

# Issue 1181387: Security: container-overflow in TabGroups

Reported by abalq...@microsoft.com on Tue, Feb 23, 2021, 3:06 PM EST

GD Code

### VULNERABILITY DETAILS

Similar to bug 4173000, but it seems that fix wasn't enough and we are still hitting container overflows in some instances.

### VERSION

Chrome Version: 90.0.4427.0 (Developer Build) (64-bit)

Operating System: Windows 10 Pro

# REPRODUCTION CASE

- 1. Host attached 'taber.html'
- 2. Run: ./chrome --user-data-dir=C:\asan\tabgroups --no-first-run --disable-popup-blocking http://localhost/taber.html?l "about:blank"
- Hold shift and select all the about:blank tabs
- 4. Right click and create a tab group
- 5. Start dragging and dropping the group out of the main window and into a new window, repeat.

Crash should occur. See attached video for demo.

## FOR CRASHES, PLEASE INCLUDE THE FOLLOWING ADDITIONAL INFORMATION

Type of crash: Browser

Crash State: See attached asan log

# CREDIT INFORMATION

Reporter credit: Abdulrahman Alqabandi, Microsoft Browser Vulnerability Research

# taber.html

477 bytes View Download

# tabgroupsasan.txt

21.1 KB View Download

## tabgroupcrash.mp4

1.2 MB View Download



Comment 1 by metzman@chromium.org on Wed, Feb 24, 2021, 11:12 AM EST Project Member

Status: Assigned (was: Unconfirmed) Owner: connily@chromium.org

Labels: Security\_Impact-Head Security\_Severity-High OS-Windows Pri-1

Components: UI>Browser>TabStrip

I was able to reproduce this on Windows but not on Linux. I think it might be Windows only.

Although this requires user interaction that I don't think is super common I'll label it high severity like https://bugs.chromium.org/p/chromium/issues/detail?id=1173903

connily@ could you look into this?

Comment 2 by sheriffbot on Wed, Feb 24, 2021, 12:52 PM EST Project Member

Labels: M-90 Target-90

Setting milestone and target because of Security\_Impact=Head and high severity.

For more details visit https://www.chromium.org/issue-tracking/autotriage - Your friendly Sheriffbot

Comment 3 by sheriffbot on Wed, Feb 24, 2021, 1:17 PM EST Project Member

Labels: ReleaseBlock-Stable

This is a serious security regression. If you are not able to fix this quickly, please revert the change that introduced it.

If this doesn't affect a release branch, or has not been properly classified for severity, please update the Security\_Impact or Security\_Severity labels, and remove the ReleaseBlock label. To disable this altogether, apply ReleaseBlock-NA.

For more details visit https://www.chromium.org/issue-tracking/autotriage - Your friendly Sheriffbot

Comment 4 by connily@chromium.org on Wed, Feb 24, 2021, 2:44 PM EST Project Member

Cc: tbergquist@chromium.org

Comment 5 by connily@chromium.org on Wed, Feb 24, 2021, 3:05 PM EST Project Member

Owner: tbergquist@chromium.org
Cc: -tbergquist@chromium.org connily@chromium.org

I was able to reproduce (though it's finicky because of the random timeouts), and I'll continue to help test, but Taylor is kindly going to help fix.

Comment 6 by tbergquist@chromium.org on Wed, Feb 24, 2021, 6:14 PM EST Project Member

Status: Started (was: Assigned)

Looks like there are just other cases in RevertDragAt where it can lose track of reverted tabs, and then try to update their group membership. I didn't go through it carefully enough the first time around, and missed some.

Comment 7 by bugdroid on Thu, Feb 25, 2021, 4:40 PM EST Project Member

The following revision refers to this bug:

https://chromium.googlesource.com/chromium/src/+/baed629809830c10b3d59ab88eb8fb7dbe7968c2

commit baed629809830c10b3d59ab88eb8fb7dbe7968c2 Author: Taylor Bergquist <tbergquist@chromium.org> Date: Thu Feb 25 21:39:14 2021

Fix remaining instances of RevertDragAt losing track of tabs.

Change-Id: I139383118a4b2059da1e28a90e467ebbe7fe139e

Reviewed-on: https://chromium-review.googlesource.com/c/chromium/src/+/2719135

Commit-Queue: Taylor Bergquist <tbergquist@chromium.org> Reviewed-by: Connie Wan <connily@chromium.org> Cr-Commit-Position: refs/heads/master@{#857850}

 $[modify] \ https://crrev.com/baed629809830c10b3d59ab88eb8fb7dbe7968c2/chrome/browser/ui/views/tabs/tab\_drag\_controller.cc$ 

Comment 8 by tbergquist@chromium.org on Thu, Feb 25, 2021, 6:31 PM EST Project Member

Status: Fixed (was: Started) Labels: Security\_Impact-Stable

Fixed! Adding the appropriate security label since this crash should be able to occur on stable.

Comment 9 by sheriffbot on Fri, Feb 26, 2021, 12:21 PM EST Project Member

Labels: -security\_impact-head

Comment 10 by adetaylor@google.com on Fri, Feb 26, 2021, 1:19 PM EST Project Member

Labels: -ReleaseBlock-Stable -M-90 -Target-90 M-89 Target-89 Merge-Request-89

Removing RBS due to #c8 and adjusting M, etc. Sheriffbot would add a merge request tomorrow so I'll short cut that.

Comment 11 by sheriffbot on Fri, Feb 26, 2021, 1:24 PM EST Project Member

Labels: -Merge-Request-89 Merge-Review-89 Hotlist-Merge-Review

This bug requires manual review: We are only 3 days from stable.

Before a merge request will be considered, the following information is required to be added to this bug:

- 1. Does your merge fit within the Merge Decision Guidelines?
- $\textbf{Chrome:} \ \text{https://chromium.googlesource.com/chromium/src.git/+/master/docs/process/merge\_request.md\#when-to-request-a-merge} \\$
- Chrome OS: https://goto.google.com/cros-release-branch-merge-guidelines
- 2. Links to the CLs you are requesting to merge.
- 3. Has the change landed and been verified on ToT?
- 4. Does this change need to be merged into other active release branches (M-1, M+1)?
- 5. Why are these changes required in this milestone after branch?
- 6. Is this a new feature?
- 7. If it is a new feature, is it behind a flag using finch?

#### Chrome OS Only:

8. Was the change reviewed and approved by the Eng Prod Representative? See Eng Prod ownership by component: http://go/cros-engprodcomponents

#### Please contact the milestone owner if you have questions

Owners: benmason@(Android), bindusuvama@(iOS), geohsu@(ChromeOS), pbommana@(Desktop)

For more details visit https://www.chromium.org/issue-tracking/autotriage - Your friendly Sheriffbot

Comment 12 by sheriffbot on Fri, Feb 26, 2021, 1:55 PM EST Project Membe

Labels: -Restrict-View-SecurityTeam Restrict-View-SecurityNotify

Comment 13 by pbommana@google.com on Fri, Feb 26, 2021, 2:23 PM EST Project Member

Cc: adetaylor@chromium.org pbomm...@chromium.org

+Adetaylor(Security TPM) for Merge Decision.

Comment 14 by tbergquist@chromium.org on Fri, Feb 26, 2021, 3:32 PM EST Project Member

- 1. Yes
- 2. https://chromium-review.googlesource.com/c/chromium/src/+/2719135
- 3. Not on ToT, but connily@ tested the patch. Requested, could you give it a test to verify the fix?
- 4. The impact goes quite a ways back, but it depends on https://chromium-review.googlesource.com/c/chromium/src/+/2682744 and would need to be merged on top of that CL so it doesn't merge conflict
- 5. They fix a crash
- 6. No
- 7. N/A

Comment 15 by tbergquist@chromium.org on Fri, Feb 26, 2021, 3:33 PM EST Project Men

Went ahead and posted a cherry-pick CL to 4389 here: https://chromium-review.googlesource.com/c/chromium/src/+/2724071

Comment 16 by adetaylor@chromium.org on Fri, Feb 26, 2021, 7:35 PM EST Project Member

Thanks, I'll approve M89 merges in a few days once the initial M89 release has been successfully made.

Comment 17 by adetaylor@google.com on Wed, Mar 10, 2021, 5:24 PM EST Project Member

Labels: -Merge-Review-89 Merge-Approved-89

Approving merge to M89, branch 4389, unless any stability problems have shown up here since. Please go ahead and merge.

Comment 18 by Git Watcher on Thu, Mar 11, 2021, 3:11 PM EST Project Member

Labels: -merge-approved-89 merge-merged-4389 merge-merged-89

The following revision refers to this bug:

https://chromium.googlesource.com/chromium/src/+/ce80a25b427aa9c7f0f26b9d8452d7172f59a9b4

commit ce80a25b427aa9c7f0f26b9d8452d7172f59a9b4

Author: Taylor Bergquist <tbergquist@chromium.org>
Date: Thu Mar 11 20:10:03 2021

Fix remaining instances of RevertDragAt losing track of tabs.

(cherry picked from commit baed629809830c10b3d59ab88eb8fb7dbe7968c2)

### Bug: 1181387

Change-Id: I139383118a4b2059da1e28a90e467ebbe7fe139e

Reviewed-on: https://chromium-review.googlesource.com/c/chromium/src/+/2719135

Commit-Queue: Taylor Bergquist <tbergquist@chromium.org>

Reviewed-by: Connie Wan <connily@chromium.org>
Cr-Original-Commit-Position: refs/heads/master@{#857850}

Reviewed-on: https://chromium-review.googlesource.com/c/chromium/src/+/2724071

Bot-Commit: Rubber Stamper <rubber-stamper@appspot.gserviceaccount.com>

Cr-Commit-Position: refs/branch-heads/4389@{#1529}

 $Cr-Branched-From: 9251c5db2b6d5a59fe4eac7aafa5fed37c139bb7-refs/heads/master @\{\#843830\} feasible for the control of the cont$ 

 $\textbf{[modify]} \ https://crrev.com/ce80a25b427aa9c7f0f26b9d8452d7172f59a9b4/chrome/browser/ui/views/tabs/tab\_drag\_controller.cc$ 

Comment 19 by adetaylor@google.com on Thu, Mar 11, 2021, 6:17 PM EST Project Member

Labels: Release-2-M89

Comment 20 by adetaylor@google.com on Thu, Mar 11, 2021, 6:20 PM EST Project Member

Labels: CVE-2021-21192 CVE\_description-missing

Comment 21 by janag...@google.com on Mon, Mar 15, 2021, 7:04 AM EDT Project Member

Labels: LTS-Security-NotApplicable-86

Comment 22 by amyressler@google.com on Tue, Mar 16, 2021, 10:13 AM EDT Project Member

Labels: -CVE\_description-missing CVE\_description-submitted

Comment 23 by asumaneev@google.com on Thu, Apr 22, 2021, 10:48 AM EDT Project Member

Labels: LTS-Security-86

Comment 24 by sheriffbot on Fri, Jun 18, 2021, 1:51 PM EDT Project Member

Labels: -Restrict-View-SecurityNotify allpublic

This bug has been closed for more than 14 weeks. Removing security view restrictions.

For more details visit https://www.chromium.org/issue-tracking/autotriage - Your friendly Sheriffbot

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