

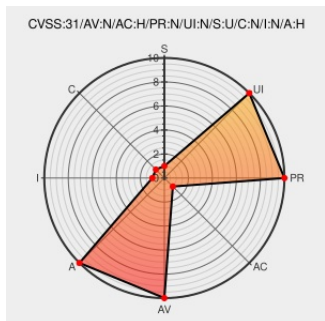


CVE-2020-15199

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CVE-2020-15199 - advisory for GHSA-x5cp-9pcf-pp3h

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

Certain versions of [Tensorflow](#) from [Google](#) contain the following vulnerability:

In Tensorflow before version 2.3.1, the ``RaggedCountSparseOutput`` does not validate that the input arguments form a valid ragged tensor. In particular, there is no validation that the ``splits`` tensor has the minimum required number of elements. Code uses this quantity to initialize a different data structure. Since ``BatchedMap`` is equivalent to

a vector, it needs to have at least one element to not be ``nullptr``. If user passes a ``splits`` tensor that is empty or has exactly one element, we get a ``SIGABRT`` signal raised by the operating system. The issue is patched in commit `3cbb917b4714766030b28eba9fb41bb97ce9ee02` and is released in TensorFlow version 2.3.1.

CVE-2020-15199 has been assigned by [security-advisories@github.com](#) to track the vulnerability - currently rated as **MEDIUM** severity.

Affected Vendor/Software: **tensorflow** - **tensorflow** version = 2.3.0

CVSS3 Score: **5.9 - MEDIUM**

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

CVSS2 Score: **4.3 - MEDIUM**

Access Vector	Access Complexity	Authentication
NETWORK	MEDIUM	NONE
Confidentiality Impact	Integrity Impact	Availability Impact

NONE

NONE

PARTIAL

CVE References

Description	Tags	Link
Fix multiple vulnerabilities in <code>`tf.raw_ops.*CountSparseOutput`</code> . · tensorflow/tensorflow@3cbb917 · GitHub	Patch Third Party Advisory github.com text/html	MISC github.com/tensorflow/tensorflow/commit/3cbb917b4714766030b28eba9fb41bb97c
Abort due to invalid splits in RaggedCountSparseOutput · Advisory · tensorflow/tensorflow · GitHub	Exploit Third Party Advisory github.com text/html	CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-x5cp-9pcf-pp3h
Release TensorFlow 2.3.1 · tensorflow/tensorflow · GitHub	Third Party Advisory github.com text/html	MISC github.com/tensorflow/tensorflow/releases/tag/v2.3.1

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Related QID Numbers

981471 Python (pip) Security Update for tensorflow-gpu (GHSA-x5cp-9pcf-pp3h)

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Google	Tensorflow	2.3.0	All	All	All
Application	Tensorflow	Tensorflow	2.3.0	All	All	All
Application	Tensorflow	Tensorflow	2.3.0	All	All	All

cpe:2.3:a:google:tensorflow:2.3.0:*:*:*:*:*:*

cpe:2.3:a:tensorflow:tensorflow:2.3.0:*:*:*:*:*:*

cpe:2.3:a:tensorflow:tensorflow:2.3.0:*:*:*:*:*:*

No vendor comments have been submitted for this CVE

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