

Introducing The Reliability Map

r9y.dev



Steve McGhee

Reliability Advocate, SRE

**This is a Call for Participation
in a community around reliability.**

(Definitely not a Google product)

**“ FooCorp would like help with SRE /
Reliability / DevOps / Platform
Engineering. ”**

Fred Foostone
Chief Foo, FooCorp

Hit the brakes

Wait, What?

"SRE, Reliability, DevOps, Platforms" ???

- Monitoring, Capacity Planning, Incident Response, Automation, Scaling, Chaos Testing, IaC ...

This is a **LARGE** space, which part exactly?

Can't you just **TELL** me what to do?



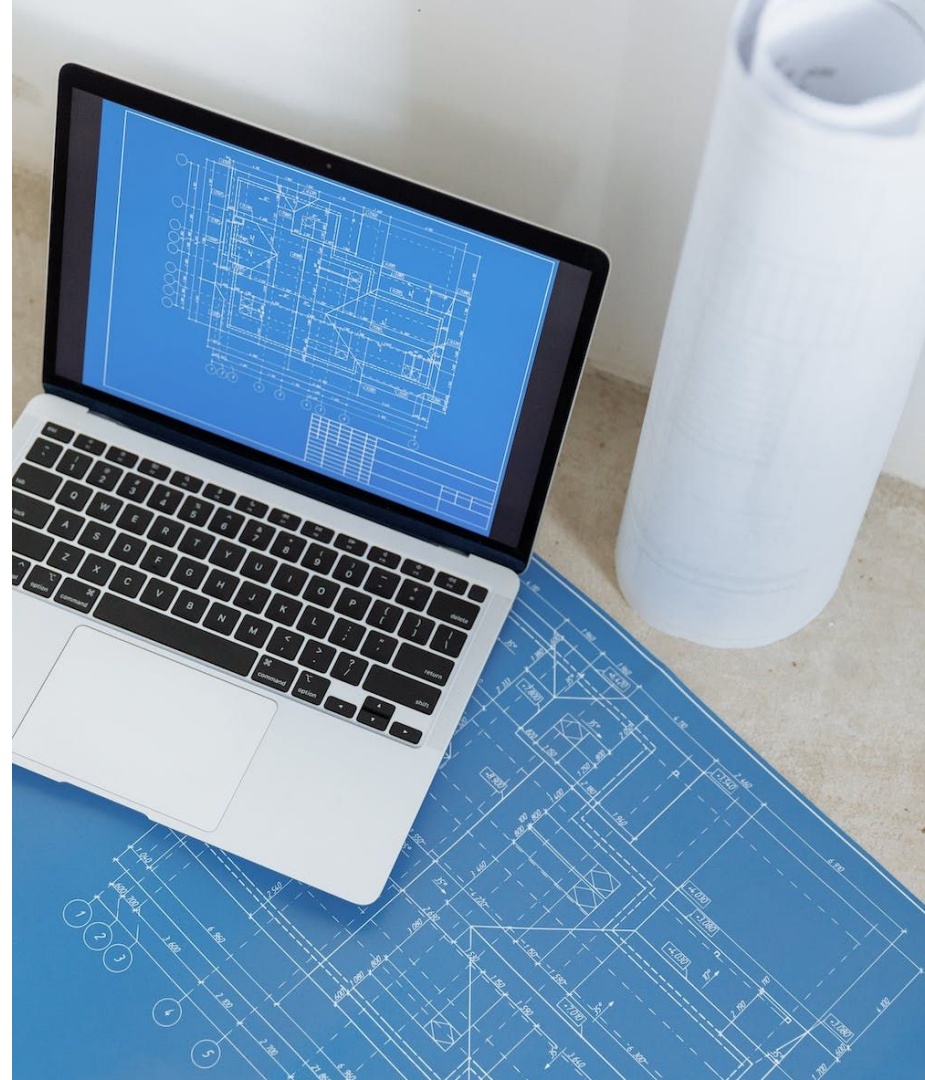
Best Practices

"Please tell us the **Best Practices** for Operations".

"Please provide some **Best Practices** for Monitoring"

"Please show some **Best Practices** for Reliability"

"Please provide a workshop for SRE **Best Practices**."



Context Matters

Best practices are

A Solution to a
problem

In **Context**

Without knowing
the context ...

We can only guess
at which solution to
offer!



How to Help?

Need to first
extract the
missing **context**.

Then we can attack
each problem
with a set of **known**
solutions

(buy/adopt),
or develop something
new (build).





Analogy Time

Road Trip !

Where do we want to go?

Where are we starting?

What is the next step?

How do we know if we're
off-course?

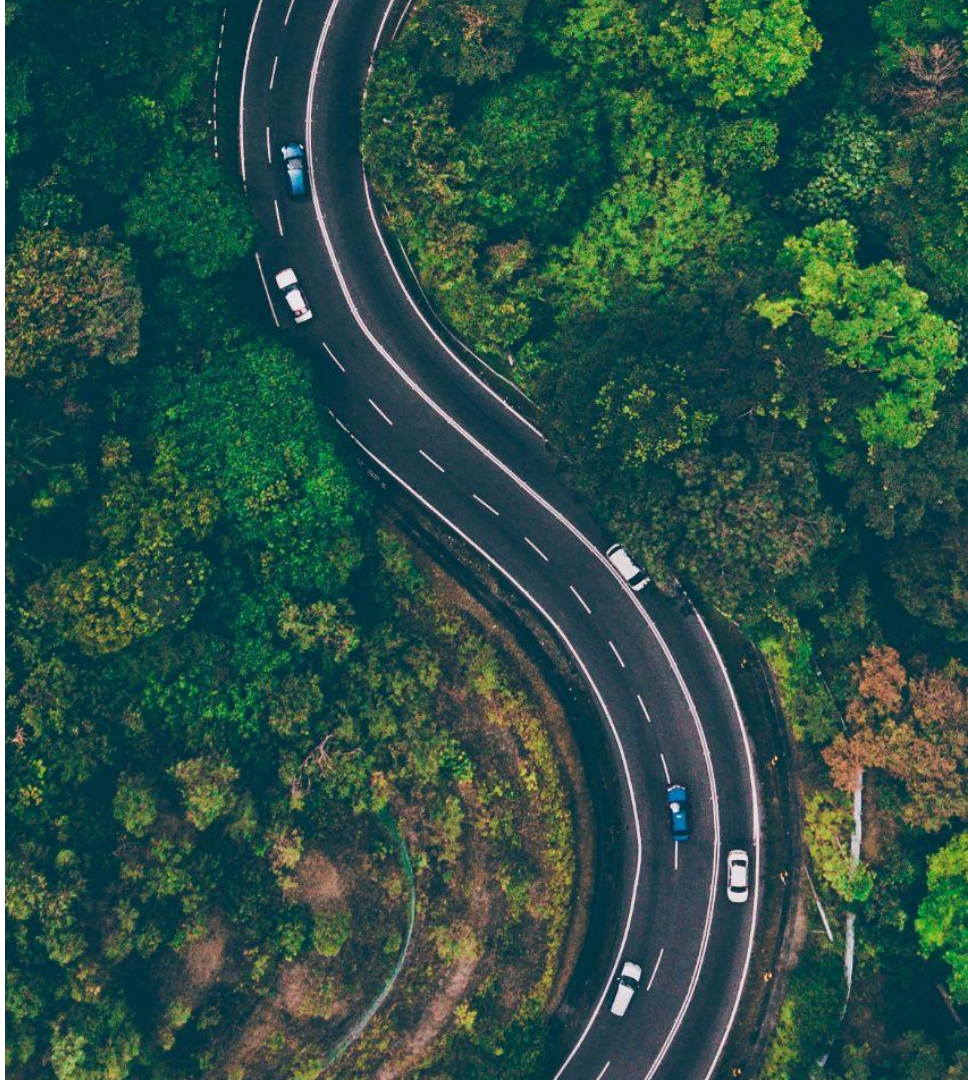


Your Platform

A team already runs on a platform, (whether they know it or not)

How does your code get to prod? All those things, that's the platform.

Hint: It may be **socio-technical** ! (i.e. not just tech)



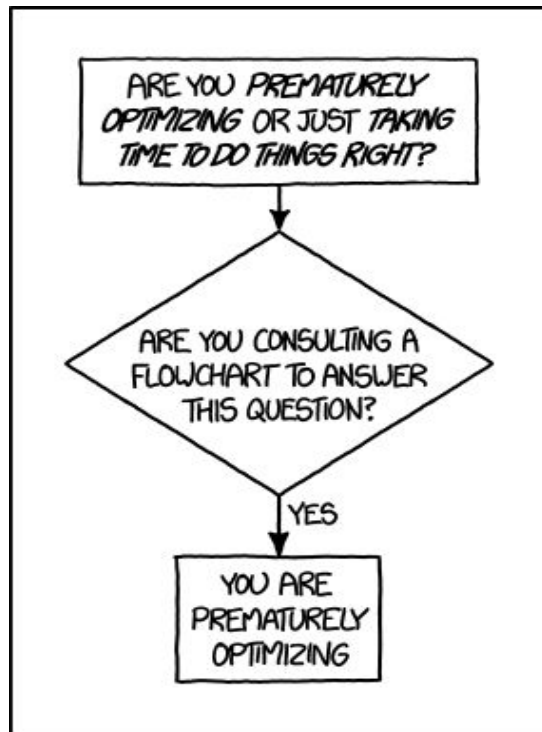
Where to Focus

"Premature Optimization is the root of all evil"

Don't try to build a detailed 4 year plan.

Do ask: "What do we need next?"

Consult a map of the space.



<https://xkcd.com/1691>

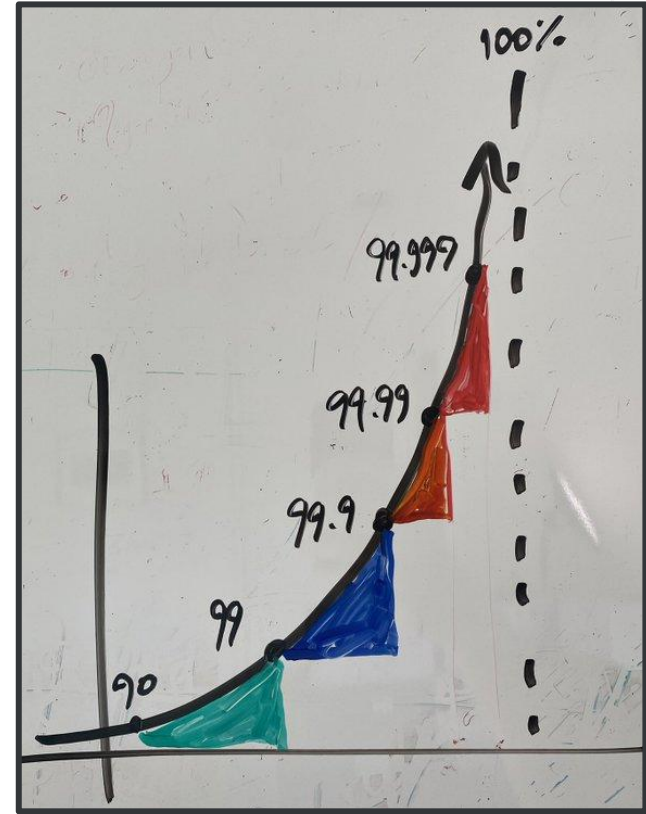
Brace Yourself

Choose Your Destination

Ease up, Turbo!

Not everything needs 99.999% availability.

Each era (column) costs ~10x as much as the last one



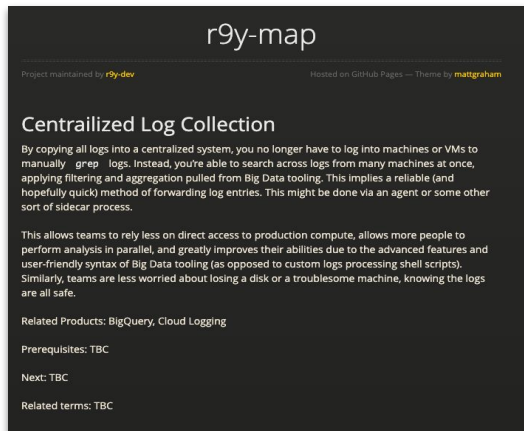
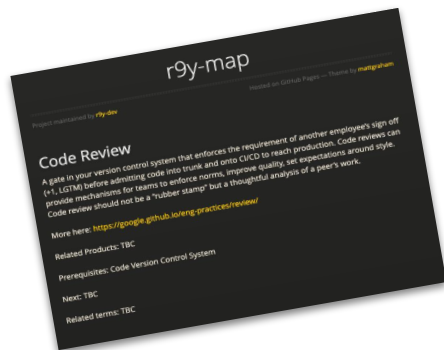
the asymptote of 9s: y-axis: cost x-axis: return

Choose Your Destination

What is the capability,
why is it needed?

How you can get it?
(adopt, build, buy)

Any prerequisites
(previous required
capabilities)? Related
capabilities or terms?



What was that ?!



You can find (and read!) the reliability map on r9y.dev



It's not done
(lotso lorem ipsum)
It's not perfect!



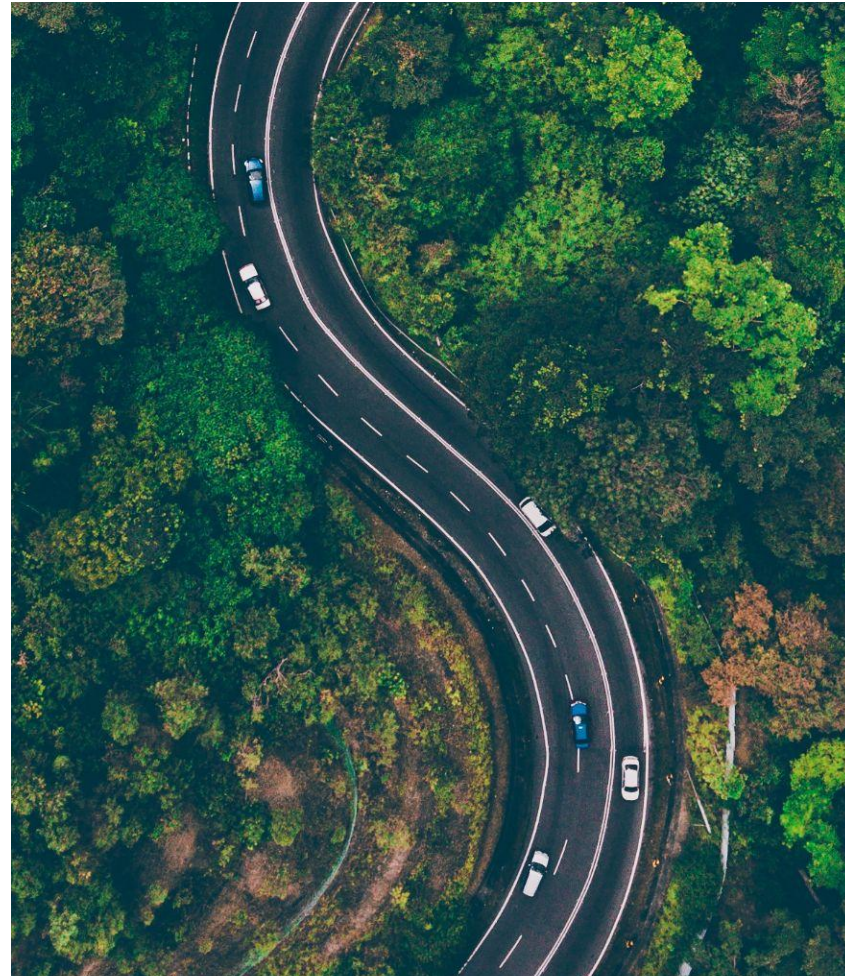
It might not even
be ... right?



Based on "tech
trees" from video
games (eg: Civ)

Sales Pitch goes here?

- Capabilities themselves are Cloud/Vendor Agnostic
- But Product/Tool/Vendor explicit mentions and links are welcome in details page!



OK, so how do I use it?

- Set your context, Starting Point "You are here"
- What are we already capable of in our platform, today?



So What?

The map can provide two types of insights:


- **Tactical:** what to work on now, today, to move toward appropriate reliability
- **Strategic:** a roadmap, which will evolve over time
 - Prevent future re-architecting
 - Rationalize costs, prevent waste

What's Next?


- Inverse Map: if I adopt X, what capabilities do I get?
 - Or: Overlays drawn over map
- Paths: known-good progressions
- "Purchase Order + OKRs" Mode - output my plan
- Self-assessment mode – no more pen on paper



How Can I Help?


 Public

[Code](#) [Issues 6](#) [Pull requests 1](#) [Discussions](#) [Actions](#) [Projects](#) [Security](#) [Insights](#)




Contribute

- Add words! Help explain capabilities. (File PRs!)
- Add capabilities! What's missing? (File Issues!)



Develop

- Bullets should be clear & punchy
- Single lines when possible



Discuss

- Join our discord! (via r9y.dev)
- discord.gg/NkmxCSkq7c

Hey Vendors

We want to hear from Vendors, too!

What capabilities does your solution provide? Please add yourself!

(note: please do not delete your competitors, :P)



Photo by [Jason Goodman](#) on [Unsplash](#)

In Conclusion

01 | Reliability is a big space, it deserves a big map.

02 | Don't expect to "buy some nines" – it's a journey!

03 | Not sure where to turn? Consult the map!

- Figure out where you are
- Decide where you're going
- Take the next turn!



Thank you.