**A package with Tools for MOHAA (mapping).  
Some of the things included:  
mohaatools.exe   
tik editor  
script editor  
BSP viewer 3D**

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Find him on TMT (The Modding Theater)** [**www.modtheater.com**](http://www.modtheater.com)

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This software is for personal use only, before converting a BSP file please check the copyright of such. Also before redistributing or using extracted parts of BSP's in your own work - check the original's copyright.  
This software is intended as a tool for Mohaa mappers to aid them in THERE work, not as a tool to copy/extract parts  
of maps/BSP's and include them in your own work. Please do not abuse the (c) of maps that are not your own.  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**This document contains basic help, including installation and useof instructions and also a revision history\*.  
\* The revision history is at the end of the document.**

**BSP Viewer Help:  
=============**

**(this is only very basic help !)**

**INSTALLATION:  
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**1.Install the software.**

**2.In the TOOLS section (top right hand side), select PK3LOOK.**

**2. a) Browse to your mohaa/main folder (where the pk3 files are, you could browse elsewhere if needed).  
Select 1 of the pk3's (does not matter which one).**

**2. Click OK (if you didn't double click the pk3 file).**

**2. c) Highlight the required pk3's from the list on the left.**

**(For Mohaa main standard pk3's \*\* here are the important pk3's for auto scanning:  
pak0.pk3 has global scripts,  
pak1.pk3 has textures.  
pak2.pk3 has textures.  
pak5.pk3 has maps and map scripts.  
pak6.pk3 has textures, maps and map scripts.**

**\*\* So really you only need to select pak1, pak2, pak5 and pak6)**

**2. d) Click the SCAN 4 TEXTURES/BSP button below the list.**

**Wait for the software to extract all the Textures/BSP's/Scripts, click OK to popup progress messages.**

**\*\*\* NOTE:  
You can repeat the scan routine for multiple folders, if you have other folders that contain custom maps !**

**USE OF THE S/WARE  
----------------------------------  
Now that u have extracted the textures and bsp's you can use the software**

**Main program BSP Viewer - Use to browse for a BSP, and then either look at the extracted info in the tree views, or run one of the tools as below:**

**3D Viewer - As it says view a bsp in 3D WITHOUT loading Mohaa, and the bsp's don't even need VIS to be viewed.  
PK3Look - Use to browse your pk3's, extract files, view files contained within.  
Script Generator - Create a basic script for your BSP by clicking a few options. (not implemented yet).  
Make from entities etc - extract the info from the tree view on left into a .map file so you can load into MohRadiant.  
Recreate Original - Yes create a .map file from all the info in the BSP, then view it in MohRadiant.**

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**BSP Viewer - Things to do:  
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**Turn on LOD and Patch light mapping.  
Export patches to map file.  
Correctly map textures in export routine.  
TIK model loader  
Static model draw in 3D viewer  
Static model export to .map files  
Enable collision detection.  
Enable door opening/closing.  
Enable climbing ladders.  
Improve hidden brush export code.**

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**MohaaTools Revision History**

**V1.6b  
=====**

**Map exporter disabled in main menu - use 3D BSP Viewer instead.  
3D BSP Viewer .map export now includes LOD terrain and Patches.**

**V1.5b  
=====**

**Added support for V21 bsp files (MOH:Spearhead), Mohaa is V19  
Lots of new keys, pree F1 to check them out.  
A Laracroft model has been included so you can run around the level in 1st person mode.  
(c) info for the Laracroft model is in the Lara folder.  
Various other tweaks have been made, which i forgot to document ! lol  
If your using this for spearhead, dont forget to extract the new BSPS's and Textures.**

**V1.4b  
=====**

**3D BSP Viewer improved.**

**Export to map is now assigned to the M key.  
Lod is exported to map files  
Texures are better mapped in export, scale is correct but offsets are wrong.  
Shaders are correctly parsed now to show all textures.  
Hidden brushes, like ladders, triggers etc are now drawn and exported.  
FOV can be altered using . , and /  
Triangles can be overlayed over textures in rendering mode use "6"  
Various draw modes have been corrected and linedrawing/lightmapping now works correctly.**

**Suggest you recheck the HELP press F1 for new key assignments.**

**V1.3b  
=====**

**Auto Extract in PK3Look now extracts all the SHADERS ! Important that you run this util again, or  
you'll not get all the textures in the 3D Viewer.**

**3D Viewer has again been improved.  
Patches now render (that means pipes, barrles, arches etc). Patches ARE NOT exported.  
Lod Terrain now renders (and it is also exported to the .map).  
Missing textures that previously were solid white, are now extracted from the shaders (see above)  
and render correctly.**

**V1.2b  
=====**

**3D Viewer has been improved, it now partialy converts triggers etc. It does not currently always give  
correct shape, because it builds a brush based on the maximum bounding box size. But most of the time  
the bounding box is the same as the brush shape.  
3D Viewer can run at 640x480 (default) or 800x600 (user choice).  
Some popup messages have been removed.  
Executable is around half the size !**

**V1.1b  
=====**

**Link added in the Tools section (MohEd) to start the MohRadiant map editor  
Bug (no keyword error) in Script File Search has been fixed   
Script file search was doing CASE-SENSITIVE searches, now it does CASE-INSENSITIVE searches much better.  
Fixed the textures missing the 3D bsp viewer.  
Max output brushes for bsp->map converter increased from 60000 to 120000.  
Max sides per face for bsp->map converter increased from 32 to 64.**

**V1.0b  
=====**

**BSP Viewer has ceased to be, but has resurfaced as MohaaTools.  
Because BSP Viewer has grown into more than just a VIEWER it was decided to rebrand the software, under  
a better title.  
All functionality of V2.0b of the BSP Viewer has been ported to MohaaTools, and now the tools will be expanded.**

**Planned expansion includes a TIK editor, Loader Screen Editor/Previewer, Hud Editor/Previewer, Scripting language  
help program with command/variable list and explanations of when/how to use them.**

**\*NOTES:  
If you have previously use BSP Viewer, then u need to MOVE the following subfolders of c:\program files\BSP Viewer  
into the c:\program files\MohaaTools folder:  
map files  
bsp files  
scr files  
textures  
Then u need to uninstall BSP Viewer, because MohaaTools makes it redundant.**

**BSP Viewer Revision History:  
=====================**

**V2.0b  
=====**

**Script Generator 1st version is now working ... will add more as time goes on   
Minor updates to commmands recognised by the script editor.**

**V1.9b  
=====**

**V1 of the Script editor has been added.  
Click on Script Editor in the Tools area of the main program.  
Include syntax/command colouring, and opening of multiple scripts at same time.**

**V1.8b  
=====**

**Cursor changes to the WAIT CURSOR at parts of program that take several mintues to process.  
Scan 4 Textures ... correctly shows the number of BSP's, SCR's and Textures extracted.  
also it gives option to abort the scanning process.  
Option to auto display this document on software startup.  
Converts faces that have upto 32 sides.  
Added more progress messages to the 3D viewer.  
Fixed the Model Move routine, maps now look better without parts of objects  
moved incorrectly.  
Recreate map button working - ported code from the 3D viewer.**

**V1.7b  
=====  
Only converts faces with a maximum of 6 sides.  
The previous version would convert around 50 faces .... well this one will do several thousand !!!   
I just converted the last level of the SP maps and it looks cool**

**V1.6b  
=====  
When you run the 3D viewer it gives the option to convert the BSP file.   
Please read the popup messages they ARE IMPORTANT !.   
Bear in mind this is the first version, and there is still much work to be done, but at least a start has been made. I successfully converted some test maps i did with around 20 - 50 burhes in, i also ran my tank map and the last sp map through it**

**V1.5b  
=====  
Minor changes to the main viewer.   
3D viewer has lots of new stuff   
You spawn at the info\_player\_start postion.   
You can use O/P to cycle through all the spawnpoints in the map   
+/- alter the farplane value script->object brushes are now in correct positions, looks great with all the doors and windows drawn correctly.   
Would be nice to get a tik loader (but that's going to be a lot of work).**

**V1.4b  
=====  
Now includes export options for map files (am still working on the full .map file export, but making good progress).   
PK3Look has been improved. Double click a file in the pk3 file list, and if it's a tga or jpeg it will preview it, or if its a scr, shader, tik, urc, txt file it will auotload it into Wordpad/Notepad for you. Also WAV files are now supported.   
Also new in the tools section is "3D BSP Viewer" , just browse for your bsp, then click this button, and you can then walk around the BSP without loading Mohaa.   
The 3D viewer is also still being developed ... currently it doesn't load patch's and any brushes that are part of entities like script->objects are loaded, but appear at the coordinate 0,0,0 ... hope to have them fixed in next version.   
You can view the bsp in Wireframe or Full rendered mode, turn on/off textures and lightmaps.   
You can also press ENTER to view a texture name for the surface under the crosshair, or H to hide the surface, or J to redisplay the surface ... great for figuring out which textures they used for Omaha beach, and in which order !!!   
I am also working on a new tool for script editing, a bit like wordpad but with syntax/command highlights in colour**

**V1.3b  
=====**

**Not released, for internal use only.  
Now includes export options for map files (am still working on the full .map file export, but making good progress).   
PK3Look has been improved. Double click a file in the pk3 file list, and if it's a tga or jpeg it will preview it, or if its a scr, shader, tik, urc, txt file it will auotload it into Wordpad/Notepad for you.   
Also new in the tools section is "3D BSP Viewer" , just browse for your bsp, then click this button, and you can then walk around the BSP without loading Mohaa.   
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**V1.2b  
=====**

**Now has a PK3 Viewer built in called PK3Look   
Use to auto extract textures and bsp files for this software.   
Also use it to view your pk3 files, either one at a time, or group select them and see ALL the files at the same time, great idea   
You can extract selected files, and also double click an image file to preview it onscreen.   
Also you'll see a button next to PK3Loop called Script Generator ...**

**V1.1b  
=====**

**Screen can now be maximised/minimised and resized.   
Textures can be previewed full screen in seperate window.   
Static Entities are now extracted from the BSP file.**

**V1.0b  
=====**

**1st version, and doesn't do much yet ... really it's just the screen layouts.**

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