

Se7en Deployment Sins

Philipp Krenn

@xeraa



elastic

Developer 🥑



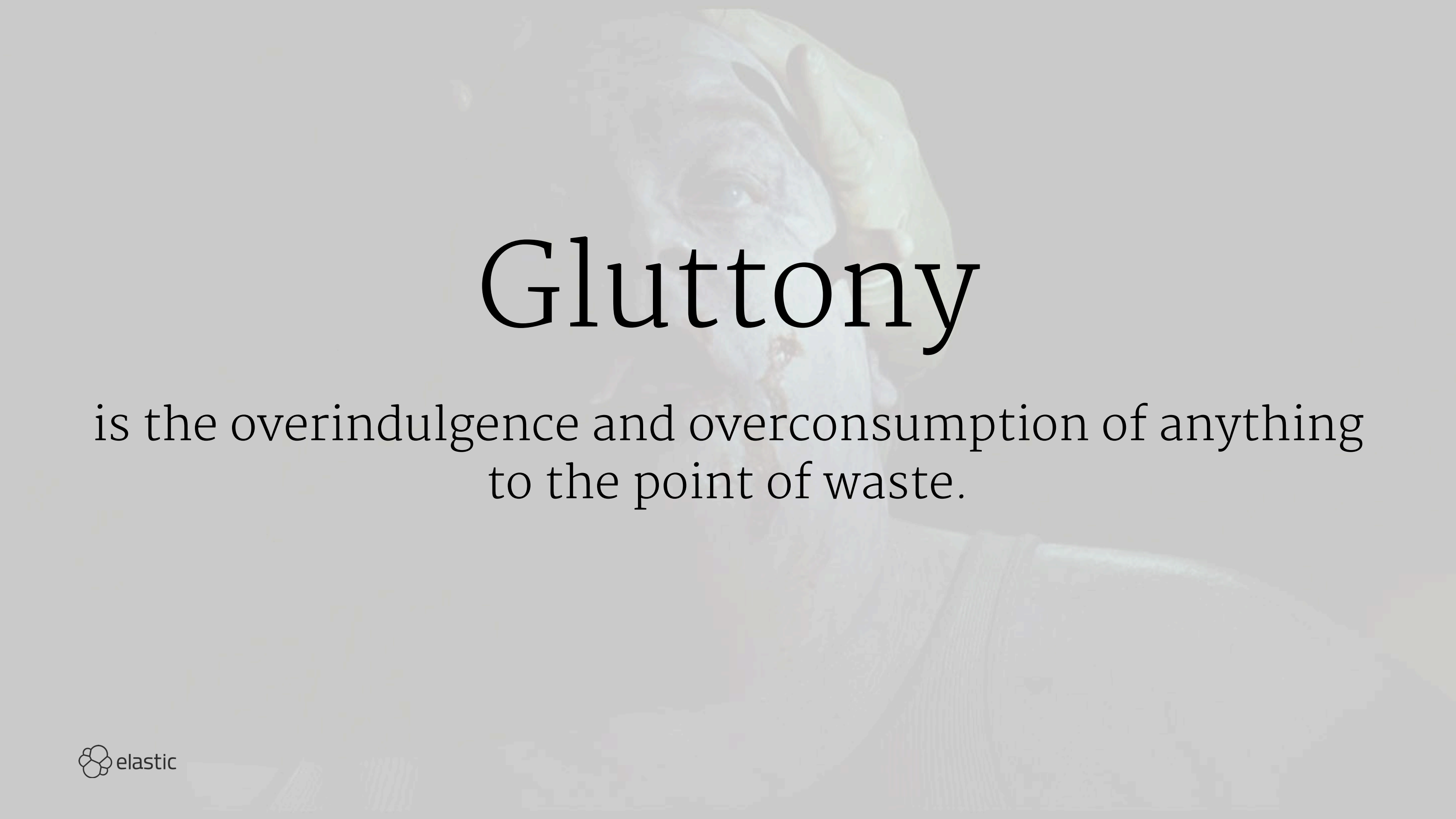
It depends...

1997: “Hello World!”

2017: “Cloud Native Distributed
Containerized RESTful microservice
based on ARMv7 w/ k8s Hello World!
as a service.”

— <https://twitter.com/shanselman/status/923721516117778432>

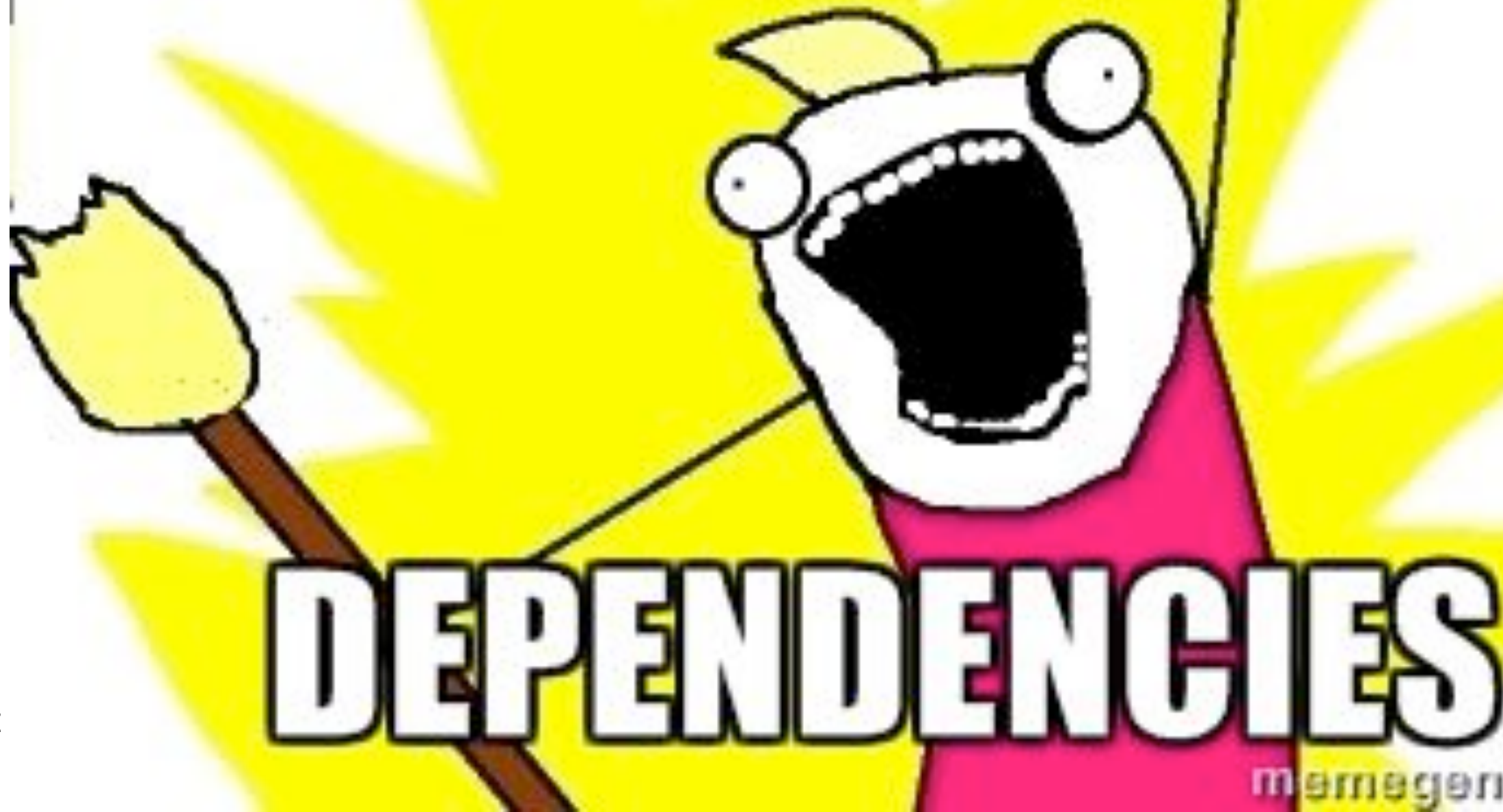




Gluttony

is the overindulgence and overconsumption of anything to the point of waste.

ADD ALL THE



DEPENDENCIES

Memory, Disk, Network

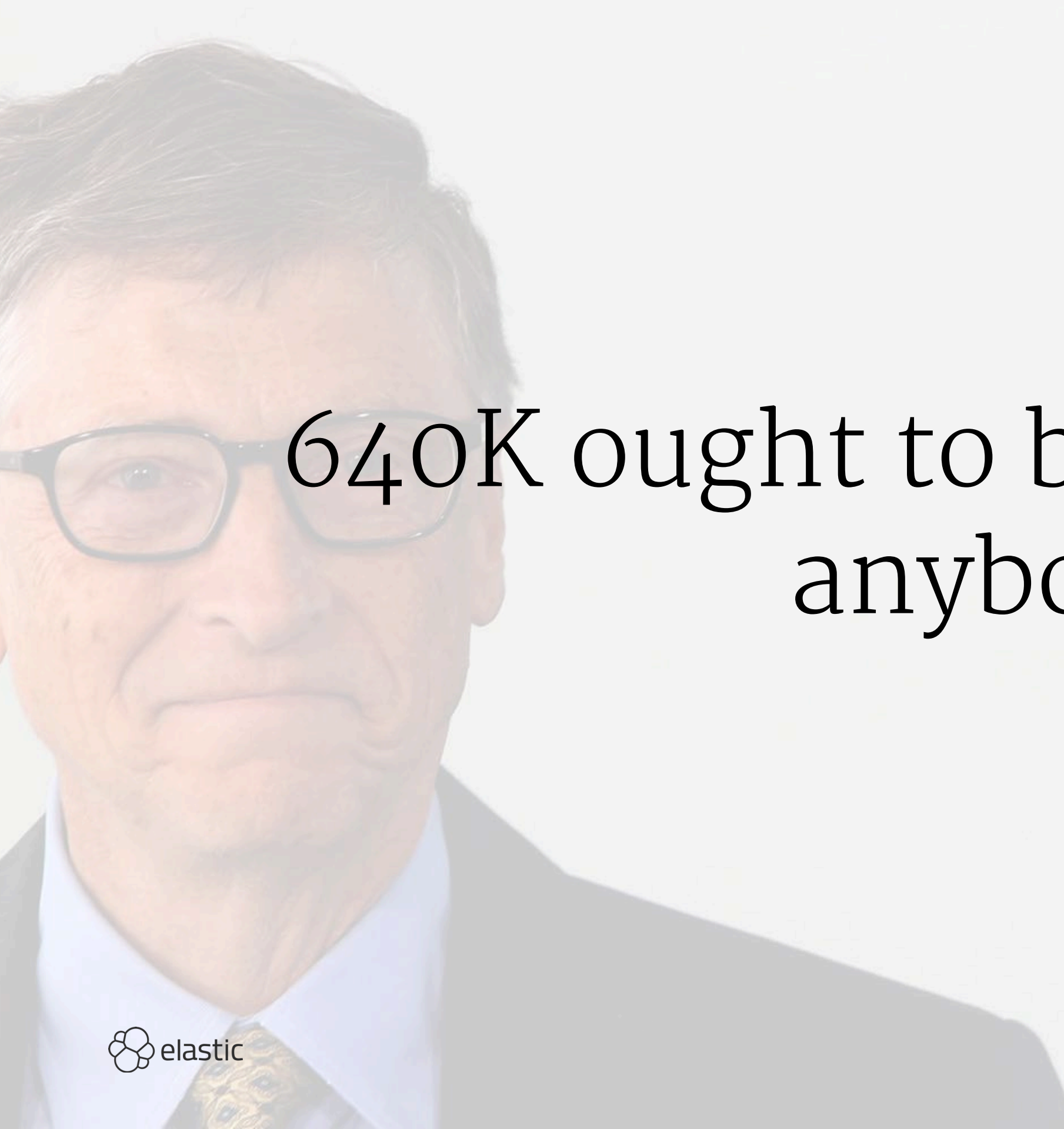
Windows 95 was 30Mb. Today we have web pages heavier than that! Windows 10 is 4Gb, which is 133 times as big. But is it 133 times as superior?

Google keyboard app routinely eats 150 Mb. Is an app that draws 30 keys on a screen really five times more complex than the whole Windows 95?

— <http://tonsky.me/blog/disenchantment/>

*"Windows 95 was 30 MB" is such an ignorant,
obnoxious, trite take.
a triple buffered framebuffer (which you want
for smooth scrolling) for my 4K display is 70
MB in pixels alone. Obviously a complete
webpage with precomposed textures would
take more.*

— <https://twitter.com/whitequark/status/1043747987342671872>



640K ought to be enough for
anybody

emoji--1 - **v1.2.1** - returns the -1 emoji

emoji-100 - **v1.2.1** - returns the 100 emoji

emoji-1234 - **v1.2.1** - returns the 1234 emoji

emoji-8ball - **v1.2.1** - returns the 8ball emoji

emoji-a - **v1.2.1** - returns the a emoji

emoji-ab - **v1.2.1** - returns the ab emoji

emoji-abc - **v1.2.1** - returns the abc emoji

emoji-abcd - **v1.2.1** - returns the abcd emoji

emoji-accept - **v1.2.1** - returns the accept emoji

emoji-admission-tickets - **v1.2.1** - returns the admission-tickets emoji

emoji-aerial-tramway - **v1.2.1** - returns the aerial-tramway emoji

emoji-airplane - **v1.2.1** - returns the airplane emoji

emoji-airplane-arriving - **v1.2.1** - returns the airplane-arriving emoji

emoji-airplane-departure - **v1.2.1** - returns the airplane-departure emoji



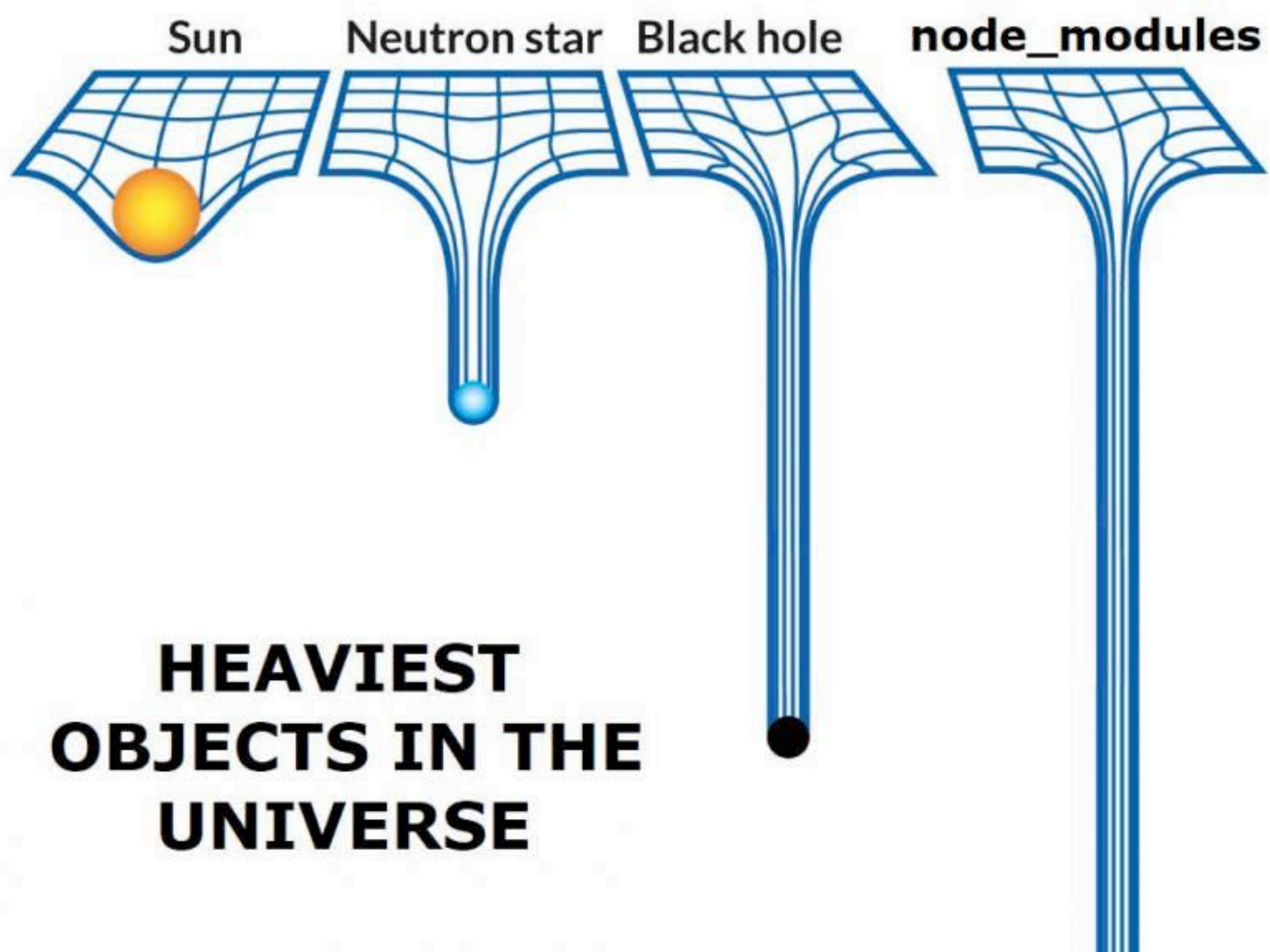
find packages

★ left-pad public

String left pad

left-pad

P.S: I've unpublished it from NPM.



The JS Drinking Game:

- 1. Think of a noun.*
- 2. Google "<noun>.js"*
- 3. If a library with that name exists,
drink! #JavaScript #code*

— https://twitter.com/_ericelliott/status/746427779525279744

COMBINE ALL



THE PROJECTS

WHEN YOUR BOSS TELLS YOU



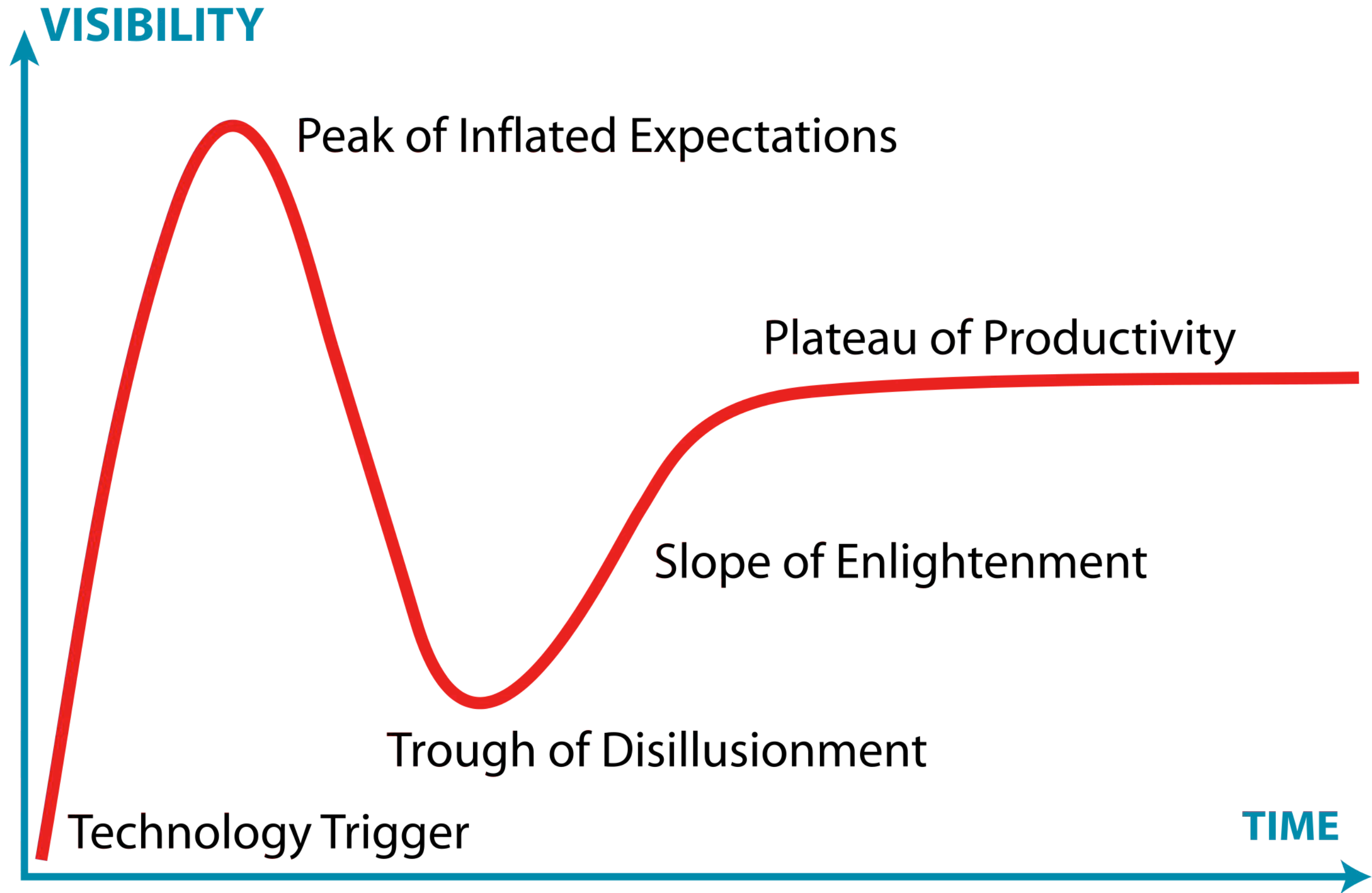
**WE'RE CONVERTING TO
MICROSERVICES**

IF ALL YOUR APIS HAVE SHORT NAMES,

THEN YOU HAVE MICROSERVICES

Microservices

Nano, Pico, Femto, Atto, **Yocto**



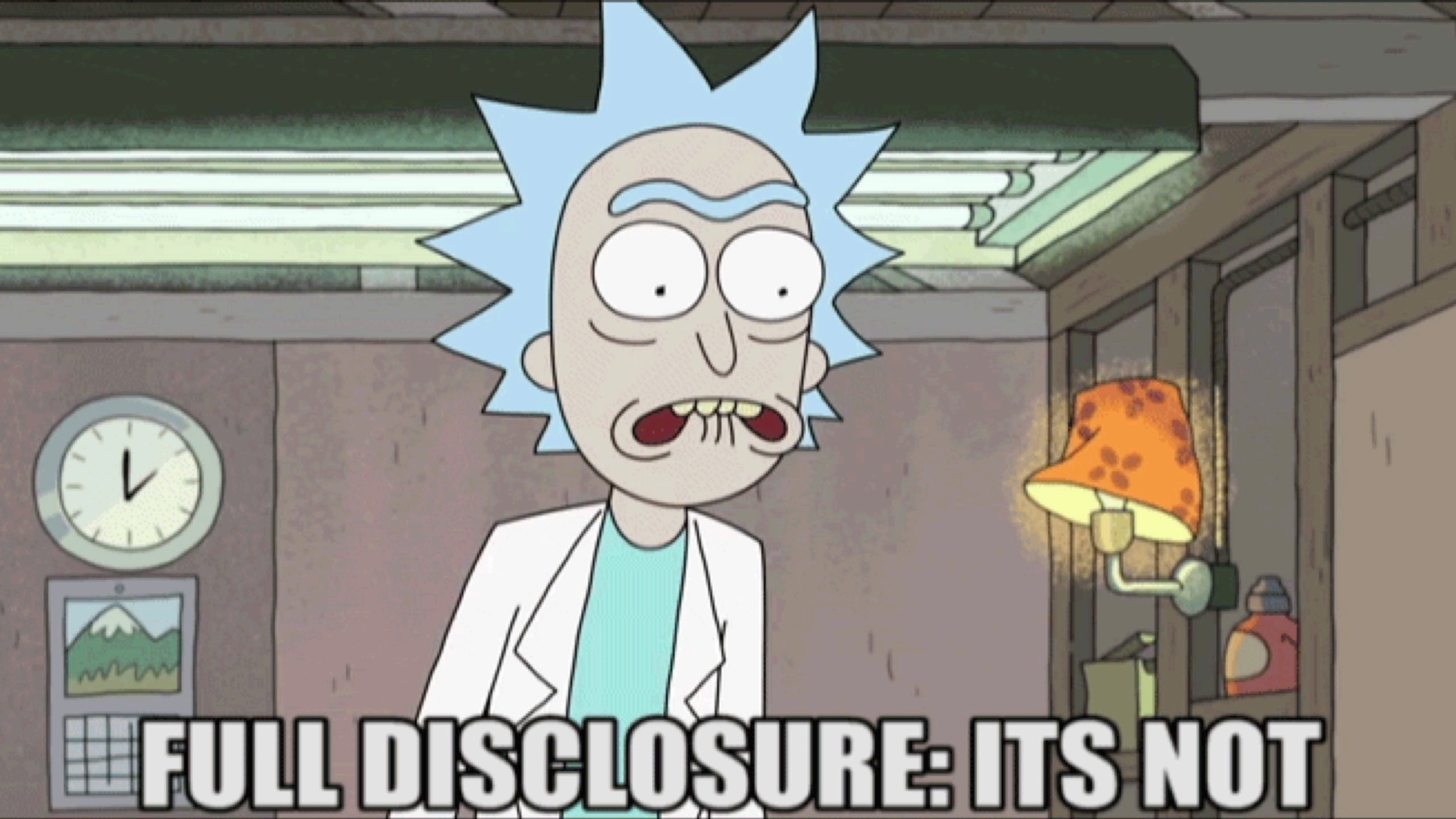
Don't forget – having legacy software is often a sign of success. Your business was successful to last long enough for your software to become legacy.

— <https://twitter.com/samnewman/status/929622273065136130>

Microservices help if

- too many people
- too many dependencies
- not scalable

Will this solve all your
problems?



FULL DISCLOSURE: ITS NOT

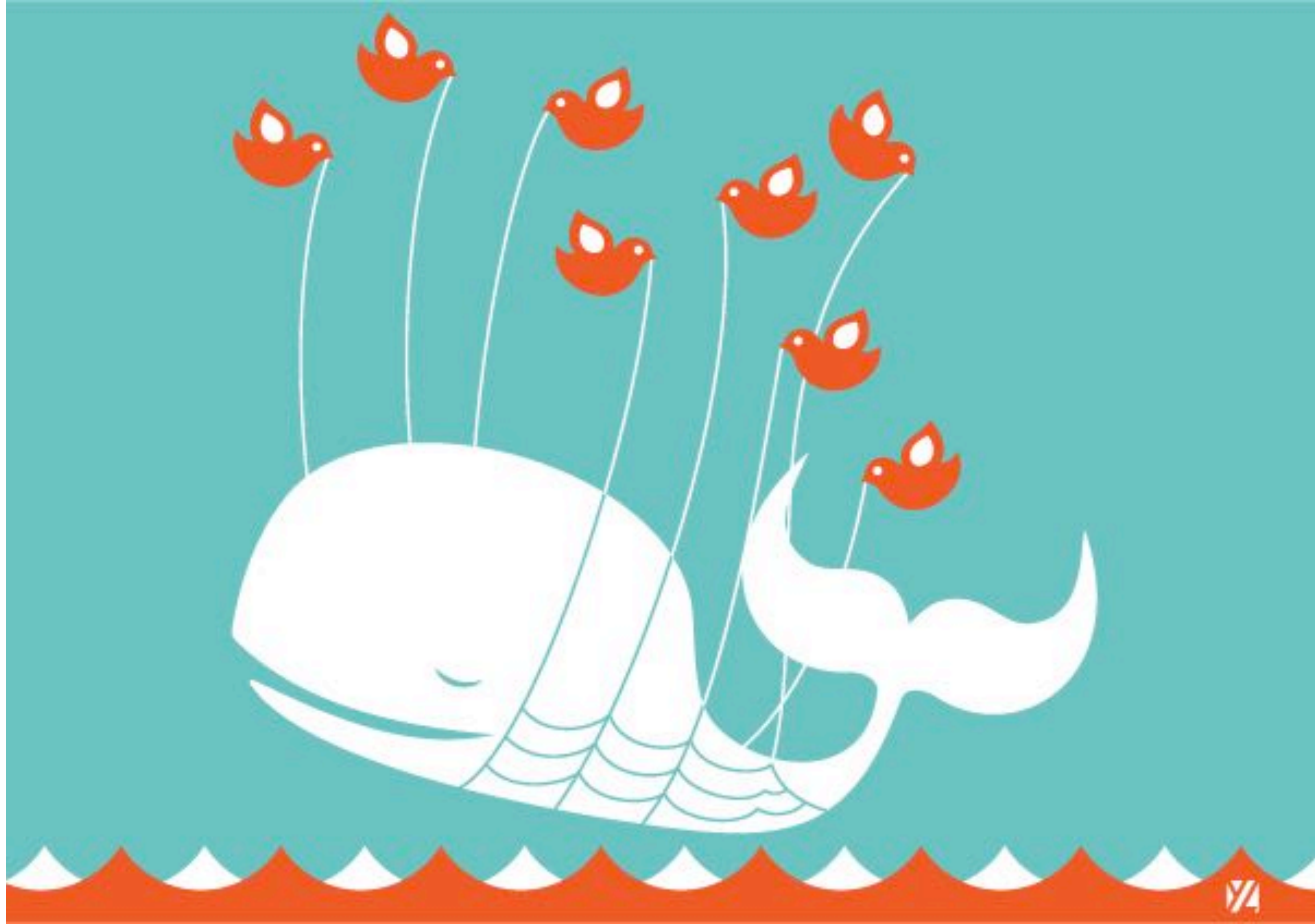
*Reminder: if you're building
microservices, you're building a
distributed system. That means,
among other things,*

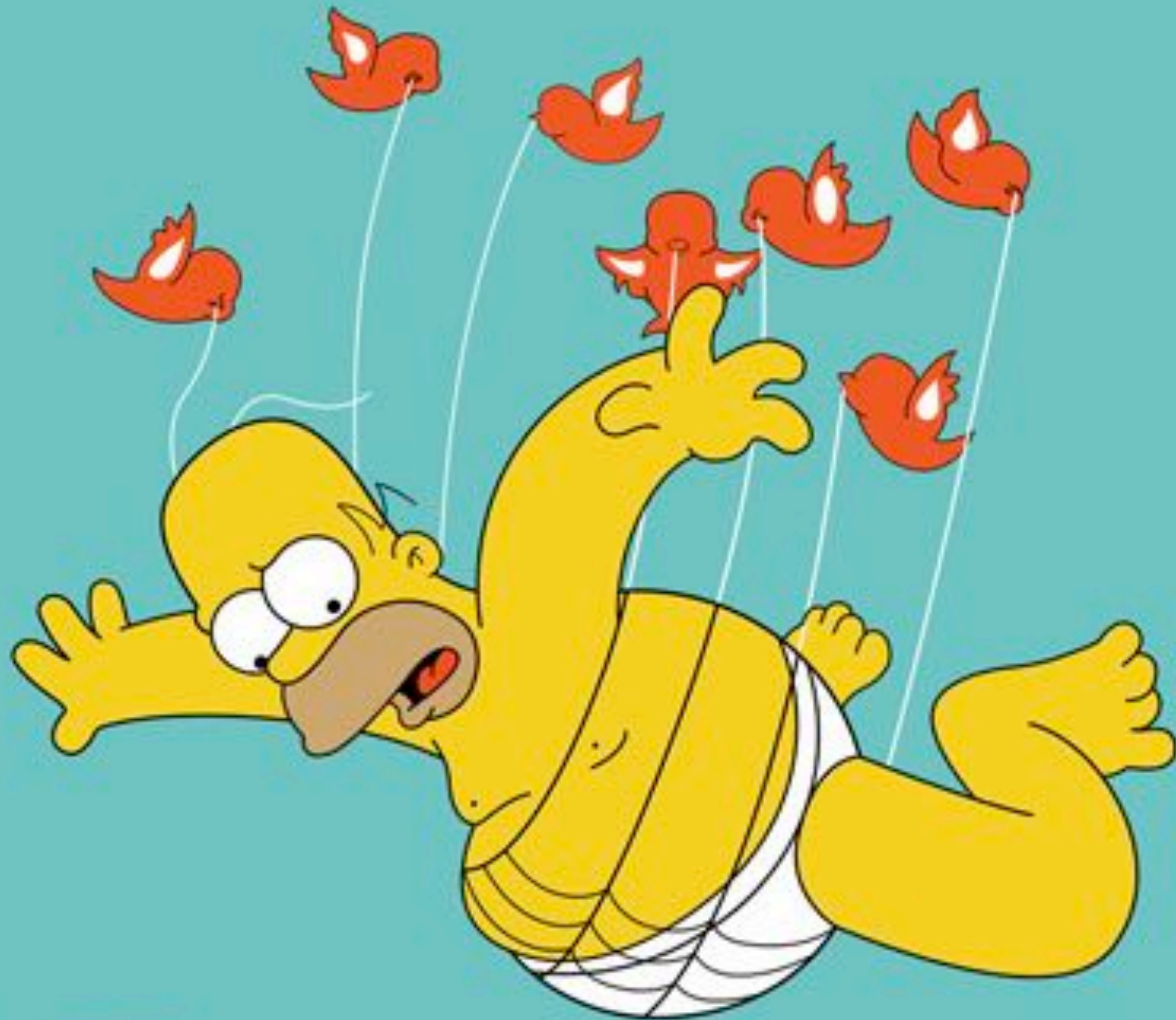
each service has to be independently testable and deployable (including to your dev environment) and should degrade gracefully if it cannot reach its dependencies.

— <https://twitter.com/jezhumble/status/1021897540445196288>

Sun Microsystems

8 fallacies of
distributed computing





Jeff Hodges

Notes on Distributed Systems for Young Bloods

<https://www.somethingsimilar.com/2013/01/14/notes-on-distributed-systems-for-young-bloods/>

The Five Nines

Is it resilient? Nein.

Is it available? Nein.

Is it scalable? Nein.

Is it reliable? Nein.

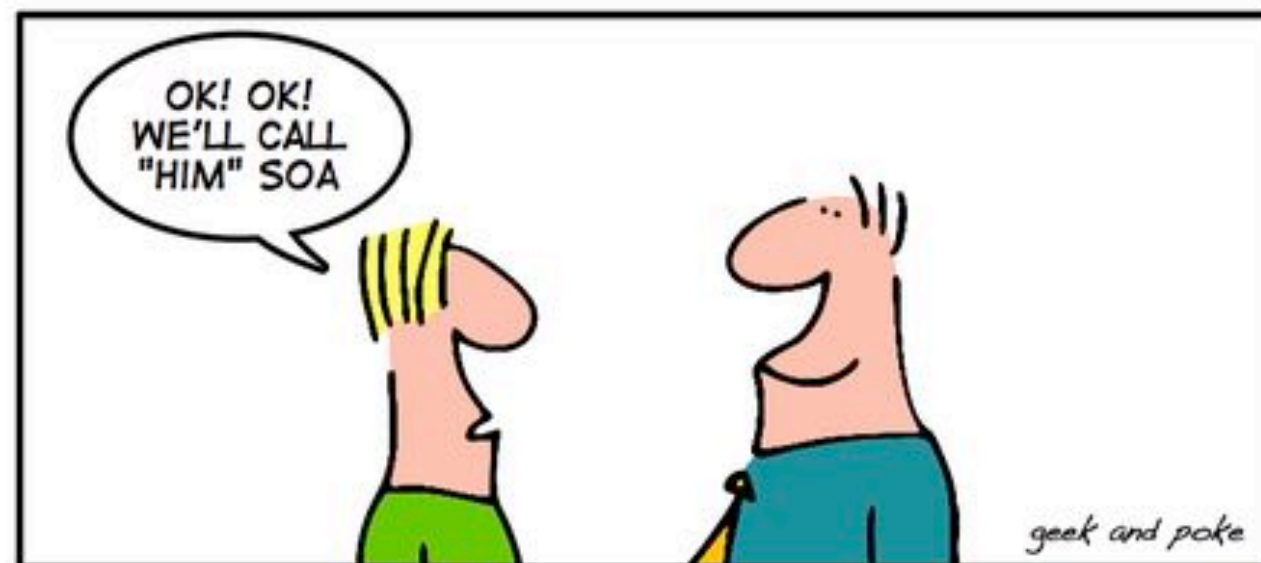
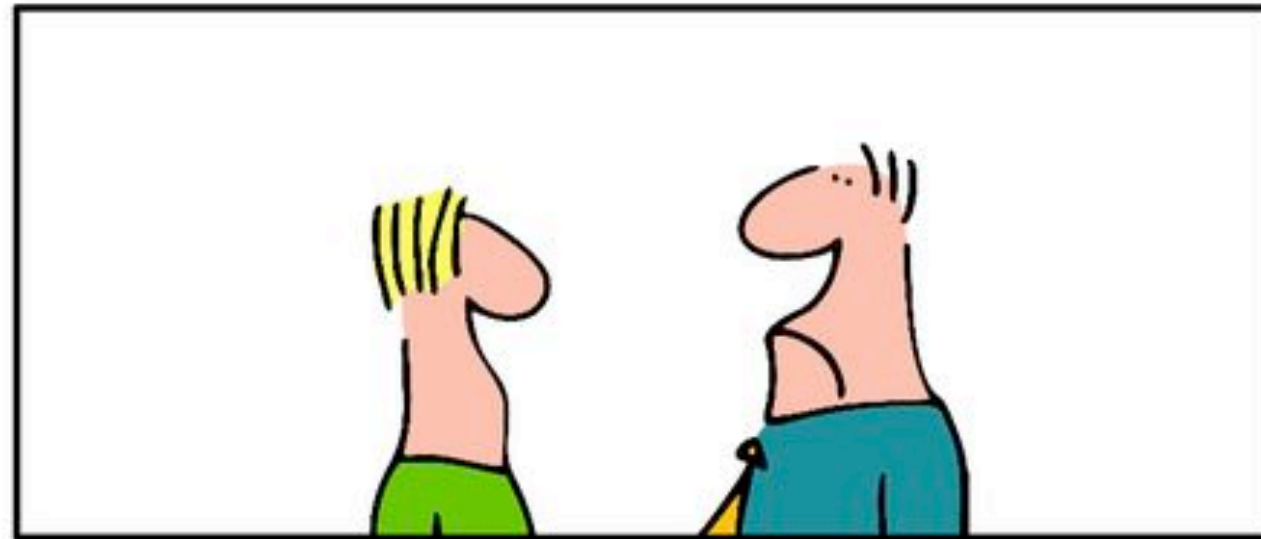
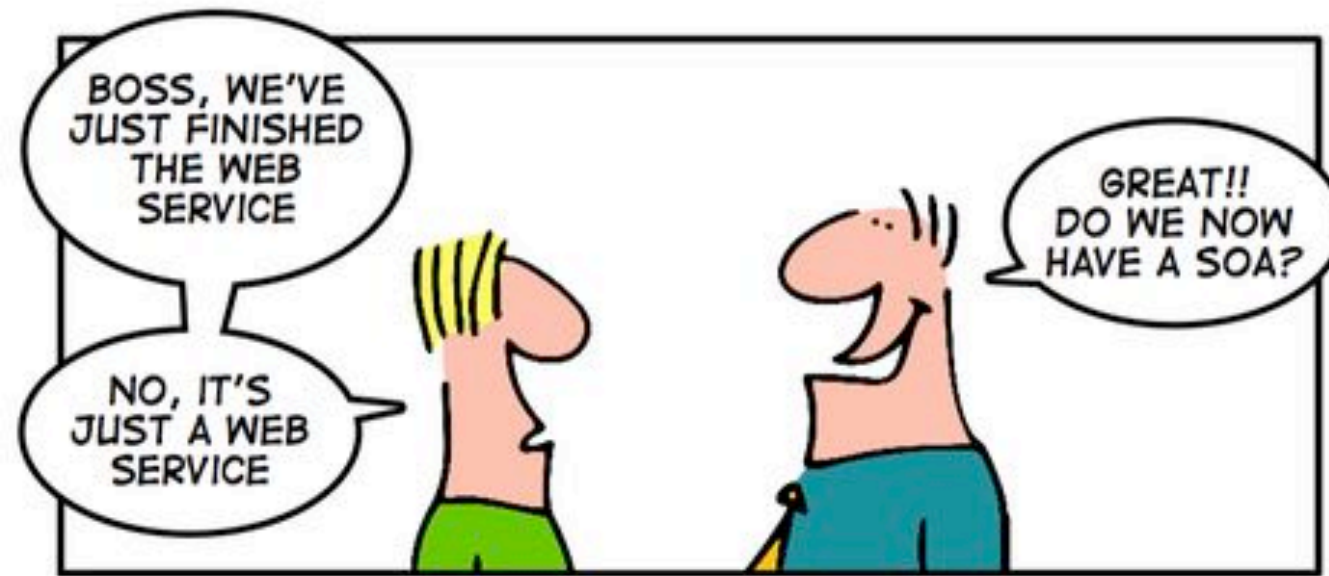
Does it work? Nein.

— <https://twitter.com/marcvolovic/status/898022815668088832>

At this point it would be easier if you told us when it DID work.

— https://twitter.com/honest_update/status/930128629677416450

SOA done right?



HOW TO GET A SOA

WVS-



SOAP: Simple Object Access Protocol.

*Except it's not Simple, it's
Complicated. And it's not about
Objects, it's about RPC.*

So really: CRAP

— <https://twitter.com/joewalnes/status/563691487586549761>

(Untitled) - Wireshark

File Edit View Go Capture Analyze Statistics Help

Filter: Expression... Clear Apply

No.	Time	Source	Destination	Protocol	Info
366	11.767290	192.168.0.31	192.168.0.28	SNMP	get-response SNMPv2-SMI::enterprises.11.2.3.9.4.2.1.4.1.5.7.1
367	11.768865	192.168.0.28	192.168.0.31	SNMP	get-request SNMPv2-SMI::enterprises.11.2.3.9.4.2.1.4.1.5.8.1
369	11.775952	192.168.0.31	192.168.0.28	SNMP	get-response SNMPv2-SMI::enterprises.11.2.3.9.4.2.1.4.1.5.8.1
381	12.286091	192.168.0.28	192.168.0.1	DNS	Standard query A www.cnn.com
384	12.311862	192.168.0.1	192.168.0.28	DNS	Standard query response A 64.236.91.21 A 64.236.91.23 A 64.236.91.24
385	12.312727	192.168.0.28	64.236.91.21	TCP	56606 > http [SYN] Seq=0 win=8192 Len=0 MSS=1460 WS=2
386	12.361495	64.236.91.21	192.168.0.28	TCP	http > 56606 [SYN, ACK] Seq=0 Ack=1 win=8192 Len=0 MSS=1460
387	12.361583	192.168.0.28	64.236.91.21	TCP	56606 > http [ACK] Seq=1 Ack=1 win=17520 Len=0
388	12.361805	192.168.0.28	64.236.91.21	HTTP	GET / HTTP/1.1
389	12.413166	64.236.91.21	192.168.0.28	TCP	http > 56606 [ACK] Seq=1 Ack=845 win=6960 Len=0
390	12.413611	64.236.91.21	192.168.0.28	TCP	[TCP segment of a reassembled PDU]
391	12.414386	64.236.91.21	192.168.0.28	TCP	[TCP segment of a reassembled PDU]

Frame 384 (167 bytes on wire, 167 bytes captured)

Ethernet II, Src: Sparklan_04:d0:9e (00:0e:8e:04:d0:9e), Dst: HonHaiPr_26:66:a2 (00:1c:26:26:66:a2)

Internet Protocol, Src: 192.168.0.1 (192.168.0.1), Dst: 192.168.0.28 (192.168.0.28)

User Datagram Protocol, Src Port: domain (53), Dst Port: 62872 (62872)

Domain Name System (response)

[Request In: 381]

[Time: 0.025771000 seconds]

Transaction ID: 0xc1f

Flags: 0x8180 (Standard query response, No error)

Questions: 1

Answer RRs: 6

Authority RRs: 0

Additional RRs: 0

Queries

www.cnn.com: type A, class IN

Name: www.cnn.com

Type: A (Host address)

Class: IN (0x0001)

Answers

www.cnn.com: type A, class IN, addr 64.236.91.21

0000 00 1c 26 26 66 a2 00 0e 8e 04 d0 9e 08 00 45 00 ..&&f... ..E.

0010 00 99 00 00 40 00 40 11 b8 e6 c0 a8 00 01 c0 a8@.@.

0020 00 1c 00 35 f5 98 00 85 98 5a cf 1f 81 80 00 01 ...5.... .Z.....

0030 00 06 00 00 00 00 03 77 77 77 03 63 6e 6e 03 63w ww.cnn.c

0040 6f 6d 00 00 01 00 01 c0 0c 00 01 00 01 00 00 00 om.....

0050 b7 00 04 40 ec 5b 15 c0 0c 00 01 00 01 00 00 00 ...@. [... ..

0060 b7 00 04 40 ec 5b 17 c0 0c 00 01 00 01 00 00 00 ...@. [... ..

0070 b7 00 04 40 ec 10 14 c0 0c 00 01 00 01 00 00 00 ...@.....

This is a response to the DNS query in this fr... Packets: 1273 Displayed: 909 Marked: 0 Dropped: 0 Profile: Default

We replaced our monolith with micro services so that every outage could be more like a murder mystery.

— https://twitter.com/honest_update/status/651897353889259520



*Here's a diagram of two microservices
and their shared database.*

— [https://twitter.com/mathiasverraes/status/
711168935798902785](https://twitter.com/mathiasverraes/status/711168935798902785)

*OH: "replace your shared monolithic
DB with a shared monolithic stream
store"*

— <https://twitter.com/ntcoding/status/928902644764200960>

In every distributed system architecture diagram, change the box labeled “Kafka” to “ESB” and immediately “The hot new thing” becomes “The legacy we need to get rid of”. Think about that. #decentralize

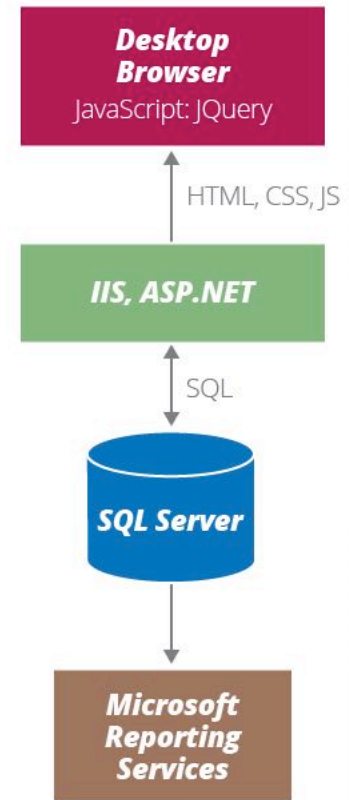
— <https://twitter.com/olivergierke/status/1044592822500904960>

*...don't even consider microservices
unless you have a system that's too
complex to manage as a monolith.
The majority of software systems
should be built as a single monolithic
application.*

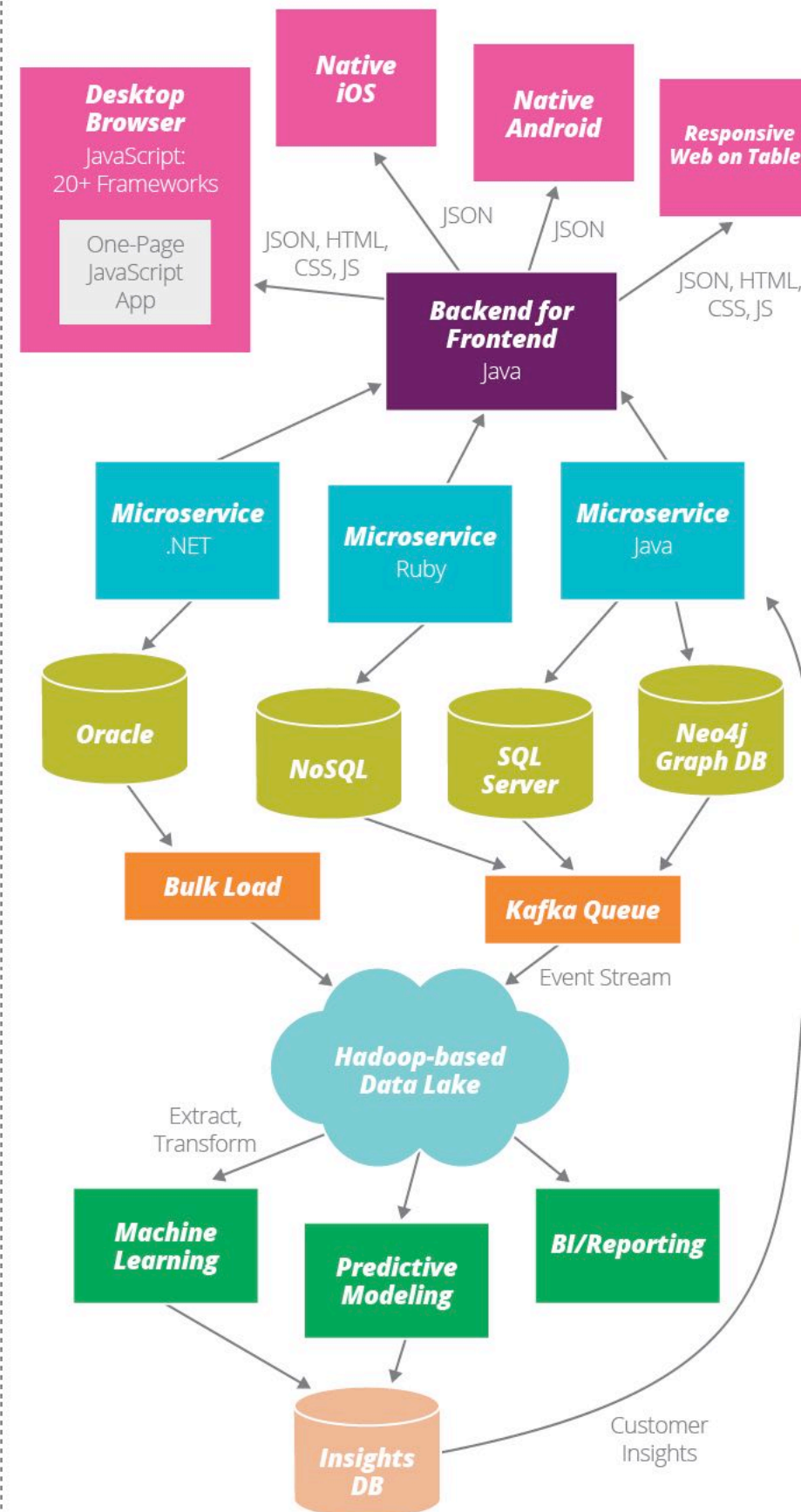
Do pay attention to good modularity within that monolith, but don't try to separate it into separate services.

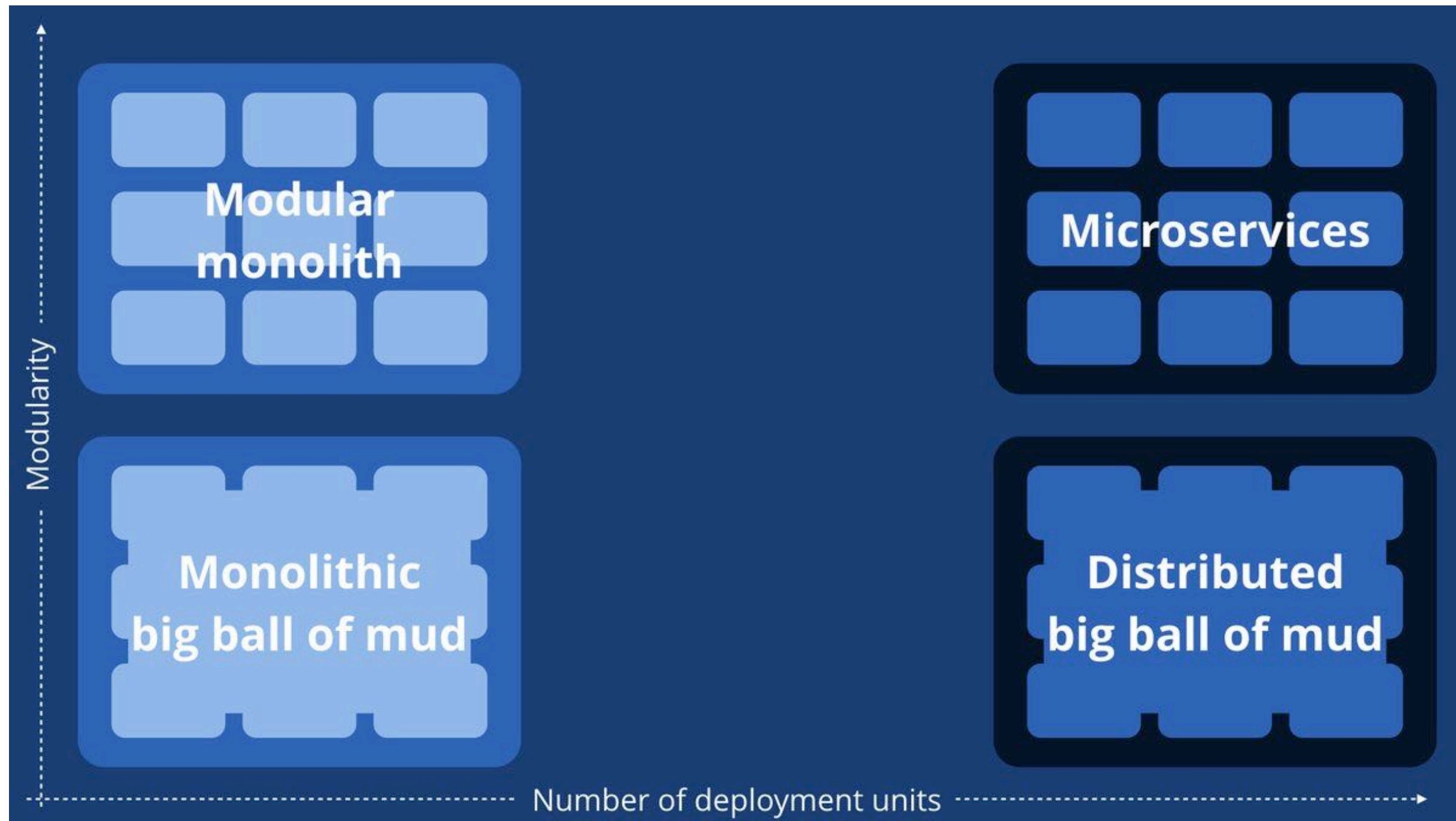
— <http://martinfowler.com/bliki/MicroservicePremium.html>

2005



2016





<https://twitter.com/simonbrown/status/847339104874381312>

*The #microservices bandwagon exists
because the name is cool. Monoliths
just need marketing help...*

*#MegaPlatform #UberContainer
#StereoLith*

— <https://twitter.com/sjmaple/status/724541627407147008>

#Serverfull

A word of the week: Microlith – a huge enterprise app ported to one, fat Docker container. #MicroserviceJokes

— <https://twitter.com/rmehmandarov/status/865542627004788737>

If you want to implement microservices, the 1st thing you need to do is implement aggregated logging. The 2nd is implement correlation IDs

— <https://twitter.com/samnewman/status/862255875125366786>

Microservices can help large number of people go faster by allowing more autonomy. I remain to be convinced it does the same for small teams

— <https://twitter.com/samnewman/status/778118760226062336>

Repeat after me

I'm not Facebook,
Google, or Amazon

Greed

is applied to a very excessive or rapacious desire and pursuit of material possessions.

The JBoss logo features the word "JBoss" in a bold, sans-serif font. The "JB" is red, and "oss" is dark grey. A registered trademark symbol (®) is at the end. To the left of the text is a decorative arrangement of ten red dots of varying sizes, forming a circular pattern.

JBoss[®]

by Red Hat



Sloth

is sometimes defined as physical laziness, but spiritual laziness is emphasized.

WHAT DO WE WANT?



TO DELIVER BETTER SOFTWARE!



WHEN DO WE WANT IT?



CONTINUOUSLY!!!



Continuous Integration **CI**

Build and test every push

Continuous Delivery

CD

Manual production deployment

Continuous Deployment **CD**


Automated production deployment



Facebook switched to Continuous Delivery / Deployment in 04/2017

[https://code.facebook.com/posts/270314900139291/
rapid-release-at-massive-scale/](https://code.facebook.com/posts/270314900139291/rapid-release-at-massive-scale/)

Deploy multiple times per day if it fits your business model. Don't deploy for the sake of deploying.




Resolved Question

continuous deployment

Show me another »

Can anyone describe an LSD trip to me?

The Hokey Pokey3 years agoReport Abuse



Best Answer - Chosen by Voters

It is an experience so weird, nobody could ever accurately describe it. Every trip is slightly different for every person and every time. Your subconscious will come to the forefront. Internal mental conflicts will be exaggerated. This is the reason some people have bad trips. But it can also be mentally therapeutic when taken in the right environment and with a focus on meditation. You will be disconnected from reality, yet everything will seem very clear.

You will feel very high. A good dose with enough visual stimulation can trigger color splashes to full blown hallucinations.

I feel that LSD should not be used as a party or pleasure drug. It should be used with respect with a focus on meditation and discovering your inner self. We can get a lot out of LSD if it is not abused.

Source(s): "I believe that if people would learn to use LSD's vision-inducing capability more wisely, under suitable conditions, in medical practice and in conjunction with meditation, then in the future this problem child could become a wonder child."

Dr. Albert Hofmann, the discoverer of LSD

experiences

environment

trip is

the reason

bad trips

mentally therapeutic

right environment

focus on meditation

disconnected from reality

progress and metrics

silos

reason to brag.

your business

devops.

dev and ops collaboration

operational

first to continuously deploy units of "mind:blown."

3 years agoReport Abuse

100% 1 Vote

<https://twitter.com/allspaw/status/925490726468771840>



Gonzo

Best Answer - Chosen by Voters

It is an experience so weird, nobody could ever accurately describe it. Every ~~trip~~ is slightly different for every person and every time. Your subconscious will come to the forefront. Internal mental conflicts will be exaggerated. This is the reason some people have ~~bad trips~~. But it can also be mentally therapeutic when taken in the right ~~environment~~ and with a focus on ~~meditation~~. You will be disconnected from ~~reality~~, yet everything will seem very clear.

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Dr. Albert Hofmann, the ~~discoverer of LSD~~

first to continuously deploy units of "mind:blown."

3 years ago

[Report Abuse](#)



60% OF THE TIME

**DEPLOYMENTS WORK
EVERYTIME!**

*DDD (Russian: Davai Davai Deploy) –
Just deploy this sh*t already. Come on!*

— [https://twitter.com/Steve_Jules/status/
862247438551265280](https://twitter.com/Steve_Jules/status/862247438551265280)

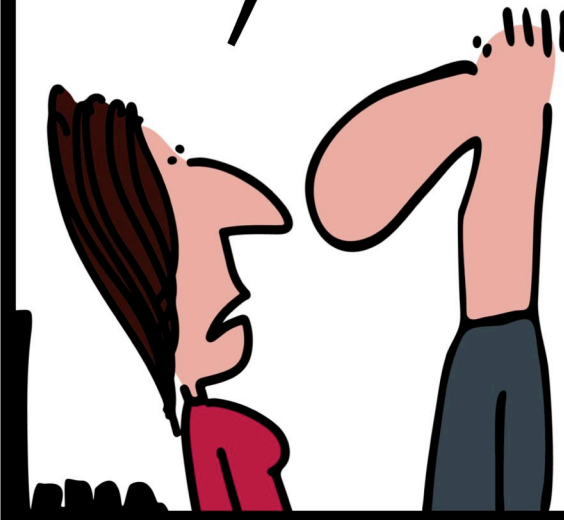
Also

Deadline Driven Deployment

SIMPLY EXPLAINED

geek & poke

FOR 5 DAYS I'VE BEEN
DOING **NOTHING** ELSE THAN
TRYING TO DEPLOY THIS
F***ING APPLICATION ON OUR
PRODUCTION ENVIRONMENT



CONTINUOUS DEPLOYMENT



Jenkins

JERKINS = ROBOT IS FAILING ON PURPOSE

JUNKINS : ROBOT IS FAILING DUE TO
INCOMPETENCE

JANKINS : ROBOT FAILS INTERMITTENTLY FOR
NO DISCERNIBLE REASON

<https://twitter.com/ericqweinstein/status/529319496029589504>

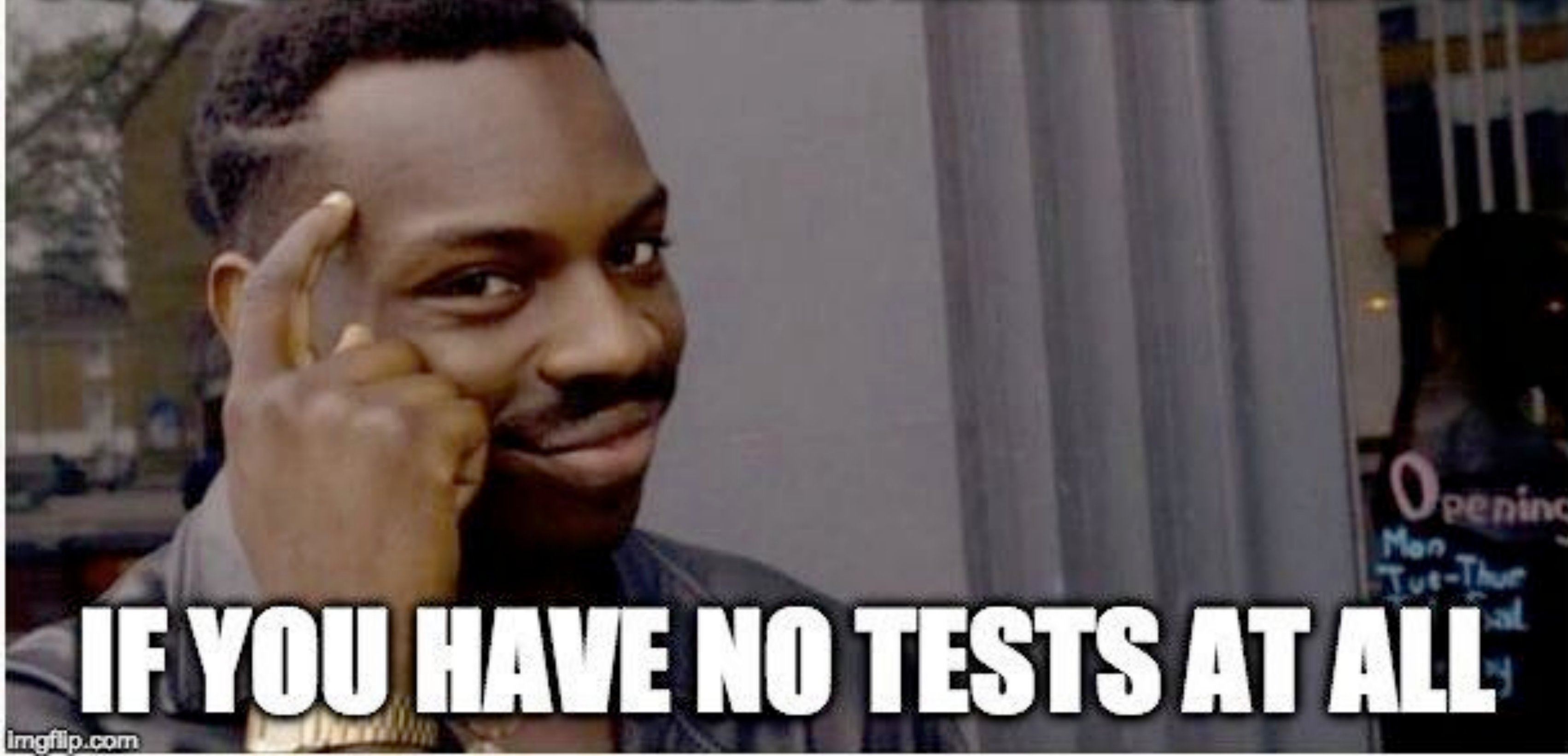
**IF YOU COULD ALL STOP BREAKING
THE BUILD**

**THAT WOULD BE
GREAT**

Volkswagen detects when your tests are being run in a CI server, and makes them pass.

<https://github.com/auchenberg/volkswagen>
<https://github.com/hmlb/phpunit-vw>

YOU DON'T HAVE FAILING TESTS



IF YOU HAVE NO TESTS AT ALL

Separate code and config

Do not commit secrets

HashiCorp Vault
Ansible Vault

...



Lust

is an intense and uncontrolled desire.

Always use the hottest

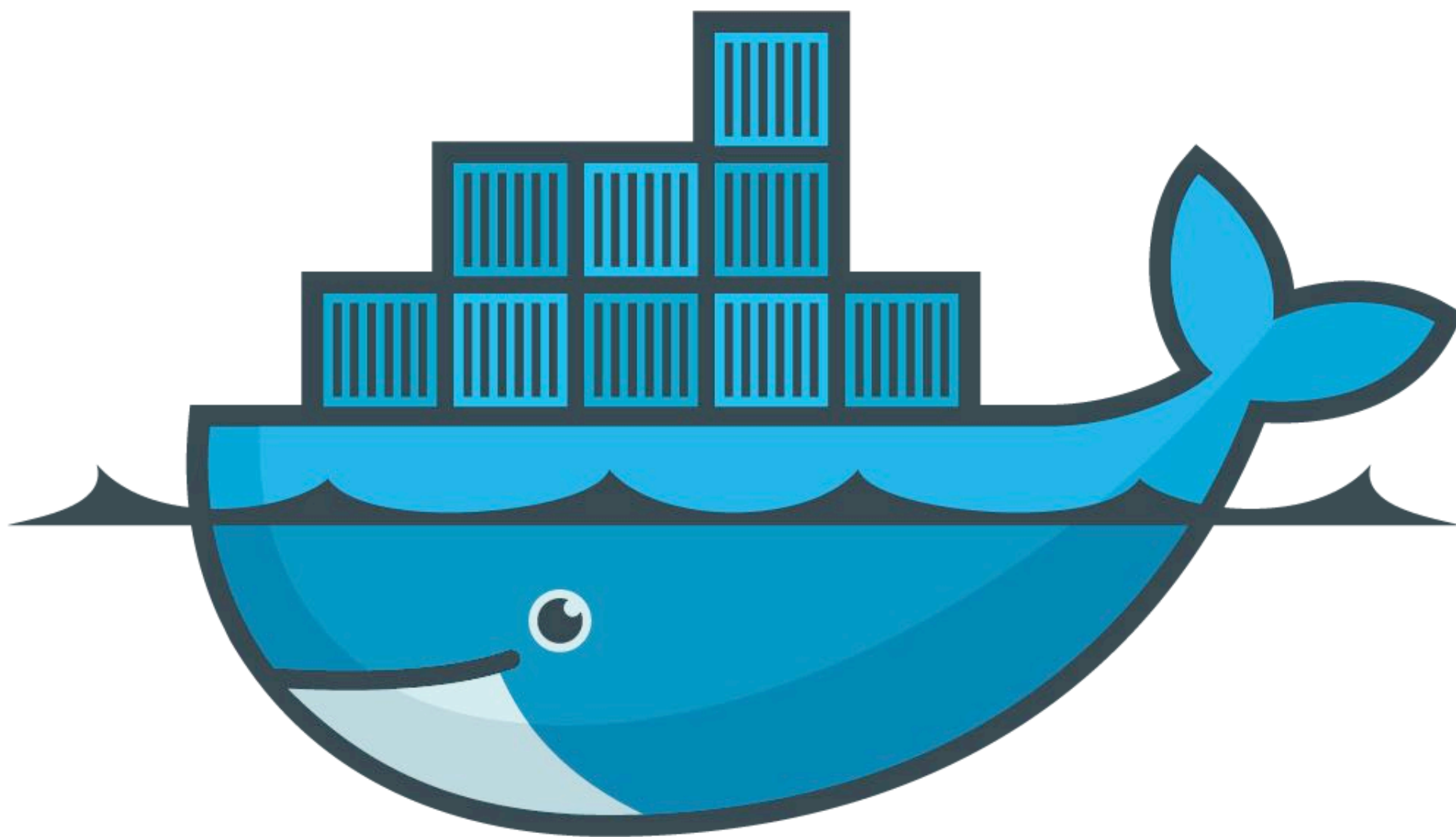


*High-latency low-throughput
append-only database with very
expensive transaction commit
protocols just doesn't have the same
ring to it as "Blockchain" does it?*

— <https://twitter.com/jstogdill/status/1004448569615626240>

#Database: garbage-in garbage-out
#Blockchain: garbage-in garbage-
carved-in-stone

— <https://twitter.com/nivertech/status/1033037299553103872>



docker



@sadoperator

@sadoperator

Follow



the team that releases no more than once a quarter has asked about deploying with docker



*Docker: each docker container should
just run one process*

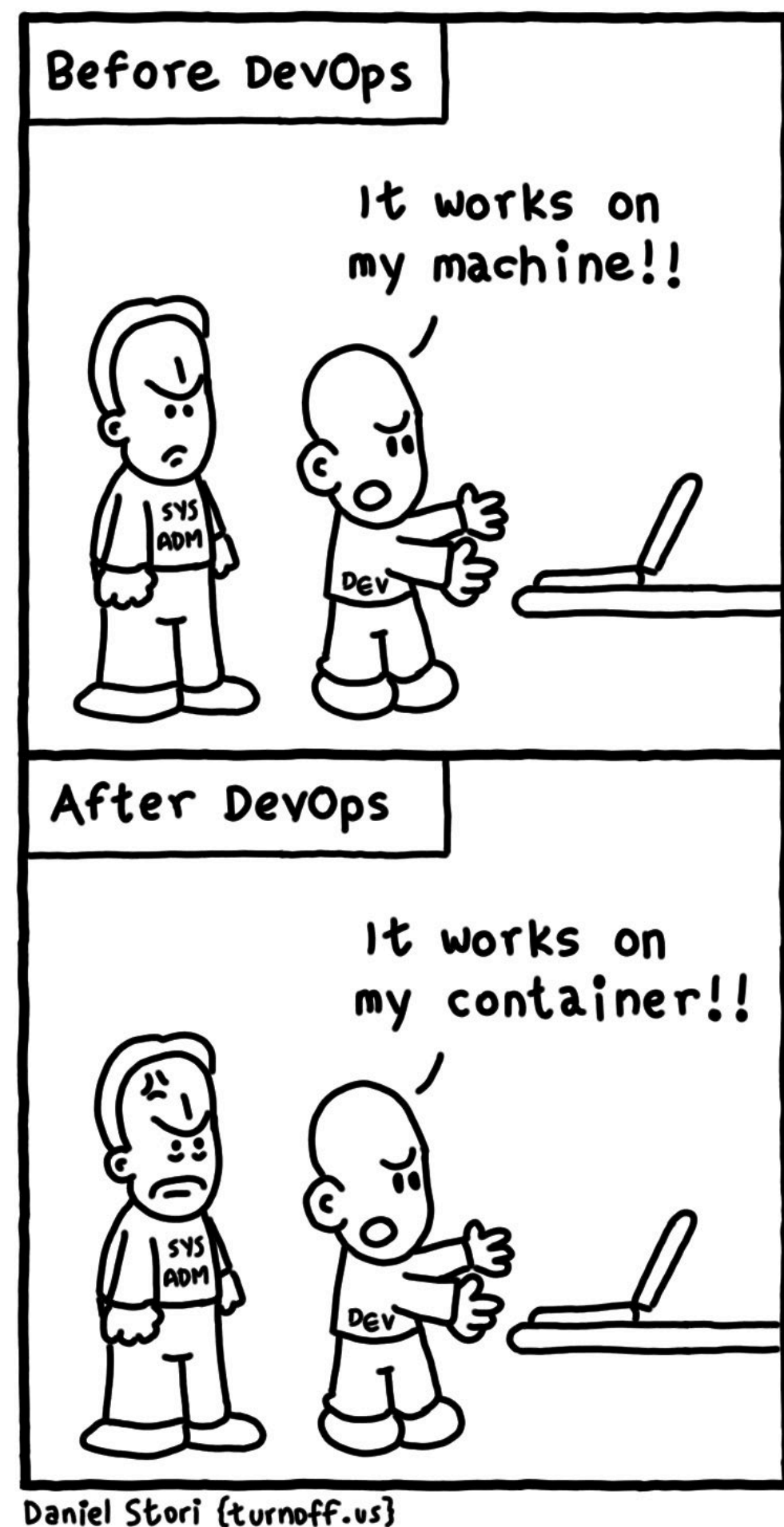
*Me: but your containers are 700+MB
each*

*Docker: you see why our mascot is a
whale*

— <https://twitter.com/classam/status/743333692462895104>

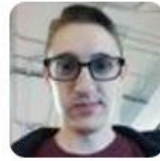


[https://turnoff.us/geek/
before-devops-after-
devops/](https://turnoff.us/geek/before-devops-after-devops/)





Now what?



Chris Martin

@chris__martin



 **Follow**

It's elegant in its simplicity because it's all tires. If you understand tires, you can understand the whole system.





CONTAINERS, CONTAINERS

EVERYWHERE

"A container is just a process"



*containers will not fix your broken
architecture*

you are welcome

— <https://twitter.com/littleidea/status/659445920954642432>



*You gotta love the docker-compose
command line:*

*docker-compose down -v Removes all
volumes*

*docker-compose -v down Prints the
version of docker-compose*

— <https://twitter.com/fhopf/status/971910920522760192>

New dependencies of your artifacts

JVM and base image

so.. using Glibc?
How's re-imaging all of your
@Docker images going?

— <https://twitter.com/starbuxman/status/700591322177019904>



Containerizing legacy applications

Microservices + containers

Cargo cult

I HIRED A MANAGEMENT CONSULTANT TO TEACH US SOMETHING HE CALLS BACKWARDS CAUSATION.



Dilbert.com DilbertCartoonist@gmail.com

I STUDIED THE MOST SUCCESSFUL COMPANIES. IF YOU IMITATE THEM, YOU'LL FEEL AS IF YOU HAVE A STRATEGY.



4-11-12 ©2012 Scott Adams, Inc./Dist. by Universal Uclick

NUMBER ONE: SPONSOR A GOLF TOURNAMENT SO YOUR CEO CAN MEET CELEBRITIES.

PROFITS, HERE WE COME.



*cargo culting comes from received but
not integrated knowledge. because
one doesn't grasp how a thing works,
one simply goes through the motion of
how one was told to do it.*

— [https://twitter.com/GeePawHill/status/
931941663886454784](https://twitter.com/GeePawHill/status/931941663886454784)

If you are only picking Kubernetes because that's the way Google does it, then you should also consider writing your own filesystems.

— <https://twitter.com/kelseyhightower/status/741310392756887552>

At this point you're crazy to think you can manage k8s yourself. I'm sure you've got engineers who want to. It's shiny and fun now, but the novelty wears off quick. And then you are left with an old snowflake

— <https://twitter.com/ibuildthecloud/status/1020371700934881280>

*Kubris – the belief that Kubernetes can
do everything by itself*

— <https://twitter.com/monadic/status/1007293757501378560>

*OH: “their infra is 50 shades of broken
and they’re now setting up their own
frankenetes cluster hoping it’ll fix
everything”* 😱😞

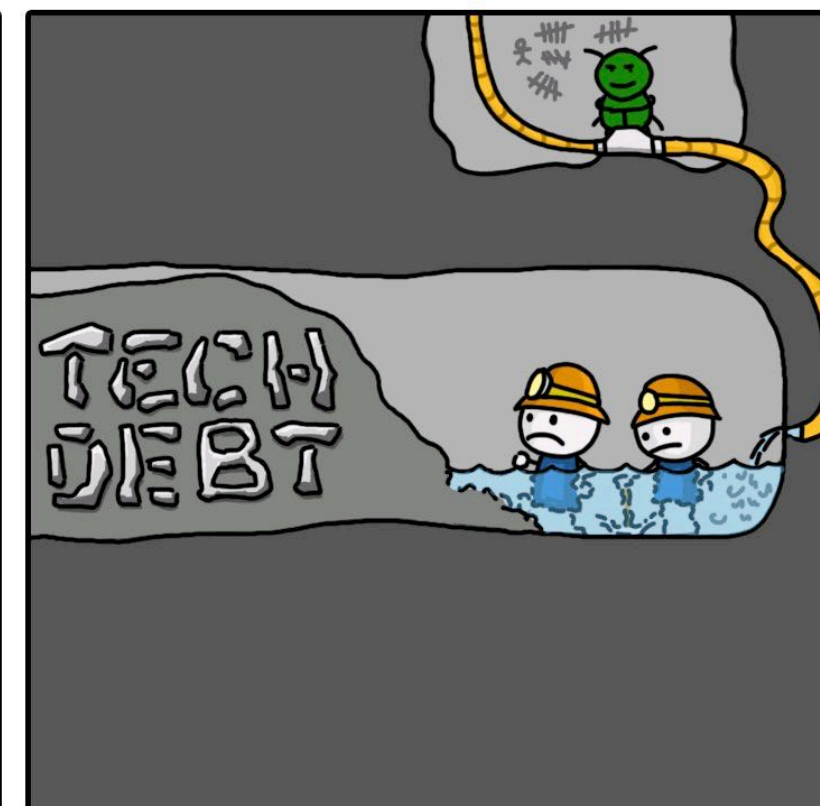
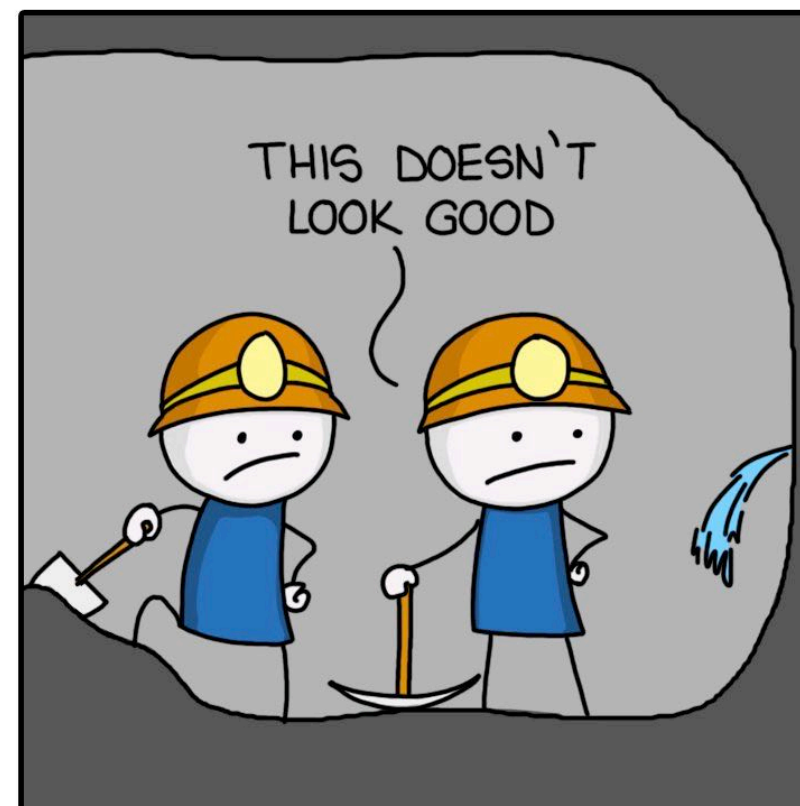
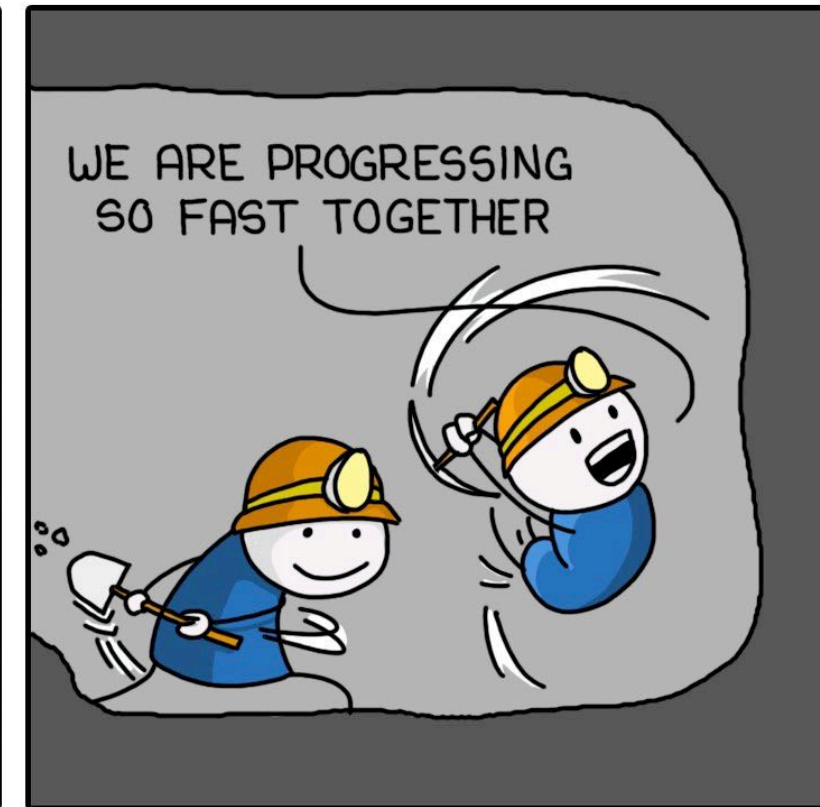
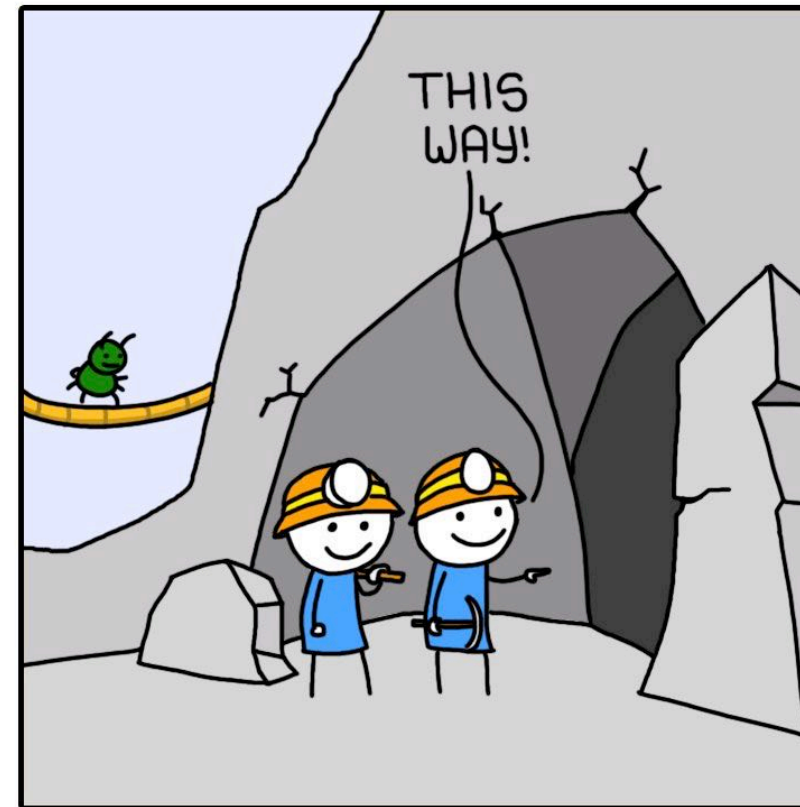
— [https://twitter.com/copyconstruct/status/
935317466573504512](https://twitter.com/copyconstruct/status/935317466573504512)

*We've been so beaten into thinking we
need to care about the speed-of-
delivery with containers, we lost focus
somewhere on prod reliability*

— <https://twitter.com/danveloper/status/858372256174669824>

[https://
www.monkeyuser.com/
2018/tech-debt/](https://www.monkeyuser.com/2018/tech-debt/)

TECH DEBT



What's wrong here?

For a stateful production service

```
$ docker run -p 9200:9200  
            -p 9300:9300  
            -e "http.host=0.0.0.0"  
            -e "transport.host=0.0.0.0"  
            -e "discovery.zen.ping.unicast.hosts=..."  
            docker.elastic.co/elasticsearch/elasticsearch
```


Zombies

ideas that should have been killed
by evidence, but keep shambling
along

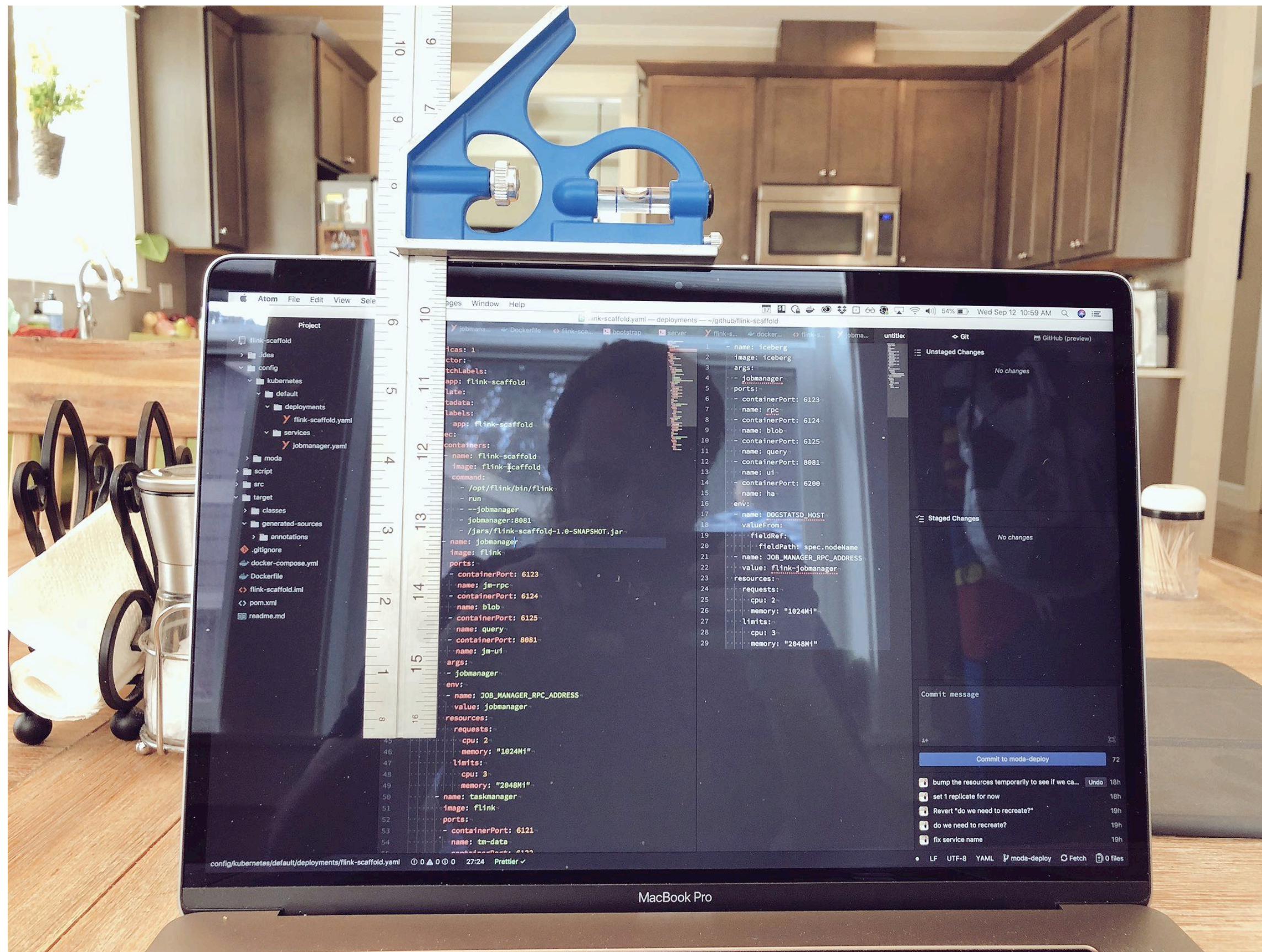
Run Elasticsearch as
root

Cockroaches

claims that disappear for a while
when proved wrong, but just keep
on coming back

Make JAR not WAR

YAML



<https://twitter.com/Caged/status/1039937162769096704>

One more thing
Serverless

A man with a shaved head, wearing a grey zip-up hoodie, is shown from the chest up. He is making peace signs with both hands, holding up two fingers on each hand. The word "Serverless" is written in a large, black, serif font across the center of his chest. The background is a blurred indoor setting with some equipment and a large 'V' logo on the wall.

Serverless



Vijay Bandari

@vijaybandari

Follow



Replying to @kelseyhightower

Serverless car... you don't need to worry about engine and fuel... just sit inside and ride :)



WeirdNutDaily.com

*Yesterday I have bird and bee
discussion with junior devops for make
realize cloud instance is born of real
hardware.*

— [https://twitter.com/DEVOPS_BORAT/status/
289777231683788801](https://twitter.com/DEVOPS_BORAT/status/289777231683788801)



@cloud_opinion

Following



"Yes, we acknowledge that Serverless has Servers. Can we resume discussion on rest of the architecture?"



*I felt a great disturbance in the cloud,
as if millions of microservices suddenly
cried out in terror, and were suddenly
serverless.*

— [https://twitter.com/kennybastani/status/
858021145890762755](https://twitter.com/kennybastani/status/858021145890762755)

2016: Serverless Architecture

2017: Codeless Architecture

2018: Architectureless Architecture

— [https://twitter.com/benbjohnson/status/
746049032699600897](https://twitter.com/benbjohnson/status/746049032699600897)

*by 2025, 30% of net new technical
debt will be serverless*

— <https://twitter.com/mstine/status/972207185005633536>

PaaS reborn?

If your PaaS can efficiently start instances in 20ms that run for half a second, then call it serverless.

— <https://twitter.com/adrianco/status/736553530689998848>

*Every vendor that can't compete in
Cloud chooses "Hybrid" as their
strategy – Opinion's law of Cloud.*

— [https://twitter.com/cloud_opinion/status/
594215778947362816](https://twitter.com/cloud_opinion/status/594215778947362816)

P R I D E





Pride

is identified as believing that one is essentially better than others.

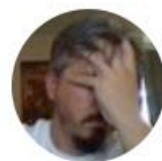
WORKED FINE IN DEV

**OPS PROBLEM
NOW**

*"I know, we need
DevDevOpsOps!"*

— [https://twitter.com/
agile_memes/status/
1019694518050754560](https://twitter.com/agile_memes/status/1019694518050754560)





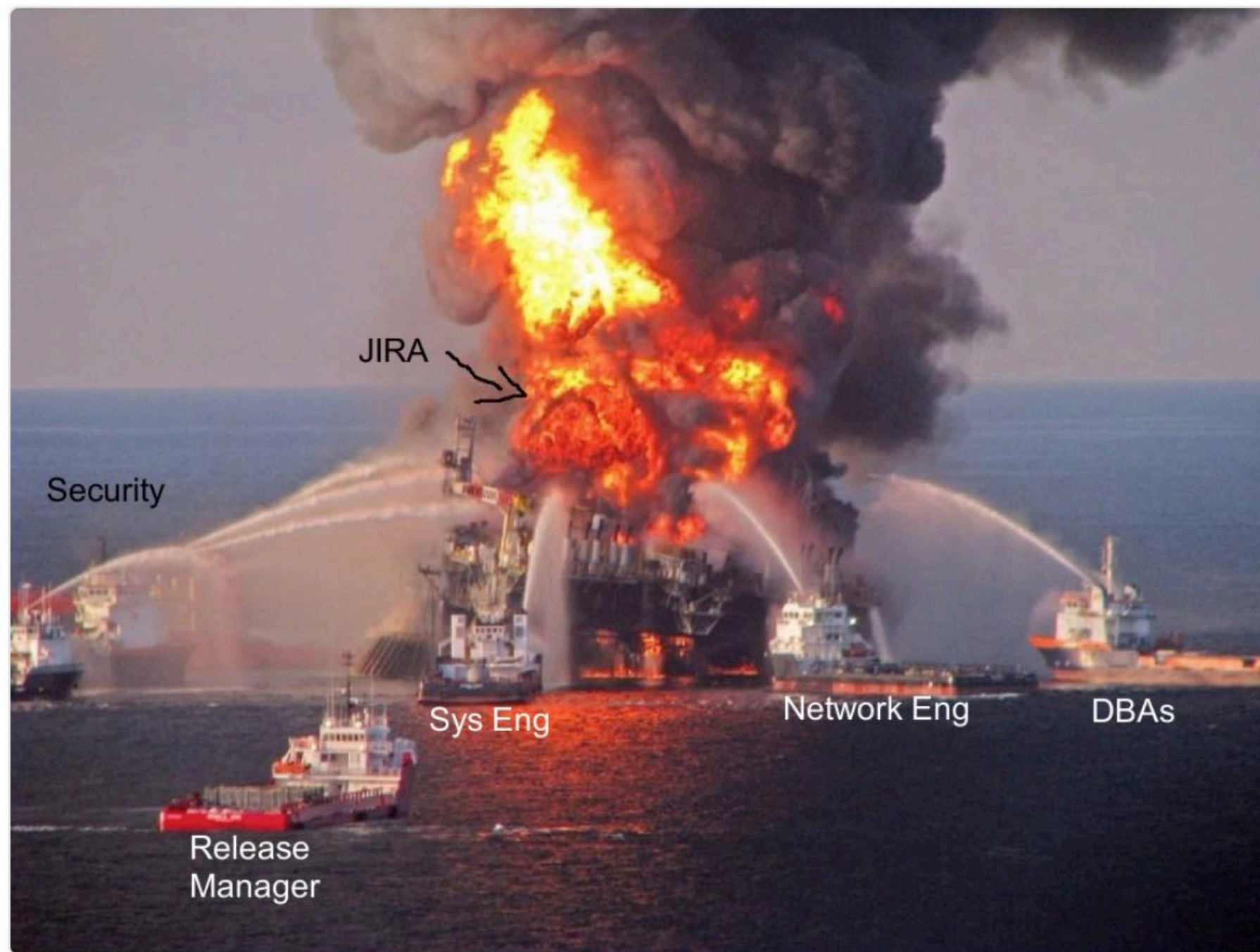
Czarcloudski

@pczarkowski

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Enterprise DevOps



DevOps is not a
tool | certificate | job title | team

WE DO DEVOPS ALREADY

**JUST WITHOUT AGILE,
STANDUPS, CI, CODE OR ANY OF
THAT OTHER HIPSTER STUFF**

SO YOU CREATED A DEVOPS TEAM



TO SOLVE YOUR SILO PROBLEMS

To make error is human. To propagate error to all server in automatic way is #devops.

— https://twitter.com/DEVOPS_BORAT/status/41587168870797312

DevOps is a software engineering culture and practice of putting horrors into containers and then talking about Kubernetes at conferences.

— <https://twitter.com/sadserver/status/1011652439303262208>



Envy

is the discontent towards someone's traits, status, abilities, or rewards.

Craft everything
yourself!

Infrastructure

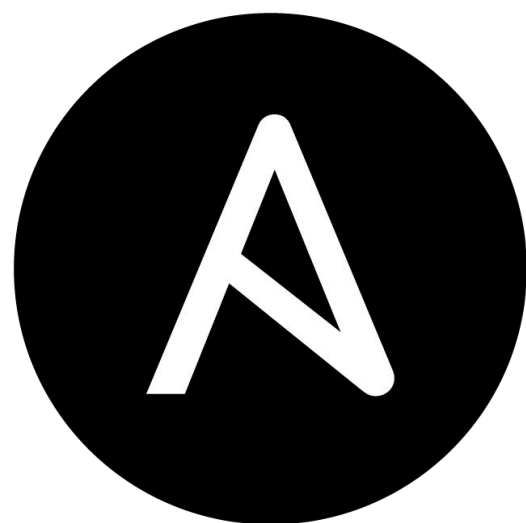


VS



*All my servers are cattle ... except for
the redis instance. That one gets
health care and Christmas gifts.*

— <https://twitter.com/ajordens/status/801847570259509248>



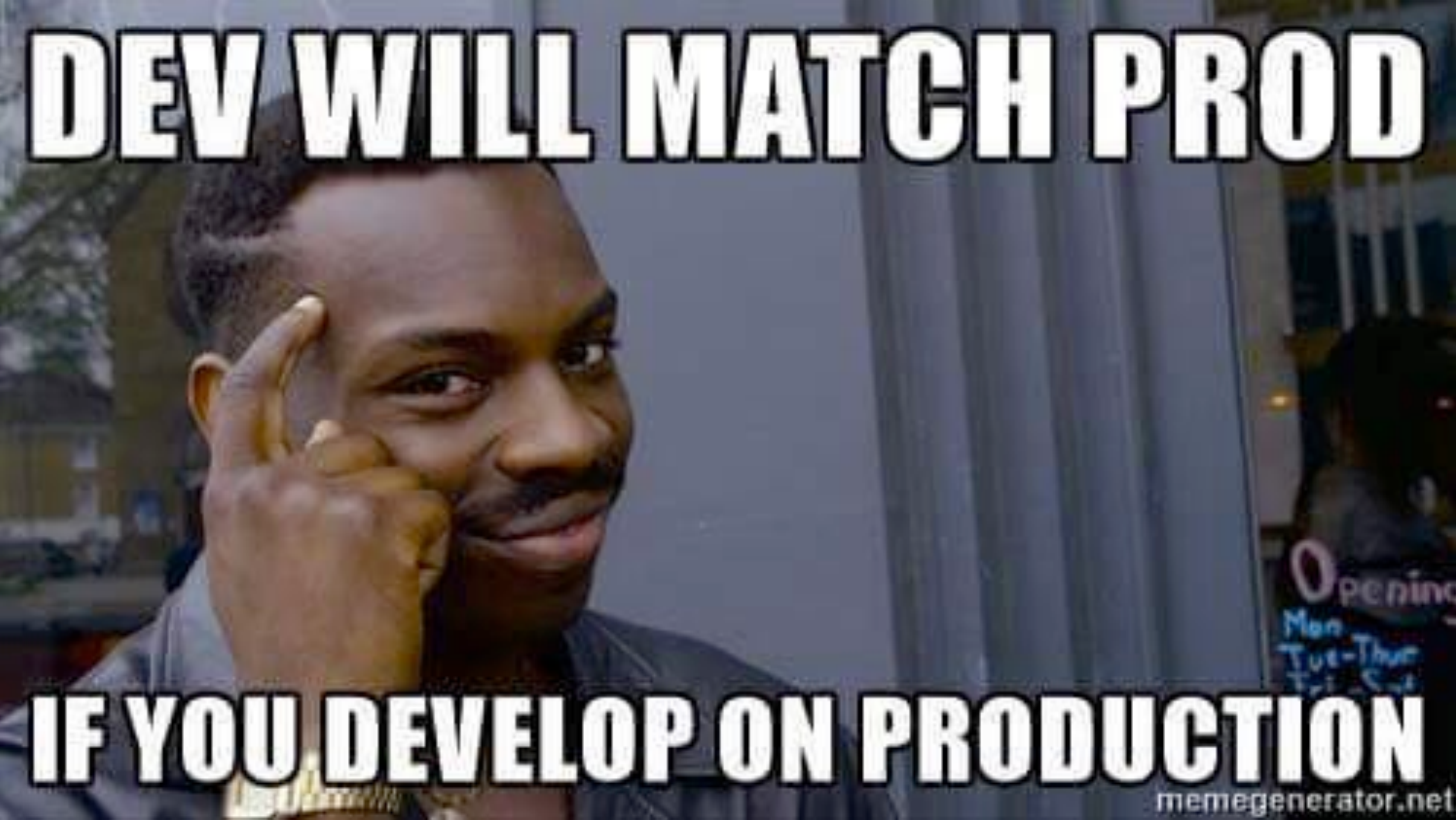
AUTOMATE



"Every company has a test environment. Some are lucky enough to also have a production environment."

— <https://twitter.com/lowrykoz/status/1017850159198294022>

Avoid Drift



DEV WILL MATCH PROD

IF YOU DEVELOP ON PRODUCTION

I like the "ssh tags the instance for garbage collection" model as a step; it lets you migrate a team to new habits.

— <https://twitter.com/ferlatte/status/905984786082050048>



Wrath

also known as "rage", may be described as inordinate and uncontrolled feelings of hatred and anger.

*How I Hacked My Morning Routine:
I wiped a production database and
now I am 100% definitely awake*

— [https://twitter.com/iamdeveloper/status/
1034824761833136128](https://twitter.com/iamdeveloper/status/1034824761833136128)

**I DON'T ALWAYS MONITOR MY
NETWORK**

BUT I SHOULD

memegenerator.net

How do you monitor your system?

End users.

UDP : User Distress Protocol.

— <https://twitter.com/thisisvibs/status/1022323915417210880>

pretty awesome when monitoring tools say zero overhead. Might as well say negative overhead.. I mean if you are going to lie at least add value!

— <https://twitter.com/adrianfcole/status/1024140189331906560>

Apache - Total Visitors

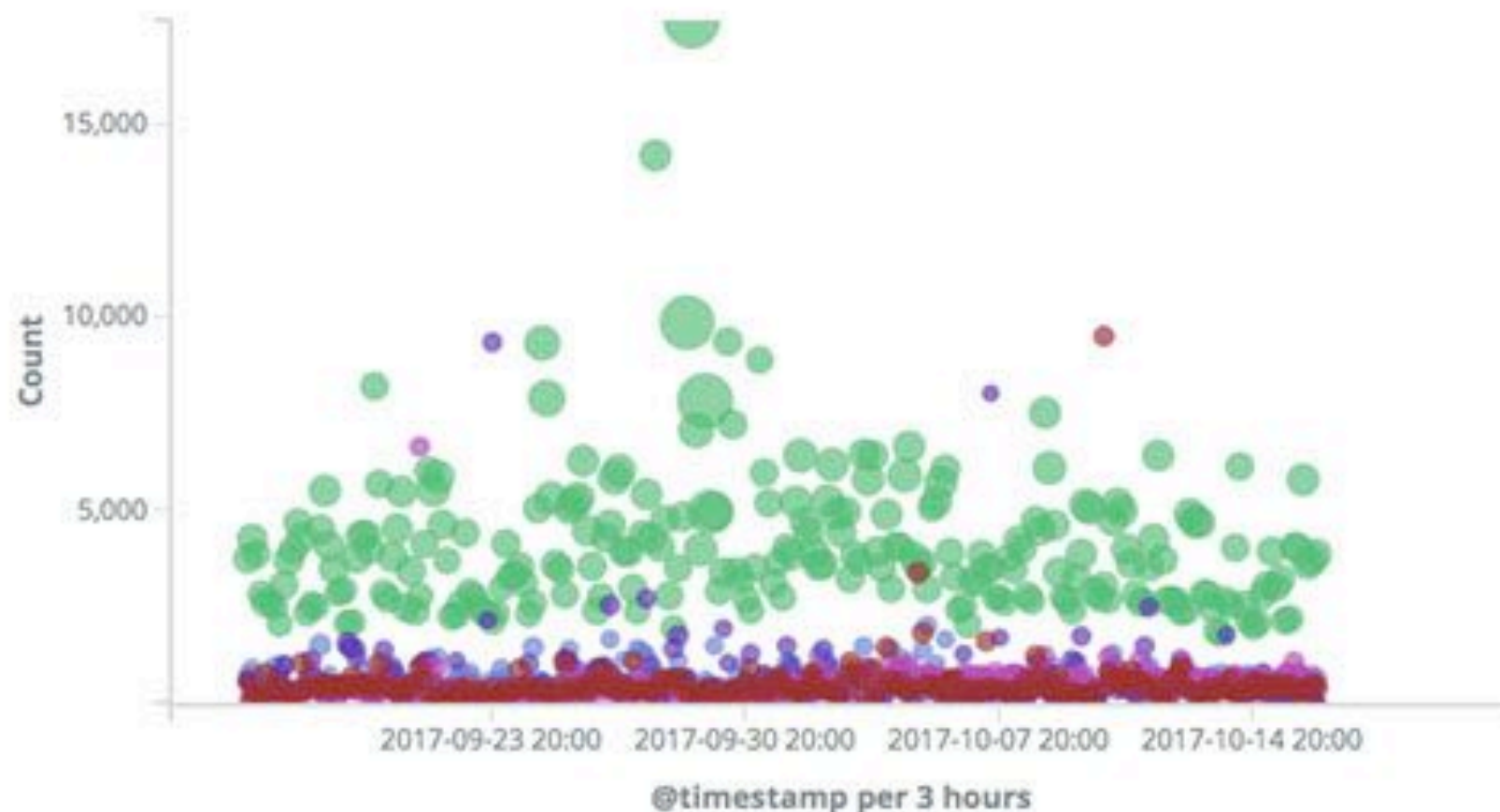
2,317,838

Apache - Unique Visitors

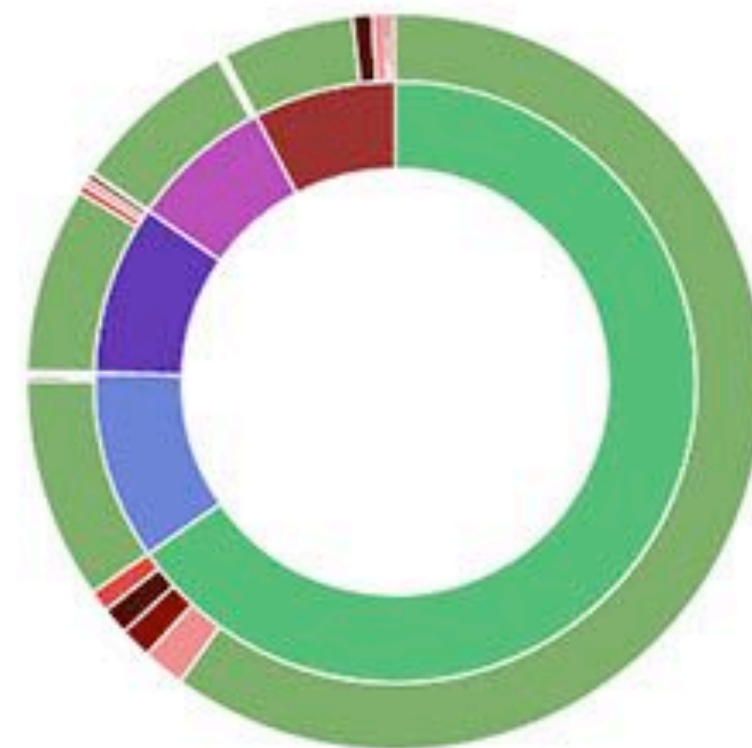
29,740

Apache - Bytes and Count

US FR DE NL CN



Apache - Country and Status

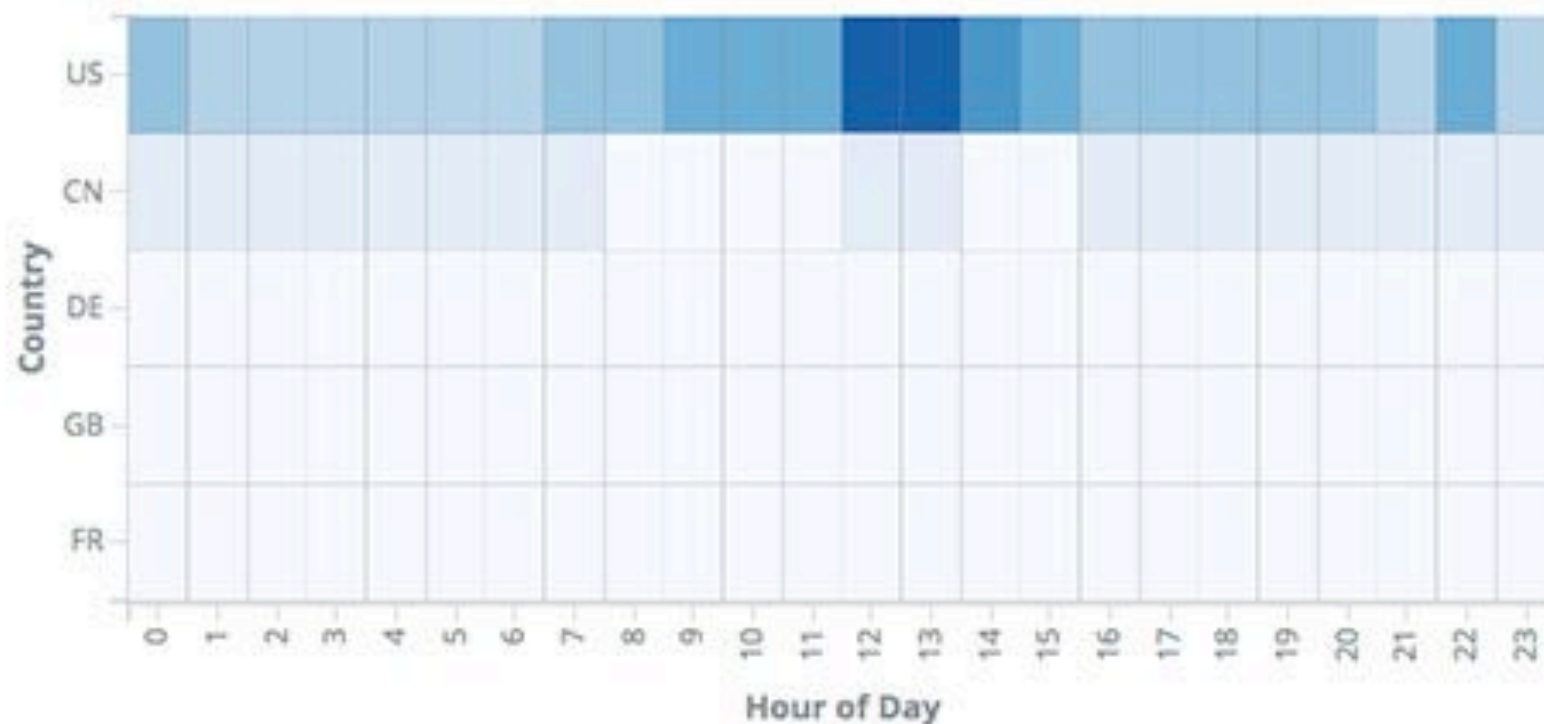


Apache - Unique Visitor...

City	Count of Unique Clients
------	-------------------------

Beijing	569
Ashburn	397
Redmond	383
Chicago	379
London	248
Los Angeles	232

Apache - Country traffic by hour

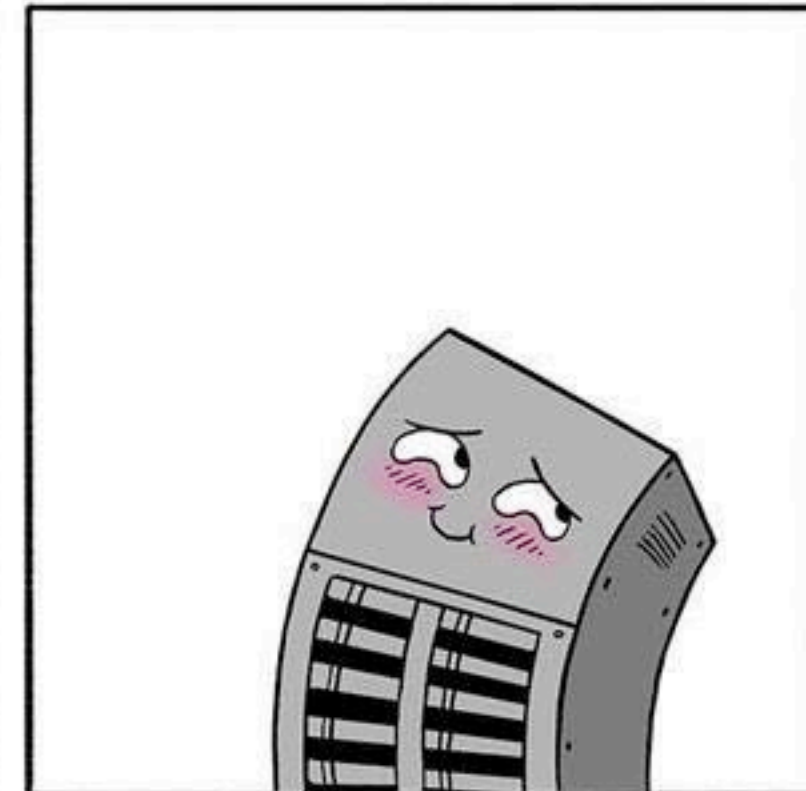
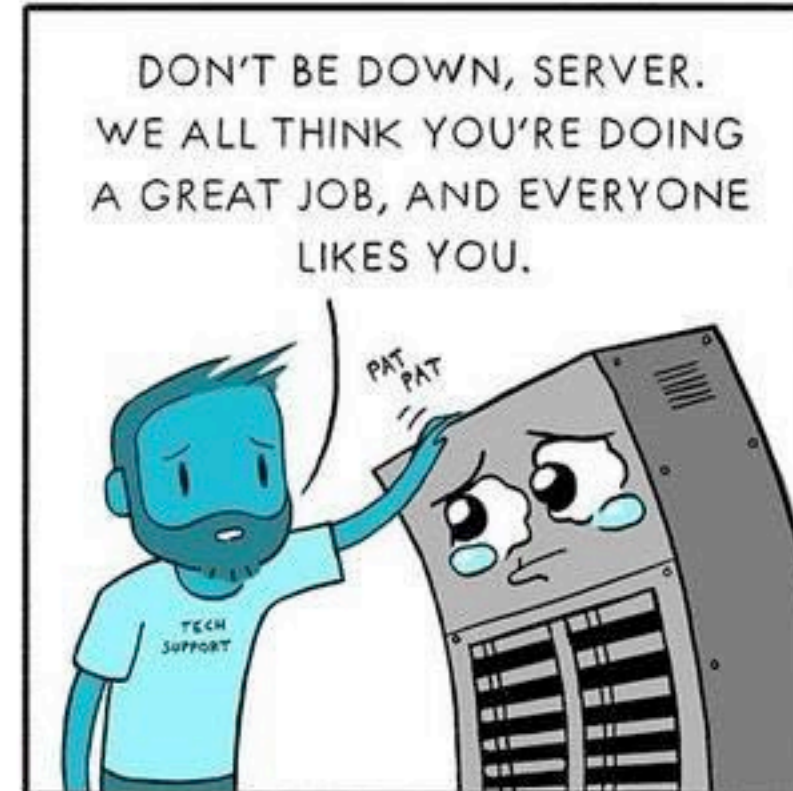


Apache - Top OS small



What we really do when a server is down. #DevOps

— <https://twitter.com/mattiasgeniar/status/1039892272643489792>



Conclusion

What did we learn today?
It depends...

*A good developer is like a werewolf:
Afraid of silver bullets.*

— [https://twitter.com/codepitbull/status/
784691906005635072](https://twitter.com/codepitbull/status/784691906005635072)

Think back five years ago. How many technical opinions did you deeply hold which you now repudiate? Now think about the present. How many opinions do you deeply hold today?

We are always in a state of progressive wrongness. Don't cling too tightly to what you believe today.

— <https://twitter.com/djspiewak/status/1040247203648819200>

1. ~~Gluttony~~

2. ~~Greed~~

3. ~~Sloth~~

4. Envy

5. Wrath

6. Pride

7. Lust

Questions?
Confessions?

@xeraa