



CVE-2019-20786

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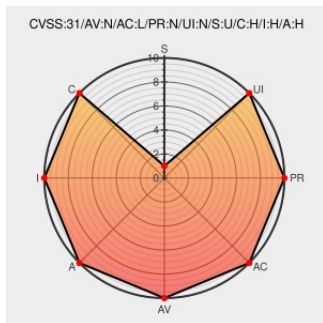
CVE-2019-20786

[Source: Mitre](#)

[Source: NIST](#)

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Certain versions of **Dtls** from **Pion** contain the following vulnerability: `handleIncomingPacket` in `conn.go` in Pion DTLS before 1.5.2 lacks a check for application data with epoch 0, which allows remote attackers to inject arbitrary unencrypted data after handshake completion.

CVE-2019-20786 has been assigned by [M](#) cve@mitre.org to track the vulnerability - currently rated as **CRITICAL** severity.

CVSS3 Score: **9.8 - CRITICAL**

Attack Vector	Attack Complexity	Privileges Required	User Interaction
NETWORK	LOW	NONE	NONE
Scope	Confidentiality Impact	Integrity Impact	Availability Impact
UNCHANGED	HIGH	HIGH	HIGH

CVSS2 Score: **7.5 - HIGH**

Access Vector	Access Complexity	Authentication
NETWORK	LOW	NONE
Confidentiality Impact	Integrity Impact	Availability Impact
PARTIAL	PARTIAL	PARTIAL

CVE References

Description	Tags	Link
Analysis of DTLS Implementations Using Protocol State Fuzzing USENIX	Third Party Advisory www.usenix.org text/html	www.usenix.org/conference/userixsecurity20/presentation/fiterau-brosteau
	Exploit	www.usenix.org/system/files/sec20fall_fiterau-

[Third Party Advisory](#) [brostean_prepub.pdf](#)
[www.usenix.org](#)
[application/pdf](#)

Comparing v1.5.1...v1.5.2 · pion/dtls · GitHub

[Patch](#)
[Third Party Advisory](#)
[github.com](#)
[text/html](#)

[MISC](#) [github.com/pion/dtls/compare/v1.5.1...v1.5.2](#)

Assert that ApplicationData has epoch != 0 · pion/dtls@fd73a5d · GitHub

[Patch](#)
[Third Party Advisory](#)
[github.com](#)
[text/html](#)

[MISC](#) [github.com/pion/dtls/commit/fd73a5df2ff0e1fb6ae6a51e2777d7a16cc4f4e0](#)

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Related QID Numbers

[982031](#) Go (go) Security Update for github.com/pion/dtls (GHSA-7gfg-6934-mqq2)

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Pion	Dtls	All	All	All	All
Application	Pion	Dtls	All	All	All	All

`cpe:2.3:a:pion:dtls:****:****:*`

`cpe:2.3:a:pion:dtls:****:****:*`

No vendor comments have been submitted for this CVE

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