CVE-2020-15107

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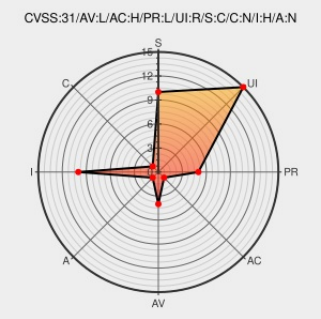
CVE-2020-15107 - advisory for GHSA-7wjx-wcwg-w999

Source: Mitre | Source: NIST | CVE.ORG | Print: PDF



Certain versions of Openenclave from Openenclave contain the following vulnerability:

In openenclave before 0.10.0, enclaves that use x87 FPU operations are vulnerable to tampering by a malicious host application. By violating the Linux System V Application Binary Interface (ABI) for such operations, a host app can compromise the execution integrity of some x87 FPU operations in an enclave. Depending on the FPU control configuration of the enclave app and whether the operations are used in secret-dependent execution paths, this vulnerability may also be used to mount a side-channel attack on the enclave. This has been fixed in 0.10.0 and the current master branch. Users will need to recompile their applications against the patched libraries to be protected from this vulnerability.

CVE-2020-15107 has been assigned by security-advisories@github.com to track the vulnerability - currently rated as MEDIUM severity.

Affected Vendor/Software: **openenclave** - **openenclave** version **< 0.10.0**

CVSS3 Score: 5.3 - MEDIUM

Attack Vector	Attack Complexity	Privileges Required	User Interaction
LOCAL	HIGH	LOW	REQUIRED
Scope	**Confidentiality Impact**	**Integrity Impact**	**Availability Impact**
CHANGED	NONE	HIGH	NONE

CVSS2 Score: 1.2 - LOW

Access Vector	Access Complexity	Authentication
LOCAL	HIGH	NONE
Confidentiality Impact	**Integrity Impact**	**Availability Impact**

NONE	PARTIAL	NONE

CVE References

Description	Tags	Link
x87 FPU operations in enclaves are vulnerable to ABI poisoning · Advisory · openenclave/openenclave · GitHub	Third Party Advisory github.com text/html	CONFIRM github.com/openenclave/openenclave/security/advisories/GHSA-7wjx-wcwg-w999

There are currently no QIDs associated with this CVE

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Openenclave	Openenclave	All	All	All	All
Application	Openenclave	Openenclave	All	All	All	All

cpe:2.3:a:openenclave:openenclave:*:*:*:*:*:*:*:*:

cpe:2.3:a:openenclave:openenclave:*:*:*:*:*:*:*:*:

No vendor comments have been submitted for this CVE

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