



CVE-2021-37637

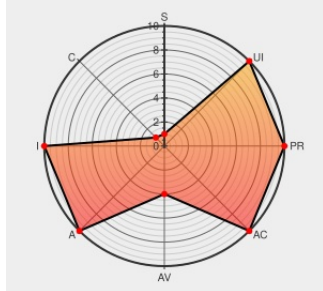
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CVE-2021-37637 - advisory for GHSA-c9qf-r67m-p7cg

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

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



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

TensorFlow is an end-to-end open source platform for machine learning. It is possible to trigger a null pointer dereference in TensorFlow by passing an invalid input to ``tf.raw_ops.CompressElement``. The [implementation]

(<https://github.com/tensorflow/tensorflow/blob/47a06f40411a69c99f381495f490536972152ac0/>) was accessing the size of a buffer obtained from the return of a separate function call before validating that said buffer is valid. We have patched the issue in GitHub commit `5dc7f6981fdaf74c8c5be41f393df705841fb7c5`. The fix will be included in TensorFlow 2.6.0. We will also cherry-pick this commit on TensorFlow 2.5.1, TensorFlow 2.4.3, and TensorFlow 2.3.4, as these are also affected and still in supported range.

CVE-2021-37637 has been assigned by [security-advisories@github.com](#) to track the vulnerability - currently rated as **MEDIUM** severity.

Affected Vendor/Software: [tensorflow](#) - **tensorflow** version `>= 2.5.0, < 2.5.1`

Affected Vendor/Software: [tensorflow](#) - **tensorflow** version `>= 2.4.0, < 2.4.3`

Affected Vendor/Software: [tensorflow](#) - **tensorflow** version `< 2.3.4`

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

Access

Authentication

Vector	Complexity	
LOCAL	LOW	NONE
Confidentiality Impact	Integrity Impact	Availability Impact
NONE	NONE	PARTIAL

CVE References

Description	Tags	Link
Fix accessing possible nullptr in tensorflow::data::CompressElement a... · tensorflow/tensorflow@5dc7f69 · GitHub	github.com text/html	 MISC github.com/tensorflow/tensorflow/commit/5dc7f6981fdaf74c8c5be41f393df705841fb7c5
Null pointer dereference in `CompressElement` · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	 CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-c9qf-r67m-p7cg

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Related QID Numbers

981506 Python (pip) Security Update for tensorflow-gpu (GHSA-c9qf-r67m-p7cg)

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Google	Tensorflow	All	All	All	All
Application	Google	Tensorflow	2.5.0	All	All	All
Application	Google	Tensorflow	2.6.0	rc0	All	All
Application	Google	Tensorflow	2.6.0	rc1	All	All
Application	Google	Tensorflow	2.6.0	rc2	All	All
cpe:2.3:a:google:tensorflow:*.*.*.*.*.*.:						
cpe:2.3:a:google:tensorflow:2.5.0:*.*.*.*.*.*.:						
cpe:2.3:a:google:tensorflow:2.6.0:rc0:*.*.*.*.*.*.:						
cpe:2.3:a:google:tensorflow:2.6.0:rc1:*.*.*.*.*.*.:						
cpe:2.3:a:google:tensorflow:2.6.0:rc2:*.*.*.*.*.*.:						

No vendor comments have been submitted for this CVE

Social Mentions

Social Mentions

Source	Title	Posted (UTC)
 @CVEreport	CVE-2021-37637 : TensorFlow is an end-to-end open source platform for machine learning. It is possible to trigger a... twitter.com/i/web/status/1...	2021-08-12 18:33:41
← Previous ID		Next ID→

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