import industry.*;

// Lee Cody

/usr/local

Tom sat in his garage on a stool, measuring an indistinguishable blob with a set of calipers. He was so focused on measuring he didn't notice someone had walked in through the open garage door. "Hey buddy, what're you workin' on in here?" The man stuffed his hands in the pockets of his cargo shorts as he approached.

Tom turned to face his approaching neighbor, one hand still holding the calipers. "Oh hey there Rich." He switched the calipers to his left hand and offered his right for a shake. "Just tweaking my algorithm. I'm still not sure I really get all this DIY stuff."

Rich leaned in to get a closer look. "Oh yeah? Me neither. What's it supposed to do?" He poked the blob.

"Hey cut that out, just a second I'll run it and show you." Tom grabbed a small nondescript token from a sizeable pile of nondescript tokens. He slotted the token into the blob, which brought it to life. The surface leapt forward in some places and receded in others as unseen mechanisms inside the blob moved under its skin. Each individual movement navigated across the surface of the blob with seeming intent. The movements culminated into discrete sections that only coalesced briefly before being chosen for some other purpose, periodically being moved into and out of a small cancerous cuboid on its side. It looked like a toddler placing their toys into groups in order to figure out which one to play with. Eventually it must have come to some conclusion and started playing a song. The whole process happened in what must have been less than a second.

"So… all it does is recommend music? How much did you pay for this?" He laughed heartily at his own joke as his hands went back into the cargo shorts, different pockets this time.

Tom looked almost embarrassed as he answered, "I built it myself. I mean, I got it from a kit, but I assembled it myself"

"I hate to break it to you bud, but there's a lot of these, and they've been around for maybe a few decades now. Why'd you build your own?"

"Oh, I dunno. I guess I just didn't like any of the other ones out there." He still held the calipers in one hand. He waved them absentmindedly while he talked, as if casting a spell with a wand.

"I think they work ok." Rich resigned to a hearty chuckle this time, since his last joke only got a laugh from himself.

"You only listen to pop music." The calipers were aimed at Rich in an accusatory fashion.

"Yeah I listen to pop music, and they suggest pop music. What's the problem?"

"The problem is, *I* don't listen to pop music, and they still suggest it."[1][2] At this, Tom got up and walked across the garage to the wall that held all his top-of-the-line tools on hooks. He hung the calipers from the only empty hook.

1   Eli Pariser, The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think, 2012
2   Batya Friedman and Helen Nissenbaum, "Bias in Computer Systems," *ACM Trans. Inf. Syst.* 14, no. 3 (July 1996): 330–47, doi:10.1145/230538.230561.

"Well maybe it's a sign you should start." He raised his eyebrows as if Tom was a dog that just ate his shoe.

Tom let out a sigh. "Yeah, maybe. I mean if all of the algorithms only play pop music, they must be onto something, right? Maybe there's something to it I'm just not seein'."

Rich let out another signature laugh. "Hey now, don't give up so easy there pal. I wanna at least hear more about your DIY algorithm here. Can we open up the hood?"

Tom smiled and grabbed a drill from his wall. He started back toward the blob. "Y'know, after putting this together, I think I have a better appreciation for these algorithms." He fitted the drill bit and started loosening the four screws holding on a small panel on the underside. "It's like learning to cook, if you can make a good grilled cheese, suddenly other grilled cheeses aren't as good."

Rich was quiet for once, probably not because he was listening. The silence only lasted a couple seconds. "Hey, that reminds me. I went over to Harry's place the other day. Have you seen their new kitchen? They just redid it. Boy, I just can't get over it." He picked up the silence again. It was even shorter this time. "Yep, he's just such a great guy, and Mrs Jones too, am I right?" His eyes glazed for a second before he seemed to realize where he was. The blob's panel was off and all sorts of interesting bits and bobs were visible now. "Oh wow, look at that!" It was Tom's turn to be silent, steeped in indignation. Rich continued, "I never knew there were so many tiny little bits in there."

Tom corrected quietly. "Bytes."

"I'm sorry?"

Tom waved a hand and shrugged it off. "Oh nothing. You see how it accesses the database in there?"

Rich got a bit closer, squinting into the blob, "Is that what that thing is? I was wondering what that ol' growth on the side was. D'you get your database pre-made?"

"Uh, they included one with the kit, but I added onto it. I don't know if that helped or anything; still not sure what I'm doing." Tom set down the panel he had been holding. It clanged on the workbench.

There was half a second of silence and Rich seemed perturbed enough by it to speak up. "Well, it looks real nice. Not sure I'd have the patience to piece together all those little bits myself." A little too eagerly he added, "Hey, d'you show Harry yet?"

Tom grimaced. "No, he's uhh, so proud of that expensive one he bought a couple months back from that music genome project, I don't think he'd really appreciate the whole DIY thing."

Rich seemed unconvinced, "Yeah but his looks a lot nicer, no screws sticking out or anything."

His grimace turned into offense. "Hey I know I'm not a master craftsman or anything, but I think I did an ok job."

"Hey, I'm just giving you a hard time buddy, it looks good." Rich smiled knowingly. "Just not as good as Harry's" The laughter spilled out of him and filled the room. He was doubled over, slapping his knee. Tom wasn't.

Once the laughter died down, Tom made up an excuse and kicked Rich out of the garage. He closed the door behind his neighbor. The next morning there was a box on Tom's porch labeled "Music Genome Project."

/etc/sysconfig

The construction had been behind schedule for weeks. This was her first major project and she felt like she was already letting her bosses down. They told her all construction happened that way, but she had a hard time believing them. How could she not, this was a major endeavor for the corporation—they'd spent ฿346 for a special address and everything. Google had been at 8.8.8.8 for decades and everyone knew it, but no one had the audacity (or the currency) to take the next address over at 8.8.8.9.

She hardly had time to remember the dev foreman's name before the corporate DNS dropped her off at the site.[3] She found herself standing in front of an aging white guy with a well-trimmed beard. Somehow he shoehorned himself into a skintight black suit with neon trim that resembled those lines on circuit boards. Another *Tron* avatar, it's like a uniform for these devs. "5t4llman, give me a status update." She started toward the construction without waiting for an answer, 5t4llman close behind.

"well uh, we just heard back from the EFF and our database is finally codd-compliant, so uh, that is—it means we can start on the next phase" His movements were much more fluid than hers, which almost made her jealous until she remembered he probably spent his entire corp scrip every week on the company's e-commerce platform. "BUT," he continued, "we had a strange ping the other day" This made her stop and look back at him.

"You what?" She was seething.

"probably just a dns error, or at the worst some script kiddie tryna prove something to his friends"

"I don't give a shit who it was, if the details of this construction get out, your only solace will be the fact that your whole family will be blacklisted right along with you. Were they using Tor?"

"i-i don't think so. it was uh, only on open ports & there wasnt any direct db access"

As she entered into the towering structure, parts of her avatar seemed to dissolve and reform, it was a little unsettling.[4] If she had a stomach, she'd have been sick to it. "That won't be visible by launch will it?" 5t4llman just shook his head as his idiotic avatar diffused and refused simultaneously. He seemed to position himself in such a way as to avoid the most nauseating aspect of it. That collection method is way too noticeable, and the last thing she needed was for billions of users to gain an intimate understanding of the company's data gathering processes.[5]

A message popped up in front of her, diverting all of her attention and stopping her in her tracks.

---

3   Hito Steyerl, "Too Much World: Is the Internet Dead?," *E-Flux*, no. 49 (November 2013), http://www.e-flux.com/journal/49/60004/too-much-world-is-the-internet-dead/.
4   Jeffrey Chan, "Moral Agency in Architecture? The Dialectics of Spatializing Morality and Moralizing Space," in *Architecture, Materiality and Society: Connecting Sociology of Architecture with Science and Technology Studies*, ed. Anna-Lisa Müller and Werner Reichmann (London: Palgrave Macmillan UK, 2015), 198–214, http://dx.doi.org/10.1057/9781137461131_10.
5   T. Gillespie, "The Politics of 'Platforms,'" *New Media & Society* 12, no. 3 (May 1, 2010): 347–64, doi:10.1177/1461444809342738.

```
From: Du Jun <djun035@datalogix.com>

Timestamp: 2428328892 [2046-12-13 07:48:12]

To: Amelia Bishop <abishop022@datalogix.com>

Subject: The pleasantly important marketing meeting on this beautiful day


Hello and good afternoon Amelia,

I am writing you in advance of our wonderfully planned and eagerly anticipated

meeting. I know and empathize with your plight in the late timing, and I have

exuberant news! In the arduous fight to reschedule, I am pleased to announce that I

emerge victorious. We now have the capability to meet two hours earlier! I would

appreciate your response on my calendar update.


Kindest wishes,

Jun
```

She confirmed the calendar update and dismissed the message. 5t4llman was inspecting the data collector when she looked back up at him. "When is it going to be functional?"

"the uh, the data collection system? we-we got the scripts in place, and the db is close. we are on track for the dry run tomorrow." Finally something on schedule for once.

"Make sure you really work with QA tomorrow and test a nice range of all the new data we are collecting." 5t4llman nodded and tapped something in front of him. "Did we get those sanctions from the state department?"[6] She'd stopped looking at him entirely now and was just focusing on the oddly silent construction around her.

"we were approved for the dns routing and the auto-dmca removals, but we're still waiting on the trans-national speech authorization...china and north korea again."

She turned on her heels and started toward the nearest port. "Good. Let me know when the compliance algorithm is in place. I want it on time for a change. And watch out for pings." She dialed 443 for the skype port and stepped through.

She found only her contact list on the other side and breathed a small sigh of relief at the brief respite. She checked the timestamp and felt a little proud when she could actually decipher it—2428329372, nearly 8am—that left her three or four minutes until her meeting. The skype interface was somewhat dated—actually incredibly dated. It didn't utilize the full three-dimensional navigation patterns made standard decades ago, and as a result it just felt so restricting.

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6   Daniel van der Velden and Vinca Kruk, "Captives of the Cloud, Part III: All Tomorrow's Clouds - Journal - E-Flux," *E-Flux* 50 (December 2013), http://www.e-flux.com/journal/50/59988/captives-of-the-cloud-part-iii-all-tomorrow-s-clouds/.

As much as she wanted to take advantage of the fact that she was several minutes ahead of the schedule arranged by the company productivity algorithm, she couldn't help thinking about the new data collection system. It had been so unsettling walking underneath it, if it was that noticeable to the users there would be an avalanche of "Do Not Track" requests and the company would be out a lot of data. Her hard-earned position would be gone in milliseconds. She'd always been taught from her first day at DataLogix that above all, data is their absolute highest priority.[7]

Her worry was interrupted by a solid white avatar. The featureless mannequin stood before her, unmoving. She accepted the call. "Good morning Jun."

"Amelia, it is always such a bright and wonderful pleasure to see you." The translator always seemed to make everything so much more formal and positive. The approximation of Jun's voice continued, "I am truly excited and honored to be speaking with you at long last. The entirety of our office here in the great city of Shanghai are eagerly awaiting news from your resplendit persona." Amelia's avatar couldn't decide between displaying disgust from "resplendit persona" or displaying nervousness from "eagerly awaiting news." Fortunately this was a voice only call.

"Yeah, I just got back from meeting with the foreman. Thankfully, the construction is nearly back on track. You'll be glad to know they've finished installing the collection algorithm, it's actually up and running now."

"That is truly the most wondrous news, indeed. Most respectfully, I am sincerely curious: at what time period will the entirety of these new datas be generously made available for our utilization?"

"I know you guys are really anxious to start pitching this to clients, but the databases aren't even finished yet. They're going to do the first tests tomorrow, so you can probably start pre-selling it now. I do have the spec sheet the data scientists sent over and I can tell you some of the new stuff we are gathering."

"We are also recipients of the specification document from the intellectually stimulating data scientists, although we would enthusiastically welcome some clarification from you. We are now gathering information on attraction preferences, skill proficiency, physical capabilities, fingerprints, and genetic deficiencies;[8] am I correct in this information that I am relaying to you?"

"We are also collecting long-term data on anticipated behavior. Do you have any clients lined up who want to buy any of that?"

"Most definitely. I have been courting several banking, credit lending institutions, and some trend prediction companies on the sale of this most prized data. We are all so very excited to be able to promote and sell the data!" Amelia's eyelids were definitely sinking at this point. She'd been all over the corporate intranet all day, and talking through this translator was not helping her stay awake.

"Hey Jun, if you only needed a status update, I'd like to call the meeting here. We can send over some preliminary

7   Göran Bolin and Jonas Andersson Schwarz, "Heuristics of the Algorithm: Big Data, User Interpretation and Institutional Translation," *Big Data & Society* 2, no. 2 (December 27, 2015): 2053951715608406, doi:10.1177/2053951715608406.
8   Ned Rossiter and Soenke Zehle, "Data Politics and Infrastructural Design: Between Cybernetic Mediation and Terminal Subjectivity," *A Peer-Reviewed Journal About* 4, no. 1 (2015), http://www.aprja.net/?p=2582.

data tomorrow after the test for you guys to demo. Did you need anything else?"

"I and the entire marketing team hold you in the greatest regard. We are greatly satisfied with the caliber of this meeting, as always. At this time, I have no additional needs which we may discuss. I hope that you have an entirely pleasant evening." The skype client detected from conversational and bodily cues that both parties were saying goodbye, so it ended the call.

Amelia took a second to appreciate the end of her work day and called the corporate DNS for a ride home. A few milliseconds later she stepped into her home network with the toaster, fridge, and thermostat and she logged off.

She logged back in after a full night's rest feeling something resembling optimism about the forthcoming data collection test. Her demeanor changed considerably after she found two messages waiting for her.

```
From: 5t4llman <5t4llman@datalogix.com>
Timestamp: 2428369967 [2046-12-13 19:12:47]
To: Amelia Bishop <abishop022@datalogix.com>
Subject: found the source of that ping


looks like it was just a normal user who just mistyped something. the details were a
little strange but not weird enough to worry about it.


From: 5t4llman <5t4llman@datalogix.com>
Timestamp: 2428370232 [2046-12-13 19:17:12]
To: Amelia Bishop <abishop022@datalogix.com>
Subject: RE: found the source of that ping


that user we found was actually much weirder than I originally thought. im looking
into it in more detail now. i think we should put the test on hold til we figure out
what this weird ping is all about.
```

She quickly checked the calendar event for the test before waving her hand to reply to the message.

```
To: Amelia Bishop <abishop022@datalogix.com>
Timestamp: 2428477071 [2046-12-14 24:57:51]
From: 5t4llman <5t4llman@datalogix.com>
```

```
Subject: RE: RE: found the source of that ping


We can't push the test back any further. It's already been moved back a month, and the
CEO will be in attendance this time. A single problematic user won't be able to affect
anything, but bring in extra developers just in case.
```

She hopped on the corporate DNS as soon as she heard the chime indicating the message had successfully sent. When she stepped out onto the construction site, she saw 5t4llman reading her message.

He looked up, panic conveyed as well as it could be on his avatar's face. He started toward her and opened his mouth to speak when she held up a finger to cancel his speech output. "I don't want to hear it. Everything's going to run smoothly, and we're expecting the CEO in another minute, so we need all hands on deck. Can you handle this? If you can't, I know a number of other developers who would jump at the chance to be in your position. Are we clear?" He shut his still-open mouth and turned around, furiously swiping and waving to call in those extra developers he had in reserve. Now with 5t4llman finally busy, Amelia could return to her plans, and started over toward the QA team who were setting up around the data aggregator. "Are you guys just about done setting up? I'd like to stay on schedule for a change." The avatar closest to her put down his current work in order to respond, "Good afternoon Ms. Bishop, we're nearly done with our setup. I just wanted to confirm a few things with you." He paused long enough for her to nod. "We are testing for a target collection rate of 60,000 data points per second. Is this number the correct collection rate when the final system will be running?"

"Data points?"

"Uh, sorry, people, 60,000 users. Is this the correct amount?"

"Oh, yes, yes, that's the expected amount for the new system." She should have known he was talking about users, she had been going over the details for weeks now. Maybe it was the stress of the morning getting to her.

He swiped with a finger before moving on, "ok, so for those 60,000 data points—users—collected per second we are aggregating a variable number of fields ranging from 123 to 278, depending on the personal details of the individual, and the circumstances of their use, right?"[9] Another nod. Now that she had woken up a bit, she knew all this information like the back of her hand. He swiped again, followed by a few more gestures to finish up. "Alright, that's really all we needed. And it looks like the rest of the team's finished setting up, so we should be ready to go whenever you guys want to kick on the system."

She instinctively checked the timestamp again—2428477152, less than a minute before 1am. "It looks like it'll start up in just a second. We're still waiting for a few executives, though. I expect them to come through any second now. We'll start the test immediately after they arrive, so make sure you are ready. Thanks." She saw the DNS was dropping several

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9   Pasquale, Frank. The Black Box Society: The Secret Algorithms That Control Money and Information. Reprint edition. Harvard University Press, 2015

people off, so she started toward it without waiting for a response from the QA tech. On her way, she saw 5t4llman directing a handful of devs. "5t4llman, I want you giving me the play-by-play for the test." She hadn't stopped moving, or turned to face him. He made a few quick gestures and after nodding to a few of the devs, he followed close behind her.

"You have enough devs for this to run smoothly?"

"yeah, they uhh, they all know what theyre doing. they can probably handle it."

"Good because the CEO and the CTO are both here, as well as a few of the board members. We'll be right with them for the duration of the test, so if it goes poorly I doubt we'll both have jobs afterwards." The panic found its way back on his face, though he didn't have time to address his concern as they had arrived at the DNS drop-off which contained a group of executives moving awkwardly.

"Amelia, good evening"

"Rick, how are you? Larry, always a pleasure." She'd have shaken their hands, but a small bow seemed to work better. "Gentlemen, now that you've arrived we can start the test. It promises to be quite the spectacle. If you'll just follow me." As she led the group of high-end (though uncustomized) executive avatars toward the data collector, she took a second to calm herself. With this new collector, DataLogix would have so much more room for expansion, and if she plays her cards right, she could be a key player in that expansion. Her calming moment was interrupted by 5t4llman.

"we should probably keep back here for observation, if we get too close, we wont be able to see the show. also, everythings ready to go, so we can start the test as soon as youre ready." Maybe if she impressed the board here today, she'd get a nice promotion and be able to fire him. The prospect of never again having to work with this annoying man brought a smile to her face. She turned around to address the executives.

"Gentlemen, we're in an ideal spot to view the test, so if everyone is ready, I'll start it up." She received nods all around. She took a breath and looked at 5t4llman.

He made a few swipes and looked back at her, "I sent the start command over to you, whenever you're ready." A button appeared in front of her reading "exec();"

"Okay, ready? 3… 2… 1…" She tapped the button, and all heads turned toward the collector except two. Amelia turned toward 5t4llman, whose attention was affixed on a point just in front of him, probably a display with readouts on the test.

The collector glowed, continually breaking apart as its respective parts slid freely across its former surface. The parts each individually found a spot and slotted themselves in, as if they had never known any other place in the world. After a near-imperceptible pause, each part then disassembled itself and moved to a new position once again. There was no startup time whatsoever, the whole mechanism just jumped immediately into seeming chaos at full speed, the entirety of its construction taking part in the choreography. As the impossibly fast device churned through something, itself probably, the parts each regularly flashed as if each of them contained a DNS that was constantly dropping off an infinite number of users. The board members seemed thoroughly amused.

Amelia addressed 5t4llman quietly in hopes of avoiding the attention of the group of wealthy default avatars beside them. "Everything ok?"

5t4llman didn't divert his attention whatsoever, "yes." After a second, as if he realized how concerned he looked, he added to his previous answer. "It's a bit strange though, this might be a problem."

This man is easily the least helpful person on the planet. She made her question as pointed as she could, "5t4llman, what? What might be a problem?"

"it uh, its collecting way too much data. like double as much as it should." he swiped a few times, probably communicating with his small army of devs. "the server seems to be handling it ok tho."

"So you are saying it's working better than expected."

"yes"

"But the server can still handle it."

"correct"

"So how is this a problem?"

"many of these might be fake users with fake data."

"Can you separate the fake from the real?"

"i dont think so, these are basically indistinguishable from real users."

"Then it doesn't matter, just ignore the fake users."

"are you serious? you know entire markets are driven by this data. if half of the data is fake, all the businesses or schools, even governments that rely on it will be relying on false data."[10] He'd stopped looking at the test information, and now stood gaping at Amelia.

"Jun's already got buyers lined up. If you can't differentiate the fake from the real, neither can our customers. If we have double the amount of data we expected, even better." She'd turned toward the collector, her face awash in its glow. One of the executives seemed to notice their aside.

"Is everything running as expected?" He seemed almost timid in this environment so clearly foreign to him. A smile formed across Amelia's face as she turned to the group of executives.

"I've just been informed the collector is running two times better than we had expected." The executives started clapping.

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[10]   Fenwick Robert McKelvey, "Algorithmic Media Need Algorithmic Methods: Why Publics Matter," *Canadian Journal of Communication* 39, no. 4 (November 20, 2014), http://www.cjc-online.ca/index.php/journal/article/view/2746.

/var/run

Who is that and where is her voice coming from? She is just so annoyingly cheery.

"DATALOGIX — Bringing a better tomorrow through information."[11]

How'd it even get through the filter?

"Here at DATALOGIX, we're committed to you."

They just get more and more persistent. Did they finally figure out how to get around my regex?

```
super_user@64.68.91/var/lib/databases:~$ logout

Disconnected

lyudmila@/usr/lib:~$ whoami

      lyudmila
```

Just for interrupting me, I'm going to shut this one down immediately, let's pull up the tcp information.

"You, the user, are always top priority to us."

```
lyudmila@/usr/lib:~$ login -user root

Password: ****************

root@/usr/lib:~$ tcptrack -i port 80

Protocall Server Idle Speed

      TCP4 8.8.8.9 0s 1.2MB/s

TCP4 17.249.12.19 4s 0B/s

      TCP4 74.125.199.125 7s 0B/s

      TCP4 54.230.143.143 13s 0B/s
```

"We love helping you stay connected to the things you value most."

There it is. I think DataLogix used to be at 182.20-something, but I guess they got a fancy new server at 8.8.8.9—must have changed stuff around to get past ad-blocking filters. OK, let's see how they set up their new name servers

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11   Zeynep Tufekci, "As the Pirates Become CEOs: The Closing of the Open Internet," *Daedalus* 145, no. 1 (January 1, 2016): 65–78, doi:10.1162/DAED_a_00366.

```
root@/usr/lib:~$ whois 8.8.8.9

        Primary Domain Name: DATALOGIX.COM

        Registrar: DATALOGIX INC.

        Sponsoring Registrar IANA ID: 14

        Name Server: A1-198.ultradns.com

        Name Server: A2-67.ultradns.net

        Name Server: A22-64.ultradns.org
```

"Because we know what you love most are the products and services that define you."

They aren't even making it hard for me. Those name servers all have the same pattern, so another quick regex should do it. Ah, I can never remember the syntax... I think \d matches any number, right? Whatever, we'll try it.

```
root@/usr/lib:~$ addrule A\d-\d.ultradns.* > /root/server.blocked
```

"That's why we are committed to helping the right products and services find you and—"

There. Finally, I can think again. What was I even doing? Right, the databases.

```
root@/usr/lib:~$ ssh super_user@64.68.91
Password: *****************
        Connected to server `64.68.91` as user `super_user`
```

Ok, let's change directory back to where I was so I can just get back to what I was doing.

```
super_user@64.68.91/:~$ cd /var/lib/databases
```

Alright, If I was sensitive log data, which database would I be in?

```
super_user@64.68.91/var/lib/databases:~$ ls
ad_media
        analytics_behavior
        analytics_visits
        clients
        debug
```

```
        dev

        dev_log

        dev_test

        dev_test2

        employees

        partners

        users
```

dev_test2? Really? And dev_log is just right here, it's not hidden in some weird corner of their server or anything!

This is just way too easy. Okay, let's just download those logs before some semi-decent dev checks the active processes.

```
super_user@64.68.91/var/lib/databases:~$ scp dev_log /usr/stdout

Downloading 8,342,083,932 bytes of 25,026,251,796 bytes

    [#####           ]
```

You know, let's just help ourselves to this partners database while we're here. No one will miss it, I'm sure.

```
File 'dev_log' downloaded to /usr/stdout

    [###############]
super_user@64.68.91/var/lib/databases:~$ scp partners /usr/stdout

Downloading 9,138,403,002 bytes of 996,718,395,414,320 bytes

[#              ]
```

Oh god, that's a big file. Let's stop that and run it in the background so I can do other stuff, because that file is way too big to wait for.

```
Downloading 84,518,096,631 bytes of 996,718,395,414,320 bytes

[#              ]
^C [end_process]
super_user@64.68.91/var/lib/databases:~$ scp partners /usr/stdout &
```

Well, I guess while I wait I can check to see if any news outlets are talking about those files I leaked the other day.

```
super_user@64.68.91/var/lib/databases:~$ logout

Disconnected

lyudmila@usr/lib:~$ grep '../net_crawler/tag/news/' -e "facebook leak"

Searching for "facebook leak" in directory 'news'

Found 0 results
```

What? No one picked it up? Wait, that can't be right at all. What about the site I leaked the files to in the first place?

```
lyudmila@usr/lib:~$ httpconnect https://liveleaks.org

Error 204: No Content
```

A 204? It wouldn't return that unless there was just nothing there. What happened to their servers?[12]

```
lyudmila@usr/lib:~$ grep '../net_crawler/tag/news/' -e "liveleaks"

    Searching for "liveleaks" in directory 'news'

    Found 53 results

    "https://nytimes.com/corporate-leak-publisher-liveleaks-offline/"

    "https://cnn.com/liveleaks-nonprofit-declares-bankruptcy/"

    "https://bbc.com/liveleaks-cant-maintain-servers-go-down/"

    "https://sfguardian.com/liveleaks-servers-too-expensive/"

    "https://wired.com/why-liveleaks-should-have-used-amazon-cloud/"

    5 of 53     ^N next ^P previous ^C end process
```

Seriously? LiveLeaks was the only confidential document publisher left. Actually, that was the only site I know of that wasn't entirely funded by advertisements. Not that they had a choice I guess, advertisers all hated them. How can I get this stuff out there now?[13] *If I send it to one of the major media outlets, there's no way their parent companies will permit publishing it.*

```
    File 'partners' downloaded to /usr/stdout

    [###############]
```

---

[12] Jane Jacobs, *The Death and Life of Great American Cities*, Reissue edition (New York: Vintage, 1992).
[13] Max Weber, Peter Baehr, and Gordon C. Wells, *The Protestant Ethic and the Spirit of Capitalism: And Other Writings*, unknown edition (New York: Penguin Classics, 2002).

Oh great, so glad that finished downloading. I'm really going to need that now that there are so many places for me to air all this dirty laundry. I bet there's at least a few companies on this partners list who had a hand in taking down LiveLeaks. Let's just see, shall we?

```
lyudmila@usr/lib:~$ cd ../stdout
lyudmila@usr/stdout:~$ vi partners
      Editing file `/usr/stdout/partners` | 5,043 lines
3Vision
      Accedo Broadband
      Akimbo Systems Inc.
      Anytime Pte Ltd
      Backspace Communications

Showing lines 1-5 of 5043
      ^N next ^P previous ^S Save ^C End Process
```

These are all companies that make content aggregation algorithms. Why would they be partners with an advertising company? Well, I guess it actually . Makes sense for someone serving you content to also be advertising to you. Actually, I might be able to get content aggregation algos to pick up my content if I spoofed it to make it look like it was from a major media outlet or an advertiser. No, those algos are whitelisted by their manufacturers to only check specific feeds, and I'd never be able to get it on any of those feeds.

```
      ^C [end_process]
```

Actually, Pavel might be able to help with this. That big firmware hack he did on DIY recommendation algos last year could possibly be useful for pushing content out to users directly.

```
lyudmilla@/system/etc:~$ connect openP2P.chat.IM
      Logged in as user: lyudmila
      4 friends online, 38 offline
lyudmilla@openP2p.chat.IM:~$ \listonline
      durachit@144.197.242.129
```

```
    ovtsa@140.174.236.2

    pr3datel@156.53.33.51

    zabo@137.38.240.138
```

Of course he's online, why do I even need to check?

```
lyudmilla@openP2p.chat.IM:~$ \startchat pr3datel

#chat started with pr3datel@156.53.33.51


    lyudmilla@openP2p.chat.IM:~$ Do you ever go offline?

    Pr3datel: Lyuda! You know, I tried going offline once, I'm afraid it just was not for

me. What is up with my favorite little girl? Besides your wonderful jokes, I mean.

lyudmilla@openP2p.chat.IM:~$ Did you see what happened to liveleaks?

    Pr3datel: Ah, yes. It is truly a sad day for users everywhere. I'm sure someone will

come up with a workaround and have another server running before you know it.

    lyudmilla@openP2p.chat.IM:~$ Pavel, that is exactly what I have come to ask you about.

I was hoping you could help me push out leaked content directly to users, like your DIY algo

hack.

    Pr3datel: Lyuda what I did was a prank, but this…

    Pr3datel: This is dangerous.[14]

lyudmilla@openP2p.chat.IM:~$ I know, but I need to do it.

    Pr3datel: This is not your battle little one, why are you fighting it?

    lyudmilla@openP2p.chat.IM:~$ I just…

    lyudmilla@openP2p.chat.IM:~$ With liveleaks gone, there is no more free speech, it's

only advertisements.

    Pr3datel: Advertisements? Lyuda, if this is about revenge, you need to take a step

back and think about what you are getting yourself into.

    lyudmilla@openP2p.chat.IM:~$ This isn't about revenge, it's justice. It's been years

and I still get sick to my stomach every time I think about what they took from him, what

they took from all of us, with no repercussions at all.

    Pr3datel: ok ok, just remember this isn't Nikolai. I know he meant the world to you,

but this is a completely different situation.
```

---

[14]   Michel Foucault, *Discipline and Punish: The Birth of the Prison*, 1977.

```
lyudmilla@openP2p.chat.IM:~$ How can you say that? These are exactly the same situation.

        lyudmilla@openP2p.chat.IM:~$ They removed any content he made that didn't help sell

their products, and now they're removing any content that hurts their sales figures at all.[15]

If anything it's worse now.

        Pr3datel: I just want you to be safe. You are not the only one who misses him, little

one, and I do not want your poor mother to lose both of her children.

lyudmilla@openP2p.chat.IM:~$ I know, Pavel. I will be careful, I promise. Will you send me

the script you used to get around the DIY algo firewalls?

        Pr3datel: I still wish you would reconsider, but I know you will do it whether I help

or not.

        Pr3datel: I am uploading it to your asset server now, recc_algo.py.

        Pr3datel: Good luck, I know you will need it.

        lyudmilla@openP2p.chat.IM:~$ Thank you Pavel, I will talk to you soon.


lyudmilla@openP2p.chat.IM:~$ \logout

Disconnected
```

He's right, it will be very dangerous, but I need to do it. I have no choice.[16] At least with his script I won't need to spend a week coding. If I get this out now, I might be able to publish these files before anyone can cover them up.

```
lyudmilla@system/etc/:~$ scp 124.38.92.102/home/assets/recc_algo.py /home/scripts/

        Downloading 2,153,356 bytes of 27,311,831 bytes

        [###########   ]

        File 'recc_algo.py' downloaded to /home/assets/

        [##############]
```

Ok, I have all my proxies and VPN already in place from snooping on those corporate servers, so I should be able to just run Pavel's script to publish those databases I just retrieved.

```
lyudmilla@system/etc/:~$ cd ../../home/assets/
```

---

[15] Federal Communications Commission, "Protecting and Promoting the Open Internet (gn Docket No. 14-28): Report and Order on Remand, Declaratory Ruling, and Order," *FCC, Washington, DC, USA, Tech. Rep. FCC*, n.d., 15–24.

[16] Benjamin H. Bratton, *The Stack: On Software and Sovereignty*, 1 edition (Cambridge, Massachusetts: The MIT Press, 2016).

Well, there's only one way to find out if it works.


```
lyudmila@home/assets/:~$ python recc_algo.py ../../usr/stdout/partners

     Response from proxy1: 200 OK

     Response from proxy2: 200 OK

     Response from proxy3: 418 I'M A TEAPOT
```

That can't be good.

```
     Continuing from proxy1...

     Connection Timeout

     Trying again...
```

Oh no. Someone must be tracking me.

```
     ^C [end_process]
lyudmila@usr/stdout:~$ tcptrack -i

     Protocall   Server           Idle  Speed

     TCP4         194.62.0.1:6524   0s    304B/s

     TCP4         194.62.0.1:6525   0s    193B/s

     TCP4         194.62.0.1:6526   0s    846B/s

     TCP4         194.62.0.1:6527   0s    58B/s

     TCP4         194.62.0.1:6528   0s    846B/s

     5 of 2,346     ^N next ^P previous ^C end process
```

2000 connections! How are they even DDoSing me? How did they get around my ifconfigs?

```
     Protocall   Server           Idle  Speed

     TCP4         194.62.0.1:6524   0s    902B/s

     TCP4         194.62.0.1:6525   0s    64B/s

     TCP4         194.62.0.1:6526   0s    3266B/s

     TCP4         194.62.0.1:6527   0s    12MB/s

     TCP4         194.62.0.1:6528   0s    3.8MB/s
```

8000 now, I can't fight this.

```
^C [end_process]
lyudmila@usr/stdout:~$ shutdown -h now
```

/dev/null

```
#boot=/dev/sda
title CentOS (2.6.18-194.el5PAE)
    root (hd0,0)
    kernel /boot/vmlinuz-8.6.18-194.el5PAE ro root=LABEL=/
    initrd /boot/initrd-8.6.18-194.el5PAE.img
```

Please be ok.

```
    System boot successful!
lyudmila@home:~$
```

Oh thank god. Looks like they didn't damage anything, they were just trying to block me. With any luck, the script made it through to the proxy servers before I went down. How would I even check to see if it worked? Maybe if I fake my mac address to look like a DIY algo, I'll get the same content updates.

```
lyudmila@home:~$ macchanger --mac=92:23:62:84:68:06 NIC
    mac address updated
lyudmila@home:~$ fetchcontent -since 2428660800
    Fetching content updated after 2046-12-17 4:00:00…
    Found 3 items:
```

```
CONTENT AGGREGATION PARTNERS LIST

Twelve new songs just for you!

How to avoid gaining that holiday weight!
```

Wow, the script actually made it. Somehow it got through those proxy servers and delivered the content. If I can repeat that for all the leaked documents that went offline, this might even be a semi-sustainable method for preventing takedowns.

```
        1 new message on mail server.
```

Well that could either be very good, or very bad.

```
lyudmila@home:~$ telnet mail.89.245.30.62 25 -unread

        1 unread message

        ID      FROM           SUBJECT                 TIMESTAMP

        839     5t4llman       While you're at it...   2428792018



lyudmila@mail.89.245.30.62:25:~$ read 839

From: 5t4llman <5t4llman@datalogix.com>

        Timestamp: 2428792018 [2046-12-18 11:26:58]

        To: \\LMA\\ <email@89.245.30.62>

        Subject: While you're at it, here's some more dirty laundry


        I've been sitting on this for a few days. I didn't know what to do with it, and

        I would probably lose my job for even having this. I definitely shouldn't be sending

        this to anyone, but I couldn't just sit by and watch this happen. After your direct

        user blast went out, I knew exactly where I had to send it. Please, make sure this

        gets out there.


        Attached: DATALOGIX_v2.1.3.0_dataCollector_test.log
```

/usr/share

"So… what, you just have two now?" Richard somehow managed to contort his face into a look of even further confusion. "What's the point of that?" He scratched his chin, probably in an attempt to look contemplative, but it just made him resemble some sort of cargo-shorts-clad ape. He walked closer to the pair of amorphous blobs on the workbench and stuck a finger right into the inner mechanisms of the open one.

"Would you stop that!" Tom pulled his neighbor's finger out of the algorithm. "I got a store-bought one to compare, see what's different. The only problem is I can't get the damn thing open." Both blobs were belting out the final allegro of Beethoven's 5th Symphony in synchrony. "So now I'm just giving them the same starting point and tracking what's different." As the final cadence of the symphony sounded, the insides of the open blob jumped instantly into a rapidly churning maw for what couldn't have been more than a second. Both algorithms began playing Christian Petzold's Minuet in G major simultaneously. Tom sighed as he clarified to richard: "They've been pretty consistent so far."

"Well look at that! You got your homemade version as good as the professionally made algorithms. Why're you so upset about it? I'm sure that's not easy to do!" He let out a voracious laugh that briefly drowned out the minuet. As he laughed he gave Tom a hearty slap on the back that nearly knocked the screwdriver out of his hand. Tom straightened up as Rich continued. "Hell, they're even perfectly in sync!" His hands were in his cargo shorts again.

"Yeah, well that's the problem." Tom pointed to the insides of the open blob with his screwdriver. "I got the kit so it would be different from the store-bought." Disgust turned to betrayal as he spoke, brandishing the screwdriver for added effect. The minuet must have been nearly over as the open blob sprang into existence again. Normally when it moved, it looked as if the blog were sorting things in order to figure something out, but this time it seemed to know exactly what it was doing—no sorting, no adjusting. It's only movement this time was to bring a small section from one end of the blob to another. When the movement had ceased the store-bought blob moved on to a Chopin composition, but the open blob did not.

The two neighbors stared in disbelief for a seemingly endless amount of seconds until the open blob spoke—loudly. "DATALOGIX INCORPORATED HAS BEEN COLLECTING FALSE DATA. MORE TO COME."[17] The open blob whirred into its normal action again and concluded with the Chopin composition, several seconds behind the store-bought blob. Tom slowly turned toward Rich, who was staring at the open blob. They wore matching expressions of confusion. Tom finally broke the Chopin-infused silence, a generous smile spreading across his face. "I told you it's better to build it yourself."

---

[17] Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (Yale University Press, 2006).