Incomplete validation in signal ops leads to crashes

Low   **mihaimaruseac** published **GHSA-5889-7v45-q28m** on May 17

Package

🐍 **tensorflow, tensorflow-cpu, tensorflow-gpu** (pip)

Affected versions	Patched versions
< 2.9.0	2.6.4, 2.7.2, 2.8.1, 2.9.0

Description

Impact

The `tf.compat.v1.signal.rfft2d` and `tf.compat.v1.signal.rfft3d` lack input validation and under certain condition can result in crashes (due to `CHECK`-failures).

Patches

We have patched the issue in GitHub commit 0a8a781e597b18ead006d19b7d23d0a369e9ad73 (merging GitHub PR #55274).

The fix will be included in TensorFlow 2.9.0. We will also cherrypick this commit on TensorFlow 2.8.1, TensorFlow 2.7.2, and TensorFlow 2.6.4, as these are also affected and still in supported range.

For more information

Please consult our security guide for more information regarding the security model and how to contact us with issues and questions.

Attribution

This vulnerability has been reported externally via a GitHub issue.

Severity

Low

CVE ID

CVE-2022-29213

Weaknesses

No CWEs