

01:28

Okay. Good to see everyone on this crisp bitcoin autumn morning.

01:37

It is, it actually crisp in Texas, though.

01:42

No, it's still like 90 degrees here.

01:45

Just like summer here today, by the way.

01:48

Yeah, I think it's going to be like 70 degrees this week, which will be fun. All right, yeah, we're ready to get going. This is going to be, I guess, a little two part meeting. So those of you that have been with us for the full sequence of sprints so far, this is sprint six, or the conclusion of sprint six, start of sprint seven. And there's been several improvements and changes along the way. And I think it's high time for us to just make some really kind of small but hopefully impactful tweaks to the way that we work. And so, after a lot of conversations with people, the three tweaks that we're proposing and these are probably not even news to a lot of people on this call, but just to make sure that everyone hears it here, we started off with an overabundance of meetings, really trying to make sure that we had a lot of ample time for people to all get together and get aligned.

03:12

And I think that basically the motivation for these changes is that we've noticed that we've got great traction with our working groups. And so trying to scale back on a lot of the large 60 minutes full team meetings and trying to sort of recalibrate that, so we go away from those types of meetings more towards the working group meetings. And so what we're going to be doing is keeping this call. The goal is going to be to try to keep this to a 30 minutes call and it's really just going to be like an opportunity to hear from each of the working group in terms of what was accomplished in the previous sprint, what's the goals for the sprint coming ahead and what are any blockers? And so we'll be going through the first version of that here shortly. The other two Tweaks really has to deal with the working group leads, and so we want to make sure that the meetings serve the needs of the ICS first and foremost.

04:22

And so the people that are closest to what those needs are the working group leads. And so they will be taking the lead on establishing the rhythm of the meetings, like what day of the week, how long they'll be, what the attendee list will be, the format, the agenda, so on and so forth. And then also those individuals will be posting updates to the GitHub discussion board, so effectively meeting minutes so that anyone that wasn't in that call can then see what was discussed in that call. They can tag people across working groups and then also really being very judicious about maintaining the project board to reflect all of the work that's going on. So you've probably been hearing me saying the word like working group lead. And this has always been like an implicit role, more strongly understood on different working groups than others.

05:30

And so I think one of the main things that we've been working on is just trying to really identify who these individuals can be. And so we all wear a lot of hats. These working group leads are also doing technical work or other types of work. And then there's people within the working group that do a lot of management and technical architecture. But at the end of the day, we want to be able to have one person that we can hold accountable and that we know is the point of contact. And you all know as the point of contact for setting up meetings, for posting these updates and updating the project board. So going across the four working groups, we've got Tyler with Nakamoto working group, Jesus with clarity, Ashton with SBTC, and Bryce with clarity WASM. And so when you start to dig into that a bit more, this is where we're at now as a family, it feels good.

06:36

I've got a pretty good understanding of who's working on what. There seems to be identifiable chunks of scope that everyone's working on. We do have some individuals that are sort of working across working groups. Say, for instance, I intentionally put clarity in between Nakamoto and SBTC. That's a team that has an impact on both of those. We've got this bar of Steiner and Cryptography spanning across three streams. So it's not a perfect diagram, but I think it fairly represents it. So just outside of the three lighter gray areas, you'll see sort of these foundational layers that are forming. So really the quality of life and some of the programming support that you'll be hearing about, I'm going to be working with the quality of life people. So really we could think of that as Jesse, Mark, Nicos, Carlos, Charlie, and then on the documentation side, Kenny will be working with that.

07:51

And then obviously there will be individuals from each working group that are points of contact for the quality of life. And then say, for instance, with the hackathon coming up in London, there's a lot of programming that goes into that. So Andre tends to be like a really great point of contact for say, Jenny and Adam and Christopher that are working on supporting a lot of the programming around the hackathon and the premier app developers. And then sort of just outside all of that, we have this overarching level of engineering leadership across Orgs and just trying to help us, whether it be connecting the dots in terms of resourcing engineering needs compliance. You know, any number of know we can see munib Diwalker, Sarala Mitchell and then Alex being very sort of behind, not necessarily in the calls, but always in the know of all of the different efforts that are going on.

09:09

And so really, the last thing I want touch on is we know that there's a lot of urgency. We've got a big chunk of work yet to do. We know that we've got this auditing process and we're bookended, say, at one end with the current day that we're at being October 3, and then what we know is the bitcoin having date, and then we've got the period of time where we need to audit the code and get everything tidied up. So we're really working as hard as we can to get all of the scheduling taken care of and getting this, I guess, validated and reflective of what needs to be done. And the working group leads are being instrumental in that. This is really, I guess, maybe a best guess at this point in time, but this is a graphic that we'll keep coming back to and that's going to get more and more real in the upcoming sprint, I would say.

10:24

So now we're going to go and so that's all sort of, I guess, part one, which is just some housekeeping wanting people to understand, like, this is some of the motivations behind some of the meeting changes that you'll be seeing. I'll be canceling the invite for this meeting, but then sending a new invite right in its place. It's just going to be a half hour and then you'll be seeing other invites coming in from your working group leads. You may already have them. So the normal flow of this call is going to be again, we're ending one sprint, we're starting the next one. So we're just going to go through the working group leads. We've got five of them and we're just going to be talking about sprint in and then sprint N plus one in terms of wins and goal setting. So Tyler, you want to kind of jump off?

11:27

Sure.

11:28

Here.

11:29

Great. Thanks, Will. Okay, so wins, you might have already seen it, maybe you haven't. Two new sips got posted by Jude on GitHub. One for Nakamoto. And one for Nakamoto. SBTC. So please go and review those, ask questions. If things aren't clear, now is the time to go and review those. And then Jude's been working on the Http refactor, so it's close to completion. We talked this morning about that a little bit. Thank you, Jude, for the sips. That was a lot of heavy lifting there. I appreciate that. Onto goal setting. So really, I think Will, you had your schedule up there. December 31 Nakamoto release candidate. We need to be there. That's where we need to be. That's where we need to land. A lot of work ahead of us. The timeline is tight. We're going to have to figure out how to get there.

12:11

October 17 is when the completion date for Makamoto is listed. Right now we need to push towards that some more. Short term goals or soft goals is I'm working through the Sip that Jude posted right now, just looking at the task breakdown from the sip perspective. Then I want to compare it against what we've actually done already and where we are with Makamoto and then start to bring those tasks in to the different. Also, the thing I'm working on in parallel is a smoke testing plan. I met with Jesse a little bit yesterday to kind of talk through what's going on currently, but really I still over to the blockers here. I'm ramping down on SBTC right now and I'm starting to ramp up on Nakamoto. So I'm coming up to speed on what's the developer workflow for Stacks. What's the test plan, what testing do we have in place, what testing would we like to extend?

12:56

Reading through the Sips and then understanding the project management boards that are already existing and then how we can use those going forward to better reflect status. One of the blockers that Judas encountered is LLVM. To compile static libraries can be a pain. So that is the update for Nakamoto. Any questions?

13:15

No? Awesome. Yeah, so you'll I notice I have a typo there uplocks, which is sort of a combination of updates and unlocks, so I'll correct that. But yeah, on the middle one, hard goals and soft goals. So this is something were kicking around where a hard goal is, hey, this is a deliverable that we're trying to accomplish or ship in this sprint. And then a soft goal is more of just like, this is a way of working. Something that how we work, we're going to try to improve upon. So I appreciate that Tyler working on providing both of.

13:56

I mean, there have been several wins, but I think the big win that I can think of for SBTC is that the happy path is done. It seems like if we were to start the hackathon, maybe even this weekend, we'd be in at least an acceptable spot. That being said, there's still a lot of work around the local DevNet that we want to get running and the documentation, but some big wins have been we've got a local DevNet that works with most apps that we care about, and a lot of people have been in the meetings having conversations about what needs to get done. And it's been very satisfying seeing everyone get clarity about what they need to work on and rally around the deadlines that we've been know. I've got many shout outs here. Freeger just absolutely is great at finding what needs to get done and just doing it.

14:46

Tyler, you've just been great at being on the Dev network and initially driving that to be part of the plan. At you know, Sarala Janix has been great with adding some of the API calls, some of the Lib calls that we need to stack JS. So be sure to relay that shout out to him and yeah, Carlos, Mike and everyone else using the GitHub templates. It's been great seeing everyone really try to up their standards. So the hard goals we have October 6, we want engineering pencils down. We want all of the actual engineering we need for SBTC developer release to be done. And then we have around a week, maybe two weeks to get that entirely in shape for the hackathon that starts on the 21st. And before that, we're going to have the testnet deployment. We want to have an official Dr 0.2 release on October 13.

15:45

That's the kind of hard deadline, but then maybe that'll be October 16. Yeah. And then I think another soft goal is increasing GitHub visibility. Those blockers, they're things that we can handle, so we're not too worried.

16:02

And when you say increasing GitHub visibility in terms of what parts of GitHub?

16:09

Yeah. So I think what we're trying to do on the SBTC team is use the GitHub project, SBTC, as a vehicle for GitHub visibility. There were a number of things that were working on that multiple people were working on the same thing or had different ideas of what approach needed to be done. So if we have everything in a Kanban board, which is what our goal is, that's what visibility here would be. Everyone can have a good idea of what everyone else is working on, and also external stakeholders can see where we are in the milestones. Now, when I'm talking about a specific project, I'm actually talking about a specific project called SBTC that was made, I think, a few months ago. Right now, the big question is, how do we get people to adopt this and stick with it and feel comfortable with it?

17:00

And so one of the pain points we heard about the big project was that people were kind of getting lost in the sauce and that it was hard to add things to. So the plan is start with sort of a smaller scope, have SBTC really try to nail out all of the different rough edges and use this reliably. And then maybe we can work on getting a big project that has everyone's timelines in it. Does that make sense?

17:31

Yeah, no, it does. That's great feedback. And once you feel like, if there's consensus, happy to work with you to try to consolidate or propagate some of those up into a consolidated timeline.

17:53

Yeah, I think. Sorry.

17:56

Yeah. Huge plus one to that. And like we discussed in the last Sprint review or Sprint planning session, we want GitHub to be the single source of truth for any and all such status updates and comms right now that needs a lot of attention both in tracking the milestones and accurately tagging issues and organizing them. And just from what we are hearing from Muneeb and the ecosystem, there's a lot of scrutiny on our GitHub. So people really do not see these PowerPoints or status updates that are on pitch and slide decks. What they really see is GitHub. So if we could just use that for meetings like this summary and just is brilliant. But working group leads need to own to make sure that all the timelines and all the updates are accurately reflected. A huge plus one to that. Ashton.

18:48

So one question on that, I think that's a good point is in the next SyncUp meeting, should we be actually just using GitHub to do status updates? Yeah. Okay. That's great. Perfect.

19:03

All right.

19:09

So giving up Clarity updates on our end, the big wins are Dr or Developer Release 0.2. Coverage is currently at 96% across both the Clarity contracts that are there. So it's cool to see Clarity Bitcoin progress. There's a lot of progress being made there, though it has taken a little bit of a backseat so we can make sure that everything for Dr and the hackathon is ready. And the last one is just went on a little bit of adventure on Merkel Proof debugging between the bridge and the contract itself, we needed to debug a lot of Merkel Proofs. And so between myself, Friedger and Nicos, that was a couple of fun few days, but we did get a win there in that the Merkel Proof that logic that's happening in Russ and in Clarity are both working with multiple tests. Each, of course, Friedger from momentum, as anyone can see, he's always pushing everyone to just do more at a higher standard, which big fan of.

20:17

And Fernando for taking on a very complicated task. At the moment, he is not done with it, but what he's working on is going to have a big unlock for what we can do with Bitcoin and Clarity. In terms of Sprint not dissimilar to Ashton this week, I'm very focused on making sure that everything contract wise for Developer Release and the hackathon is ready. Trying to get its coverage to 100%. As of right now, there's only two functions that don't have unit tests and both of them are read only that don't have a lot to do, so not much blocking us there. After that. The general focus, and again, this is what Marvin and Fernando are working on is to have Clarity Bitcoin V Five wrapped up and Soft goals are, of course, post hackathon updates, anything that we hear feedback wise from the hackathon that needs to be done.

21:09

Clarity side, I don't expect much, but we want to keep bandwidth available for that right after. And then the rest of the soft goals for this next Sprint are going to be revolved a lot more around now. Working with the Signer group, working with Nakamoto and making sure we have the storage contracts ready and reviewed with the Signer working group to see what is missing, what data types or requests are missing. In terms of blockers, there is no blocker at the moment, but we are now working on integrating Clarinet SDK, which is not officially out yet. So there is a little bit of working with the hero team a little bit more closely to make sure we're doing everything correctly. And that is the clarity update.

21:58

That's great, Bryce. Clarity WASM all right.

22:04

So, yeah, clarity WASM is moving along pretty smoothly. We are currently at 52% of the clarity keywords are now implemented. And if we look at just supporting the boot contracts, which was our first target, I think we're at 61%. So this is a number I'll just keep reporting. It's a nice, clean status check that we can do. We have a major refactoring that is kind of validated and in progress, which will be a big win. And then we're making some great progress on the testing framework. So this is where we basically can execute the entire chain state on both the old runtime and the new runtime and validate that we get the same results. So that's a huge unlock once that's ready. So my four shout outs here are Chris for the beautiful refactoring. This will be a big change that hopefully we can get through quickly.

22:57

But like I said, the proof of concept is there and it looks really nice. Kyle's been doing all kinds of insightful experiments and finding better, cleaner ways to do things, which has been really helpful. Anthony keeps chugging along, writing some complex web assembly. So he's been working on the hash 160 function right now and handwriting the WebAssembly for that. So he's been doing a great job at that. And then a special shout out to Matt, who's not in our working group, but decided to jump in and try to play with implementing the print function and finding some interesting challenges for us there. So thanks to Matt for that. As far as goals, there's kind of three key remaining implementations that we want to have that are kind of unique. So the contract call, print and hash 160. So contract call was just something that kind of had some unknowns.

23:56

It looks like everything's pretty clean there. And I'm making progress on that. Should finish in a couple of days. Print seems like it should be easy, but because it's actually one of the only functions that's completely untyped, it adds a new challenge for everything else. When we need to pass operands from the WebAssembly runtime to the host we already know typing information. And for print, we don't have that. So we have to solve it in a different way. And then hash 160 is the first of these complex operations that we've been implementing. So basically, once those three are done, all the rest of the functions, I've gone through them all, they're all just variations of something that we've already done. So after those three are done, then everything else kind of should flow much more quickly after what we already have done. So for this next sprint, I think we should be able to knock out at least another 15% on that top number that I'm showing there.

24:58

And as a stretch goal, we may not get this totally finished, but getting that testing framework for comparing the chain state, obviously that won't be able to run until we support all of the actual expressions that are needed, but the framework will be there and we can run it on the existing runtime. And then our soft goals are improving our communication on GitHub. So we all have a tendency to kind of start an issue and then you don't hear anything on GitHub until the PR is ready. So we communicate in an internal chat, but we want to have more of that public on GitHub and then that kind of ties in with the other one there of improving external updates. So we've done a good job of communicating internally, but not as well as getting that outside. And then finally our blockers, we have one blocker not actually blocking us, but it's us blocking Clarinet.

25:57

So because Clarinet is compiling the Clarity crate to WebAssembly, when we introduced WASM time into the Clarity crate, WASM Time is not able to be compiled to WASM paradoxically. So we need to do some refactoring there to kind of pull that out of the pull the runtime, separate it from the rest of the Clarity crate so that there can be an implementation for the blockchain that uses WASM time. And then Clarinet will call the WASM code via nodes built in WASM runtime. So it's a bit of refactoring that has to be done and it is holding up Clarinet from being able to let people start playing with this in Clarinet. But we've talked about a lot. I think we have a pretty clear path forward here. That's it for me.

26:56

Excellent. Yeah. And then with quality of life, really, I'm just kind of getting into the role here, really trying to make sure that we're getting this whole process established. So the working group lead revisions, we got through a bunch of interviews. So thank you all to the working group leads and Jude for taking time to chat with us and also trying to get some thing resourcing aligned on the Stacks Foundation side. So going to be working pretty closely with Jay Wiley, with Kenny on documentation, and Mark, who's been out office. So, yeah, just a big shout out to everyone that's been working with the Sprint revisions. And then for the Sprint upcoming goals, going to be working with Mark. He's been out office on establishing this kind of drop dead date. So working backwards from when we hope to be live with the auditors to figure out exactly how much time we can provide to the development team for development and then get that to the working group lead so that they can know the exact parameters of start and stop, date and schedule everything that they need to know between there.

28:18

I'm going to be working with Kenny on sort of accumulating a lot of documentation that's been bubbling up in a lot of different repos across Stacks Network into a single superdocs. We've got a table of contents, and we're trying to take things like Ashton's Testing and Best Practices document, get that integrated, and also make sure that we don't lose track of anything that's already a part of the doc. So working with Kenny and Jesse Wiley on that. And then we got Nicos and Carlos re upped for another quarter of critical bounties. So they're going to be working. Got their contract signed this morning and going to be meeting with them to figure out how we can set up some regular touch points with the two of them, myself and Jay Wiley. And, yeah, really just some small walkers connecting with Mark kenny's doing some homework on selecting a docs platform, and then we got the contracts taken care of, so pretty much sorted out on.

29:35

So tyler, Jesus, Bryce, Ashton, if you wanted to go ahead and post these updates to your discussion board, I can send you a link to that if you don't have it on the Stacks Network, github.org are where the discussion boards so, you know, obviously Ash and the SPTC, Jesus and the Clarity, so on and so forth. And I will also post an update that just provides an overall overview of these revisions to the Sprint process, to the way of working discussion board. But I think that, like I said, we're going to try to really limit this call to 30 minutes. I know everyone's really busy. Minimizing meeting time is something that we wanted to be very cognizant of and was feedback that I was hearing. And so we're going to cut it here unless anyone has anything that they wanted to discuss. Amazing. All right, 30 minutes.

30:55

Call. Don and I will talk to you all soon. Take care.

31:02

Thanks, Will.

31:04

Thanks.

31:05

Have a good one. Bye.