

Gamma

a ray tracing debugger for Mesa drivers?

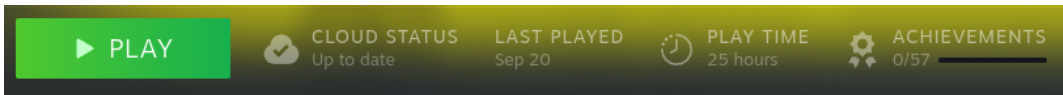
Konstantin Seurer

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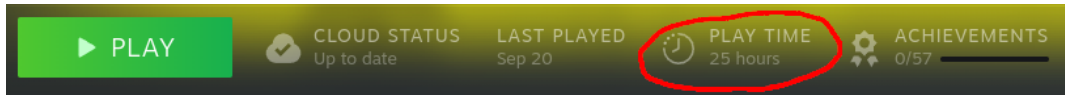
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- Missing renderdoc support, displaying hardware details is not possible

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- Existing tools are hardware or driver specific

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Support for your driver will take some effort!

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 - file format, 3D view, ...

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- RADV:
 - acceleration structure inspection (Common code)

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- RADV:
 - acceleration structure inspection (Common code)
 - ray history (No common code yet)

Next steps

Get more drivers on board!

- Merge common BVH dump infra & lavapipe support !44769

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Even more functionality!

- rebuilding acceleration structures in a trace

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Even more functionality!

- rebuilding acceleration structures in a trace
- compute statistics for acceleration structures → shader-db for acceleration structures

Need help adding gamma support to your driver?

Reach out to me on:

IRC: konstantin

Discord: @KonstantinSeurer

or via email: konstantin.seurer@gmail.com

```
konstantin@fedora:~/dev/mesa$ git log
commit 74771586ad0badc0fe068e8bbc812f2df315ef85
(HEAD -> xdc2026, origin/xdc2026)
Author: Konstantin Seurer <konstantin.seurer@gmail.com>
Date: Sat Sep 26 20:55:13 2026 +0200
```

radv/bvh: Break BVH updates

How can I demo a debugger if nothing is broken?