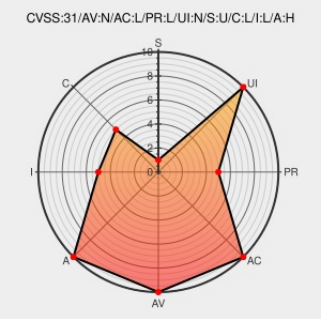
CVE-2022-23573

Published on: 02/04/2022 12:00:00 AM UTC

Last Modified on: 02/10/2022 03:32:00 PM UTC

CVE-2022-23573 - advisory for GHSA-q85f-69q7-55h2

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



Certain versions of Tensorflow from Google contain the following vulnerability:

Tensorflow is an Open Source Machine Learning Framework. The implementation of `AssignOp` can result in copying uninitialized data to a new tensor. This later results in undefined behavior. The implementation has a check that the left hand side of the assignment is initialized (to minimize number of allocations), but does not check that the right hand side is also initialized. The fix will be included in TensorFlow 2.8.0. We will also cherrypick this commit on TensorFlow 2.7.1, TensorFlow 2.6.3, and TensorFlow 2.5.3, as these are also affected and still in supported range.

CVE-2022-23573 has been assigned by security-advisories@github.com to track the vulnerability - currently rated as HIGH severity.

Affected Vendor/Software: **tensorflow** - **tensorflow** version **>= 2.7.0, < 2.7.1**

Affected Vendor/Software: **tensorflow** - **tensorflow** version **>= 2.6.0, < 2.6.3**

Affected Vendor/Software: **tensorflow** - **tensorflow** version **< 2.5.3**

CVSS3 Score: 8.8 - HIGH

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

CVSS2 Score: 6.5 - MEDIUM

Access Vector	Access Complexity	Authentication
NETWORK	LOW	SINGLE
Confidentiality Impact	**Integrity Impact**	**Availability Impact**

Impact	Impact	Impact
PARTIAL	PARTIAL	PARTIAL

CVE References

Description	Tags	Link
Prevent copying uninitialized data in `AssignOp`. · tensorflow/tensorflow@ef1d027 · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/commit/ef1d027be116f25e25bb9
Unitialized variable access in `AssignOp` · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-q8
tensorflow/assign_op.h at a1320ec1eac186da1d03f033109191f715b2b130 · tensorflow/tensorflow · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/blob/a1320ec1eac186da1d03f033109191f L143

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	2.7.0	All	All	All
Application	Google	Tensorflow	All	All	All	All
Application	Google	Tensorflow	All	All	All	All

cpe:2.3:a:google:tensorflow:2.7.0:*:*:*:*:*:*:*:

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

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

No vendor comments have been submitted for this CVE

Social Mentions

Source	Title	Posted (UTC)
@CVEreport	CVE-2022-23573 : Tensorflow is an Open Source Machine Learning Framework. The implementation of `AssignOp` can resu… twitter.com/i/web/status/1…	2022-02-04 22:46:40
@LinInfoSec	Tensorflow - CVE-2022-23573: github.com/tensorflow/ten…	2022-02-05 02:00:15

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Next ID→

CVE.report and Source URL Uptime Status status.cve.report