



***DEVOPS FOR  
DEVELOPERS...  
OR MAYBE AGAINST THEM?***



24



Posted by [u/ThePoetWalsh57](#)

## Just got my first job in devops. What exactly is devops?

Title explains itself really. What am I in for? I used to work as a software engineer but recently got moved to a devops position.



# CONSPIRACY THEORY?!

DETACHED FROM REALITY

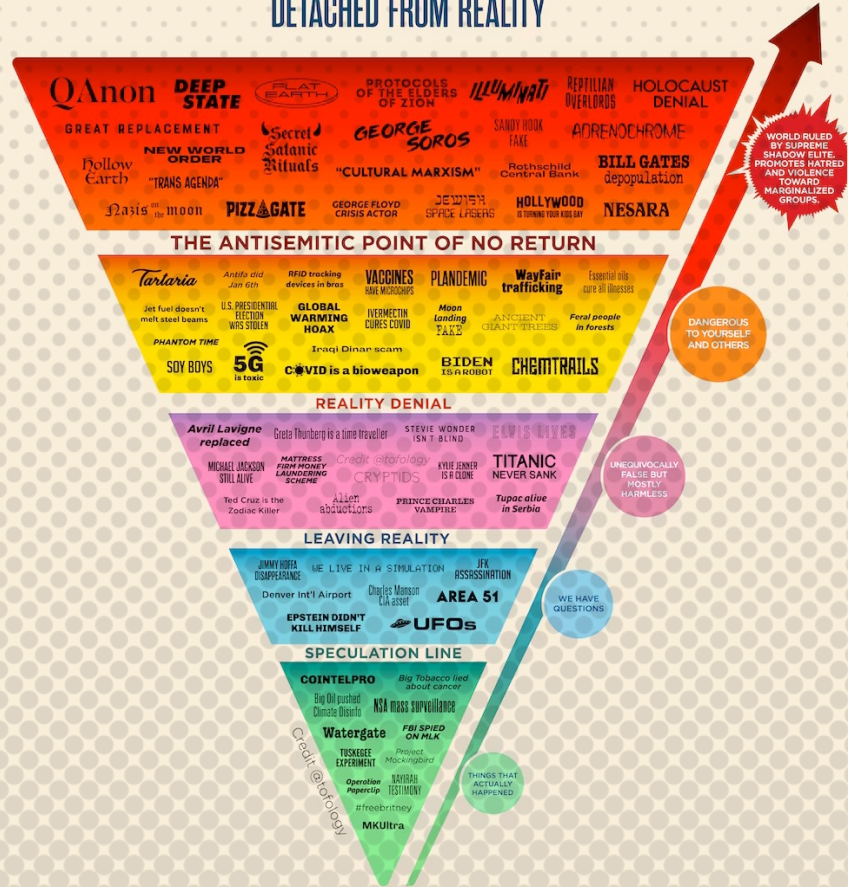


CHART BY ABBIE RICHARDS

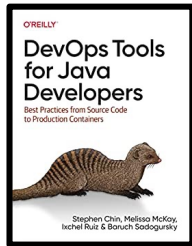
GROUNDED IN REALITY

***DEVOPS IS A  
CONSPIRACY BY OPS  
PEOPLE TO MAKE US,  
THE DEVELOPERS,  
DO THEIR JOB***



# **BARUCH SADOGURSKY - @JBARUCH**

- × Developer Productivity Advocate
- × Gradle Inc
- × Development → DevOps → #DPE



## ***SHOWNOTES***

- × [speaking.jbaru.ch](https://speaking.jbaru.ch)
- × Slides
- × Video
- × All the links!





## AlphaCSP

6 yrs 1 mo

- **Training Division Manager**

Jan 2007 - Oct 2010 · 3 yrs 10 mos

- Development and delivery of most of AlphaCSP courses on different Java-related topics and in different levels;  
Among the customers: IDF, Cisco, IDI direct insurance, Rafael, PayPal, Opal, BMC, Malam, Checkpoint, HP Software and others.
- Development and delivery Artifactory training for JFrog customers world-wide;  
Among the customers: Cisco, Sita, Ansys and others.
- JTeam – Extremely successful internal training program in AlphaCSP – ¼ of AlphaCSP personnel are JTeam alumni.
- Java department technical lead at MalamTeam Training Center – development and delivery of all Java courses.
- Named one of the best speakers in all AlphaCSP events through the years.

- **Consultant & Architect**

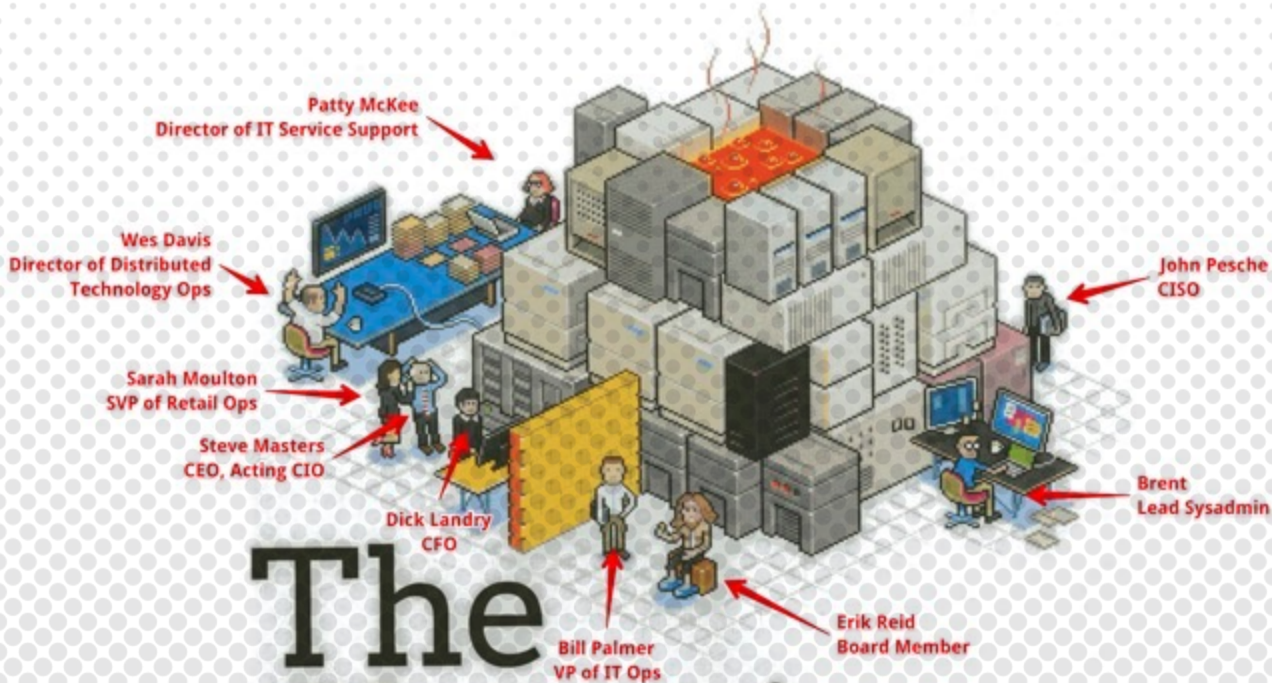
Jan 2007 - Oct 2010 · 3 yrs 10 mos

Consulting, building architectures and design, mentoring, and developing in various Java-related projects on the topics, described in Specialties section above;  
Among the customers: BMC, Logia, IDF, Starhome (Comverse), Malam, Cisco, IDI, IDIT, Isracard, Virtual Tweens, Amobee, SolarEdge, Checkpoint, Cadence, Evolgen, ExLibris, Retalix, Schema, Time To Know and others.

- **Senior Developer**

Oct 2004 - Jan 2007 · 2 yrs 4 mos

Working on various projects in BMC Software Israel



# The Phoenix Project

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SPEAKING.JBARUCH



***NOT A SINGLE  
DEVELOPER!***



*@JBARUCH*

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*

About 350,000,000 results (0.40 seconds)



Amazon.com

<https://aws.amazon.com> › devops › what-is-devops

## What is DevOps? - DevOps Models Explained

DevOps is the combination of cultural philosophies, practices, and tools that increases an organization's ability to deliver applications and services at ...

[AWS DevOps Competency](#) · [What is Continuous Integration?](#)



Atlassian

<https://www.atlassian.com> › devops

## What is DevOps?

DevOps is a set of practices, tools, and a cultural philosophy that automate and integrate the processes between software development and IT teams.



GitLab

<https://about.gitlab.com> › topics › devops

## What is DevOps?

DevOps is a combination of software development (dev) and operations (ops). It is defined as a software engineering methodology which aims to integrate the work ...

[Continuous Delivery \(CD\): Continuous deliver...](#) [Agile: Agile development means taking iter...](#)

[Continuous Integration \(CI\): The practice of re...](#) [Version control: The fundamental practice o...](#)

[DevOps explained](#) · [The four phases of DevOps](#) · [The DevOps lifecycle and how...](#)



Microsoft

<https://learn.microsoft.com> › en-us › what-is-devops

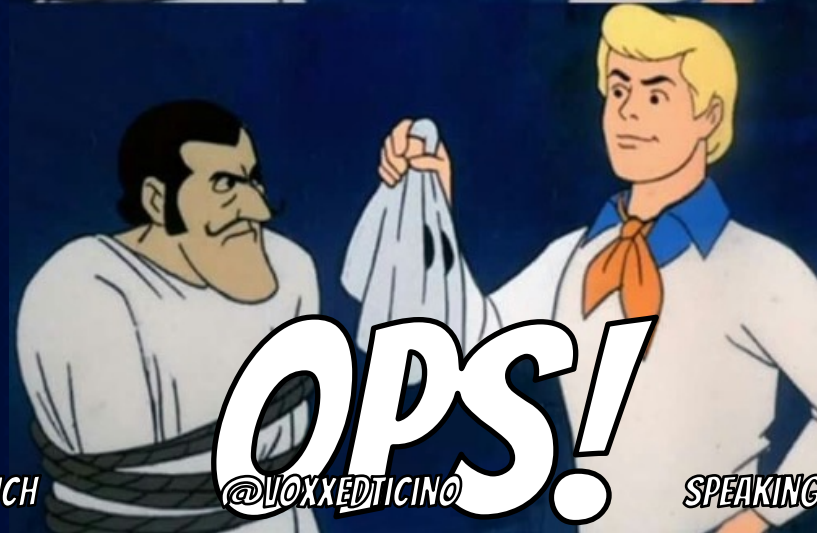
## What is DevOps?

Jan 25, 2023 — DevOps enables coordination and collaboration between formerly siloed roles like development, IT operations, quality engineering, and security.

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SPEAKING.JBARUCH



@JBARUCH

@LOXXEDTICINO

SPEAKING.JBARU.CH

**Y THO...**



**@JBARUCH**

**@VOXXEDTICINO**

**SPEAKING.JBARU.CH**



## As a Linux system administrator, how do I shift my career to DevOps?



**Disha Rathod**

DevOps Online Trainer (2013–present) · 5y

Hi,

Being a Linux administrator will help you to easily get started with DevOps because it starts with learning Linux fundamentals, DevOps also includes cloud computing concepts like AWS. More importantly DevOps is all about tools, it comes with hundreds of tools. **Gits**, Chef, Maven, Jenkins, Puppet, Docker are modern and most popular DevOps tools.

So in order to move into DevOps industries you should have prominent knowledge following concepts

1. Linux Fundamental; Shell Scripting
2. Cloud Computing (AWS)
3. DevOps Fundamentals
4. Software Development Life Cycle
5. Continuous Integration, Deployment, and Delivery.

# System Administrator Salary

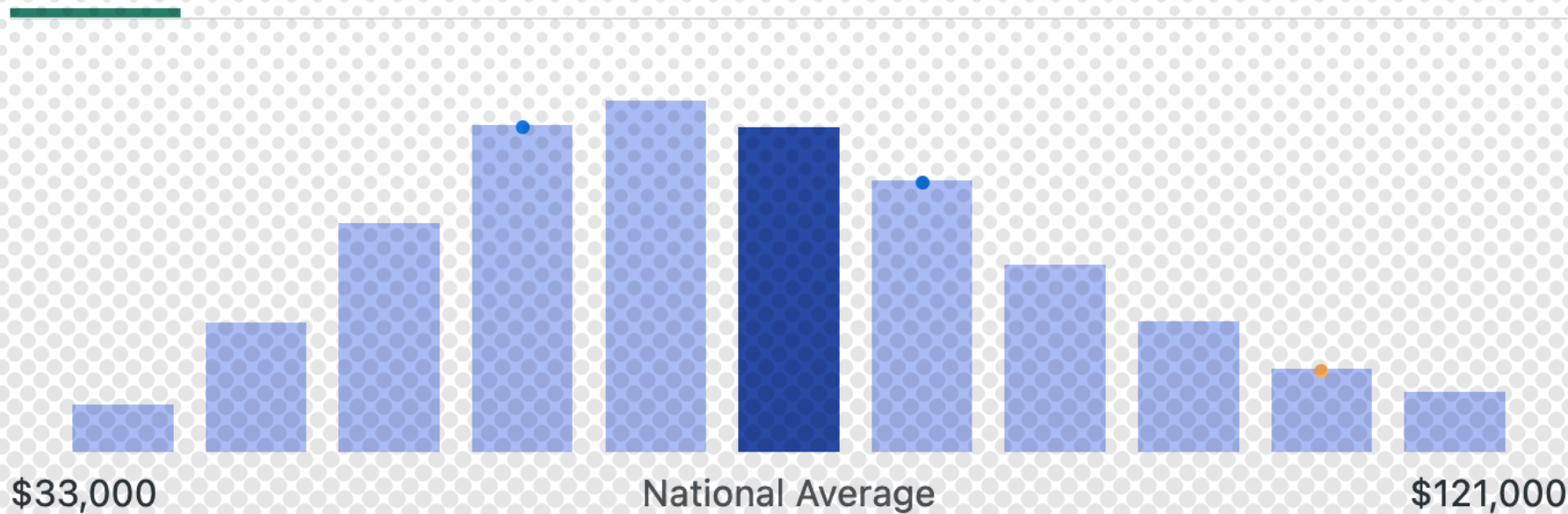
Yearly

Monthly

Weekly

Hourly

Table View



\$33,000

National Average

\$121,000

**\$76,644** /year

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*@VOXXEDITCINO*

*SPEAKING.JBARUCH*

\$/hour

# Devops Engineer Salary

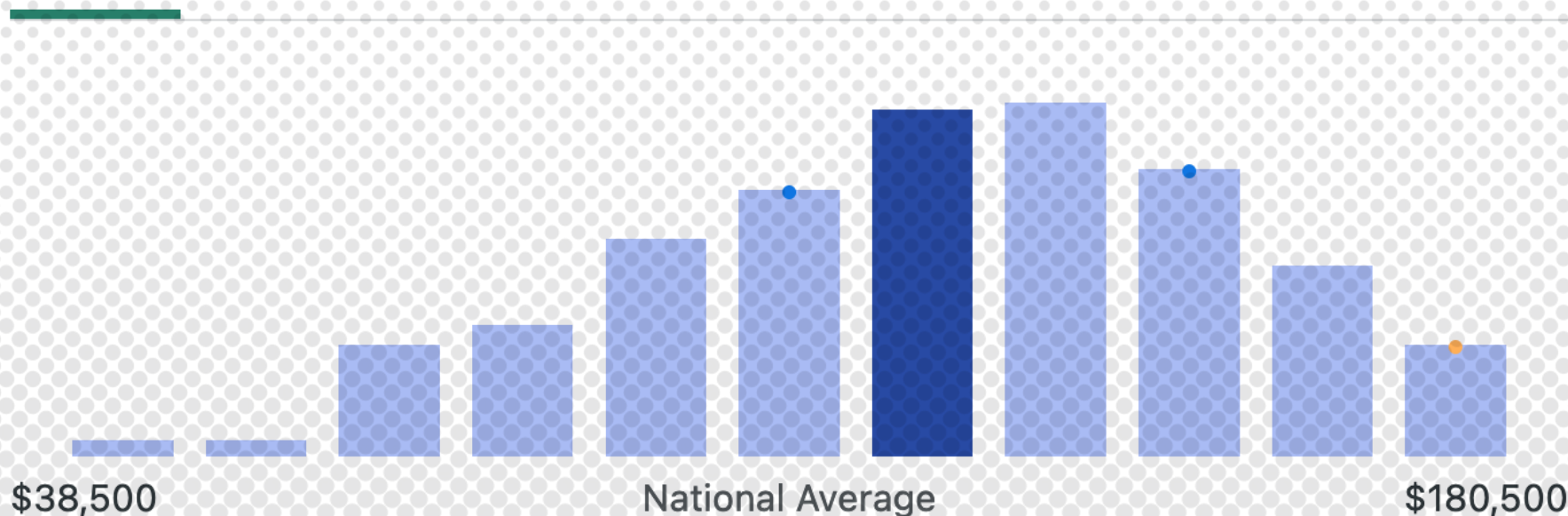
Yearly

Monthly

Weekly

Hourly

Table View



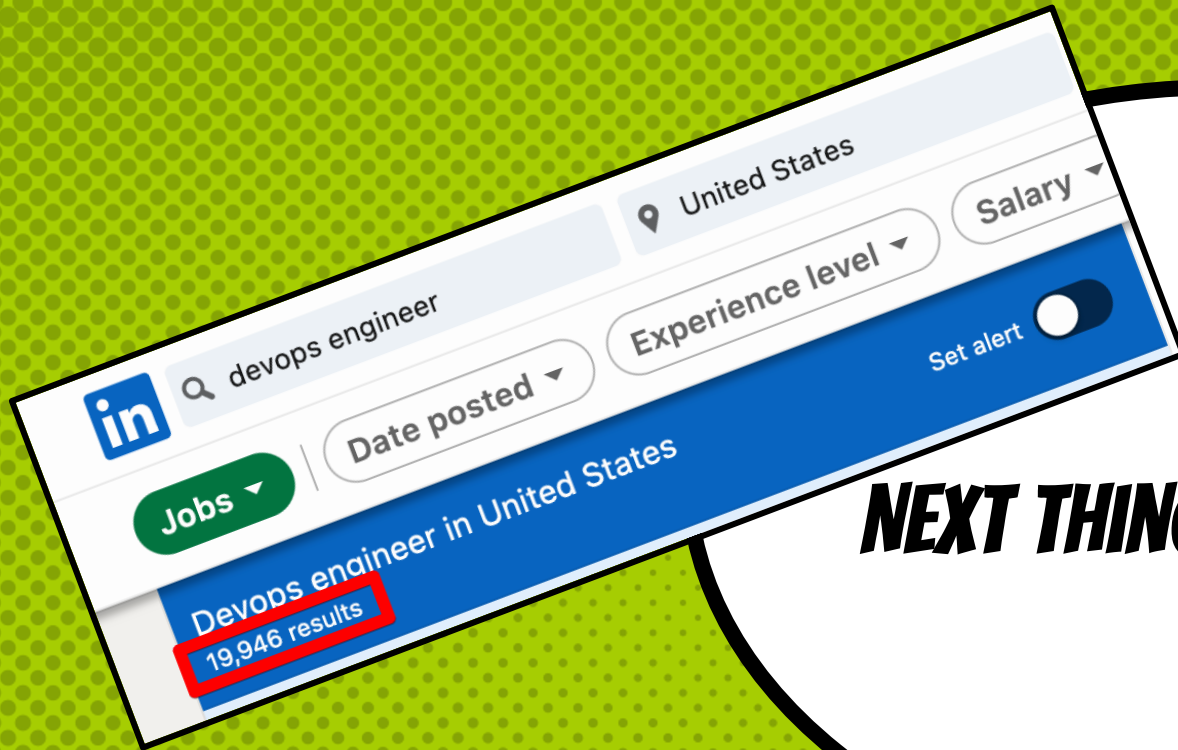
**\$127,036** /year

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*SPEAKING.JBARUCH*

\$51/hour



***NEXT THING YOU KNOW...***





**AND THIS:**

*@JBARUCH*

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*

**RAGE!**

**(BUT WE'LL GET  
TO IT LATER)**



A man wearing a white surgical cap and a light blue surgical mask is shown from the chest up. He is looking slightly to his right with a thoughtful expression. The background is a blurred indoor setting, possibly a hospital or laboratory.

*@JBARUCH*

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*



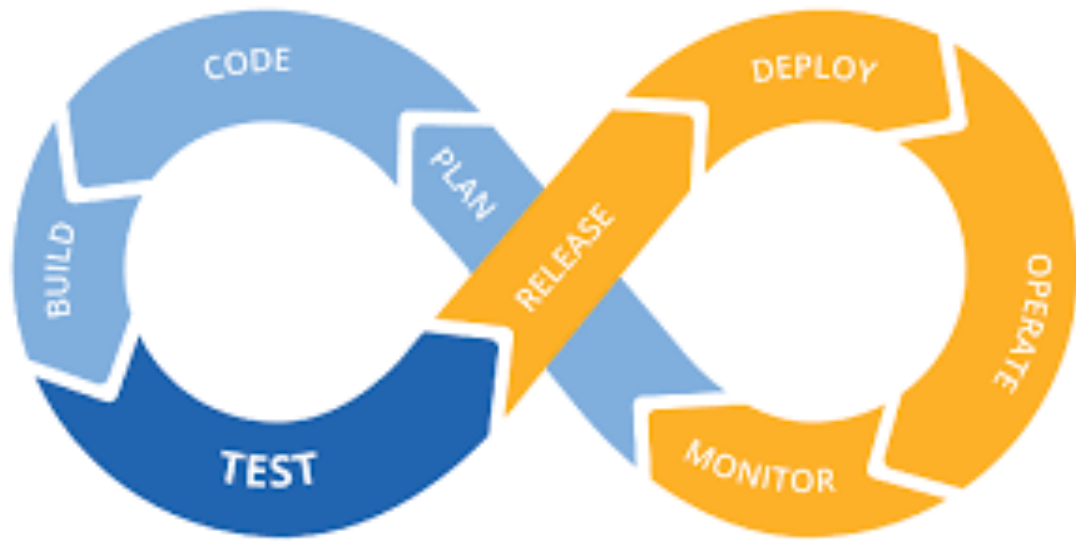
**BBC** NEWS | MUNDO

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Parrot learns how to ask “Why?” repeatedly and is promoted to Engineering Manager

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*





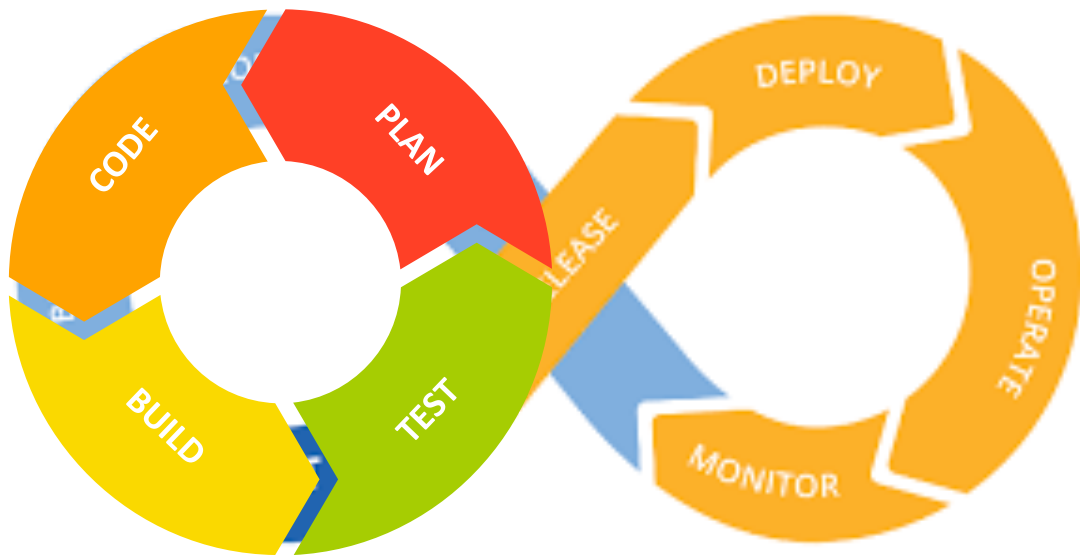
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*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*



# AGILE!



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2024

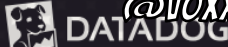
Google Cloud

# Accelerate State of DevOps

Gold Sponsors



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<b>Time Spent</b>	<b>Elite</b>	<b>High</b>
<b>NEW WORK</b>	<b>50%</b>	<b>50%</b>
<b>Unplanned work and rework</b>	19.5%	20% <sup>a</sup>
<b>Remediating security issues</b>	5%	5% <sup>b</sup>
<b>Working on defects identified by end users</b>	10%	10% <sup>c</sup>
<b>Customer support work</b>	5%	10%

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## ***TYPES OF WORK ACCORDING TO DEVOPS***

Planned Work	Business projects or new features
Internal Projects	Server migrations, software updates and so on
Changes	Driven by feedback on completed work
Unplanned Work	Support escalations and emergency outages

**SO  
FASCINATING...**



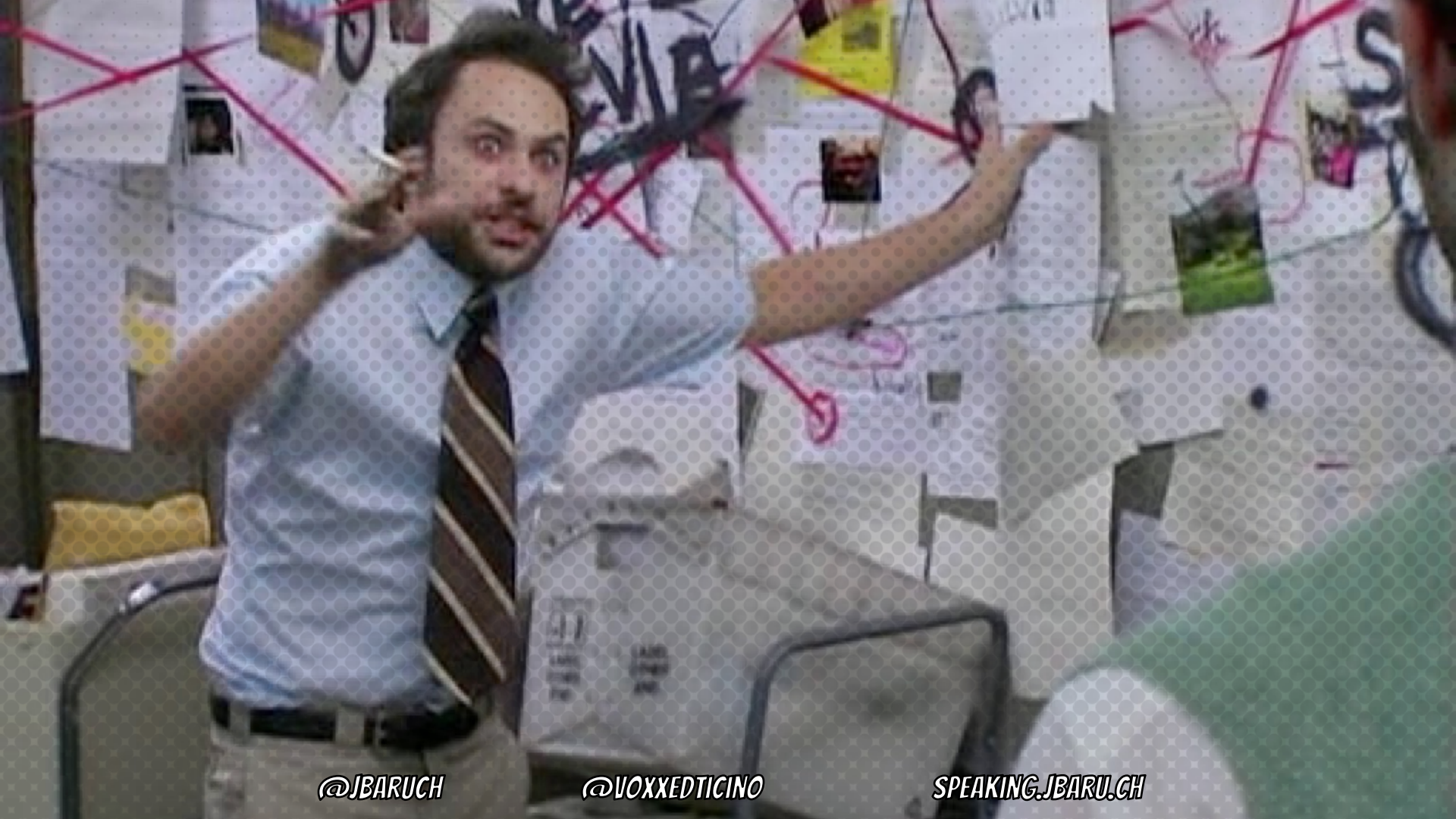
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*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*

## ***TYPES OF WORK ACCORDING TO DEVELOPERS***

New Features	Writing code
Refactoring	Writing code
Bug Fixes	Writing code



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# Manifesto for Software Craftsmanship

Raising the bar.

As aspiring Software Craftsmen we are raising the bar of professional software development by practicing it and helping others learn the craft. Through this work we have come to value:

Not only working software,  
but also **well-crafted software**

Not only responding to change,  
but also **steadily adding value**

Not only individuals and interactions,  
but also **a community of professionals**

Not only customer collaboration,  
but also **productive partnerships**

That is, in pursuit of the items on the left we have found the

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the right to b @VOXXEDTICINO

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*@JBARUCH*

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*



## ***SOFTWARE CRAFT-PERSON DEFINITION OF DONE***

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- × Product owner is happy - (i.e. customer is happy)

DEVELOPER



TESTER



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**TRACTORMEN, IMPROVE THE QUALITY OF TRACTOR-TRAILER TRACKING!**

INTERNET ARCHIVE

Wayback Machine

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*SPEAKING.JBARUCH*

Start banking online now  
Get a User ID

GO



IT'S MORE THAN FREE.

Get the Details

Returning Users: Log On

User ID:

Password:

Remember my User ID

[Forgot User ID/Password?](#)

Log On



Security Center Highlights

Chase helps keep you safe and informed.

- Enhanced online security to help prevent fraud.
- Scams involving advance fees and cashier's check.
- Online fraud and e-mail scams
- Ways we protect you
- How you can protect yourself

Personal Banking

- Checking
- Credit Cards
- Savings
- CDs
- Debit Cards
- Online Banking & Bill Pay

Business

- Business Banking  
Revenues up to \$10MM
- Commercial Banking  
Revenues over \$10MM
- Business Credit Cards

Personal Lending

- Home Equity  
Loans & Lines
- Mortgage
- Auto/Vehicle Loans
- Student Loans

Insurance & Investing

- Insurance
- Investing
- Retirement Planning

Enter the Chase  
"Log On to Cash In"  
Sweepstakes.

DETAILS

GET MORE  
CASH BACK.

Click to  
LEARN MORE.

Tell me about...

- Premier Platinum Banking  
Exclusive banking and investment benefits for clients with higher balances

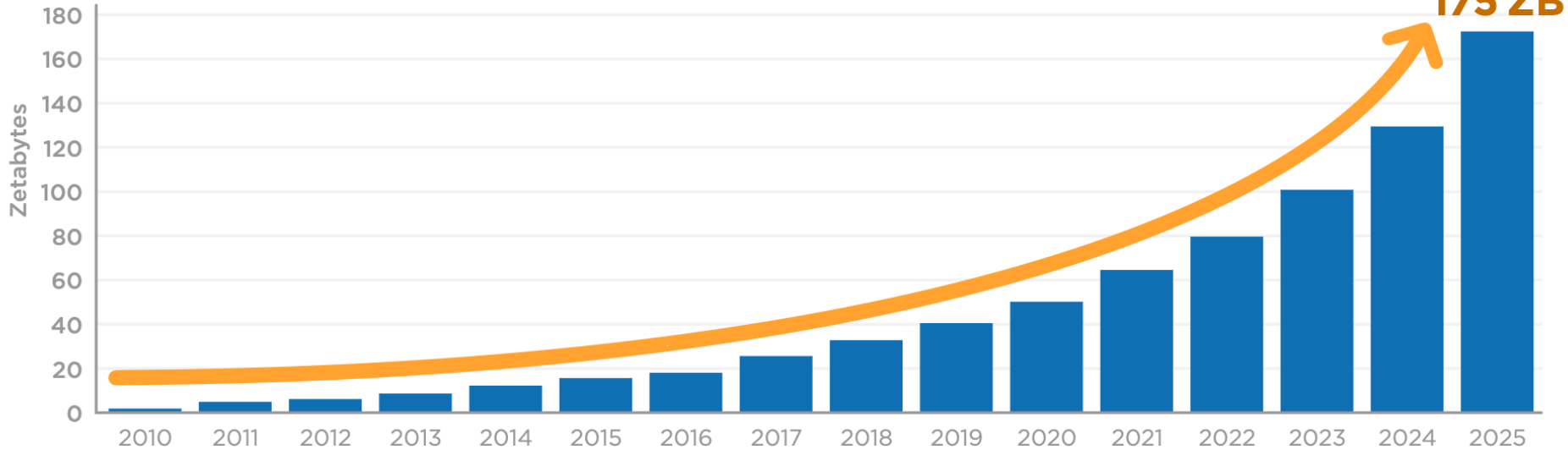
News & Announcements

- U.S. Armed Forces Overseas  
Please contact us if you need assistance with your Chase accounts.
- Chase offers Zero-Fees!  
For academic year 2007-2008 the origination fee will be paid on all Federal Stafford Loans that Chase funds directly to students.
- Fair Lending & HMDA Data
- Chase Clear & Simple Expands

12 HOURS MAINTENANCE FOR WEBSITE UPDATE TO ENSURE QUALITY

# CODE QUALITY IS NOT ENOUGH

Annual Size of the Global Datasphere



Source: Data Age 2025, sponsored by Seagate with data from IDC Global DataSphere, Nov 2018

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## Zettabyte Era

🌐 4 languages ▾

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From Wikipedia, the free encyclopedia

The **Zettabyte Era** or **Zettabyte Zone**<sup>[1]</sup> is a period of human and [computer science](#) history that started in the mid-2010s. The precise starting date depends on whether it is defined as when the global [IP traffic](#) first exceeded one [zettabyte](#), which happened in 2016, or when the amount of digital data in the world first exceeded a zettabyte, which happened in 2012. A zettabyte is a multiple of the unit [byte](#) that measures digital storage, and it is equivalent to 1,000,000,000,000,000,000 (10<sup>21</sup>) bytes.<sup>[2]</sup>

According to [Cisco Systems](#), an American multinational technology conglomerate, the global IP traffic achieved an estimated 1.2 zettabytes in 2016, an average of 96 [exabytes](#) (EB) per month. Global IP traffic refers to all digital data that passes over an IP network which includes, but is not limited to, the public Internet. The largest contributing factor to the growth of IP traffic comes from video traffic (including online streaming services like [Netflix](#) and [YouTube](#)).<sup>[3][4]</sup>

The Zettabyte Era can also be understood as an age of growth of all forms of digital data that exist in the world which includes the public Internet, but also all other forms of digital data such as stored data from security cameras or voice data from cell-phone calls.<sup>[5]</sup> Taking into account this second definition of the Zettabyte Era, it was estimated that in 2012 upwards of 1 zettabyte of data existed in the world and that by 2020 there would be more than 40 zettabytes of data in the world at large.<sup>[6]</sup>

The Zettabyte Era translates to difficulties for [data centers](#) to keep up with the explosion of data consumption, creation and replication.<sup>[7]</sup> In 2015, 2% of total global power was taken up by the Internet and all its components, so [energy efficiency](#) with regards to data centers has become a central problem in the Zettabyte Era.<sup>[8]</sup>



STAGING SERVER

JOLLY WHERE THE TIMES  
WHEN WE COULD TEST EVERYTHING  
BEFORE DEPLOYING TO PRODUCTION

1985 - 2015

***WHAT DO WE DO?!***



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[@VOXXEDTICINO](#)

[SPEAKING.JBARUCH](#)



**PRODUCTION STEAMS ITS WAY TO THE DEVELOPERS!**

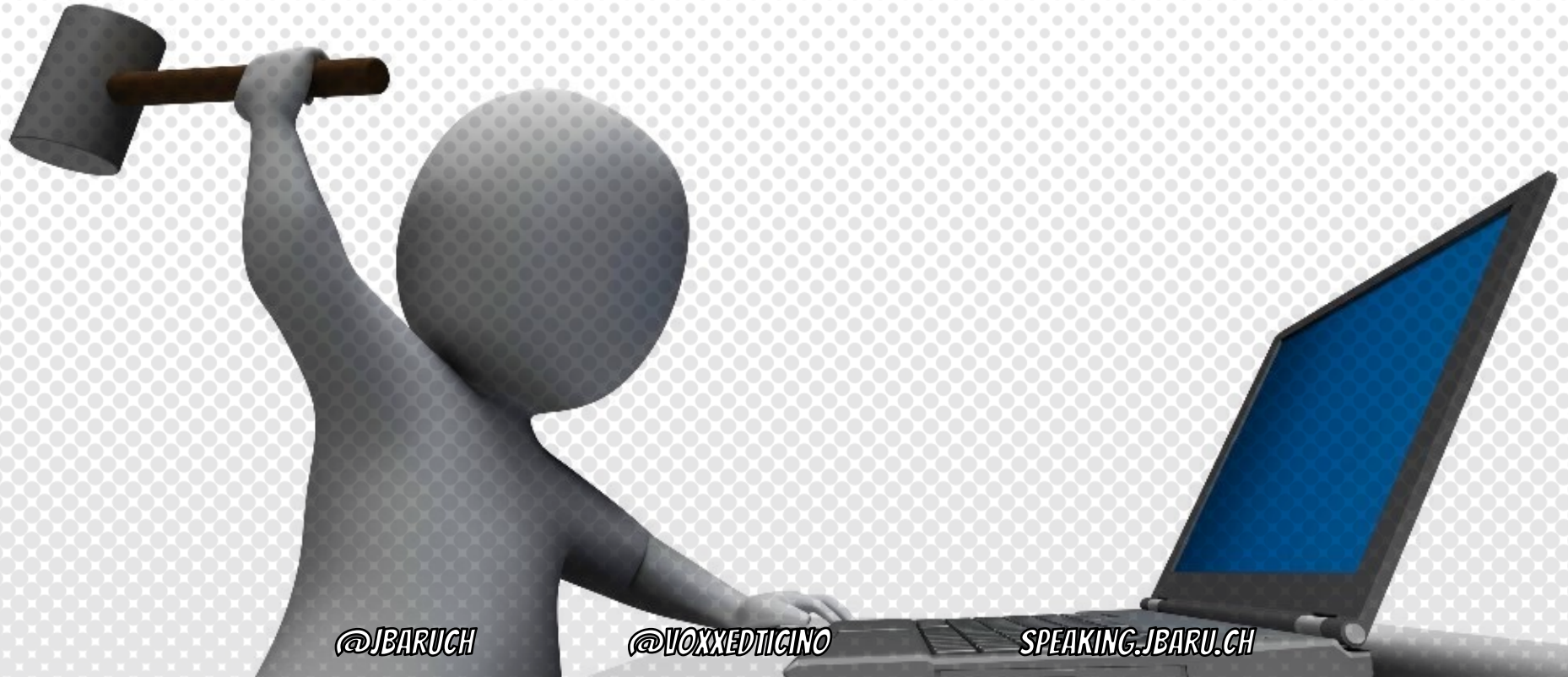


**WELCOME TO ON-CALL!**

## ***SOFTWARE CRAFT-PERSON DEFINITION OF DONE***

- × We got what they want
- × Clear code
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- × Non-func reqs - ✓
- × No new tech dept
- × Tests - ✓
- × QA are happy
- × Team lead is happy
- × Product owner is happy - (i.e. customer is happy)
- × DevOps are ready

WHO IS THIS "DEVOPS" PERSON?!



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# HELLO!



I am Baruch and I have an obsession

*@JBARUCH*

*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*





***"DEVOPS ENGINEER"  
IS NOT A THING***

***@JBARUCH***

***@VOXXEDTICINO***

***SPEAKING.JBARU.CH***

A man with a bald head, wearing a grey jumpsuit, is shown from the chest up. He has a large black cylindrical object slung over his shoulders. He is making peace signs with both hands. He has a surprised or excited expression on his face. The background is a control room with various panels and lights.

**COLLABORATION ENGINEER**

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*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*



**WHAT YOU SEE WHEN  
YOU HEAR THE TERM  
"DEVOPS TEAM"**

[@JBARUCH](#)

[@VOXXEDTICINO](#)

[SPEAKING.JBARU.CH](#)

**WHAT I SEE WHEN  
I HEAR THE TERM  
"DEVOPS TEAM"**

Dystopian TV show  
about how  
in a ruined and toxic  
world thousands  
live in a giant silo.

THE TRUTH WILL SURFACE

**S I L O**

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**LET'S**

**BREAK DOWN THIS SILO!**

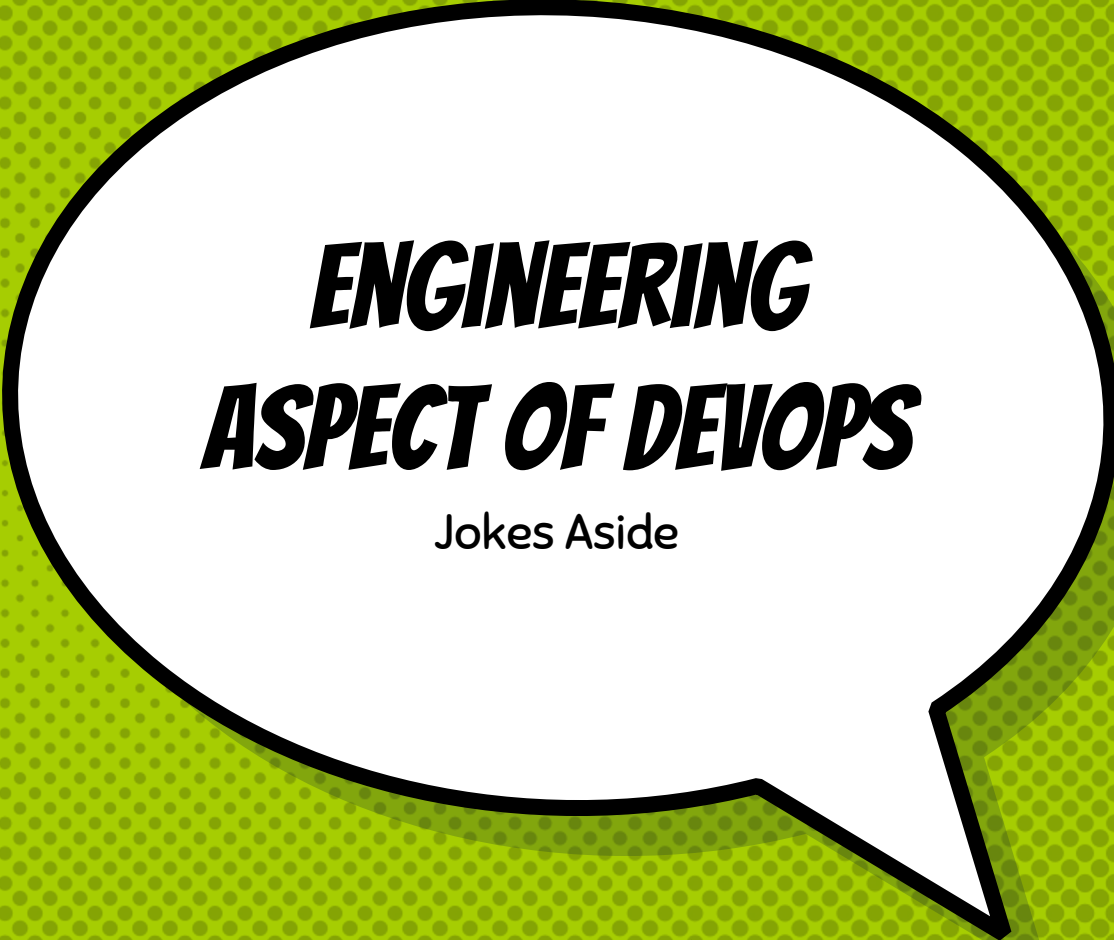
**THE RISE OF THE DEVDEVOPS!**

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***ENGINEERING  
ASPECT OF DEVOPS***

Jokes Aside

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*@VOXXEDTICINO*

*SPEAKING.JBARU.CH*



Class SRE implements DevOps.



**NO ONE WANTS TO BE A "SITE  
RELIABILITY ENGINEER"**

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***WELCOME TO OUR NEW LORD  
AND SAVIOR:  
"PLATFORM ENGINEERING"!***

***@JBARUCH***

***@VOXXEDTICINO***

***SPEAKING.JBARU.CH***

A diverse crowd of people, including men and women of various ethnicities, are shown in a state of high excitement. They have their arms raised and mouths wide open as if cheering or shouting. The background is slightly blurred, emphasizing the people in the foreground. The overall atmosphere is one of joy and celebration.

**EVERYBODY WANTS TO BE A  
"PLATFORM ENGINEER"**

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Jobs

Job description

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Salary

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Maps

Books

About 33,800,000 results (0.41 seconds)



The New Stack

<https://thenewstack.io> › Blog

## How Is Platform Engineering Different from DevOps and ...

Sep 16, 2022 — **Platform engineering** is the next stage of the **DevOps** evolution. It encompasses the best intentions of the cultural shifts that came before it.



TechTarget

<https://www.techtarget.com> › searchitoperations › tip › Pl...

## Platform engineering vs. DevOps: What's the difference?

Apr 13, 2023 — **DevOps** teams create the software, with a focus on accelerating delivery and enhancing quality, whereas **platform engineers** implement and manage ...

People also ask




what is platform engineering in one sentence



Platform engineering is the process of designing, building, and maintaining the underlying infrastructure, including software platforms, systems, and services, that software developers use to create and deploy applications more efficiently.





**PLATFORM  
ENGINEER**



**SRE**

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- × Team lead is happy
- × Product owner is happy - (i.e. customer is happy)
- × PEs are happy

# ***WHAT MAKES PLATFORM ENGINEERS HAPPY***

- × Modular
- × Deployable
- × Observable
- × Scalable
- × Upgradable
- × Downgradable

## ***DEVOPS-READY SOFTWARE (A.K.A. CLOUD-NATIVE)***

- × Clear deployment plan
- × Stable and fast build
- × Stateless code
- × Fast startup and stop
- × Observability
- × Feature flags
- × Backwards and forward-compatible
- × Event streaming
- × Our code is cheap



Save  
MORE  
by wasting  
LESS

@JBARUCH

@VOXXEDITCINO

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▼ Elastic Compute Cloud		\$1,181.41
▼ US East (N. Virginia)		\$845.47
Amazon Elastic Compute Cloud running Linux/UNIX		\$120.47
\$0.00 per Linux t2.micro instance-hour (or partial hour) under monthly free tier	750 Hrs	\$0.00
\$0.0058 per On Demand Linux t2.nano Instance Hour	1,788 Hrs	\$10.37
t2.nano Linux instance usage covered by Compute Savings Plans	1,040 Hrs	-\$6.03
\$0.0116 per On Demand Linux t2.micro Instance Hour	144 Hrs	\$1.67
t2.micro Linux instance usage covered by Compute Savings Plans	144 Hrs	-\$1.67
\$0.096 per On Demand Linux m5.large Instance Hour	1,341 Hrs	\$128.74
m5.large Linux instance usage covered by Compute Savings Plans	780 Hrs	-\$74.88
\$0.133 per On Demand Linux r4.large Instance Hour	448 Hrs	\$59.58
r4.large Linux instance usage covered by Compute Savings Plans	261 Hrs	-\$34.71
\$0.20 per On Demand Linux m4.xlarge Instance Hour	448 Hrs	\$89.60
m4.xlarge Linux instance usage covered by Compute Savings Plans	261 Hrs	-\$52.20
Amazon Elastic Compute Cloud running Linux/UNIX Reserved Instances		\$0.00
Linux/UNIX (Amazon VPC), c5.large reserved instance applied, c5.large instance used	448 Hrs	\$0.00
USD 0.0 hourly fee per Linux/UNIX (Amazon VPC), c5.large instance	720 Hrs	\$0.00
USD 0.0 hourly fee per Linux/UNIX (Amazon VPC), c4.large instance	720 Hrs	\$0.00
Amazon Elastic Compute Cloud running Linux/UNIX Spot Instances		\$442.61
r4.xlarge Linux/UNIX Spot Instance-hour in US East (Virginia) in VPC Zone #7	4,506.805 Hrs	\$386.23
t3.medium Linux/UNIX Spot Instance-hour in US East (N. Virginia) in VPC Zone #12	4,510 Hours	\$56.38
Amazon Elastic Compute Cloud running Windows Spot Instances		\$253.46
c3.large Windows Spot Instance-hour in US East (Virginia) in VPC Zone #7	2,255 Hrs	\$253.46
EBS		\$28.93
\$0.00 for 480 Mbps per m5.large instance-hour (or partial hour)	447 Hrs	\$0.00
\$0.00 for 525 Mbps per c5.large instance-hour (or partial hour)	448 Hrs	\$0.00
\$0.00 per GB-month of General Purpose (SSD) provisioned storage under monthly free tier	20.067 GB-Mo	\$0.00
\$0.000 for 750 Mbps per m4.xlarge instance-hour (or partial hour)	448 Hrs	\$0.00
\$0.10 per GB-month of General Purpose SSD (gp2) provisioned storage - US East (Northern Virginia)	289.298 GB-Mo	\$28.93
Elastic Load Balancing - Application		\$0.00
\$0.00 per Application LoadBalance (hour) under monthly	Hrs	\$0.00

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ChatGPT 4o ▾

↗ Share



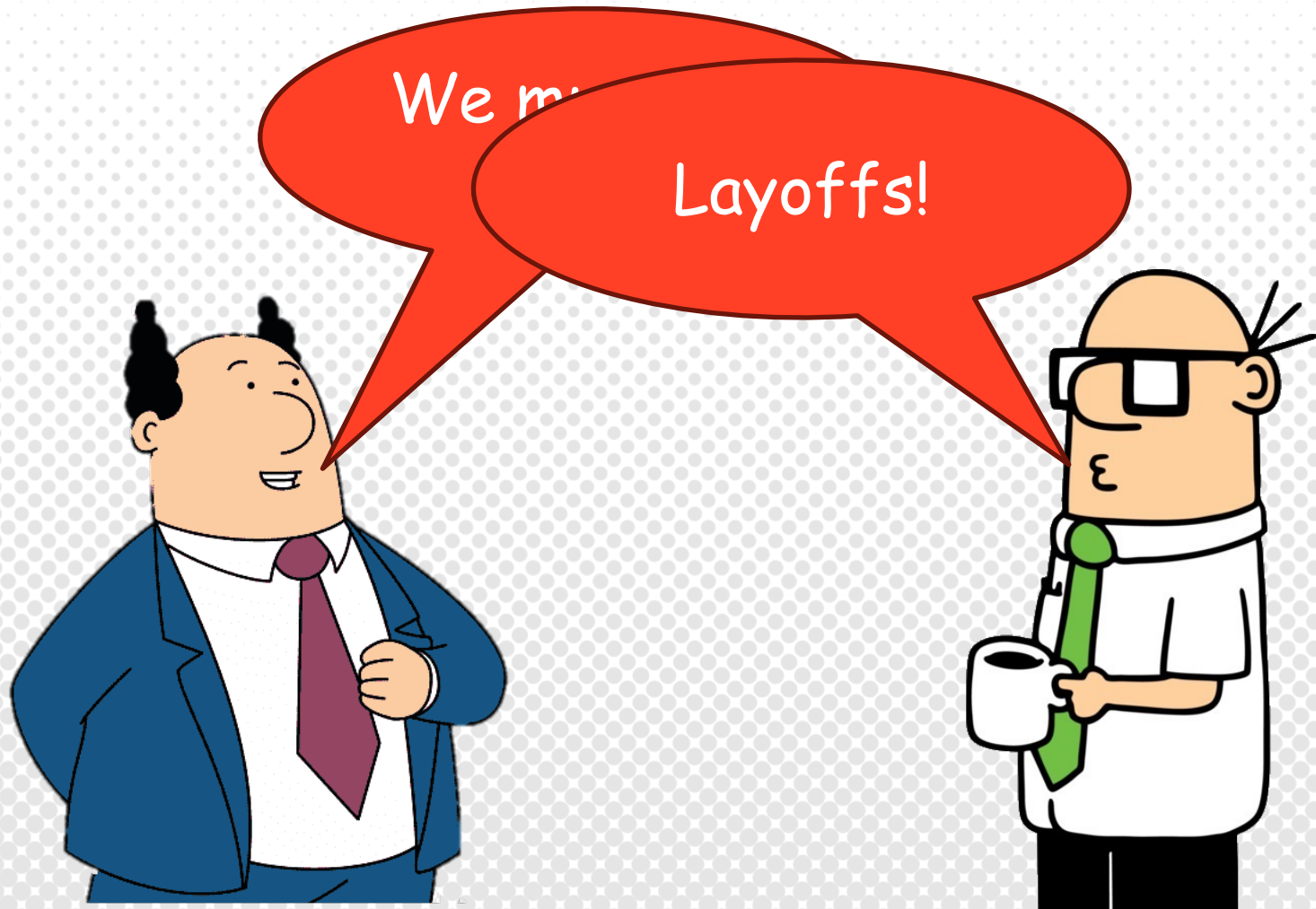
Developers can help reduce AWS costs by being mindful of resource usage and implementing cost-efficient practices during development. Here's how:

### 1. Optimize Code

- **Reduce Compute Requirements:** Write efficient code to minimize CPU and memory usage.
- **Batch Processing:** Aggregate tasks to reduce instance start/stop cycles.
- **Asynchronous Workloads:** Use async or event-driven patterns to make the most of serverless and Spot Instances.



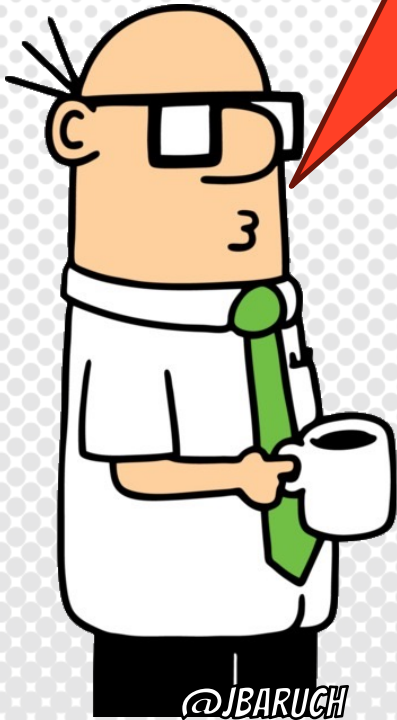
**BUSINESS STEAMS ITS WAY TO THE DEVELOPERS!**



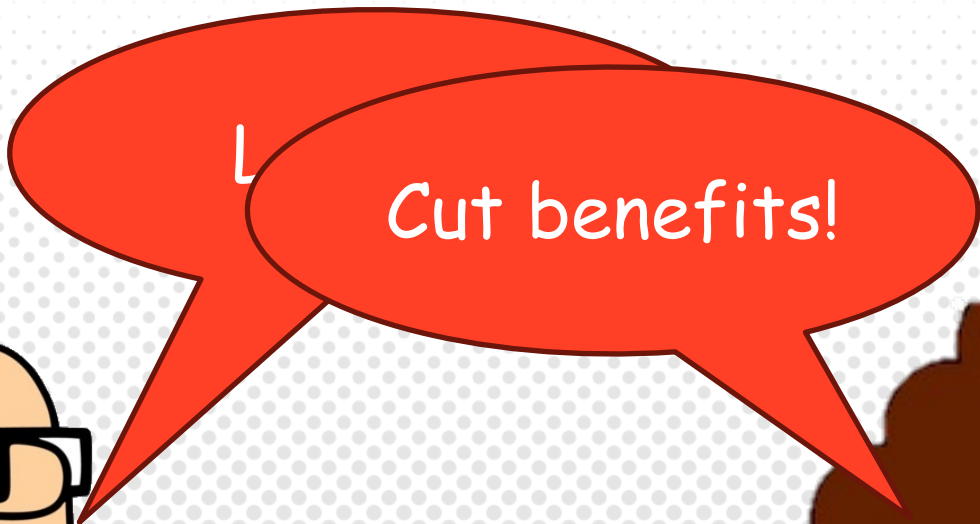
*@JBARUCH*

*@VOXXEDITICINO*

*SPEAKING.JBARUCH*



@JBARUGH



@VOXXEDITICINO

SPEAKING.JBARUGH

Cut b

Let's switch  
to serverless  
and deploy to  
the cloud!



@JBARUCH



@VOXXEDITICINO

SPEAKING.JBARUCH



They are  
going to fire  
me!

Ask ChatGPT  
how to do  
Kubernetes!!

@JBARUCH

@LOXXEDTICINO

SPEAKING.JBARU.CH





We need  
more happy  
customers!

*@JBARUCH*

*@VOXXEDITICINO*

*SPEAKING.JBARUCH*

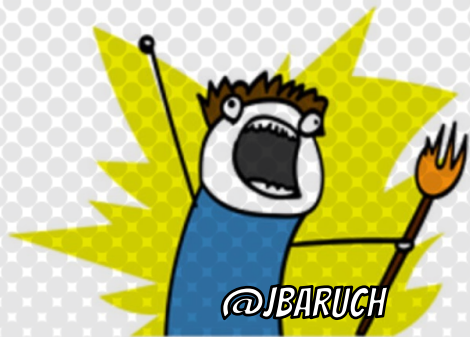
WHAT DO WE WANT



NEW FEATURES!



WHEN DO WE THEM?



@JBARUCH

@VOXXEDTICINO

YESTERDAY!



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When compared to low performers,  
elite performers realize

**127x**

faster lead  
time

**182x**

more  
deployments  
per year

**8x**

lower change  
failure rate

**2293x**

faster failed  
deployment  
recovery times



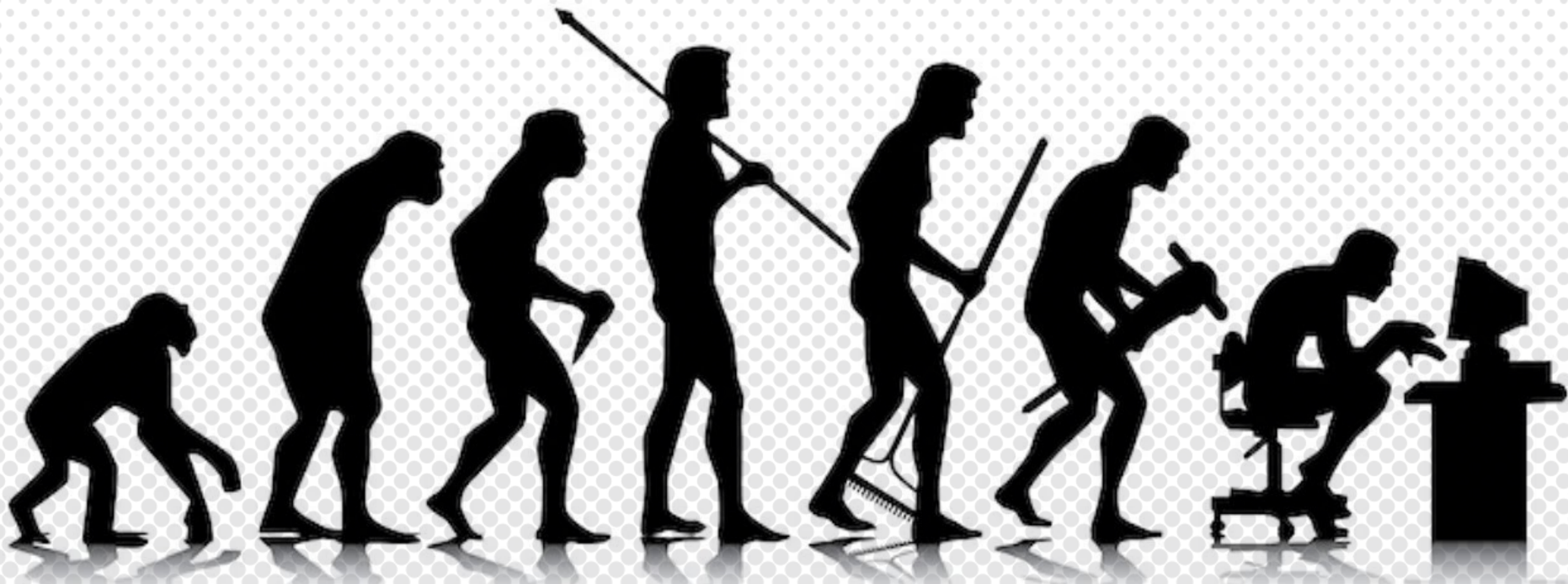
**DEVOPS IS GOOD FOR BUSINESS,**

**SO WELCOME TO DEVOPS!**

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*@VOXXEDITICINO*

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## ***DEVOPS WAS AN OPS IDEA. YOU HAVE TO RUN WITH IT.***

- × DevOps mainly solves Ops' concerns
- × But it provides the business with real value
- × So, be on-board or be out the ship
- × AI can help, a lot!

# ***THANKS!***



Q&A and Twitter X/Bsky/Mastodon/LinkedIn ads:

x @jbaruch

x @VoxxedTicino

x speaking.jbaru.ch