




☆ Starred by 5 users

Owner:

 hongchan@chromium.org  
OOO (12.15-1.8)

CC:

adetaylor@chromium.org  
carlosil@chromium.org  
 rtoy@chromium.org  
pbomm...@chromium.org  
 hongchan@chromium.org

Status:

Verified (Closed)

Components:

Blink>WebAudio

Modified:

Sep 22, 2021

Backlog-Rank:

----

Editors:

----

EstimatedDays:

----

NextAction:

----

OS:

Linux, Android, Windows, Chrome, Mac, Fuchsia, Lacros

Pri:

1

Type:

Bug-Security

Hotlist-Merge-Review  
Security\_Impact-Stable  
Security\_Severity-Medium  
reward-7500  
allpublic  
reward-inprocess  
CVE\_description-submitted  
merge-merged-4240  
M-91  
LTR-Merged-86  
LTS-Security-86  
Target-91  
external\_security\_report  
merge-merged-4430  
merge-merged-90  
merge-merged-4472  
merge-merged-91  
LTS-Merged-90  
LTS-Security-90  
Release-0-M91  
CVE-2021-30530

Issue 1201033: Security: Out-of-bounds access in WebAudio  
Reported by kkwon...@gmail.com on Tue, Apr 20, 2021, 10:36 PM EDT

 Code

**VULNERABILITY DETAILS**  
[https://source.chromium.org/chromium/chromium/src/+master:third\\_party/blink/renderer/modules/webaudio/audio\\_worklet\\_processor.cc;drc=7f5a8953f42e12194870ec6f0bf6d41c66663a36;\\_t=173](https://source.chromium.org/chromium/chromium/src/+master:third_party/blink/renderer/modules/webaudio/audio_worklet_processor.cc;drc=7f5a8953f42e12194870ec6f0bf6d41c66663a36;_t=173)  
...  
bool AudioWorkletProcessor::PortTopologyMatches(  
v8::Isolate\* isolate,  
v8::Local<v8::Context> context,  
const Vector<scoped\_refptr<AudioBus>>& audio\_port\_1,  
const TraceWrapperV8Reference<v8::Array>& audio\_port\_2) {  
TRACE\_EVENT0 TRACE\_DISABLED\_BY\_DEFAULT("audio-worklet"),  
"AudioWorkletProcessor::Process (compare topology");  
if (audio\_port\_2.IsEmpty())  
return false;  
  
// Two AudioPorts are supposed to have the same length because the number of  
// inputs and outputs of AudioNode cannot change after construction.  
v8::Local<v8::Array> port\_2\_local = audio\_port\_2.NewLocal(isolate);  
DCHECK(port\_2\_local->IsArray());  
DCHECK\_EQ(audio\_port\_1.size(), port\_2\_local->Length());  
  
v8::TryCatch try\_catch(isolate);  
  
v8::Local<v8::Value> value;  
uint32\_t bus\_index\_counter = 0;  
for (const auto& audio\_bus\_1 : audio\_port\_1) {  
if (!port\_2\_local->Get(context, bus\_index\_counter).ToLocal(&value) || // \*\*\* 1 \*\*\*  
!value->IsArray())  
return false;  
  
// Compare the length of AudioBus1[i] from AudioPort1 and AudioBus2[i] from  
// AudioPort2.  
unsigned number\_of\_channels =  
audio\_bus\_1 ? audio\_bus\_1->NumberOfChannels() : 0;  
v8::Local<v8::Array> audio\_bus\_2 = value.As<v8::Array>();  
if (number\_of\_channels != audio\_bus\_2->Length()) // \*\*\* 2 \*\*\*  
return false;  
  
// If the channel count of AudioBus1[i] and AudioBus2[i] matches, then  
// iterate all the channels in AudioBus1[i] and see if any AudioChannel  
// is detached. (i.e. transferred to a different thread)  
for (uint32\_t channel\_index = 0; channel\_index < audio\_bus\_2->Length();  
++channel\_index) {  
if (!audio\_bus\_2->Get(context, channel\_index).ToLocal(&value) ||  
!value->IsFloat32Array()) // \*\*\* 3 \*\*\*

```

    return false;
    v8::Local<v8::Float32Array> float32_array = value.As<v8::Float32Array>();

    // If any array is transferred, we need to rebuild them.
    if (float32_array->ByteLength() == 0) // *** 4 ***
        return false;
}

    bus_index_counter++;
}

return true;
}
...

https://source.chromium.org/chromium/chromium/src/+master:third\_party/blink/renderer/modules/webaudio/audio\_worklet\_processor.cc;l=61;drc=cb83c85e1025099b2888bc29e24dac4ab49b02c7
...

bool AudioWorkletProcessor::Process(
    const Vector<scoped_refptr<AudioBus>>& inputs,
    Vector<scoped_refptr<AudioBus>>& outputs,
    const HashMap<String, std::unique_ptr<AudioFloatArray>>& param_value_map) {
    TRACE_EVENT0(TRACE_DISABLED_BY_DEFAULT("audio-worklet"),
        "AudioWorkletProcessor::Process");

    DCHECK(global_scope->IsContextThread());
    DCHECK(!hasErrorOccurred());

    ScriptState* script_state =
        global_scope->ScriptController()->GetScriptState();
    ScriptState::Scope scope(script_state);
    v8::Isolate* isolate = script_state->GetIsolate();
    v8::Local<v8::Context> context = script_state->GetContext();
    AudioWorkletProcessorDefinition* definition =
        global_scope->FindDefinition(Name());

    // 1st JS arg [inputs_]. Compare [inputs] and [inputs_]. Then allocates the
    // data container if necessary.
    if (!PortTopologyMatches(isolate, context, inputs, inputs_)) { // *** 5 ***
        ...

https://source.chromium.org/chromium/chromium/src/+master:third\_party/blink/renderer/modules/webaudio/audio\_worklet\_processor.cc;drc=7f5a8953f42e12194870ec6fb6d41c66663a36;j=314
        ...

void AudioWorkletProcessor::CopyPortToArrayBuffers(
    v8::Isolate* isolate,
    const Vector<scoped_refptr<AudioBus>>& audio_port,
    BackingArrayBuffers& array_buffers) {
    DCHECK_EQ(audio_port.size(), array_buffers.size());

    for (uint32_t bus_index = 0; bus_index < audio_port.size(); ++bus_index) {
        const scoped_refptr<AudioBus>& audio_bus = audio_port[bus_index];
        size_t bus_length = audio_bus ? audio_bus->length() : 0;
        unsigned number_of_channels = audio_bus ? audio_bus->NumberOfChannels() : 0;
        for (uint32_t channel_index = 0; channel_index < number_of_channels;
            ++channel_index) {
            auto backing_store = array_buffers[bus_index][channel_index] // *** 6 ***
                .NewLocal(isolate)
                ->GetBackingStore();
            memcpy(backing_store->Data(), audio_bus->Channel(channel_index)->Data(), // *** 7 ***
                bus_length * sizeof(float));
        }
    }
}
...

The root cause of this vulnerability is JavaScript callback from [1].

```

In 'AudioWorkletProcessor::PortTopologyMatches', 'audio\_port\_1' is the parameter variable 'inputs' in 'AudioWorkletProcessor::Process' [5]. The size of 'audio\_port\_1' is the same as the length of 'audio\_bus\_2' in most cases. The variable 'audio\_bus\_2' is determined by 'audio\_port\_1' in 'AudioWorkletProcessor::ClonePortTopology' function. After 'audio\_bus\_2' is set, 'audio\_bus\_2' is not changed before 'AudioWorkletProcessor::PortTopologyMatches' returns 'false'.

When the user makes two 'AudioWorkletNode's using singleton pattern, 'AudioWorkletNode's have the same 'AudioWorkletProcessor'. Then, 'AudioWorkletProcessor::PortTopologyMatches' can have different sizes of 'audio\_port\_1'. Because we can pass the different sizes of 'inputs' using different 'AudioWorkletNode's. It means that the length of 'port\_2\_local' less than 'bus\_index\_counter' which is an index of 'audio\_port\_1's size. In this case, we can make a JavaScript callback using '\_\_\_defineGetter\_\_\_', and it will be called in [1].

Using the JavaScript callback, we can control the variable 'value' which is the return value of the callback. Then, we can bypass the check routine [2] because we can control the size of the array using the callback. Also, we can bypass the check routines [3], and [4] in the same manner. Bypassing the check routines, 'AudioWorkletProcessor::PortTopologyMatches' always returns 'true'. It means the variable 'audio\_bus\_2' is never changed, and also the variable 'array\_buffers', which is explained as follows, is not changed too.

In 'AudioWorkletProcessor::CopyPortToArrayBuffers', 'audio\_port' is the same variable above 'audio\_port\_1'. The variable 'array\_buffers' is 'Vector' type, and the size of 'array\_buffers' is also determined by 'audio\_port\_1' from 'AudioWorkletProcessor::ClonePortTopology'. It means that the size of 'audio\_port\_1' can be bigger than the size of 'array\_buffers' (using singleton pattern and bypassing check routines). So we can access 'array\_buffers' out of bounds in [6]. Also, if we detach one of 'ArrayBuffer' in 'array\_buffers' from 'AudioWorkletProcessor::PortTopologyMatches' after bypassing check routines (TOCTOU), We can access the detached backing store of 'ArrayBuffer' in [7].

## VERSION

Chrome Version: 90.0.4430.72 (latest stable version)  
Operating System: Windows, Linux, MacOS, Android

## REPRODUCTION CASE

I attached two JavaScript codes. One is Out-of-Bounds 'Vector' access. The other is accessing the detached 'ArrayBuffer's backing store. Please see the attachments.

**arraybuffer.html**  
1.4 KB [View](#) [Download](#)

**oob.html**  
1.3 KB [View](#) [Download](#)

**Comment 1** by [sheriffbot](#) on Tue, Apr 20, 2021, 10:37 PM EDT Project Member  
**Labels:** external\_security\_report

**Comment 2** by [ClusterFuzz](#) on Thu, Apr 22, 2021, 10:05 PM EDT Project Member  
ClusterFuzz is analyzing your testcase. Developers can follow the progress at <https://clusterfuzz.com/testcase?key=5667300636950528>.

**Comment 3** by [ClusterFuzz](#) on Thu, Apr 22, 2021, 10:06 PM EDT Project Member  
ClusterFuzz is analyzing your testcase. Developers can follow the progress at <https://clusterfuzz.com/testcase?key=5079857089019904>.

**Comment 4** by [carlosil@chromium.org](mailto:carlosil@chromium.org) on Fri, Apr 23, 2021, 7:53 PM EDT Project Member  
**Cc:** carlosil@chromium.org  
**Labels:** Needs-Feedback  
It looks like CF was not able to reproduce this with either poc, and I was also not able to reproduce by hand. Could you attach the crash log you get? Thanks

**Comment 5** by [kkwon...@gmail.com](mailto:kkwon...@gmail.com) on Sun, Apr 25, 2021, 9:56 PM EDT  
I attach the crash logs. And, you have to run the PoCs with web server for reproducing it.

**oob.log**  
10.9 KB [View](#) [Download](#)

**arraybuffer.log**  
5.9 KB [View](#) [Download](#)

**Comment 6** by [sheriffbot](#) on Sun, Apr 25, 2021, 9:58 PM EDT Project Member  
**Labels:** -Needs-Feedback  
Thank you for providing more feedback. Adding the requester to the cc list.

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

**Comment 7** by [carlosil@chromium.org](mailto:carlosil@chromium.org) on Mon, Apr 26, 2021, 8:06 PM EDT Project Member  
**Status:** Assigned (was: Unconfirmed)  
**Owner:** rtoy@chromium.org  
**Labels:** Security\_Impact-Stable Security\_Severity-Medium  
**Components:** Blink>WebAudio  
rtoy: Can you please help triage this one too? Thanks

**Comment 8** by [rtoy@chromium.org](mailto:rtoy@chromium.org) on Tue, Apr 27, 2021, 12:55 PM EDT Project Member  
**Owner:** hongchan@chromium.org  
**Cc:** rtoy@chromium.org  
**Labels:** OS-Android OS-Chrome OS-Fuchsia OS-Linux OS-Mac OS-Windows OS-Lacros Pri-2  
See also [issue-1292060](#), which is probably a duplicate where DCHECK is enabled to catch the unexpected state which looks as if it can actually happen.  
This probably happens for all OSes.

**Comment 9** by [sheriffbot](#) on Tue, Apr 27, 2021, 1:03 PM EDT Project Member  
**Labels:** M-91 Target-91  
Setting milestone and target because of Security\_Impact=Stable and medium severity.

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

**Comment 10** by [sheriffbot](#) on Tue, Apr 27, 2021, 1:39 PM EDT Project Member  
**Labels:** -Pri-2 Pri-1  
Setting Pri-1 to match security severity Medium. If this is incorrect, please reset the priority. Sheriffbot won't make this change again.

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

**Comment 11** by [sheriffbot](#) on Wed, May 5, 2021, 12:21 PM EDT Project Member  
hongchan: Uh oh! This issue still open and hasn't been updated in the last 14 days. This is a serious vulnerability, and we want to ensure that there's progress. Could you please leave an update with the current status and any potential blockers?  
If you're not the right owner for this issue, could you please remove yourself as soon as possible or help us find the right one?  
If the issue is fixed or you can't reproduce it, please close the bug. If you've started working on a fix, please set the status to Started.  
Thanks for your time! To disable nags, add the Disable-Nags label.

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

**Comment 12** by [hongchan@chromium.org](mailto:hongchan@chromium.org) on Wed, May 5, 2021, 6:29 PM EDT Project Member  
**Status:** Started (was: Assigned)

**Comment 13** by [Git Watcher](#) on Wed, May 5, 2021, 8:21 PM EDT Project Member  
The following revision refers to this bug:  
<https://chromium.googlesource.com/chromium/src/+f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49>

commit [f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49](#)  
Author: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>  
Date: Thu May 06 00:20:54 2021

Return false when the size of audio\_port\_1 and audio\_port\_2 is different

The current code assumes the size of audio ports is identical because the number of inputs and outputs cannot change after construction. This assumption is broken when multiple AudioWorkletNodes share a singleton AudioWorkletProcessor instance.

This patch removes the assumption and explicitly returns false when the

number of inputs and outputs does not match.

[Bug-1204030, 120360](#)

Test: 3 repro cases submitted do not crash on ASAN.

Change-Id: I4065e7970b9b7b54468fc82558509a3238ff28e4

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2875846>

Commit-Queue: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Reviewed-by: Raymond Toy <[rtoy@chromium.org](mailto:rtoy@chromium.org)>

Cr-Commit-Position: refs/heads/master@{#879631}

[modify] [https://crrev.com/f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49/third\\_party/blink/renderer/modules/webaudio/audio\\_worklet\\_processor.cc](https://crrev.com/f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49/third_party/blink/renderer/modules/webaudio/audio_worklet_processor.cc)

[Comment 14](#) by [hongchan@chromium.org](mailto:hongchan@chromium.org) on Fri, May 7, 2021, 2:43 PM EDT Project Member

**Status:** Fixed (was: Started)

kkwondotnet@

Could you check with 92.0.4500.0?

[Comment 15](#) by [sheriffbot](#) on Sat, May 8, 2021, 12:41 PM EDT Project Member

**Labels:** reward-topanel

[Comment 16](#) by [sheriffbot](#) on Sat, May 8, 2021, 2:00 PM EDT Project Member

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

[Comment 17](#) by [sheriffbot](#) on Sat, May 8, 2021, 2:25 PM EDT Project Member

**Labels:** Merge-Request-91

Requesting merge to beta M91 because latest trunk commit (879631) appears to be after beta branch point (738).

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

[Comment 18](#) by [sheriffbot](#) on Sat, May 8, 2021, 2:27 PM EDT Project Member

**Labels:** -Merge-Request-91 Hotlist-Merge-Review Merge-Review-91

This bug requires manual review: M91's targeted beta branch promotion date has already passed, so this requires manual review  
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?  
- Chrome: [https://chromium.googlesource.com/chromium/src.git/+master/docs/process/merge\\_request.md#when-to-request-a-merge](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), marinakz@(ChromeOS), pbommana@(Desktop)

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

[Comment 19](#) by [kkwon...@gmail.com](mailto:kkwon...@gmail.com) on Sun, May 9, 2021, 9:02 AM EDT

hongchan@

I checked it, and it seems to be fixed very well.

[Comment 20](#) by [hongchan@chromium.org](mailto:hongchan@chromium.org) on Mon, May 10, 2021, 11:30 AM EDT Project Member

**Status:** Verified (was: Fixed)

1. Yes.
2. <https://crrev.com/c/2875846>
3. Yes.
4. Yes.
5. This is a security issue.
6. No.
7. No.

[Comment 21](#) by [adetaylor@google.com](mailto:adetaylor@google.com) on Mon, May 10, 2021, 3:17 PM EDT Project Member

**Labels:** -Merge-Review-91 Merge-Approved-91

Approving merge to M91, branch 4472.

[Comment 22](#) by [adetaylor@chromium.org](mailto:adetaylor@chromium.org) on Mon, May 10, 2021, 5:49 PM EDT Project Member

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

[Issue-1203060](#) has been merged into this issue.

[Comment 23](#) by [Git Watcher](#) on Tue, May 11, 2021, 12:51 PM EDT Project Member

**Labels:** -merge-approved-91 merge-merged-4472 merge-merged-91

The following revision refers to this bug:

<https://chromium.googlesource.com/chromium/src/+bce03b43e222a2e659809ae909674a242bdccdde>

commit [bce03b43e222a2e659809ae909674a242bdccdde](https://chromium.googlesource.com/chromium/src/+bce03b43e222a2e659809ae909674a242bdccdde)

Author: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Date: Tue May 11 16:50:26 2021

Return false when the size of audio\_port\_1 and audio\_port\_2 is different

The current code assumes the size of audio ports is identical because the number of inputs and outputs cannot change after construction. This assumption is broken when multiple AudioWorkletNodes share a singleton AudioWorkletProcessor instance.

This patch removes the assumption and explicitly returns false when the number of inputs and outputs does not match.

(cherry picked from commit [f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49](#))

[Bug-1204030, 420260](#)

Test: 3 repro cases submitted do not crash on ASAN.

Change-Id: I4065e7970b9b7b54468fc82558509a3238ff28e4

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2875846>

Commit-Queue: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Reviewed-by: Raymond Toy <[rtoy@chromium.org](mailto:rtoy@chromium.org)>

Cr-Original-Commit-Position: refs/heads/master@{#879631}

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2885639>

Reviewed-by: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Bot-Commit: Rubber Stamper <[rubber-stamper@appspot.gserviceaccount.com](mailto:rubber-stamper@appspot.gserviceaccount.com)>

Cr-Commit-Position: refs/branch-heads/4472@{#935}

Cr-Branched-From: 3d60439cfc36485e76a1c5bb7f513d3721b20da1-refs/heads/master@{#870763}

[modify] [https://crrev.com/bce03b43e222a2e659809ae909674a242bdccdde/third\\_party/blink/renderer/modules/webaudio/audio\\_worklet\\_processor.cc](https://crrev.com/bce03b43e222a2e659809ae909674a242bdccdde/third_party/blink/renderer/modules/webaudio/audio_worklet_processor.cc)

**Comment 24** by [amyressler@google.com](mailto:amyressler@google.com) on Thu, May 20, 2021, 1:08 PM EDT Project Member

**Labels:** -reward-topanel reward-unpaid reward-7500

\*\*\* Boilerplate reminders! \*\*\*

Please do NOT publicly disclose details until a fix has been released to all our users. Early public disclosure may cancel the provisional reward. Also, please be considerate about disclosure when the bug affects a core library that may be used by other products. Please do NOT share this information with third parties who are not directly involved in fixing the bug. Doing so may cancel the provisional reward. Please be honest if you have already disclosed anything publicly or to third parties. Lastly, we understand that some of you are not interested in money. We offer the option to donate your reward to an eligible charity. If you prefer this option, let us know and we will also match your donation - subject to our discretion. Any rewards that are unclaimed after 12 months will be donated to a charity of our choosing.

Please contact [security-vrp@chromium.org](mailto:security-vrp@chromium.org) with any questions.

\*\*\*\*\*

**Comment 25** by [amyressler@chromium.org](mailto:amyressler@chromium.org) on Thu, May 20, 2021, 5:34 PM EDT Project Member

Congratulations, the VRP Panel has decided to award you \$7500 for this report! Nice work!

**Comment 26** by [amyressler@google.com](mailto:amyressler@google.com) on Fri, May 21, 2021, 5:32 PM EDT Project Member

**Labels:** -reward-unpaid reward-inprocess

**Comment 27** by [amyressler@chromium.org](mailto:amyressler@chromium.org) on Mon, May 24, 2021, 11:05 AM EDT Project Member

**Labels:** Release-0-M91

**Comment 28** by [amyressler@google.com](mailto:amyressler@google.com) on Mon, May 24, 2021, 2:18 PM EDT Project Member

**Labels:** CVE-2021-30530 CVE\_description-missing

**Comment 29** by [achuith@chromium.org](mailto:achuith@chromium.org) on Thu, May 27, 2021, 3:24 PM EDT Project Member

**Labels:** LTS-Merge-Request-86 LTS-Security-86

**Comment 30** by [surabhigrover@chromium.org](mailto:surabhigrover@chromium.org) on Tue, Jun 1, 2021, 3:53 PM EDT Project Member

**Labels:** -LTS-Merge-Request-86 LTS-Merge-Approved-86

**Comment 31** by [Git Watcher](#) on Wed, Jun 2, 2021, 2:35 PM EDT Project Member

**Labels:** merge-merged-4240

The following revision refers to this bug:

<https://chromium.googlesource.com/chromium/src/+e80c2769e463f2795afa72fe36a66c02ba1f2a14>

commit [e80c2769e463f2795afa72fe36a66c02ba1f2a14](#)

Author: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Date: Wed Jun 02 18:34:26 2021

Return false when the size of audio\_port\_1 and audio\_port\_2 is different

The current code assumes the size of audio ports is identical because the number of inputs and outputs cannot change after construction. This assumption is broken when multiple AudioWorkletNodes share a singleton AudioWorkletProcessor instance.

This patch removes the assumption and explicitly returns false when the number of inputs and outputs does not match.

(cherry picked from commit [f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49](#))

[Bug-1204030, 420260](#)

Test: 3 repro cases submitted do not crash on ASAN.

Change-Id: I4065e7970b9b7b54468fc82558509a3238ff28e4

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2875846>

Commit-Queue: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Reviewed-by: Raymond Toy <[rtoy@chromium.org](mailto:rtoy@chromium.org)>

Cr-Original-Commit-Position: refs/heads/master@{#879631}

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2922863>

Reviewed-by: Jana Grill <[janagrill@google.com](mailto:janagrill@google.com)>

Commit-Queue: Achuth Bhandarkar <[achuith@chromium.org](mailto:achuith@chromium.org)>

Owners-Override: Achuth Bhandarkar <[achuith@chromium.org](mailto:achuith@chromium.org)>

Cr-Commit-Position: refs/branch-heads/4240@{#1659}

Cr-Branched-From: f297677702651916bbf65e59c0d4bbd4ce57d1ee-refs/heads/master@{#800218}

[modify] [https://crrev.com/e80c2769e463f2795afa72fe36a66c02ba1f2a14/third\\_party/blink/renderer/modules/webaudio/audio\\_worklet\\_processor.cc](https://crrev.com/e80c2769e463f2795afa72fe36a66c02ba1f2a14/third_party/blink/renderer/modules/webaudio/audio_worklet_processor.cc)

**Comment 32** by [amyressler@google.com](mailto:amyressler@google.com) on Mon, Jun 7, 2021, 3:27 PM EDT Project Member

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

**Comment 33** by [vsavu@google.com](mailto:vsavu@google.com) on Mon, Jun 14, 2021, 12:27 PM EDT Project Member

**Labels:** -LTS-Merge-Approved-86 LTS-Merged-90 LTS-Merge-Request-90 LTS-Security-90

**Comment 34** by [gianluca@google.com](mailto:gianluca@google.com) on Tue, Jun 15, 2021, 6:28 AM EDT Project Member

**Labels:** -LTS-Merge-Request-90 LTS-Merge-Approved-90

**Comment 35** by [vsavu@google.com](mailto:vsavu@google.com) on Tue, Jun 15, 2021, 6:28 AM EDT Project Member

**Labels:** -LTS-Merged-90 LTR-Merged-86

Comment 36 by [Git Watcher](#) on Wed, Jun 16, 2021, 8:58 AM EDT Project Member

**Labels:** merge-merged-4430 merge-merged-90

The following revision refers to this bug:

<https://chromium.googlesource.com/chromium/src/+32bfec158a82ae94fb62efdd5dc2cd616f7c0891>

commit [32bfec158a82ae94fb62efdd5dc2cd616f7c0891](#)

Author: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Date: Wed Jun 16 12:57:57 2021

[M90-LTS] Return false when the size of audio\_port\_1 and audio\_port\_2 is different

The current code assumes the size of audio ports is identical because the number of inputs and outputs cannot change after construction. This assumption is broken when multiple AudioWorkletNodes share a singleton AudioWorkletProcessor instance.

This patch removes the assumption and explicitly returns false when the number of inputs and outputs does not match.

(cherry picked from commit [f1e277f1b586e0be0cc7f3b4f6462fa4982b7b49](#))

(cherry picked from commit [bce03b43e222a2e659809ae909674a242bdccdde](#))

[Bug-1201033, 120260](#)

Test: 3 repro cases submitted do not crash on ASAN.

Change-Id: [I4065e7970b9b7b54468fc82558509a3238ff28e4](#)

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2875846>

Commit-Queue: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Reviewed-by: Raymond Toy <[rtoy@chromium.org](mailto:rtoy@chromium.org)>

Cr-Original-Original-Commit-Position: refs/heads/master@{#879631}

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2885639>

Reviewed-by: Hongchan Choi <[hongchan@chromium.org](mailto:hongchan@chromium.org)>

Bot-Commit: Rubber Stamper <[rubber-stamper@appspot.gserviceaccount.com](mailto:rubber-stamper@appspot.gserviceaccount.com)>

Cr-Original-Commit-Position: refs/branch-heads/4472@{#935}

Cr-Original-Branched-From: [3d60439cfb36485e76a1c5bb7f513d3721b20da1](#)-refs/heads/master@{#870763}

Reviewed-on: <https://chromium-review.googlesource.com/c/chromium/src/+2961288>

Owners-Override: Victor-Gabriel Savu <[vsavu@google.com](mailto:vsavu@google.com)>

Reviewed-by: Artem Sumaneev <[asumaneev@google.com](mailto:asumaneev@google.com)>

Commit-Queue: Victor-Gabriel Savu <[vsavu@google.com](mailto:vsavu@google.com)>

Cr-Commit-Position: refs/branch-heads/4430@{#1525}

Cr-Branched-From: [e5ce7dc4f7518237b3d9bb93cccca35d25216cbe](#)-refs/heads/master@{#857950}

[modify] [https://crrev.com/32bfec158a82ae94fb62efdd5dc2cd616f7c0891/third\\_party/blink/renderer/modules/webaudio/audio\\_worklet\\_processor.cc](https://crrev.com/32bfec158a82ae94fb62efdd5dc2cd616f7c0891/third_party/blink/renderer/modules/webaudio/audio_worklet_processor.cc)

Comment 37 by [vsavu@google.com](mailto:vsavu@google.com) on Wed, Jun 16, 2021, 9:04 AM EDT Project Member

**Labels:** -LTS-Merge-Approved-90 LTS-Merged-90

Comment 38 by [sheriffbot](#) on Wed, Sep 22, 2021, 1:34 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

Comment 39 by [amyressler@chromium.org](mailto:amyressler@chromium.org) on Wed, Sep 22, 2021, 2:16 PM EDT Project Member

Hello- we consider attachments/pocs included with reports to be an integral part of the report, so I've un-deleted them. Thanks!