

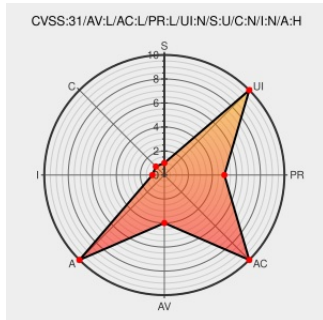


CVE-2021-41202

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CVE-2021-41202 - advisory for GHSA-xrqm-fpgr-6hhx

[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. In affected versions while calculating the size of the output within the `tf.range` kernel, there is a conditional statement of type `int64 = condition ? int64 : double`. Due to C++ implicit conversion rules, both branches of the condition will be cast to `double` and the result would

be truncated before the assignment. This result in overflows. The fix will be included in TensorFlow 2.7.0. We will also cherrypick this commit on TensorFlow 2.6.1, TensorFlow 2.5.2, and TensorFlow 2.4.4, as these are also affected and still in supported range.

CVE-2021-41202 has been assigned by security-advisories@github.com to track the vulnerability - currently rated as **MEDIUM** severity.

Affected Vendor/Software: tensorflow - tensorflow version $\geq 2.6.0, < 2.6.1$

Affected Vendor/Software: tensorflow - tensorflow version $\geq 2.5.0, < 2.5.2$

Affected Vendor/Software: tensorflow - tensorflow version $< 2.4.4$

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

Confidentiality Impact

NONE

Integrity Impact

NONE

Availability Impact

PARTIAL

CVE References

Description	Tags	Link
Merge pull request #51711 from yongtang:46899-tf.range · tensorflow/tensorflow@1b0e0ec · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/commit/1b0e0ec27e7895b9985076eab32445026ae5ca94
`tf.sparse.eye` crashes(aborts) when num_rows contains large number · Issue #46912 · tensorflow/tensorflow · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/issues/46912
Overflow/crash in `tf.range` · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-xrqm-fpgr-6hxx
tf.keras.backend.arange crash (abort) when start is large · Issue #46889 · tensorflow/tensorflow · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/issues/46889
Merge pull request #51359 from yongtang:46913-range-overflow · tensorflow/tensorflow@6d94002 · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/commit/6d94002a09711d297dbba90390d5482b76113899

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Related QID Numbers

980168 Python (pip) Security Update for tensorflow-gpu (GHSA-xrqm-fpgr-6hxx)

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

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:*:*:*:*:

No vendor comments have been submitted for this CVE

Social Mentions		
Source	Title	Posted (UTC)
 @CVEreport	CVE-2021-41202 : TensorFlow is an open source platform for machine learning. In affected versions while calculating... twitter.com/i/web/status/1...	2021-11-05 21:52:39
← Previous ID		Next ID→

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