

## Doomsday Engine - Bug #1821

### [Hexen] Monsters do not always awaken (Seven Portals and elsewhere)

2014-06-14 12:22 - vermil

<b>Status:</b>	Progressed	<b>Start date:</b>	2014-06-14
<b>Priority:</b>	High	<b>% Done:</b>	10%
<b>Assignee:</b>	skyjake		
<b>Category:</b>	Vanilla emulation		
<b>Target version:</b>	Vanilla / Gameplay		
<b>Description</b>			
Using the seven portals hub, I seem to notice that bad guys flagged as deaf in HeXen don't appear to be switching from deaf to non-deaf upon hearing a shot (i.e their vision doesn't appear to be switching from 180 degrees to 360 degrees).			
Also, I can't get the Chaos Serpent thing 56 to wake up until I either shoot it or move close to it; in Vanilla HeXen he would wake up on sight from any distance.			
<del>Finally, bad guys are incorrectly losing their alerted status when the player returns to the map (i.e they aren't staying woken up). This one I can confirm. (see <a href="#">#2068</a>)</del>			
<b>Related issues:</b>			
Related to Bug #2068: [HeXen] Badguys not retaining alerted status upon retur...		<b>New</b>	<b>2015-05-21</b>
Related to Bug #2261: Mobj cross-references not always fully restored after l...		<b>Closed</b>	<b>2017-07-28</b>

#### History

##### #1 - 2014-06-14 12:23 - vermil

Latest unstable build 1256.

##### #2 - 2015-03-12 01:37 - danij

- File *wakeuptest.wad* added

I built *wakeuptest.wad* (attached) to try out Chaos Serpent wakeup behavior and could find no issue in build 1528. Did you notice this behavior on a specific map? Maybe after loading a saved game?

##### #3 - 2015-03-12 01:37 - danij

- Status changed from *New* to *Feedback*

##### #4 - 2015-03-12 01:37 - danij

- Assignee set to *vermil*

##### #5 - 2015-03-12 10:35 - vermil

I used HeXen's Seven Portals hub map as a test, yes.

I sent you a save game to test this with a month or so ago, but here is another :)

##### #6 - 2015-03-12 10:39 - vermil

But here is another.

##### #7 - 2015-03-12 10:40 - vermil

- File *hex0.save* added

##### #8 - 2015-03-12 13:25 - danij

A saved game is no good to me until we've decided this issue is related. As I said I cannot replicate any issue with the Chaos Serpent specifically, irrespective of whether one loads a saved game or not.

What we need to do is to determine whether this issue occurs on other maps and if so what they have in common.

##### #9 - 2015-03-12 13:34 - vermil

Please note that in my initial report above, that I said Seven Portals (the main hub or Map02 to use it's ID) and Chaos Serpent thing 56 (a specific mobj on that map, rather than a mobj type) :

I used him as an example of a bad guy that always appears to be affected by one of the three possible issues mentioned in my original report.

**#10 - 2015-03-12 16:36 - danij**

Ah, I see. Thanks for the clarification; your original report now makes a lot more sense to me. I've a couple of working theories so lets see what I can turn up in the debugger...

**#11 - 2015-03-14 01:23 - danij**

- *Subject changed from [Hexen] multiple issues of bad guys seemingly not waking up or retaining woken up status, correctly to [Hexen] Monsters do not always awaken in Seven Portals*

- *Category set to Regression*

- *Status changed from Feedback to In Progress*

- *Assignee changed from vermil to danij*

Initial testing indicates that those specific monsters, on this particular map, are not waking up when they otherwise should because of the significantly broken line and sector geometry in this map. If I manually fix that broken geometry in a map editor those monsters wake when they should.

The next step is to determine whether this is a regression in the line of sight algorithm, or, a fault with the interpretation of broken map geometry in Doom's internal BSP builder.

**#12 - 2015-03-14 05:43 - danij**

- *File wakeuptest2.wad added*

Tackling the original map data in the debugger was proving to be very time consuming. So I decided to try a different approach and reduce the geometric complexity of the map. After some considered experimentation I was able to reduce the map to a far simpler test case, which I've attached as **wakeuptest2.wad**

It should now be a lot easier to determine the real fault here (another day...).

**#13 - 2015-03-15 01:24 - danij**

- *% Done changed from 0 to 10*

**#14 - 2015-03-15 01:24 - danij**

- *Category changed from Regression to Vanilla emulation*

**#15 - 2015-05-03 20:08 - vermil**

I'm perhaps being a bit presumptuous here, but I'm just going to remind of this report due to:

"bad guys are incorrectly loosing their alerted status when the player returns to the map (i.e they aren't staying woken up). This one I can confirm."

I believe this is an important gameplay issue that may accidently be buried by the perhaps lesser seemingly map specific (i.e because it seems map specific) issue also included in this report.

**#16 - 2015-05-20 20:04 - skyjake**

- *File hex4.save added*

**#17 - 2015-05-20 20:05 - skyjake**

- *Tags set to Hexen, PlaySim*

I attached a save from Shadow Wood, after the puzzle has been completed. Is it correct behavior that the monsters in the final room face the wrong way and don't wake up easily?

**#18 - 2015-05-20 20:12 - vermil**

You have reminded me, that I meant to update this report; I've noticed occasions on Herisarch's seminary where where monsters weren't seeing the player when there was/is a polyobj between them and the player.

**#19 - 2015-05-20 20:14 - skyjake**

vermil wrote:

when there was/is a polyobj between them and the player

This sounds like something that definitely needs investigating.

**#20 - 2015-05-20 20:37 - skyjake**

- *Subject changed from [Hexen] Monsters do not always awaken in Seven Portals to [Hexen] Monsters do not always awaken (Seven Portals and elsewhere)*

**#21 - 2015-05-21 03:11 - danij**

skyjake wrote:

I attached a save from Shadow Wood, after the puzzle has been completed. Is it correct behavior that the monsters in the final room face the wrong way and don't wake up easily?

Vermil informed me via ICQ that he tested vanilla and it behaved in the same way.

**#22 - 2015-05-21 09:41 - skyjake**

danij wrote:

Vermil informed me via ICQ that he tested vanilla and it behaved in the same way.

Question then is, how many of the other waking up problems fall under the same "vanilla bugs" category?

**#23 - 2015-05-21 10:07 - danij**

Indeed. This is why I've found it tricky to resolve this issue because all the evidence seems to suggest there is either a) not a single underlying cause, or b) vanilla behavior is at least partially dependent on some broken logic and/or map geometry.

Solving this particular issue is likely going to be quite time consuming.

**#24 - 2015-05-21 10:45 - vermil**

I'm going to duplicate the HeXen 'bad guys are incorrectly loosing their alerted status when the player returns to the map (i.e they aren't staying woken up' issue in a new report as given the way this discussion has progressed, I fear it risks being buried.

**#25 - 2015-05-21 11:06 - skyjake**

- *Description updated*

**#26 - 2015-05-21 11:06 - skyjake**

- *Related to Bug #2068: [HeXen] Badguys not retaining alerted status upon return to a map added*

**#27 - 2016-07-06 00:01 - skyjake**

- *Status changed from In Progress to Progressed*

**#28 - 2017-04-03 14:16 - skyjake**

- *Target version set to 2.1 (Late 2018)*

**#29 - 2017-10-17 08:11 - skyjake**

- *Related to Bug #2261: Mobj cross-references not always fully restored after loading a save added*

**#30 - 2017-10-17 08:12 - skyjake**

- *Assignee changed from danij to skyjake*

Should be retested in light of [#2261](#).

**#31 - 2018-10-27 15:56 - skyjake**

- *Priority changed from Normal to High*

**#32 - 2019-11-30 08:25 - skyjake**

- *Target version changed from 2.1 (Late 2018) to Vanilla / Gameplay*

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**Files**

wakeuptest.wad	1.81 KB	2015-03-12	daniij
hex0.save	47.9 KB	2015-03-12	vermil
wakeuptest2.wad	9.77 KB	2015-03-14	daniij
hex4.save	112 KB	2015-05-20	skyjake