GENERAL:

First Seen Time and Date: 20/12/2024 03:04:12 +0500

Insight: Phishing \rightarrow Credential Abuse \rightarrow AWS Privilege Misuse (Insight-16681 - Discovery

with Execution and Initial Access)

Associated Signals:

- 1. Proofpoint TAP User Received Phishing Email
- 2. Phishing Link Then Proxy Allow
- 3. First Seen AWS API Call: ListBucket2024-12-20 from User
- 4. Spike in AWS API Call from User
- 5. Suspicious AWS Lambda Enumeration
- 6. AWS GuardDuty Alert UnauthorizedAccess:IAMUser/InstanceCredentialExfiltration

SEVERITY CLASSIFICATION:

Priority: P2

Reason: This incident is classified as **P2** because a user endpoint was successfully compromised through a phishing campaign, and the attacker is actively using valid credentials in AWS for reconnaissance (S3, Lambda). A high-severity GuardDuty alert confirms credential misuse from an unusual IP. However, there is **no confirmed destructive activity or large-scale data exfiltration yet**, which is why this is contained at P2 instead of P1.

SOURCE DETAILS:

Source IPs:

- 125.118.246.104 (Phishing host) Geolocated to Ningbo, Zhejiang, China
- 72.229.28.104 (User device observed accessing phishing URL) New York, US

Source Hostname: anderson-karen-laptop

TARGET DETAILS:

Target Username: karen.anderson

Target Email Address: karen.anderson@corporatedomain.local

Target Device IP: 72.229.28.104 (workstation)

ADDITIONAL INFORMATION:

Phishing URL:

http://console.aws.amazon.account83sfas2.app-region121.io/signin → Fake AWS login page, hosted under app-region121.io, not affiliated with AWS.

- File Basename: text.txt (delivered attachment with phishing email).
- Domain uses HTTP instead of HTTPS, meaning credentials could be transmitted in cleartext.

INCIDENT DETAILS:

Between **20/12/2024 03:04 and 20/12/2024 04:05**, the user **Karen Anderson** was compromised through a targeted phishing campaign.

- 1. At **03:04**, Karen received a phishing email with attachment text.txt, delivered via Proofpoint TAP.
- 2. The email contained a link to a fake AWS login page (http://console.aws.amazon.account83sfas2.app-region121.io/signin).
- 3. At **04:04**, Zscaler proxy logs confirmed outbound traffic from **anderson-karen-laptop** (**72.229.28.104**) to the phishing URL, suggesting credentials were submitted.
- 4. Immediately after, suspicious AWS API activity began from IP **125.118.246.104** (China) using Karen's credentials:
 - o First-time S3 ListBucket API call
 - o Spike in AWS API calls, consistent with scripted activity
 - Lambda function enumeration indicating reconnaissance of compute resources
- The activity triggered a GuardDuty
 UnauthorizedAccess:IAMUser/InstanceCredentialExfiltration alert, confirming credential theft and misuse.

This chain of events demonstrates successful phishing \rightarrow credential theft \rightarrow AWS account reconnaissance.

REMEDIATION ACTIONS:

Immediate Containment:

- Revoke all AWS credentials for karen.anderson (access keys, session tokens, console password).
- Enforce MFA on the account before re-enabling.
- Terminate any suspicious AWS sessions and block traffic from 125.118.246.104.
- Isolate the endpoint **anderson-karen-laptop** for forensic analysis (check for malware/stealers).

Forensic & Audit:

- Review CloudTrail logs for privilege escalation, persistence (role creation), or unauthorized data access.
- Audit S3 and Lambda for unauthorized modifications, exposures, or hidden persistence.
- Search for additional users targeted by similar phishing emails.

Security Enhancements:

- Block the phishing domain **app-region121.io** across DNS, proxy, and mail gateways.
- Enable AWS GuardDuty + Security Hub continuous monitoring.
- Educate the user on phishing awareness and reinforce reporting procedures.
- Rotate credentials for any downstream systems accessed by Karen's account.

Conclusion:

This is a **P2** (High Priority) incident involving phishing, credential compromise, and AWS reconnaissance. The compromise has not escalated to confirmed destructive or large-scale data theft yet, but active credential misuse is ongoing and requires immediate containment and audit.