



# CVE-2022-3028

[MITRE](#)[NVD](#)[CVE.ORG](#)[Print: PDF](#)

## Summary

<b>CVE</b>	CVE-2022-3028
<b>State</b>	PUBLIC
<b>Assigner</b>	secalert@redhat.com
<b>Source Priority</b>	CVE Program / NVD first with legacy fallback
<b>Published</b>	2022-08-31 16:15:00 UTC
<b>Updated</b>	2023-11-07 03:50:00 UTC
<b>Description</b>	A race condition was found in the Linux kernel's IP framework for transforming packets (XFRM subsystem) when multiple c

## Risk And Classification

**Problem Types:** CWE-362 | CWE-787

## NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	<a href="#">Debian</a>	<a href="#">Debian Linux</a>	10.0	All	All	All
Operating System	<a href="#">Fedoraproject</a>	<a href="#">Fedora</a>	35	All	All	All
Operating System	<a href="#">Fedoraproject</a>	<a href="#">Fedora</a>	36	All	All	All
Operating System	<a href="#">Fedoraproject</a>	<a href="#">Fedora</a>	37	All	All	All
Operating System	<a href="#">Linux</a>	<a href="#">Linux Kernel</a>	All	All	All	All
Operating System	<a href="#">Linux</a>	<a href="#">Linux Kernel</a>	6.0	rc1	All	All
Operating System	<a href="#">Linux</a>	<a href="#">Linux Kernel</a>	6.0	rc2	All	All

## References

Reference	Source	Link
Re: Race 1 in net/xfrm/xfrm_algo.c	MISC	<a href="#">lore.kernel.org</a>
August 2022 Linux Kernel 5.19 Vulnerabilities in NetApp Products   NetApp Product Security	CONFIRM	<a href="#">security.netapp.com</a>
[SECURITY] [DLA 3131-1] linux security update	MLIST	<a href="#">lists.debian.org</a>
[SECURITY] Fedora 36 Update: kernel-5.19.6-200.fc36 - package-announce - Fedora Mailing-Lists		<a href="#">lists.fedoraproject.org</a>
[SECURITY] Fedora 35 Update: kernel-5.19.6-100.fc35 - package-announce - Fedora Mailing-Lists		<a href="#">lists.fedoraproject.org</a>
[SECURITY] Fedora 37 Update: kernel-tools-5.19.4-300.fc37 - package-announce - Fedora Mailing-Lists		<a href="#">lists.fedoraproject.org</a>
[SECURITY] [DLA 3173-1] linux-5.10 security update	MLIST	<a href="#">lists.debian.org</a>

Re: Race 1 in net/xfrm/xfrm_algo.c		<a href="https://lore.kernel.org">lore.kernel.org</a>
[SECURITY] Fedora 37 Update: kernel-tools-5.19.4-300.fc37 - package-announce - Fedora Mailing-Lists	FEDORA	<a href="https://lists.fedoraproject.org">lists.fedoraproject.org</a>
[SECURITY] Fedora 35 Update: kernel-5.19.6-100.fc35 - package-announce - Fedora Mailing-Lists	FEDORA	<a href="https://lists.fedoraproject.org">lists.fedoraproject.org</a>
af_key: Do not call xfrm_probe_algs in parallel · torvalds/linux@ba953a9 · GitHub	MISC	<a href="https://github.com">github.com</a>
[SECURITY] Fedora 36 Update: kernel-5.19.6-200.fc36 - package-announce - Fedora Mailing-Lists	FEDORA	<a href="https://lists.fedoraproject.org">lists.fedoraproject.org</a>
CVE Program record	CVE.ORG	<a href="https://www.cve.org">www.cve.org</a>
NVD vulnerability detail	NVD	<a href="https://nvd.nist.gov">nvd.nist.gov</a>

No vendor comments have been submitted for this CVE.

### Legacy QID Mappings

<a href="#">160123</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9852)
<a href="#">160135</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9871)
<a href="#">160136</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9870)
<a href="#">160147</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9926)
<a href="#">160150</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9927)
<a href="#">160161</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9931)
<a href="#">160164</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9930)
<a href="#">160212</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9998)
<a href="#">160239</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9999)
<a href="#">160583</a> Oracle Enterprise Linux Security Update for kernel (ELSA-2023-2458)
<a href="#">160692</a> Oracle Enterprise Linux Security Update for kernel (ELSA-2023-2951)
<a href="#">181039</a> Debian Security Update for linux (CVE-2022-3028)
<a href="#">181091</a> Debian Security Update for linux (DLA 3131-1)
<a href="#">181190</a> Debian Security Update for linux-5.10 (DLA 3173-1)
<a href="#">198999</a> Ubuntu Security Notification for Linux kernel (OEM) Vulnerabilities (USN-5693-1)
<a href="#">199029</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5728-1)
<a href="#">199030</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5727-1)
<a href="#">199031</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5729-1)
<a href="#">199036</a> Ubuntu Security Notification for Linux kernel (GCP) Vulnerabilities (USN-5727-2)
<a href="#">199037</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5728-2)

<a href="#">199038</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5729-2)
<a href="#">199051</a> Ubuntu Security Notification for Linux kernel (GCP) Vulnerabilities (USN-5728-3)
<a href="#">199072</a> Ubuntu Security Notification for Linux kernel (Azure) Vulnerabilities (USN-5774-1)
<a href="#">241417</a> Red Hat Update for kernel security (RHSA-2023:2458)
<a href="#">241468</a> Red Hat Update for kernel-rt (RHSA-2023:2148)
<a href="#">241504</a> Red Hat Update for kernel security (RHSA-2023:2951)
<a href="#">241527</a> Red Hat Update for kernel-rt (RHSA-2023:2736)
<a href="#">242855</a> Red Hat Update for kernel (RHSA-2024:0412)
<a href="#">283080</a> Fedora Security Update for kernel (FEDORA-2022-6835ddb6d8)
<a href="#">283081</a> Fedora Security Update for kernel (FEDORA-2022-35c14ba5bb)
<a href="#">354071</a> Amazon Linux Security Advisory for kernel : ALAS-2022-1636
<a href="#">354075</a> Amazon Linux Security Advisory for kernel : ALAS2-2022-1852
<a href="#">354081</a> Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.4-2022-036
<a href="#">354082</a> Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.15-2022-008
<a href="#">354084</a> Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.10-2022-020
<a href="#">354439</a> Amazon Linux Security Advisory for kernel : ALAS2022-2022-150
<a href="#">354468</a> Amazon Linux Security Advisory for kernel : ALAS2022-2022-185
<a href="#">354542</a> Amazon Linux Security Advisory for kernel : ALAS-2022-185
<a href="#">355199</a> Amazon Linux Security Advisory for kernel : ALAS2023-2023-070
<a href="#">377891</a> Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2023:0002)
<a href="#">378043</a> Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX2-SA-2023:0011)
<a href="#">378468</a> Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-20230042)
<a href="#">378512</a> Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2023:0042)
<a href="#">390268</a> Oracle VM Server for x86 Security Update for kernel (OVMSA-2022-0026)
<a href="#">591406</a> Siemens SIMATIC S7-1500 CPU GNU/Linux subsystem Multiple Vulnerabilities (SSB-439005, ICSA-22-104-13)
<a href="#">6140169</a> AWS Bottlerocket Security Update for kernel (GHSA-c274-x72q-qpf2)
<a href="#">672278</a> EulerOS Security Update for kernel (EulerOS-SA-2022-2686)
<a href="#">672354</a> EulerOS Security Update for kernel (EulerOS-SA-2022-2732)

<a href="#">672391</a> EulerOS Security Update for kernel (EulerOS-SA-2022-2767)
<a href="#">672410</a> EulerOS Security Update for kernel (EulerOS-SA-2022-2796)
<a href="#">672474</a> EulerOS Security Update for kernel (EulerOS-SA-2022-2823)
<a href="#">672711</a> EulerOS Security Update for kernel (EulerOS-SA-2023-1507)
<a href="#">752584</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3265-1)
<a href="#">752589</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3264-1)
<a href="#">752591</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3274-1)
<a href="#">752592</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3282-1)
<a href="#">752594</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3293-1)
<a href="#">752596</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3291-1)
<a href="#">752615</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3408-1)
<a href="#">752632</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3450-1)
<a href="#">753063</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4617-1)
<a href="#">753167</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3288-1)
<a href="#">753370</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3609-1)
<a href="#">753374</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3809-1)
<a href="#">753703</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:0416-1)
<a href="#">753707</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:0416-1)
<a href="#">753727</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:0416-1)
<a href="#">903761</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10814)
<a href="#">903874</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10822)
<a href="#">904110</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10814-1)
<a href="#">904140</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10822-1)
<a href="#">905902</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10814-2)
<a href="#">906453</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (10822-2)
<a href="#">941023</a> AlmaLinux Security Update for kernel (ALSA-2023:2458)
<a href="#">941061</a> AlmaLinux Security Update for kernel-rt (ALSA-2023:2148)
<a href="#">941096</a> AlmaLinux Security Update for kernel (ALSA-2023:2951)
<a href="#">941114</a> AlmaLinux Security Update for kernel-rt (ALSA-2023:2726)

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