

FACTOM COMMUNITY

MEETING MINUTES

Factom Guides
MEETING #13
2018-07-15



VERSION	DATE	CHANGED BY	CHANGES
0.1	2018-04-07	Tor Hogne Paulsen	First draft for guide review.
1.0	2018-04-09	Tor Hogne Paulsen	Version for general use in the Factom community.
1.1	2018-04-12	Tor Hogne Paulsen	Added more fields for metadata.
1.2	2018-04-15	David Chapman	Updated, "Chairman" and, "Secretary" fields.

Note: This version control is for the Template, not the individual meeting minutes.



Date and time of meeting	2018-07-15 19:00 UTC
Date minutes drafted	2018-07-15
Date minutes approved	
Organization/Team	Factom Guides
Attendees	Factom inc (Brian Deery), Centis BV (Niels Klomp), DBGrow Inc (Julian), Canonical ledgers (Sam), The 42ND Factoid LTD (Tor) (via chat).
Members not in attendance	N/A
Other attendees	
Meeting Leader	
Meeting Secretary	DBGrow Inc (Julian)

Subject 0	- Roll Call - Approval of minutes from previous meeting on (2018-07-07).
Discussion	
Conclusion	 Everyone present except Tor (Mic issues). Attended from Subject 3 via chat. Meeting minutes approved.
Follow up	

Subject 1	Status onboarding new ANOs? (Brian)	
Discussion	Going to start debugging process for next round of onboarding.	
Conclusion		
Follow up		

Subject 2	Current network issues (Brian)
Discussion	Brian: An example of having the system be built such that it it protects itself so that last friday we were seeing some federated servers and follower nodes panic and Steven went through and did a lot of testing and debugging, always the hardest part of finding the problems here. The current working theory is there's a race condition between 2 different functions inside the processing and balance checking for entry credits. There was a new usage pattern that's emerged on the network by a third party thats exercising this bug in a random fashion. This is a high priority for getting fixed, its damaging to the network. Last week we were only going to push out the update for the grants, and then there were other issues we will talk about later with that, and then we figured we would roll this emergency fix in with the grants. That would be minimal set of code updates with lowest risk. Coming up in early half of next week. Also the testnet release for next week, not sure how that fits in with emergency fix release. There's still uncertainty around this but we're moving forward on this. Sam: new usage pattern, can u elaborate? Brian: What it appears to be is buying entry credits and using them immediately, in rapid succession, continuously. Normal pattern is buying Ecs in a larger amount and using over time. That's more economically efficient. New third party is buying small amount, using that amount, and then buying anot
	Brian: An example of having the system be built such that it it protects itself so that last friday we were seeing some federated servers and follower nodes panic and Steven went through and did a lot of testing and debugging, always the hardest part of finding the problems here. The current working theory is there's a race condition between 2 different functions inside the processing and balance checking for entry credits. There was a new usage pattern that's preged on the network by a third party thats exercising this bug in a random fashion. This is a high priority for getting fixed, its damaging to the network. Last week we were only going to push out the update for the grants, and then there were other issues we will talk about later with that, and then we figured we would roll this emergency fix in with the grants. That would be minimal set of code updates with lowest risk. Coming up in early half of next week. Also the testnet release for next week, not sure how that fits in with emergency fix release. There's still uncertainty around this but we're moving forward on this. Sam: new usage pattern, can u elaborate? Brian: What it appears to be is buying entry credits and using them immediately, in rapid succession, continuously. Normal pattern is buying Ecs in a larger amount and using over time. That's more economically efficient. New third party is buying small amount, using that amount, and then buying another small amount in a short fashion.
Conclusion	
Follow up	



Subject 3 Tasking "Core, Technical & Code deployment"-committee to investigate network issues. (Niels) **Discussion** Niels: Basically we have ongoing problem. It showcases how dependent we are on Factom inc. We know that, but we need more communication about this stuff. We as guides need to take control of it and task a core code committee to handle these kinds of issues. Make sure ANOS are updated as well, and get in control of stuff like this. Currently Factom Inc is the only one able to view Docker logs. It would be wise to draft up a process so that every ANO with crashed audit set servers should auto upload their logs to a shared storage location available to that committee. It's all about making sure the anos are updated regularly and that we also know whats going on with the network Brian: I'll add that this is a community debugging process. Im observing and participating and steven and paul as well in the operators technical channel. We have a lot of help from various anos. My perception is that the core committee as a subset of the technical people lending a hand seems to be operating as expected. Niels: Well of course anos are helping, sure, but I don't think currently the core committee is the owner of the problem. Factom inc is. And you are currently the guys that have to fix the problem in the code. But it would be wise if committee owns the problem, coordinates outreach to ano parties, etc. Sam: Tor has input from gov channel " Input: This is about investigating, making a plan for how to look into it, communication to the broader community (and of course ANOs).... And yeah; having an "owner" of the problem is paramount here, so there are some people tasked with actually doing this and doing it the same way every round. If an authority server crashed the ANO should report this via a standard channel and upload the logs to the community drive. The then committee should be tasked to investigate and see if something needs to be done or not. Niels: Basically make up a plan of how we go about it. Central logs for instance. Implement making the committee the owner of these network problems. Brian: Im not sure what an owner means in a distributed project like that. Niels: Owner is being used loosely. ANOs are still having the input. In the end it is factom inc that has to solve the problems. That's where everything is being hidden behind a wall. Inc is currently the owner of the problem, not the committee. Sam: So it seems like part of this is making logs accesible to more than factom inc. Brian: I would object that stuff is happening behind a wall. Niels: Of course, it wasn't meant to criticise, it's just more that you guys are owner of problem instead of network committee. With last problem we saw it happening so we



informally started talking about what happened, not knowing if we should wake you guys up. I think committee needs to start taking ownership of this type of problem.

Xavier: Is there a chairperson for the committee?

Niels: Currently there isn't a chair that I am aware of. The committee can appoint a chair. The guides can help in creating the processes as well.

AlexanderSuperSloth: How can we make sure things happen swiftly through committee.

Niels: Interaction between committee and ANOs would happen, committee would have to step up to the plate.

Tor: Paul, Brian, and Steven are also all part of the committee. Niels and Tor also part of the committee.

Niels: Tor and I can start drafting up the framework and processes for it.

Niels starts motion to task the committee to develop frameworks to handle network problems, committee would also be the owner of network problems, make sure all parties that need to be involved are involved. Tor seconds.

AlexanderSuperSloth: Something broken about how we're doing it now? Strikes me as unnecessary bureaucracy.

Niels: Comm channel are not optimal. Committee being owner makes sure it's better in the future. We need a framework to handle this stuff. We saw something happening and it wasn't clear what we should all do.

Brian: In an emergency situation uncertainty is the name of the game. Responding to uncertainty and getting clarity is part of the process.

Niels: Removing as much uncertainty as possible will definitely help.

Brian: Adding a bureaucracy layer does not seem to strike me as affecting that goal.

Niels: Well it's not really a lot of bureaucracy. Making sure people in committee are involved with the problem and can help expedite comm with parties that need to know.

Sam: So it's sort of a formalization of the way it's already done, but creating it as a defined process. Longer term goal of getting more developers than can assist Factom Inc. in troubleshooting this stuff.

Tor:



- 1) If there is a Authority node crash/network incident there is a plan for how to report it; and
- 2) For someone (the committee) to take a look at it and determine if its an something that needs to be handled or some kind of previous known problem/one time problem
- 3) Decide what action to take (pull logs, involve other people, what way to investigate)
- 4) Inform the ANOs or not?
- 5) Make a short term plan for what steps to take the next hours/days/weeks
- 6) Type up after action report if its resolved....

Xavier: This is more about after action report so ANOs can follow

Sam: Info about what the bug is doesn't always get propagated.

Niels: Its making sure that the whole process start to finish is clear to every party involved. I said it should be a committee, i don't care if committee should be involved, but I think that would be wise, its about clarity, we are decentralized protocol and we need more technical people taking on these problems. After action report is just one part of it.

Sam: Given we are a bunch of people in a bunch of timezones, having a framework helps facilitate that, having a more formalized and distributed framework will help.

Niels: With steven, brian, and paul as part of the committee, they can work just like now, its about making sure the other people in the committee also are doing their work. Contacting anos, creating reports, alongside people from inc doing their work. It can help lnc not have to do as much as they do now.

Sam: Right now there's a disproportionate burden on inc to fix these problems.

Niels: Example, yesterday, someone noticed lots of ecs in a short amount of time, figure out this may be related to bug involved, so we already did lots of work, that won't change, but would be nice if we document this, bugs would be noticed in standardized way, actions to take, etc. It needs to be more formalized, doc were steps are written down and together. Right now people just talking in a chat, still would happen, but we want to pull the info documented into a single place to build on. It will add work for the committee, but in the end we would get quality reports, what happened, how did we resolve, how long, who was involved.

Tor: I also believe every ano would want proper action reports after issues are resolved.

Brian: So summary of the results of the investigation and the fix.

Niels: That, and parties involved. Proper report on it. How you would handle incident management in a non-decentralized instance as well.

Julian: I'm in agreement pushing it to a committee. Even if it's working right now we need a framework for the future to ensure it continues to work. Having it in a format

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	where a few extra people can be involved and defining what their roles are. Currently it's just Brian and having more people to assist him would be good. Niels: It's not about taking away current roles but supplementing. Enterprise customers would like to have more formal reports if they're going to use this protocol. Informal chats are not going to be sufficient. Julian: Yeah, exactly. We're in a stage right now where we can have these problems come up and think forward to figure out how to preemptively solve them for the future. Brian: I'm trying to understandthis seems reasonable. Niels: I hear some hesitation still. Brian: You talk about me being the main guy but Steven has been involved as well. Niels: Of course he is. Factom Inc. will still be involved just like now. It's not a critique of you guys it's a way of formalizing the process. Tor in chat:
	And process for reporting, identifying severity and type of problem, who to include and inform and then prepare the reports.
	Brian: That seems reasonable.
	Sam: Lets go ahead and vote, motion is proposed and seconded already.
	Brian, Niels, Tor, Julian, and Sam vote Yes.
Conclusion	Brian, Niels, Tor, Julian, and Sam vote Yes.
Follow up	Tor and Niels start working on the framework and processes.

Subject 4	ANO application round (Tor)	
Discussion	(Following Information added prior to the meeting).	
	Application period opens:	16th of July at 00:00 UTC.
	Application period ends:	30th of July at 23:59 UTC.

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All applications are made public: 31th of July.

(Does not apply to the "private application document").

Forum threads opens for questions: 31th of July at 00:00 UTC.

Forum threads closes for questions: 18th of August at 23:59

UTC.

Forum threads closes for answers: 20th of August at 23:59

UTC.

Guides officially begin the scoring process: 21th of August at 00:00

UTC.

Final results of the Applications process posted: 27th of August at 00:00

UTC.

<u>DOC 104</u> has been finalized (v.2.0) and describes the application process, and shall be used as a guide by all applicants to ensure they perform all necessary steps when applying.

(End of Information added prior to the meeting).

Sam: Tor was tasked with this.

Tor: Included it in minutes for posterity.

Sam: Applications open in a few hours. *describes timeline*, any questions?

Tor: All guides have looked over forms and processes and are in agreement about the process and documents..

Xavier: During the last ano election, two applicants got a tied score. How do we resolve that this round.

Sam: Good point. Since we have a capped # of applicants its possible 2 applicants get tied score for 6th place. Guides will have to discuss.

Niels: This is an edge case, if we are at boundary we would have to resolve.

Brian: It's also a problem of not having enough resolution in scoring. When it goes to coin voting there will be more decimal places.

Niels: Last time we went to 1 decimal place. Internal calculations had more. We can include more decimal places. Something like 2.



	Sam: Well discuss this and make sure there's a way to resolve. Alexander says could be as simple as a vote between guides. Any other questions?
Conclusion	
Follow up	

Subject 5	Factoid Exchange Concerns (Sam)
Discussion	There has been concern of getting more factoids on more exchanges. Polo is offline, and some issues with bittrex right now. We do have an exchange committee working to get FCT on more exchanges. We are trying to get them on larger exchanges like coinbase, binance, gemini, etc. Hefty listing fees, require grants, etc We are also targeting some of these smaller ones, exchanges with less stringent requirements. We are active, have a strategy, but it does take some time because of how exchanges operate.
	Niels: Am I correct to assume that exchanges only want to comm with Inc? Or accept the comm of committee.
	Sam: Approach is to include Inc but do it through the exchange. Some things I can't say but in general if Inc does have previous experience with exchanges we don't want to start over.
	Brian: You've been a lot more involved with that sam.
	Niels: Currently anything from an organizational POV holding the committee back?
	Sam: Not from an organizational POV. It's a matter of closing comm loop with Inc, creating a strategy and moving forward.
	Niels: Current situation makes clear how vulnerable we are. Our 2 large exchanges that handle 80-90 % of volume with closed wallets, exchange committee is very important. I worry about our factoids, and if this situation takes more time could short term endanger the project. It's a sticky situation.
	Sam: Those are valid concerns and duly noted. We are doing the best we can and will have a monthly report at next ANO meeting.
Conclusion	
Follow up	

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Meeting adjourned at time 19:53 UTC.