Threat Detection and Remediation Workshop

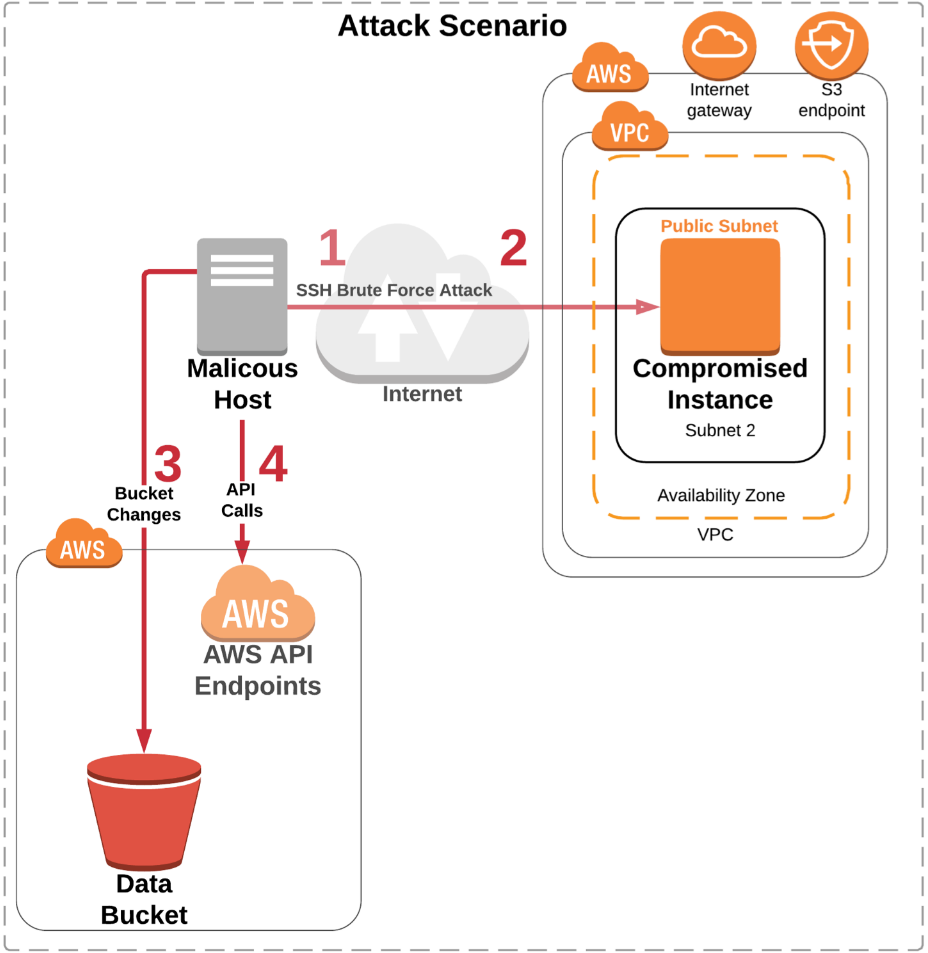
Module 4 – Review, Discussion, Questions & Cleanup

Agenda

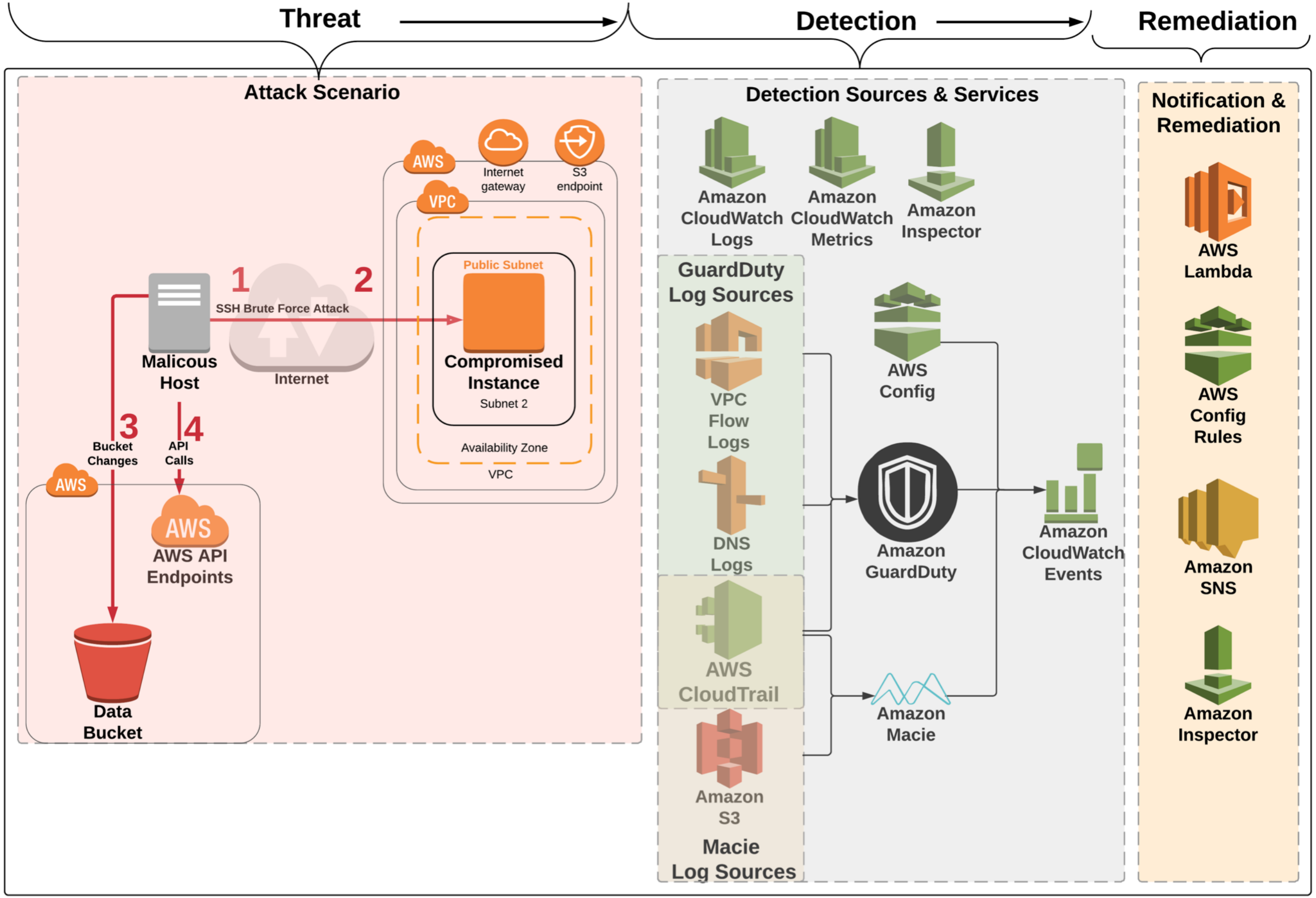
- Review & Discussion – 5 min
- Questions – 15 min
- Cleanup

Review & Discussion

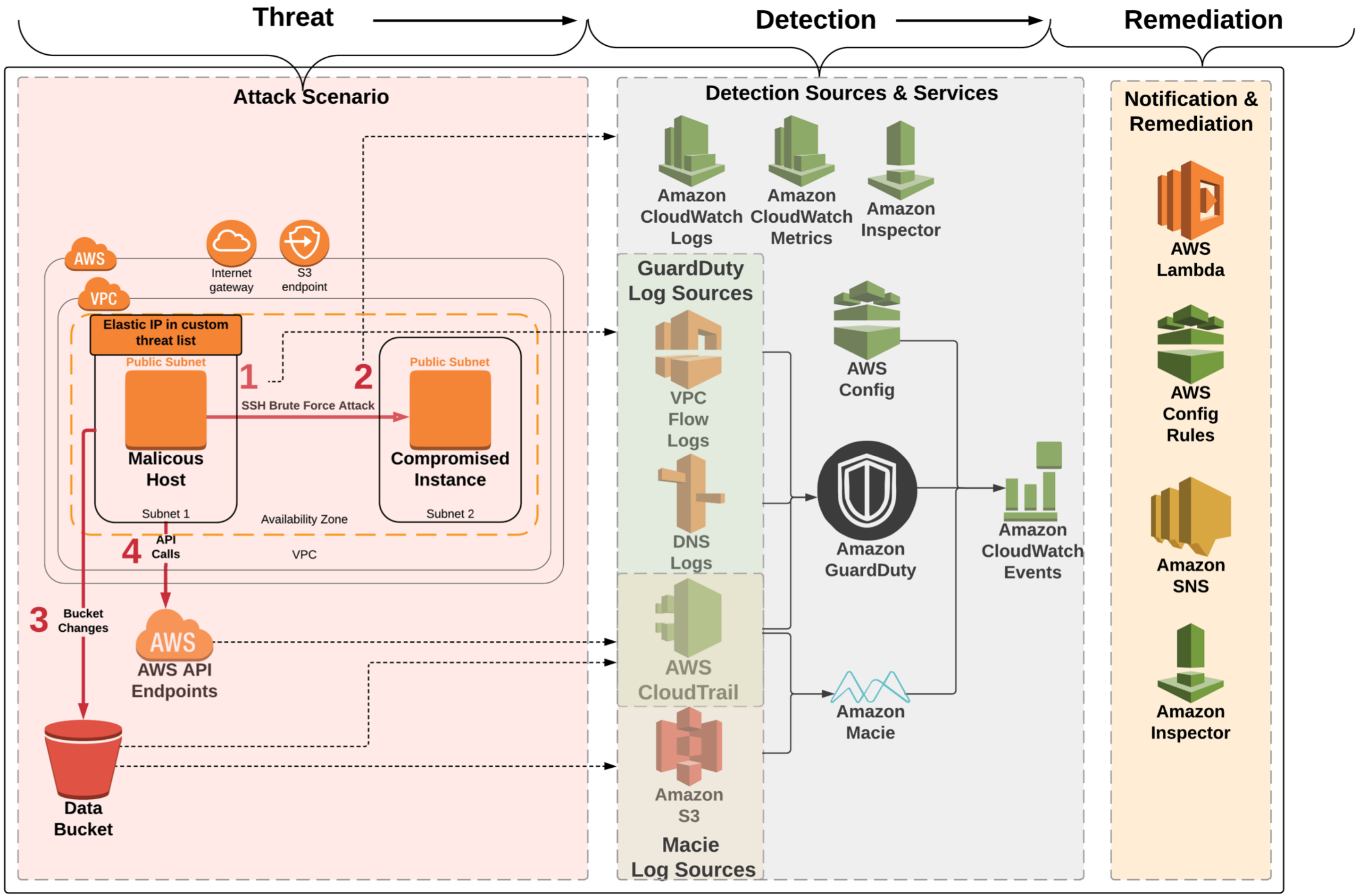
The Attack


Attack Scenario
AWS
Internet gateway
S3 endpoint
VPC
Public Subnet
Compromised Instance
Subnet 2
Availability Zone
VPC
1
2
SSH Brute Force Attack
Internet
Malicous Host
3
Bucket Changes
4
API Calls
AWS
AWS
AWS API Endpoints
Data Bucket

Module 2 setup



What really happened?



Questions

Workshop questions

Why did the API calls from the “malicious host” generate GuardDuty findings?

Workshop questions

- The lab mentions you can ignore the high severity SSH brute force attack finding? Why?

- Why is this a ”side-effect” of the simulated attack in this workshop? (hint: how does that differ from the medium severity brute force finding we investigated?)

Workshop questions

- Which two AWS service provide a historical configuration change audit?

- Which service is designed (and easier to use) for analysis of configuration changes?

Workshop questions

Let’s assume the company policy in this scenario is that EC2 instances running Linux can only use certificate authentication. At some point somebody must have enabled password authentication on the web server.

How could you determine when this was changed and by whom?

Workshop questions

We use Inspector as part of a remediation pipeline. Is inspector a Protect or Detect service (or both)?

Workshop questions

- Would you consider a single SSH brute force attack finding by itself be enough to kick off an automated action to add an ACL to block the source of the attack?

- What combination of data points would lead you to consider automatically terminating the compromised instances?

Workshop questions

- Macie had an alert for “S3 Bucket IAM policy grants global read rights.” We investigated that bucket in the workshop. Were the objects in the bucket actually publicly accessible?

- What about the encrypted objects in the bucket?

Cleanup

Links we discussed

https://aws.amazon.com/security/

https://www.verizonenterprise.com/resources/reports/rp_DBIR_2018_Report_en_xg.pdf

https://www.nist.gov/cyberframework

https://d0.awsstatic.com/whitepapers/AWS_CAF_Security_Perspective.pdf

https://www.forbes.com/forbesinsights/bmc_security/index.html

Thank you!