



CVE-2022-4378

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Summary

CVE	CVE-2022-4378
State	PUBLIC
Assigner	secalert@redhat.com
Source Priority	CVE Program / NVD first with legacy fallback
Published	2023-01-05 16:15:00 UTC
Updated	2023-11-07 03:57:00 UTC
Description	A stack overflow flaw was found in the Linux kernel's SYSCTL subsystem in how a user changes certain kernel parameters

Risk And Classification

Problem Types: CWE-787

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All

References

Reference	Source	Link
Kernel Live Patch Security Notice LNS-0092-1 ≈ Packet Storm	MISC	packetstorm
kernel/git/stable/stable-queue.git - Linux kernel stable patch queue	MISC	git.kernel.or
kernel/git/stable/stable-queue.git - Linux kernel stable patch queue	MISC	git.kernel.or
oss-sec: CVE-2022-4378: Linux kernel stack-based buffer overflow	MISC	seclists.org
2152548 – (CVE-2022-4378) CVE-2022-4378 kernel: a stack overflow in do_proc_dointvec and proc_skip_spaces	MISC	bugzilla.red
CVE Program record	CVE.ORG	www.cve.or
NVD vulnerability detail	NVD	nvd.nist.gov

No vendor comments have been submitted for this CVE.

Legacy QID Mappings

160349 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-10078)
160350 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-10071)
160351 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-10081)
160352 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-10080)
160353 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-10072)
160354 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-10079)
160355 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2022-10073)
160367 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2022-10108)
160371 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2023-12008)
160372 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2023-12009)
160374 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2023-12007)
160376 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2023-12006)
160381 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2023-12017)
160382 Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2023-12018)
160490 Oracle Enterprise Linux Security Update for kernel (ELSA-2023-0951)
160503 Oracle Enterprise Linux Security Update for kernel (ELSA-2023-1091)
160537 Oracle Enterprise Linux Security Update for kernel (ELSA-2023-1566)
160866 Oracle Enterprise Linux Security Update for kernel (ELSA-2023-1822)
181419 Debian Security Update for linux (CVE-2022-4378)
181440 Debian Security Update for linux-5.10 (DLA 3244-1)
181565 Debian Security Update for linux (DLA 3245-1)
199101 Ubuntu Security Notification for Linux kernel (OEM) Vulnerability (USN-5799-1)
199103 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5803-1)
199110 Ubuntu Security Notification for Linux kernel (OEM) Vulnerabilities (USN-5809-1)
199118 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5814-1)

199136 Ubuntu Security Notification for Linux kernel (Azure CVM) Vulnerabilities (USN-5831-1)
199138 Ubuntu Security Notification for Linux kernel (Raspberry Pi) Vulnerabilities (USN-5832-1)
199160 Ubuntu Security Notification for Linux kernel (GKE) Vulnerabilities (USN-5860-1)
199179 Ubuntu Security Notification for Linux kernel (GKE) Vulnerabilities (USN-5877-1)
199183 Ubuntu Security Notification for Linux kernel (HWE) Vulnerabilities (USN-5879-1)
199212 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5917-1)
199214 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5920-1)
199567 Ubuntu Security Notification for Linux kernel (HWE) Vulnerabilities (USN-5883-1)
199581 Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-5919-1)
241215 Red Hat Update for kernel-rt (RHSA-2023:0979)
241218 Red Hat Update for kernel (RHSA-2023:0951)
241229 Red Hat Update for kpatch-patch (RHSA-2023:1008)
241243 Red Hat Update for kernel-rt (RHSA-2023:1092)
241246 Red Hat Update for kpatch-patch (RHSA-2023:1101)
241247 Red Hat Update for kernel-rt (RHSA-2023:1110)
241249 Red Hat Update for kernel (RHSA-2023:1091)
241257 Red Hat Update for kernel security (RHSA-2023:1221)
241258 Red Hat Update for kernel security (RHSA-2023:1202)
241259 Red Hat Update for kernel-rt (RHSA-2023:1220)
241260 Red Hat Update for kernel-rt (RHSA-2023:1203)
241263 Red Hat Update for kpatch-patch (RHSA-2023:1251)
241290 Red Hat Update for kpatch-patch (RHSA-2023:1435)
241310 Red Hat Update for kernel-rt (RHSA-2023:1584)
241324 Red Hat Update for kernel security (RHSA-2023:1566)
241328 Red Hat Update for kpatch-patch (RHSA-2023:1659)
241567 Red Hat Update for kernel security (RHSA-2023:3388)
241576 Red Hat Update for kpatch-patch (RHSA-2023:3431)
241603 Red Hat Update for kernel (RHSA-2023:0944)
241632 Red Hat Update for kpatch-patch (RHSA-2023:1103)

241668 Red Hat Update for kpatch-patch (RHSA-2023:0858)
241681 Red Hat Update for kernel (RHSA-2023:1109)
241684 Red Hat Update for kernel (RHSA-2023:0856)
241685 Red Hat Update for kpatch-patch (RHSA-2023:0945)
257226 CentOS Security Update for kernel (CESA-2023:1091)
354664 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-099
354667 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-097
354668 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.10-2023-025
354669 Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.15-2023-012
354671 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-102
354672 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-101
354738 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-107
354740 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-103
354742 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-105
354744 Amazon Linux Security Advisory for kernel-livepatch : ALAS2LIVEPATCH-2023-106
355199 Amazon Linux Security Advisory for kernel : ALAS2023-2023-070
377891 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2023:0002)
378043 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX2-SA-2023:0011)
378468 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-20230042)
378512 Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2023:0042)
390271 Oracle VM Server for x86 Security Update for kernel (OVMSA-2022-0032)
390272 Oracle Managed Virtualization (VM) Server for x86 Security Update for kernel (OVMSA-2023-0001)
6140318 AWS Bottlerocket Security Update for kernel (GHSA-xjgr-cm78-34qq)
672802 EulerOS Security Update for kernel (EulerOS-SA-2023-1551)
672838 EulerOS Security Update for kernel (EulerOS-SA-2023-1584)
672851 EulerOS Security Update for kernel (EulerOS-SA-2023-1574)
753014 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4505-1)
753015 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 23 for SLE 15 SP3) (SUSE-SU-2022:4544-1)

753016 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 24 for SLE 15 SP2) (SUSE-SU-2022:4587-1)
753017 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 4 for SLE 15 SP4) (SUSE-SU-2022:4560-1)
753018 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 31 for SLE 15) (SUSE-SU-2022:4577-1)
753020 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4585-1)
753021 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 14 for SLE 15 SP3) (SUSE-SU-2022:4528-1)
753022 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 20 for SLE 15 SP3) (SUSE-SU-2022:4551-1)
753023 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 5 for SLE 15 SP4) (SUSE-SU-2022:4542-1)
753025 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 32 for SLE 15 SP1) (SUSE-SU-2022:4506-1)
753026 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 33 for SLE 15 SP1) (SUSE-SU-2022:4533-1)
753029 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 25 for SLE 15 SP3) (SUSE-SU-2022:4517-1)
753031 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 31 for SLE 15 SP2) (SUSE-SU-2022:4515-1)
753032 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 27 for SLE 15 SP2) (SUSE-SU-2022:4513-1)
753033 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 1 for SLE 15 SP4) (SUSE-SU-2022:4518-1)
753034 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4504-1)
753035 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 30 for SLE 15 SP2) (SUSE-SU-2022:4534-1)
753036 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 26 for SLE 15) (SUSE-SU-2022:4550-1)
753037 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 26 for SLE 15 SP2) (SUSE-SU-2022:4580-1)
753038 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4573-1)
753039 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4574-1)
753040 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 12 for SLE 15 SP3) (SUSE-SU-2022:4562-1)
753041 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 24 for SLE 15 SP3) (SUSE-SU-2022:4516-1)
753042 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 35 for SLE 15 SP1) (SUSE-SU-2022:4539-1)
753043 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 26 for SLE 15 SP3) (SUSE-SU-2022:4572-1)
753044 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 3 for SLE 15 SP4) (SUSE-SU-2022:4559-1)
753045 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4503-1)
753046 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 30 for SLE 15 SP1) (SUSE-SU-2022:4527-1)
753047 SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4566-1)
753048 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 18 for SLE 15 SP3) (SUSE-SU-2022:4569-1)
753049 SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 26 for SLE 15 SP5) (SUSE-SU-2022:4520-1)

753049	SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 22 for SLE 15 SP3) (SUSE-SU-2022:4543-1)
753050	SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 22 for SLE 15 SP3) (SUSE-SU-2022:4543-1)
753051	SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4589-1)
753060	SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4615-1)
753061	SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4616-1)
753062	SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4613-1)
753063	SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2022:4617-1)
905004	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.72.1-1.cm2 (12532)
905017	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.81.1-1.cm2 (12553)
905019	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.74.1-1.cm2 (12537)
905049	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.48.1-4.cm2 (12528)
905050	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.80.1-1.cm2 (12549)
905089	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.77.1-1.cm2 (12541)
905145	Common Base Linux Mariner (CBL-Mariner) Security Update for livepatch-5.15.79.1-1.cm2 (12546)
905204	Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (12908)
905337	Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (12908-1)
940942	AlmaLinux Security Update for kernel (ALSA-2023:0951)
940952	AlmaLinux Security Update for kernel-rt (ALSA-2023:0979)
940970	AlmaLinux Security Update for kernel (ALSA-2023:1566)
940974	AlmaLinux Security Update for kernel-rt (ALSA-2023:1584)
960667	Rocky Linux Security Update for kernel-rt (RLSA-2023:0979)
960903	Rocky Linux Security Update for kernel (RLSA-2023:1566)
960918	Rocky Linux Security Update for kernel-rt (RLSA-2023:1584)

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