



CVE-2019-18397

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CVE-2019-18397

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

Certain versions of [Debian Linux](#) from [Debian](#) contain the following vulnerability:

A buffer overflow in the `fribidi_get_par_embedding_levels_ex()` function in `lib/fribidi-bidi.c` of GNU FriBidi through 1.0.7 allows an attacker to cause a denial of service or possibly execute arbitrary code by delivering crafted text content to a user, when this content is then rendered by an application that uses FriBidi for text layout calculations.

Examples include any GNOME or GTK+ based application that uses Pango for text layout, as this internally uses FriBidi for bidirectional text layout. For example, the attacker can construct a crafted text file to be opened in GEdit, or a crafted IRC message to be viewed in HexChat.

CVE-2019-18397 has been assigned by [M](#) cve@mitre.org to track the vulnerability - currently rated as **HIGH** severity.

CVSS3 Score: **7.8 - HIGH**

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

CVSS2 Score: **6.8 - MEDIUM**

Access Vector	Access Complexity	Authentication
NETWORK	MEDIUM	NONE
Confidentiality Impact	Integrity Impact	Availability Impact
PARTIAL	PARTIAL	PARTIAL

CVE References

Description	Tags	Link
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[SECURITY] Fedora 31 Update: fribidi-1.0.5-5.fc31 - package-announce - Fedora Mailing-Lists	lists.fedoraproject.org text/html	 FEDORA FEDORA-2019-7075bc4ff8
[SECURITY] Fedora 30 Update: fribidi-1.0.5-5.fc30 - package-announce - Fedora Mailing-Lists	lists.fedoraproject.org text/html	 FEDORA FEDORA-2019-533a72fec5
Red Hat Customer Portal	access.redhat.com text/html	 REDHAT RHSA-2020:0291
Red Hat Customer Portal	access.redhat.com text/html	 REDHAT RHSA-2019:4361
Truncate isolate_level to FRIBIDI_BIDI_MAX_EXPLICIT_LEVEL · fribidi/fribidi@034c6e9 · GitHub	Patch github.com text/html	 MISC github.com/fribidi/fribidi/commit/034c6e9a1d296286305f4cfd1e0072b879
CVE-2019-18397	Third Party Advisory security-tracker.debian.org text/html	 MISC security-tracker.debian.org/tracker/CVE-2019-18397
GNU FriBidi: Heap-based buffer overflow (GLSA 202003-41) — Gentoo security	security.gentoo.org text/html	 GENTOO GLSA-202003-41
'[oss-security] CVE-2019-18397 - Stack buffer overflow in GNU FriBidi >= 1.0.0' - MARC	Third Party Advisory marc.info text/html	 MISC marc.info/?l=oss-security&m=157322128105807&w=2
#944327 - fribidi: CVE-2019-18397 - Debian Bug report logs	Issue Tracking Third Party Advisory bugs.debian.org text/html	 CONFIRM bugs.debian.org/cgi-bin/bugreport.cgi?bug=944327
Red Hat Customer Portal	access.redhat.com text/html	 REDHAT RHSA-2019:4326

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Related QID Numbers

- [376906](#) Alibaba Cloud Linux Security Update for fribidi (ALINUX2-SA-2020:0004)
- [500193](#) Alpine Linux Security Update for fribidi
- [750026](#) SUSE Enterprise Linux Security Update for fribidi (SUSE-SU-2021:1655-1)
- [750202](#) OpenSUSE Security Update for fribidi (openSUSE-SU-2021:0763-1)
- [750783](#) OpenSUSE Security Update for fribidi (openSUSE-SU-2021:1655-1)

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	Debian	Debian Linux	10.0	All	All	All

Operating System	Debian	Debian Linux	8.0	All	All	All
Operating System	Debian	Debian Linux	9.0	All	All	All
Operating System	Debian	Debian Linux	10.0	All	All	All
Operating System	Debian	Debian Linux	8.0	All	All	All
Operating System	Debian	Debian Linux	9.0	All	All	All
Application	Gnu	Fribidi	All	All	All	All
cpe:2.3:o:debian:debian_linux:10.0:*:*:*:*:*:						
cpe:2.3:o:debian:debian_linux:8.0:*:*:*:*:*:						
cpe:2.3:o:debian:debian_linux:9.0:*:*:*:*:*:						
cpe:2.3:o:debian:debian_linux:10.0:*:*:*:*:*:						
cpe:2.3:o:debian:debian_linux:8.0:*:*:*:*:*:						
cpe:2.3:o:debian:debian_linux:9.0:*:*:*:*:*:						
cpe:2.3:a:gnu:fribidi:*:*:*:*:*:						

No vendor comments have been submitted for this CVE