

Infrastructures Befitting Healthcare

Architecting Systems for Rigid Compliance



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What really is infrastructure?

(And why does it matter)

Infrastructure is

- ~~Devops~~
- ~~Sys admin tasks~~
- An idea with rules
- The means to run your application
- (Somewhat) Separate from your application

Good infrastructure has 4 properties

- Stable
 - You shouldn't be refreshing your status page all day
- Scalable
 - You shouldn't be refreshing your server load page all day
- Secure
 - You shouldn't be combing through firewall logs all day
- Simple
 - You shouldn't have to spend all day explaining it

Most important properties for healthcare

- Security
 - “I don’t store PHI...”
 - Tenancy
- Stability
 - Soft Real-time (< 1m)

BRIEF

Anthem shells out \$16M in largest ever HIPAA fine

BUSINESS NEWS JUNE 27, 2018 / 4:06 PM / 4 MONTHS AGO

Equifax avoids fines in deal with U.S. states over data breach

So...How do you do any of this?

- Clouds
 - Multi-cloud
 - Hybrid-cloud
 - Private-cloud
- Tools
 - Kubernetes
 - ECS

Pitfalls

- Cloud Jail
 - Vendor Lock In
- Shiny Things
 - “Google does it!”

Final thoughts

- Infrastructure is useful
- Stability + Scalability + Security + Simplicity = Sleep

Thank you!

Questions?

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