

MONERO'S RELEASE SCHEDULE: WE CAN DO BETTER

JUSTIN EHRENHOFER

DV TRADING / DV CHAIN

COMMUNITY WORKGROUP ORGANIZER

HIGH-LEVEL TAKEAWAYS

Monero's release schedule is usually nothing short of chaos

Updates are fine, but we need to get our act together

Effort isn't typically the issue

We need to be better at communication

WHAT MONERO SUPPOSEDLY DOES

Taken from the 2015 Year in Review





GOVERNANCE PROCESS



CASE STUDY 1: SPRING 2019 UPDATE





CASE STUDY 1: SPRING 2019 UPDATE

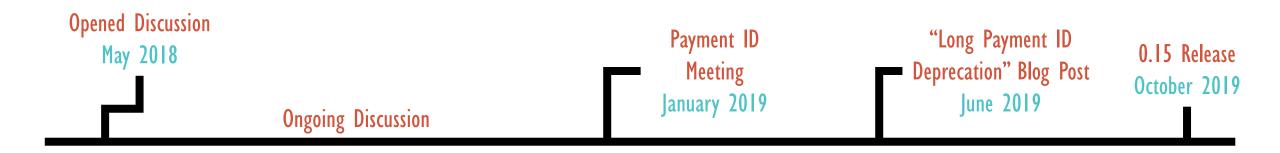


Moving the release forward one month delayed the implementation of most features by three months.



February 25

CASE STUDY II: PAYMENT IDS



CASE STUDY II: PAYMENT IDS

Everyone agreed that using long payment IDs is bad

Only some people argued for the removal of short payment IDs

No one agreed on what "deprecation" meant — wallet or consensus?

No one agreed on how to deprecate — permanent or temporary?

AREAS OF SUCCESS

Monero has a strong decentralized passion. It's unlikely that controversial changes can be implemented without significant prior discussion.

Monero has a huge community of people who genuinely care. They offer many perspectives with good intentions.

The Monero community continues to grow.

ROOM FOR IMPROVEMENT

Monero doesn't have enough code reviewers.

Monero Core Team is a bottleneck.

More formal proposal processes and distilled discussions are needed.

Better stakeholder notifications are essential for feedback and communicating timelines.

Monero needs to commit to many (not all) changes in advance.

WHAT ARE WE DOING?

Github issues and pull requests

Developer, Community, MRL meetings

Reddit discussions

IRC discussions

WHAT ARE WE DOING?

Github issues and pull requests

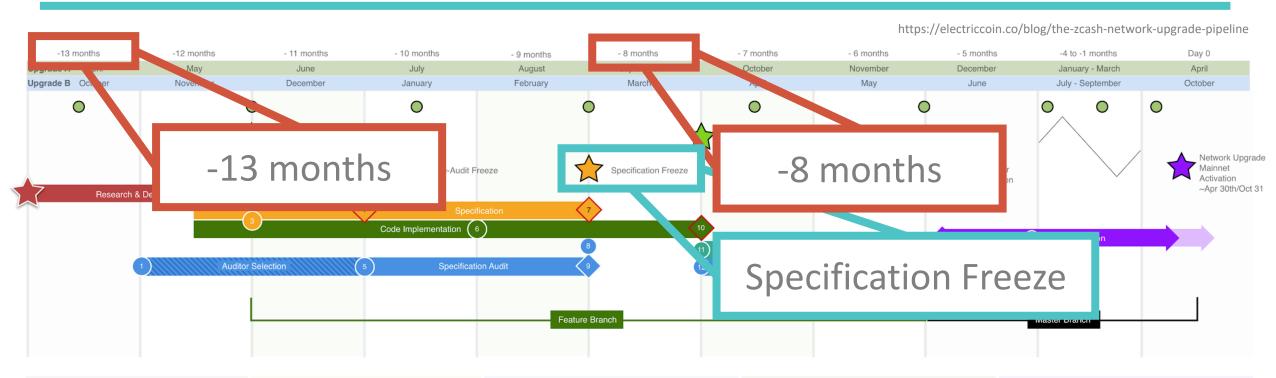
Developer, Community, MRL meetings

Reddit discussions

IRC discussions

A chaotic, hands-off decision-making process is MORE centralized than a clear, formal process

WHAT ARE OTHERS DOING? - ZCASH



R&D Begins

This should begin no later than 13 months before mainnet activation, but can be started

- Minor Release
- **Auditor Selection Begins** Define scope based on specification information so far, find auditors, negotiate
 - Handoff from R&D Lead to Security Assessor
- R&D Lead verifies that feature selection is complete and Specification Lead agrees to take on specification work

- Specification Lead provides initial specifications to Implementation Lead and Implementation Lead agrees to take on work
- All specifications for all features are complete. Specifications may only change after this point if anyone discovers a high priority issue.
- All new or incomplete specifications after this point must go into the next activation, but work may continue to get them activation-ready for the next release.
- **Auditor Selection Complete**

- Prototype and Test Vectors Complete
- All specifications are complete, including all changes as a result of the specification audit. Specification Lead certifies that all specifications are complete and Implementation Lead agrees to take on implementation completion
- Security Assessor certifies that all specification audits are complete and all remediations have been completed. Implementation Lead agrees to take on implementation completion.
- Specification Audit and Remediations Complete All incompletely audited or remediated specifications after this point must go into the next activation, but work may continue on these incomplete specifications to get them activation-ready for the next release.

Code is Feature Complete

Code is complete except any fixes that arise in testing/implementation audit, including RPCs and wallet integration but not necessarily library updates. All features that are not code-complete must go into the next activation; work may continue on code to get it activation-ready for the next release.

- Implementation Lead certifies that all coding is feature complete and Quality Assessor agrees to begin QA
- Implementation Lead certifies all coding is complete and Security Assessor agrees to begin the implementation audit process.

All code has been completed, tested and audited. Library updates are completed



Testing and Remediations Complete

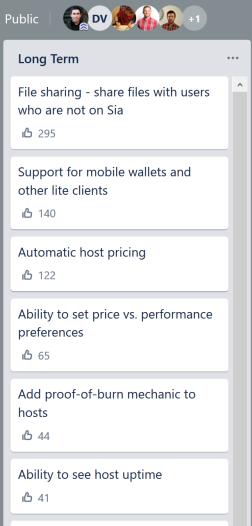
All features that are not fully tested with all issues remediated must go into the next activation, but work may continue on new specifications to get them activation-ready for the next release. Quality Assessor and Security Assessor certify that all testing and audit is complete and all remediations have been completed. Implementation lead agrees to merging and activation.

Mainnet Activation Commit

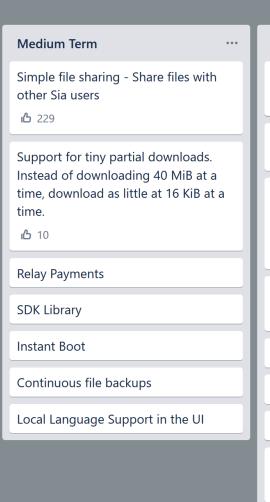
- 4 months (Dec 31/Jun 30)

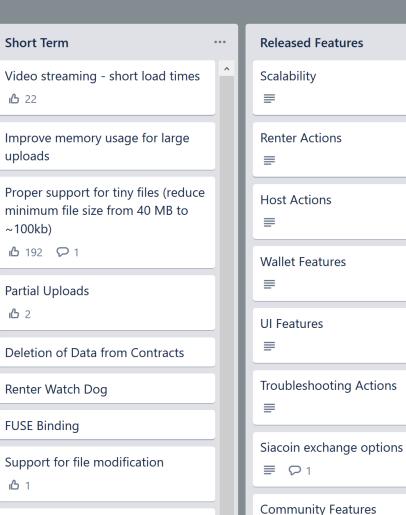
WHAT ARE OTHERS DOING? - SIA

Sia Feature Roadmap 🔯 | 🛇 Public | 😭 🕏 🕦 🗐 +1 Info **L** 295 **140 L** 122 Welcome to the Sia Public Roadmap! Click to learn more. **占** 65 **△** 68 **≡ ②** 2 Sia Releases, Click for link. hosts **△** 3 **≡ L** 44 ம் 41 Testnet for Sia



凸 9





Reset Wallet Password

FORMALIZED PROCESSES \neq CENTRALIZATION

By adopting more formal processes, Monero can:

- Provide more clarity in the decision-making process
- Engage a wider set of stakeholders
- More clearly communicate changes in advance to important ecosystem components
- Reduce Core Team influence by giving others a clear platform
- Offer better, less chaotic release schedules

Agreeing to a sensible formal process increases decentralization overall and brings large benefits.

WHAT I DON'T PROPOSE

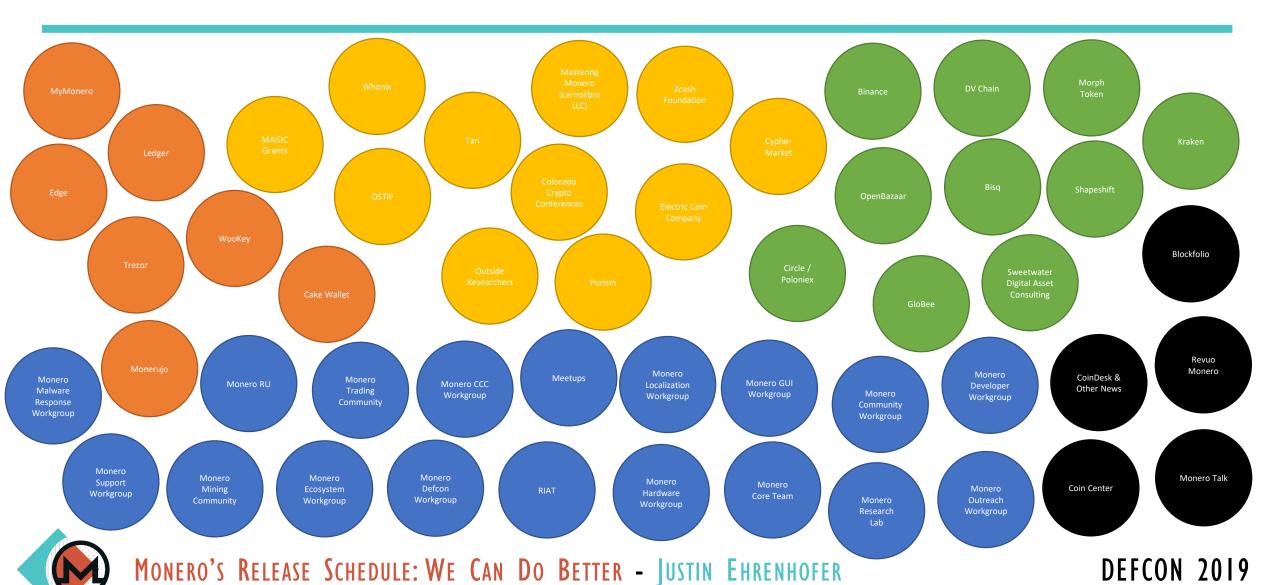
Voting for specific proposals — too easy to manipulate and subject to other issues

Delaying critical security patches

Upgrading at an unnecessarily high, burdensome frequency

Asking the Core Team to completely run this process
...but they need to be a part of it! Their buy-in is key!

THE MONERO ECOSYSTEM GROWS IN COMPLEXITY



THE MONERO ECOSYSTEM GROWS IN COMPLEXITY



Monero's Release Schedule: We Can Do Better - Justin Ehrenhofer

DEFCON 2019

THE MONERO ECOSYSTEM GROWS IN COMPLEXITY

With such a diverse set of stakeholders, the Core Team & community need to embrace formalization

There is no way to keep track of thousands of conversations and dozens of workgroups

Delegate this task as needed to other workgroups sensibly

Some bureaucracy is good if it gets everyone on the same page

Core Team needs to embrace responsibilities or delegate/abdicate

Smart communication is key



SPECIFIC BABY STEPS

Commit to code freezes one full month before

Decide on the main features about 6 months before scheduled upgrades

More frequent and scheduled minor, feature updates (reproduceable builds, yay!)

Create timelines for major features

Have formal feedback submission procedures for large changes and open conversations to discuss these

Set and adhere to reasonable deadlines, and only adjust if the situation changes



SPECIFIC BABY STEPS

Commit to code freezes one full month before

Decide on the main features about 6 months before scheduled upgrades

Plans may change, but we need to make them and communicate them clearly

More frequent and scheduled minor, feature updates (reproduceable builds, yay!)

Create timelines for major features

Have formal feedback submission procedures for large changes and open conversations to discuss these

Set and adhere to reasonable deadlines, and only adjust if the situation changes



THANK YOU

justin@ehrenhofer.org

