# DoomVB 3.0

What is DoomVB?

DoomVB is a powerful Drag-N-Drop style editor for id Software's Tour de Force game, DOOM.   DoomVB allows you to create new levels for DOOM.   Currently, DoomVB allows you to edit the following data:

**THING** data (monsters, weapons, etc.)
**SECTOR** data (including ceiling/floor heights/textures)
**LINEDEF/SIDEDEF** data (including wall textures and triggers)

DoomVB cannot create ad-hoc brand new levels (yet!), but this is the final goal of the author.   As new information is learned about the format of the DOOM.WAD file, this information will be incorportated into DoomVB.

This software is in NO WAY connected to id Software.   It is intended for the personal creation of Doom levels ONLY.   You have been warned!

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# Menu Options

**File Menu:**
**Open...** Opens a WAD or PWAD file for editing.
**Revert to Saved:** Reloads the current level from the current .WAD file, erasing changes you have made since last saving that level.
**Save as...** Saves the current level as a PWAD file.   PWAD files can be used in DOOM by using the following command line:

DOOM -DEVPARM -FILE <filename1.WAD> <filename2.WAD> .....

**Save as BMP:** Saves the current Window image as a Windows Bitmap, which can be used for printing purposes
**Exit:** Leaves DoomVB


**Level Menu:**
**Game 1,2,3:**   Use these menus to select the current level for editing.   Levels unavailable in the current .WAD file are disabled.

**Edit Menu:**
**Things:**   Puts you in Thing Editing Mode.
**Sectors:**   Puts you in Sector Editing Mode
**LineDefs:** Puts you in LineDef/SideDef Editing Mode

**Thing Menu:**
**Insert Thing:**   Adds a Thing to the center of the Window.   The thing added is a copy of the previous thing being edited.
**Delete Thing:**   Deletes the current thing from the level

**Help Menu:**
**Help:**   Displays this Help File
**About:** Credits

# Thing Editing

When in Thing Editing Mode, all the Things appear as colored dots using the following color codes:

Red: Monster
Dark Gray: Player Start Positions
Cyan: Weapons/Ammo
Light Gray: "Scenery" (torches, pools
Green: Barrels
Magenta: Goodies (RadSuits, Armor, Li
Dark Yellow: KeyCards and Skull Keys

To move an existing thing, just click on it and drag it to the new location.   To add a thing, select INSERT THING from the menu.   The new thing will be an exact duplicate of the previous thing. It will be located in the center of the screen.   To delete a thing, select DELETE THING from the menu.   The current thing will be deleted.

To edit a things attributes, right click on the map when a thing is selected.   The Thing Editing window will appear.   To change what the thing is, select first the Type of thing using the "KMAGS" buttons.   Each button stands for the following:

K: Keys (and Player Start positions)
M: Monsters
A: Ammo and Weapons
G: Goodies (potion, armor, stuff you can pick up except weapons)
S: Scenery (including barrels)

Once a button is selected, choose the desired thing in the list box.

The angle boxes are only relevent to monsters, as other objects always face the player.   The skill bits check boxes are for selecting which levels the thing will appear on, and other attributes:

1/2: Appears in difficulty levels one and two.
3:     Appears in difficulty levels three
4/5: Appears in difficulty levels four and five.   (Difficulty level five available as of Doom version 1.2)

Deaf:   Clicking on this check box will make a monster 'deaf': he will not respond to gunshots within earshot.   He will attack a player only when he sees him.

Net:   Makes the thing available only in network games.

# Sector Editing

A Doom Sector is an area enclosed by a set of LineDefs.   It is an enclosed area of space having a common floor and ceiling.   The sector editor allows you to change various attributes of sectors.

To begin sector editing, choose *Sectors* from the Edit menu.   To select a sector, left click on one of the sectors surrounding Lines.   If a Line encloses two sectors, click on that line again to toggle between the two sectors it defines.   The current sector is drawn in red.   If the sector is tied to one or more Linedefs via a trigger, those Linedefs will appear in green.

To begin sector editing, right click on the map when the sector you wish to edit is hgihtlighted.

The Sector attributes available for editing are as follows:

Ceiling/Floor Altitude:   Valid Values are -262 to 262.   An altitude difference between floors of 28 is negotiable by a player, while a difference of 32 is too high to climb.   A player may fall any amount in Doom without damage.

Ceiling/Floor Texture:   To change textures, just drag them from the scrolling list box.   To preview a texture, double click on the texture name, either in the list box or in the Ceiling/Floor texture boxes.

Special:   The rightmost listbox is for choosing a special attribute for the sector, such as blinking lights, or the damaging green lakes of 'NUKAGE'.

Brightness:   Valid values are 0 (dark) to 255 (bright)

Trigger:   Trigger numbers tie the sector to a Linedef with the same Trigger number.   Type the trigger number you wish in the box provided.   If you wish to create a new trigger, select the 'new' button above the trigger box, and a previously unused trigger number will be assigned. Once a trigger has been assigned, clicking on the 'LineDef...' button will bring up the LineDef Editing box for the LineDef having the same trigger number.

NOTE:   A Sector can be tied to more than one LineDef, and vice-versa:   If this is the case, clicking on the 'LineDef...' button will bring up only ONE of the LineDefs tied to this Sector.   The other LineDefs can be edited in LineDef Editing Mode, of course.

# About the Author(s)

The primary author of DoomVB is matt tagliaferri (matt.tagliaferri@pcohio.com).   It is my goal to create the most widely used Doom level creation facility, and to create some truly wicked Doom levels for freeware use.

Other contributing Authors are Everett Pence, who wrote the main graphics display routine, and Carlton Guc, who had some pretty good ideas in improving the interface.

Most of the actual Doom Wad spelunking has been done by Matt Fell (matt.burnett@acebbs.com), a man I have never met but whose hand I sure would like to shake!   He is the author of "The Unofficial Doom Specs".    It is recommended you get a copy of this file if you wish to learn more about what makes Doom tick.

# LineDef/SideDef Editing

 A LineDef is a line defined between two Vertexes.   LineDefs cannot be moved in the current version of DoomVB.   A SideDef is the texture definition of each side of the LineDef.   A LineDef can have either one or two SideDefs   (based on the number of sectors it borders)   The following information can be edited:

Action:   The largest listbox defines what the LineDef will do when it is 'Activated'   The activation event is one of the following, denoted by the first characters in the listbox elements:

* :The linedef needs a matching trigger # to link it to the appropriate sector(s).     The tied sectors will be acted on .
$: The function is activated by pressing the space bar (usually a switch).   The action happens once only.
&: The function is activated by pressing the space bar (usually a door).   The action happens each time the spacebar is pressed.
@: Unknown if happens once or many times.

There are many numbers which are not filled in yet.   These numbers appear as trigger actions somewhere in the game.   If you discover the meaning of any of these unknown numbers, send the data to me or the author of the Doom Specs (see About the Author(s) ).

Attributes:   These attributes are again as of now sketchily defined (Like what happens if I define a LineDef as both impassable AND transparent?)   Contact the authors if you figure out any more of this stuff!

Trigger:   Trigger numbers tie the LineDef to a Sector with the same Trigger number.   Type the trigger number you wish in the box provided.   If you wish to create a new trigger, select the 'new' button above the trigger box, and a previously unused trigger number will be assigned. Once a trigger has been assigned, clicking on the 'Sector...' button will bring up the Sector Editing box for the Sector having the same trigger number.

NOTE:   A LineDef can be tied to more than one Sector, and vice-versa:   If this is the case, clicking on the 'Sector...' button will bring up only ONE of the Sectors tied to this LineDef.   The other Sector can be edited in Sector Editing Mode, of course.

SideDef Data:

SideDef 1 checkbox:   This checkbox will be available if the LineDef has a second SideDef. check this box to edit the second SideDef, uncheck to resume editing the first SideDef.

X,Y: The Coordinates that textures will be 'pasted' onto the Linedef

WallAbove: The texture that is visible on any part of this LineDef above the corresponding sector's ceiling.   For example, it this SideDef's Sector has a lower ceiling than its neighbor sectors, the side of the wall will be visible.   This texture defines that part of the wall.

Wall:   The texture that makes up the area between the ceiling and floor of the corresponding sector.

WallBelow: The texture that is visible on any part of this LineDef below the corresponding sector's floor.

To edit the above textures, drag the desired texture from the scrolling listbox and drop it in the desired box.   To clear a texture, click the small button marked 'c' next to the desired box.

# Quick Start

Don't like to read manuals, eh?   OK: here's the scoop in a nutshell.

Select either THING, SECTOR, or LINEDEF editing from the EDIT menu.

Things can be moved by dragging them around.   Right-click to bring up a full edit screen.
"KMAGS" stands for Keys, Monsters, Ammo/Weapons, Goodies, Scenery.

Sectors are selected by clicking on one of the Lines that make them up.   Click on the line again
if it borders two sectors to select the second sector.   Right-Click to bring up the full edit screen.

LineDefs are selected by clicking on them.   Again, right click to bring up the LineDef/SideDef
Edit screen.

Triggers tie a LineDef to a Sector using a common number.     LineDefs actions are selected in
the large listbox on the LineDef edit screen.   A trigger tied LineDef or Sector will appear in
Green on the main map.   More than one LineDef or Sector can be tied with the same trigger.

A level is saved by itself in what's known as a PWAD file (having a WAD extension).
To Play a new level, use the following command line:

DOOM -DEVPARM -FILE <filename1.WAD> <filename2.WAD> .....

Happy Dooming!

# Using the Map

When you first select a level, the entire level is displayed in the window area.   Resizing the windows will automatically resize the map.

You can zoom in and out of the map by pressing the + and - keys.

To center on a new spot, Hold down the CTRL key and click on that spot with the left mouse button.