

Using Splunk/ELK for Auditing AWS/GCP/Azure Security Posture

By Rod Soto and José Hernandez

\$Whoami

José Hernandez

Principal Security Researcher at Splunk. He started his professional career at Prolexic Technologies (now Akamai), fighting DDOS attacks against Fortune 100 companies perpetrated by “anonymous” and “lulzsec.” As a engineering co-founder of Zenedge Inc. (acquired by Oracle Inc.), José helped build technologies to fight bots and web-application attacks. He has also built security operation centers and run a public threat-intelligence service.

Rod Soto

Principal Security Research Engineer at Splunk. Worked at Prolexic Technologies (now Akamai), and Caspida. Cofounder of Hackmiami and Pacific Hackers meetups and conferences. Creator of Kommand && KonTroll / NoQrtr-CTF.

Security in the Cloud...

- The cloud is prevalent and pervasive in all that we do.
- Cloud providers are not invulnerable and attacks against them affect our lives.
- As cloud adoption expands, there are an increasing number of new technologies and unknowns.
- Cloud security is not an exact translation of inside-the-perimeter security.
- Every provider has its own set of technologies, features, and security items.
- While there are several cloud-security initiatives, it is still an ongoing effort.
- There are a range of emerging tools designed to assess the cloud. We chose CS Suite because it helps analysts assess Azure, AWS, and GCP.

...Security in the Cloud

engadget

Login

Gear

Gaming

Entertainment

Tomorrow

Buyer's Guide

Video

Reviews



Believe in Humans^{AI}
Together the possibilities are exponential

LEARN ABOUT AI

sas

AdChoices

Microsoft and Amazon will fight for the Pentagon's \$10B cloud contract

Project JEDI has attracted some of the biggest tech names in the world.



Rachel England, @rachel_england
04.11.19 in Business

28
Comments

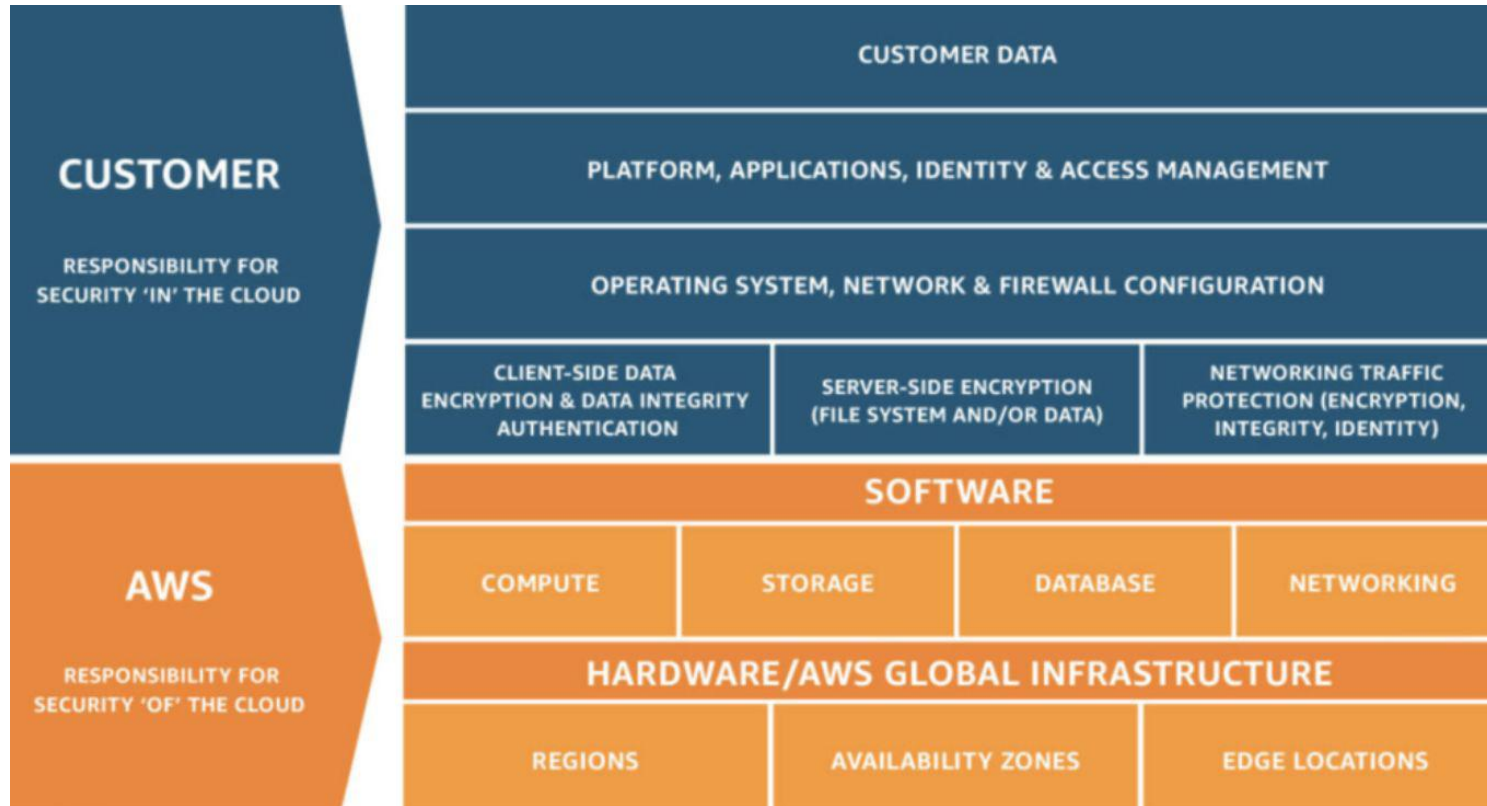
1882
Shares



The Imaginary Line Between Provider And Customer

| Responsibility per cloud service model | IaaS (Infrastructure as a Service) | PaaS (Platform as a Service) | SaaS (Software as a Service) |
|--|---------------------------------------|---------------------------------|---------------------------------|
| GRC (Security Governance, Risk & Compliance) | | | |
| Data Security | | | |
| Application Security | | | |
| Platform Security | | | |
| Infrastructure Security | | | |
| Physical Security | | | |

The Imaginary Line Is Not That Imaginary... AWS



Azure

Securing Azure resources is a shared responsibility between Microsoft and the customer

MICROSOFT'S COMMITMENT

Securing and managing the cloud foundation



Physical assets



Datacenter operations



Cloud infrastructure

JOINT RESPONSIBILITY

Securing and managing your cloud resources



Virtual machines



Applications & workloads



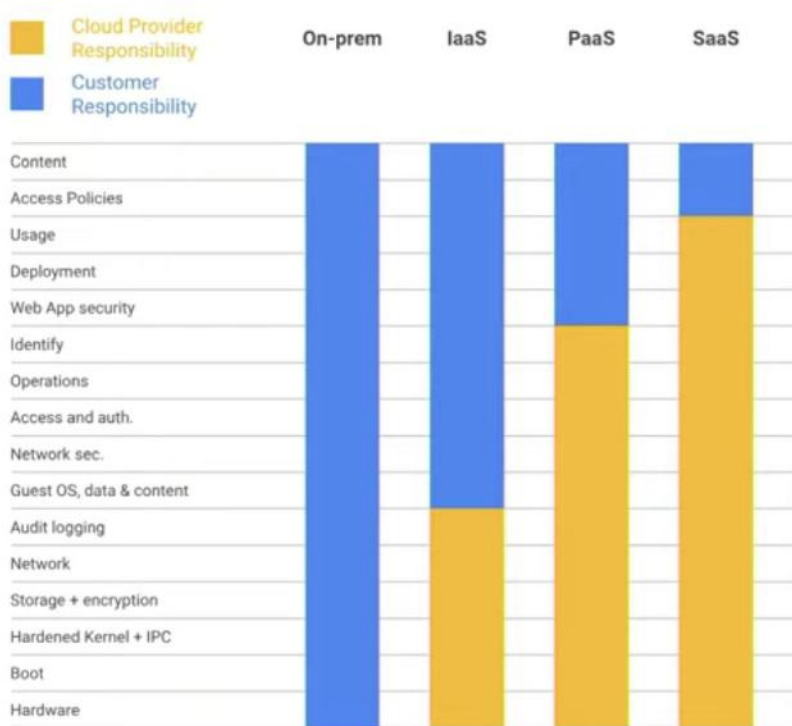
Data

GCP

Understanding shared responsibility

The **boundaries change** based on the services selected by the customer

Customers can use multiple classes of services **simultaneously**



Cloud Attacks Highlights

- Sony (2011): 77M users
- iCloud (2014): The Fappening
- CloudHopper: (2014 - 2016 -)(IBM, Fujitsu, NTT Data, Tata, HP, DXC, Dimension, CSC)
- Ashley Madison: (2015) / AFF (2015/2016)
- Equifax (2017): 143M customers
- HBO (2017): 1.5 TB of data stolen, including unreleased GoT
- Marriott (2018): 327M accounts
- Kubernetes: CVE-2018-1002105 (PrivEsc)
- Yup...2019 Capital One: 100M accounts

Main Cloud Attack Vectors CSA: "Treacherous 12"

1. Data breaches
2. Insufficient identity, credential, and access management
3. Insecure interfaces and application-programming interfaces (APIs)
4. System vulnerabilities
5. Account hijacking
6. Malicious insiders

Main Cloud Attack Vectors CSA: Treacherous 12

7. Advanced persistent threats (APTs)
8. Data loss
9. Insufficient due diligence
10. Abuse and nefarious use of cloud services
11. Denial of Service (DoS)
12. Shared technology vulnerabilities

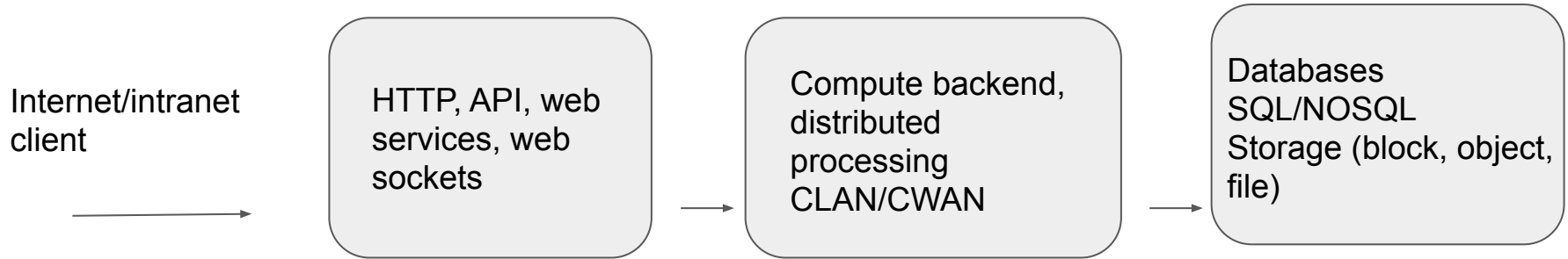
Main Targets of Cloud Attacks

- **Users:** ATO, key exfil, phishing
- **Providers:** AZ, AWS, GCP
- **Admins:** Like Domain Admin, they have access to all
- **Resources:** Cryptomining, DDoS for rent
- **Data:** Everyone's private life and work information
- **Third parties** Partner or co-tenant gets hacked, actor pivots to your cloud, attacks affecting IdP

DevOps Attack Surface (CI/CD Pipeline)

- **Source code repository:** Bitbucket, Beanstalk, Github, Gitlab, SVN, S3 buckets
- **CI/CD platform:** TravisCI, Jenkins, CircleCI, Gitlab
- **Container repository:** Docker, Vagrant
- **IaaS Provider:** Kubernetes flavor, OpenStack (this may also be local in some private, hybrid environments)
- **IaC** Ansible, Terraform, Chef, Cloudformation

Main Cloud Attack Surface Segments



Can We Create Common Criteria For Cloud Security?



Google Cloud



amazon
web services



Azure

Common Criteria For Cloud Security

1. **Network:** External access, VLAN/VWAN, VPN, routing
2. **Security:** CIA → heavy emphasis in IAM, encryption, and FWs
3. **Compute:** Artifacts such as virtual machines, containers, apps, microservices
4. **Database:** SQL, NOSQL
5. **Storage:** Basically buckets and file type storage (block, object, file)
6. **Management:** Kubernetes flavor, logging setup, Management access

Common Criteria for Cloud Security Audits

Compute

AWS: EC2, Lightsail, Lambda, Elastic Beanstalk, ECS, EKS, Batch, ECR, Kubernetes

Azure: Virtual machines (VMs), load balancers, app services, batch, Mesh, disks, Kubernetes

GCP: VM Instances, disks, snapshots, images, TPUs, metadata, zones, Kubernetes, "big data"

Common Criteria for Cloud Security Audits

Management

AWS: Console, CloudTrail, Config, OpsWorks, Systems Manager, CloudFormation, Kubernetes

Azure: Console, Monitor, Advisor, activity log, metrics, manage applications, solutions, Kubernetes

GCP: Console, StackDriver, audit logs, cloud tasks

Common Criteria for Cloud Security Audits

Storage

AWS: S3, EFS, FSx, S3 Glacier, storage gateway, AWS backup

Azure: Data Box, Storage explorer, StorSimple, Data Lake Storage

GCP: Bigtable, Buckets, DataStore, Firestore, Filestore, Spanner, Memorystore

Common Criteria for Cloud Security Audits

Security

AWS: IAM, Resource Access Manager, Secrets Manager, GuardDuty, AWS SSO, Certificate Manager, Key Management Service, Dir Service, WAF & Shield, Security Hub

Azure: Azure AD, Security Center (encryption, FW, WAF, etc.), Azure Vault

GCP: Security Command Center, Cloud Identity-Aware Proxy, Access Context Manager, VPC, Binary Authorization, Data Loss Prevention, cryptographic keys, Access Approval, Web Security Scanner

Common Criteria for Cloud Security Audits

Network

AWS: VPC, CloudFront, Route53, API Gateway, Direct Connect, AWS App Mesh, AWS Cloud Map, Global Accelerator

Azure: Virtual Networks, Load Balancers, DNS zones, CDN, Traffic Manager, ExpressRoutes, IPs, route tables/filters, Virtual WANS, Network Interfaces

GCP: Virtual Private Cloud network, Network Services, Hybrid Connectivity, Network Service Tiers, network security

Common Criteria for Cloud Security Audits

Database

AWS: RDS, DynamoDB, ElastiCache, Neptune, Amazon Redshift, Amazon QLDB, Amazon DocumentDB

Azure: SQL DB, Azure DB for PostGres/MariaDB, Redis, SQL Elastic pools, Cosmos DB

GCP: Datastore, BigQuery, MongoDB, PostgreSQL

Enter Cloud Security Suite

One-stop tool for auditing the security posture of AWS/GCP/Azure infrastructure

Gathers and presents unified information from the following tools:

- GScout
- Scout2
- Prowler
- Lynis
- Azure Audit template

```
# python cs.py -h
usage: cs.py [-h] -env {aws,gcp,azure} [-aip AUDIT_IP] [-u USER_NAME]
            [-pem PEM_FILE] [-p] [-pId PROJECT_ID] [-az_u AZURE_USER]
            [-az_p AZURE_PASS] [-o OUTPUT] [-w]

this is to get IP address for lynis audit only

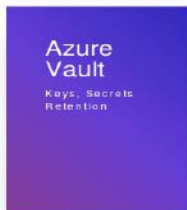
optional arguments:
  -h, --help                show this help message and exit
  -env {aws,gcp,azure}, --environment {aws,gcp,azure}
                            The cloud on which the test-suite is to be run
  -aip AUDIT_IP, --audit_ip AUDIT_IP
                            The IP for which lynis Audit needs to be done .... by
                            default tries root/Administrator if username not
                            provided
  -u USER_NAME, --user_name USER_NAME
                            The username of the user to be logged in,for a
                            specific user
  -pem PEM_FILE, --pem_file PEM_FILE
                            The pem file to access to AWS instance
  -p, --password             hidden password prompt
  -pId PROJECT_ID, --project_id PROJECT_ID
                            Project ID for which GCP Audit needs to be run. Can be
                            retrived using `gcloud projects list`
  -az_u AZURE_USER, --azure_user AZURE_USER
                            username of azure account, optionally used if you want
                            to run the azure audit with no user interaction.
  -az_p AZURE_PASS, --azure_pass AZURE_PASS
                            username of azure password, optionally used if you
                            want to run the azure audit with no user interaction.
  -o OUTPUT, --output OUTPUT
                            writes a log in JSON of an audit, ideal for
                            consumptions into SIEMS like ELK and Splunk. Defaults
                            to cs-audit.log
  -w, --wipe                rm -rf reports/ folder before executing an audit
```

Installation

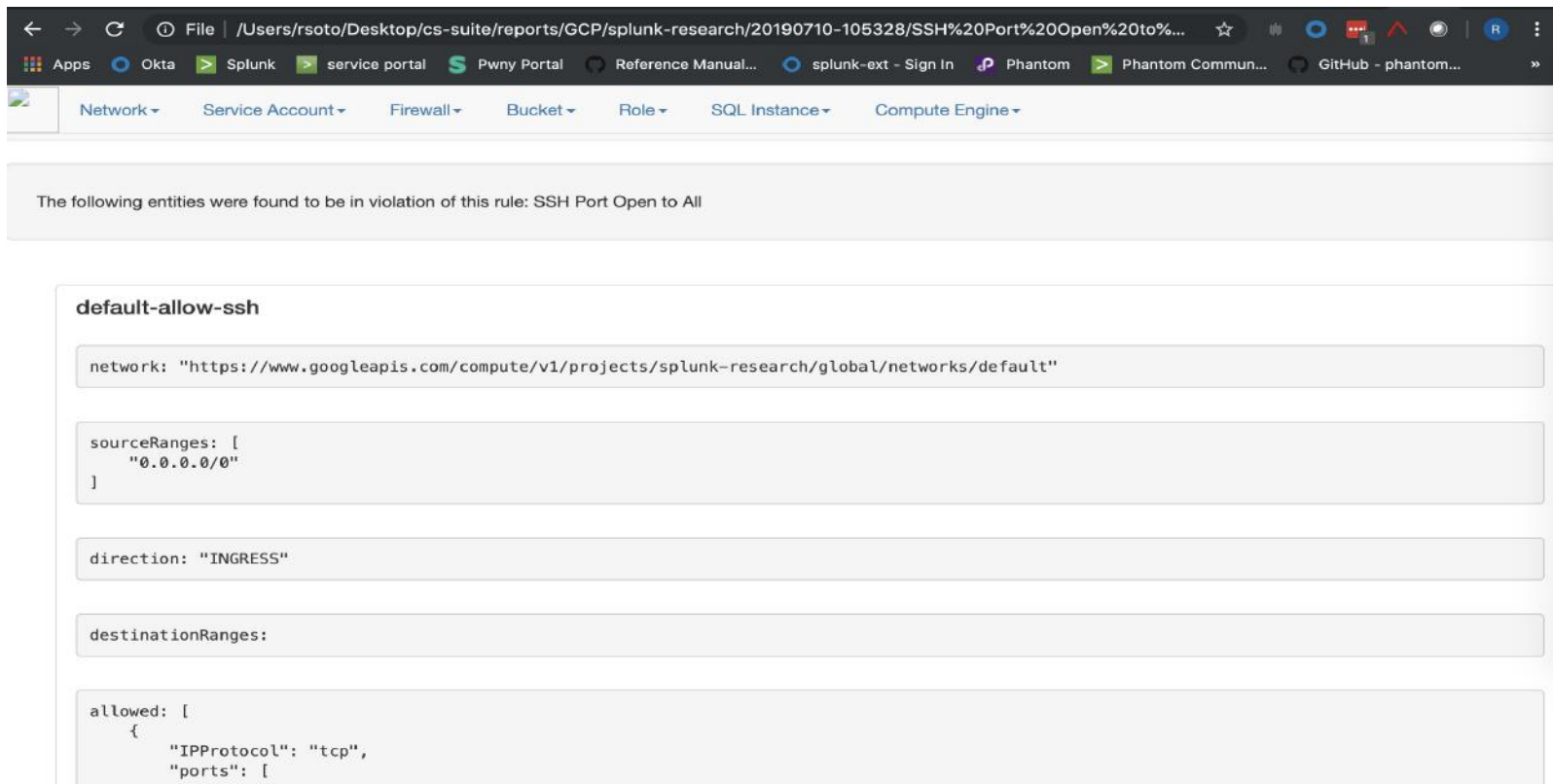
Github <https://github.com/SecurityFTW/cs-suite>

- We **modified** the original project to produce output logs that can be ingested by major SIEM frameworks.
- You will need **CLI** tools, accounts with **read** privileges, and an API **token** for authentication, in some cases.
- Your **vision** may vary, depending on **segmented** resources and organizational architecture.
- The tool, however, presents a **nice report** category interface.

Azure Security Benchmarks



GCP Security Benchmark



The following entities were found to be in violation of this rule: SSH Port Open to All

default-allow-ssh

```
network: "https://www.googleapis.com/compute/v1/projects/splunk-research/global/networks/default"

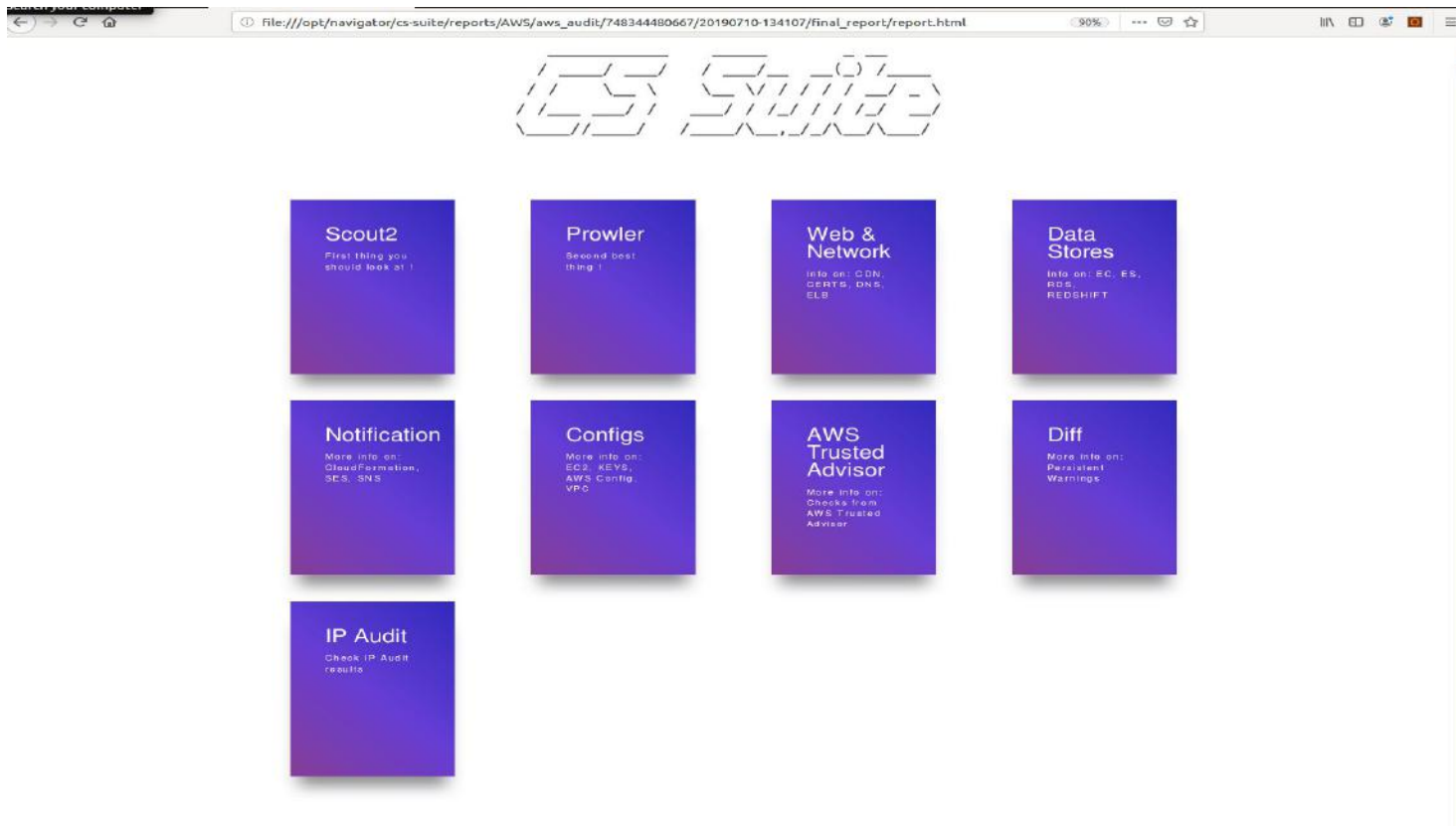
sourceRanges: [
  "0.0.0.0/0"
]

direction: "INGRESS"

destinationRanges:

allowed: [
  {
    "IPProtocol": "tcp",
    "ports": [
      "22"
    ]
  }
]
```

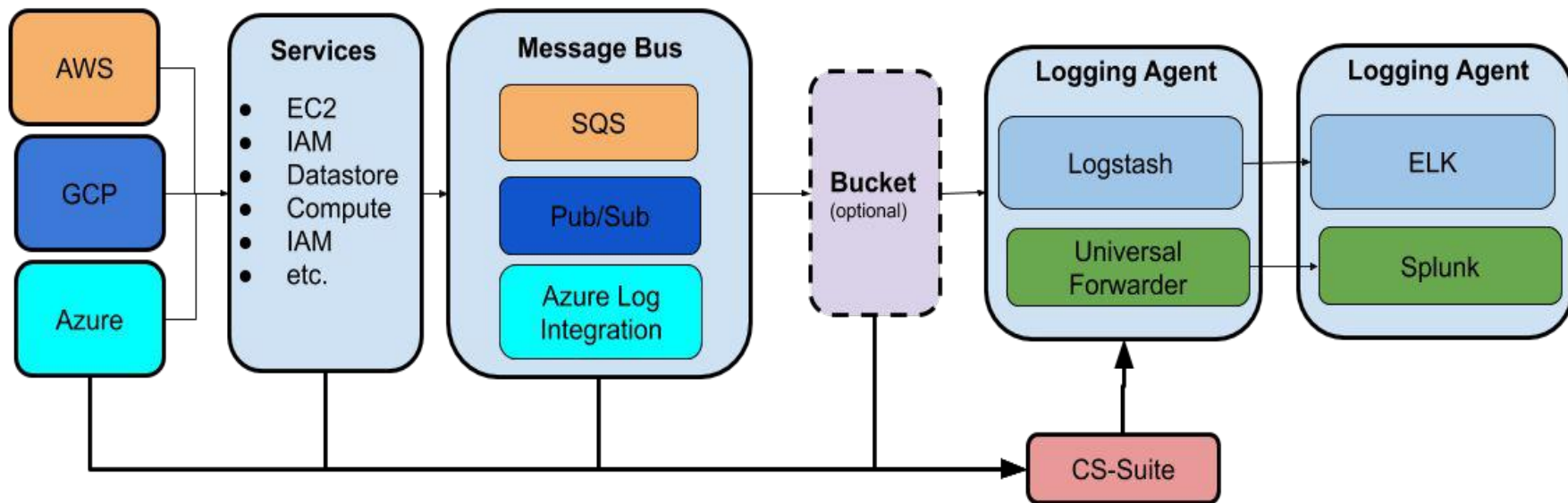
AWS Security Benchmarks



The Challenge Of Getting All These Sources Together...

- Logging in the cloud costs **\$** and requires **time** for setup. It is not provided by default (CloudTrail, Stackdriver, Azure Monitor, GCP Stackdriver).
- A log **indexing** and **data streaming** pipeline infrastructure (Splunk/ELK) needs to be present.
- Architecture of **streaming** and **storage**
- A framework that allows **analysis** and further knowledge operation (basically SIEM).
- Most of the cloud providers have **JSON** output. Not all monitoring logs are in JSON file, but enough to get a first comprehensive approach.

Architectural Diagram



Integration with popular SIEMS Splunk/ELK

- Based on the common criteria items we can create **knowledge objects** that can allow the analyst have a better vision on cloud security resources
- Things such as **dashboards**, reports can help analysts make sense of the onslaught of logs coming from such disparate sources
- We can then create **alerts**, lookups and even SOAR **playbooks** that can help us **automate** from the onslaught of logs.

ELK

filebeat.yml+

buffers

```
1 filebeat.inputs:
2 - type: log
3   enabled: true
4   paths:
5     - /Users/jhernandez/workspace/cs-suite/cs-audit.log
6   json.keys_under_root: true
7   json.add_error_key: true
8 filebeat.config.modules:
9   path: ${path.config}/modules.d/*.yml
10  reload.enabled: true
11 setup.template.settings:
12   index.number_of_shards: 1
13 setup.kibana:
14 output.elasticsearch:
15   hosts: ["http://xxxxxx:9200"]
16 processors:
17   - add_host_metadata: ~
```


Filters 1 data.type:"WARNING"

KQL



Aug 4, 2019 @ 20:47:00.0 → Aug 4, 2019 @ 20:48:00.0

Refresh

filebeat-*

Selected fields

? _source

Available fields

⌚ @timestamp

t_id

t_index

_score

t_type

t agent.ephemeral_id

```
t agent.hostname
```

t agent.id

t agent.type

t agent.version

? category

Top 5 values in 35 / 35 records

management 62.9%

security 25.7%

| Category | Percentage |
|----------|------------|
| network | 11.4% |


Aug 4, 2019 @ 20:47:00.000 - Aug 4, 2019 @ 20:48:00.000 — Auto ✓



Time

_source

```
✓ Aug 4, 2019 @ 20:47:10.799 @timestamp: Aug 4, 2019 @ 20:47:10.799 category: management data: { "region": "us-east-1", "value": "No CloudWatch group found for CloudTrail events", "score": "Scored", "type": "WARNING", "check_no": "3.2", "level": "Level 1" } timestamp: 2019-08-05T00:47:07.167563Z name: cs-audit log.file.path: /Users/jhernandez/workspace/cs-suite/cs-audit.log log.offset: 598,447 message: aws prowler report check: Ensure a log metric filter and alarm exist for Management Console sign-in without MFA (Scored) level: INFO input.type: log ecs.version: 1.0.1 host.architecture: x86_64
```

 Expanded document

[View surrounding documents](#)[View single document](#)

Table JSON

⌚ @timestamp

Aug 4, 2019 @ 20:47:10.799

t _id

H0E-X2wBmXST5oAx1a0e

t_index

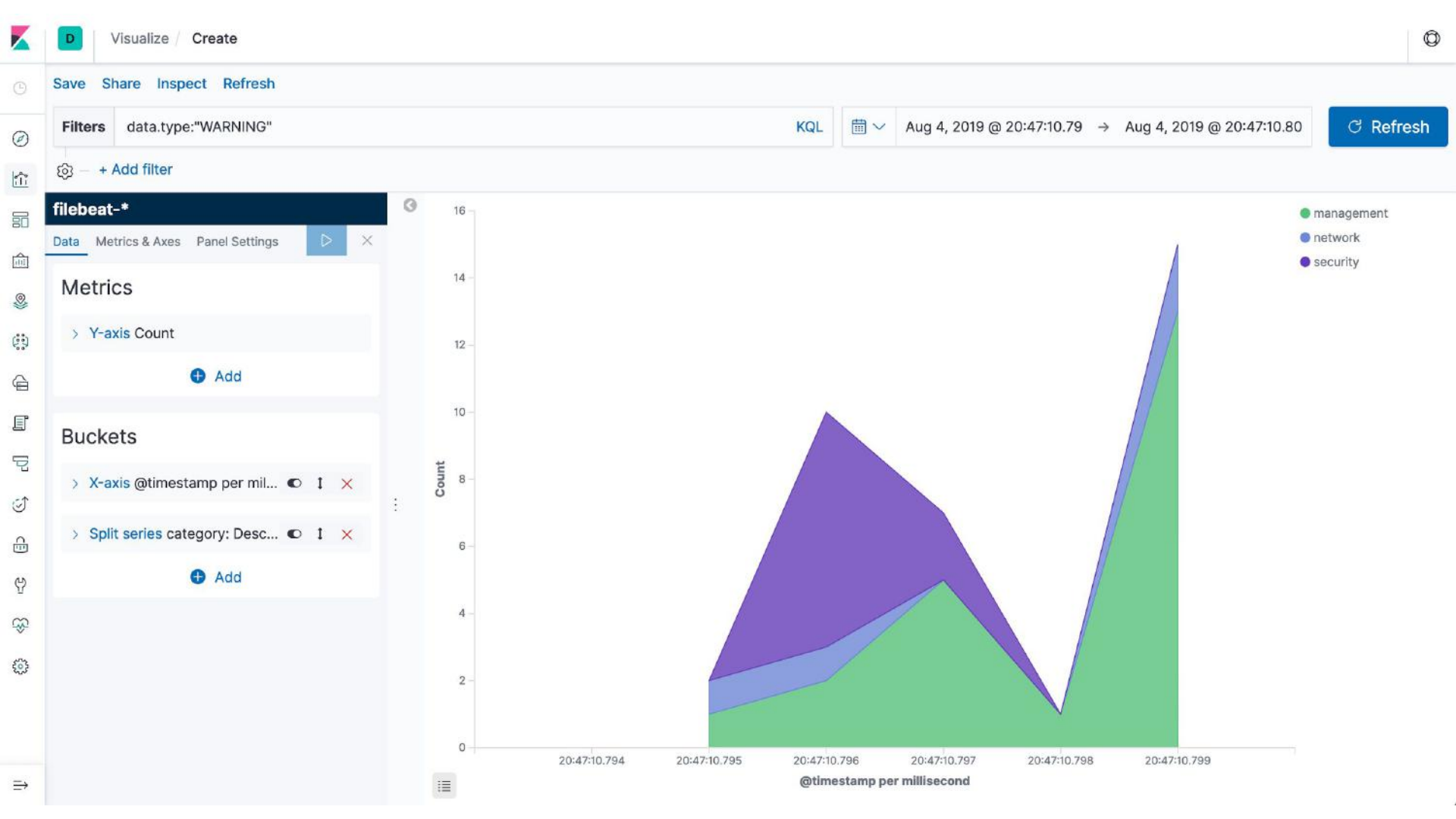
filebeat-7.3.0-2019.08.04-000001

```
# _score
```

—

t_type

_doc



Splunk

New Search

Save AsClose

sourcetype="cs-suite" type="WARNING" OR data{}.type="WARNING" | replace "Compute Engine" WITH compute IN category | replace "Firewall" WITH network IN category | replace "Network" WITH network IN category | replace "Role" WITH security IN category | replace "Subnet" WITH network IN category | eval service=case(message LIKE "aws%", "AWS", message LIKE "gcp%", "GCP", message LIKE "azure%", "AZURE") | search service=AWS | rename data{}.value as value

Last 1 day

315 events (7/31/19 3:21:16.000 PM to 8/1/19 3:21:16.000 PM)No Event Sampling

JobPauseRunDownloadSmart Mode

Events (315)PatternsStatisticsVisualization



ListFormat20 Per Page

Prev12345678...Next

| | Time | Event |
|---|-------------------------------------|---|
| <div><div>Hide FieldsAll Fields</div><div>SELECTED FIELDS</div><div>a category 3</div><div>a check 35</div><div>a host 1</div><div>a service 1</div><div>a source 1</div><div>a sourcetype 1</div><div>a value 100+</div><div>INTERESTING FIELDS</div><div># data[].check_no 31</div><div>a data[].level 3</div><div>a data[].region 16</div><div>a data[].score 1</div><div>a data[].type 3</div><div># date_hour 7</div><div># date_mday 2</div><div># date_minute 4</div><div>a date_month 2</div><div># date_second 9</div></div> | <div>>8/1/193:02:01.446 PM</div> | <div>{ [-]</div> <div>category: management</div> <div>check: Ensure CloudTrail is enabled in all regions (Scored)</div> <div>data: [[-]</div> <div>{ [-]</div> <div>check_no: 2.1</div> <div>level: Level 1</div> <div>region: us-east-1</div> <div>score: Scored</div> <div>type: WARNING</div> <div>value: AWSMacieTrail-DO-NOT-EDIT trail in us-east-1 is not enabled in multi region mode</div> <div>}</div> <div>{ [-]</div> <div>check_no: 2.1</div> <div>level: Level 1</div> <div>region: us-east-1</div> <div>score: Scored</div> <div>type: PASS</div> <div>value: honeypot-s3 trail in us-east-1 is enabled for all regions</div> <div>}</div> <div>- - -</div> |

Cloud Security

Cloud security alert reports

Edit

Export ▾

...

Azure Audit

Azure Warnings

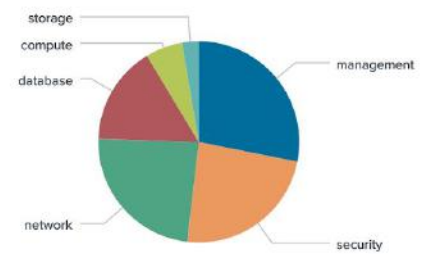
| message ⇅ | value ⇅ | type ⇅ |
|--------------|---|---------|
| azure report | Please manually check for approval for these extensions ['linuxDiagnostic', 'AADLoginForLinux'] | WARNING |
| azure report | The VM test27MS does not have DATA DISK ENCRYPTION enabled | WARNING |
| azure report | The VM test27MS does not have OS DISK ENCRYPTION enabled | WARNING |
| azure report | Network Watcher is not enabled for your account | WARNING |
| azure report | There is currently no RETENTION policy applied to the LOG PROFILE | WARNING |
| azure report | There is currently no LOG PROFILE enabled | WARNING |
| azure report | Security Phone Contact is NOT SET | WARNING |
| azure report | Please manually check for approval for these extensions ['linuxDiagnostic', 'AADLoginForLinux'] | WARNING |
| azure report | The VM test27MS does not have DATA DISK ENCRYPTION enabled | WARNING |
| azure report | The VM test27MS does not have OS DISK ENCRYPTION enabled | WARNING |
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| azure report | There is currently no LOG PROFILE enabled | WARNING |

Cloud Security Overview

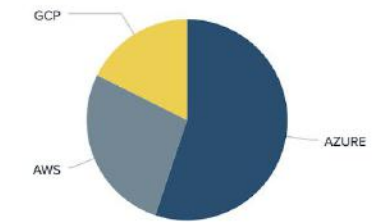
Overview of ALL Cloud Providers security posture



Category



Cloud Providers



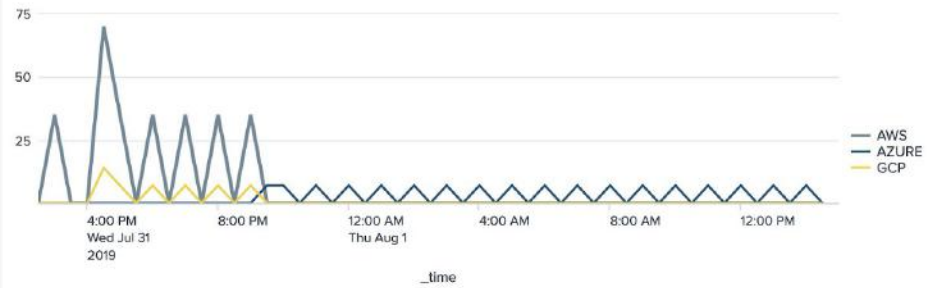
Security Category Across Providers

Failed checks over Time



Cloud Providers

Failed checks over Time



| service | category | check | value | failed |
|---------|------------|-----------|---|--------|
| AWS | management | VPC_AUDIT | VPC peering is not being used | 126 |
| | network | DNS_AUDIT | Zone Z369YJTWABRSRQ does not have SPF records | 126 |
| AWS | management | EC2_AUDIT | List of servers which are not associated with IamInstanceProfile i-0214f3461d8233f89 i-0d215b965a3da9349 | 9 |
| AWS | management | EC2_AUDIT | List of servers which are not associated with IamInstanceProfile i-032cca8fb4ba4edec i-04a190e3ce4d25077 i-0362d95285997f26c i-06cb4ed0d3c243625 | 9 |
| AWS | management | EC2_AUDIT | List of servers which are not associated with IamInstanceProfile i-076b66a3c694f1bf2 i-0768634fa406c35ad i-0801bc23165219b23 i-09c953058ea2501d7 i-0e0beab03e9ce2c2f i-0c0545b0d2b9b995f i-01a61f61060427e93 i-091112a9022161fbd i-00200b0477e69a139 i-04f99731a2635615d i-0534f6e8c378dcab1 i-068d2e41aa2b45ee9 i-0f665f1db22bbf7eb i-049c0d64f4a3d34bb i-06e8c38d461a684c3 i-01b639c78f143cb8d i-0505cc5242663581d i-0a198803ab7bd7f21 i-0c8c413484cb4ab22 i-04367818f89def447 i-096990e799cb4f3e25 i-07f3e91c3e0a84afb i-0f797df509aef05fe i-05ef1782c9d6f4d59 i-0ba82e44961b83292 i-0369d190c6819e3f2 i-09214304702cacaef i-0e3a9c9b0680b256e i-0a85179f5b3db3399 i-0e21214b62e2f2d42 i-03ad46b3614f69c2a i-086d3c84d5f9871f0 i-08da33d259d0f43ed i-09c2f5bb0428fbfe8 | 9 |
| AWS | management | EC2_AUDIT | List of servers which are not associated with IamInstanceProfile i-0fd9536bc75008fc4 i-09bb0f85f79d3fdb1 i-0c45edae77d43a24f i-0d16f5a7a6d0b3baa i-05a3d61c41b19fafd i-096be2a451c0d4550 i-0bdd4301683739fc9 i-0e68687f113028ac3 i-07ca362e67af6c40d i-04251639cd0fa73ec i-05173c29d334c3024 i-069ebb62ac2293b8b | 9 |
| AWS | management | EC2_AUDIT | List of volumes which are not encrypted vol-08c6e0830e7624644 vol-09080ad8588dbae45 vol-08be57dcb9942835a vol-06e6245e5587c143e vol-0db0f4403130d49a9 vol-0787760cbcdca96b84 vol-012e0a28becf29788 vol-0cd5f8f6f7831ae10 vol-02223daad40f136a4 vol-0c9da8dd870f0448f vol-03aa7ad25c6490503 vol-00544cbefaa324a3e vol-0ed5c00b95bdd0f25 vol-0ea3acd44562bc6cb vol-0adfcdf2c7873460c vol-00c24c617577a8ada vol-0c4023fb87b7c838e vol-034b976fd831adf0e vol-0566bad152bc4a7b0 vol-02bd2830d8255e49b vol-02891fff6db2dcaa7 vol-071d738e79284035c vol-0d95f64ba07048b38 vol-01e6bc3c9624ecfda vol-00b1ad660557f37c4 vol-07d6f6906a4088a0e vol-05ccd5a5538ede24a vol-0b106021be382a72b vol-049332d21ec5e78e5 vol-052793cf160314b61 vol-07b1f2657da5eb0d1 vol-07d4c08abc45c3be8 vol-096532deb3cd9241a vol-0cfc3400ed9e5e91d vol-08c9432fa9dc17119 vol-0d0bb967b80cb0efd vol-0eabc67695867e5baa vol-0308689ca1af13500 vol-07cd109db48d8f0f5 vol-041192a8b728cb6c6 vol-07b10fbab61df9409 | 9 |
| AWS | management | EC2_AUDIT | List of volumes which are not encrypted vol-0bd8911a48a007884 vol-0aa9cf2d9cc666dd0 vol-0c161b50c7555cfb vol-07b89099e4c500722 vol-07ea1ba7c476226bc vol-0a9d2163a5e96bf76 vol-0e460f22d90b98431 vol-03af1cdce0329b8a2 vol-0d593cc46250d66ad vol-028bdd12cef67a811 vol-0c6e5f343863f86a7 vol-0b9171a891a77fb42 vol-0e1a07b90efb0ef90 vol-08510f368b89700e3 vol-0dcd7f5ebf4affbf8f vol-031171613bb5a482cb vol-0d7e50dbde4da7bdd vol-070db88e0ab4b5c43 vol-0482e07faac36e980 vol-0af9463c2b8b6791a vol-01942c970916702df vol-01d2e55a5353a5b2b vol-07b374ba17dea5ea7 vol-0615dd99fecb5de9 vol-0d0e90db5a4619632 vol-00c48720f785d79c6 vol-062f5c66c6d5ec163 vol-06477a662e2865afa | 9 |
| AWS | management | EC2_AUDIT | List of volumes which are not encrypted vol-0c903b77ef617073b vol-010c21cf5f91c6450 vol-080d70f5aff00d312 vol-0c3903c9822fd2804 vol-0b3add6a971486e2f vol-0b30b4bbbach4745e vol-07b302087473d3104 vol-0914aa308684780dd vol-07a9eae44ed0d1a9d vol-06fa08da0faf888d6 vol-07f07cf73317f9cf83 vol-08dad905b503cbb0d vol-0e9dbbf36f4cb3968 vol-018f7fd7d77da58b5 vol-0e35c221f63ba439e vol-0dd0e0938ad6a90e6 vol-0747c83283a6842e9 | 9 |
| AWS | management | EC2_AUDIT | List of volumes which are not encrypted vol-0e305cfe902905726 vol-0e6959f2bcb030304 | 9 |
| AWS | management | EC2_AUDIT | List of volumes which are not encrypted with KMS key are vol-08c6e0830e7624644 vol-09080ad8588dbae45 vol-08be57dcb9942835a vol-06e6245e5587c143e vol-0db0f4403130d49a9 vol-0787760cbcdca96b84 vol-012e0a28becf29788 vol-0cd5f8f6f7831ae10 vol-02223daad40f136a4 vol-0c9da8dd870f0448f vol-03aa7ad25c6490503 vol-00544cbefaa324a3e vol-0ed5c00b95bdd0f25 vol-0ea3acd44562bc6cb vol-0adfcdf2c7873460c vol-00c24c617577a8ada vol-0c4023fb87b7c838e vol-034b976fd831adf0e vol-0566bad152bc4a7b0 vol-02bd2830d8255e49b vol-02891fff6db2dcaa7 vol-071d738e79284035c vol-0d95f64ba07048b38 vol-01e6bc3c9624ecfda vol-00b1ad660557f37c4 vol-07d6f6906a4088a0e vol-05ccd5a5538ede24a vol-0b106021be382a72b vol-049332d21ec5e78e5 vol-052793cf160314b61 vol-07b1f2657da5eb0d1 vol-07d4c08abc45c3be8 vol-096532deb3cd9241a vol-0cfc3400ed9e5e91d vol-08c9432fa9dc17119 vol-0d0bb967b80cb0efd vol-0eabc67695867e5baa vol-0308689ca1af13500 vol-07cd109db48d8f0f5 | 9 |

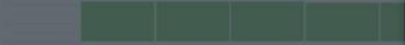
New Search

sourcetype="cs-suite" type="WARNING" OR d
"Network" WITH network IN category |
message LIKE "gcp%", "GCP", message L

✓ 1182 events (8/1/19 4:44:02.000 PM to 8/2/19 4:44:02.000 PM)

Events (1,182) Patterns Statistics Vis

Format Timeline ▾ — Zoom Out + Zoom In



List

< Hide Fields All Fields

SELECTED FIELDS

a category 5
a check 44
a data[]value 100+
a host 1
a service 3
a source 1
a sourcetype 1

INTERESTING FIELDS

data[]check_no 32
a data[]level 3
a data[]region 16
a data[]score 1
a data[]type 3
date_hour 24
data[]index 3

Save As Alert



Settings

Title Failed Management Check

Description \$service\$ has \$count\$ failed management checks in the last 1 hour

Permissions Private Shared in App

Alert type Scheduled Real-time

Run every hour ▾

Triggers

- Risk Analysis
Creates risk modifier events in the risk index
- Run Playbook in Phantom
Run a Phantom playbook on this event.
- Run a script
Invoke a custom script
- Searching Domains
Filter and search specific records using this endpoint. Using simple filter composition, any type of data fetching is possible
- Send To UBA
Forwards search results from Splunk Enterprise to UBA

+ Add Actions ▾

Number of Results ▾

0

For each result

Cancel

Save

Save As ▾ Close

Copy | replace
Last 1 day ▾

Smart Mode ▾

1 hour per column

3 4 5 6 7 8 ... Next >

sourcetype = cs-suite

Q&A

Thank You!

Rod Soto @rodsoto rod@rodsoto.net

Jose Hernandez @d1vious josehelps.com