Battlefield 2 Editor Tutorial: Crashing Issue Fixes

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The purpose of this tutorial is to provide some tips on how to troubleshoot or work around crashes with the editor. The biggest problem that I run into is where the editor crashes just from moving around. This is usually a static or collision mesh issue.

Before we get into how to track down and fix the issues, let's look at some possible work arounds. After all, if all you want to do is redraw the combat area or adjust some spawn positions you may not to take the time to fix the static -- a work around may work instead. These work arounds are for needing to do some work where you are not changing the statics.

Also, this is not about how to fix a static object. That would be a separate tutorial on it's own. What I want to provide is easy solutions or possible work arounds for bad static objects that work.

Here is a list of possible workarounds:

- [Start the Map without static objects] Rename the map's staticobject.con file to staticobject.bak and restart the map in the editor. This will help to validate that the problem is with the static objects and you may not need the statics to redraw a combat area or do CP/spawn point editing if you can use the shadow outline of the buildings on the maps.

- [Adjust spawn camera] If the map crashes after the map loads right away or as soon as you move, adjust the map spawn camera position to raise it up higher. If you only need to another area of the map that does not have issues, this could be a work around.   In the map's init con look for the following line and change the height setting by +200. In the example below, change 150 to 350.

gameLogic.setBeforeSpawnCamera 0/150/0 0/0/0

If those work arounds don't work for you, then the next course of action is to look at the debug file to track down which statics are causing the issues.

First of all, the editor produces a dump file when it crashes or is closed out. Ignore it. That is technical info that would be useful to a software developer that is familiar with the code.   What we want is the debug log file. Look in this folder:

Battlefield_2_Editor\bf2editor\Logs

For the most recent version of a file that starts with Debug_, ends with _Editor.log with the computer name, date, and time in the middle. Example:

Debug_DESKTOP-SHQFG6O_20231120_1919_Editor.log

This file has a lot of info to look through and we will narrow down where to in order to track down the offending statics.

1. Search for "staticMesh Please make sure it exists!"

If it finds something it will look something like the following example:

D:\bf2editor\Code\BF2\Geom\StaticMeshTemplate.cpp(468): Cannot load StaticMesh objects/staticobjects/_middle-east/city/city_architecture/house_medium_05/house_medium_05_col/Meshes/house_medium_05_col .staticMesh Please make sure it exists!

This does not tell you exactly what the problem is, but it does show you were to find the offending object. Note this object as needing to be fixed.

2. Search for "collisionMesh error"

If it finds something it will look like this example. This should also identify where the object is located. Note this object as needing to be fixed.

3. Search for "Collision mesh triangle with edge too short"

This one will not show the location but note this object as needing to be fixed. You will need to search for the location.

4. Search for "Collision mesh bounding box has no volume"

This one will show the location and note this one as a problem staticobject as well.

Note: This line is just a warning and does not need to be fixed in order to resolve the crashing editor problems: Collision mesh warning: Pivot should be more than 1/10 inside the bounding box

[Possible work arounds for bad static objects]

Now that you have your list of problem statics the next step is to look to see if there are some possible workarounds for these as well.   BFMeshView can be useful for checking out the objects.

1. Determine if the static is needed to suport the work that you are doing in the editor. If not try deleting it from the map's staticobject.con file.

2. Check for working similar object that could be swapped out.   For example, if a yellow barrow is causing a problem then maybe the green barrow will work instead. Do a search and replace in the staticobject.con file.

3. Check other mods.   PR reality has nav_statics available, that can swapped out in the staticobject.con file: It is explained how to use here: https://www.realitymod.com/forum/showthread.php?t=103902

Nations at War has a lot of fixed up static objects as well.

There are also updated POE2 static object files released here: https://www.moddb.com/mods/point-of-existence-2/addons/poe2-objects-col3

Ultimately, the static objects should be fixed, so if the mod is still active notify the mod team, as it could cause issues in-game as well.