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## Announcements

**Site Relaunch** 10/13/2016

Welcome back to BFEEditor.org! We've upgraded the forum software, removed the spammers, and improved security. Apologies for the downtime! Det

**Lightning & Other Weather Effects**[Sign in to follow this](#)

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Started by [EoD]Junglist, December 1, 2009

9 posts in this topic

**[EoD]Junglist**

Member



Members



295 posts

Gender: Male

Location: UK

Posted December 1, 2009 (edited) · [Report post](#)**WORK IN PROGRESS - FILES NOT ADDED YET - MORE INFO NEEDS ADDING**

This tutorial is to explain how to bring weather effects into your Battlefield 2 map.

In this tutorial we will cover adding lightning effects & thunder claps to your map as well as adding rain & snow to a map.

You should have all ready covered these two tutorials before using this one...

[1\) Creating A Map For Begginers](#)[2\) Creating A Map For Intermediate Users](#)**Getting Started**

Before you start make sure you download my pack of ambient effects & sounds!

[Download Here](#)**Step 1 - Lightning**

Ok, so here all that is basically needed is a couple of tweaks to the init.con & the ambientobjects.con files.

What we want to do is to add a lightning effect to the map allond with a delayed clap of thunder.

Firstly open up your maps init.con file.

Now this is what you are basically going to see:

```
rem *** Generated by BF2Editor ***
if v_arg1 == BF2Editor

run Heightdata.con
LevelSettings.InitWorld
run Terrain.con BF2Editor
run StaticObjects.con BF2Editor
run Sounds.con
run Sky.con BF2Editor
run Editor/GamePlayObjects.con host
UndergrowthEditable.create
Undergrowth.load Levels\YOUR_MAP_NAME\
run Overgrowth/Overgrowth.con
Overgrowth.editorEnable 1
run AmbientObjects.con BF2Editor
run Water.con

else

run Heightdata.con
run Terrain.con v_arg2
run Sky.con v_arg2
run CompiledRoads.con
run Sounds.con
run tmp.con v_arg1
Undergrowth.load Levels\YOUR_MAP_NAME\
run Overgrowth/Overgrowth.con
run Overgrowth/OvergrowthCollision.con
run AmbientObjects.con
run Water.con

endIf

rem ----- LevelSetting
rem -----

gameLogic.setTeamName 1 "MEC"
gameLogic.setTeamName 2 "US"
```

```

gameLogic.setTeamLanguage 1 "Mec"
gameLogic.setTeamLanguage 2 "English"

gameLogic.setTeamFlag 0 "flag_neutral"
gameLogic.setTeamFlag 1 "flag_mec"
gameLogic.setTeamFlag 2 "flag_us"

gameLogic.setKit 1 0 "MEC_Specops" "mec_light_solc
gameLogic.setKit 2 0 "US_Specops" "us_light_solc

gameLogic.setKit 1 1 "MEC_Sniper" "mec_light_sol
gameLogic.setKit 2 1 "US_Sniper" "us_light_soldi

gameLogic.setKit 1 2 "MEC_Assault" "mec_heavy_sc
gameLogic.setKit 2 2 "US_Assault" "us_heavy_solc

gameLogic.setKit 1 3 "MEC_Support" "mec_heavy_sc
gameLogic.setKit 2 3 "US_Support" "us_heavy_solc

gameLogic.setKit 1 4 "MEC_Engineer" "mec_light_s
gameLogic.setKit 2 4 "US_Engineer" "us_light_sol

gameLogic.setKit 1 5 "MEC_Medic" "mec_light_solc
gameLogic.setKit 2 5 "US_Medic" "us_light_soldie

gameLogic.setKit 1 6 "MEC_AT" "mec_heavy_soldier
gameLogic.setKit 2 6 "US_AT" "us_heavy_soldier"

rem -----

gameLogic.setBeforeSpawnCamera -203/157/-27 -28/

if v_arg1 == BF2Editor
LevelSettings.CustomTextureSuffix ""
else
texturemanager.customTextureSuffix ""
endIf
rem -----

GameLogic.MaximumLevelViewDistance 140

rem -----

gameLogic.setDefaultNumberOfTicketsEx 16 1 100
gameLogic.setDefaultNumberOfTicketsEx 16 2 110
gameLogic.setDefaultNumberOfTicketsEx 32 1 200

```

```

gameLogic.setDefaultNumberOfTicketsEx 32 2 220
gameLogic.setDefaultNumberOfTicketsEx 64 1 300
gameLogic.setDefaultNumberOfTicketsEx 64 2 330
gameLogic.setDefaultNumberOfTicketsEx 128 1 150
gameLogic.setDefaultNumberOfTicketsEx 128 2 250
gameLogic.setDefaultTimeToNextAIWave 0
gameLogic.setTicketLossAtEndPerMin 200
gameLogic.setTicketLossPerMin 1 12
gameLogic.setTicketLossPerMin 2 6

rem -----

rem -----

renderer.globalStaticMeshLodDistanceScale 1
renderer.globalBundleMeshLodDistanceScale 1
renderer.globalSkinnedMeshLodDistanceScale 1

gameLogic.setTeamDropVehicle 1 "jep_vodnik"
gameLogic.setTeamDropVehicle 2 "usjep_hmmwv"

```

Now what we want to do, is to add to this a few lines of code.

So under the line of code that says:

"gameLogic.setTicketLossPerMin"

You will notice something like this:

```

rem -----
-----

rem -----
-----

```

Now, inbetween these lines we can post some code to help with the lightning.

I've explained the ones you really need to play with to suit your need.

*weatherManager.stormEnabled 1*

*weatherManager.lightningMaxInterval 20 - **Maximim interval before strike - low value for testing replace 20 with 300***

*weatherManager.lightningMinInterval 10 - **Minimum interval before strike - low value for testing replace 10 with 240***

*weatherManager.lightningDuration 0.2 - **How long lightning effect will appear to the eye***

*weatherManager.lightningScale 25/1250 - **Length & width of effect***

*weatherManager.lightningColor 0.85/0.95/1/1 - **Lightning colour***

*weatherManager.lightningMinPos -650/0/650 - **Affects where the lightning will occur in the sky***

*weatherManager.lightningMaxPos -400/0/400 - **Affects where the lightning will occur in the sky***

*weatherManager.lightningBlendOutTime 0.5*

*weatherManager.lightningPerturbation 20*

*weatherManager.lightningSegments 25*

*weatherManager.inFadeSegments 5*

*weatherManager.lightningGroundPenetration 60*

*weatherManager.doubleStrikeProbability 0.6 - **Chance of a double strike happening***

*weatherManager.doubleStrikeMinDelay 0.3 - **Minimum delay between next strike in a doublestrike***

*weatherManager.doubleStrikeMaxDelay 0.75 - **Maximum delay between next strike in a doublestrike***

*SkyDome.lightingColor 0.7/0.75/0.8*

*rem ----- Sound -----*

*weatherManager.lightningSFXDelay 0.8 - **Delay after effect until thunder sounds***

*weatherManager.lightningSFXName S\_Thunder - **Effect name that links to your ambientobjects.con file***

So, now you know what the important (For now) parts mean, add the following code...

```
weatherManager.stormEnabled 1
weatherManager.lightningMaxInterval 300
weatherManager.lightningMinInterval 240
weatherManager.lightningDuration 0.2
weatherManager.lightningScale 25/1250
weatherManager.lightningColor 0.85/0.95/1/1
```

```

weatherManager.lightningMinPos -650/0/650
weatherManager.lightningMaxPos -400/0/400
weatherManager.lightningBlendOutTime 0.5
weatherManager.lightningPerturbation 20
weatherManager.lightningSegments 25
weatherManager.inFadeSegments 5
weatherManager.lightningGroundPenetration 60

weatherManager.doubleStrikeProbability 0.6
weatherManager.doubleStrikeMinDelay 0.3
weatherManager.doubleStrikeMaxDelay 0.75

SkyDome.lightingColor 0.7/0.75/0.8

rem ----- Sound -----

weatherManager.lightningSFXDelay 0.8
weatherManager.lightningSFXName S_Thunder

```

So now you should have a init.con that resembles this one:

```

rem *** Generated by BF2Editor ***
if v_arg1 == BF2Editor

run Heightdata.con
LevelSettings.InitWorld
run Terrain.con BF2Editor
run StaticObjects.con BF2Editor
run Sounds.con
run Sky.con BF2Editor
run Editor/GamePlayObjects.con host
UndergrowthEditable.create
Undergrowth.load Levels\YOUR_MAP_NAME\
run Overgrowth/Overgrowth.con
Overgrowth.editorEnable 1
run AmbientObjects.con BF2Editor
run Water.con

else

run Heightdata.con
run Terrain.con v_arg2
run Sky.con v_arg2
run CompiledRoads.con
run Sounds.con
run tmp.con v_arg1

```

```
Undergrowth.load Levels\YOUR_MAP_NAME\  
run Overgrowth/Overgrowth.con  
run Overgrowth/OvergrowthCollision.con  
run AmbientObjects.con  
run Water.con  
  
endIf  
  
rem ----- LevelSetting  
rem -----  
  
gameLogic.setTeamName 1 "MEC"  
gameLogic.setTeamName 2 "US"  
  
gameLogic.setTeamLanguage 1 "Mec"  
gameLogic.setTeamLanguage 2 "English"  
  
gameLogic.setTeamFlag 0 "flag_neutral"  
gameLogic.setTeamFlag 1 "flag_mec"  
gameLogic.setTeamFlag 2 "flag_us"  
  
gameLogic.setKit 1 0 "MEC_Specops" "mec_light_sc  
gameLogic.setKit 2 0 "US_Specops" "us_light_solc  
  
gameLogic.setKit 1 1 "MEC_Sniper" "mec_light_sol  
gameLogic.setKit 2 1 "US_Sniper" "us_light_soldi  
  
gameLogic.setKit 1 2 "MEC_Assault" "mec_heavy_sc  
gameLogic.setKit 2 2 "US_Assault" "us_heavy_solc  
  
gameLogic.setKit 1 3 "MEC_Support" "mec_heavy_sc  
gameLogic.setKit 2 3 "US_Support" "us_heavy_solc  
  
gameLogic.setKit 1 4 "MEC_Engineer" "mec_light_s  
gameLogic.setKit 2 4 "US_Engineer" "us_light_sol  
  
gameLogic.setKit 1 5 "MEC_Medic" "mec_light_solc  
gameLogic.setKit 2 5 "US_Medic" "us_light_soldie  
  
gameLogic.setKit 1 6 "MEC_AT" "mec_heavy_soldier  
gameLogic.setKit 2 6 "US_AT" "us_heavy_soldier"  
  
rem -----  
  
gameLogic.setBeforeSpawnCamera -203/157/-27 -28/  
  
if v_arg1 == BF2Editor
```

```

LevelSettings.CustomTextureSuffix ""
else
texturemanager.customTextureSuffix ""
endIf
rem -----

GameLogic.MaximumLevelViewDistance 140

rem -----

gameLogic.setDefaultNumberOfTicketsEx 16 1 100
gameLogic.setDefaultNumberOfTicketsEx 16 2 110
gameLogic.setDefaultNumberOfTicketsEx 32 1 200
gameLogic.setDefaultNumberOfTicketsEx 32 2 220
gameLogic.setDefaultNumberOfTicketsEx 64 1 300
gameLogic.setDefaultNumberOfTicketsEx 64 2 330
gameLogic.setDefaultNumberOfTicketsEx 128 1 150
gameLogic.setDefaultNumberOfTicketsEx 128 2 250
gameLogic.setDefaultTimeToNextAIWave 0
gameLogic.setTicketLossAtEndPerMin 200
gameLogic.setTicketLossPerMin 1 12
gameLogic.setTicketLossPerMin 2 6

rem -----

weatherManager.stormEnabled 1
weatherManager.lightningMaxInterval 20
weatherManager.lightningMinInterval 10
weatherManager.lightningDuration 0.2
weatherManager.lightningScale 25/1250
weatherManager.lightningColor 0.85/0.95/1/1
weatherManager.lightningMinPos -650/0/650
weatherManager.lightningMaxPos -400/0/400
weatherManager.lightningBlendOutTime 0.5
weatherManager.lightningPerturbation 20
weatherManager.lightningSegments 25
weatherManager.inFadeSegments 5
weatherManager.lightningGroundPenetration 60

weatherManager.doubleStrikeProbability 0.6
weatherManager.doubleStrikeMinDelay 0.3
weatherManager.doubleStrikeMaxDelay 0.75

SkyDome.lightingColor 0.7/0.75/0.8

rem ----- Sound -----

```



```

weatherManager.lightningSFXDelay 0.8
weatherManager.lightningSFXName S_Thunder

rem -----

renderer.globalStaticMeshLodDistanceScale 1
renderer.globalBundleMeshLodDistanceScale 1
renderer.globalSkinnedMeshLodDistanceScale 1

gameLogic.setTeamDropVehicle 1 "jep_vodnik"
gameLogic.setTeamDropVehicle 2 "usjep_hmmwv"

```

Save that for now.

## Step 2 - Sound

Open up your maps ambientobjects.con file.

Look for the header like this:

```
rem ***** AmbientSounds *****
```

Now, we need to add a section under that header like this:

```

rem [SoundObjectTemplate: S_Thunder]
ObjectTemplate.create Sound S_Thunder
ObjectTemplate.activeSafe Sound S_Thunder
ObjectTemplate.modifiedByUser "jung"
ObjectTemplate.lowSamples 2147483647
ObjectTemplate.mediumSamples 2147483647
ObjectTemplate.soundFilename "levels/YOUR_MAP_NAME/your_sound.wav"
ObjectTemplate.loopCount 0
ObjectTemplate.is3dSound 0
ObjectTemplate.stopType 0
ObjectTemplate.volume 1
ObjectTemplate.pitch 1
ObjectTemplate.pan 0.5
ObjectTemplate.reverbLevel 0
ObjectTemplate.minDistance 300000

Sound.addTrigger S_Thunder

```

Now look a bit further down the ambientobject.con file and find this line:

```
if v_arg1 == BF2Editor
```

Under that, add this:

```
Object.create S_Thunder  
Object.absolutePosition 0.00/200/0.00  
Object.rotation 0.000/0.000/0.000  
Object.layer 1
```

Ok, now save!

So, now we need to make a new folder directly in the folder  
YOUR\_MAP\_NAME

Add this folder:

common

Inside common add:

sound

Inside sound add:

levelambients

And inside there place the file "thunder\_1.ogg" from my  
download pack (Available at the top of this page).

### Step 3 - Sky

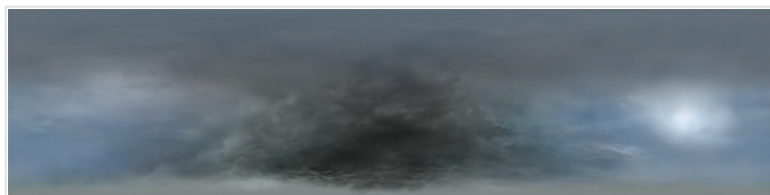
Ok, so this would be enough for our map to see some  
lightning action, but if we want the sky to light up with the  
lightning we need to look at the sky you are using.

Skies in BF2 can be saved as DXT 5 .dds file.

These files have alpha channels, so the white area is the  
area that will light up with the lightning effect.

If it's all black, nothing in the sky will light up except the  
lightning effect.

So if we look at this sky normally:



And at the Alpha Channel:



You can see where the sky will light when the lightning effect happens.

You'll need to understand photoshop and save the sky as 2048 x 512 DXT 5 .dds file.

I'm not the best one to do a tut on how to make an alpha channel like that I'm affraid.

We can use the sky from Operation Harvest located in OperationHarvest/client/common/textures/sky/harvest\_sky.dds if you can't make your own.

### NOTES

The init.con will remove your weather info if you load the map in the editor so remember to re-add it before you play, or do it at the end of making your map once you pack it all up.

You can get round this by using the tmp.con and weather.con but I'll explain this later on.

So that's pretty much it for the lightning!

**Edited December 2, 2009 by [EoD]Junglist**

**[EoD]Junglist**

Member



Members



295 posts

Gender: Male

Location: UK

Posted December 1, 2009 · [Report post](#)



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**[EoD]Junglist**

Posted December 1, 2009 · [Report post](#)



Member

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Members



295 posts

Gender:Male

Location:UK

**mccae**Posted December 1, 2009 · [Report post](#)

Member



Members



108 posts

Gender:Male

Location:Vienna, Austria

Interests:PC Games  
(Battlefield series,...), Java,  
Music,...

Thank you for this really clear tutorial!

I must confess that, I did not knew that there is a built in  
lightning function since now...**mschoeldgen[Xw  
w2]**Posted December 2, 2009 (edited) · [Report post](#)

God-like



Moderators



8,876 posts

Gender:Male

Interests:Simulators, FP  
Games, Bass playingThere's even code preperation for rain - unfortunately this  
only does work with the debugger . Harry pioneered in this  
field:<http://bfeditor.org/forums/index.php?showtopic=5951>Note also that BF2 supports wind . I found those in the  
debugger:

```
windManager.globalWindSpeed 10
```

gives you



Change the direction with

```
windManager.globalWindDirection X/Y/Z
```



The question remains why some sprites are affected and some are not, though 🤔 I also didn't test yet with the retail EXE.

Edit: windManager does work with the retail EXE ( 1.5 ) , at least in a local game 😄 Now we only need to find out if the rainManager made it into 1.5 ...

Edit2: No, unfortunately the rainManager doesn't work in 1.5 - too bad 😞

Edited December 2, 2009 by mschoeldgen[Xww2]

**Amok@ndy**

Member



Members



116 posts

Gender:Male

Location:Germany/Bavaria/Munich

Interests:Mapping, Djing, Battlefield2Mods

<http://newcommunity.eu>

Posted December 2, 2009 · [Report post](#)



seems like inspired junglist to a new tutorial 😄 awesome

i could really need sth like this 2 weeks ago 😊

thx Junglist

**[EoD]Junglist**

Member



Members



295 posts

Gender:Male

Location:UK

Posted December 2, 2009 (edited) · [Report post](#)



msch, wind kinda works in game, when there's an explosion on say the ambstatic fire it blows all over the place.

Doesnt seem to work on justsmoke though.

But yeah proper wind would be nice in game 😊

Edited December 2, 2009 by [EoD]Junglist

**Amok@ndy**

Member



Posted December 2, 2009 · [Report post](#)



it works on smoke grenades on FH2 maybe a secret line in the animation of the smoke ?



Members  
● 0  
116 posts  
Gender: Male  
Location: Germany/Bavaria/Munich  
Interests: Mapping, Djing, Battlefield2Mods  
<http://newcommunity.eu>

## mschoeldgen[Xww2]

God-like



Moderators



8,876 posts  
Gender: Male  
Interests: Simulators, FPS Games, Bass playing

Posted December 3, 2009 (edited) · [Report post](#)



It depends on the 'windAffectionFactor NN' coding in the effect. But despite that all sprites in the above effect have the factor set to similar values not all sprites are affected.

To have global wind in your map , add those lines to your tmp.con:

```
windManager.globalWindSpeed 10
```

( where 10 is the speed in meters/second )

and optionally

```
windManager.globalWindDirection X/Y/Z
```

where X, Y and Z are the usual 3D coordinates . e.g. 0/-1/0 would make your wind blow right down to the ground .

When running the debugger you can interactively set direction and speed and then take those settings into your tmp.con

**Edited December 3, 2009 by mschoeldgen[Xww2]**

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