

The following is a Sourcemod teleport plugin to address RCBot2 teleport glitch

Details of the issue

There is a current issue in RCBot2 Linux dedicated servers where bots randomly teleport to the map origin from various locations in the map.

How they do this is not known.

What is known is it can be...

- On dod_avalanche, dod_jagd and dod_kalt.
- The source teleport location can be anywhere in these maps.
- The end destination is always the map origin. However, the heights vary and match the source teleport location in all cases.
- This can be an allied bot or an axis bot.

See here for all information collected in tests so far...

<https://www.dodbits.com/dods/index.php/dods/rcbot2-for-dod-s/rcbot2-bottleport-glitch-on-linux-dedicated-servers>

The map dod_avalanche is especially effected as the allied team that are normally teleporting from lower areas of the map, end up under the map near the middle flag where they can shoot at the players above and the players cannot see them.

Purposed temporary fix.

This is hard to overcome. A plugin can be applied that will add an invisible teleport cube that can transport the bot to another location.

Code that made the upper cube teleport

```
"0"  
{  
  "name""Teleport1"  
  "coordinate_a""-12.000000 -12.000000 -185.000000"  
  "coordinate_b""12.000000 12.000000 -500.000000"  
  "vis""1"  
  "team""0"  
}
```

These two cubes are "Target1" and "Target2" cubes. They are the destination and can be anywhere in the map.

having them like this the bot drops from there and ...gets killed

Code that made the lower cube teleport

```
"2"  
{  
  "name""Teleport2"  
  "coordinate_a""-12.000000 -12.000000 500.000000"  
  "coordinate_b""12.000000 12.000000 -80.000000"  
  "vis""1"  
  "team""0"  
}
```

This isn't perfect as there is a zone not covered, here...
...and while bots/humans can go through ok and not get teleported it does miss some teleports the bots do at this height around the upper levels.

When the teleport occurs in RCBot2, the bots go to the map origin.
However, they maintain their height (Z axis) after arriving at "0.0, 0.0" the map origin.
This allows a small amount of bots through but they are normally axis bots and get killed quickly.

The bots under the map have no chance to stay there under the map with this fix.

The plugin is here... <https://forums.alliedmods.net/showthread.php?t=224839>

- First you install the core plugin, (see my download)
- Then place this in `dod\cfg\sourcemod\sourcemod.cfg`

```
// Dev Zone plugin
// sm_zones (lzones in chat) for open the main menu and create/edit/remove zones (Required admin flag "t" for use).
// Filter
// 1 = Only allow valid alive clients to be detected in the native zones.
// 0 = Detect entities and all (you need to add more checkers in the third party plugins).
sm_devzones_filter "1"

//Mode
// 0 = Use checks every X seconds for check if a player join or leave a zone.
// 1 = hook zone entities with OnStartTouch and OnEndTouch (less CPU consume)
sm_devzones_mode "0"

//Check
// checks and beambox refreshs per second
// low value = more precise but more CPU consume,
// More high = less precise but less CPU consume
sm_devzones_checker "5.0"

// Model
// Use a model for zone entity (IMPORTANT: change this value only on map start)
sm_devzones_model "models/error.mdl"
```

The core plugin can have “Third party” plugins added, in this case “DevZones_Teleport”

The download has these plugins.

The plugin will make files for each map in “**addons\sourcemod\configs\ dev_zones**”

Configuring these is complex so I have done two for you to test, `dod_avalanche` and `dod_jagd`.

Opening those files, you see an option to have these zones visible “1” or not “0”

```
"name"          "Teleport1"
"cordinate_a"    "-12.000000 -12.000000 -185.000000"
"cordinate_b"    "12.000000 12.000000 -500.000000"
"vis"           "0"
"team"          "0"
```

...also selecting a team “0” seems to be all teams.

In the latest download I have made these special zones invisible compared to the image above.

I have moved the destination cube in `dod_avalanche` to the room above the center area so the bots don’t die, they just relocate. (see images below). However I left `dod_jagd` a big drop if it detects bots under the map.



As you can see there is a menu for this plugin.

You can bring that up via a console command “sm_zones”. It’s not an easy menu to use and make zones...but it is possible.

Here is the destination for dod_kalt...



It is rare bots teleport on that map...but it is known to occur.

This isn’t a perfect solution, the image above you can see a gap in the tall teleport cubes. Some bots will appear at this gap; however, it will grab most bots teleporting above and below the map origin.

I don’t know if this has any bad side effects on a live server.