

Transcript

July 28, 2023, 2:31PM

Interviewer:

The recording is working now, so starting right away with the questions. Firstly, maybe just start by telling me if you rent out space in a co-located data center or if you have your own.

Storage Provider:

We don't run our own data center, we rent out space in co-location data centers, yeah.

Interviewer:

So it's multiple DCs, right?

Storage Provider:

Yeah, we have multiple co-location data centers in *anonymized location*, yeah.

Interviewer:

Do they provide their PUE values, that's power usage effectiveness.

Storage Provider:

Yeah, it's 1.3.

The PUE in the data center we work with in *anonymized location* is 1.3.

Interviewer:

That's great, that's a pretty good PUE.

Storage Provider:

Yeah, yeah.

Interviewer:

Other than that, do you run multiple minerIDs?

And if that's the case, what's the reasoning and is your raw byte power evenly distributed between minerIDs?

Storage Provider:

Yeah, we manage multiple minerIDs and the power is not evenly distributed because some of the miners are owned by us, but we also do the hosting service.

So we host our clients' miners too.

So yeah, that's why we have multiple miners.

Interviewer:

And would it be a problem if you give me a list of these minerIDs that you have?

If that's not super private information, I will not share it publicly, but it's just that I can make some calculations for the models that I'm working on.

Storage Provider:

So I think maybe we can send you by email.

Yeah, but we will have to ask our clients for their approval. We cannot reveal their minerIDs without their permission.

Interviewer:

Yes, of course. You can send me the list by email if they agree, if not then I guess it is what it is, no problem.

Storage Provider:

Yeah, no problem.

Interviewer:

Since you run your operations from a co-located data center, is there anything specific that you can say about the data center regarding their non-IT processes?

So other than cooling, lights, just the normal stuff, is there anything else that's more specific?

Storage Provider:

Umm, I don't think so. *Discusses need of cooling because of location climate*

Solving network problems

Interviewer:

OK, so the PUE value that you mentioned, 1.3 that's like an annual average probably or?

Storage Provider:

Yeah, I think that is the annual average.

Interviewer:

OK.

And what is the energy mix for this data center?

Do you just get power from the grid, or do you also produce renewable energy on site?

Or do you buy renewable energy certificate, something like this?

Storage Provider:

We have only one energy provider in *anonymized location*, which all the data centers use.

It is *anonymized company name* and 99.99% of the electricity that is generated comes from renewable sources.

So if you need it, I can send you their website and you can check all the information.

Because in *anonymized location* it is just this one provider, it's just *anonymized company name*.

So we use their renewable energy.

Interviewer:

Yeah.

So it's automatically green.

Storage Provider:

Yeah, yeah.

Interviewer:

That's great. And do you know what your average monthly power consumption is in kWh, for example?

Storage Provider:

I don't know how to do the calculation, but in our colocation data center, the power is 35kW in total and we can seal 40TB of raw byte power per day. So there's 35kW in total, and we use about 85% of that amount.

Interviewer:

Yeah, that's good enough information for me.

And does it fluctuate a lot or is it like on average 35?

Storage Provider:

35 is the maximum capacity, and we use about 85% in general.

Interviewer:

OK yeah, I understand.

And maybe you can tell me about the hardware that you use for your operations?

I assume that you use different machines for sealing and for storage?

Storage Provider:

Yeah, basically there are 3 kinds of servers, one is for the storage, to store the sector files, another model is the PoSt server, that does the Window PoSt and Winning PoSt messages to keep the power.

And also there's one sealing server.

So for storage server we have basically 2 models of the type of server, I can send the models in the chat.

Is that OK?

Interviewer:

Yes, that's perfect.

Storage Provider:

OK, I sent it in the chat.

So for the storage server, there's Exxact and the 45 drive and for the PoSt server we use HPE DL385 Gen10 and for the sealing server we use the Powerleader.

Interviewer:

That's great.

And do you know how much energy these machines consume and how many of each do you have?

Storage Provider:

Yeah.

For that Exxact and the 45 drive they consume a maximum 600W per server.

And PoSt server consumes 850W per server and for the sealing server they consume 2kW per server.

Interviewer:

That's the maximum?

Storage Provider:

Yeah, that's the maximum.

So, you know, for Filecoin the servers do not run all the time. They get rest for a while. You know, there are multiple a processes of sealing like PC1 the PC2, C2 they they don't run all the time.

Interviewer:

Yes, of course.

And how much time does sealing a sector take on average for you guys?

And is it 32 or 64GiB?

Also, for some other storage providers, they've told me that they seal multiple sectors at the same time. Do you also do that or is it just one sector at a time per machine?

Storage Provider:

We do 32GiB sectors and I sent in the chat the time for each process like PC1, PC2, C2.

And yeah, we seal multiple sectors at the same time.

For 32GiB sector one sealing server could seal about 20 sectors in parallel.

Interviewer:

That's great.

And do you know what the average power consumption of your sealing hardware is?

Or do you just know the maximum that you already shared with me?

Storage Provider:

We only know the maximum.

Yeah, we don't know.

Interviewer:

Is that the same for also the storage hardware so the power consumption and the capacity of a rack in your system?

Storage Provider:

Yeah, same.

Interviewer:

OK, good.

And then I guess my last question is if you reuse the same hardware for other cryptocurrency mining operations or if you run an Ethereum validator node or anything like this?

Storage Provider:

No, no other cryptocurrencies, only Filecoin.

Interviewer:

And for Filecoin, do you also have data backups and stuff like this?

Or is all the data that I can see on Filecoin what you actually store?

Storage Provider:

We don't do back-ups.

We have a storage cluster, so it's redundant itself.
So there's no risk of data loss.

Interviewer:

That's great. I guess those were all the questions or do you have anything else that you want to share, I guess we went through them pretty fast.

Storage Provider:

Yeah, I think it's OK.

Later we can send you the minerIDs when we get approval from our clients.

Interviewer:

Yeah, that's that's no problem.

OK. Well, I guess that was it then. Thank you so much for participating!

Storage Provider:

Thank you!