

Forum: [Hack Forums](#)

Thread: [Temporarily reducing the block size](#)

Vana - August 21, 2017, 3:58 pm

Luke Dashjr, a Bitcoin Core developer, proposed [in a Twitter poll](#) the idea of temporarily reducing the block size.

His argument is that BTC will soon outpace technology as the Blockchain grows 52GB/yr with full 1MB blocks.

I just wanted to see what thoughts people had on this (reducing the block size not Luke, Orgy).

??tt - August 21, 2017, 4:00 pm

And what exactly is reducing the block size supposed to achieve?

Vana - August 21, 2017, 4:01 pm

(Aug 21, 2017 04:00 PM)??tt Wrote: [\[CITE\]](#) And what exactly is reducing the block size supposed to achieve?

Slowing the growth of the blockchain size.

minimalist - August 21, 2017, 4:02 pm

I think he's mad. Data on the blockchain is expensive but storage for the blockchain is cheap. I think it was shown that most full node operators can afford the bandwidth and storage to do 4MB blocks.

Orgy - August 21, 2017, 4:03 pm

(Aug 21, 2017 03:58 PM)Vana Wrote: [\[CITE\]](#) (reducing the block size not Luke, Orgy).
i think he prefers to be called by his roman name "Luke the kook"

Vana - August 21, 2017, 4:03 pm

(Aug 21, 2017 04:02 PM)Minimalist Wrote: [\[CITE\]](#) I think he's mad. Data on the blockchain is expensive but storage for the blockchain is cheap. I think it was shown that most full node operators can afford the bandwidth and storage to do 4MB blocks.

He seems to have concerns with how long it would take to process the full blockchain, not just the storage size.

<https://twitter.com/LukeDashjr/status/899405418753122305>

minimalist - August 21, 2017, 4:09 pm

(Aug 21, 2017 04:03 PM)Vana Wrote: [\[CITE\]](#) He seems to have concerns with how long it would take to process the full blockchain, not just the storage size.

<https://twitter.com/LukeDashjr/status/899405418753122305>

Block propagation time was the biggest issue last year and now it's processing power...what will it be next year?

<http://bitcoinstats.com/irc/bitcoin-dev/logs/2016/01/11#l1452495829.0>

LanMan - August 22, 2017, 12:49 pm

(Aug 21, 2017 03:58 PM)Vana Wrote: [\[CITE\]](#) Luke Dashjr, a Bitcoin Core developer, proposed [in a Twitter poll](#) the idea of temporarily reducing the block size.

His argument is that BTC will soon outpace technology as the Blockchain grows 52GB/yr with full 1MB blocks.

I just wanted to see what thoughts people had on this (reducing the block size not Luke, Orgy). Hmmm i don't really agree with him there, it will cloak down the network even more, resulting in higher fees and delay, even with segwit counter to maleability spam attack, 300kb block is too low.

Atleast if that happens, Litecoin (or shitcoin/scamcoin as Luke call it) will definitely be in the light for coffee transactions.

? sentient ? - August 22, 2017, 12:53 pm

We have to wait for LN + Segwit results, and further wait on hashrate stabilization due to what's going on with Bitcoin, but we should definitely be figuring this out. Real big threat.

FaberCastell - August 22, 2017, 1:00 pm

Well how many people are running full nodes anyways... It seems like bullshit to me. The technology is advancing as well and 100GB will be much cheaper and mean relatively less in 5 years.

Is there any good reason for small blocks? Or are they thinking, say, 50years ahead?

Edit:

Anyways decreasing block size would make fees higher and bitcoin even more unusable, so if nobody uses it anymore, perhaps the small blocks will be big enough after all... ?

Orgy - August 22, 2017, 1:03 pm

(Aug 22, 2017 01:00 PM)FaberCastell Wrote: [\[CITE\]](#) Well how many people are running full nodes anyways... It seems like bullshit to me. The technology is advancing as well and 100GB will be much cheaper and mean relatively less in 5 years.

Is there any good reason for small blocks? Or are they thinking, say, 50years ahead?

The best argument I've heard against large blocks is network propagation. Larger blocks will take time to propagate throughout the network. In this time, it's possible that someone else had mined a block that's different from the first block mined, and perhaps it propagates that block separately through the network. Some nodes will see one block as valid, others will see a different block as valid.

This is where my "expertise" ends. Perhaps Minimalist or someone else has an opinion on this.

hashymere Wrote:Yes, if blockchain size is outgrowing technology growth that means soon it will be a very real issue. Where do you plan to put your data when you can't? How do you plan to have a service that's going to be used if it takes hours to load?

Notice how as it increases bandwidth usage will grow exponentially (as users will) as well as well, so that's one more thing to consider.

meh that's really a nonissue. storage is cheap.

Mr. Dave - August 22, 2017, 1:38 pm

(Aug 22, 2017 01:03 PM)Orgy Wrote: [\[CITE\]](#) The best argument I've heard against large blocks is network propagation. Larger blocks will take time to propagate throughout the network. In this time, it's possible that someone else had mined a block that's different from the first block mined, and

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As far as I understand, they will see both blocks but won't know which one to trust until another block comes in first and makes one of the previous blocks valid. I think it has something to do with proof of work & whom it took longer to mine it or something like that. What are the chances of this happening twice in a row?

Could be that I completely misunderstood blockchain too, lol. Would like to hear a simple explanation from someone how this works if I'm completely wrong, which I probably am.

Mr. Dave - August 26, 2017, 5:03 am

Anyone? I'd like to know what really happens?

minimalist - August 26, 2017, 5:19 am

(Aug 26, 2017 05:03 AM)Mr. Dave Wrote: [\[CITE\]](#) Anyone? I'd like to know what really happens?

Two blocks would be valid until a third block comes in, at which point one block is orphaned. Transactions not confirmed in sibling block would be reintroduced into the mempool. This is why we wait for multiple confirmations for high value transactions: 1 block forks aren't uncommon but forks of a greater length are rare.

SIM-2015410 - September 22, 2017, 1:37 am

(Aug 22, 2017 01:03 PM)Orgy Wrote: [\[CITE\]](#) The best argument I've heard against large blocks is network propagation. Larger blocks will take time to propagate throughout the network. In this time, it's possible that someone else had mined a block that's different from the first block mined, and perhaps it propagates that block separately through the network. Some nodes will see one block as valid, others will see a different block as valid.

This is where my "expertise" ends. Perhaps Minimalist or someone else has an opinion on this. You're correct about the network propagation. In fact, larger blocks favor higher mining centralization for basically the reason you described, which is also a bad thing. Larger blocks favor the more powerful miners and those with the lowest latency (usually the same thing), because if latency is delaying transactions in reaching other miners for a substantial amount of time, the miners with low latency have a big advantage in time mining on the new block while the old one is still propagating, or, if they're big enough, to simply ignore the fact a new block may have been found in the meantime and orphan it with their own.

There is an interesting paper, somewhat relevant here, on the pressure toward mining centralization too. It describes a dishonest mining strategy, but slower relay times have a similar effect:

<https://arxiv.org/abs/1311.0243>

And just for reference, a quote from a paper on block propagation: "For blocks, whose size is larger than 20kB, each kilobyte in size costs an additional 80ms delay until a majority knows about the block. [\[source\]](#)

Orgy - September 22, 2017, 7:37 am

(Sep 22, 2017 01:37 AM)MeshCollider Wrote: [\[CITE\]](#) You're correct about the network propagation. In fact, larger blocks favor higher mining centralization for basically the reason you described, which is also a bad thing. Larger blocks favor the more powerful miners and those with the lowest latency

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I did more research afterwards. Turns out it's really a non-issue for the reasons mini and Dave mentioned above.

Miners compete with internet speed as well as hash power.