

**00:00**

Editing it last time, so yeah. Did we change something?

**00:06**

Let me check the permissions. I don't know why.

**00:10**

Yeah, I lost permissions to this doc as well.

**00:13**

My bad. Yeah, I'll make sure they're open.

**00:18**

Sorry.

**00:19**

Open now.

**00:22**

All right, let's see.

**00:24**

All you need to do is show up. No prep needed for this one.

**00:33**

Good.

**00:33**

I still can't see the doc.

**00:38**

Really?

**00:39**

Yeah.

**00:43**

Don'T bother. We can take it offline. Okay.

**00:49**

My screen is sharing.

**00:50**

All right. Yes. Okay.

**00:55**

All right, so let's get rolling. We've got a lot to cover. So this is conclusion of Sprint Two and just trying to get the wheels turning for Sprint Three.

**01:11**

So I guess what I wanted to.

## **01:14**

Do normally, we had been issuing the survey to try and get a sense of, hey, this is what I'm going to be working on in Sprint, the upcoming Sprint. And this is what was accomplished in the previous Sprint. I guess the goal of the way that I'm formatting this call and tomorrow's call will be the same for Sprint review and retro and planning. Moving forward, we're going to really just try to rely on the systems that we have in place so that there's not more surveys to fill out and more of this, more of that. So what I will show here is let me know if my chat tiles and stuff are blocking anything. So this is a spreadsheet. So I went through and this is just to sort of double click one. Thank you Mitchell, for setting up the forum style daily update channel.

## **02:21**

And more importantly, thanks to everyone that is posting there. And so you can see this is by day the number of people that are posting in posting all of their daily updates. So I'm able to go through and collect all of the daily updates and summarize that. Try to get a sense of, okay, this is what was accomplished. Really want to try to highlight and surface what was done so that it gives you a chance in this call to share your wins and also make people aware of everything that was accomplished. And so that is really something that's going to become more and more important. We need people to post their daily updates every day and that's going to inform the it helps set the stage for the Sprint review in retro this call. And then at the end of this call, we will be talking about planning, which is going to be all about the project board.

## **03:23**

So really making sure that people are taking upon themselves to fill out what they are going to be doing on the project board and make sure that it's showing up in the correct Sprint. And so we'll get more into that later on. Basically those are the systems that we have in place. And so trying to addition through subtraction, basically trying to make those things even more apparent to people by removing these additional surveys and touch points. So congratulations Martin and Stefan, you have.

**03:59**

Perfect.

**04:03**

Know I went through and I was actually counting all of the bullet points that people are posting. So there are some people that post on a shorter frequency than others, but they'll make a very long update. And then there's people that do it every single day and it could just be a single item. Holy cool. And then there's people like Martin that is just like a superstar posting like five, six things every single day, making us all look bad. But I think the encouraging news is that the forum style channel went into place, I think last Tuesday. So August 1. And really you can see that we have had a pretty nice uptick in people participating. So right now we're at like an average of out of the 23 people that have or sorry, 24 people that have posted daily updates. We're getting an update from about 50% of those people every day, but we are trending in the right direction and getting 75%.

**05:08**

And then there were some individuals that have not posted, so not to shame anyone and people are getting onboarded into this whole team. And I'm actually not totally sure the extent to which Charlie and Jeff are formally a part of the team or contributing to this. But those individuals, Fernando, we can touch base if you're not clear and Dean also not sure if you're participating. But then Kyle Magic, Monad Hassan from the Bitcoin L two labs trying to get them more engaged. And then Carlos Jordy and Nicos Mid Mosaic are part of the testing team, which are still in the process of getting onboarded. So we should be seeing this list of 24 grow to at least 30 in the next sprint. So I will try to highlight this every single call and.

**06:13**

Let me go back to where I was.

**06:17**

All right, so now we're going to take all of those updates and I pulled out the real juicy things and I want to make sure that we give everyone a chance to go through and kind of give a very brief overview of what they covered in this previous sprint. Flag anything that others should know about and maybe you can set the stage for what it is that you're contemplating for the next sprint. So we're going to go through this Nakamoto quality of life. So really the two blockchain things, clarity VM and then stack security testing and hardening very much related. And then from there we jump into a lot of SBTC work. So all of the work streams that are pretty easy to identify by IC. And then we'll jump to Andre and Mitchell to talk about some product stuff. And then we'll end with me talking about project and then that will segue us into sprint Three.

**07:19**

So like a pre planning, just heads up on some things. So Jude and Aaron and Jose, if you want to kind of walk us through some of the highlights of work that you were able to accomplish in Sprint Two. There's some notes here on the board to make sure that you're reminded.

**07:44**

Sorry, what's the question?

**07:46**

Do you just want to kind of give everyone a top level overview of what it was that you accomplished in Sprint Two with regard to Nakamoto and Blockchain work and then also Stacker DB?

**08:00**

Getting the Stacker DB up and running is my overriding goal right now because it's on the critical path to having successful hackathon in New York next week. And that's what I have been doing the past couple of weeks. That's what I will continue to do today and will continue to work on after the remainder of the week time permits. And I think it will, I will start adding RPC methods that the assigner team has requested to the node in order to make their jobs easier.

**08:24**

And can you explain to a rube like myself what is a neighborhood walk or neighbor walk?

**08:33**

Okay, so one of the core requirements of any peer to peer network is you have to know where other peers are, otherwise you're just a bunch of islands and you can't talk to each other in a blockchain specifically. This is also true for Stackerdb. Both of these systems are fully replicated state machines. And what that means is every node has to have a copy of the same data in order to ensure they all process it the same way. So the peer to peer network system that is in the stacks node is primarily focused on making sure that every node is reachable from every other node, so that if one of them makes a block or a transaction, then every other node will get a copy of it. The way in which we achieve this in an open membership setting where anyone can run a node, including evil people, is to execute what's called a random walk.

**09:18**

So you can think of the set of peer nodes linked together as a graph, and by a graph I mean a collection of vertices, which are the nodes, and the edges, which are the connections between nodes. The system attempts to establish a K regular random graph, which is to say the probability of any neighbor, of any node being your neighbor is one over number of neighbors in the system. And you try to establish K neighbors as your neighbors. The randomness property is crucial for ensuring the system remains live in the face of network partitions, especially adversarial ones where people can control some of the neighbors that might be some of the peers that might become your neighbors. So this had been working since day one. It's working reasonably well. What I've been asked to do and what I have been executing on is refactoring the code base here to make it much easier to understand, in part to make it so that we fix all the layering violations, all of the implicit couplings between otherwise disparate modules.

**10:11**

Thing is, the system has evolved as business requirements have evolved, and we haven't had a chance to take a breather yet to do the needful refactoring to ensure that the code reflects the business requirements. So that's what's happening right now in a piecemeal fashion. I just finished it up with the Random Neighbor Walk, which needs to especially be scrutable right now because that is on a dependency of making the Stacker DB system work. The stacker DB system depends on the random neighbor walk to discover other replicas of a single stacker DB instance. There will be at least three of them in the production system. One for SPTC, one for Block producers, and one for Stacker signers. So what I've been working on is making it so that the peers who replicate different stacker DBS can find each other and then they can start talking to each other so they can exchange data so that all of them have a copy of the same database.

**11:05**

Very cool. That was a very clear explanation.

**11:09**

Thank you.

**11:10**

No problem. Aaron, do you want to give us a little update on the Sip that's in the works and the technical documentation? Anything else that really jumps out at you as a highlight from Sprint Two? Yeah, so I was working on a number of things during Sprint Two. Probably the two biggest chunks of time were reviewing the Stacker DB PRS and providing some feedback there and then resolving some CI issues that the blockchain repo has had. Thankfully, the CI issues are mostly resolved. We went from, I guess unit test runtimes that went from like 2 hours to then 5 hours to then not completing at all to now they should run in about 30 minutes, so that should be helpful for everyone. I will say that people should be mindful of the runtimes of unit tests and if they notice that their PR makes unit tests suddenly start running in.

**12:28**

Two to 3 hours, just be.

**12:32**

Aware of that and maybe decide not to merge or ping me first. And then the other thing I was working on was trying to tape the.

**12:43**

Better Blocks technical document that Jude had.



**12:47**

Very sort of thoroughly written and was pretty great source material into piecemeal issues in the Stacks blockchain repo that people could start hopefully working on right away. And if they can't start working on them right away, they at least provide sort of like issue specific locations for getting more details on those issues and then looking forward to the next Sprint going to be working on actually tackling those.

**13:24**

Yeah, that's great.

**13:28**

Jose, I wanted to highlight something here. I don't know if this is still current for you, but you had posted a request or comment on the Stacks forum.

**13:38**

The proposal is totally orthogonal to the current design, but if someone wants to read it and maybe savage any ideas from there, but it's totally different from the current design. Yeah, I'm continuing reading the current Dakamoto design to see if I can help with add anything there. Yeah, the thing with the blockchain design that is difficult is that to have maybe it's more like an art. So unless you have a model or an experiment, like economic and model and probabilistic model is more like art. So you have to trust on the experience of the designers. But yeah, so far it's very good.

**14:39**

Actually.

**14:39**

I'm not like a very junior rust developer, so yeah, I hope maybe in the near future I can collaborate with more.

**14:51**

So yeah.

**14:52**

Thank you.

**14:54**

Awesome.

**14:55**

Jesse Wiley, I wanted to highlight some of the quality of life things that you've been working on. Can you make people aware of these items regarding CI testing and GitHub actions? Jesse might not be here yet.

**15:20**

Okay. All right.

**15:22**

Bryce, are you I know you were going to be out. Are you on the call?

**15:31**

Okay. Bryce is out today also.

**15:34**

All right. Scott and Mark I saw Scott here, could you give us and Mark might be also.

**15:45**

Yeah.

**15:48**

So Mark was working on categorizing stack specific vulnerability and assessing the severity as he wrote in the Update Channel. I've been focusing on mutation testing for the Stacks blockchain repository. I ran into a few hiccups getting that to work. I was working on that again this morning, however.

**16:09**

Yeah, I don't know exactly when I'll.

**16:11**

Have that ready, but the PR is.

**16:12**

In draft if you want to look at it.

**16:16**

I plan on pushing an update commit this afternoon related to what Bryce is working on. I was asked to work on fuzz testing for the Clarity VM for WASM as one of the.

**16:31**

Things to do.

**16:32**

In the next sprint.

**16:32**

I just wanted to highlight that was going to be my focus once.

**16:35**

I get this PR cut and ready for review.

**16:39**

Great.

**16:39**

Could you take a second and just kind of contextualize for us how mutation testing works and a use case for that would be helpful.

**16:48**

Yeah.

**16:49**

So mutation testing is about the quality of your tests rather than the coverage, like how much of your code gets touched. So what mutation testing does is it identifies areas of code and makes changes to it and sees if your test unit test suite actually passes or fails it. And then it delivers a metric on the survival rate of mutants, which is if I change this equals operation to a not equals operation, does the code still work for all unit tests, that sort of thing?

**17:20**

What this does is it gives you.

**17:23**

Greater visibility into not only how much of your code gets tested, but whether or not it's testing all the edge cases that humans might not think about. And a lot of these corner cases for mutation testing have security implications. So that's why it's my current focus.

**17:44**

Excellent, thank you. And then staying with testing and hardening. Ashton, I know a lot of your efforts are still related to Onboarding. I'd love to hear any thoughts that you might have on just getting yourself familiarized and up to speed and any other kind of testing and hardening related items. And then we'll jump to.

**18:08**

You know, I've got to say, Onboarding has been relatively painless. I think the places I've been working right know, I've been helping with making the scripts for the SBTC repo within the Stacks network. And my hope is that everything we do in our CI can be recreated locally. So I've just sort of put out a little draft PR, including a script that lets us do that, and maybe we can adopt some of that into the Stacks blockchain. But I mean, really fairly painless onboarding.

**18:42**

Excellent.

**18:44**

Sergeant, anything you want touch on in terms of Sprint Two highlights.

**18:50**

So that's for Emerge Workspace pull request and there's relative issues that I'm currently working on and currently also working on planning for the next Sprint especially. So the main thing will be test for SBTC. I mean, manual test, just like kind of like, how do you do? And from that one, we will decide what we would like to do for automated test. That's pretty much it.

**19:31**

Awesome.

**19:34**

And then, Jesse, I just saw you join. Give me a shout if you are connected. Just we covered the quality of life things that you were working on. Just wanted to see if you could kind of help bring any attention to these items so that others are aware of your efforts from Sprint Two.

**19:59**

What do you want me to comment on?

**20:06**

We're just having people go through and make sure that you're able to discuss what it is that you did during Sprint too, and if there's anything that way other people are aware of the work that's been done.

**20:21**

Yeah, so I've been focused entirely on our CI process, reducing dependencies and improving the speed at which tests are run.

**20:36**

I'm running some tests of the tests.

**20:39**

Today to get some different timings and see if there's any further improvements I can make before drafting a PR.

**20:49**

Great. Okay.

**20:51**

All right, so let's jump to SBTC. So we'll start with the Clarity team. Marvin, I don't know if Marvin's able to make this call given his time zone. If Cedus or Jose want to jump in or Fur or Freger, just kind of give us an update on where you're at with the Clarity work stream.

**21:14**

Sure.

**21:15**

So I'm happy to give an update for Marvin and the group. Last week, we had a lot of progress in terms of opening up the last kind of not the last, but opening up issues now that we are getting unit tests for the Stacking pool, working in a flow. And so by that I mean, obviously testing for the lifecycle of what does SBTC developer relations look like? There's multiple steps, such as registering then voting, then et cetera. Last week we finally got the flow tests working and so now we're just slowly working our way up on the coverage. Jose has been kind enough to actually let us know which projects have what amount of coverage. So I would say this week is going to be a lot of ironing those out and trying to prepare as much as we can for the first release of developer release.

**22:15**

Excellent. Jacinta, can we get you to provide a little bit of an update on what was accomplished in Sprint Two regarding signer?

**22:27**

Sure.

**22:28**

So I did get some of the SDC doc updated, particularly the stacker signer requirements, as well as how to set up a signer, sort of how to guide as well as a stacker. I'm continuing on improving that documentation, though. Aside from that, I have a PR up for some rough scaffolding of what the signer code side of things would look like. I have to get back onto the documentation though, so that's going to continue into the next Sprint, but that's pretty much it.

**23:01**

Awesome.

**23:03**

And Joey, so you're doing a lot with taproot?

**23:08**

Yeah.

**23:09**

So basically the blocking path right now for us doing anything is taproot. So I focused on first getting to where the WSTS library could actually function, doing taproot's key spins. Then I put that into the unit test for the SPTC core, the frostbtc test, so that's all working. We can do key spins with Frost, everything's fully distributed and I had to fiddle the math to make it work, but everything's fine. So still though, that doesn't do what we really need, which is we need script spins. And so that's what I've been working on for the last week or so. I'm pretty much there. I think hopefully I'll get that banged out in the next couple of days. So we'll that's done. Then I can move on to doing the meta protocols, the fire and the roast. And I'm working with Jacinta to try to get us some traits in Rust so that we can have separate traits for the coordinators and signers, so they can do whatever the different parts for the need for the different roles.



**24:05**

Great.

**24:05**

And could you kind of help explain for someone like myself what is the attribute that tap root signatures contain that make it, I guess, the direction to go rather than say, SegWit or some.

**24:27**

Other type of address?

**24:30**

So we have to do taproot if we want to do Schnorr signatures and Frost is Schnorr signatures. So we have to actually do taproot. And taproot is really awesome because taproot lets you have a very concise chain tree of scripts. And what we actually want to do is we want to have separate script spends for the commitment reveal transactions so people can commit to a deposit, but they can withdraw it, or the signers can then commit to actually doing the deposit and vice versa for the reveal. So we need taproot for schnorr. And taproot also allows us to have multiple script spins instead of having those complex kind of scripts that you would have to do if you're doing native SegWit.

**25:11**

Awesome.

**25:11**

And then have you been working with or communicating with different wallet teams in terms of being able to I know that there's all of the handoffs, the inputs and outputs from one touch point to the other when handling these transactions is quite involved in terms of being able to facilitate a lot of different integrations. Is there anything that you've been working on or that I could help facilitate on that front?

**25:50**

So I just today talked with Martin and got the current version of what we're actually doing for commit reveal, and it turns out that we don't actually have any way of back channel communicating.

**26:01**

The commit into the system right now.

**26:04**

That's something that all of the wallets, all of the portals, anyone who's going to be doing some sort of like a web based deposit kind of thing, we're going to need some sort of back channel into our system and we don't have anything for that. And I was shocked to find that out because I thought this was just going to be something that we could read inside the transactions either in Bitcoin or in stacks. But apparently since all of these are going to be hidden script spins, there's going to be nothing that you can actually know about by looking at any of the blockchains that this is going on. We have to have some sort of back channel communication. Right now we have nothing. So if you can find some way of communicating that requirement to people, martin knows exactly the details as much as anyone else does, but we need to do that and currently we don't have that at all.

**26:49**

Okay, that sounds pretty important. I don't know Martin or Jude or Aaron or anyone want to add anything to that or should.

**27:04**

We do have this on our radar? For the technical, things like this needs to be integrated. I mean, that's one of the big pieces of designer and the signer has a lot of moving pieces that we need to lock in, at least for the Dev release and then for the Nakamoto release, it's a more generic component because anyone could do really transactions in Nakamoto according to the current direction.

**27:28**

Okay, great stepan. Lots of updates. Really pretty interesting things that are happening with SDK. You want to unpack this for folks? I put a link here to your latest issue that you're looking for. Comments from Aaron and oh yeah, I.

**27:51**

Moved that today from the TM organization to the main one. So yeah, might be interesting to take a look. So let me so we've actually set the SPTC repo recently, thanks to Jesse and his help.

**28:09**

Thank you, Jesse.

## **28:10**

And yeah, I've actually took multiple steps to moving logic into the stacked core library. Done it a couple of times with the hashing primitives, the encodings, the stacks address, and some other types. And it seems the latest agreement is that maybe we'll try to go with your implementation for a bit longer term solution right now. Yeah, I've also added the wire formats for the SPDC operations like Parsing Construction. I'm currently looking into what else we need to support to extend the SPDC core library, also add the signer parts in it. And yeah, more recently I've also written quite a few of the issues when it comes to CI everything that the new repo needs to have. And yeah, I want to thank Ashton for looking into it and what was the most recent thing? Let me take yeah, and I've also started adding the prefixed contract names into the wire formats today.

## **29:21**

That was some work that was already done in the start blockchain repo, but I need to move that into this new repo now. It shouldn't be too hard. And yeah, so by the way, when you have time, the link that you just opened, whoever is interested can take a look. Basically what we have discovered is that when you bootstrap a node from an archive and ask for any SPTC ops from any of the blocks are in the archive, it will just say there are none. So it needs to process the block by itself in order to get those SPDC operations, which was the issue for the Alpha, might still be the issue for zero point X releases. But yeah, as Martin pointed out, it shouldn't be an issue for the 1.0 release because then it's going to be a part of the consensus. So, yeah, maybe something to look at.

## **30:13**

I'm not really sure how critical it is and what's the fix? Do we even need a fix for it?

## **30:19**

So, yeah, please take a look.

**30:20**

And this also ties into the unknowns of how we want to handle these operations for Mini. If we want to handle the operations in the Dev release in the same way as we did for Alpha, then yes, this is an issue for mini. But I think that's something we haven't really come to yet. That's sort of how we design the signer and how designers kind of communicate with other signers and also monitor the blockchains and things. But yeah, it's a good point to keep in mind so we don't drop it.

**30:48**

Great. So staying with you, Martin, let's jump into the docs. Not sure if Kenny's on the call, but sayak, Martin, if you want to kind of give us mean there's been.

**31:02**

So much progress on the save some goodies for so SPDC stick wire format. We also have a roadmap in the docs right now, a sort of initial roadmap. We showed it in the Sprint string, so I don't think people would be too surprised to see it here because that's been a lot of work during the past sprint to sort of iron out what's the status of the different work streams, how do things tie into each other? A lot of unknowns and iron out how the road looks forward. What are the next steps, what are the big question marks and big challenges we need to overcome to move forward with this project. And I think this view is going to help us find that direction. And it's there now. There are some updates pending, but actually Jose merged it today. After approving the review. Sachs, do you want to continue filling in some other fun stuff?

**32:03**

Yeah, not much to add there, but yeah, there has been really good progress. I actually merged the last one. It says final adjustments, but that one's been merged or sorry, that one's in review. The commit reveal is integrated, like I said. Yeah, the deployment is live. It doesn't have the Mermaid diagrams integrated yet, but I think that's assigned to Ashton now.

**32:35**

I didn't know who wanted to take.

**32:36**

It, but yeah.

**32:41**

It does have Mermaid scripts.

**32:44**

Oh, have you done it? Nice.

**32:47**

Okay. Yeah.

**32:48**

So all of these tasks are kind of done.

**32:52**

Great.

**32:55**

And then Kenny's on the call. I don't know if you've been in touch with Kenny, but there was a handoff. Some really great onboarding curriculum for Blockchain engineers was created by Hero, and Kenny's been working to sort of turn that into more of an online status driven onboarding process that gives you an indicator of how far along you are and just kind of packaging up that content.

**33:30**

Yeah, this is more geared towards anyone who's joining Stacks Ecosystem, more fresh and wants to familiarize with all the concepts. So this is something that we use to onboard our Blockchain engineers. The curriculum is set on a week by week basis with deep dives on each subject. There's a bunch of useful links, including talks from Muneeb, a lot of white papers, et cetera. So Kenny just extracted all of that and placed it on GitHub. I don't have the link. Maybe you can drop the link here. That's something that we could use all of your help and kind of just review the curriculum and see if there are any missing topics or details that you would like to see as part of it as well as any content that you have found useful. We can update that. We'll also drop some links as part of the curriculum for the whiteboarding sessions.

**34:24**

The few whiteboarding sessions that Aaron and Jude have kind of conducted with the Hero and Trust Machines team.

**34:35**

Great.

**34:37**

And Mike, let's jump to you and talk about the bridge. And I know that there was a discussion topic this morning about support for Alpha. I'd love to hear from any strong opinions on that.

**34:52**

Sure.

**34:52**

Thanks, Will.

**34:54**

Yeah.

**34:54**

So that topic I spoke to Martin, so what I've done at the moment is just tied it off. I've tagged the. Code base for both the API and the client and put it on a separate URL. So we've kind of keep that going forward and then I think that I'm going to take the opportunity to just refactor the code in the bridge, make it a lot more nicer, more streamlined and orientate it towards mini now. So that would be a big change. So I've also set up a public DevNet with the mini contracts on, can start aiming things towards those.

**35:39**

Great.

**35:40**

And then Martin or Andre, I don't know if there's anything that you want to highlight about dropping support for Alpha or maintaining support for Alpha.



**35:54**

I mean, alpha right now is running on the coordinator for Alpha, which is a custodial system, is running on a VM in trust machines. We don't intend to do any changes to that one. And right now from my perspective, it seems like the interest in alpha is relatively low. It's a quite brittle system, it has very low guarantees. So from the front end perspective, freezing sort of the code on the front end, then we'll have a completely code frozen system and yeah, depends on the interest. If there's a lot of people who are suddenly very interested in trying out and using alpha, then we can of course give it more attention because that would probably reveal bugs. But right now it doesn't seem to have that level of traction to motivate more development effort on it.

**36:41**

Cool. And then I pulled in just some basic management tasks that I seen you flagging in your updates. I don't know if there's anything here that you want to bring to people's attention.

**36:53**

Yeah, maybe, I mean some of these are details like PR reviews, I wouldn't say are like managerial tasks. That's my ice word. But yeah, let's do some management high level. So again, yeah, bringing that attention to the roadmap. We've had a lot of dialogues with the character working group and the signer and yeah, the biggest red flag right now is that there's a lot of complexity and uncertainties in the signer and we don't have a lot of contributors working on that. So hopefully the get together in NYC next week is going to be the sort of Kickstart that, I mean we have a lot of work, especially for this sprint to even prepare for that and get a lot of speed. There is a need for more cross working group collaboration, especially syncing between the Clarity, Insight and working group, which I think I've heard from both sides and tried to sort of initiate more dialogues.

**37:43**

There and have a better cross view.

**37:46**

But I think we're getting better at that. So yeah, documentation kickstart. Another thing to highlight release rebranding for anyone who didn't hear or saw that. So we now don't have mini. You can still use the mini word, we don't have a square yard, but it's called the dev release. Internally we can use the version number 0.10.2 and 1.0. It's also in the documentation mini is Dev release and then 1.0 is also called Nakamoto release. Another thing to flag a decision during this sprint was that the Mini release is targeting withdrawals to be initiated on the Stacks chain and not the Bitcoin chain which differs from the final system where we're initially only going to target the Bitcoin chain to initiate the transactions as the original Sip with the commit TRIL addition. And long term there is some ideas that will enable us to support sort of both happy scenarios where more operations are initiated on Stacks.

**39:01**

But yeah, those were some brief management updates. I don't want to steal more time so we can continue.

**39:08**

Great.

**39:09**

Thank you, Andre and Mitchell. I want to make sure that we're bringing equal attention to product related efforts and bringing life to the system once it's been developed. Anything you want to flag here?

**39:27**

Yeah.

**39:27**

Thanks, Will.

**39:28**

So on my end the priority was on the Signer work stream. So I merged an update to the Signer product requirements after feedback from this group and working with Jacinta on that, spent some time on Signer BD. We had a meeting with BitGo and with Figment working to get them onboarded to be a signer for Mini. Also collected feedback from all of the Stacking pools. Experts has confirmed that they will be signing for Mini as well as Plan Better and Freaker I believe still has some open questions to address around that, but working to try to get clarity on that. Let's see, did some work on the Bridge user stories, working with Mike and Maxime to really scope down that product.

**40:21**

So that we have a good user.

**40:23**

Facing user experience for that when Mini release goes live and did some additional work. Just sort of roadmap planning. Working with Mitchell to really define.

**40:38**

What.

**40:39**

Is the success criteria for these releases and really who we're targeting for this.

**40:45**

That's great.

**40:47**

Mitchell, you want to help us see how the sausage is made when it comes to just give people a little bit of context around the app growth, the comms, everything that's happening?

**41:00**

No.

**41:03**

Happy to share.

**41:04**

So basically I guess theme of the last two weeks for kind of the non tech side of SPTC is obviously what Andre mentioned on the product side. But on the comms and marketing side, what we've been doing is kind of getting buy in from various leads and things that are going to need to contribute resources generally in terms of their team's time to help us make sure that we can actually get attention on these various releases. I think I've covered this so I'll be fairly quick. But basically the approach is going to be kind of a singular campaign that starts with SPTC mini going out the door that's focused the first sort of release and launch. Obviously focused on developers getting feedback. A lot of the goals and things have to do with that. They're aligned with Marten's. OKRs, so nothing will be too surprising there.

**41:59**

But what we've been trying to do is make sure that all the people throughout the ecosystem that are, like, hosting events and doing comms and marketing and have PR resources available and who maybe are working on the brand refresh, are all tied into the loop on some of these general timelines, the goals for these releases and so forth. So if anyone's interested in that, I'll happily share the doc. I think actually, I'm looking for sort of a tech lead that is interested in the comms and marketing side that I can regularly sync with so that I can sort of trust, maybe if I can't make every Sprint meeting that someone knows that information and that we have sort of technical buy in. So think about who that should be. And I'd love to sync with you this week and kind of share the whole pitch I've been using to try to get resources to the table, but that's basically it.

**42:52**

I'm feeling really confident about it. The way we're structuring it is such that if timelines shift, it's not a big deal. It's really just about sequencing and having a lot of the material prepared ahead of time, such that whenever we are ready to kind of go out, quote unquote, public with things that the ecosystem is ready. And we may be hiring some agencies and things like that as we get into bigger launches like Nakamoto, but that's the gist of it. And also just some BD work on the side as well. There's a lot of partnerships and things that we're trying to wrangle that we can sprinkle into various releases and announcements.

**43:34**

Right on. Yeah. It's always really important for people to have context of all these things that happen off stage, like in terms of the downstream effects of a release and all the coordination that needs to go into the messaging and communicating. With exchanges and other people that need to do integrations and updates and making sure that those things are done in a professional way so that there's not, like, a lot of needing to go back and clean things up with all of these external stakeholders.

**44:09**

Right, yeah.

**44:11**

And one thing I didn't mention was we signed off a new statement of work with an agency that's going to be running Gina, set this all up. Thanks. Shout out to her. So they're going to be doing some token economics analyses so that we kind of know what we're working with on that front for, I don't know, emissions and stuff like that. It looks like Manib has his hand raised.

**44:38**

Manib?

**44:39**

No, I was just going to add something here which is related. So one thing is that there's at least one and potentially more large companies. I'm not going to share who they are right now just because they're at an early stage, but who are looking at SPDC because they've been having trouble working with lightning. And I think that's pretty huge given how widespread lightning sort of like the technology is in the bitcoin ecosystem. So if people are looking at SPDC as a very serious sort of like, hey, we're having challenges with lightning, let us explore SPDC as a potential alternative.

**45:19**

I think that's huge.

**45:20**

So one of the immediate things you might notice is we'll be working on docs a little bit faster today as well and in the coming days because people from the outside when they're looking in, obviously information is spread everywhere and some of the docs are inconsistent, like, for example, from the White Paper. So we are trying to quickly improve it as those conversations are happening. But generally speaking, I think that's huge in terms of how impactful this work can be. So we want to get the public docs in a better shape and then maybe help some of the engineers as they're asking more questions. And these are pretty high profile companies and engineers who are doing that. So definitely a bunch of eyes on it. The second thing I want to quickly mention is start of September, there is a little bit of a spike in public facing events.

**46:10**

There's basically the Korea Blockchain week.

**46:12**

Where?

**46:13**

I'm there. There's Token 2049 in Singapore, which is basically the largest event in crypto in Asia this year. So everybody is going to be there. There might be some things we're doing on the ground, but I know for sure that there will be a lot of questions about what's going on with Nakamoto, SBTC and stuff like that people will be asking me, including media potentially. So I think if you can have that thing in mind that in terms of documentations or roadmap and stuff, if it becomes more mature or polished by then, we have roughly like a month to go. So that when people are asking or if there are certain things that we feel comfortable just telling more people, then I can include those things into my talks and things like that. I plan to talk about this anyway, but I think it'll be a great venue to kind of get more interest.

**47:08**

Going around some of the work that we're doing.

**47:12**

Very exciting.

**47:13**

That's great. Yeah. And we want to make sure that we get all the support that you need for those early September efforts. And then I guess just to round this out with my update on the ecosystem project management side. So I posted this is on the discussion board and it's very much byproduct of everyone's efforts. So we had a ten question survey that went around regarding the quality of life and the user journey from a developer experience point of view of interacting with the stacked blockchain. We got 18 responses. All of the questions were very open ended intentionally, and you can find all of the unfiltered feedback here. It's all like obviously anonymous. I just called it dev one through dev 18. The feedback, there's ten tabs at the bottom there, so that's where the raw feedback is.

**48:21**

And then going back to this, you.



## **48:26**

Can see below each one. So, as I mentioned, there's ten steps dealing with everything from onboarding experience to documentation to testing, deployment code patterns, future enhancements, so on and so forth. And so what I try to do here is just highlighted. Okay, what was the original question? What's a representative statement from the positive end of the spectrum and then one from the negative end of the spectrum and then beyond that, going to be working with Sergey later on today and all of the testing team people. So, Aaron, I wanted to bring your attention to this Jesse Kenny, like, whole number of people. So through that, pulled out 44 different action items of things that jumped out as improvements that could be made. These are still very big, very high level, and so these are all draft issues that are on the project board now as things that could be done.

## **49:32**

Sergey, sorry, they are assigned to you. But basically one of the goals for Sprint Three, I think, is to go through these and identify, like, okay, these are the top 20 or 15 or ten or whatever that really could move the needle. And we're going to develop these from draft issues into more complete issues, add them to the board and prioritize them, get them assigned, get people working on them. So that was one item that was worked on in the background. The other was really, again, back to the project board. So you can see we've got a roadmap really pretty well defined now with a lot of help from Martan, from Aaron, from Bryce, from Jude. So you can see all of the SPTC related stuff here. This is kind of like broken up more by work stream. So there's a prefix I've been adding to these issues to make sure that when we look at it across projects, you can tell which effort it belongs to.

**50:42**

Working group, whatever you want to call it, and then the work stream and then the effort around, you know, Martin, if you want to sort of take smaller tasks and assign them to these things, or we can work together to make this more functional, that would be great. Same with Jude and Aaron. Everything's laid out here, per your earlier notes regarding the rollout of Nakamoto. And then also, Bryce has taken this a step further. So these are all actual issues pulled in from the Clarity awesome repo, and all related to the Clarity VM work stream. And so going into here, this will kind of round out the conversation for today. So you can see that there's a bunch of tabs and really just been trying to set up opportunities for people to pull meaningful insights from this. And one thing that we'll be looking at tomorrow.

**51:51**

So right now we've got a very.

**51:54**

Clear, robust set of tag or issues here for the current sprint. So we're going to be going from current sprint tomorrow. This will trigger going to Sprint Three will now all of a sudden become the next sprint. And then you can also see the previous sprint. And so on the next sprint, which starts tomorrow, you can see that there's only a handful of items that are here. And so if folks could go through, I created a Nakamoto by IC and an SBTC by IC. So each individual can go through here, and you should set the status. So I pulled in everything from the repos to make sure that we can really level set this project board. So if it's done, just mark it as done. It will disappear, but it will be there in the background. And if it's in progress, set it as in progress.

## **52:54**

If it's in the backlog, you're going to get to it later noted as such, pretty much only a handful of statuses here to keep it simple and then make sure you're setting it to Sprint Two. That way it will show up in the current sprint tomorrow, and that will help us continue to move things forward. And then the other thing I really.

## **53:17**

Wanted to highlight about sprint two is.

## **53:22**

Sprint Three SBTC Peeps. I've got a board here of all of the different user stories that were identified. There's a link back here to the document where it was outlined. A lot of these user stories are very important. They're all important. A lot of tasks have been identified, but only a handful of tasks, with the exception, the glowing exception that is Jacinta. She's identified six and assigned herself six. So there's a lot of under assigned tasks and tickets here. So please go through those. Make sure those get added to the project board for tomorrow. And then last but not least, this came together in the background very quickly last week.

## **54:13**

A handful of us are going to.

## **54:15**

Be meeting together in New York. There's going to be like a hybrid hackathon component to Sprint Three. The goal is to get through this bottleneck, around the signer in particular. So there's a lot of handful of people that are going to be meeting in New York. We're going to be working out of the Hero office, have an intense little hackathon. We're going to stand up a block producer stacker signer and an SBTC signer, work on some issues around Nakamoto, the API, and just wanted to make sure that was on people's radar. If you're expected to be there in person, you were invited to a call this morning. If you're just going to be remoting in, we'll make sure to keep that on your radar as we move forward. We'll talk more about this tomorrow. Any last thoughts before we call it a sprint?

## **55:25**

Cool.

## **55:26**

This has been great, and lots of excellent work being done. I just really wanted to use this format to highlight the importance of these daily updates. So we've got an automation set up to nudge everyone, I believe at noon Central, so eleven Eastern, whatever. And yeah, just make sure that you're putting in your two cent there every day. Just helps us come back to it two weeks later and put a nice little bow on the sprint and make sure everyone is aware of what was done and keep moving forward.

## **56:08**

Beautiful. Thank you all. Take care. Thanks. Bye there.