Linux Kernel Use-After-Free Vulnerability

MITRE | NVD | CVE.ORG | Print: PDF

Summary

CVE	CVE-2022-2586
State	RESERVED
Assigner	cve@mitre.org
Source Priority	CVE Program / NVD first with legacy fallback
Published	2024-01-08 18:15:00 UTC
Updated	2024-01-12 16:21:00 UTC
Description	Linux Kernel contains a use-after-free vulnerability in the nft_object, allowing local attackers to escalate privileges.

Risk And Classification

EPSS: 0.022170000 probability, percentile 0.844110000 (date 2026-04-01)

CISA KEV: Listed on 2024-06-26; due 2024-07-17; ransomware use Unknown

Problem Types: CWE-416

CISA Known Exploited Vulnerability

Vendor	Linux
Product	Kernel
Name	Linux Kernel Use-After-Free Vulnerability
Required Action	Apply updates per vendor instructions or discontinue use of the product if updates are unavailable.
Notes	This vulnerability affects a common open-source component, third-party library, or a protocol used by different products. For more information, please see: https://seclists.org/oss-sec/2022/q3/131; https://nvd.nist.gov/vuln/detail/CVE-2022-2586

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	Canonical	Ubuntu Linux	14.04	All	All	All
Operating System	Canonical	Ubuntu Linux	16.04	All	All	All
Operating System	Canonical	Ubuntu Linux	18.04	All	All	All
Operating System	Canonical	Ubuntu Linux	20.04	All	All	All
Operating System	Canonical	Ubuntu Linux	22.04	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All

References

References

Reference	Source	Link	Tags
USN-5560-2: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
USN-5582-1: Linux kernel (Azure CVM) vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
ZDI-22-1118 | Zero Day Initiative		www.zerodayinitiative.com	Third Pa
USN-5564-1: Linux kernel (Intel IoTG) vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
USN-5566-1: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
USN-5560-1: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
CVE - CVE-2022-2586		cve.mitre.org	Third Pa
USN-5562-1: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
USN-5567-1: Linux kernel (OEM) vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
USN-5565-1: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
oss-security - CVE-2022-2586 - Linux kernel nf_tables cross-table reference UAF		www.openwall.com	Mailing
[PATCH 1/3] netfilter: nf_tables: do not allow SET_ID to refer to another table		lore.kernel.org	Mailing
USN-5557-1: Linux kernel vulnerabilities | Ubuntu security notices | Ubuntu		ubuntu.com	Third Pa
CVE Program record	CVE.ORG	www.cve.org	canonic
NVD vulnerability detail	NVD	nvd.nist.gov	canonic
CISA Known Exploited Vulnerabilities catalog	CISA	www.cisa.gov	kev

No vendor comments have been submitted for this CVE.

Legacy QID Mappings

- 160106 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9827)
- 160107 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-9828)
- 160108 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9829)
- 160109 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-9830)
- 160210 Oracle Enterprise Linux Security Update for kernel (ELSA-2022-7683)
- 160270 Oracle Enterprise Linux Security Update for kernel (ELSA-2022-8267)
- 180938 Debian Security Update for linux (DSA 5207-1)
- 181002 Debian Security Update for linux-5.10 (DLA 3102-1)
- 181091 Debian Security Update for linux (DLA 3131-1)
- 182513 Debian Security Update for linux (CVE-2022-2586)
- 198891 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5560-1)

198892 Ubuntu Security Notification for Linux kernel (OEM) Vulnerabilities (USN-5567-1)

198894 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5566-1)

198895 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5562-1)

198896 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5565-1)

198897 Ubuntu Security Notification for Linux kernel (Intel IoTG) Vulnerabilities (USN-5564-1)

198911 Ubuntu Security Notification for Linux kernel (Azure CVM) Vulnerabilities (USN-5582-1)

240815 Red Hat Update for kernel-rt (RHSA-2022:7444)

240817 Red Hat Update for kernel security (RHSA-2022:7683)

240869 Red Hat Update for kernel-rt (RHSA-2022:7933)

240904 Red Hat Update for kernel security (RHSA-2022:8267)

242890 Red Hat Update for kernel (RHSA-2024:0724)

283034 Fedora Security Update for kernel (FEDORA-2022-9bbb1d9b7b)

283035 Fedora Security Update for kernel (FEDORA-2022-484e226872)

354060 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.4-2022-035

354081 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.4-2022-036

354082 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.15-2022-008

354084 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.10-2022-020

354439 Amazon Linux Security Advisory for kernel : ALAS2022-2022-150

354468 Amazon Linux Security Advisory for kernel : ALAS2022-2022-185

354542 Amazon Linux Security Advisory for kernel : ALAS-2022-185

355199 Amazon Linux Security Advisory for kernel : ALAS2023-2023-070

355545 Amazon Linux Security Advisory for kernel : ALAS2-2023-2100

355557 Amazon Linux Security Advisory for kernel : ALAS-2023-1773

377012 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX2-SA-2022:0036)

377117 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2022:0158)

377871 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX2-SA-2023:0001)

377891 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2023:0002)

6140022 AWS Bottlerocket Security Update for kernel (GHSA-j7qm-552q-93v3)

6140124 AWS Bottlerocket Security Update for kernel (GHSA-j7qm-552q-93v3)

6140134 AWS Bottlerocket Security Update for kernel (GHSA-j7qm-552q-93v3)

672278 EulerOS Security Update for kernel (EulerOS-SA-2022-2686)

672286 EulerOS Security Update for kernel (EulerOS-SA-2022-2654)

672354 EulerOS Security Update for kernel (EulerOS-SA-2022-2732)

672391 EulerOS Security Update for kernel (EulerOS-SA-2022-2767)

672410 EulerOS Security Update for kernel (EulerOS-SA-2022-2796)

752708 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3704-1)

752724 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3775-1)

752750 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3844-1)

753063 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4617-1)

753095 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3585-1)

753370 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3609-1)

753374 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:3809-1)

755605 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2024:0120-1)

755606 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2024:0117-1)

940732 AlmaLinux Security Update for kernel (ALSA-2022:7683)

940766 AlmaLinux Security Update for kernel-rt (ALSA-2022:7444)

940798 AlmaLinux Security Update for kernel (ALSA-2022:8267)

940843 AlmaLinux Security Update for kernel-rt (ALSA-2022:7933)

960176 Rocky Linux Security Update for kernel-rt (RLSA-2022:7444)

960184 Rocky Linux Security Update for kernel (RLSA-2022:7683)