

Creating new models
from old models.
FOR
Combat Flight Simulator
2

BOOK 1. "The basics"

INTRODUCTION

This tutorial will show you how to create a new model from an old model.

You will be able to apply new renamed textures.

You will be able to give this model a new guid number.

You will be able to change model name and other adjustments.

TOOLS REQUIRED

BGLAnalyze

You will need an account at avsim.

**[http://library.avsim.net/eseach.php?
CatID=fs2002sd&DLID=27375](http://library.avsim.net/eseach.php?CatID=fs2002sd&DLID=27375)**

scasm

<http://www.scasm.de/>

Go to downloads.

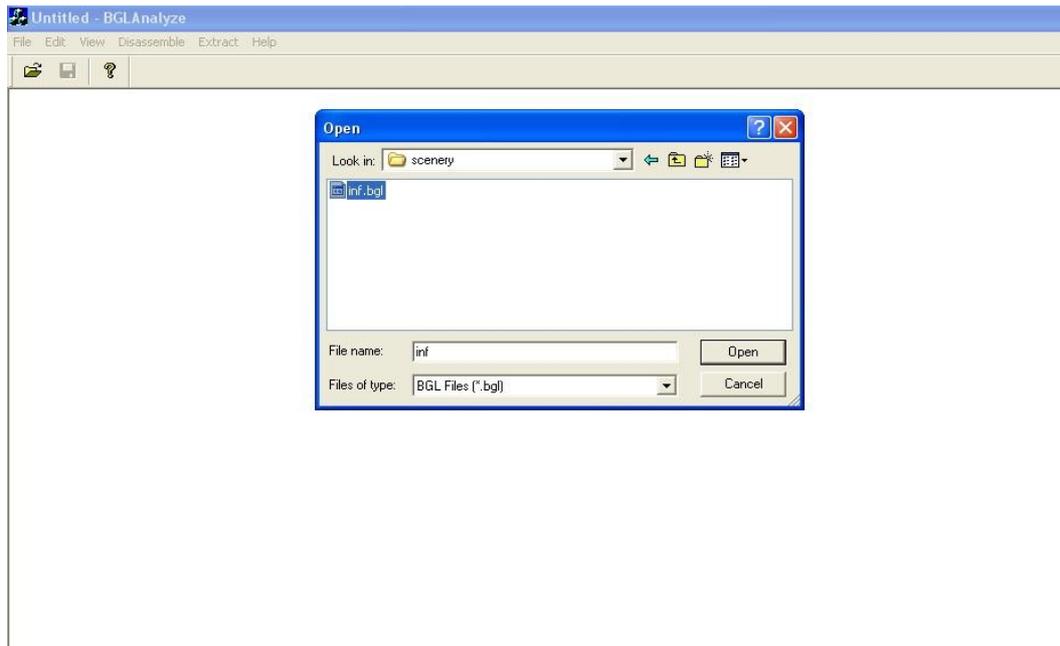
Download SCASM 2.96

Lets get started

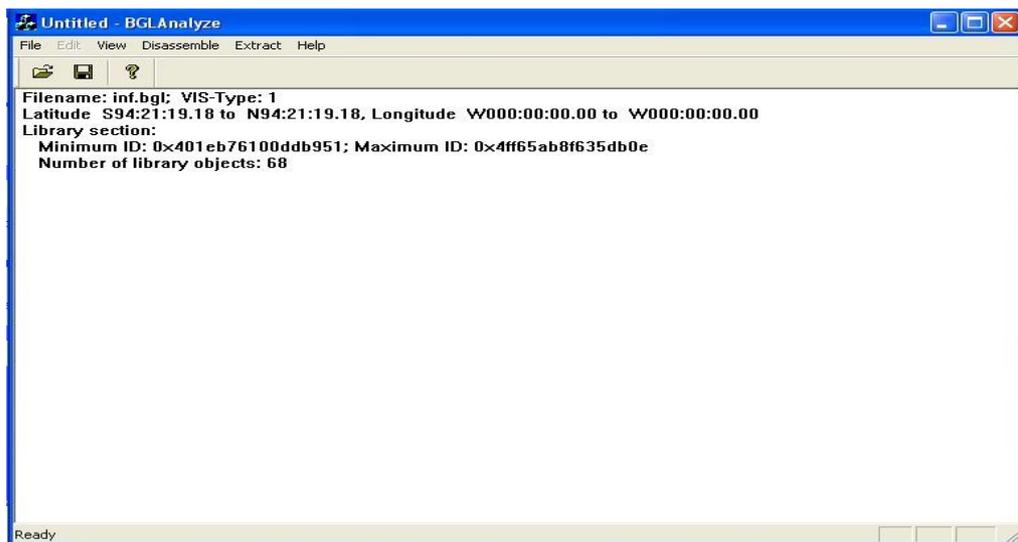
Decompiling

Double click on the BGLAnalyze, go to file and open, navigate to the .bgl you want to open.

In this tutorial we are going to open the inf.bgl file that is situated in the scenery sub folder of the inf folder which resides in the scenedb folder in your cfs2 root directory.

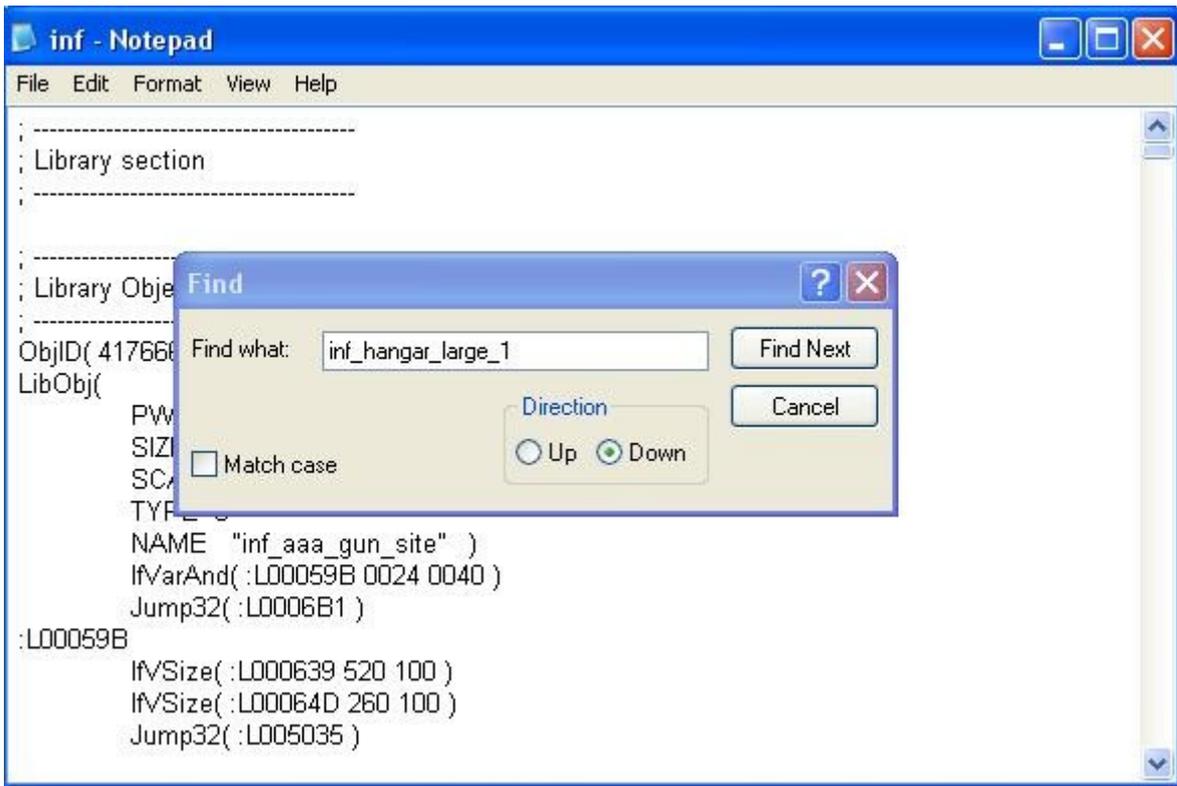


And disassemble

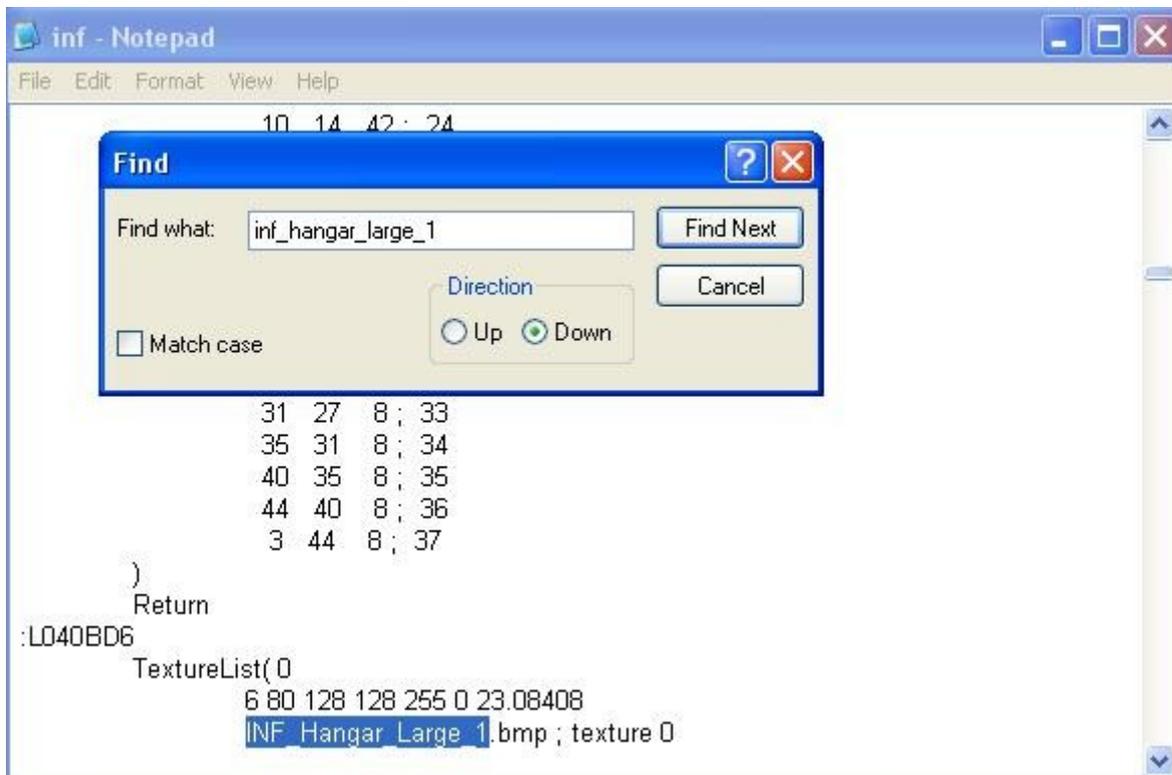


and save as inf.sca in a folder you would like to save your .sca files in.

Now open the .sca file in notepad.



Copy the name of a texture in your model, go to file, go to find, and paste it in, Find what, and click Find Next.



Now scroll up to the beginning of the model.

```

inf - Notepad
File Edit Format View Help
    Dbx( 22 00 )
EndObj
-----
Library Object #25, Offset 0x3F40A, size 34590 (= 0x4000000)
-----
ObjID( DEDF9739 459F0D4E FE45E696 9C4C231E )
LibObj(
    PWR  0
    SIZE 34627
    SCALE 0.001
    TYPE 0
    NAME "inf_hangar_largea"
    IfVarAnd( :L03F452 0024 0040 )
    Jump32( :L03F570 )
:L03F452
    IfVSize( :L03F4E4 845 100 )
    IfVSize( :L03F4F8 338 100 )
    IfVSize( :L03F50C 169 100 )
    Jump32( :L0443D4 )
:L03F470

```

Copy from Library Object to End Obj, and paste to new text file.

Copy and paste the header below to the top of file.

; Insert the "Set(FSVers 0x800)" instruction at the beginning
; of the file, if you want to use the FS2002 instructions
; for the facilities section

mif([\$Version < 285])

Error(You need at least SCASM version 2.85 to compile this
code)

mifend

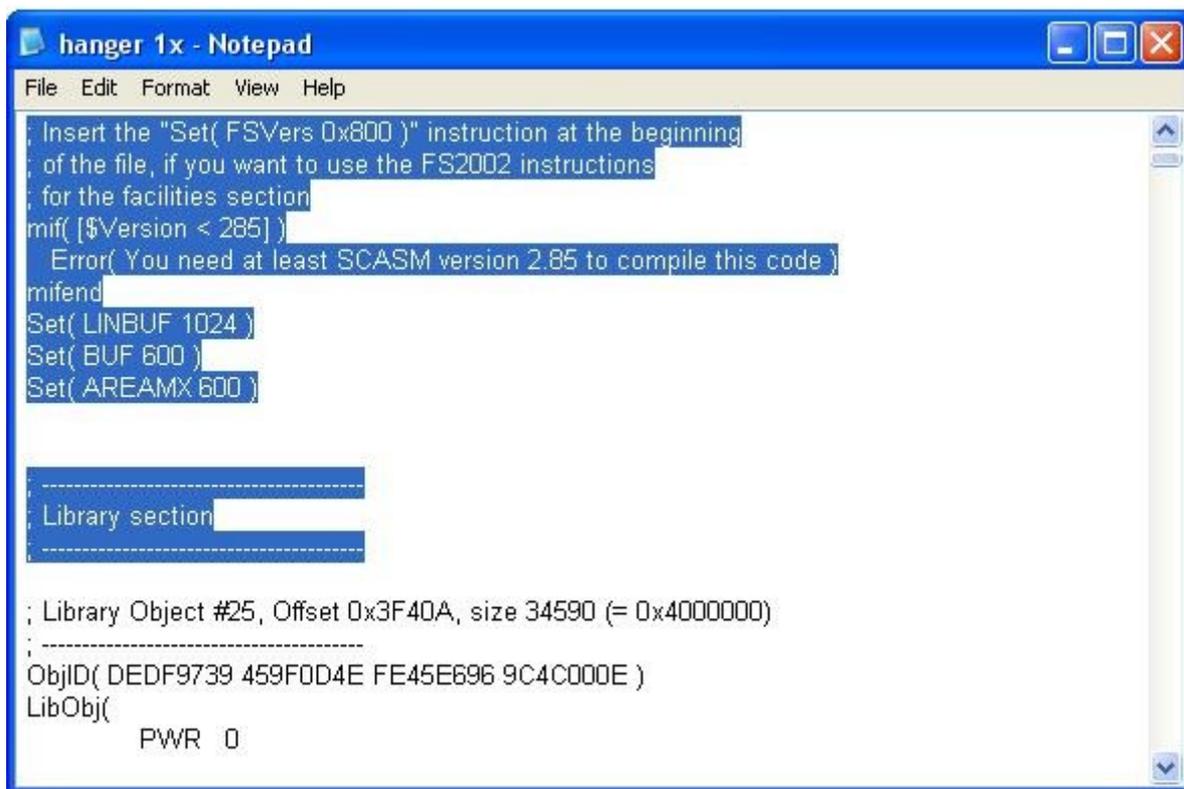
Set(LINBUF 1024)

Set(BUF 600)

Set(AREAMX 600)

; -----
; Library section
; -----

and save as Hanger 1x.sca



```
hanger 1x - Notepad
File Edit Format View Help

; Insert the "Set( FSVers 0x800 )" instruction at the beginning
; of the file, if you want to use the FS2002 instructions
; for the facilities section
mif( [$Version < 285] )
    Error( You need at least SCASM version 2.85 to compile this code )
mifend
Set( LINBUF 1024 )
Set( BUF 600 )
Set( AREAMX 600 )

-----
Library section
-----

; Library Object #25, Offset 0x3F40A, size 34590 (= 0x4000000)
; -----
ObjID( DEDF9739 459F0D4E FE45E696 9C4C000E )
LibObj(
    PWR 0
```

Now change the guid number (ObjID).

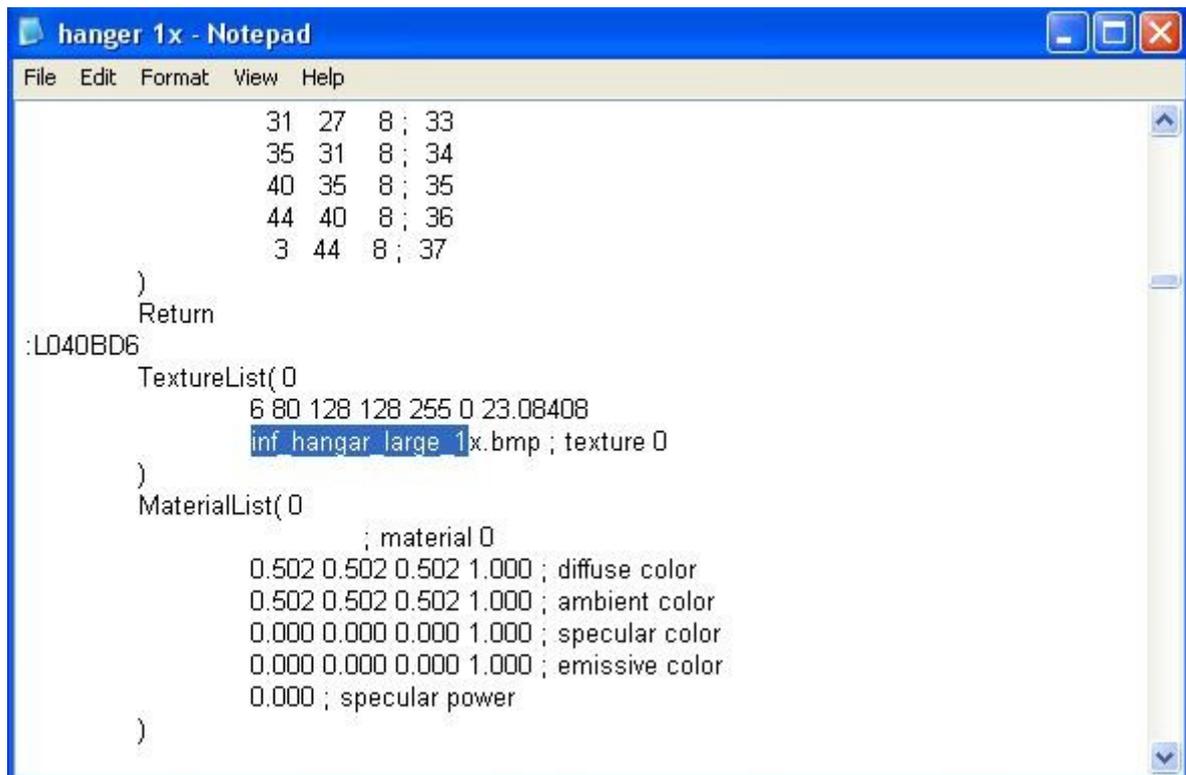
You can use the guidmaker to generate a new guid number for this.

I just changed the number from xxx231E to xxx000E for this tutorial and save. Scroll down until you find NAME

Change the name of your model.

I changed the name from "inf_hanger_largea" to "inf_hanger_largeax"

Now change all the texture name(s) to the one(s) you are using and save.



```
File Edit Format View Help
31 27 8 ; 33
35 31 8 ; 34
40 35 8 ; 35
44 40 8 ; 36
3 44 8 ; 37
)
Return
:L040BD6
TextureList(0
6 80 128 128 255 0 23.08408
inf_hanger_large_1x.bmp ; texture 0
)
MaterialList(0
; material 0
0.502 0.502 0.502 1.000 ; diffuse color
0.502 0.502 0.502 1.000 ; ambient color
0.000 0.000 0.000 1.000 ; specular color
0.000 0.000 0.000 1.000 ; emissive color
0.000 ; specular power
)
```

I changed the texture name from inf_hanger_Large_1.bmp to inf_hanger_Large_1x.bmp

Recompiling

Drag and drop your new .sca file on top of the scasm.exe. Your new .bgl is now compiled.

The .bgl name for this tutorial is Hanger1x.bgl.

Notes.

While doing this project I think the size is wrong.

(SIZE 34627 to large)

This number can be changed if too large or small, it is a visibility controller, and controls the amount of area the object takes up in virtual space.

Use the GuidMaker to generate a new guid number like this 4D9EF5D21ACE4BBEA6E5C777D9B9858F and then copy and paste this number to ObjID in the sca and put in gaps between the letters and numbers like this 4D9EF5D2|1ACE4BBE|A6E5C777D9B9858F. (EVERY EIGHT)save and close GuidMaker. **EVERY OBJECT SHOULD HAVE ITS OWN UNIQUE GUID NUMBER.**

Set(LINBUF 1024)

Set(BUF 600)

Set(AREAMX 600) Numbers can be changed if you get a linebuffer overflow.

HOPE THIS TUTORIAL HELPS.

Please leave feedback.

Robert John

19.05.2011