Guide to modify Empire Earth in Professional Way

Starting With

You need 4 softwares For now...

1) EE Studio: Using this to extract Data.ssa
   Download it http://ee.heavengames.com/downloads/showfile.php?fileid=1004

2) Wolfie's EE MultiDecompressor to decrypt .dat files after extraction
   Download it http://www.mediafire.com/?6rr7eedbnpdd1hm

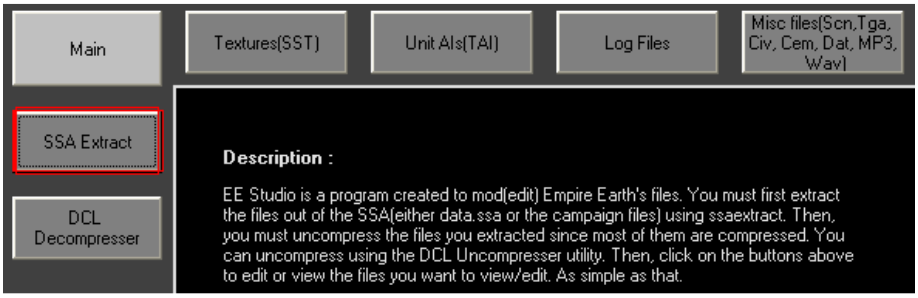
3) A hex editor Such as Hex Workshop which is going to be Used Here: This allows you to edit the .dat files directly.
   Download it http://www.mediafire.com/?wnejxdtuomd

4) Resource Hacker :Program used to edit language and add Language Ids

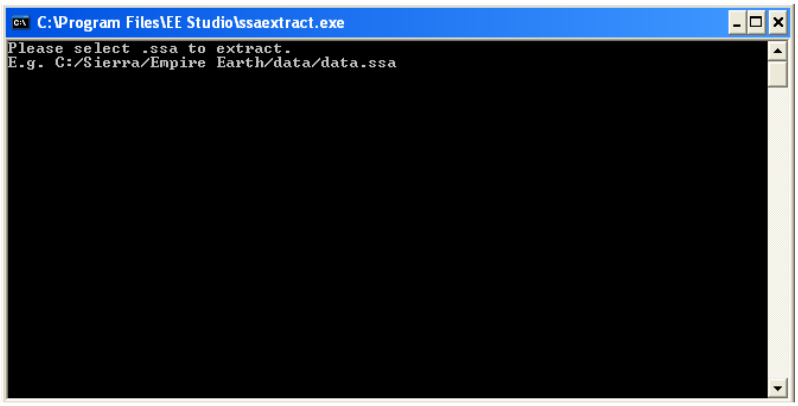
   Download it http://www.angusj.com/resourcehacker/reshack_setup.exe

Procedure:

1- Open EE Studio After installing it, It would be in desktop
   Now first we want the game files so we need to extract them
   Open EE Studio ..Click in SSA Extract as shown in figure below.

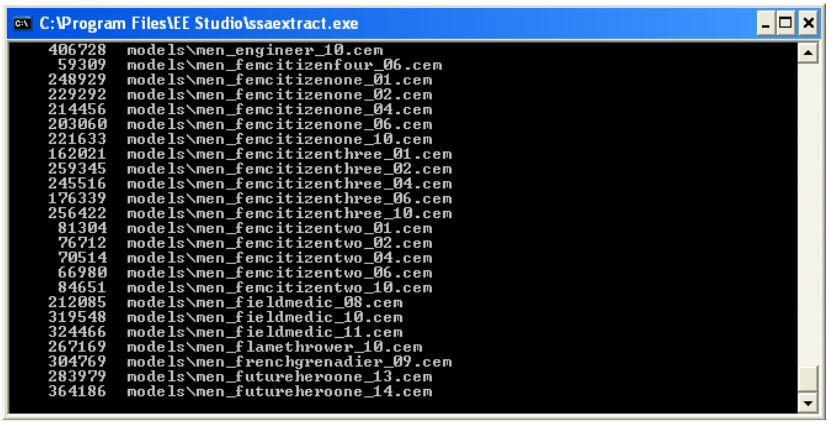


This gonna be shown (Black screen)

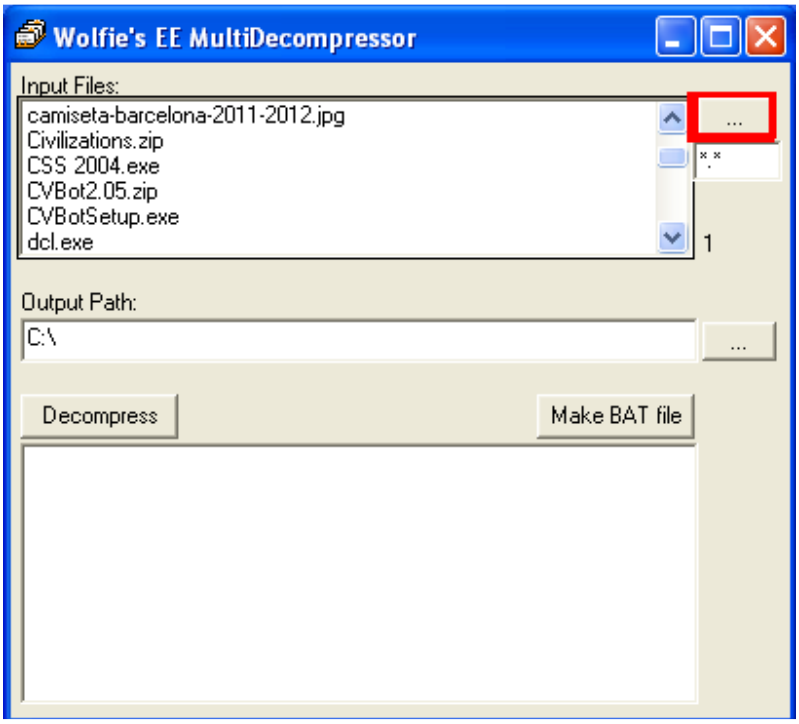


Write where your Empire earth data.ssa Located...In my Case
It is
C:/Sierra/Empire Earth/Data/data.ssa
Press Enter key
Now choose your output Directory .Lets say
C:/EE Extract/

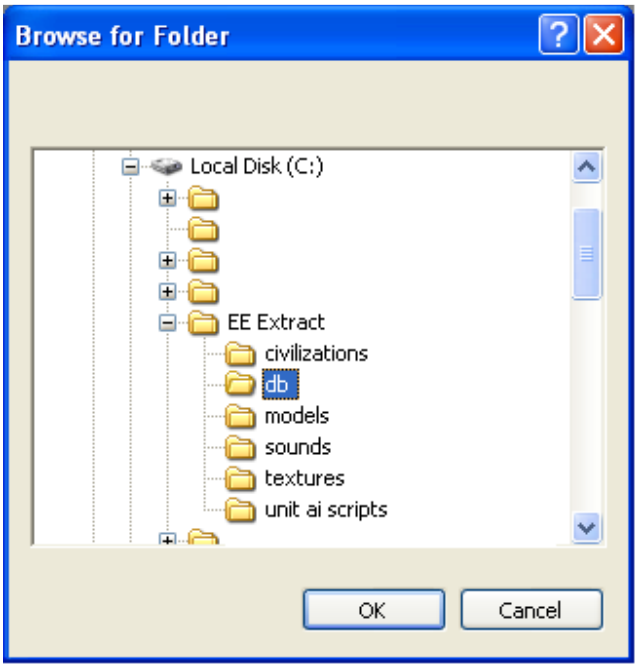
Now Press Enter key again
Extraction process started as shown in figure below. Wait it until finishing



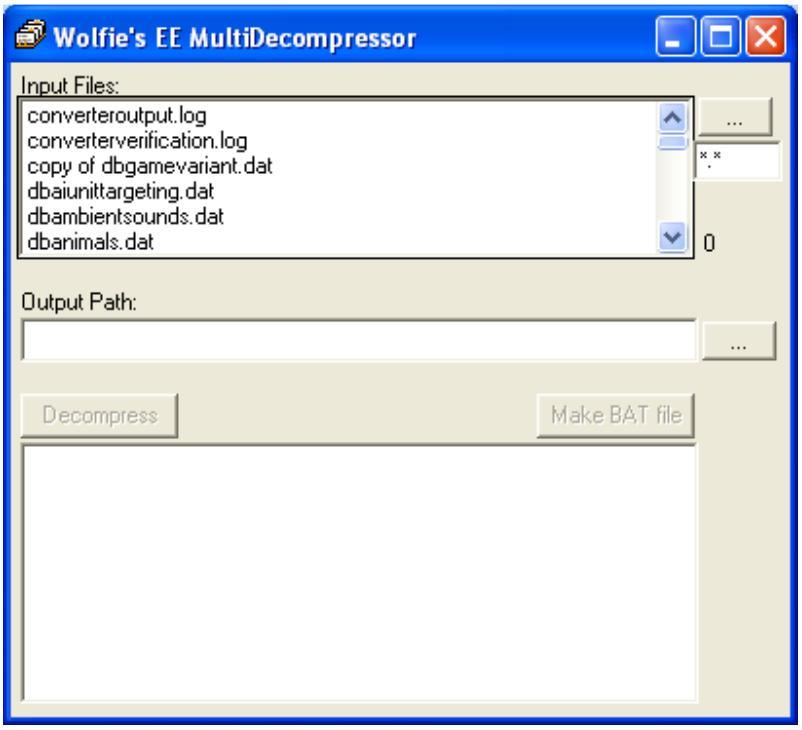
2- Decrypt files which were extracted by EE Studio using Wolfie's EE MultiDecompressor
Extract Wolfie's EE MultiDecompressor.zip archive .Open Wolfie's EE MultiDecompressor
Click Browse button as shown in figure below.



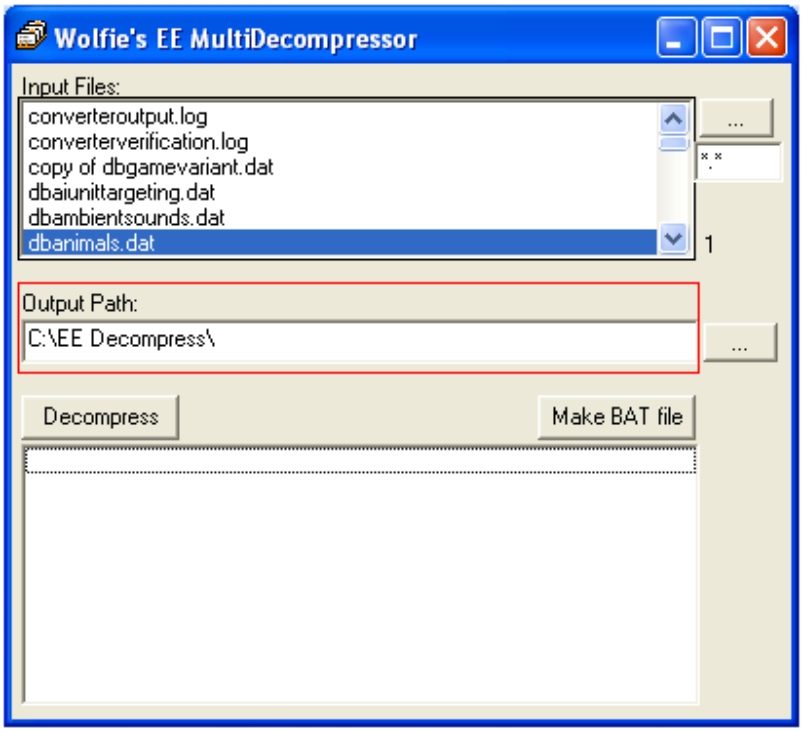
This gonna be shown_ go to our output directory which is located in c drive EE Extract folder then db folder and click ok



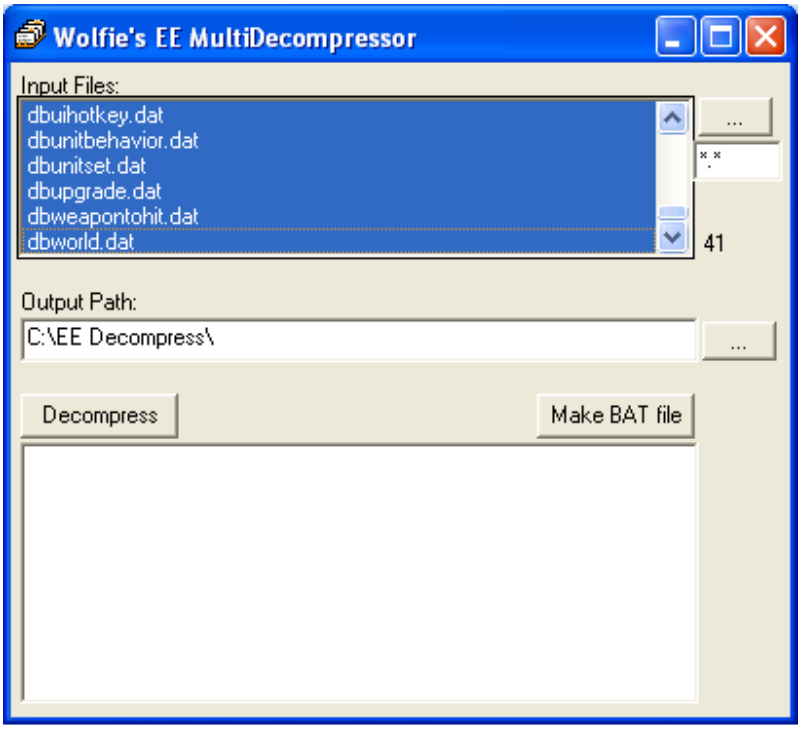
Now Files which were inside db folder shown dbanimals.dat, dbambient.dat and so on....



In Output path write this directory
C:\EE Decompress\

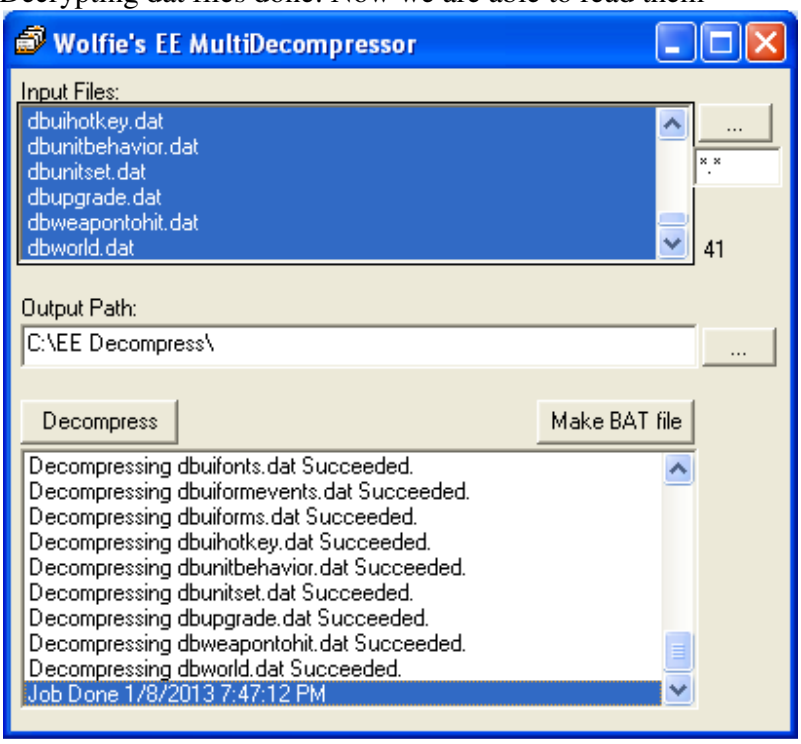


Select All files using Shift key, starting from first file until last file as shown below

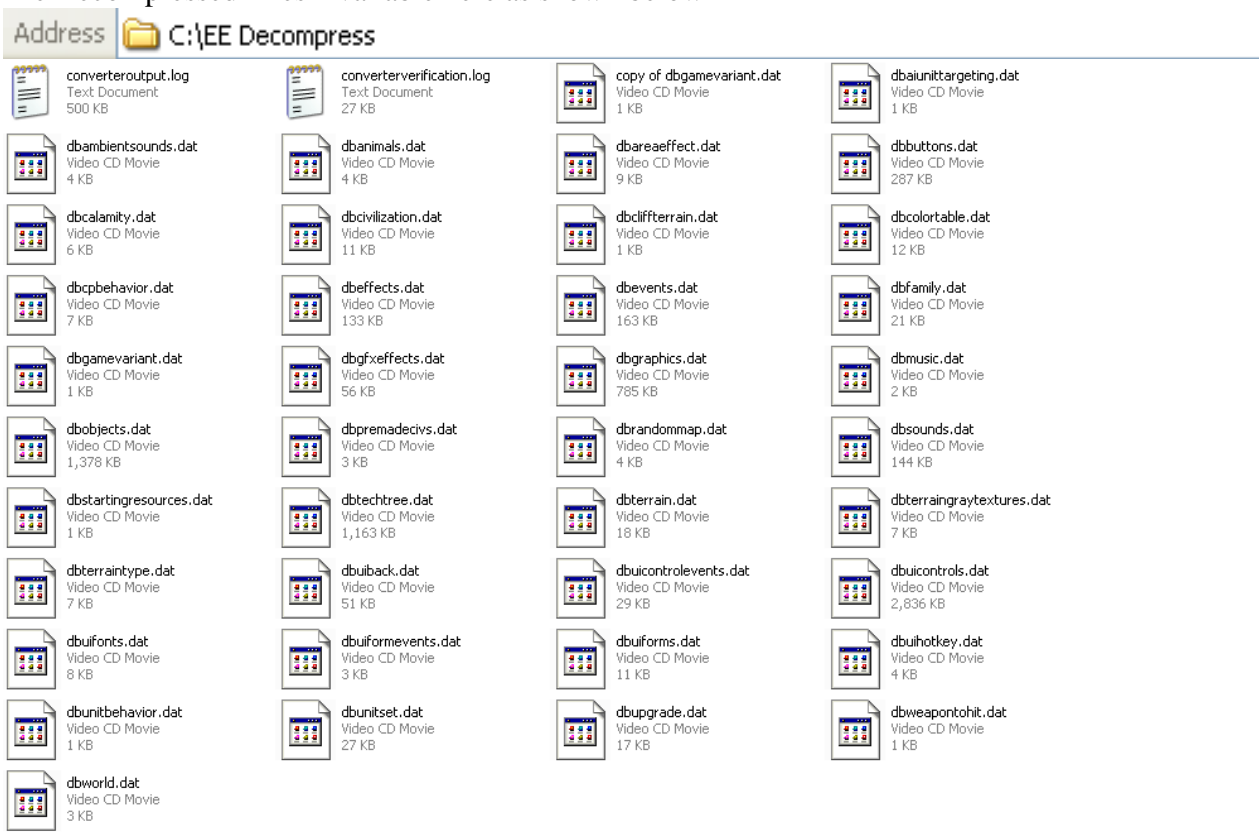


Click **Decompress Button**

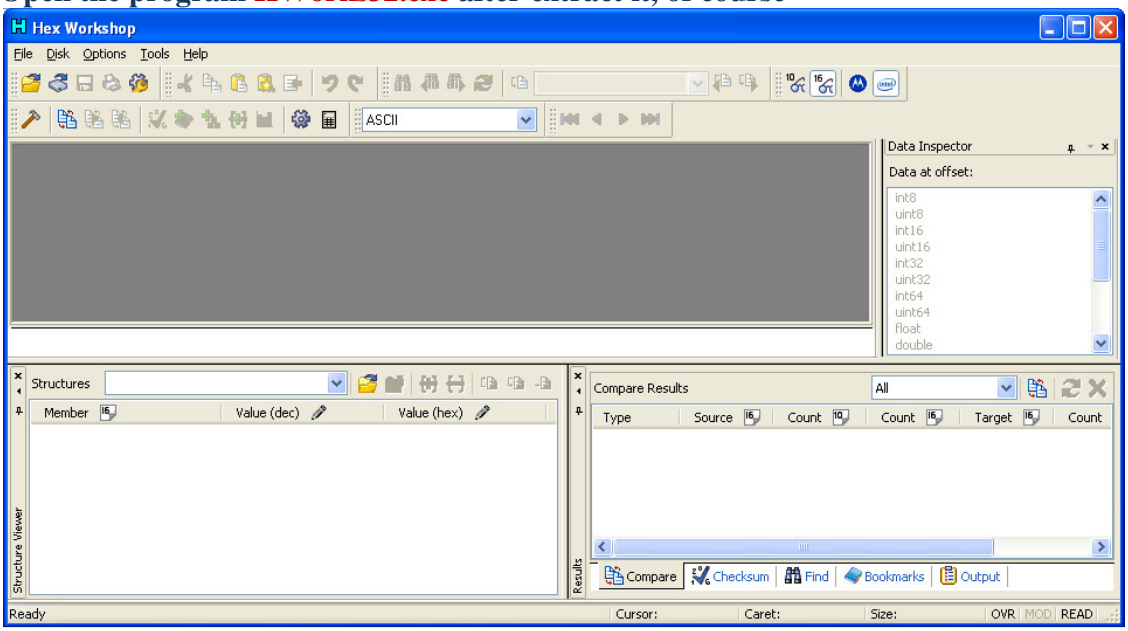
Decrypting dat files done. Now we are able to read them

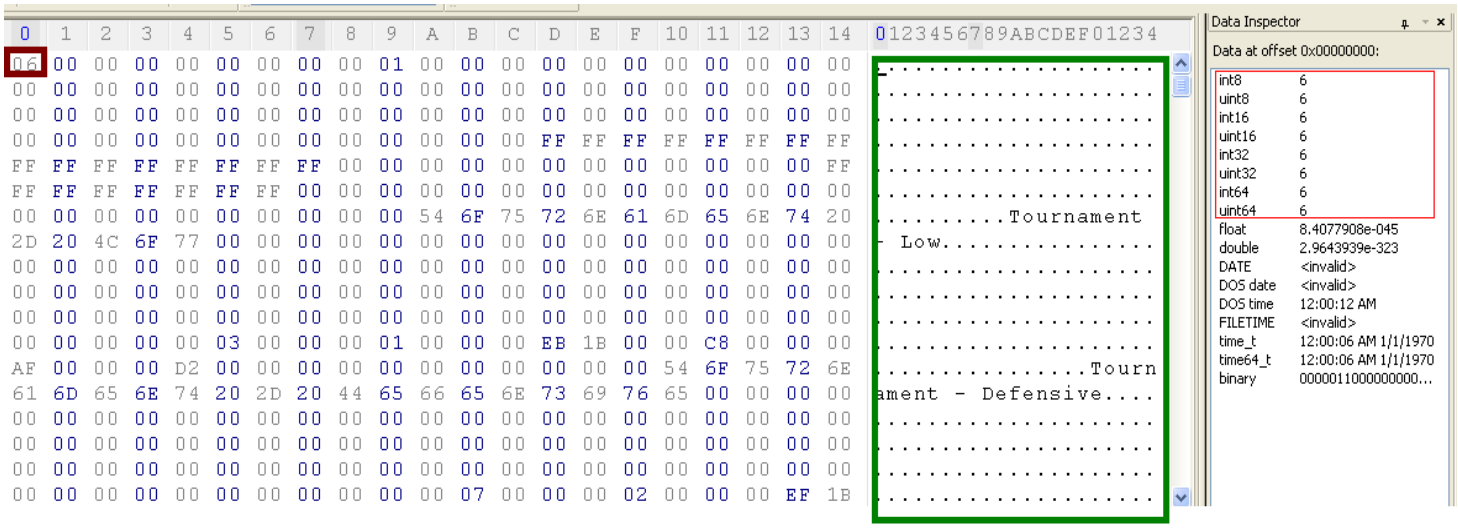


The Decompressed Files Available here as shown below



3- **Hexadecimals_dat files which you decrypted them in step 2 located at C:\EE Decompress**
That files can be opened using hex workshop program
Download and extract it
Open the program HWorks32.exe after extract it, of course





Example of hex location ..thousands of Hex locations in this file but showing one as example only

Values of the selected hex location shown there

Text of the File expressing the hexadecimal values

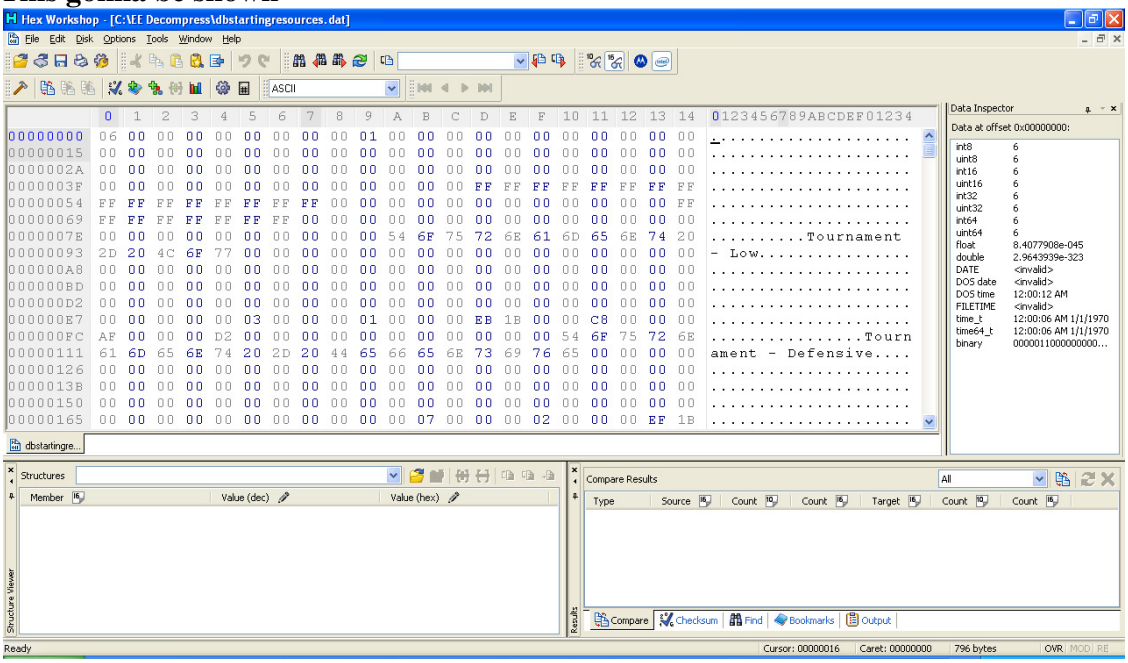
Let's start Analyze First Db file which is **dbstartingresources.dat**

Open Hex Workshop Program _ Browse into this folder

C:\EE Decompress \db

And choose dbstartingresources.dat

This gonna be shown

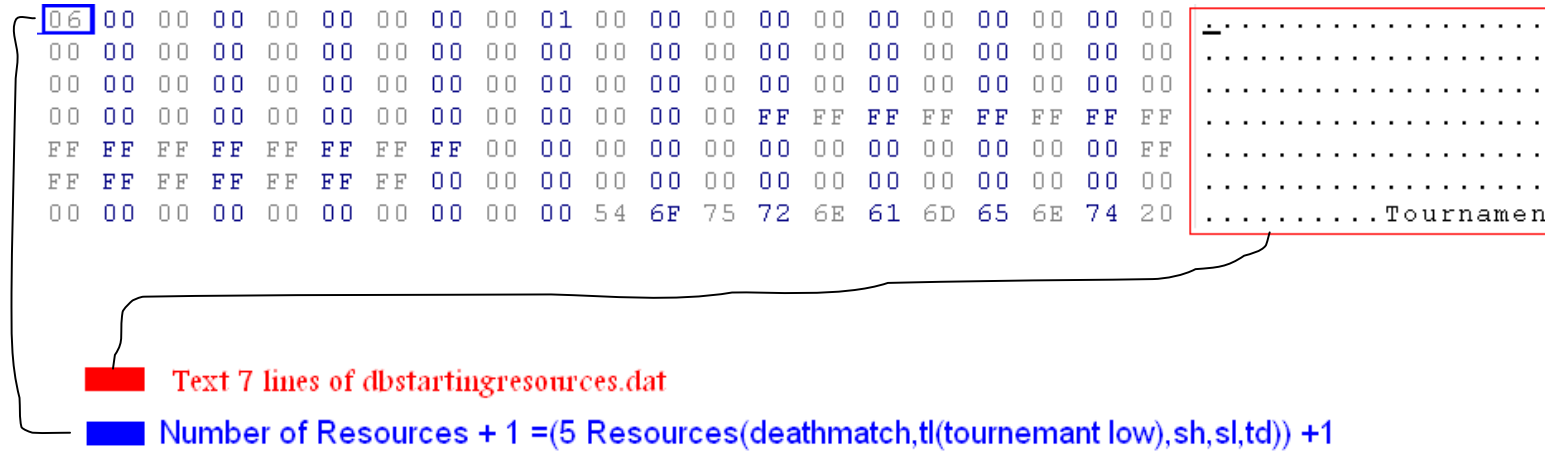


dbstartingresources.dat

This file holds for available Resources in game at start such As Standard high , Standard low, DeathMatch Tournament High and Tournament Low or ...

We gonna learn how to add New Resources and how to edit and what do we need for that?

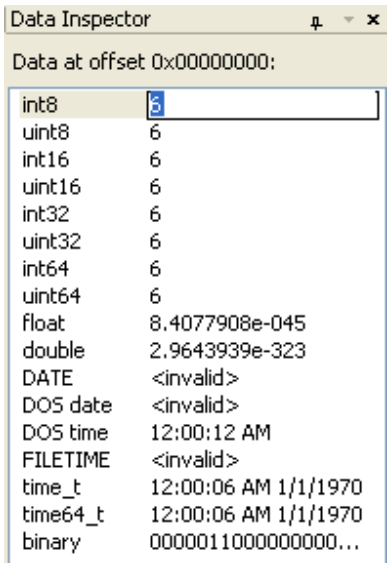
Analyze Region

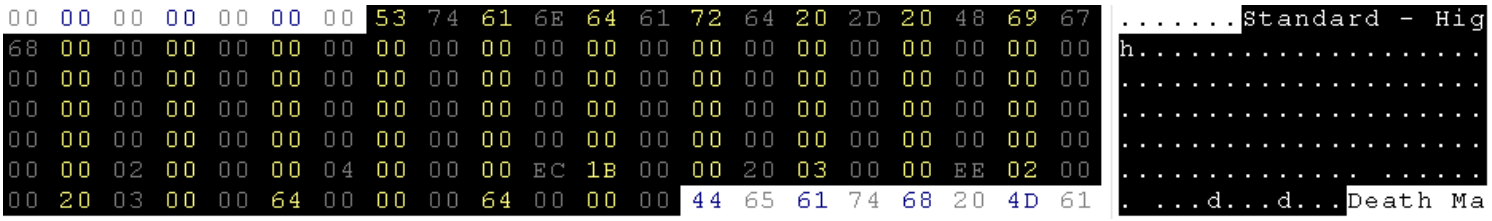


Text 7 lines of dbstartingresources.dat

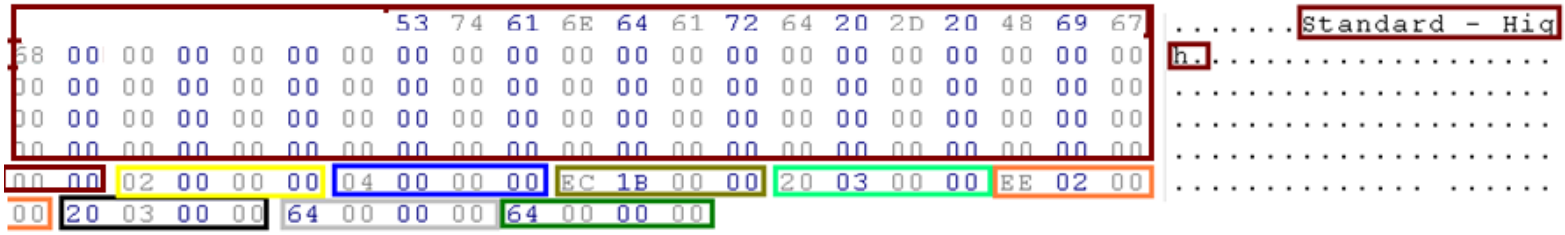
Number of Resources + 1 =(5 Resources(deathmatch,tl(tournemant low),sh,sl,td)) +1
If you add 1 new Resouce you should increment this by 1

How to change Value? Just Click on the value shown here below and change it to whatever..After selecting the Hexa Location





Selected Hexa locations are related all to Standard High Resource



Resource name but for your use only _not showing in game

Resource Order in the File

Languag ID

Game ID But It is not important for Now_You can just give it new value which is not used

WooD Amount

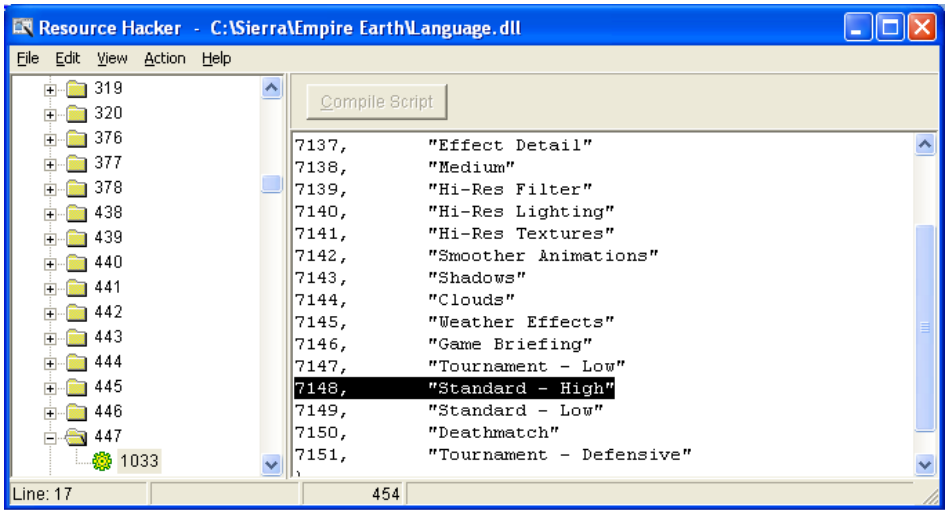
FooD amount

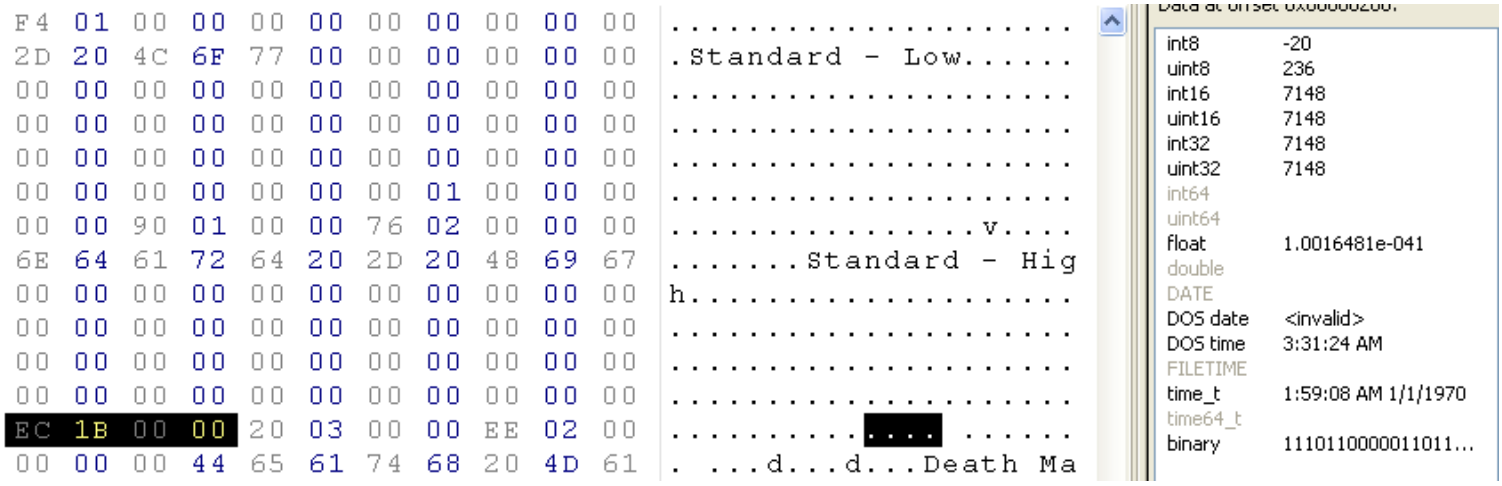
Gold Amount

Stone Amount

Iron Amount

_You need Resource Hacker program to edit language and if you want to add

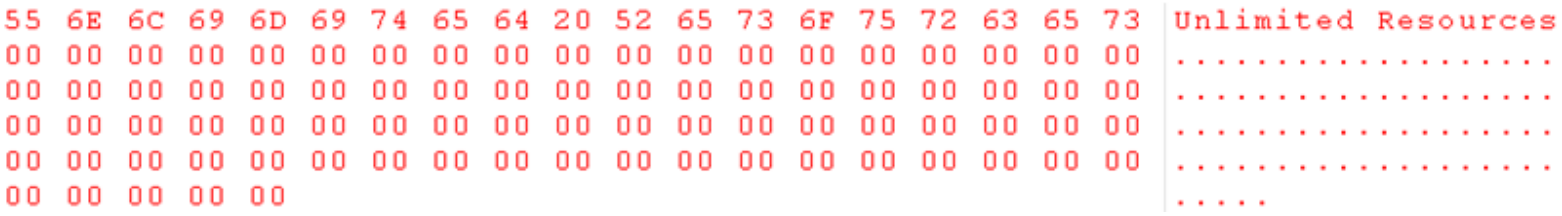




Standard high here is 7148 which is the same as hex value show above for language ID which is EC1B0000

Lets Add New Resource_We call it Unlimited Resources As Alpha 1.5 Patch

We need to write first our cooment Lets say it is Unlimited Resources



In All these Zeros You can write whatever on it, it is not a matter_But keep in your mind to keep the same number of bytes for the name or comment!! Same Number!! You can fill the comment or the name of the source in all these bytes

Note: 00 is 1 byte whatever such 51 is a byte whatever such AE is a byte ..So for 2 Values is a byte

Note :There are about 100 bytes for the name of the resource!!..if you missed 1 byte resource will not work!!

Now we need to add Game ID…As I said Game ID is not important! So Just give it new value such as 9
So we add for previous 09 00 00 00
It will look like below

```
55 6E 6C 69 6D 69 74 65 64 20 52 65 73 6F 75 72 63 65 73 Unlimited Resources
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 09 00 00 00                              .........
```

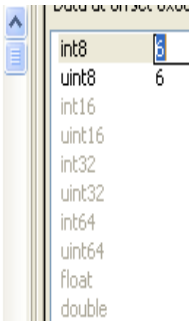
Now we need to add resource order_Since last resource in the file is deathmatch which has order 05 00 00 00 ,the new resource

```
55 6E 6C 69 6D 69 74 65 64 20 52 65 73 6F 75 72 63 65 73 Unlimited Resources
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 09 00 00 00 06 00 00 00                  ............
```

(Unlimited Resource) should have the order 06 00 00 00
As shown above

Now since we are adding New resource we need to increment the index of dbstarting resources by 1 how?

```
06 00 00 00 00 00 00 00 00 01 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 00 00 00 .....................
00 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
00 00 00 54 6F 75 72 6E 61 6D 65 6E 74 20 2D 20 4C 6F 77 ...Tournament - Low
```



Go to the start of the file you will find 06 00 00 00 as shown in figure above
Means they are 5 Resources as explained before

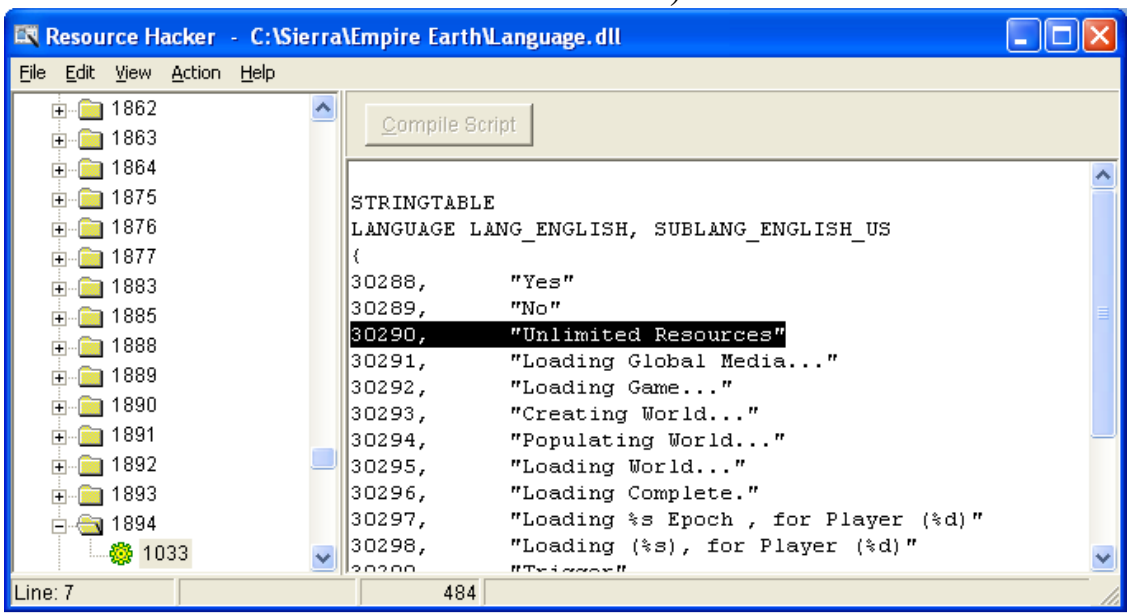
```
07 00 00 00 00 00 00 00 00 01 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....................
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF 00 00 00 .....................
```

Change that Value into 7 since we are adding new Resources with a total of 6 to be like this

```
55 6E 6C 69 6D 69 74 65 64 20 52 65 73 6F 75 72 63 65 73 Unlimited Resources
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 09 00 00 00 06 00 00 00                   .............
```

Now we are Here

We need to add language ID which can be added or obtain existed one
Open resource hacker search for unlimited resources (Click on View then Find Text)



It is located at 30290 so we don't need to add since we have that Language.

In hex 52 76

In Decimal 30290

```
55 6E 6C 69 6D 69 74 65 64 20 52 65 73 6F 75 72 63 65 73 Unlimited Resources
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ...................
00 00 00 00 00 09 00 00 00 06 00 00 00 52 76 00 00       .............Rv..
```

So we need to add it

So gonna added 52 76 00 00 which will look like

Now add Resource Amounts
We need to add Food Amount 4 Bytes, wood amount 4 bytes, Stone amount 4 bytes ,Gold amount 4 bytes, Iron amount 4 bytes

In Decimal 16771834
In hex FA EA FF 00
Will look like this

```
55 6E 6C 69 6D 69 74 65 64 20 52 65 73 6F 75 72 63 65 73  Unlimited Resources
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ...................
00 00 00 00 00 09 00 00 00 06 00 00 00 52 76 00 00 FA EA  .............Rv....
FF 00 FA EA FF 00 FA EA FF 00 FA EA FF 00 FA EA FF 00     ...................
```

Save it and put it in data/db folder and try it

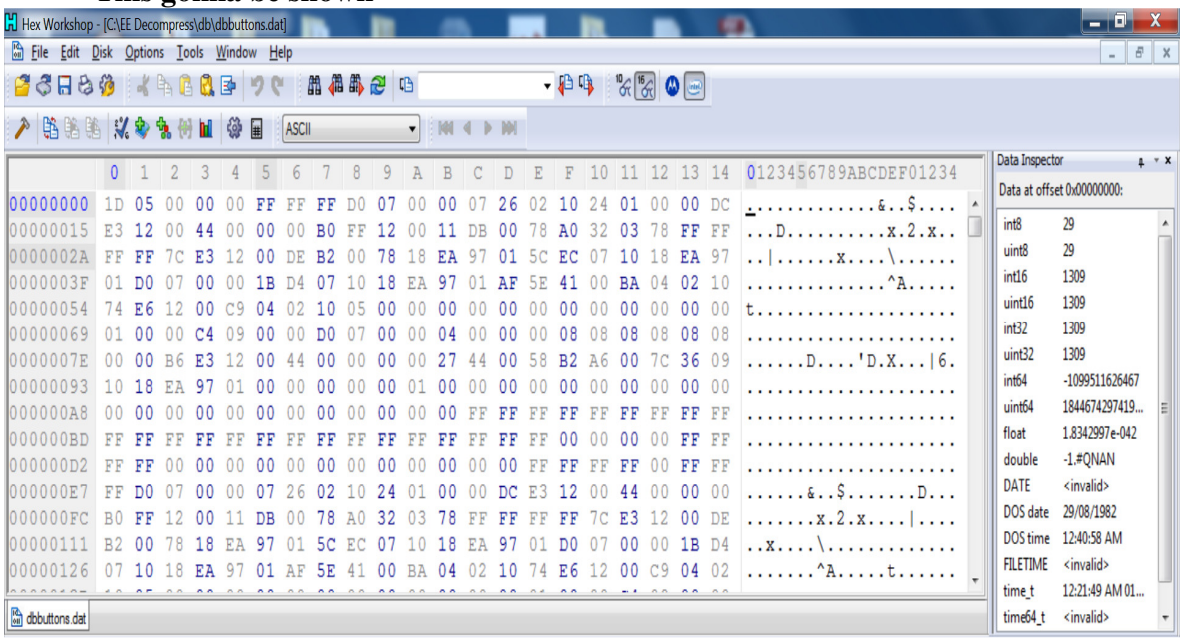
---

dbbuttons.dat

This file holds for available Buttons of the game

Let's start Analyze Second Db file which is **dbbuttons.dat**

Open Hex Workshop Program _ Browse into this folder
C:\EE Decompress \db
And choose dbbuttons.dat
This gonna be shown

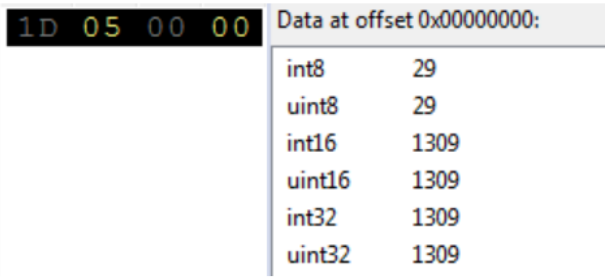


We gonna learn how to add New Button and how to edit and what do we need for that?

```
00000000  1D 05 00 00 00 FF FF FF D0 07 00 00 07 26 02 10 24 01 00 00 DC  .............&..$....
00000015  E3 12 00 44 00 00 00 B0 FF 12 00 11 DB 00 78 A0 32 03 78 FF FF  ...D..........x.2.x..
0000002A  FF FF 7C E3 12 00 DE B2 00 78 18 EA 97 01 5C EC 07 10 18 EA 97  ..|......x....\......
0000003F  01 D0 07 00 00 1B D4 07 10 18 EA 97 01 AF 5E 41 00 BA 04 02 10  ..............^A.....
00000054  74 E6 12 00 C9 04 02 10 05 00 00 00 00 00 00 00 00 00 00 00 00  t.....................
00000069  01 00 00 C4 09 00 00 D0 07 00 00 04 00 00 00 08 08 08 08 08 08  ......................
0000007E  00 00 B6 E3 12 00 44 00 00 00 00 27 44 00 58 B2 A6 00 7C 36 09  ......D....'D.X...|6.
```

Index of DBButton_Number of buttons in the File +1 ..1308 Buttons +1 with a Total of 1309 ..In Hex 1D 05 00 00

This Index Gonna Be found at the start of dbbutton.dat 2 Bytes=16 Bit

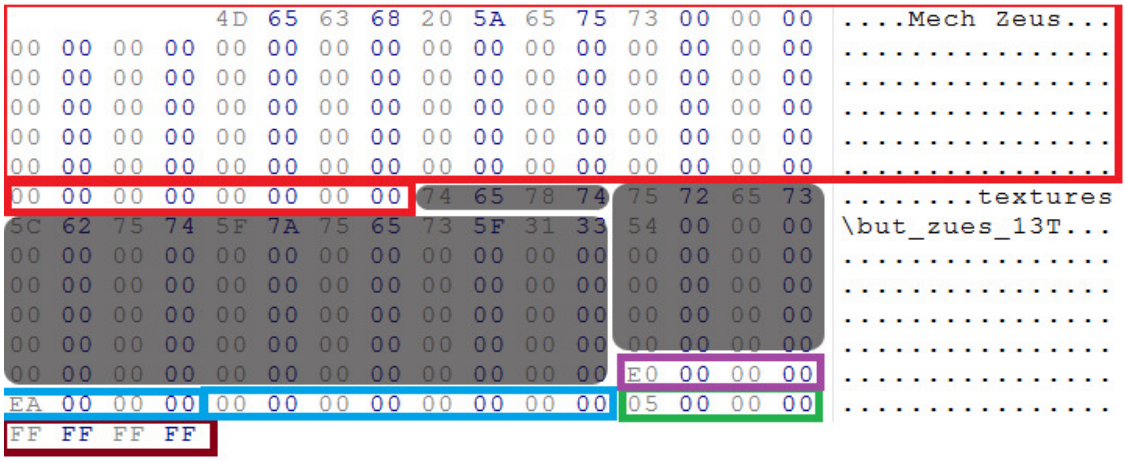


The total number of Buttons is 1308 but always +1 for programming Purpose
If we add new Button means this gonna Be Incremented By 1 for each new Button

Lets Analyze Mech Zeus Button

```
FF FF FF FF 4D 65 63 68 20 5A 65 75 73 00 00 00 00 00 00 00 00  ....Mech Zeus.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 74  ......................t
65 78 74 75 72 65 73 5C 62 75 74 5F 7A 75 65 73 5F 31 33 54 00  extures\but_zues_13T.
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ......................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 E0 00 00 00 EA 00  ......................
00 00 00 00 00 00 00 00 00 00 05 00 00 00 FF FF FF FF 4D 65 63  ..................Mec
```

Selected By Black is related All to Mech Zeus Button



Button Name..For your Use Only_Not Showing in game_100 Bytes
If You did Less than 100 bytes (less than Hundred of hex locations) Game will crash

Texture File Name for Button_100 Bytes_100 Hex locations

End Of the Button_Always Ended with FF FF FF FF

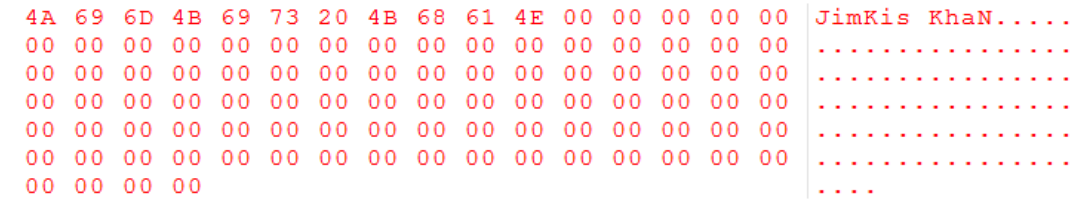
Button ID for the file Index_ it should be In Order in the File

Button Position in the game

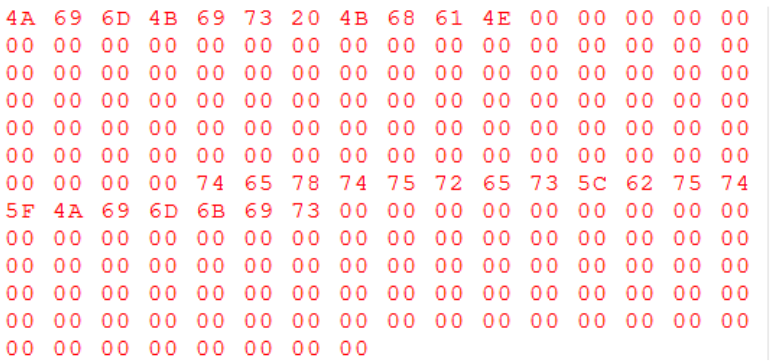
Game ID But this not important_Give it any Value which not used for Game ID

Let's Make New Button Together

We need 100 Bytes for The Name we want. Example JimKis KhaN Shown Below

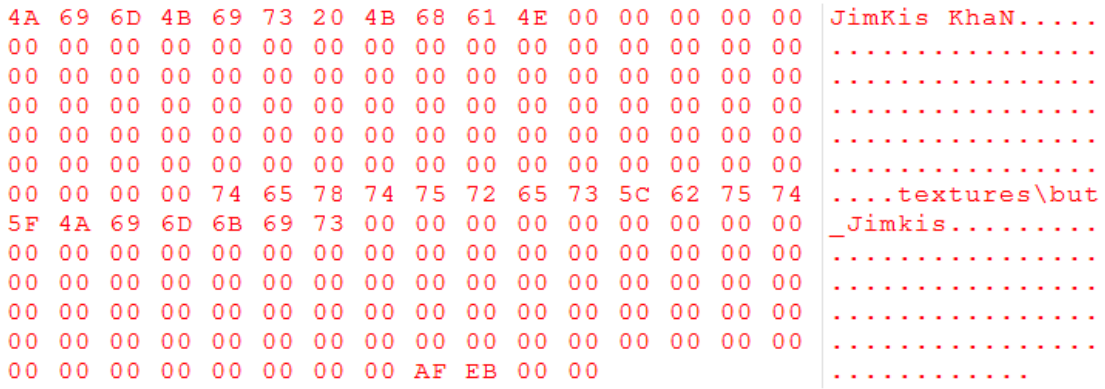


Now we Need Texture File Name_100 Bytes too
Assume we have Texture Button called but_Jimkis located in textures..
Hex shown Below

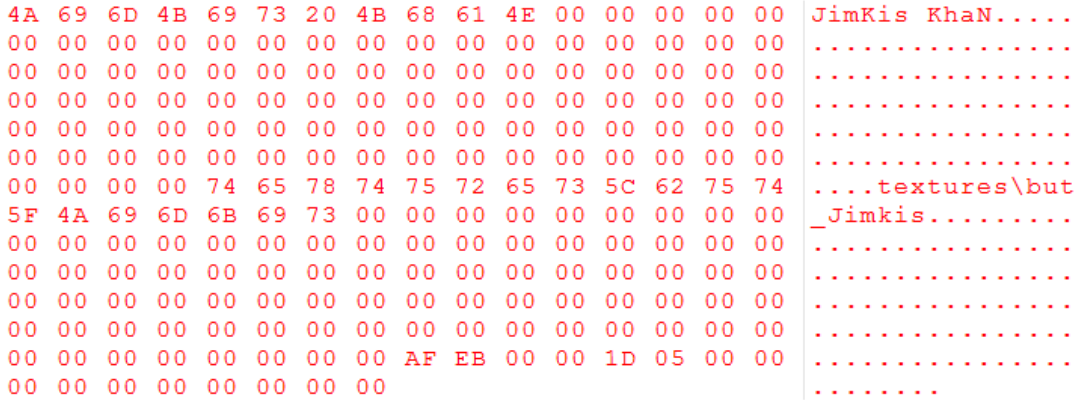


Note: Whatever length of file name ,it will be no matter if it is in the range of 100 bytes

Now we Need game ID _but as I said this is not even important as I know…
So Give it whatever let's say AF EB 00 00_shown below



Now add Button ID ,Last button ID in the file is 1308
The New Button ID should be
In Decimal 1309
In Hex is 1D 05 00 00 (12 Bytes) so Other bytes Should Be zeros as Shown in this Figure Below
Don't Forget It should Be in Order of Button ID in the File!!



Add Button Position_We want it to be shown in 9 as example so would be like this

```
4A 69 6D 4B 69 73 20 4B 68 61 4E 00 00 00 00 00  JimKis KhaN.....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 74 65 78 74 75 72 65 73 5C 62 75 74  ....textures\but
5F 4A 69 6D 6B 69 73 00 00 00 00 00 00 00 00 00  _Jimkis.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 AF EB 00 00 1D 05 00 00  ................
00 00 00 00 00 00 00 00 09 00 00 00              ............
```

Finally End Your Button By FF FF FF FF as shown Below

```
4A 69 6D 4B 69 73 20 4B 68 61 4E 00 00 00 00 00  JimKis KhaN.....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 74 65 78 74 75 72 65 73 5C 62 75 74  ....textures\but
5F 4A 69 6D 6B 69 73 00 00 00 00 00 00 00 00 00  _Jimkis.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 AF EB 00 00 1D 05 00 00  ................
00 00 00 00 00 00 00 00 09 00 00 00 FF FF FF FF  ................
```

Since we are adding New Button We need to change Index of Dbbutons.dat (Start Byte of The file) and Increment it By 1

```
00000000 1D 05 00 00 0  FF FF FF D0 07 00 00 07 26 02 10  ............&..
```

From 1309 Decimal into 1310 Decimal
From 1D 05 00 00 into 1E 05 00 00
As shown below

```
00000000 1E 05 00 00 00 FF FF FF D0 07 00 00 07 26 02 10
```

---

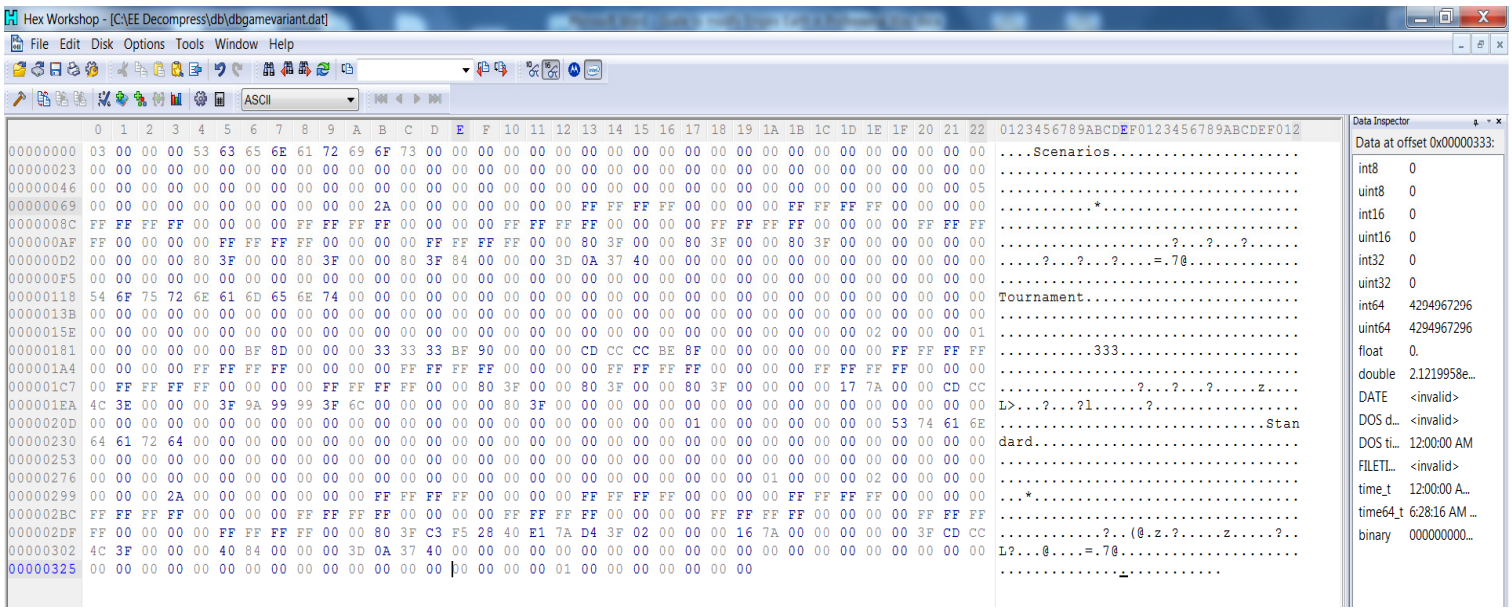
dbgamevariant.dat

This file holds for available Game Variants Such as Tournament and Standard

Let's start Analyze Second Db file which is **dbgamevariant.dat**

Open Hex Workshop Program _ Browse into this folder
C:\EE Decompress \db
And choose dbgamevariant.dat

This gonna be shown

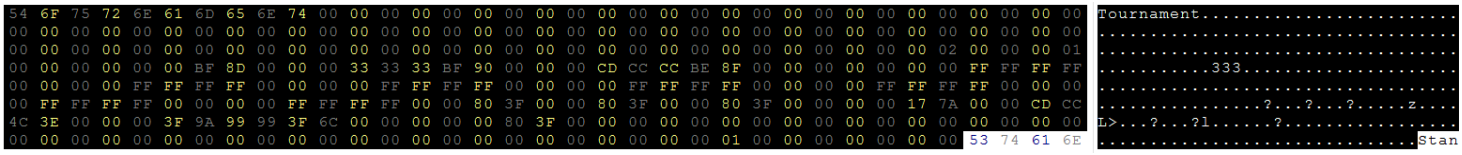


Index of dbgamevariant.dat(first byte in the file) is shown below

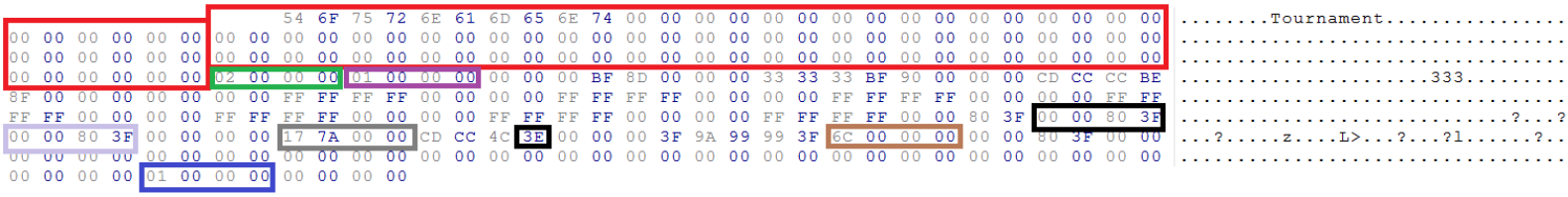
```
03 00 00 00 53 63 65 6E 61 72 69 6F 73 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

It is 03 00 00 00 in Hex but in Decimal is also 3
Which means there are 2 game variants
So If we add new Game Variant We need to increment this by 1
/----------

Lets Analyze Tournament Variant



Selected Hex Locations and Bytes Relates to Tournament Variant



Other Bits are unknown to me, But by making them being Zeros would not be problem since I tried them and game was fine!

Wonders Cost	Hexadecimal
1050	6C 00 00 00
2100	84 00 00 00

Cost of Buildings

Let's Make New Game Variant Together

We call it DeathMatch since it gathers Very fast

We need 100 Bytes for Game Variant name (Our Use only)

```
44 65 61 74 68 4D 61 74 63 68 20 20 20 20 20 20  DeathMatch
56 61 72 69 61 6E 74 00 00 00 00 00 00 00 00 00  Variant.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00                                      ....
```

We need to add Game ID…As I said it is not important give it whatever

```
44 65 61 74 68 4D 61 74 63 68 20 20 20 20 20 20  DeathMatch
56 61 72 69 61 6E 74 00 00 00 00 00 00 00 00 00  Variant.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 06 00 00 00                          ........
```

Now add Variant ID Since last Variant ID is 2 so this going to be 3

```
44 65 61 74 68 4D 61 74 63 68 20 20 20 20 20 20  DeathMatch
56 61 72 69 61 6E 74 00 00 00 00 00 00 00 00 00  Variant.........
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 06 00 00 00 03 00 00 00              ............
```

Now we need to Increment the Index of dbgamevariant.dat (at the start of the file) by 1

```
03 00 00 00 53 63 65 6E 61 72 69 6F 73 00 00 00  ....Scenarios...
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ._..............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 05 00 00 00 00 00 00 00  ................
00 00 00 00 2A 00 00 00 00 00 00 00 FF FF FF FF  ....*...........
```

So it will be 04 00 00 00 as shown below

```
04 00 00 00 53 63 65 6E 61 72 69 6F 73 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 05 00 00 00 00 00 00 00
00 00 00 00 2A 00 00 00 00 00 00 00 FF FF FF FF
```

Now just copy The remaining for The new Varient from Tournemant Copy as follows and add them to your Hexas

```
                  00 00 00 BF 8D 00 00 00 33 33 33 BF    ........333.
90 00 00 00 CD CC CC BE 8F 00 00 00 00 00 00 00  ................
FF FF FF FF 00 00 00 00 FF FF FF FF 00 00 00 00  ................
FF FF FF FF 00 00 00 00 FF FF FF FF 00 00 00 00  ................
FF FF FF FF 00 00 00 00 FF FF FF FF 00 00 00 00  ................
FF FF FF FF 00 00 80 3F 00 00 80 3F 00 00 80 3F  .......?...?...?
00 00 00 00 17 7A 00 00 CD CC 4C 3E 00 00 00 3F  .....z....L>...?
9A 99 99 3F 6C 00 00 00 00 00 80 3F 00 00 00 00  ...?l......?....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ................
00 00 00 00 01 00 00 00 00 00 00 00              ............
```

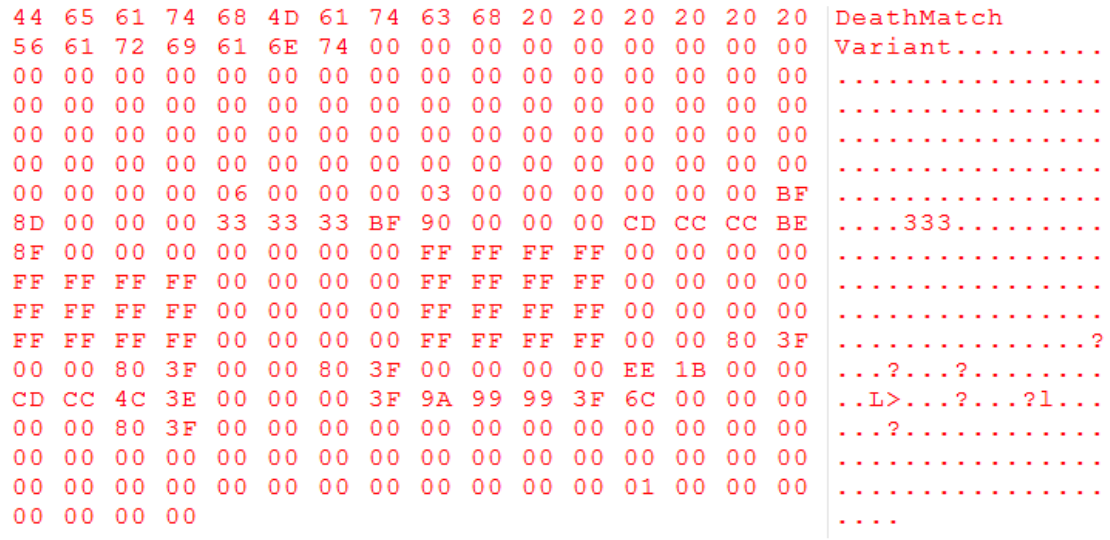
Add it and change Language ID+ Cost of wonders + Gather Rate + and Enable it

DeathMatch Language ID located at 7150 in Decimal

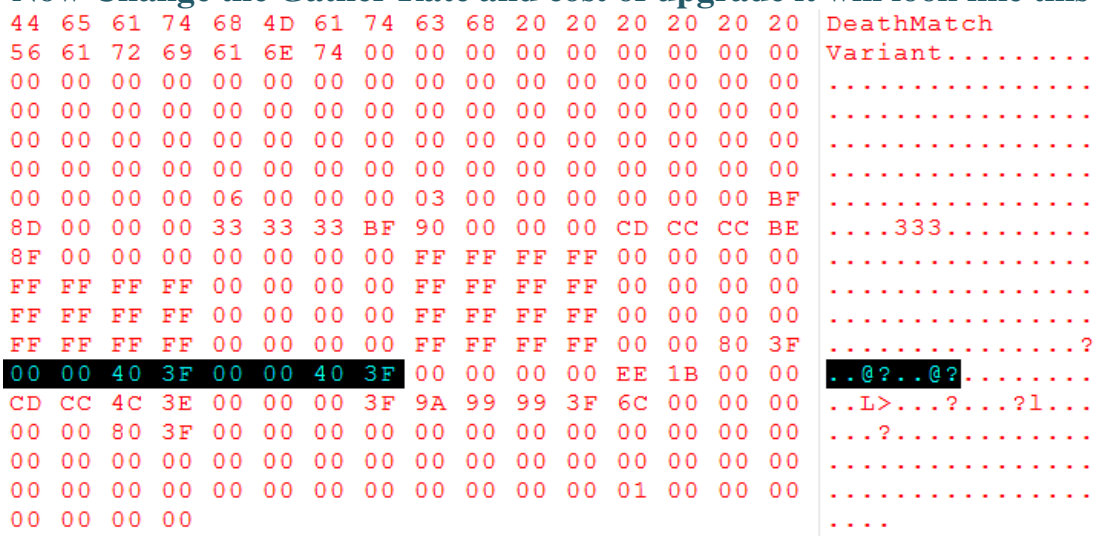
In Hex

EE 1B 00 00

It will look like below



Now Change the Gather Rate and cost of upgrade it will look like this



This gonna Increase Gather Rate nearly in double rate and more And decrease the cost of upgrade nearly_ It is possible to control cost more by changing the hexa location explained previously

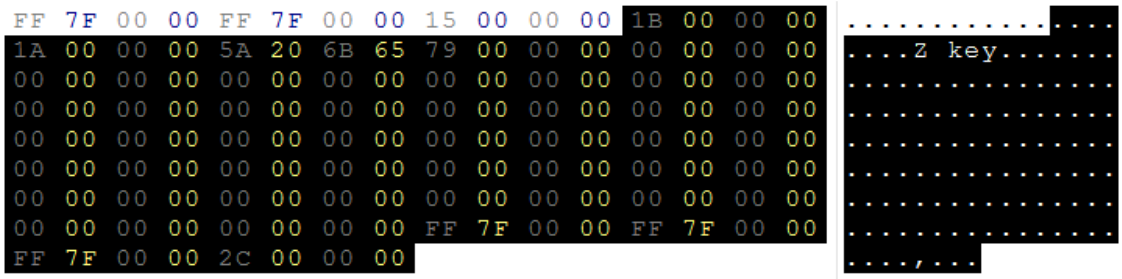
---

dbuihotkey.dat

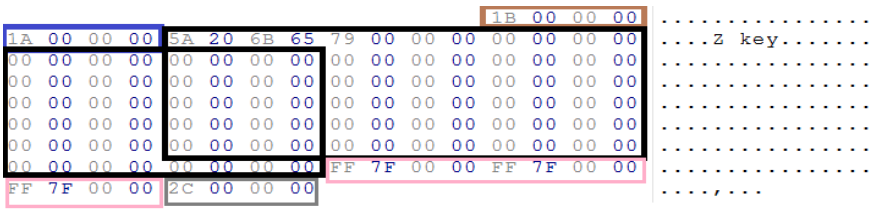
This file holds for available Hotkeys can be used in the game

Let's start Analyze the Db file which is **dbuihotkey.dat**

Open Hex Workshop Program _ Browse into this folder
C:\EE Decompress \db
And choose dbuihotkey.dat



The Selected Hexas are related to Z hotkey!



Hotkey ID_It is In Order in the File

Game ID Hotkey_Is not important

Key name for your use only_ Not showing in game_100 bytes_100 hexa location

Hexas for Ending the hotkey hex Purpose_It tells the game that this is Hotkey..

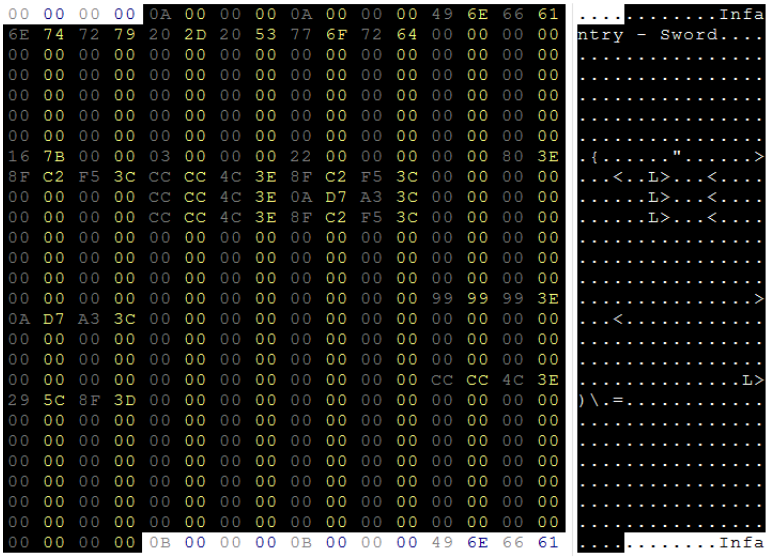
I dont know what does this means for now! but maybe later i can get what use of this!
Leading it to zero will not affect the game because hotkey will keep working..I did try it

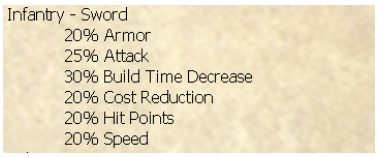
Most thing Here is the Hotkey ID!!_We don't want Anything Else

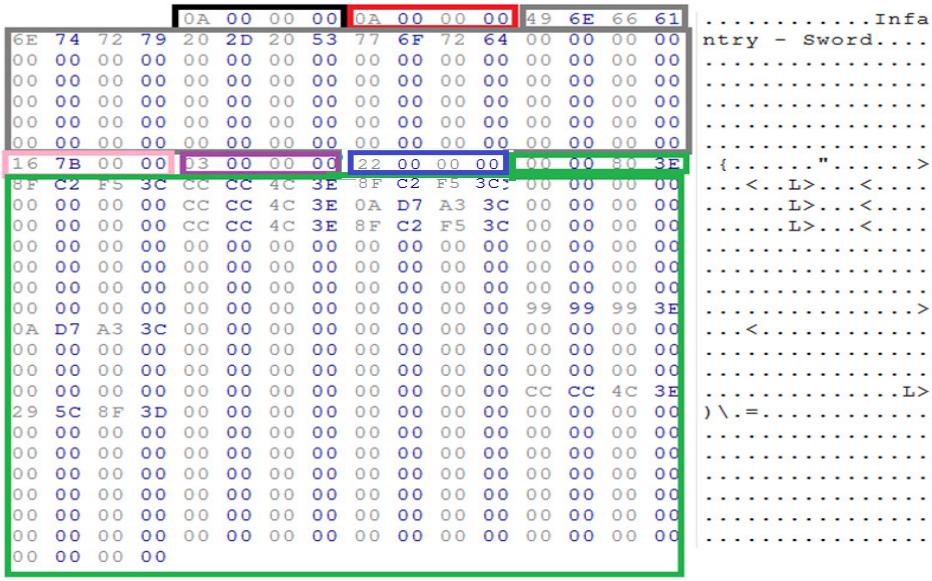
dbcivilization.dat
This file holds for available Civilizations in the game

Let's start Analyze the Db file which is **dbcivilization.dat**

Open Hex Workshop Program _ Browse into this folder
C:\EE Decompress \db
And choose dbcivilization.dat







```
00 00 00 00 0A 00 00 00 0A 00 00 00 49 6E 66 61 ............Infa
6E 74 72 79 20 2D 20 53 77 6F 72 64 00 00 00 00 ntry - Sword....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
16 7B 00 00 03 00 00 00 22 00 00 00 00 00 80 3E .{......"......>
8F C2 F5 3C CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ...<..L>...<....
00 00 00 00 CC CC 4C 3E 0A D7 A3 3C 00 00 00 00 ......L>...<....
00 00 00 00 CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ......L>...<....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 99 99 99 3E ................>
0A D7 A3 3C 00 00 00 00 00 00 00 00 00 00 00 00 ...<............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 CC CC 4C 3E ..............L>
29 5C 8F 3D 00 00 00 00 00 00 00 00 00 00 00 00 )\.=............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 0B 00 00 00 0B 00 00 00 49 6E 66 61 ............Infa
```

Selected Bytes Related to Infantry Swords Civilizations Which contains

Infantry - Sword
- 20% Armor
- 25% Attack
- 30% Build Time Decrease
- 20% Cost Reduction
- 20% Hit Points
- 20% Speed

```
                0A 00 00 00 0A 00 00 00 49 6E 66 61 ............Infa
6E 74 72 79 20 2D 20 53 77 6F 72 64 00 00 00 00 ntry - Sword....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
16 7B 00 00 03 00 00 00 22 00 00 00 00 00 80 3E .{......"......>
8F C2 F5 3C CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ...<..L>...<....
00 00 00 00 CC CC 4C 3E 0A D7 A3 3C 00 00 00 00 ......L>...<....
00 00 00 00 CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ......L>...<....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 99 99 99 3E ................>
0A D7 A3 3C 00 00 00 00 00 00 00 00 00 00 00 00 ...<............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 CC CC 4C 3E ..............L>
29 5C 8F 3D 00 00 00 00 00 00 00 00 00 00 00 00 )\.=............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00
```

Game ID_Not Important

Civilization ID

Civs Name_For your Use Only Not Showing in Game_ 100 Bytes_100 Hexa Location

Language ID_For Civs Name

Increment Per Choose From It.

Percentages + Contents such Attack m Armor and...

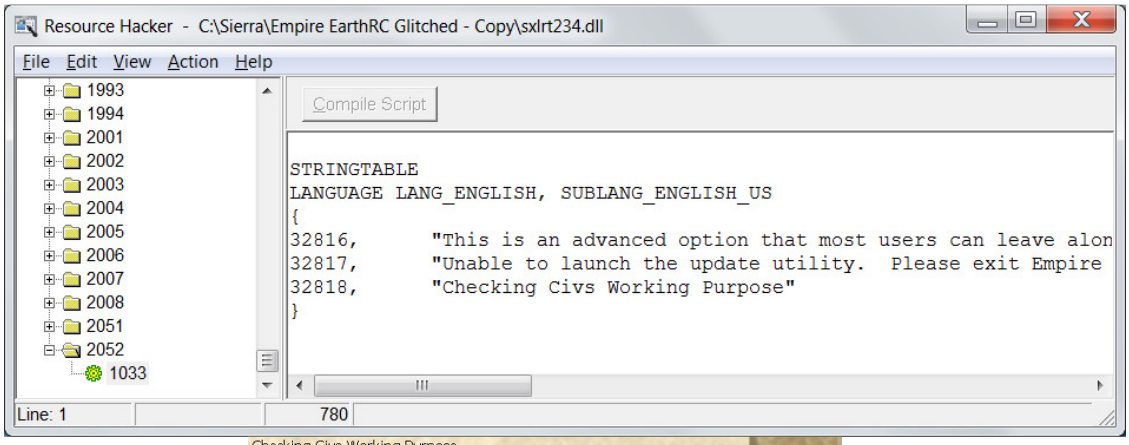
Linkage ID..Should Not Repeated_(New One [New Number])_

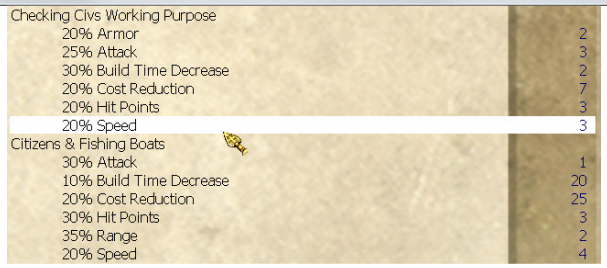
IF you want to make New Civilization
Just copy the Content of civilization you want and give it
(Hotkey ID ,Civilization Name ,Language ID, Linkage ID)
And then Increment the Index of the file (Start byte of dbcivilization.dat)
by 1 since your are adding new civilization

```
000000000 1B 00 00 00 00 00 00 00 00 00 00 00 00 E3 12 00 ................
000000010 38 C6 30 00 88 39 3E 00 01 00 00 00 02 00 00 00 8.0..9>.........
000000020 FE FF FF FF 00 00 00 00 30 E2 12 00 00 00 00 00 ........0.......
000000030 00 00 00 00 00 00 00 00 00 00 00 00 E0 E3 12 00 ................
000000040 00 00 00 00 00 C6 30 00 88 E6 A6 00 00 00 00 00 ......0.........
000000050 00 00 00 00 04 00 00 00 04 00 00 00 54 D5 A6 00 ............T...
000000060 87 38 00 78 48 1F 3E 00 11 37 00 78 01 00 00 00 .8.xH.>..7.x....
```

Example New Civilization

```
                  1E 00 00 00 1B 00 00 00 4E 65 77 20 ............New
43 69 76 69 6C 69 7A 61 74 69 6F 6E 20 20 20 20 Civilization
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20
32 80 00 00 03 00 00 00 2A 00 00 00 00 00 80 3E 2.......*......>
8F C2 F5 3C CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ...<..L>...<....
00 00 00 00 CC CC 4C 3E 0A D7 A3 3C 00 00 00 00 ......L>...<....
00 00 00 00 CC CC 4C 3E 8F C2 F5 3C 00 00 00 00 ......L>...<....
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 99 99 99 3E ...............>
0A D7 A3 3C 00 00 00 00 00 00 00 00 00 00 00 00 ...<............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 CC CC 4C 3E ..............L>
29 5C 8F 3D 00 00 00 00 00 00 00 00 00 00 00 00 )\.=............
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00 00 00 00                                     ....
```





Later On ,We do Need to insert This Civs into some Units we do Like to be included within the civilization

To Be Continued
RealForce_AlFrQan_Cobra