



CVE-2016-4020

Published on: 05/25/2016 12:00:00 AM UTC

Last Modified on: 02/13/2023 04:50:00 AM UTC

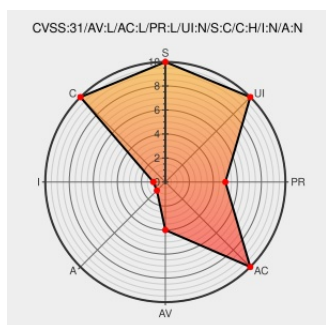
CVE-2016-4020

Source: Mitre

Source: NIST

CVE.ORG

Print: PDF



Certain versions of [Ubuntu Linux](#) from [Canonical](#) contain the following vulnerability:

The patch_instruction function in hw/i386/kvmvapic.c in QEMU does not initialize the imm32 variable, which allows local guest OS administrators to obtain sensitive information from host stack memory by accessing the Task Priority Register (TPR).

CVE-2016-4020 has been assigned by secalert@redhat.com to track the vulnerability - currently rated as **MEDIUM** severity.

CVSS3 Score: **6.5 - MEDIUM**

Attack Vector	Attack Complexity	Privileges Required	User Interaction
LOCAL	LOW	LOW	NONE
Scope	Confidentiality Impact	Integrity Impact	Availability Impact
CHANGED	HIGH	NONE	NONE

CVSS2 Score: **2.1 - LOW**

Access Vector	Access Complexity	Authentication
LOCAL	LOW	NONE
Confidentiality Impact	Integrity Impact	Availability Impact
PARTIAL	NONE	NONE

CVE References

Description	Tags	Link
Bug 1313686 – CVE-2016-4020 Qemu: i386: leakage of stack memory to guest in kvmvapic.c	Issue Tracking Third Party Advisory bugzilla.redhat.com text/html	CONFIRM bugzilla.redhat.com/show_bug.cgi?id=1313686

[SECURITY] [DLA 1599-1] qemu security update	Mailing List Third Party Advisory lists.debian.org text/html	 MLIST [debian-lts-announce] 20181130 [SECURITY] [DLA 1599-1] qemu security update
[Qemu-devel] [PATCH] i386: kvmvapic: initialise imm32 variable	Patch Third Party Advisory lists.gnu.org text/x-diff	 MLIST [qemu-devel] 20160407 [Qemu-devel] [PATCH] i386: kvmvapic: initialise imm32 variable
Red Hat Customer Portal	Third Party Advisory access.redhat.com text/html	 REDHAT RHSA-2017:2408
CVE-2016-4020 - Red Hat Customer Portal	access.redhat.com text/html	 MISC access.redhat.com/security/cve/CVE-2016-4020
QEMU CVE-2016-4020 Information Disclosure Vulnerability	Third Party Advisory VDB Entry cve.report (archive) text/html	 BID 86067
git.qemu.org Git - qemu.git/commit	Patch Vendor Advisory web.archive.org text/xml Inactive Link Not Archived	 MISC git.qemu.org/?p=qemu.git%3Ba=commit%3Bh=691a02e2ce0c413236a78dee6f2651c937b09fb0
Red Hat Customer Portal	Third Party Advisory access.redhat.com text/html	 REDHAT RHSA-2017:2392
Red Hat Customer Portal	Third Party Advisory access.redhat.com text/html	 REDHAT RHSA-2017:1856
USN-2974-1: QEMU vulnerabilities Ubuntu	Third Party Advisory www.ubuntu.com text/html	 UBUNTU USN-2974-1
Re: [Qemu-devel] [PATCH] i386: kvmvapic: initialise imm32 variable	Patch Third Party Advisory lists.gnu.org text/html	 MLIST [qemu-devel] 20160407 Re: [Qemu-devel] [PATCH] i386: kvmvapic: initialise imm32 variable
QEMU: Multiple vulnerabilities (GLSA 201609-01) — Gentoo security	Third Party Advisory security.gentoo.org text/html	 GENTOO GLSA-201609-01

By selecting these links, you may be leaving CVEreport webspace. We have provided these links to other websites because they may have information that would be of interest to you. No inferences should be drawn on account of other sites being referenced, or not, from this page. There may be other websites that are more appropriate for your purpose. CVEreport does not necessarily endorse the views expressed, or concur with the facts presented on these sites. Further, CVEreport does not endorse any commercial products that may be mentioned on these sites. Please address comments about any linked pages to comment@cve.report.

There are currently no QIDs associated with this CVE

Known Affected Configurations (CPE V2.3)

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	15.10	All	All	All
Operating System	Canonical	Ubuntu Linux	16.04	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	15.10	All	All	All
Operating System	Canonical	Ubuntu Linux	16.04	All	All	All
Operating System	Debian	Debian Linux	8.0	All	All	All
Operating System	Debian	Debian Linux	8.0	All	All	All
Application	Qemu	Qemu	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	7.4	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.5	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.7	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.4	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.5	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Eus	7.7	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	7.4	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	7.7	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	7.7	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.7	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.6	All	All	All
Operating System	Redhat	Enterprise Linux Server Tus	7.7	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	Openstack	10	All	All	All
Application	Redhat	Openstack	11	All	All	All
Application	Redhat	Openstack	11.0	All	All	All
Application	Redhat	Openstack	6.0	All	All	All
Application	Redhat	Openstack	7.0	All	All	All
Application	Redhat	Openstack	8	All	All	All
Application	Redhat	Openstack	8.0	All	All	All
Application	Redhat	Openstack	9	All	All	All
Application	Redhat	Openstack	9.0	All	All	All
Application	Redhat	Openstack	10	All	All	All
Application	Redhat	Openstack	11.0	All	All	All
Application	Redhat	Openstack	6.0	All	All	All
Application	Redhat	Openstack	7.0	All	All	All
Application	Redhat	Openstack	8.0	All	All	All
Application	Redhat	Openstack	9.0	All	All	All
Application	Redhat	Virtualization	4.0	All	All	All

Application	Redhat	Virtualization	4.0	All	All	All
cpe:2.3:o:canonical:ubuntu_linux:12.04.*.*.*:esm.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:14.04.*.*.*:esm.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:15.10.*.*.*.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:16.04.*.*.*:lts.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:12.04.*.*.*:esm.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:14.04.*.*.*:esm.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:15.10.*.*.*.*.*.*:						
cpe:2.3:o:canonical:ubuntu_linux:16.04.*.*.*:lts.*.*.*:						
cpe:2.3:o:debian:debian_linux:8.0.*.*.*.*.*.*:						
cpe:2.3:o:debian:debian_linux:8.0.*.*.*.*.*.*:						
cpe:2.3:a:qemu:qemu.*.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_desktop:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_desktop:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.4.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.5.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.6.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.7.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.4.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.5.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.6.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_eus:7.7.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_server:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_server:7.0.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_server_aus:7.4.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_server_aus:7.6.*.*.*.*.*.*:						
cpe:2.3:o:redhat:enterprise_linux_server_aus:7.7.*.*.*.*.*.*:						

```

opc.2.0.0.0.nat.0n1cpr100_11111_00101_000.1.1. . . . .

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cpe:2.3:o:redhat:enterprise_linux_server_aus:7.4:*:*:*:*:*:
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cpe:2.3:o:redhat:enterprise linux server aus:7.6:*.~*~*~*~*~*~*
```

```
cpe:2.3:o:redhat:enterprise_linux_server_aus:7.7:*:*:*:*:*:
```

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cpe:2.3:o:redhat:enterprise_linux_server_tus:7.6:*:*:*:*:*:
```

```
cpe:2.3:o:redhat:enterprise linux server tus:7.7:*:*:*:*:*.*
```

```
cpe:2.3:o:redhat:enterprise_linux_server_tus:7.6:*:*:*:*:*:
```

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cpe:2.3:o:redhat:enterprise_linux_server_tus:7.7:*:*:*:*:*:
```

```
cpe:2.3:o:redhat:enterprise_linux_workstation:7.0:*:*:*:*:*.*
```

```
cpe:2.3:o:redhat:enterprise linux workstation:7.0:*.~*~*~*~*~*~*
```

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cpe:2.3:a:redhat:openstack:10:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:11:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:11.0:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:6.0:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:7.0:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:8:*.:.:.:.:.:
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cpe:2.3:a:redhat:openstack:8.0:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:9:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:9.0:*:*:*:*:*:*:
```

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cpe:2.3:a:redhat:openstack:10:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:11.0:*:*:*:*:*:*:
```

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cpe:2.3:a:redhat:openstack:6.0:*:*:*:*:*:*:
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cpe:2.3:a:redhat:openstack:7.0:*:*:*:*:*:*:
```

```
cpe:2.3:a:redhat:openstack:8.0:*:*:*:*:*:*:
```

```
cpe:2.3:a:redhat:openstack:9.0:*:*:*:*:*:*:
```

```
cpe:2.3:a:redhat:virtualization:4.0:*:*:*:*:*:*:
```

```
cpe:2.3:a:redhat:virtualization:4.0:*:*:*:*:*:*:
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No vendor comments have been submitted for this CVE

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