



Cloud Security at its Finest

SANS Cloud Security Summit 2019 - Ben Hagen

Hi! A little about me ...

- **Motorola** - Remember the MotoRAZR?
- **Neohapsis** - Oldsk00l security consulting

~ Forecast, cloudy ~

- **Obama for America 2012** - President from the clouds
- **Netflix** - Streaming from the clouds

~ Forecast, a chance of showers ~

- **Salesforce** - ... clouds for business?
- **Facebook** - Social networking ... clouds?
- **Cruise Automation** - Self driving clouds

```
/* There isn't just one reason  
to cloud */
```

Velocity

Efficiency

Desperation

Familiarity

Growth

/* The State of Cloud Security */

谎言
wēijǐ

谎言 is a lie.

huǎng yán

危机 is a crisis.

wēijī

“It keeps getting more
#\$&@#\$& complicated.”

```
/* “New” Problems */
```

Basic Hygiene

Hardening

Lifecycles

Forensics

Inconsistency

```
/* New trends */
```

Instrumentation

AWS X-Ray

Google Stackdriver Trace

Serverless

AWS Lambda

Google Cloud Functions

A kind of serverless

AWS Fargate

Google Cloud Run

WHY?

Because containers are
hard.


```
/* New Solutions */
```

AWS Re:Invent 2018

AWS Control Tower

AWS Security Hub

CloudWatch Logs

Insights

Google Cloud Next 2019

Command Center

Container Vuln Scanning

Binary Authorization

```
/* Open Source */
```

Governance

Security Monkey

Cloud Custodian

Cloud Inquisitor

Architecture Insight

Lyft Cartographer

Cloudmapper

Rightsizing

Repoman/kid

Cloudtracker

Security can only be
solved by community.

Bonus! Top 10 Risks to Cloud Computing

1. Insecure use of developer credentials
2. Publicly accessible S3 buckets
3. Improper use of default configurations
4. Access controls do not follow principles of least privilege
5. Misconfigured network constructs
6. Lack of appropriate logging and monitoring
7. Lack of inventory management
8. Domain hijacking
9. Lack of a disaster recovery plan
10. Manual account configuration

Thanks!

@benhagen

<http://d.hx.io/GLUWdd>