

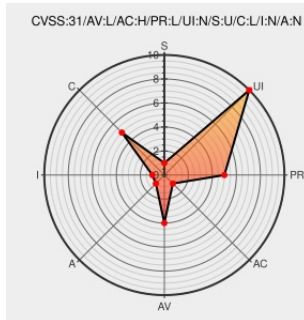


# CVE-2020-8912

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## CVE-2020-8912

[Source: Mitre](#)[Source: NIST](#)[CVE.ORG](#)[Print: PDF](#) 

Certain versions of [Aws S3 Crypto Sdk](#) from [Amazon](#) contain the following vulnerability:

A vulnerability in the in-band key negotiation exists in the AWS S3 Crypto SDK for GoLang versions prior to V2. An attacker with write access to the targeted bucket can change the encryption algorithm of an object in the bucket, which can then allow them to change AES-GCM to AES-CTR. Using this in combination with a decryption oracle can reveal the authentication key used by AES-GCM as decrypting the GMAC tag leaves the authentication key recoverable as an algebraic equation. It is recommended to update your SDK to V2 or later, and re-encrypt your files.

CVE-2020-8912 has been assigned by [Google](#) security@google.com to track the vulnerability - currently rated as **LOW** severity.

Affected Vendor/Software: [Google](#) **Google LLC - AWS S3 Crypto SDK for GoLang** version <= V1

CVSS3 Score: **2.5 - LOW**

| Attack Vector    | Attack Complexity      | Privileges Required | User Interaction    |
|------------------|------------------------|---------------------|---------------------|
| <b>LOCAL</b>     | <b>HIGH</b>            | <b>LOW</b>          | <b>NONE</b>         |
| Scope            | Confidentiality Impact | Integrity Impact    | Availability Impact |
| <b>UNCHANGED</b> | <b>LOW</b>             | <b>NONE</b>         | <b>NONE</b>         |

CVSS2 Score: **2.1 - LOW**

| Access Vector          | Access Complexity | Authentication      |
|------------------------|-------------------|---------------------|
| <b>LOCAL</b>           | <b>LOW</b>        | <b>NONE</b>         |
| Confidentiality Impact | Integrity Impact  | Availability Impact |
| <b>PARTIAL</b>         | <b>NONE</b>       | <b>NONE</b>         |

CVE References

Description

Tags

Link

In-band key negotiation issue in AWS S3 Crypto SDK for golang · Advisory · google/security-research · GitHub

Exploit

Third Party Advisory

github.com

text/html

CONFIRM

github.com/google/security-research/security/advisories/GHSA-7f33-f4f5-xwgw

Updates to the Amazon S3 Encryption Client | AWS Developer Blog

Vendor Advisory

aws.amazon.com

text/html

aws

CONFIRM

aws.amazon.com/blogs/developer/updates-to-the-amazon-s3-encryption-client/?s=09

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There are currently no QIDs associated with this CVE

Known Affected Configurations (CPE V2.3)

| Type        | Vendor | Product           | Version | Update | Edition | Language |
|-------------|--------|-------------------|---------|--------|---------|----------|
| Application | Amazon | Aws S3 Crypto Sdk | All     | All    | All     | All      |
| Application | Amazon | Aws S3 Crypto Sdk | All     | All    | All     | All      |

cpe:2.3:a:amazon:aws\_s3\_crypto\_sdk:\*:\*:\*:\*:golang:\*:\*:

cpe:2.3:a:amazon:aws\_s3\_crypto\_sdk:\*:\*:\*:\*:golang:\*:\*:

Discovery Credit

Sophie Schmieg

Social Mentions

| Source                                            | Title                                                                                  | Posted (UTC)        |
|---------------------------------------------------|----------------------------------------------------------------------------------------|---------------------|
| <div><div>✕</div><div>@tomtwinklestar</div></div> | aws-sdk-go v1からv2への切り替えモニョモニョしている間にCVE-2020-8911,CVE-2020-8912が来てバタバタv2に切り替えた 取り敢えずヨシ！ | 2022-09-02 10:26:16 |

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