

Bug 1189685 (CVE-2021-23240) VUL-0: CVE-2021-23240: sudo: Possible Symlink Attack in SELinux Context in 'sudoedit'

Status: RESOLVED FIXED

Classification: Novell Products

Product: SUSE Security Incidents

Component: Incidents

Version: unspecified

Hardware: Other Other

Priority: P3 - Medium

Severity: Normal

Target Milestone: ---

Assigned To: Security Team bot

QA Contact: Security Team bot

URL: [none]

Whiteboard: CVSSv3.1:SUSE:CVE-2021-23240:7.8(AV:...

Keywords:

Depends on:

Blocks:

Show dependency tree / graph

Create test case

Clone This Bug

Reported: 2021-01-08 09:34 UTC by Matthias Gerstner

Modified: 2021-10-14 09:38 UTC (History)

CC List: 5 users (show)

See Also:

Found By: ---

Services Priority:

Business Priority:

Blocker: ---

Attachments

[Add an attachment](#) (proposed patch, testcase, etc.)

Note

You need to [log in](#) before you can comment on or make changes to this bug.

Matthias Gerstner 2021-01-08 09:34:22 UTC

Description

Tracking for issue d) from [bug 1181222](#). This is still under embargo but will be published somewhen next week in sudo 1.9.5.

If SELinux is enabled on a system then 'sudoedit' uses alternate code paths to create temporary files and to copy temporary files to target files, namely 'selinux_edit_copy_tfiles()' and 'selinux_edit_create_tfiles()'. Both functions employ 'chown()' system calls which follow symlinks.

Especially in 'selinux_edit_copy_tfiles()' a 'chown()' to the target user is performed on a temporary file path that is owned by the unprivileged user in e.g. /var/tmp. The unprivileged user could remove this file and replace it by a symlink to a another file, that would be followed by 'sudoedit' to change its ownership.

When SELinux is in enforce mode then it should prevent such a thing to happen. But a system might run in SELinux permissive mode in which case the SELinux logic in 'sudoedit' would still trigger but the protection effect would be gone.

Matthias Gerstner 2021-01-08 10:11:09 UTC

Comment 1

Regarding affectedness Factory, SLE-15 and SLE-12 based codestreams are equally affected. SLE-11 based codestreams don't contain SELinux support yet so they aren't affected with this particular issue.

Matthias Gerstner 2021-01-11 13:23:30 UTC

Comment 2

Upstream has published the bugfixes now. The fixing commit is 12800:8fcb36ef422a. Please provide submissions for affected codestreams.

Simon Lees 2021-01-25 04:25:04 UTC

Comment 4

(In reply to Matthias Gerstner from [comment #1](#))

> Regarding affectedness Factory, SLE-15 and SLE-12 based codestreams are > equally affected. SLE-11 based codestreams don't contain SELinux support yet > so they aren't affected with this particular issue.

SLE-12-SP2 doesn't contain sudo_edit_mktemp or selinux_edit_create_tfiles yet, so i'm not 100% certain if they are affected by this issue. If they are they will require a completely different fix and it will miss the current update round.

Matthias Gerstner 2021-01-25 09:53:12 UTC

Comment 5

(In reply to [simonf.lees@suse.com](#) from [comment #4](#))

> SLE-12-SP2 doesn't contain sudo_edit_mktemp or selinux_edit_create_tfiles > yet, so i'm not 100% certain if they are affected by this issue. If they are > they will require a completely different fix and it will miss the current > update round.

It doesn't look like there is any SELinux specific sudoedit code yet in this codestream. Also no trace of the plain 'chown()' call. So I would consider this codestream as not affected.

Swamp Workflow Management 2021-01-26 23:16:20 UTC

[Comment 6](#)

SUSE-SU-2021:0226-1: An update that solves three vulnerabilities and has one errata is now available.

Category: security (important)
Bug References: 1180684,1180685,1180687,1181090
CVE References: CVE-2021-23239,CVE-2021-23240,CVE-2021-3156
JIRA References:
Sources used:
SUSE OpenStack Cloud Crowbar 9 (src): sudo-1.8.20p2-3.20.1
SUSE OpenStack Cloud Crowbar 8 (src): sudo-1.8.20p2-3.20.1
SUSE OpenStack Cloud 9 (src): sudo-1.8.20p2-3.20.1
SUSE OpenStack Cloud 8 (src): sudo-1.8.20p2-3.20.1
SUSE Linux Enterprise Server for SAP 12-SP4 (src): sudo-1.8.20p2-3.20.1
SUSE Linux Enterprise Server for SAP 12-SP3 (src): sudo-1.8.20p2-3.20.1
SUSE Linux Enterprise Server 12-SP4-LTSS (src): sudo-1.8.20p2-3.20.1
SUSE Linux Enterprise Server 12-SP3-LTSS (src): sudo-1.8.20p2-3.20.1
SUSE Linux Enterprise Server 12-SP3-BCL (src): sudo-1.8.20p2-3.20.1
SUSE Enterprise Storage 5 (src): sudo-1.8.20p2-3.20.1
HPE Helion Openstack 8 (src): sudo-1.8.20p2-3.20.1

NOTE: This line indicates an update has been released for the listed product(s). At times this might be only a partial fix. If you have questions please reach out to maintenance coordination.

Swamp Workflow Management 2021-01-26 23:17:52 UTC

[Comment 7](#)

SUSE-SU-2021:0227-1: An update that solves three vulnerabilities and has one errata is now available.

Category: security (important)
Bug References: 1180684,1180685,1180687,1181090
CVE References: CVE-2021-23239,CVE-2021-23240,CVE-2021-3156
JIRA References:
Sources used:
SUSE Manager Server 4.0 (src): sudo-1.8.22-4.15.1
SUSE Manager Retail Branch Server 4.0 (src): sudo-1.8.22-4.15.1
SUSE Manager Proxy 4.0 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Server for SAP 15-SP1 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Server for SAP 15 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Server 15-SP1-LTSS (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Server 15-SP1-BCL (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Server 15-LTSS (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Module for Basesystem 15-SP3 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Module for Basesystem 15-SP2 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise Module for Basesystem 15-SP1 (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise High Performance Computing 15-SP1-LTSS (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise High Performance Computing 15-SP1-ESPOS (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise High Performance Computing 15-LTSS (src): sudo-1.8.22-4.15.1
SUSE Linux Enterprise High Performance Computing 15-ESPOS (src): sudo-1.8.22-4.15.1
SUSE Enterprise Storage 6 (src): sudo-1.8.22-4.15.1
SUSE CaaS Platform 4.0 (src): sudo-1.8.22-4.15.1

NOTE: This line indicates an update has been released for the listed product(s). At times this might be only a partial fix. If you have questions please reach out to maintenance coordination.

Swamp Workflow Management 2021-01-26 23:19:11 UTC

[Comment 8](#)

SUSE-SU-2021:0225-1: An update that solves three vulnerabilities and has one errata is now available.

Category: security (important)
Bug References: 1180684,1180685,1180687,1181090
CVE References: CVE-2021-23239,CVE-2021-23240,CVE-2021-3156
JIRA References:
Sources used:
SUSE Linux Enterprise Software Development Kit 12-SP5 (src): sudo-1.8.27-4.6.1
SUSE Linux Enterprise Server 12-SP5 (src): sudo-1.8.27-4.6.1

NOTE: This line indicates an update has been released for the listed product(s). At times this might be only a partial fix. If you have questions please reach out to maintenance coordination.

Swamp Workflow Management 2021-01-27 11:15:50 UTC

[Comment 9](#)

openSUSE-SU-2021:0170-1: An update that solves three vulnerabilities and has one errata is now available.

Category: security (important)
Bug References: 1180684,1180685,1180687,1181090
CVE References: CVE-2021-23239,CVE-2021-23240,CVE-2021-3156
JIRA References:
Sources used:
openSUSE Leap 15.2 (src): sudo-1.8.22-1p152.8.6.1

Swamp Workflow Management 2021-01-27 11:17:07 UTC

[Comment 10](#)

openSUSE-SU-2021:0169-1: An update that solves three vulnerabilities and has one errata is now available.

Category: security (important)
Bug References: 1180684,1180685,1180687,1181090
CVE References: CVE-2021-23239,CVE-2021-23240,CVE-2021-3156
JIRA References:
Sources used:
openSUSE Leap 15.1 (src): sudo-1.8.22-1p151.5.12.1

Simon Lees 2021-05-11 01:07:59 UTC

[Comment 12](#)

Should be done reassigning to security

Robert Frohl 2021-10-14 09:38:23 UTC

[Comment 16](#)

done

