

ET: Legacy Development - Bug #1078

blob shadows (/cg_shadows 1) drains FPS

24.02.2018 19:11 - keMoN

Status: Fixed	% Done: 100%
Priority: Normal	Spent time: 0.00 hour
Assignee: IR4T4	
Category: Renderer	
Target version: 2.77	
OS:	Arch:
Description Reported by hatcher: Shadows set to [blob] (/cg_shadows 1) have a huge impact on the performance both on my 6 year old computer and on the new one. The FPS often dropped to 80-90	
Related issues: Related to ET: Legacy Development - Bug # 116: Fix: cg_shadows 2 (r2 - max sh... New 12.11.2012	

Associated revisions

Revision 115491b8 - 24.11.2018 21:26 - IR4T4

renderers: increase fps for (temp) decals/blob shadow refs #1078

History

#1 - 25.02.2018 10:28 - IR4T4

Which renderer is used?

#2 - 25.02.2018 10:33 - keMoN

vanilla renderer

#3 - 25.02.2018 15:02 - IR4T4

Actually this is the first time I've heard about performance drops with cg_shadows 1. FPS drops to 80-90 are no surprise and more related to used map, player settings and/or players on the server.

Q: Is the native screen device resolution used?

#4 - 25.02.2018 17:23 - keMoN

Yes, native resolution is used.

[quote=hatcher]

it happens when there's a lot action going on, then the fps drops.

As soon as i turn off blob shadows the fps stays stable at 125, on the same map, in the same game.

It happened on both rail gun and el kalif(?). Both times i had my settings reset for some reason, while i was testing something.

I was wondering about the performance issues.

I knew that even my old pc was good enough to run ET at 125 fps, so i started messing with the settings and ended up at blob shadows being the problem.

Both the old and new pc have AMD processors

[/quote]

#5 - 26.02.2018 10:54 - keMoN

- File shot0002.jpg added
- File shot0005.jpg added
- File shot0006.jpg added

It seems that depending on the underground, the plane of the shadow is manipulated. Likely to avoid sticking out, going in or z-fighting with the underground.

As visible in the screenshots, the verts/tris count significantly increases when on inclined underground. Flat (06) is only 12 verts / 6 tris, while shot05 is 16+ verts and the last one is just messed up. I do believe that when many players are in a scene with difference in terrain height (Railgun was mentioned above), that this has an impact on FPS. The thing is, that I don't think it's quite possible to change the manipulation of the shadow plane, because then we might have shadows that go into terrain or hover out of it.

There is an option to to disable them (cg_shadows 0) if the perceived decline in FPS is too much. As a non-competitive player I was always happy with FPS >70. But that's personal preference, I guess^^

So, I guess issue confirmed, but I don't know what we could do here?

The shadow consists of 3 planes. One big blob for body and two smaller ones for feet. I guess it would be possible to have cg_shadows 2 with only the body blob?

That way, you prevent the complete weirdness of not having shadows, but only have around a third of drawn verts/tris?

#6 - 26.02.2018 11:01 - keMoN

- File shot0000.jpg added
- File shot0001.jpg added
- File shot0003.jpg added
- File shot0004.jpg added

Direct comparison with r_showtris 2. In one spot, the shadow of one player makes 14 FPS difference and in the other spot 8 FPS. With several players, that might actually really get ugly^^

#7 - 30.10.2018 20:08 - IR4T4

- Status changed from New to Confirmed

#8 - 24.11.2018 21:30 - IR4T4

- Status changed from Confirmed to Feedback
- Target version changed from 2.78 to 2.76
- % Done changed from 0 to 70

This should be muuuuch better now.

#9 - 18.12.2018 08:02 - IR4T4

- Category changed from Mod CGAME to 24
- Target version changed from 2.76 to 2.78

#10 - 06.01.2019 09:35 - IR4T4

- Target version changed from 2.78 to 2.77

#11 - 17.01.2019 14:20 - IR4T4

- Related to Bug #116: Fix: cg_shadows 2 (r2 - max shadow setting bug (Player model black-skinned as a shadow) added

#12 - 17.01.2019 14:21 - IR4T4

- Status changed from Feedback to Fixed

- % Done changed from 70 to 100

#13 - 22.01.2019 12:56 - Timothy

- Category changed from 24 to Renderer

#14 - 24.01.2019 14:15 - IR4T4

- Assignee set to IR4T4

Files

shot0005.jpg	982 KB	26.02.2018	keMoN
shot0002.jpg	987 KB	26.02.2018	keMoN
shot0006.jpg	848 KB	26.02.2018	keMoN
shot0001.jpg	1.12 MB	26.02.2018	keMoN
shot0000.jpg	1.13 MB	26.02.2018	keMoN
shot0003.jpg	1.12 MB	26.02.2018	keMoN
shot0004.jpg	1.11 MB	26.02.2018	keMoN