CVE-2022-29201

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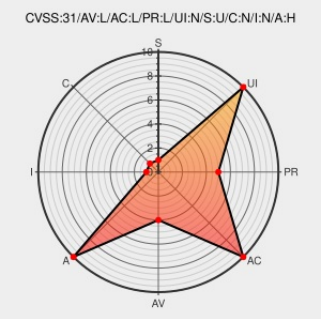
CVE-2022-29201 - advisory for GHSA-pqhm-4wvf-2jg8

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



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 implementation of `tf.raw_ops.QuantizedConv2D` does not fully validate the input arguments. In this case, references get bound to `nullptr` for each argument that is empty. Versions 2.9.0, 2.8.1, 2.7.2, and 2.6.4 contain a patch for this issue.

CVE-2022-29201 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
tensorflow/quantized_conv_ops.cc at f3b9bf4c3c0597563b289c0512e98d4ce81f886e · tensorflow/tensorflow · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/blob/f3b9bf4c3c0597563b289c0512e98d4c
Fix undefined behavior in QuantizedConv2D · tensorflow/tensorflow@0f0b080 · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/commit/0f0b080ecde4d3dfec158d
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
Missing validation results in undefined behavior in `QuantizedConv2D` · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-pq

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:*:*:*:*:*:*:

No vendor comments have been submitted for this CVE

Social Mentions

Source	Title	Posted (UTC)
@CVEreport	CVE-2022-29201 : TensorFlow is an open source platform for machine learning. Prior to versions 2.9.0, 2.8.1, 2.7.2,… twitter.com/i/web/status/1…	2022-05-20 23:02:11
@LinInfoSec	Tensorflow - CVE-2022-29201: github.com/tensorflow/ten…	2022-05-21 01:01:27
/r/netcve	CVE-2022-29201	2022-05-21 00:38:08

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