



CVE-2019-6974

[MITRE](#)[NVD](#)[CVE.ORG](#)[Print: PDF !\[\]\(e3f8612927870f2e0f9f5989e6dd3064_img.jpg\)](#)

Summary

CVE	CVE-2019-6974
State	PUBLIC
Assigner	cve@mitre.org
Source Priority	CVE Program / NVD first with legacy fallback
Published	2019-02-15 15:29:00 UTC
Updated	2023-11-07 03:13:00 UTC
Description	In the Linux kernel before 4.20.8, kvm_ioctl_create_device in virt/kvm/kvm_main.c mishandles reference counting because

Risk And Classification

Problem Types: CWE-362 | CWE-416

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	Canonical	Ubuntu Linux	12.04	All	All	All
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	18.10	All	All	All
Operating System	Canonical	Ubuntu Linux	12.04	All	All	All
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	18.10	All	All	All
Operating System	Debian	Debian Linux	8.0	All	All	All
Operating System	Debian	Debian Linux	8.0	All	All	All
Application	F5	Big-ip Access Policy Manager	All	All	All	All
Application	F5	Big-ip Access Policy Manager	All	All	All	All
Application	F5	Big-ip Access Policy Manager	All	All	All	All
Application	F5	Big-ip Advanced Firewall Manager	All	All	All	All
Application	F5	Big-ip Advanced Firewall Manager	All	All	All	All

Application	F5	Big-ip Advanced Firewall Manager	All	All	All	All
Application	F5	Big-ip Analytics	All	All	All	All
Application	F5	Big-ip Analytics	All	All	All	All
Application	F5	Big-ip Analytics	All	All	All	All
Application	F5	Big-ip Application Acceleration Manager	All	All	All	All
Application	F5	Big-ip Application Acceleration Manager	All	All	All	All
Application	F5	Big-ip Application Acceleration Manager	All	All	All	All
Application	F5	Big-ip Application Security Manager	All	All	All	All
Application	F5	Big-ip Application Security Manager	All	All	All	All
Application	F5	Big-ip Application Security Manager	All	All	All	All
Application	F5	Big-ip Edge Gateway	All	All	All	All
Application	F5	Big-ip Edge Gateway	All	All	All	All
Application	F5	Big-ip Edge Gateway	All	All	All	All
Application	F5	Big-ip Fraud Protection Service	All	All	All	All
Application	F5	Big-ip Fraud Protection Service	All	All	All	All
Application	F5	Big-ip Fraud Protection Service	All	All	All	All
Application	F5	Big-ip Global Traffic Manager	All	All	All	All
Application	F5	Big-ip Global Traffic Manager	All	All	All	All
Application	F5	Big-ip Global Traffic Manager	All	All	All	All
Application	F5	Big-ip Link Controller	All	All	All	All
Application	F5	Big-ip Link Controller	All	All	All	All
Application	F5	Big-ip Link Controller	All	All	All	All
Application	F5	Big-ip Local Traffic Manager	All	All	All	All
Application	F5	Big-ip Local Traffic Manager	All	All	All	All
Application	F5	Big-ip Local Traffic Manager	All	All	All	All
Application	F5	Big-ip Policy Enforcement Manager	All	All	All	All
Application	F5	Big-ip Policy Enforcement Manager	All	All	All	All
Application	F5	Big-ip Policy Enforcement Manager	All	All	All	All
Application	F5	Big-ip Webaccelerator	All	All	All	All
Application	F5	Big-ip Webaccelerator	All	All	All	All
Application	F5	Big-ip Webaccelerator	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Linux	Linux Kernel	All	All	All	All
Operating System	Redhat	Enterprise Linux	7.0	All	All	All
Operating System	Redhat	Enterprise Linux	7.0	All	All	All

Operating System	Redhat	Enterprise Linux Desktop	7.0	All	All	All
Operating System	Redhat	Enterprise Linux Desktop	7.0	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.5	All	All	All
Operating System	Redhat	Enterprise Linux Server	7.0	All	All	All
Operating System	Redhat	Enterprise Linux Server	7.0	All	All	All
Operating System	Redhat	Enterprise Linux Server Aus	7.4	All	All	All
Operating System	Redhat	Enterprise Linux Server Aus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Aus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Eus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Eus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.4	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Workstation	7.0	All	All	All
Operating System	Redhat	Enterprise Linux Workstation	7.0	All	All	All
Application	Redhat	Openshift Container Platform	3.11	All	All	All
Application	Redhat	Openshift Container Platform	3.11	All	All	All

References

Reference	Source	Link
kernel/git/torvalds/linux.git - Linux kernel source tree	MISC	git.kernel.org
Red Hat Customer Portal	REDHAT	access.redhat.com
cdn.kernel.org/pub/linux/kernel/v4.x/ChangeLog-4.9.156	MISC	cdn.kernel.org
support.f5.com/csp/article/K11186236	CONFIRM	support.f5.com
USN-3932-2: Linux kernel (Xenial HWE) vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
[SECURITY] [DLA 1731-2] linux regression update	MLIST	lists.debian.org
USN-3930-1: Linux kernel vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
USN-3930-2: Linux kernel (HWE) vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
[SECURITY] [DLA 1771-1] linux-4.9 security update	MLIST	lists.debian.org
Red Hat Customer Portal	REDHAT	access.redhat.com
1765 - project-zero - Project Zero - Monorail	MISC	bugs.chromium.org
USN-3932-1: Linux kernel vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
USN-3933-2: Linux kernel (Trusty HWE) vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
cdn.kernel.org/pub/linux/kernel/v4.x/ChangeLog-4.14.99	MISC	cdn.kernel.org
USN-3931-1: Linux kernel vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
[SECURITY] [DLA 1731-1] linux security update	MLIST	lists.debian.org

USN-3931-2: Linux kernel (HWE) vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
USN-3933-1: Linux kernel vulnerabilities Ubuntu security notices	UBUNTU	usn.ubuntu.com
Linux - 'kvm_ioctl_create_device()' NULL Pointer Dereference - Linux dos Exploit	EXPLOIT-DB	www.exploit-db.com
Linux Kernel CVE-2019-6974 Security Bypass Vulnerability	BID	www.securityfocus.com/bid
cdn.kernel.org/pub/linux/kernel/v4.x/ChangeLog-4.20.8	MISC	cdn.kernel.org
Red Hat Customer Portal	REDHAT	access.redhat.com
myF5		support.f5.com
Red Hat Customer Portal	REDHAT	access.redhat.com
support.f5.com/csp/article/K11186236	CONFIRM	support.f5.com
kvm: fix kvm_ioctl_create_device() reference counting (CVE-2019-6974) · torvalds/linux@cfa3938 · GitHub	MISC	github.com
cdn.kernel.org/pub/linux/kernel/v4.x/ChangeLog-4.19.21	MISC	cdn.kernel.org
Red Hat Customer Portal	REDHAT	access.redhat.com
Red Hat Customer Portal	REDHAT	access.redhat.com
CVE Program record	CVE.ORG	www.cve.org
NVD vulnerability detail	NVD	nvd.nist.gov

No vendor comments have been submitted for this CVE.

Legacy QID Mappings

[670269](#) EulerOS Security Update for kernel (EulerOS-SA-2021-1808)

[670634](#) EulerOS Security Update for kernel (EulerOS-SA-2021-2392)

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