Pacing Security in Containerworld

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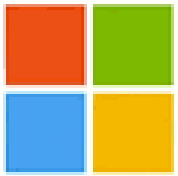
CLOUDFOUNDRY

docker

kubernetes

WHAT ARE YOU GONNA DO?

Well over 400 engineers building enterprise platforms



Microsoft

Google

NOT ON THE “CONFERENCE CIRCUIT”

BACK TO THE RIVER/CONTAINER METAPHOR

HOW DO WE DEAL?

What doesn't work so well

- Invent enemies
- Freeze (do nothing, obsess, panic)
- Control-monger
- Blame

More things that don't work

- Use existing security policy and process (P&P)
- Change P&P out of sync with apps and devops
- Get stuck in transition

The “web” wins when it meets the enterprise.

EVERY TIME.

What seems to work?

Everyone is a tech company.

Do what big tech companies do.

A word on culture.

Strive for:
Awareness, Focus, and Flexibility

Start with small projects with exec blessing & clear outcomes.

Learn & build trust.

Awareness, Focus, and Flexibility: In your org and your tech.

Awareness

- What are developers using and asking for?
- What's your inventory?
- What types of vulns have been most trouble?
- Who can do what to what?
- How are things configured?
- Platform vs. Dev
- Is the "undone" stuff visible?

Focus

- “Where the attention goes, the energy flows”
- Can you zero-in on a type of action in logs?
- Centralize auth
- Centralize pipelines and tooling
- Blocking and tackling
- METRICS METRICS METRICS

Flexibilty

- Systems that welcome change
- Run towards the pain
- Rotate creds often
- Embed capabilities into the platform
- MOATs around legacy

Example AFF Metrics

- Consider by app and by org
- Time to deploy patch (OS, middleware, app)
- Container lifetime
- Cluster lifetime
- Credential lifetime

SANS Secure DevOps SUMMIT AND TRAINING

Vulnerabilitays

Make it RAIN!

- ***R***ecognize
- ***A***llow / Acknowledge / Accept
- ***I***nvestigate
- ***N***eutralize

RAIN Example (1)

- ***Amplificiation attack on auth system***
  - ***Recognize -*** Simple idea
  - ***Allow -*** No judgment
  - ***Investigate -*** Look around for other examples
  - ***Neutralize –*** logs, IP filtering, ☺

RAIN Example

- ***Credential leaks to a log file***
  - ***Recognize –*** How did we find out?
  - ***Allow –*** Very easy do
  - ***Investigate -*** Look around for other examples
  - ***Neutralize –*** education, platform, scanning, rotate

FIN