



# CVE-2023-5178

[MITRE](#)[NVD](#)[CVE.ORG](#)[Print: PDF !\[\]\(e3f8612927870f2e0f9f5989e6dd3064\_img.jpg\)](#)

## Summary

<b>CVE</b>	CVE-2023-5178
<b>State</b>	PUBLIC
<b>Assigner</b>	secalert@redhat.com
<b>Source Priority</b>	CVE Program / NVD first with legacy fallback
<b>Published</b>	2023-11-01 17:15:00 UTC
<b>Updated</b>	2024-04-03 14:15:00 UTC
<b>Description</b>	A use-after-free vulnerability was found in drivers/nvme/target/tcp.c` in `nvmet_tcp_free_crypto` due to a logical bug in the

## Risk And Classification

**Problem Types:** CWE-416

## 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	6.6	rc1	All	All
Operating System	Linux	Linux Kernel	6.6	rc2	All	All
Operating System	Linux	Linux Kernel	6.6	rc3	All	All
Operating System	Linux	Linux Kernel	6.6	rc4	All	All
Operating System	Linux	Linux Kernel	6.6	rc5	All	All
Operating System	Linux	Linux Kernel	6.6	rc6	All	All
Application	Netapp	Active Iq Unified Manager	-	All	All	All
Application	Netapp	Solidfire Hci Management Node	-	All	All	All
Application	Netapp	Solidfire Hci Storage Node	-	All	All	All
Operating System	Redhat	Enterprise Linux	8.0	All	All	All
Operating System	Redhat	Enterprise Linux	9.0	All	All	All

## References

Reference	Source	Link
RHSA-2023:7557		<a href="#">access.redhat.com</a>
Red Hat		<a href="#">access.redhat.com</a>

Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2024:1278		<a href="https://access.redhat.com">access.redhat.com</a>
2241924 – (CVE-2023-5178) CVE-2023-5178 kernel: use after free in nvmet_tcp_free_crypto in NVMe	MISC	<a href="https://bugzilla.redhat.com">bugzilla.redhat.com</a>
RHSA-2023:7551		<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2024:1269		<a href="https://access.redhat.com">access.redhat.com</a>
CVE-2023-5178 Linux Kernel Vulnerability in NetApp Products   NetApp Product Security		<a href="https://security.netapp.com">security.netapp.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
[PATCH] nvmet-tcp: Fix a possible UAF in queue intialization setup - Sagi Grimberg	MISC	<a href="https://lore.kernel.org">lore.kernel.org</a>
RHSA-2023:7549		<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2023:7554		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2024:1268		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
cve-details	MISC	<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2023:7559		<a href="https://access.redhat.com">access.redhat.com</a>
RHSA-2023:7548		<a href="https://access.redhat.com">access.redhat.com</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</a>
[SECURITY] [DLA 3711-1] linux-5.10 security update		<a href="https://lists.debian.org">lists.debian.org</a>
Red Hat		<a href="https://access.redhat.com">access.redhat.com</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

[161208](#) Oracle Enterprise Linux Security Update for kernel (ELSA-2023-7549)

[161229](#) Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2023-13044)

[161237](#) Oracle Enterprise Linux Security Update for unbreakable enterprise kernel (ELSA-2023-13043)

[161238](#) Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2023-13049)

<a href="#">161239</a> Oracle Enterprise Linux Security Update for unbreakable enterprise kernel-container (ELSA-2023-13048)
<a href="#">161318</a> Oracle Enterprise Linux Security Update for kernel (ELSA-2024-12094)
<a href="#">161404</a> Oracle Enterprise Linux Security Update for kernel (ELSA-2024-0461)
<a href="#">199929</a> Ubuntu Security Notification for Linux kernel (OEM) Vulnerabilities (USN-6497-1)
<a href="#">199976</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6534-1)
<a href="#">199980</a> Ubuntu Security Notification for Linux kernel Vulnerability (USN-6536-1)
<a href="#">199982</a> Ubuntu Security Notification for Linux kernel (GCP) Vulnerability (USN-6537-1)
<a href="#">199996</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6549-1)
<a href="#">199997</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6548-1)
<a href="#">199999</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6548-2)
<a href="#">200002</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6534-2)
<a href="#">200003</a> Ubuntu Security Notification for Linux kernel (GKE) Vulnerabilities (USN-6549-2)
<a href="#">200006</a> Ubuntu Security Notification for Linux kernel (Oracle) Vulnerabilities (USN-6548-3)
<a href="#">200007</a> Ubuntu Security Notification for Linux kernel (Low Latency) Vulnerabilities (USN-6549-3)
<a href="#">200010</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6534-3)
<a href="#">200024</a> Ubuntu Security Notification for Linux kernel (Intel IoTG) Vulnerabilities (USN-6549-4)
<a href="#">200035</a> Ubuntu Security Notification for Linux kernel Vulnerabilities (USN-6549-5)
<a href="#">200037</a> Ubuntu Security Notification for Linux kernel (IoT) Vulnerabilities (USN-6548-5)
<a href="#">200113</a> Ubuntu Security Notification for Linux kernel (GCP) Vulnerabilities (USN-6635-1)
<a href="#">242482</a> Red Hat Update for kernel-rt (RHSA-2023:7379)
<a href="#">242497</a> Red Hat Update for kpatch-patch (RHSA-2023:7418)
<a href="#">242515</a> Red Hat Update for kernel (RHSA-2023:7557)
<a href="#">242516</a> Red Hat Update for kernel (RHSA-2023:7549)
<a href="#">242522</a> Red Hat Update for kpatch-patch (RHSA-2023:7554)
<a href="#">242526</a> Red Hat Update for kernel-rt (RHSA-2023:7548)
<a href="#">242528</a> Red Hat Update for kernel-rt (RHSA-2023:7551)
<a href="#">242529</a> Red Hat Update for kpatch-patch (RHSA-2023:7559)
<a href="#">242612</a> Red Hat Update for kernel security (RHSA-2023:7370)
<a href="#">242727</a> Red Hat Update for kpatch-patch (RHSA-2024:0340)

<a href="#">242728</a> Red Hat Update for kpatch-patch (RHSA-2024:0378)
<a href="#">242738</a> Red Hat Update for kpatch-patch (RHSA-2024:0386)
<a href="#">242759</a> Red Hat Update for kernel (RHSA-2024:0432)
<a href="#">242769</a> Red Hat Update for kpatch-patch (RHSA-2024:0554)
<a href="#">242789</a> Red Hat Update for kernel (RHSA-2024:0575)
<a href="#">242839</a> Red Hat Update for kernel (RHSA-2024:0461)
<a href="#">242847</a> Red Hat Update for kernel-rt (RHSA-2024:0431)
<a href="#">242855</a> Red Hat Update for kernel (RHSA-2024:0412)
<a href="#">243055</a> Red Hat Update for kernel (RHSA-2024:1268)
<a href="#">243057</a> Red Hat Update for kpatch-patch (RHSA-2024:1278)
<a href="#">243058</a> Red Hat Update for kernel-rt (RHSA-2024:1269)
<a href="#">356572</a> Amazon Linux Security Advisory for kernel : ALAS2KERNEL-5.10-2023-040
<a href="#">379614</a> Alibaba Cloud Linux Security Update for cloud-kernel (ALINUX3-SA-2024:0017)
<a href="#">6000419</a> Debian Security Update for linux (DSA 5594-1)
<a href="#">6000428</a> Debian Security Update for linux-5.10 (DLA 3711-1)
<a href="#">673595</a> EulerOS Security Update for kernel (EulerOS-SA-2023-3247)
<a href="#">673692</a> EulerOS Security Update for kernel (EulerOS-SA-2023-3275)
<a href="#">673714</a> EulerOS Security Update for kernel (EulerOS-SA-2024-1196)
<a href="#">755238</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:4378-1)
<a href="#">755240</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:4375-1)
<a href="#">755249</a> SUSE Enterprise Linux Security Update for the Linux Kernel (SUSE-SU-2023:4414-1)
<a href="#">755563</a> SUSE Security Update for the linux kernel (SUSE-SU-2023:4351-1)
<a href="#">755566</a> SUSE Security Update for the linux kernel (SUSE-SU-2023:4345-1)
<a href="#">755567</a> SUSE Security Update for the linux kernel (SUSE-SU-2023:4343-1)
<a href="#">755706</a> SUSE Enterprise Linux Security Update for the Linux Kernel RT (Live Patch 3 for SLE 15 SP4) (SUSE-SU-2024:0331-1)
<a href="#">755709</a> SUSE Enterprise Linux Security Update for the Linux Kernel RT (Live Patch 5 for SLE 15 SP5) (SUSE-SU-2024:0348-1)
<a href="#">755714</a> SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 3 for SLE 15 SP5) (SUSE-SU-2024:0352-1)
<a href="#">755715</a> SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 5 for SLE 15 SP5) (SUSE-SU-2024:0378-1)

<a href="#">755718</a> SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 6 for SLE 15 SP5) (SUSE-SU-2024:0395-1)
<a href="#">755726</a> SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 8 for SLE 15 SP4) (SUSE-SU-2024:0414-1)
<a href="#">755728</a> SUSE Enterprise Linux Security Update for the Linux Kernel (Live Patch 7 for SLE 15 SP4) (SUSE-SU-2024:0421-1)
<a href="#">907626</a> Common Base Linux Mariner (CBL-Mariner) Security Update for hyperv-daemons (31777-1)
<a href="#">907632</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (31852)
<a href="#">907677</a> Common Base Linux Mariner (CBL-Mariner) Security Update for kernel (31852-1)
<a href="#">941482</a> AlmaLinux Security Update for kernel (ALSA-2023:7549)
<a href="#">961087</a> Rocky Linux Security Update for kernel-rt (RLSA-2023:7548)
<a href="#">961089</a> Rocky Linux Security Update for kernel (RLSA-2023:7549)

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