RIZE)
40. Prakash Neelakantan (Broadridge)
41. Amaury Perez (Goldman Sachs)
42. Alex Gorelik (DigiK)
43. Richard Domikis (MPCH)
44. Vinh Nguyen (5North)
45. Ivan Reif (Tenkai)
46. Jonathan Reisman
47. David Petrie (4m Group)
48. Maciej Bohusz (RedStone)
49. Charles Desmonty (Kaiko)
50. Jonathan Mayeur (IntellectEU)*
51. Viktor Kuzenkov (P2P)
52. Kushagra Jindal
53. Jan Hoenisch (Lukka)*
54. Michael Gaare (DeNex)
55. Philip (DigiK)

56. Mirella Guglielmi (Figment)
57. Carlos (Sensei Node)
58. Teagan Buckley (Canton Foundation)
59. Malik Faizullah (Moody's)
60. Joseph Chua
61. Stephane Loeuillet (Kaiko)
62. Edward Newman (DA)
63.

Regrets

190. Josh Mercer-Deadman (LayerZero)
191. Matthew Shilston (MPCH)*
192. Rajesh Sinha (Launchnodes)
193. Jaydeep Korde (Launchnodes)
194. Yash Bhavas (Launchnodes)
195. Luke Streckenback (Figment)
196. Lyutskan (Fiona)
197. Puneet Bharti (Fiona)
198. Lucas Naundorf (Fiona)
199. Tim Pelzer (Fiona)
200. Daniel Schrader(Fiona)
201. Will White (Republic)
202. Luca Burlando (Republic)
203. Hossein Khoshtaghaza (Republic)
204. Tornike Machavariani (BCW)
205. Brett Hornucg (BCW)
206. Jared (Figment)
207. Aman Goyal (SBI Digital Asset)
208. Chris Kelly (IEU)
209. Chris Zuehlke (Cumberland)
210. Prashant Malik (HSBC)

Agenda:

- Upgrade schedule and timing
    - Canton 3.4 is releasing mid-October
        - Available DevNet mid-Nov. Tentative dates:
            - DevNet Nov 12th
                - Runs for 2 weeks and if no errors then proceeds to Test
            - TestNet Nov 26th (same process as Dev)
            - MainNet Dec 10th
                - This is a challenging time. Please check with Node operators that this date works
                - Trading will be down for a few hours

        - Features of 3.4:
            - Rolling protocol changes: One of the features of this upgrade is a reduction of downtime with future upgrades
            - BFT layer was designed from scratch which is at least as fast as CometBFT
                - Should allow an increase in SV nodes (testing has not indicated this yet)
    - Running an SV Node Timing is dependent on the BFT layer.
- [tabled] Tradeweb pentest results
- [tabled] DA BFT proposal
- Node as Service requests
    - Node as a Service Application: Launchnodes (coming Aug 11)
        - Consensus: needs to come back with plan on kms
    - Node as a Service Application: Lightshift
    - Node as a Service Application: Edgevana
        - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
    - Node as a Service Application: P2P Staking
        - Presenting - KMS not fully ready
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: Gateway.fm
    - SenseiNode
        - Presenting - Not on DevNet
        - Unsure with KMS
            - Consensus: Needs to come back with KMS solution, a description of how they will do it would be sufficient.
    - Node as a Service Application: Tenkai - coming
        - Last time: Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
        - Presenting that each client has a separate environment.
            - Consensus: Ready to go

- Ongoing Audits:
    - [tabled] Tradeweb: Will present next week
    - Digital Asset:
        - Engaging Cure53 to do whitebox / source code level security audits of Canton and Daml
            - Previously completed audits on Daml and Canton in 2023
            - Currently going through a new set:
                - DA BFT
                - Ledger API
                - JSON API
            - Two more scheduled

            - Cryptography
            - Topology management
        - More planned for the coming year
    - DA has reviewed and responded to the Quantstamp audit of the Splice Canton Coin and Governance Daml models
    - Continuing to engage with additional partners that perform web3 audits
        -
    - Findings:
        - Only found low or informational issues
            - DA BFT
            - Ledger API
        - Will take action on these, and report on findings from upcoming audits
- Feedback that has come up
    - The Tie's onboarding has brought up some processes that can help others in the future
    - Mid-October can present a better solution for wallet/app/node management
    - Ben Latz can give tips

Aug 15, 2025 Special Sub Group Meeting for only NaaS applications Only

Attendees:

64. Amanda Martin (GSF & Linux Foundation)
65. Chris Matturi (Proof Group)
66. Ivan Reif (Tenkai)
67. Jonathan Mayeur (IntellectEU)*
68. Matthew Shilston (MPCH)*
69. Sophia Roman (DA)
70. Wayne Collier (Digital Asset)
71. Anoosh Arevshatian (Zodia)
72. Michael Roerge (Edgevana)
73. Steven O'Connor (Edgevana)

Regrets

211. Justin Peterson (Tradeweb), Chair
212. Jan Hoenisch (Lukka)*
213. Vinh Nguyen (5 North) *
214. Michael Gaar (DRW/Denex) *

Agenda:

- Node as Service requests

        - Node as a Service Application: Zodia Custody Limited - coming
            - Consensus- approve
        - Node as a Service Application: Edgevana- coming
            - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
        - Node as a Service Application: Tenkai - coming
            - Consensus- needs to come back with more thoughtful multi-tenancy plan and roadmap for KMS solution
        - Node as a Service Application: Lightshift- invited
        - Node as a Service Application: Gateway.fm - invited
        - SenseiNode - holiday -can't come (Aug 25th)
        - Node as a Service Application: P2P Staking- holiday -can't come (Aug 25th)
        - [tabled] Node as a Service Application: Launchnodes
            - Consensus: needs to come back with plan on kms
- Ongoing Audits:
    - [tabled] Tradeweb: Will present next week
    - Digital Asset:
        - Engaging Cure53 to do whitebox / source code level security audits of Canton and Daml
            - Previously completed audits on Daml and Canton in 2023
            - Currently going through a new set:
                - DA BFT
                - Ledger API
                - JSON API
            - Two more scheduled
                - Cryptography
                - Topology management
            - More planned for the coming year
        - DA has reviewed and responded to the Quantstamp audit of the Splice Canton Coin and Governance Daml models
        - Continuing to engage with additional partners that perform web3 audits
            -
        - Findings:
            - Only found low or informational issues
                - DA BFT
                - Ledger API
            - Will take action on these, and report on findings from upcoming audits
- Feedback that has come up

Aug 11, 2025

Attendees:

74. Amaury Perez (Goldman Sachs)

75. Charles Desmonty (Kaiko)
76. Eduardo Furtado (T-RIZE)
77. Chris Matturri (ProofGroup)*
78. David Petrie (4m Group)
79. Jan Hoenisch (Lukka)*
80. Jonathan Mayeur (IntellectEU)*
81. Josh Mercer-Deadman (LayerZero)
82. Malik Faizullah (Moody's)
83. Maciej Bohusz (RedStone)
84. Matthew Shilston (MPCH)*
85. Mirella Guglielmi (Figment)
86. Prakash Neelakantan (Broadridge)
87. Vinh Nguyen (5 North) *
88.
89. Amanda Martin (LF)
90. Melvis (LF)
91. Wayne Collier (DA)
92. Rajesh Sinha (Launchnodes)
93. Jaydeep Korde (Launchnodes)
94. Yash Bhavas (Launchnodes)
95. Luke Streckenback (Figment)
96. Lyutskan (Fiona)
97. Puneet Bharti (Fiona)
98. Lucas Naundorf (Fiona)
99. Tim Pelzer (Fiona)
100. Daniel Schrader(Fiona)
101. Philip (DigiK)
102. Alex Gorelik (DigiK)
103. Will White (Republic)
104. Luca Burlando (Republic)
105. Hossein Khoshtaghaza (Republic)
106. Michael Gaar *

Regrets

215. Justin Peterson (Tradeweb), Chair
216. Tornike Machavariani (BCW)
217. Brett Hornucg (BCW)
218. Edward Newman (DA)
219. Michael Gaare (DeNex)
220. Jared (Figment)
221. Aman Goyal (SBI Digital Asset)
222. Chris Kelly (IEU)
223. Chris Zuehlke (Cumberland)

224. Prashant Malik (HSBC)
225. Richard Domikis (MPCH)
226. Stephane Loeuillet (Kaiko)

Agenda:

- [tabled] Tradeweb pentest results
- [tabled] DA BFT proposal
- Node as Service requests
    - Node as a Service Application: Launchnodes (coming Aug 11)
        - Consensus: needs to come back with plan on kms
    - Node as a Service Application: Finoa Consensus Services (coming Aug 11)
        - Consensus: Ready to go
    - Node as a Service Application: DigiK (coming Aug 11)
        - Consensus: Ready to go
    - Node as a Service Application: Republic (coming Aug 11)
        - Consensus: Ready to go
    - Node as a Service Application: Zodia Custody Limited
    - Node as a Service Application: Lightshift
    - Node as a Service Application: Edgevana
    - Node as a Service Application: P2P Staking
    - Node as a Service Application: ChainSafe
    - Node as a Service Application: Gateway.fm
    - SenseiNode
- Announcing the conclusion of the Quantstamp audit of Canton Coin
    - Consensus: Ready to go
- Ongoing Audits:
    - [tabled] Tradeweb: Will present next week
    - Digital Asset:
        - Engaging Cure53 to do whitebox / source code level security audits of Canton and Daml
            - Previously completed audits on Daml and Canton in 2023
            - Currently going through a new set:
                - DA BFT
                - Ledger API
                - JSON API
            - Two more scheduled
                - Cryptography
                - Topology management
            - More planned for the coming year
        - DA has reviewed and responded to the Quantstamp audit of the Splice Canton Coin and Governance Daml models
        - Continuing to engage with additional partners that perform web3 audits
            -
        - Findings:

        - Only found low or informational issues
            - DA BFT
            - Ledger API
        - Will take action on these, and report on findings from upcoming audits
- Feedback that has come up

Jul 28, 2025

Attendees:

227. Justin Peterson (Tradeweb), Chair
228. Prakash Neelakantan (Broadridge)
229. Chris Matturri (ProofGroup)
230. Jan Hoenisch (Lukka)
231. Maciej B RedStone
232. Amanda Martin (LF)
233. Tornike Machavariani (BCW)
234. Wayne Collier (DA)
235. Jonathan Mayeur (IntellectEU)
236. Vinh (5 North)
237. Eduardo Furtado (T-RIZE)
238. Ankit Jain (
239. Melvis (LF)
240. Brett Hornucg (BCW)
241. Edward Newman (DA)
242. Michael Gaare (DeNex)
243. Jared (Figment)
244. Amaury Perez (Goldman Sachs)
245. Mirella Guglielmi (Figment)
246. Aman Goyal (SBI Digital Asset)

Regrets

247. Chris Kelly (IEU)
248. Chris Zuehlke (Cumberland)
249. Prashant Malik (HSBC)
250. Matthew Shilston (MPCH)
251. Langyintue
252. David Petrie (4m Group)
253. Brett Hornung
254. Michael Roberge
255. Miroslav
256. Richard Domikis (MPCH)

257. Ryan
258. Steven O'Connor
259. Charles Desmonty (Kaiko)
260. Stephane Loeuillet (Kaiko)

Agenda:

- Intros
- Validator as a service: Review of their offering
    - BCW
        - Consensus that they are approved
- Wayne: Role of this committee
    - Current charter is relatively limited in scope:
        - Specify, set up & monitor / supervise the IT systems that LF provides to the Canton Foundation
            - Team of SV representatives manages these operations on behalf of this committee, in collaboration with LF (Amanda Martin)
                - SBI
                - IntellectEU
                - Digital Asset
        - Advise and influence technical direction of Canton and Splice
        - Advise and influence other technical progress
    - Should we do more? And if so, should we update our charter?
        - Vet featured applications?
        - Vet technical feasibility of CIPs?
        - Assess readiness of Validator-as-a-service providers
            - We're doing this provisionally right now.
        - Influence / vote on the Splice and Canton roadmaps?
            - Would require getting involved in the details of the engineering work
        - Help propagate understanding of validator operations
            - Example: multi-hosted parties
    - Idea
        - Have tech lead with Tokenomics to connect the two committees
            - Chris Zuehlke, Chair, Rep (Cumberland)
            - Christopher Kelly, Rep (Intellect EU)
            - **Chris Matturri, Rep (ProofGroup)**
            - Eric W. Saraniecki, Rep (Digital Asset)
            - Kinga Bosse, Alt (MPCH)
            - **Prakash Neelakantan, Alt (Broadridge)**
            - Veronica Augustsson, Rep (7Ridge)
        - App Dev Office hours
            - DevRel role coming soon
- Melvis: Request to move Slack collaborations to Discord
    - Wayne / Chris Matturi: Would institutions agree to use Discord?

        - Most likely this would be a barrier for many institutions. Needs to be more fully considered before there is a single platform
- Wayne: Request from the SV Operations teams:
    - Can we (or Tokenomics WG) formalize the process of re-onboarding validator nodes under a new sponsor/node operator?
      Something like “If you want to recreate a node, you have 48 hours to create a new one, transfer funds, and disable an old node, or "you face some restrictions".
        - I believe that right now, this process is quite informal, and there are no recommendations/rules/strict timelines/monitoring on how fast people transfer their coins and shut down the previous node. This can end in situations when people run at the same time 2+ nodes for quite long periods of time, although they aren't allowed to do so. Or abuse our processes by constantly re-onboarding and keeping several nodes live at the same time.
        - I assume if any kind of audit occurs, some questions may arise on how that happened
            - Wayne: Recommend that the SV that provides the onboarding secret is responsible to make sure that the old node goes down.
                - Canton Foundation can provide some backup; periodically looking for nodes that are still active that should have been removed.
        - SBI (Stas): while I generally agree that as long as validator onboarding is centrally supervised this sort of policy makes sense at the same it may create more confusion and gray zones.
            - The rule may be broken accidentally (i.e. somebody forgets to stop their old validator)
            - It may not be clear when the rule is broken as the new validator may have a different name and it may be onboarded at an operator’s discretion, so the rule could be ignored either accidentally or intentionally (as nobody is watching)
            - What we (or Canton) could monitor is the total number of validators onboarded by an SV and whether the number exceeds explicitly approved validators + quota for the given SV.
    - Consensus
        - SV Operations have the ability to make such implementations
        - Two days notice, then shut down / blacklist
            - Tradeweb: Yes
            - GSF: Yes
            - Proof Group: Yes
            - SBI: Yes
            - Five North: Yes
            - Cumberland: Yes
            - Digital Asset: Yes
            - MPCH:

- Feedback that has come up
- Node as Service requests
    - Node as a Service Application: Launchnodes
    - Node as a Service Application: Finoa Consensus Services
- Announcing the conclusion of the Quantstamp audit of Canton Coin
    - Amanda to ask for newer Audit
        - Only paragraph on KYC has changed in new version
        - Share feedback feedback by Thursday
    - Security Audit needed for exchanges
- Ongoing Audits:
    - Tradeweb: Will present next week
    - Digital Asset:
        - Engaging Cure53 to do whitebox / source code level security audits of Canton and Daml
            - Previously completed audits on Daml and Canton in 2023
            - Currently going through a new set:
                - DA BFT
                - Ledger API
                - JSON API
            - Two more scheduled
                - Cryptography
                - Topology management
            - More planned for the coming year
        - DA has reviewed and responded to the Quantstamp audit of the Splice Canton Coin and Governance Daml models
        - Continuing to engage with additional partners that perform web3 audits
            -
        - Findings:
            - Only found low or informational issues
                - DA BFT
                - Ledger API
            - Will take action on these, and report on findings from upcoming audits

Jul 14, 2025

Attendees:

1. Justin Peterson (Tradeweb), Chair
2. Chris Kelly (IEU)
3. Chris Matturri (ProofGroup)
4. Chris Zuehlke (Cumberland)
5. Prashant Malik (HSBC)
6. Amanda Martin (LF)

7. Melvis (LF)
8. Jan Hoenisch (Lukka)
9. Jonathan Mayeur (IntellectEU)
10. Matthew Shilston (MPCH)
11. Wayne Collier (DA)
12. Eduardo Furtado (T-RIZE)
13. Langyintue
14. David Petrie (4m Group)
15. Tony Chew (HydraX)
16. Bahri Rizaldi (HydraX)
17. Brett Hornung
18. Maciej B
19. Michael Roberge
20. Miroslav
21. Richard Domikis (MPCH)
22. Ryan
23. Steven O'Connor
24. Tornike_BCW
25. Vinh

Regrets

26. Amaury Perez (Goldman Sachs)
27. Charles Desmonty (Kaiko)
28. Prakash Neelakantan (Broadridge)
29. Stephane Loeuillet (Kaiko)
30. Aman Goyal (SBI Digital Asset)

Agenda:

- Intros
- Wayne: Status of audits and pentests
    - Guest: Edward Newman, Digital Asset CISO
        - ACTION: Amanda to add to all meetings in series + Agenda on Audits
    - Wayne: Would Tradeweb be open to sharing pentest results with the GSF?
    - Audits are complete and soon to be delivered publicly (Quantstamp)
    - Cure53
- Wayne: Reviewing upcoming CIPs
    - GSF minting from unminted pool
    - Validator staking
    - Featured app requests
    - Generally: How do we get sufficient technical staff to do detailed technical reviews, and in which forum should we do this?

        - Consensus: To incorporate a technical proposals review inside this group (structure TBD).
- Validator Operator Requests
    - Edgevana
    - Others?
- Validator as a service: Review of
    - BCW
        - Safely secure validator keys & operate sufficient KMS
        - Have disaster recovery procedures in place
        - Use existing wallet solutions (for example, Bron, Copper, DFNS, etc) or KMS systems to give customers control of the keys for their parties hosted on multi-tenant validators
        - Operate at least one node each on DevNet, TestNet and MainNet on a continuous basis, including performing upgrades correctly.
        - Consensus: Needs a little more work, suggestion to determine wallet and run on all networks for 2 weeks and re-present at a future time (with KMS in more detail).
    - HydraX
        - Safely secure validator keys & operate sufficient KMS
        - Have disaster recovery procedures in place
        - Use existing wallet solutions (for example, Bron, Copper, DFNS, etc) or KMS systems to give customers control of the keys for their parties hosted on multi-tenant validators
        - Operate at least one node each on DevNet, TestNet and MainNet on a continuous basis, including performing upgrades correctly.
        - Consensus: Ready to host others
- Feedback that has come up

Jun 30, 2025

Attendees:

31. Amaury Perez (Goldman Sachs)
32. Amanda Martin (LF)
33. Charles Desmonty (Kaiko)
34. Chris Matturri (ProofGroup)
35. Dabid Petrie (4M Group)
36. Eduardo Furtado (T-RIZE)
37. Jan Hoenisch (Lukka)
38. Jonathan Mayeur (IntellectEU)
39. Melvis Langyintue (LF)
40. Prakash Neelakantan (Broadridge)
41. Stephane Loeuillet (Kaiko)
42. Wayne Collier (DA)

Regrets

43. Justin Peterson (Tradeweb), Chair
44. Chris Zuehlke (Cumberland)
45. Aman Goyal (SBI Digital Asset)

Agenda:

- Intros
- App Dev support from Linux?
    - Melvis had call about developer certification program
    - More to come
- How do we assess whether or not an SV has met their obligations to meet a given milestone? Should it be this team or another?
    - No second review, Tech+Ops is second eyes as needed.
- AngelHack CIP Deliverables
    - https://lists.sync.global/g/tokenomics/topic/cip_0053_deliverable/113863054
- Quantstamp has delivered a report to the splice team, it is not public yet but does seem adequate for the weight.
- Feedback that has come up
    - Developer community growth + engagement
        - Melvis + Bernard talking with AngelHack
            - Working on getting people educated and then starting a DevRel pipeline
        - Ideal is more community engagement across all parties.
        - Having API stability is important - The plan is to have backwards compatibility.
            - 3.4 will still have some breaking changes, 3.5 onward is using this design principal
            - ACTION: Wayne will discuss more with Stephane offline later.
    - Lessons learned from the upgrade
        - Only 4 node that didn't upgrade (or attempt to upgrade)
    -

Jun 16, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Jonathan Mayeur (IntellectEU)
- Chris Zuehlke (Cumberland)
- Chris Matturri (ProofGroup)
- Eduardo Furtado (T-RIZE)
- Wayne Collier (DA)

- Prakash Neelakantan (Broadridge)
- Jan Hoenisch
- Aman Goyal (SBI Digital Asset)
- Amaury Perez (Goldman Sachs)
- Melvis Langyintue (LF)
- Amanda Martin (LF)

46. Justin: Wants to focus on application stats
    - Is there information available via the network that will report activity from featured apps?
    - Chris: Yes, Proof Group provides this sort of information
    - Jan: We probably want separate/different representations for:
        - Which apps are available and what do they do?
        - What is the level of activity in various apps?
    - Chris: What do we do with privacy?
        - Wayne: Featured app rewards serves as a proxy for activity
        - Chris: This shows information but not the asset volume.
    - Wayne: Data oracles will make a business out of getting access to data aggregates, and selling those
        - Jan: How can we go about doing this?
        - Wayne: You'll need to reach out to the app providers
        - Jan: Is there any general forum for this?
        - Wayne: Not that I know of; I imagine someone might do that as a service as well

47. Justin: App Dev support from Linux?
    - Melvis: Hart Montgomery is the primary contact here
    - Melvis: Is DA interested in contributing education material?
    - Wayne: Unclear what DA will want to control vs. contribute to GSF or Linux
        - Will need to negotiate this with DA

- Wayne: How do we assess whether or not an SV has met their obligations to meet a given milestone? Should it be this team or another?
    - Melvis: Proposes that the Tech & Ops committee handle this process.
    - Chris Zuehlke : Asks that this remains with the Tokenomics working group, with advice from Tech & Ops committee
    - **Resolution**:
        - Tech & Ops will advise Tokenomics

June 2, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Jonathan Mayeur (IntellectEU)
- Chris Zuehlke (Cumberland)
- Chris Matturri (ProofGroup)
- Eduardo Furtado (T-RIZE)
- Wayne Collier (DA)
- Prakash Neelakantan (Broadridge)
- Jan Hoenisch
- Aman Goyal (SBI Digital Asset)
- Amaury Perez (Goldman Sachs)
- Melvis Langyintue (LF)
- Amanda Martin (LF)

Regrets

- Roger Brogan (Chainlink)
- Malik Faizullah (Moody's)

Agenda:

- Welcome
    - Melvis
- ? Validator metrics status?
    - Went over the onboarding countdown
- Wayne: It may be time to formalize a process for tracking & prioritizing requests for technical & operational work related to the Global Synchronizer.
    - I'd like to raise here some points to consider when designing a process.

    - Types of requests that have been / could be raised in this committee:
        - Requests for specific features
            - Functional
            - Non-functional (scale, throughput)
            - Documentation (node deployment, application development)
        - Prioritization
            - Strategic; for example
                - AppDev vs. Scaling node count
                - TPS vs. Latency
            - Tactical
                - One feature before another
        - Operational
            - How to manage major upgrades with downtime
                - Specific times & procedures
            - How to manage / respond to threats / attacks on the network

            - Processes for interaction & communication
                - Slack, email lists & forum, Google Drive
        - Governance
            - How to manage the CIP process
    - Available resources
        - SV Node operators / operations teams
            - Accountable to SV node owners
            - Incentives
                - Keep node online and in the SV quorum, to mint rewards
                - Avoid failures / inaction or malicious actions that might lead other SVs to offboard the node
        - OSS contributors to Splice
            - Digital Asset
            - Obsidian Systems
            - IntellectEU
            - Proof Group
            - SBI Security Solutions
        - OSS contributors to Canton
            - Digital Asset
        - Digital Asset teams working on AppDev tooling and documentation
        - Digital Asset teams working on Financial Markets Utilities
        - Linux Foundation staff assigned to support the GSF
        - Committee members

    - Considerations for a Process
        - How open should requests be?
            - Any member of GSF?
            - SV operators and GSF members?
            - Validator node operators
            - Any member of the public?
        - How formal should requests be?
            - Use a standard input form for creating a request?
            - Raise requests this committee, record in minutes, and then track as part of admin actions after the meetings?
        - Should all requests result in Canton Improvement Proposals (CIPs)?
            - If not, can we characterize which requests should follow a different / more streamlined process?
            - What would a more streamlined process process look like?
        - Who should track the requests?
            - LF Staff supporting the GSF?
            - Staff from one or more of the members of this committee?
            - Dedicated GSF staff?
        - Who should propose prioritization, and how should prioritization be agreed on?

    - Other topics we should consider?
    - Who would like to propose a process to the committee?
    - Next steps 0-6 months?
        - Tech Ops should be more active in product requests. Perhaps current process is not ideal for the members
        - App (Dev, performance, upgrade) seems to be the primary concern
        - Need some process on getting feedback about Splice from GSF
        - This group should focus on Apps for now, not a long term solution
            - Since there is no other group for Apps for now

May 19, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Amanda Martin (LF)
- Eduardo Furtado (T-RIZE)
- Wayne Collier (DA)
- Roger Brogan (Chainlink)
- Aman Goyal (SBI Digital Asset)
- Chris Zuehlke (Cumberland)
- Malik Faizullah (Moody's)
- Amaury Perez (Goldman Sachs)
- Chris Matturri (ProofGroup)
- Prakash Neelakantan (Broadridge)
- Jonathan Mayeur (IntellectEU)

Regrets

- Jan Hoenisch

Agenda:

- Welcome
    - Roger
- Wayne: Pen testing procedures
    - Against privately deployed networks vs. SV-operated networks
    - Pen testing should be done on a separate network as doing this on TestNet or Main net would result in shutting the validator down.
    - TestNet is designed to be a stable environment for applications to test composition with each other, so many SV operators maintain alerts for activities there, including pending votes, and node downtime.
    - Wayne to update the SV in the ops call

        - Justin to get the fuller report from his team.
- Justin: Increase Application Requests
    - Validator Requests are coming in well
    - Featured Application requests are not as well done
        - Some limitations in developing the apps
        - DA is working on making development easier
    - Ideally there would be consensus on the number of validators we should onboard.
    - New documentation for Daml 3.3 will come in ~2 weeks
    - Breaking changes in 3.x have made development difficult, a migration guide would be nice.
    - Chris Zuehlke
        - Need better examples of how to work with assets onchain
        - Need to allow non-CC transactions to be featured
            - Wayne: This will go live on Devnet at the end of May; Mainnet near the end of June
    - Chris Matturi
        - Still very hard to develop on Canton and Daml
- Feedback that has come up
    - App dev (Wayne to take to team)

April 21, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Amanda Martin (LF)
- Amaury Perez (Goldman Sachs)
- Chris Matturri (ProofGroup)
- Chris Zuehlke (Cumberland)
- Jan Hoenisch (MPCH)
- Jonathan Mayeur (IntellectEU)
- Malik Faizullah (Moody's)
- Prakash Neelakantan (Broadridge)
- Wayne Collier (DA)

Regrets

- Aman Goyal (SBI Digital Asset)
- Eduardo Furtado (T-RIZE)

Agenda:

- Welcome
- Justin: What's the best way to track and report on application activity?

    - Spoke with marketing; they would like to know more about application provider status
        - Application stats are more important now
        -
    - Wayne:
        - Canton Coin Scan reports on the application provider partyIDs earning the top rewards
        - Will eventually rank all application provider partyIDs
    - Other ideas
        - Number of parties using a given app?
        - Transaction rates per party for given apps?
        - Might want to do this in aggregates?
        - Averages over time
    - Wayne: The new Meditator API / “private transactions” API should enable this
        - API will be available on MainNet in June
    - Chris:
        - Data Oracle / Data Services is expected to start to reveal application-level aggregates of transaction / asset values
        - Justin to follow up with Cumberland.
- Wayne:
    - We just completed the Super Validator onboarding process for Five North and Proof Group
        - Four rehearsal events spread over ~two months
    - New SV onboarding cohort starts in July with a series of network action rehearsals
        - New nodes need to be up and running on DevNet **in June** to join the onboarding cohort network rehearsals that start in July.
        - This is the final opportunity for SV operators approved before February to onboard a node in compliance with CIP-0045
        - Most new SVs can pay for their rights to be hosted, but Circle and Broadridge cannot. Some SVs (Obsidian, Bitwave) who do not have to operate a node plan to do so anyway, and will join this cohort.
- Wayne: Feedback from SV Operators on proposal to move major upgrades to weekends
    - Strong feedback of not going to weekends for upgrades, would not get ⅔ pass
    - Organizations have agreements on the normal course of business work on weekends.
    - Justin: Chris, Jonathan and Chris propose:
        - Look for times when traffic is low
        - Look for a time other than 9 am Eastern on Wednesday
        - Let the data determine what makes sense
- Feedback that has come up
    - Jan: Validator metrics status?
        - For next time

April 7, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Aman Goyal (SBI Digital Asset)
- Wayne Collier (DA)
- Amanda Martin (LF)
- Eduardo Furtado (T-RIZE)
- Chris Matturri (ProofGroup)
- Malik Faizullah (Moody's)
-

Regrets

- Jonathan Mayeur (IntellectEU)
- Prakash Neelakantan (Broadridge)
- Amaury Perez (Goldman Sachs)

Agenda:

- Welcome
    - Eduardo Furtado (T-RIZE)
- Feedback that has come up
    - None we know of
- Wayne: Upcoming votes on new Daml models
    - Introducing new governance, new featured app rewards, CN Token standards
        - CIPs all approved
        - Ideally on chain voting will start next week (some will continue in May)
- Wayne: Canton 3.3 release is coming up
    - Major upgrade with downtime on MainNet (hard migration) June 11
        - Will require a separate CIP
    - Release freeze mid-April
    - Target DevNet mid-May; MainNet mid-June
    - Two more hard migrations are anticipated
    - Perhaps rethink the day for down time to be weekend rather than Wednesday
        - ACTION: Wayne to ask the operators on moving this to a weekend, proposal coming from Tradeweb
        - ACTION: Justin to send an email to Chris Z, Jonathan M and Kinga B on proposal
- Wayne: Large onboarding group for SVs in late summer
    - Possible to have 8 new Operators
        - Circle, Figment, Obsidian, Kiln - want to run own node
        - TRM, Coinmetric, Bitwave - most likely want to run a node
        - Broadridge, AngleHack, Monstera - not as certain
        - Quantstamp, BNY - others to run their node
    - Could have practice migrations on the weekends to set the example

    - Need to establish process for getting all to work on the migration / practice on the weekend
-

Mar 24, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Jonathan Mayeur (IntellectEU)
- Prakash Neelakantan (Broadridge)
- Aman Goyal (SBI Digital Asset)
- Malik Faizullah (Moody's)
- Wayne Collier (DA)
- Amanda Martin (LF)
- Chris Matturri (ProofGroup)
- Amaury Perez

Agenda:

- Welcome
- Feedback that has come up
    - None to mention
- KPIs
    - The Tie might have some of these stats already available.
        - Question is how do we get this data
        - Need to make sure of data integrity
            - DA is planning on doing a review for accuracy
        - Ideally easy for people to digest
        - ACTION: Justin to work with Liz at DA
            - Probably on hold until validity is established
        - Do not want a budget (yet) for these
- Blog posts from this team?
    - Validator blogs are going through the Marketing Team
    - A blog post from Node operators on best practices would be nice "lessons learned"
    - Blog intake form: https://form.asana.com/?k=Jpc2T-A4sNzUmNtjMsoq1A&d=9283783873717
- (Wayne) Should GSF run an AppDev Network for application developers?
    - This would be a network for the App Developer interest and not on super validator timelines/scale.
        - Currently there are too frequent upgrades for app development
    - General consensus that this is a good idea, with option to revisit when we are more stable.
    - ACTION: Jonathan to provide a cost estimate.
        - Ideally a 4-node synchronizer.

        -
- Status of new partners
    - Goldman Sachs
        - In progress for an app
    - Figment
        - Vote passed - announced later today
    - Obsidian
        - Node live
    - Elliptic
        - Live, minting through GSF node with own validator
    - TRM
        - SV Rights approved, but no visible activity yet
        - Live next month (April)
    - Circle
        - Not minting, reduced weight
    - iBTC
        - No SV weights - has not been proposed yet
        - Have drafted something but not ready for discussion
    - Proof Group
        - Canton Coin explorer is out!
        - Feedback welcome
            - Secure connection coming soon
    - The Tie
        - Added Canton Coin / Global Synchronizer to their dashboard
            - Some calculations incomplete / inaccurate
    - Chata.ai
        - Showing early versions of query builder tool
    - Franklin Templeton
        - Actively in development
        - Released initial project plan
    - Others we'd like to track in this committee?
        -
- Status of stalled partners
    - JPMorgan

Mar 10, 2025

Attendees:

- Justin Peterson (Tradeweb), Chair
- Prakash Neelakantan (Broadridge)
- Aman Goyal (SBI Digital Asset)
- Jonathan Mayeur (IntellectEU)
- Malick Faizullah (Moody's)

- Wayne Collier (DA)
- Amanda Martin (LF)

Agenda:

- Welcome
- Feedback that has come up
    - None to bring up this time.
- What are we doing to close gaps in the full collateral use case?
    - Moving from 2 to 3 is not the easiest.
    - Anything this group could do to facilitate that transition?
    - Seems like the issue is the firm to firm usage on 3
    - Documentation on DAML 3 will be released in the next few weeks
        - Pre-release is available as needed
    - Full interoperability is important with 3.x
    - How can others help with documentation? - tabled
        - There are comments/discussion on the GSF Docs on devnet
- KPIs
    - **Validator Network Expansion:**
      Number of active validators onboarded per quarter
    - **Ecosystem Development:**
      Number of applications integrated with the Canton Network
    - **System Uptime & Reliability:**
      % uptime for the Canton Network and Global Synchronizer
    - **Infrastructure Maintenance:**
      Keeping an active upgrade cycle for sustainable upgrades on the network to minimize the time lag between upgrades announcement and implementation
        - *Currently weekly upgrades (non-breaking) - how long until validators implement.*
        - *Are they pushing to delay upgrades because of being too frequent.*
        - *How long to adopt breaking changes.*
            - *DAML - ~3 times a year*
            - *Protocol - ~ 2 times a year*
        - *Need to make sure these are easy enough to accomplish.*
    - **Interoperability Readiness:**
      Number of active technical bridges
    - **Security & Risk Mitigation:**
      Number of security incidents reported and resolution time
    - **Certified Developers:**
      Number of developers certified to use DAML
    - **Engagement Metrics:**
      Deliver key numbers to internal stakeholders to gauge engagement

- ***Many of the above KPIs are measurable but require dedicated time that Committee members do not have. Recommendation is wait for ED to hire out a person/contractor to engage in metrics.***
- Blog posts from this team?
- Status of new partners
    - Elliptic
        - SV rights approved
            - Hosted?
        - Linked to DevNet
    - TRM
        - SV Rights approved, but no visible activity yet
    - Circle
        - Working on options for accelerating onboarding
    - iBTC
        - Initial solution design proposals shared; active progress
    - Proof Group
        - Claim they will release a Canton Coin explorer soon
    - The Tie
        - Added Canton Coin / Global Synchronizer to their dashboard
            - Some calculations incomplete / inaccurate
    - Chata.ai
        - Showing early versions of query builder tool
    - Franklin Templeton
        - Actively in development
        - Released initial project plan
    - Others we'd like to track in this committee?
- Status of stalled partners
    - JPMorgan
        - Has taken an EVM-or-nothing public stance
            - Continue to double down on this publicly
            - Hard to leave this behind
        - Digital Asset is working with JPMorgan on a project to operate a Canton node that then uses a JP-operated bridge to settle with Kinexys.
- (Wayne) Should GSF run an AppDev Network for application developers? - tabled

Feb 24, 2025

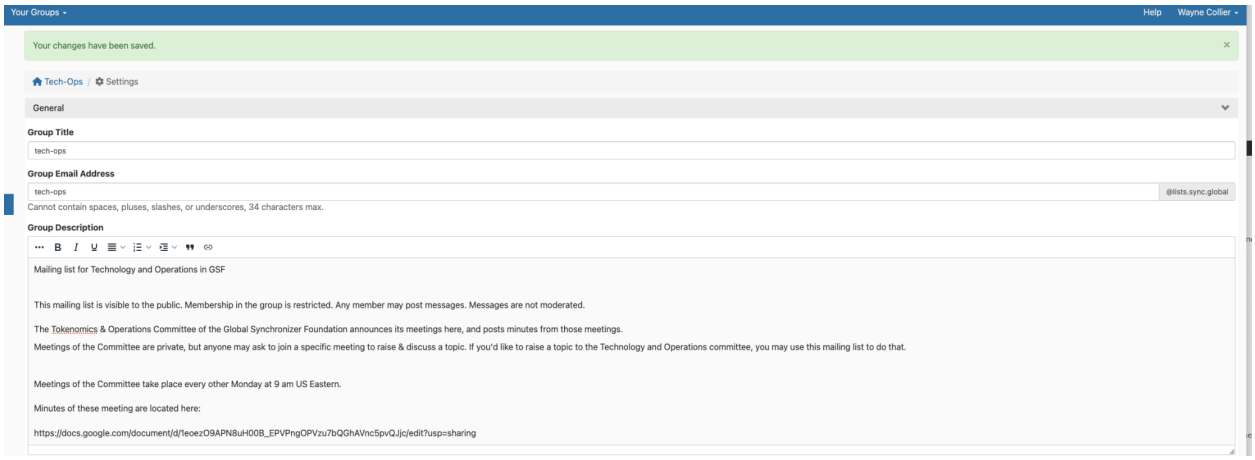
Attendees:

- Justin Peterson (Tradeweb), Chair
- Jonathan Mayeur (IntellectEU)
- Prakash Neelakantan (Broadridge)
- Wayne Collier (DA)

- Malick Faizullah (Moody's)
- Amanda Martin (LF)

Agenda:

- Welcome
- Wayne: These are the current privacy, moderation and sharing guidelines we have for the email list for this committee. Are they correct? Meaning, are they compatible with the mission of the GSF and the objectives of this committee?



- Wayne: Forum for general discussion of Global Synchronizer topics
    - Use the Main mailing list
        - Open to anyone
        - New Members moderated (two messages)
        - Messages otherwise not moderated
        - Crawled by Google (and searchable)
    - Separate discussions of technical docs
        - Link from the docs page
            - Allow in-page comments
            - Backed by GitHub discussions
            - (does require GH account) - okay for technical people
- Wayne: CIP-0000
- Wayne: Security Roadmap for Canton
    - Justin: Let's have a review of the major categories of risk, and how DA engineering tackles them.
- Justin: Objectives of this group
    - Technical actions
    - Should advocate for expansion of technical involvement in the network
        - What are the impediments to joining?
    - Justin: My life would be much better if JP Morgan joined Canton
        - Why aren't they joining? Can we resolve any technical issues that might block them from joining?

                - Maybe don't need to focus on the DeFi ideological barriers
                - But worried about anyone who has concrete concerns
            - Can we get a list of technical & operational issues blocking Blackrock and JPMorgan?
                - Justin: Who can help figure this out?
                    - Tradeweb, Broadridge, Moody's (and Cumberland) are well-positioned to ask / look for these issues
                - Justin: How would we resolve the issues they raise?
                    - Wayne: We can definitely use this committee to bring those topics back to the various engineering teams
                - Prakash: Might need to parse between
                    - Is there a clear use case for this firm?
                    - Is the development team unwilling / unprepared / lacks appropriate talent to learn Daml and Canton? Can we solve for this?
                        - Education?
                        - Greater flexibility?
    - Wayne/Justin: Can we make this part of our regular meetings
        - What specific feedback have we received?
        - Can we qualify / improve the quality of this feedback / confirm the reality?
    - Prakash: How do we incentivize startups to use Canton?
        - Justin: Getting some good press on projects. If we announce projects, competitors are going to join.
    - Justin: Regulatory barriers if Tradewb were to offer a custody solution. Need to partner to resolve for some use cases, like collateral mobility. This use case really excites people. Need to remove any barrier to this.
        - Add to the fixed agenda: what are we doing to resolve the full collateral use case?

Feb 10, 2025

Attendees:

- Jonathan Mayeur (IntellectEU)
- Justin Peterson (Tradeweb), Chair
- Jan Hoensich (MPCH)
- Amanda Martin (LF)
- Wayne Collier (DA)
- Matthew Schoenberg (EquiLend)
- Malick Faizullah (Moody's)
- Prakash Neelakantan (Broadridge)

Agenda:

- Welcome
    - Matthew Schoenberg (Equilend)

        - Works with Ken DiGiulio
        - Securities finance, data provider
            - Have a DLT initiative on Canton
            - Go live June-July 2025
    - Malik Faizullah (Moody's)
        - Digital Economy Group
        - Blockchain Tech
        - KPMG (prior)
        - Rating digital Assets & financial instruments
        - Financial evolution and financial readiness of these systems and assets
        - Jan: How does this fit into Moody's as a whole?
            - Moody's covers lots of different assets; this group covers ratings & impacts of Digital Assets.
                - Looking at AI, blockchain, quantum computing
- Wayne / Amanda: GitHub permissions, we are using 4 eyes but do we want 2 orgs or does 1 org enough?
    - Justin: Personally ok with four eyes from one org
    - Jan: If we don't like the change that one org made, the others can change it back, and if malicious / undesireable, vote them out.
- Wayne: Readout from GSF Board meeting in Brussels
    - Justin: Each group was given a task at the GSF meeting to define a set of KPIs for success of the Foundation; how would Technology & Operations contribute?
        - Wayne: We have some easy ones related to access to communications & record keeping
            - ACTION: For Wayne and Amanda to look into this more
                - (Node as a Service?)
        - Jonathan: Legal Committee can have KPI on security
        - Jan: How easy is it to stand up Canton (Validator, Super Validator, Participant?)
            - Docs do not provide scripts or internal structures but perhaps it could provide general strategies for best case/easiest case. Need to ensure we do not cross a boundary of providing too much information. Complete freedom leads to struggling to start.
        - Prakash: Technical readiness to have multiple synchronizers (private & Global Sync) linked in production.
        - Justin: Is GSF going to become an open source group?
            - What will be the relationship between GSF and Splice?
            - What is the relationship between GSF and Open Source Canton
        - Jonathan: What are the incentives for participation in Global Sync? Can we improve these?
            - What do we need to incentivize? What types of technical components & market components?
        - Wayne/Jonathan/Prakash: Technical changes to Splice: Should they come to this group?

        - Prakash: Yes, I think this group should be involved
        - Wayne: Will start a discussion in tech & operations mailing list.
        - All should have:
            - An account at groups.io
            - Selections of groups at: https://lists.sync.global
    - Jan: The operational side of this work is also very complex

Jan 27, 2025

Attendees:

- Jonathan Mayeur (IntellectEU)
- Justin Peterson (Tradeweb), Chair
- Jan Hoensich (MPCH)
- Amanda Martin (LF)
- Wayne Collier (DA)

Agenda:

- Improve the process for voting (CIP, etc)
    - Current state on GitHub
        - Stakeholders are emailed with the resolution, and timeline for votes and respond to that email with their desired vote
        - Some issues with this is that this drives a high number of emails. This does remind others to vote when they are included in the reply all but is rather noisy. This method is not the most private and is error prone with the vote counter potentially missing votes as the process for collection is manual.
    - Possible solutions
        - Google Forms Example - Email address collection is ON to ensure authenticity of voter.
        - LFX - Requires users to have an LFX profile for authenticity. Not able to label why with abstention.
    - Questions:
        - Can we show how each SV voted?
            - For transparency it is okay to list who voted how.
            - ACTION: Wayne to ask this more broadly to cip-votes
- Meeting membership
    - Ken DeGiglio EquiLend
    - Matthew Schoenberg EquiLend
    - Rajeev Bamra Moody
    - Malik Faizullah Moody
    - Alfredo Saavedra Moody
    - Benjamin Burgess Moody
        - ACTION: Amanda to reach out to them and ask for who is primary (can have 1 alternate as well)
        - ACTION: Justin to send names to Amanda to reach out.

        - prakash.neelakantan@broadridge.com
- Currently the protocol is as private as we can make it. Should these be changed so that it is more public and no information skew is occurring.
    - Need to have a conversation on information leakage with the broader group and perhaps reengage this over time.
    - Do not want to limit App creators based on decisions.
- DAML 2 documentation is much better than 3. These are currently in the works on getting better.
-

Jan 13, 2025

Attendees:

- Wayne Collier
- Jonathan Mayeur
- Jan Hoensich
- Justin Peterson, Chair
- Chris Zuehlke
- Amanda Martin

Agenda:

- Amanda: Should we move this meeting to GSF systems
    - ACTION: Amanda to move LFX zoom account (every other week)
    - Meetings are announced on tech-ops mailing list but NOT in the public calendar.
        - If they have a topic they can come.
        - Change mailing list to non-restricted (no exposed emails)
        - ACTION: Amanda and Wayne to follow up with Groups.io restrictions
        - Publish minutes to the mailing list.
- Wayne:
    - General progress on tasks
        - Slack is in place
        - Validators to move over from DA-hosted to GSF-hosted in the coming week
        - ACTION: Amanda and Wayne to work with Emnet and Manoj (should SV agreements be moved to GSF from DA). DA controlled the funds.
    - Status of GitHub Enterprise
        - License blocked by LF (Rudy)
            - Next step is escalating to Daniela
    - CIP Process
        - Governance - CIP Process - CIP - 0000
        - Based on BIP 0002
    - Should CIP votes be finalized in
        - GitHub via Git Votes (used by CNCF/Kubernetes)
            - Requires all voters to use a github account
        - CIP-Vote mailing list

        - Resolution:
            - Keep the votes in cip-votes
                - Summarize results in the PR and link to the announcement in cip-announce.
- Jan: Minting/Burning
    - Do we have processes for these made yet- matter for tokenomics committee
        - Canton Coin Minting Curve
        - White Paper to read

Dec 9, 2024

Systems Setup with Amanda Martin

- Wayne: Let's finalize the following
    - PCC details
        - Linux Foundation members are not available automatically for scheduling inside PCC
            - Must set up a profile manually for each LF member
        - Other members just need to set up their LF ID
            - Or they can be added manually
        - To set up an LFID:
            - **https://docs.linuxfoundation.org/lfx/sso/create-an-account**
    - Email mailing list tooling
        - Will handle all mailing lists via groups.io
        - URL: lists.sync.global
        - Committee members are added automatically to a committee-level email list
            - Others can join this list but they do not automatically become members of the committee
    - Google Drive access setup
        - Need lists of all committee members
        - Wayne Collier will set up access to Google Drive now
    - GitHub branch-level controls
        - Resolution: Amanda will request an Enterprise GitHub license for GSF, so we can enable branch-level controls
    - Status of Slack setup
        - Board at 8/12 approve waiting on LF internal process for Credit Card
        - As soon as this goes through, Wayne and Amanda will set up the new Slack workspace

Dec 9, 2024

Weekly Tech & Ops committee meeting
Recording:
Password:

- Wayne: Report on GitHub setup
    - Using a script to automate administrative actions, and provide a trail
    -
- Justin: Zoom meetings?
    - Wayne: This is managed via the Project Control Center tool from LF

Oct 17, 2024

- Justin: Review questions from LF around systems administration
- Proposals for the GSF board meeting from the Technology and Operations committee
    - Proposal 1:
        - GSF will use paid Slack for communications related to GSF activities.
        - Message retention timeframe to be determined; will start off keeping all messages.
        - Budget: (An estimate of an annual license for 200 users will be provided by LF / Sandra Jackson and Wayne Collier)
    - Proposal 2:
        - Allow the Technology and Operations committee to select tools for communications, collaboration, meetings management and record keeping from among the tools supported by the Linux Foundation.
        - Allow the Technology and Operations committee to set administrative policies for who may use these systems, and who may add new users. Linux Foundation staff will implement, along with representatives of GSF member organizations
            - The Tech & Ops committee will document these decisions and policies as they are implemented, and make these documents available to the board
        - Tech & Ops committee will set up at least the following systems:
            - GSF Slack instance
            - GSF GitHub repo(s), including
                - CIPs
                - Featured Applications and approved Validators
                - IP Whitelist
                - Technical deployment documentation for Validators and Super Validators
    - Proposal 3:
        - Technology and Operations committee will take responsibility for operating the GSF's SV node
        - A member of the Tech & Ops committee who is also on the GSF board will oversee operations of the GSF's SV node, and cast the GSF node vote in on-chain vote proposals
            - Committee nominates Jonathan Mayeur of IntellectEU to serve this role.

- Proposal 4: Marketing and Communications Committee
    - Propose that the GSF form a Marketing and Communications committee
    - This committee would take responsibility for GSF website content (https://sync.global)
        - Website would be maintained by LF staff
    - Committee members should be familiar with regulations regarding communications about financial markets and participants.

- Proposal 5: Draft of operating charter for the Technology and Operations committee:

  Objectives of the Committee:
    - Use Case advocacy:
        - This committee will encourage and facilitate apps to join the Global Synchronizer, and to make the Global Synchronizer more appealing to the developers and operators of these apps
        - This committee will
            - Recommend technical approaches for new applications
            - Request and recommend standards from technical contributors
            - Recommend funding for work on standards and full solutions via grants from the GSF Treasury
                - Includes a sponsor from this committee who will remain actively involved in the proposal
        - As an illustrative example, the committee will advocate development of solutions for:
            - Trade repositories
            - Tooling that improves the UX for holding assets on the Canton Network
                - Starting with separation of signing from node operations
                - Expanding to simplifying each step in an asset's lifecycle

    - Advocate technical direction for Splice apps (for example, Canton Coin and Super Validator governance) and the Canton protocol
        - New features
        - Easier deployment
        - Better development tooling
        - Any other technical changes that will help expand use of the Global Synchronizer

    - Operations of the Super Validator node owned by the GSF
        - A member of this committee will be delegated by this committee to govern the operations of the SV node owned by GSF
        - This individual will represent this committee and the GSF board in discussions and votes with other SV node operators
        - The representative of this committee who meets with the SV operators will also be a member of the GSF board

    - Access to, and policies for, administration of the communications, collaboration and record-keeping systems used by the GSF
        - These systems will include at minimum

        - Meeting venue (zoom, minutes, votes) available for operational coordination meetings of the Super Validator operators
        - GitHub repository for Canton Improvement Proposals
        - GitHub repository for recording approvals of Validators and Featured applications
        - Other communications, collaboration and documentation systems as required
    - These systems will be maintained by Linux Foundation staff, but this committee will set policies for use and administration of these systems when used by the GSF.
    - This committee will review administrative policy questions (below) and provide answers to Linux Foundation staff
    - This committee will propose annual budgets for these systems to the GSF treasury, and ensure that the treasury committee is able to track the rate of spend for these systems

Bylaws of the Committee:

- Committee chair will be appointed by the GSF board.
    - Chair of this committee must be a GSF board member.
- Members of this committee need not be members of the GSF
    - May be nominated by a GSF member, or a member of the Linux Foundation..
    - Outside (community) members are accepted into the committee by ⅔ vote of the committee (or could be done by consensus, meaning “no objections raised”)
- Actions of the committee will be decided by
    - Proposal by a committee member in the form of an item in the agenda for an upcoming meeting of the committee
    - Discussion of the topic in a meeting of the committee
        - May be discussed informally in advance of the meeting
        - Decisions and actions must be taken in the meeting itself
    - Vote by consensus
        - Decisions will be made by consensus, meaning “approved if no objections are raised”.
        - In committee votes, silence or absence will serve as a statement of “no objection”, above a minimum threshold of active support.
            - Minimum threshold of three members must be present and actively support the motion to establish consensus
- Committee will limit decisions to topics that fit within its four primary objectives

Oct 7, 2024

- Justin: Use Cases we’d like to see on the Global Synchronizer:
    - Trade Repositories
    - Chris: Do you want a single repository?
        - Justin: Yes, I’d like to see a common SDR for the market. When you build your own, everyone hurts. Everyone creates their own SDR, you have to update multiple SDRs. I think we need just one.

    - Chris: playing devil's advocate: Why would people want to move to a centralized solution? Seems like a big lift and shift.
        - Justin: because the scope of current SDRs is somewhat limited: only certain swaps; not the full lifecycle (repo trades, mortgage trades). We need a multi-asset-type SDR
        - Chris: So this would be enough to justify a move?
            - Justin: Yes. We might still need to convince some people
- Chris: In general, when we look at this, I ask:
    - Why should organizations move to this, and also
    - What is the security and governance for this big common apps? They will become big targets
    - Justin:
        - We do need some privacy, but we need discoverability too.
        - There are some challenges for how this would evolve
- Justin: Can we do this incrementally?
    - What would an asset-agnostic repository look like
    - Then various organizations could build their own approaches to it.
- Wayne: Maybe we can start off with standards and guidelines and let people start to interact with them
- Chris:
    - Incremental bootstrapping around a standard does work
    - There are some groups out there that are getting started with this sort of thing
        - GL-1 (some Canton participants are involved)
- Jonathan: Is DA involved in GL-1?
    - IEU will be talking with them
    - Can we align the DA test apps with GL-1?
- Chris: Maybe our guidelines could be Canton-independent: We open source the standard, and we build an implementation of it
    - Message: let's play nice with others
- Justin: The downside of the SDRs was that there were no standards or guidelines; no one would build anything that was on in their interest
- Chris: We should cite those issues as reasons to take a different approach.

- Justin: Other use cases?
- Chris:
    - There is no good UX for wallets and custody for Canton Coin. We have a lot of experience with this
    - To hold a bond, we had to go from one entity to another; no third party was ready to hold the asset.
        - We had to arrange for an entity that's operating a validator to hold the asset. Lots of work to get the operator qualified to work with the banks and other parties.
        - If Cumberland is struggling with this, it's going to be really hard for others.
- Wayne:
    - Working on this with Copper and DFNS, and also internal project at DA. Who would like to get updates on this?

            - All: Chris Zuehlke via Tate Burns and Nick McCardy, Justin Peterson, Aman Goyal, Jonathan Mayeur

    - Jonathan:
        - Can we start to standardize this? Are there standards out there.

- Admin questions
    - Free Slack vs. Paid
    - Join channels:
        - Public at invite of the GSF member who created the channel
    - Will review other Admin questions; Wayne Collier to distribute (included below).

- Super Validator Operations
    - Do we need a GSF committee for this?
    - Justin: Is there a group of SV operators that is already meeting?
    - Wayne: Yes, there's an ad-hoc weekly meeting that is not officially hosted by any organization
    - Justin: Can we use that?
    - Wayne: A GSF designated representative could join the meeting, and that would loop the GSF into Super Validator operations.
        - Jonathan Mayeur is a GSF board member, and IEU is operating the GSF-owned SV node
        - Maybe we can close this loop by having Jonathan join the current meetings
    - Justin: Is Jonathan willing to do that?
        - Jonathan: Willing to do it
    - Justin: Let's propose it.

- Wayne: Building blocks of a charter for this committee:

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            - Recommend technical approaches for new applications
            - Request and recommend standards from technical contributors
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                - Includes a sponsor from this committee who will remain actively involved in the proposal
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Questions related to GSF systems administration, on which Linux Foundation staff need guidance

Category	Topic	Question(s) to Resolve	Background and Options	Comments/ Resolution
Communications	Slack license	Should GSF use Slack for interactive communications? If yes, should the GSF use a paid or a free version of Slack for communications?	The Super Validator operators have voted to request that the GSF provide Slack to them as an interactive communication platform. The free version of Slack has the following limitations: ● Messages retained for only 90 days, then deleted ● Users may not update the email addresses in their profile ● Administrative restrictions, for example: ○ Max of ten integrated apps ○ No user groups (like @chairs) ○ Huddles are only 1-1 or channels (no larger) Pricing details TBD; Slack allows significant discounts for non-profits but we need to confirm whether they will apply to the GSF	Chris: We should retain data for 7 years Justin: We should use paid Slack. Resolution: Paid Slack. **Action:** * Wayne Collier to propose the cost/price, in collaboration with Sandra Jackson * Justin: Will raise the budget at the next meeting
Communications	Slack admin	If the GSF adopts Slack as its primary method for interactive communication: Who should have the ability to set up new public and private Slack channels? Who should have the ability to invite new users to Slack? To	**Admin Options for the Slack instance:** A: LF staff perform all admin functions B: LF retains top-level admin responsibility, but a limited number of GSF members (committee chairs and working group members) may create private and public channels, and invite users to them C: LF retains top-level admin responsibility, but any user of the Slack instance may create new private and public channels, and invite new users to it. D. Other options could be considered **Membership options for the GSF Slack instance:**	Administrative control: Justin, Chris: GSF members should be allowed to create and manage Slack channels. Membership: Justin, Chris: Only GSF members should manage Slack channels

		specific Slack channels?	A. Only employees of GSF members B. Both GSF members and non-members	and control who joins. Non-GSF members may join Slack channels. Resolution: Sandra Jackson will admin Other admins: Wayne Collier jan.hoenisch@mpc… Someone from TradeWeb
Communications	GitHub Repo Setup	Who will be the maintainers for the GSF's GitHub Repo? What will be their relationship to the GSF board?	* Maintainers should be familiar with the intent and use of the files stored in the repo * Maintainers should also be familiar with the process through which the GSF board agrees to post and share any new documentation in this GitHub repo	Resolution: Maintainers Wayne Collier Itai Segall Kamil Golebiowski Someone from TradeWeb
Communications	GitHub Repo Content	What content will be hosted in the GitHub repo managed by the GSF?	The Super Validator operators have voted to ask the GSF to take over management of the following files, using a GitHub repo controlled by the GSF. These files are edited, updated and agreed on by the Super Validators operators. They are currently maintained in a GitHub repo managed by Digital Asset: * IP Whitelists for the global synchronizer * SV minting weights, names and public keys * Deployment documentation and reference helm charts for Validator and Super Validator nodes linked to the Global Synchronizer * UI configuration settings for Canton Coin (so that UIs say "Canton Coin" and "Global Synchronizer" instead of the generic "Amulet" and "decentralized synchronizer") * The specific build of Splice that the Super Validator operators vote to use at any given time * The specific build of Canton that the Super Validator operators vote to use at any given time.	Resolution: Maintainers Wayne Collier Itai Segall Kamil Golebiowski Someone from TradeWeb
Communications	Technical Documentation	Where will the GSF publish the technical documentation for Validators and Super Validators?	Currently all Validator and Super Validator technical documentation is hosted by Digital Asset on a website separate from all other Digital Asset documentation. The technical docs are maintained using GitHub and updated with every release of Splice. The GSF could host these docs on a page of the GSF website updated from the GSF GitHub repository in the same way Digital Asset currently relies on the Splice repository to update the webpage it hosts.	Resolution: Unrestricted access to the technical docs on the GSF website. Use LF procedures for copyrighting
Communications	Document Collabor	What solution will the GSF use for collaboratively editing	Because CIPs become implemented via onchain votes made by the Super Validator operators, the SV operators have requested that the GSF create, edit and	Google docs is acceptable the incremental cost is

	ation	documents, including for example: Canton Improvement Proposals Detailed guidelines and policies for Foundation operations Meeting agendas and minutes	manage CIPs inside GitHub. Would GitHub also be a workable environment for hosting meeting minutes and GSF internal guidelines, meeting agendas and minutes? Other options available from the GSF include: * Google Docs * Confluence	minimal.
Communications	Website management	Who will maintain the GSF website? What information will be posted there, and how often?	The GSF website plays a clear marketing and communications role. The Super Validator operators have also asked whether the GSF website could also post important operational information about the Global Synchronizer, including: * The current version of Splice adopted by the majority of SV nodes * The current version of Canton adopted by the majority of SV nodes * The current Migration ID of the DevNet, TestNet and MainNet of the Global Synchronizer * The Scan API endpoints served by the Super Validators This information could be accessed automatically from the SV node operated by the Global Synchronizer Foundation	Chris: This seems like something that should be owned by the GSF. Communications are important to get right; need to consider regulatory requirements for communications. LF might not know regulatory constraints. LF could do the work, but GSF needs to advise on details. Justin: Can our organizations identify people who could contribute here? For now there does not appear to be a “Communications” committee at GSF
Communications	Video Conferencing	Can the GSF provide a zoom account to be used to host GSF meetings, including board and committee meetings, webinars, etc.?	Digital Asset currently hosts many meetings of GSF members via a Digital Asset zoom account. Ideally Digital Asset would turn this role over to the GSF.	Resolution: Committees of the GSF can use the LF project control center for meetings. All meeting invites should come from Sandra; all recordings should go back to Sandra Who will admin this? Sandra Jackson alternates: Wayne Collier Jan Hoenisch Jonathan Mayeur
Committee	Meetings Manage	What method(s) will the GSF board,	Meeting management for the GSF involves:	Resolution: Committees of the GSF

Operations	ment	committees and working groups use to manage their meetings, and meetings output?	* Scheduling * Agenda formation * Minutes recording in-meeting * Vote recording in-meeting * Action item tracking * Reporting of minutes and votes Questions to consider: * Should the board, the committees and the working groups follow the same methods and practices for meeting management? * If not, what differences should there be in how these (six) activities take place in the board, the committees and the working groups? Tooling Options: A. The Linux Foundation has built a tool called “Project Control Center” to help facilitate and automate meetings management. Should the GSF review and consider using this tool? B. Should the GSF use its document collaboration tool (TBD, above) as the basis for meetings management?	can use the LF project control center for meetings.
Record-Keeping	Super Validator operating guidelines	Will the GSF agree to host and share the operating guidelines agreed on by the Super Validators?	The Super Validator operators have created guidelines intended to help operators anticipate and understand each others’ actions on the Global Synchronizer. Because operators act without any binding agreement or obligation to each other, these guidelines are the primary way that SV operators develop a common language, and interpret each others’ actions in a consistent way. In most cases the guidelines provide plain-english descriptions of the onchain Daml smart contract code that controls the decentralized operations performed by Super Validators, and the ways onchain actions result from individual Super Validator actions.	
Record-keeping	Agendas and minutes for meetings of the GSF Board	How will the GSF record and share agendas and minutes for meetings of the GSF Board?		Resolution: Treat the same as other collaboration documents
Record-keeping	Agendas and minutes for meetings of the GSF committees and working groups	How will the GSF record and share agendas and minutes for meetings of the GSF Board?		Resolution: Treat the same as other collaboration documents

Record-keeping	Agendas and Minutes for Super Validator ad-hoc meetings	Will the GSF agree to host the agendas and minutes for ad-hoc meetings of Super Validator operators and rights owners?	The GSF does not administer all activities of the Super Validators, for two primary reasons: * Not all Super Validator rights owners, or Super Validator operators, are members of the Global Synchronizer Foundation, or participate in GSF committees. * The GSF is not liable for the actions of the Super Validators and assumes no obligations on behalf of the Super Validators A consequence of this is both SV rights owners and SV operators meet on an ad-hoc basis to discuss issues of interest to them. Any decision of the Super Validators may be implemented on the Global Synchronizer may be implemented when ⅔ are in agreement. The Super Validator operators have agreed to ask the GSF to retain and publish records of these ad-hoc meetings and decisions, to improve transparency without implying responsibility on the part of the GSF.	Resolution: Treat the same as other collaboration documents
GSF Super Validator Node Operations	GSF SV Voting	Who will vote on CIPs on behalf of the GSF?	Currently the SV rights owners have decided to halt new CIP adoption until the GSF appoints a representative to vote on new CIPs on behalf of the GSF's	Resolution: GSF's process for voting as an owner on the CIPs need to be resolved. Also, communicating the decision. Jonathan Mayeur will perform on-chain votes representing the GSF SV node (proposal to the GSF board)
GSF Super Validator Node Operations	GSF SV Node	Who will oversee and be accountable for operations of the GSF Super Validator node, and onchain votes to implement CIPs?	The GSF currently controls one Super Validator node, which is operated by IntellectEU. The Super Validator rights owner should oversee operations of this node and advise the operator on key decisions such as how minted Canton Coin will be protected, and how the operator should vote when implementing CIPs onchain. The GSF should designate an individual responsible for this oversight. That individual could be: A. The same individual who represents the GSF in CIP votes B. A different individual more familiar with SV node operations C. Someone else	Resolution: This committee, with Jonathan Mayeur as the active delegate
GSF Super Validator Node Operation	GSF SV Node	Who will represent the GSF in operational votes made by the SV Operators?	Super Validator operators make regular decisions on operational topics that are not raised as CIPs. These votes take place in regular operations meetings joined by all Super Validator operators.	Resolution: This committee, with Jonathan Mayeur as the active delegate

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