omigroup / **gltf-extensions**   Public

‹› Code   ◉ Issues 8   ⑂ Pull requests 4   💬 **Discussions**   ▷ Actions   •••

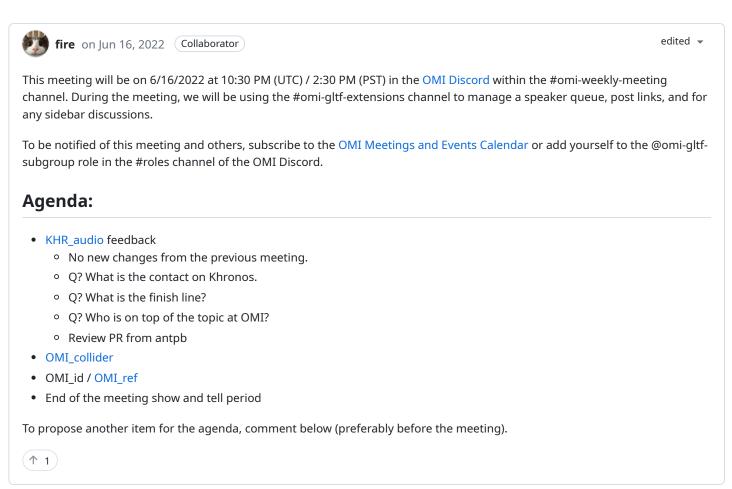# OMI glTF Working Group Meeting 6/16/2022 #90

fire started this conversation in **General**

fire on Jun 16, 2022   Collaborator   edited ▾

This meeting will be on 6/16/2022 at 10:30 PM (UTC) / 2:30 PM (PST) in the OMI Discord within the #omi-weekly-meeting channel. During the meeting, we will be using the #omi-gltf-extensions channel to manage a speaker queue, post links, and for any sidebar discussions.

To be notified of this meeting and others, subscribe to the OMI Meetings and Events Calendar or add yourself to the @omi-gltf-subgroup role in the #roles channel of the OMI Discord.

Agenda:

- KHR_audio feedback
  - No new changes from the previous meeting.
  - Q? What is the contact on Khronos.
  - Q? What is the finish line?
  - Q? Who is on top of the topic at OMI?
  - Review PR from antpb
- OMI_collider
- OMI_id / OMI_ref
- End of the meeting show and tell period

To propose another item for the agenda, comment below (preferably before the meeting).

↑ 1

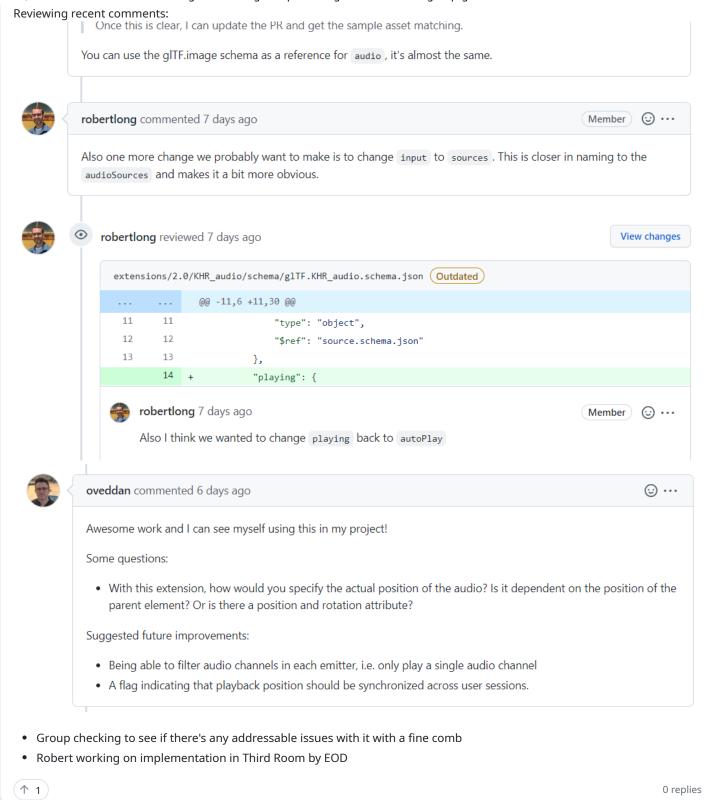**2 comments**   Oldest Newest Top

madjin on Jun 16, 2022   Collaborator   edited ▾

- to get the khr audio extension over the finish line we need:
  - to believe its ready, the ideas we attempt to get it right
  - setup / join meeting with khronos group to be ratified
  - what else can be marked as 'nice to have' vs 'must have'?

Lyuma:
There's an open PR in our group by antpb to adjust feedback from khronos

Reviewing recent comments:

> Once this is clear, I can update the PR and get the sample asset matching.
>
> You can use the glTF.image schema as a reference for `audio`, it's almost the same.

robertlong commented 7 days ago   Member ☺ ···

Also one more change we probably want to make is to change `input` to `sources`. This is closer in naming to the `audioSources` and makes it a bit more obvious.

👁 **robertlong** reviewed 7 days ago   View changes

extensions/2.0/KHR_audio/schema/glTF.KHR_audio.schema.json (Outdated)

...	...	@@ -11,6 +11,30 @@
11	11	"type": "object",
12	12	"$ref": "source.schema.json"
13	13	},
	14	+ "playing": {

robertlong 7 days ago   Member ☺ ···

Also I think we wanted to change `playing` back to `autoPlay`

oveddan commented 6 days ago   ☺ ···

Awesome work and I can see myself using this in my project!

Some questions:

- With this extension, how would you specify the actual position of the audio? Is it dependent on the position of the parent element? Or is there a position and rotation attribute?

Suggested future improvements:

- Being able to filter audio channels in each emitter, i.e. only play a single audio channel
- A flag indicating that playback position should be synchronized across user sessions.

- Group checking to see if there's any addressable issues with it with a fine comb
- Robert working on implementation in Third Room by EOD

↑ 1   0 replies

---

madjin on Jun 16, 2022   Collaborator   edited ▾

- I bring up janusweb sound implementation as reference

```
      this.defineProperties({
        sound_id: { type: 'string', set: this.updateSound },
        singleshot: { type: 'boolean', default: false },
        positional: { type: 'boolean', default: null },
        loop: { type: 'boolean', default: false },
        auto_play: { type: 'boolean', default: false },
        play_once: { type: 'boolean', default: false },
        dist: { type: 'float', default: 1.0, set: this.updateSound },
        pitch: { type: 'float', default: 1.0, set: this.updateSound },
        gain: { type: 'float', default: 1.0, set: this.updateSound },
        starttime: { type: 'float', default: 0.0, set: this.updateSound },
        distancemodel: { type: 'string', default: 'inverse', set: this.updateSound },
        rolloff: { type: 'float', default: 1.0, set: this.updateSound },
        rect: { type: 'string', set: this.updateSound }
      });
```

asked bai some questions about it

What's singleshot?

> oh, it's so you can just fire a sound and it self-destructs when it's done playing
> like...sometimes you want a sound that's persistent, like a looping sound - but sometimes you want something like a
> bounce, or some other reaction noise, and singleshot spawns the sound object at the give position, plays it once, and then
> dies
> it's good for sounds that are going to play occasionally but not all the time - for sounds that happen frequently, like impact
> noises or weapon sound effects or whatever, it's often better to use an objectpool of sounds

whats starttime used for usually?

> I often use starttime for ambient loops - like that Blacktop Hoops world I built, it's based on a real streetball court in New
> York, and it has some ambient sound effect loops recorded from the real location, like 3-4 minutes long
> so I can use that same ambient loop with spatialized sound emitters positioned around the court, on the sidewalk and
> streets, but with different offsets
> so when you're moving around you get that sense of traffic and pedestrian and other random ambient noise coming from
> all around you, without having to use unique recordings for each location
> it's not really segmented, it's playing the whole loop at each location - but because it's offset by some random amount, it
> feels more like infinite non-repeating loops
> like you might hear a dog bark from your back left, and then a minute and 37 seconds later the same dog barks from your
> back right

maybe that can be used for bird chirps

> yeah exactly, that kind of thing
> if you have a couple different ambient clips of differnet lengths you can pretty efficiently do what feels like infinitely-unique
> sounds, because they're gonna loop at different times
> lots of tricks you can play to avoid the problem of super-repetitive sound....nothing drives me crazier than repeating
> ambient bird noises or whatever where it's a constant pattern 😄

> in the context of gltf suggestions I'd say, singleshot is pretty engine-specific, that's more of a runtime thing, whereas the
> starttime offset would actually be useful to be able to specify in a gltf, if gltf is going to support positional sound emitters
> that can reference the same audio buffer

```
janus sound.* => KHR_audio.*
    sound_id: .name
  singleshot: **MISSING**
  positional: .type=="positional"
```

```
         loop: .loop
    auto_play: .playing
    play_once: .loop==false?
         dist: .maxDistance
        pitch: **MISSING**
         gain: .gain
    starttime: **MISSING**
 distancemodel: .distanceModel
      rolloff: .rolloffFactor
         rect: **MISSING**
```

Couple record player implementations (janusweb / vrchat udon)

- https://github.com/madjin/janus-custom-components/blob/master/media/recordplayer/recordplayer.js
- https://github.com/Vard-and-Temmie/Udon-Record-player

Couple new comments made to PRs

- ⚄ **Add OMI_collider** #63 (comment)
- ⎇ **Adjusts to KHR_audio PR recommendations to split audio out** #88 (comment)

↑ 1   0 replies

Category

💬 **General**

Labels

None yet

2 participants