



OST

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Distributed Systems & Blockchain

In the news



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Distributed Systems & Blockchain in the News

- 20.02.2023: Stadt Wuppertal fährt 1.000 Server wieder hoch [\[link\]](#)
 - Even distributed systems can go offline
 - Wuppertal has a population of ~355'000, so that means 1 server per 355 citizens [\[link\]](#)
 - Comparing apples and bananas: Let's Encrypt uses 1 server [\[link\]](#) for 230m certificates
- 21.02.2023: Let's Encrypt Stats - **update** - data problem
- 20.02.2023: Millions of active WebSockets with Node.js [\[link\]](#)
 - On a consumer grade laptop with WiFi from 2013
 - Raise the allowed file limit (ulimit)
 - Set up about ~50 IP addresses, use 20k ports per IP
 - Reaching 1 million WebSockets takes a few minutes
- 19.02.2023: Infinite-Storage-Glitch [\[link\]](#)
 - Embed files into video and upload them to youtube as storage

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 gsmachado commented yesterday 

Hey all 🌟

It's great to see this repo! Awesome!

I detected this problem in 2013 (10 years now! 🤖), when I authored the paper:
"Bypassing Cloud Providers' Data Validation to Store Arbitrary Data"



Available at:

- <https://dl.ifip.org/db/conf/im/im2013/MachadoHWS13.pdf>
- <https://arxiv.org/abs/1404.2637>

The paper showed several techniques on how to bypass the "file validation engine" of several cloud providers (like Google, Twitter, etc) to store files (i.e., arbitrary data). The different techniques included files encoded within images, videos, audio (mp3), videos with QR code, etc., and uploaded to several Cloud providers. An actual evaluation was done back then. 🤖

It's incredible to see that this "problem" STILL exists at scale and, as I expect, will remain for many many years to come. 😊
At that time I tried to contact some providers trying to help to detect this kind of stuff but, obviously, no answers.

I'm happy to a) discuss this further; and b) re-evaluate several cloud providers nowadays; if anyone is interested. 🙌

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Distributed Systems & Blockchain in the News

- 21.02.2023: Last undersea Internet cable connecting Vietnam with the world breaks down [\[link\]](#)
 - **SMW3** → “Earlier, AAG and APG suffered from serious failures and are now completely unable to carry the Internet traffic” - the other two are only functioning partially
 - “will not have great impact on the speed of Internet connection between the country and the world” – Not only undersea cables, e.g., Switch [\[link\]](#)
- Latency matters: VTE adds ~20 ms of input latency [\[link\]](#)
 - Not only hardware may add to latency, e.g., my keyboard: `lsusb -vd #id# | grep bInterval` → 10ms Gamers use PS/2 [\[link\]](#)
- 19.02.2023: Der Krypto-Star Do Kwon ist auf der Flucht, jetzt gerät eine Schweizer Bank in den Fokus: Sie soll ihm das Abheben von über 100 Millionen Dollar erlaubt haben [\[link\]](#)
 - Still officially unknown, but there are rumors. NZZ asked Sygnum:
 - “Eine der von der NZZ angefragten Banken, die Sygnum Bank, schreibt in einer Stellungnahme, aufgrund des Bankkundengeheimnisses keine Angaben über das Bestehen oder Nichtbestehen einer Kundenbeziehung machen zu können.”