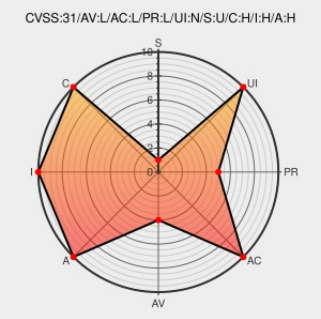
CVE-2021-28705

Published on: 11/23/2021 12:00:00 AM UTC

Last Modified on: 12/01/2021 07:15:00 AM UTC

CVE-2021-28705

Source: Mitre | Source: Nist | Print: PDF



Certain versions of Xen from Xen contain the following vulnerability:

issues with partially successful P2M updates on x86 T[his CNA information record relates to multiple CVEs; the text explains which aspects/vulnerabilities correspond to which CVE.] x86 HVM and PVH guests may be started in populate-on-demand (PoD) mode, to provide a way for them to later easily have more memory assigned. Guests are permitted to control certain P2M aspects of individual pages via hypercalls. These hypercalls may act on ranges of pages specified via page orders (resulting in a power-of-2 number of pages). In some cases the hypervisor carries out the requests by splitting them into smaller chunks. Error handling in certain PoD cases has been insufficient in that in particular partial success of some operations was not properly accounted for. There are two code paths affected - page removal (CVE-2021-28705) and insertion of new pages (CVE-2021-28709). (We provide one patch which combines the fix to both issues.)

CVE-2021-28705 has been assigned by security@xen.org to track the vulnerability - currently rated as HIGH severity.

Affected Vendor/Software: **Xen** - **xen** version **4.14.x**

Affected Vendor/Software: **Xen** - **xen** version **4.12.x**

Affected Vendor/Software: **Xen** - **xen** version **4.15.x**

Affected Vendor/Software: **Xen** - **xen** version **xen-unstable**

Affected Vendor/Software: **Xen** - **xen** version **4.13.x**

CVSS3 Score: 7.8 - HIGH

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

CVSS2 Score: 6.9 - MEDIUM

Access Vector	Access Complexity	Authentication
LOCAL	MEDIUM	NONE
Confidentiality Impact	**Integrity Impact**	**Availability Impact**
COMPLETE	COMPLETE	COMPLETE

CVE References

Description	Tags	Link
	xenbits.xenproject.org text/plain	MISC xenbits.xenproject.org/xsa/advisory-389.txt
[SECURITY] Fedora 35 Update: xen-4.15.1-4.fc35 - package-announce - Fedora Mailing-Lists	lists.fedoraproject.org text/html	FEDORA FEDORA-2021-03645e9807

Related QID Numbers

751411 SUSE Enterprise Linux Security Update for xen (SUSE-SU-2021:3852-1)

751414 SUSE Enterprise Linux Security Update for xen (SUSE-SU-2021:3851-1)

751417 SUSE Enterprise Linux Security Update for xen (SUSE-SU-2021:3842-1)

751422 SUSE Enterprise Linux Security Update for xen (SUSE-SU-2021:3849-1)

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Operating System	Xen	Xen	4.15.0	All	All	All
Operating System	Xen	Xen	4.15.1	All	All	All
Operating System	Xen	Xen	All	All	All	All
Operating System	Xen	Xen	All	All	All	All
Operating System	Xen	Xen	All	All	All	All

cpe:2.3:o:xen:xen:4.15.0:*:*:*:*:*:x86:*:

cpe:2.3:o:xen:xen:4.15.1:*:*:*:*:*:x86:*:

cpe:2.3:o:xen:xen:*:*:*:*:*:*:x86:*:

cpe:2.3:o:xen:xen:*:*:*:*:*:*:x86:*:

cpe:2.3:o:xen:xen:*:*:*:*:*:*:x86:*:

Social Mentions

Source	Title	Posted (UTC)
@CVEreport	CVE-2021-28705 : issues with partially successful P2M updates on x86 T[his CNA information record relates to multi… twitter.com/i/web/status/1…	2021-11-24 01:08:39
@oss_security	Xen Security Advisory 389 v3 (CVE-2021-28705,CVE-2021-28709) - issues with partially successful P2M updates on x86:… twitter.com/i/web/status/1…	2021-11-24 02:30:11

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