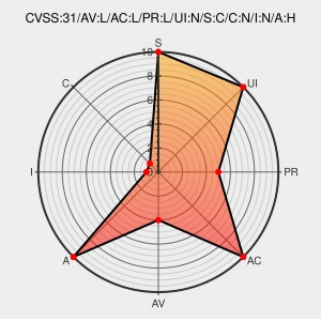
CVE-2021-28714

Published on: 01/06/2022 12:00:00 AM UTC

Last Modified on: 08/08/2023 02:22:00 PM UTC

CVE-2021-28714

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



Certain versions of Debian Linux from Debian contain the following vulnerability:

Guest can force Linux netback driver to hog large amounts of kernel memory T[his CNA information record relates to multiple CVEs; the text explains which aspects/vulnerabilities correspond to which CVE.] Incoming data packets for a guest in the Linux kernel's netback driver are buffered until the guest is ready to process them. There are some measures taken for avoiding to pile up too much data, but those can be bypassed by the guest: There is a timeout how long the client side of an interface can stop consuming new packets before it is assumed to have stalled, but this timeout is rather long (60 seconds by default). Using a UDP connection on a fast interface can easily accumulate gigabytes of data in that time. (CVE-2021-28715) The timeout could even never trigger if the guest manages to have only one free slot in its RX queue ring page and the next package would require more than one free slot, which may be the case when using GSO, XDP, or software hashing. (CVE-2021-28714)

CVE-2021-28714 has been assigned by security@xen.org to track the vulnerability - currently rated as MEDIUM severity.

Affected Vendor/Software: **Linux** - **Linux** version **? consult Xen advisory XSA-392**

CVSS3 Score: 6.5 - MEDIUM

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

CVSS2 Score: 2.1 - LOW

Access Vector	Access Complexity	Authentication
LOCAL	LOW	NONE

LOCAL	LOW	NONE
Confidentiality Impact	**Integrity Impact**	**Availability Impact**
NONE	NONE	PARTIAL

CVE References

Description	Tags	Link
[SECURITY] [DLA 2941-1] linux-4.19 security update	lists.debian.org text/html	MLIST [debian-lts-announce] 20220309 [SECURITY] [DLA 2941-1] linux-4.19 security update
[SECURITY] [DLA 2940-1] linux security update	lists.debian.org text/html	MLIST [debian-lts-announce] 20220309 [SECURITY] [DLA 2940-1] linux security update
	xenbits.xenproject.org text/plain	MISC xenbits.xenproject.org/xsa/advisory-392.txt
Debian -- Security Information -- DSA-5050-1 linux	www.debian.org Depreciated Link text/html	DEBIAN DSA-5050
Debian -- Security Information -- DSA-5096-1 linux	www.debian.org Depreciated Link text/html	DEBIAN DSA-5096

Related QID Numbers

179012 Debian Security Update for linux (DSA 5050-1)

179117 Debian Security Update for linux (DSA 5096-1)

179118 Debian Security Update for linux (DLA 2940-1)

179119 Debian Security Update for linux-4.19 (DLA 2941-1)

183448 Debian Security Update for linux (CVE-2021-28714)

198659 Ubuntu Security Notification for Linux kernel (OEM) Vulnerabilities (USN-5278-1)

198678 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5298-1)

198708 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5337-1)

198709 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5338-1)

198731 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5368-1)

198740 Ubuntu Security Notification for Linux kernel (BlueField) Vulnerabilities (USN-5377-1)

282190 Fedora Security Update for kernel (FEDORA-2021-e6cbca1e9e)

282191 Fedora Security Update for kernel (FEDORA-2021-4f1a2cdf2e)

353130 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.4-2022-021

353151 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.10-2022-009

353160 Amazon Linux Security Advisory for kernel : ALAS2-2022-1749

353161 Amazon Linux Security Advisory for kernel : ALAS-2022-1563

353242 Amazon Linux Security Advisory for kernel : ALAC2012-2022-036

353243 Amazon Linux Security Advisory for kmod-mlx5 : ALAC2012-2022-037

353244 Amazon Linux Security Advisory for kmod-sfc : ALAC2012-2022-038

354747 Amazon Linux Security Advisory for kernel : ALAS-2023-1688

376925 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2022:0125)

671505 EulerOS Security Update for kernel (EulerOS-SA-2022-1489)

751590 OpenSUSE Security Update for the Linux Kernel (openSUSE-SU-2022:0056-1)

751600 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0068-1)

751602 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0080-1)

751622 OpenSUSE Security Update for the Linux Kernel (openSUSE-SU-2022:0131-1)

751654 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0197-1)

751695 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0367-1)

751697 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0366-1)

751701 OpenSUSE Security Update for the Linux Kernel (openSUSE-SU-2022:0366-1)

751702 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0371-1)

751989 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0131-1)

753133 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0181-1)

753264 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0079-1)

753355 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:0056-1)

900519 Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (7165)

905757 Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (7165-1)

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	11.0	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All

cpe:2.3:o:debian:debian_linux:10.0:*:*:*:*:*:*:*

cpe:2.3:o:debian:debian_linux:11.0:*:*:*:*:*:*:*

cpe:2.3:o:linux:linux_kernel:*:*:*:*:*:*:*:*:

Social Mentions

Source	Title	Posted (UTC)
@oss_security	Xen Security Advisory 392 v4 (CVE-2021-28714,CVE-2021-28715) - Guest can force Linux netback driver to hog large am… twitter.com/i/web/status/1…	2021-12-20 16:31:13
@CVEreport	CVE-2021-28714 : Guest can force #Linux netback driver to hog large amounts of #kernel memory T[his CNA informatio… twitter.com/i/web/status/1…	2022-01-06 17:14:05

← Previous ID

Next ID→