



CVE-2022-29209

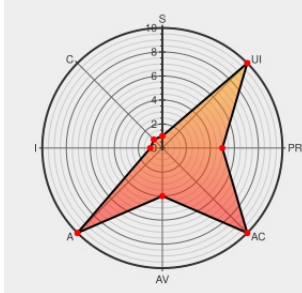
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CVE-2022-29209 - advisory for GHSA-f4rr-5m7v-wxcw

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

CVSS:31/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:H



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

TensorFlow is an open source platform for machine learning. Prior to versions 2.9.0, 2.8.1, 2.7.2, and 2.6.4, the macros that TensorFlow uses for writing assertions (e.g., `CHECK_LT`, `CHECK_GT`, etc.) have an incorrect logic when comparing `size_t` and `int` values. Due to type conversion rules, several of the macros would trigger incorrectly. Versions 2.9.0, 2.8.1, 2.7.2, and 2.6.4 contain a patch for this issue.

CVE-2022-29209 has been assigned by security-advisories@github.com to track the vulnerability - currently rated as **MEDIUM** severity.

Affected Vendor/Software: tensorflow - tensorflow version < 2.6.4

Affected Vendor/Software: tensorflow - tensorflow version >= 2.7.0rc0, < 2.7.2

Affected Vendor/Software: tensorflow - tensorflow version >= 2.8.0rc0, < 2.8.1

Affected Vendor/Software: tensorflow - tensorflow version >= 2.9.0rc0, < 2.9.0

CVSS3 Score: **5.5 - MEDIUM**

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

CVSS2 Score: **2.1 - LOW**

Access Vector	Access Complexity	Authentication
LOCAL	LOW	NONE
Confidentiality	Integrity	Availability

Impact	Impact	Impact				
NONE	NONE	PARTIAL				
CVE References						
Description	Tags	Link				
Release TensorFlow 2.8.1 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/releases/tag/v2.8.1				
Test fail on r2.8: core: __tensorflow_core_lib_math_math_util_test · Issue #55530 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/issues/55530				
Type confusion leading to `CHECK`-failure based denial of service · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	 CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-f4				
Release TensorFlow 2.9.0 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/releases/tag/v2.9.0				
Release TensorFlow 2.7.2 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/releases/tag/v2.7.2				
Release TensorFlow 2.6.4 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/releases/tag/v2.6.4				
tensorflow/logging.h at f3b9bf4c3c0597563b289c0512e98d4ce81f886e · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/blob/f3b9bf4c3c0597563b289c0512e98d4ce81f886e				
Fix `size_t` vs int logic in `CHECK_OP` by awf · Pull Request #55730 · tensorflow/tensorflow · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/pull/55730				
Merge pull request #55730 from graphcore:awf/issue-55530 · tensorflow/tensorflow@b917181 · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/commit/b917181c29b50cb83399				
By selecting these links, you may be leaving CVEreport webspace. We have provided these links to other websites because they may have information that would be of interest to you. No inferences should be drawn on account of other sites being referenced, or not, from this page. There may be other websites that are more appropriate for your purpose. CVEreport does not necessarily endorse the views expressed, or concur with the facts presented on these sites. Further, CVEreport does not endorse any commercial products that may be mentioned on these sites. Please address comments about any linked pages to comment@cve.report.						
There are currently no QIDs associated with this CVE						
Known Affected Configurations (CPE V2.3)						
Type	Vendor	Product	Version	Update	Edition	Language
Application	Google	Tensorflow	All	All	All	All
Application	Google	Tensorflow	2.7.0	rc0	All	All
Application	Google	Tensorflow	2.7.0	rc1	All	All
Application	Google	Tensorflow	2.8.0	-	All	All
Application	Google	Tensorflow	2.8.0	rc0	All	All
Application	Google	Tensorflow	2.8.0	rc1	All	All

Application	Google	Tensorflow	2.9.0	rc0	All	All
Application	Google	Tensorflow	2.9.0	rc1	All	All
cpe:2.3:a:google:tensorflow:*:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.7.0:rc0:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.7.0:rc1:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.8.0:-:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.8.0:rc0:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.8.0:rc1:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.9.0:rc0:*:*:*:*:						
cpe:2.3:a:google:tensorflow:2.9.0:rc1:*:*:*:*:						