IDS 4687 Games Engines – UnrealEd Tutorial 9

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This document can be downloaded at: www.planetunreal.com/squacky/UnrealEd-Tutorial9.doc

Tutorial 9 – Movers

This level continues building on the map started in Tutorial 1. Movers are objects in the world that move. The most common Movers in DM and CTF maps are elevators and doors. First, we will start with a quick explanation of how Movers work. Then we will create a working door.

The first thing you must do when you create a Mover is to model the Mover itself (the door or elevator which is going to move). This model you create will not be the actual Mover itself, but a template you can re-use. When you create the Mover template, build it in an open area away from the spot where the actual Mover will be placed in the map.

After you have created your Mover template you must Intersect your building brush with the template. Then right click your building brush and select Polygons>>To Brush. This copies the polygons of your mover template to your building brush. Next you place your building brush where you wish the mover to appear and hit Add Mover Brush. The last step is to set the Movement Keys and add sounds.

Let's build the door. Suppose we want to add a door between the two rooms we have built.
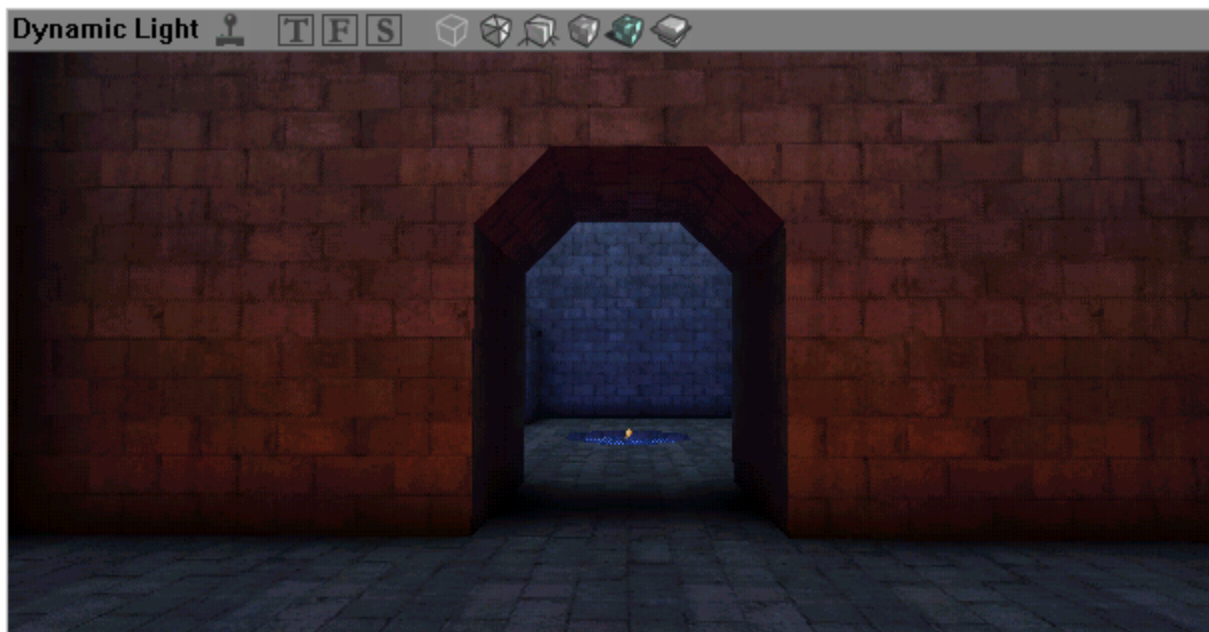
The first step is to build a template for the door. The doorway above is 320 units high and 256 units wide. Yours may be a bit different.

Build a cube to fit the exact dimensions of your door. Make the door 32 units thick. The cube shown below is 320*256*32. It is positioned where we want the door to go.
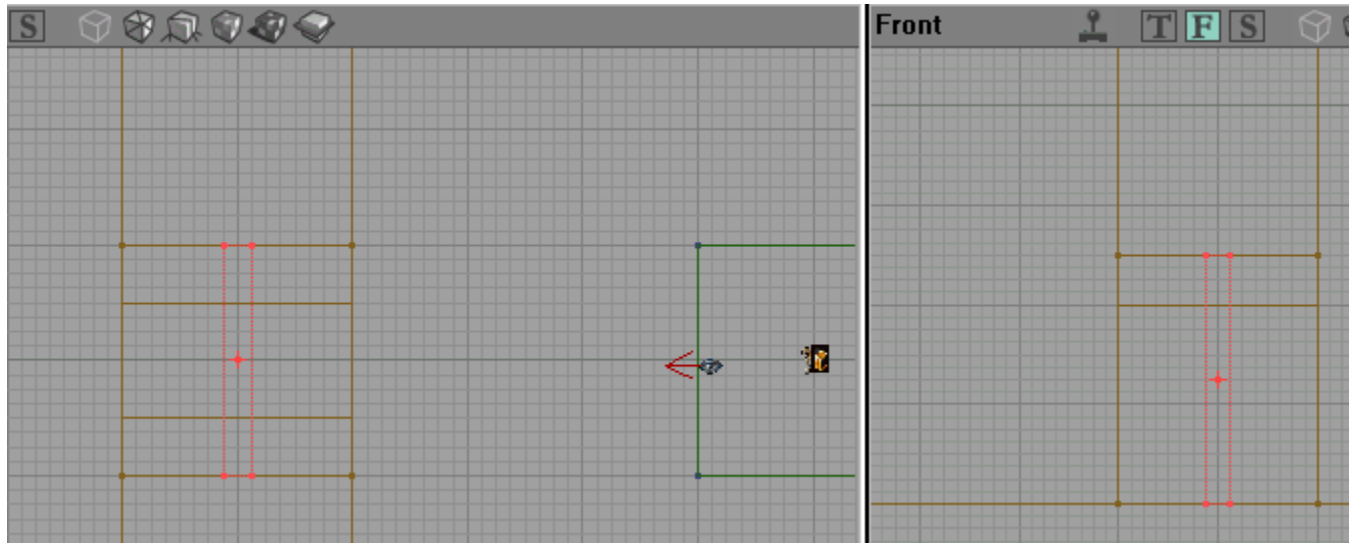

Remember that we don't want to build our door template where the door will be, so move it somewhere away from the doorway and off the floor. Now choose a texture and Add the door. The door below uses the texture "DoorC2" from the "UTTech1" texture package.


Make sure your door template is off the floor and there is plenty of room around it.

Now build a cube big enough to completely surround the door template. The Building Brush below is 320*256*256.
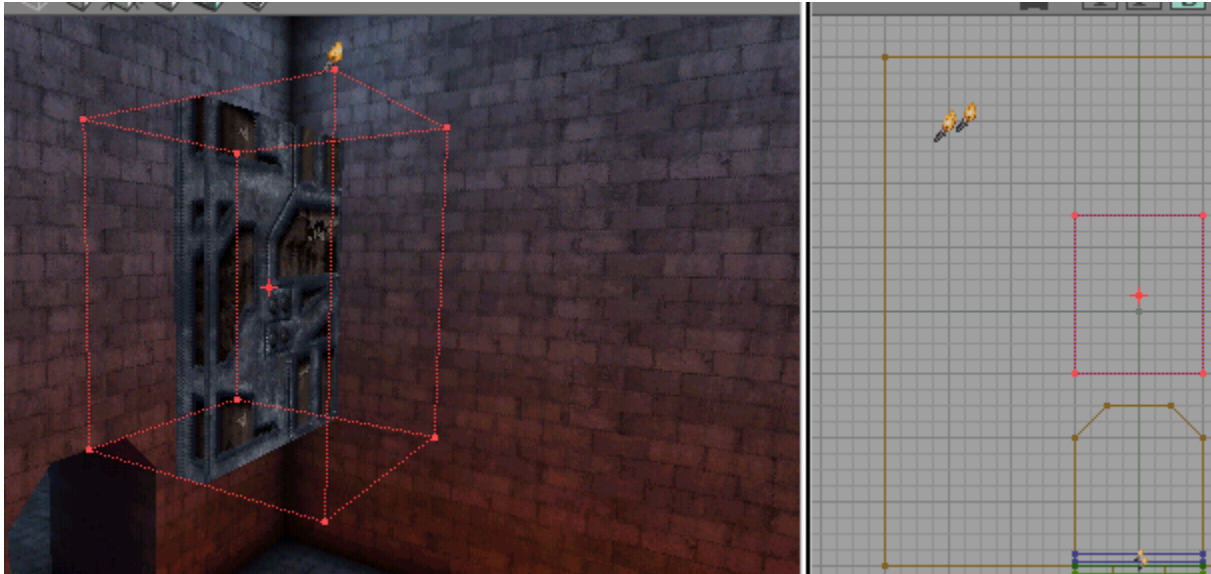

Now hit the Intersect button and your building brush will intersect with the door taking its exact shape. After
you do this right click the Building Brush and select Polygons>>To Brush.
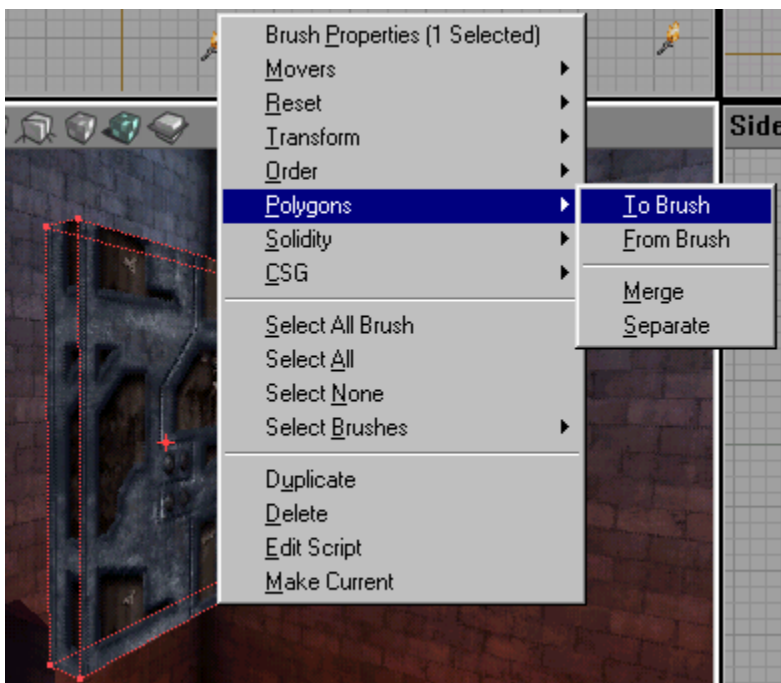
This step copies the polygons of your template to the Building Brush.

Now position the Building Brush exactly where you want the Mover to be in its resting state. We are making
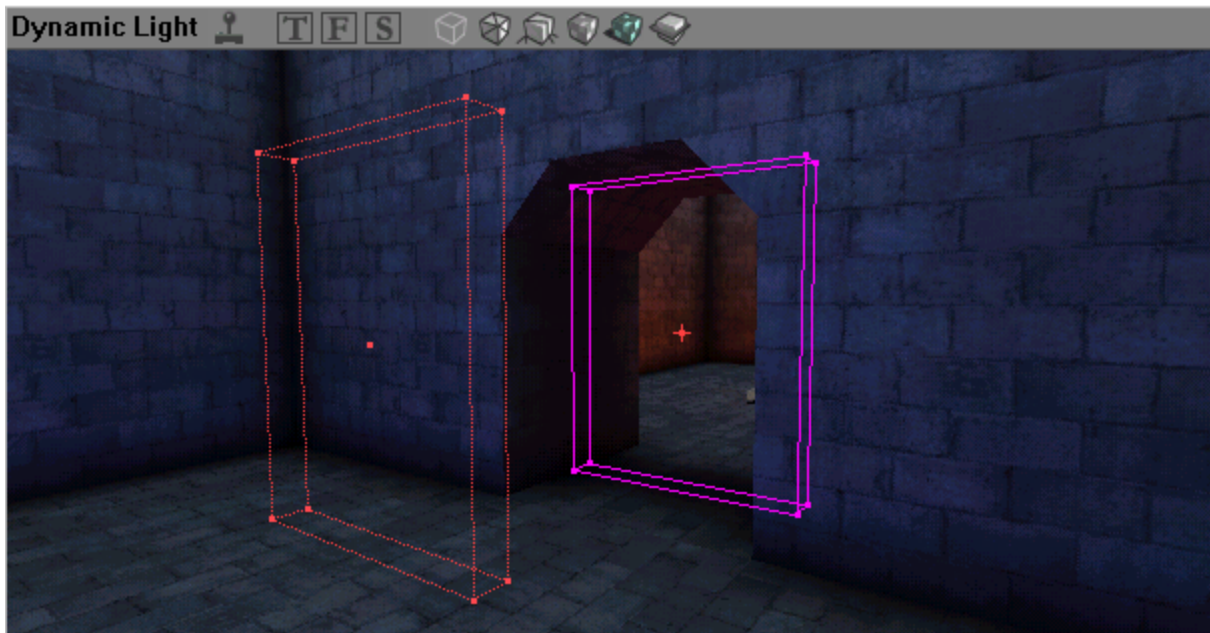a door that slides into the ceiling. So position the Building Brush as shown below.
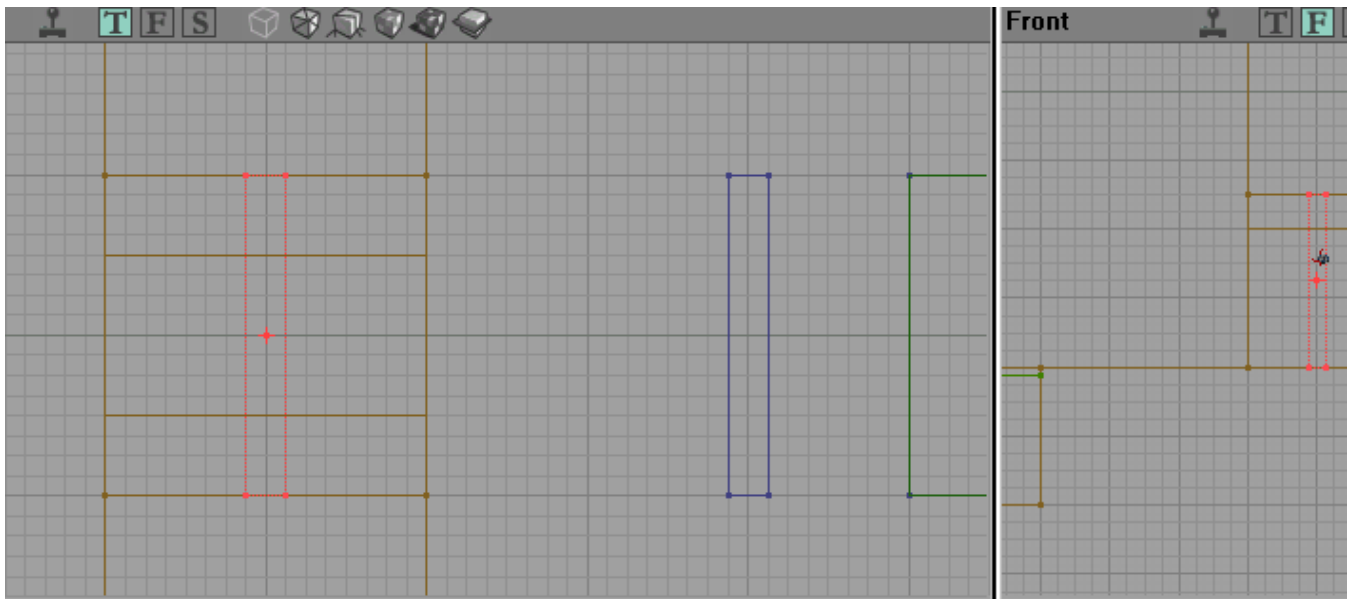
Now that the Building Brush is in place we can hit Add Mover Brush.


Add Mover Brush

After you hit Add Mover Brush, move your building brush out of the way. You will see the purple wire frame of a Mover. Movers in UnrealEd appear as purple wire frame even in the 3D Window.

The next part is to actually select our mover Keys. These are the places the door will move between. This part can be a bit tricky so be careful. The door is now resting at Key 0. The "up" position of the door will be Key 1. Right click your mover and select Movers>>Key 1.
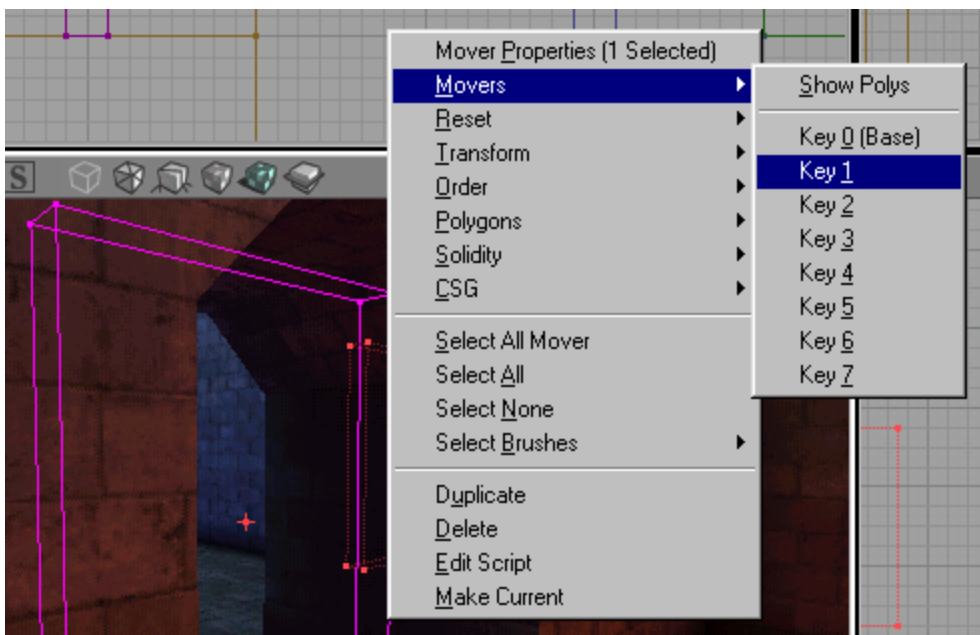

You must now move the door to Key 1. This is most easily accomplished in the 2D Window. Move it to a similar position as shown below.
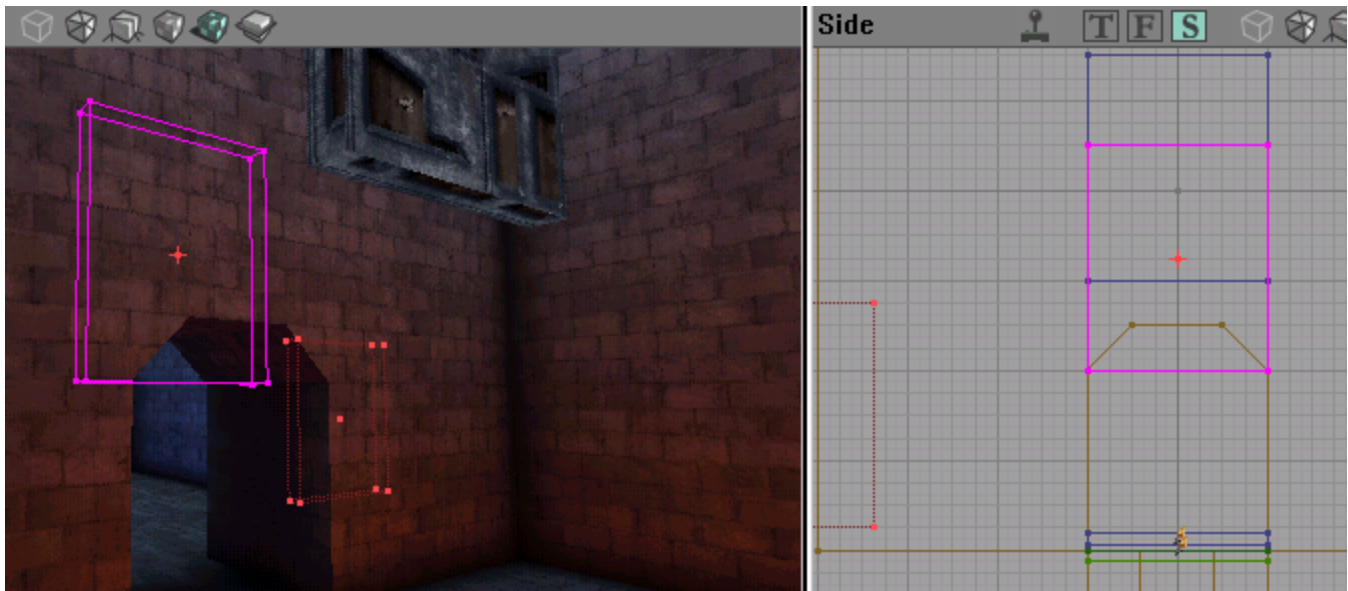
Notice the door is still protruding slightly below the top of the doorway. This will be Key 1, or the "up" position.

Now right click the mover and select Movers>>Key 0. This will return the door to the resting position. The door should be fully operational now when you "bump" into it in game. Rebuild your map and try the door out. If it does not move then delete the mover and start over. If the door has the Unreal default texture (a bubbly white texture) you forgot either Intersect or do Polygons>>To Brush.

Once you are sure your door work correctly you can delete the door template you left floating in mid-air. One way to greatly enhance the realism of your map is to add Mover sounds. Right click the mover and select Mover Properties.
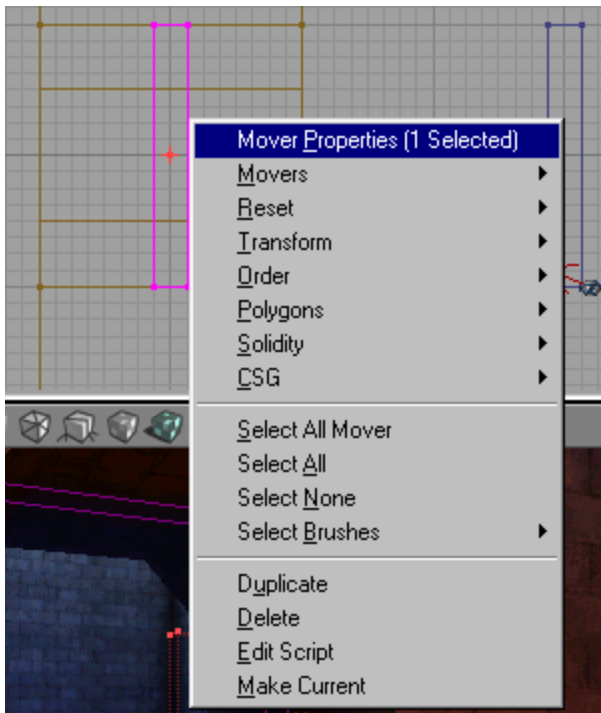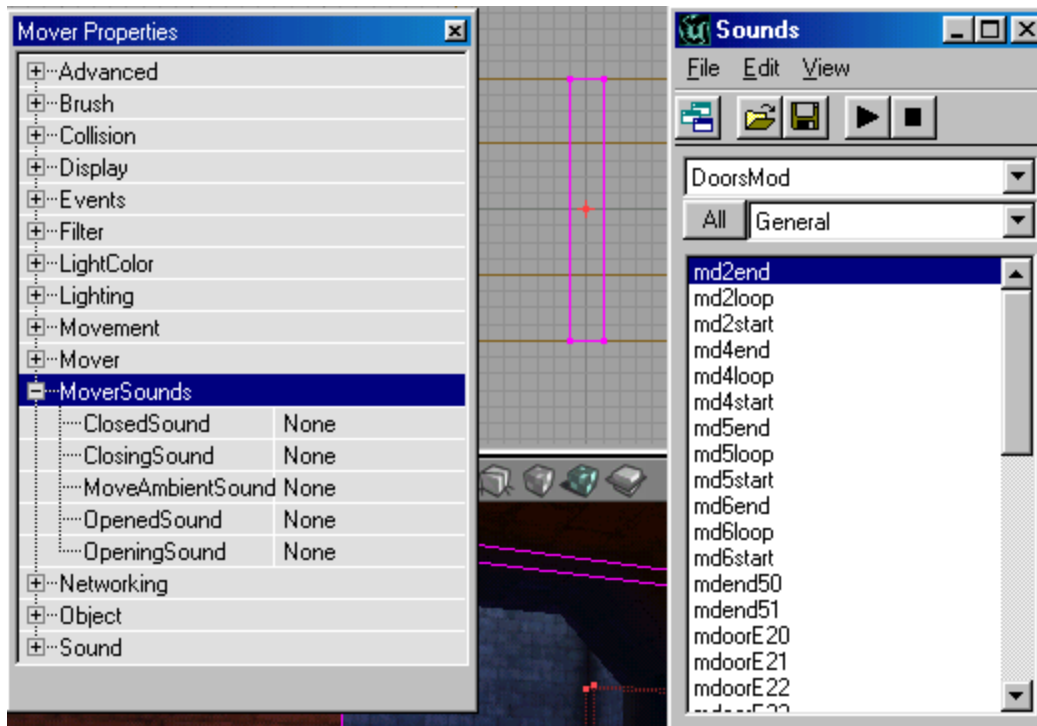
Open up the Sound Browser as well.
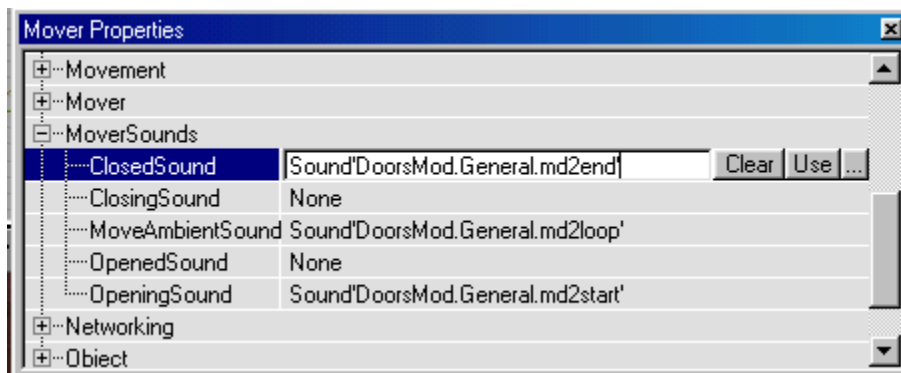
Sound Browser

In the sound browser open the package "DoorsMod.uax".

To make things easier, arrange your Editor so you can see both the Sound Browser and the Mover Properties. Browse to Mover Sounds in the Mover Properties list.

Play some of the sounds in the Sound Browser. The "end" sounds are generally used for a door slamming shut. The "loop sounds" are used while the door is moving. The "start" sounds are for a door starting to move from resting position. For the tutorial map the sounds are selected as follows.

To select a sound simply highlight it in the Sound Browser, the click "Use" in the appropriate place under Mover Sounds. You door is finished. Now let's review the steps.

1) Build the mover template.
2) Intersect the Building Brush with the mover template.
3) Place the Building Brush in position and hit Add mover Brush.
4) Right click the mover, select Movers>>Key 1.
5) Place the mover where you wish Key 1 to be.
6) Right click the mover and hit Movers>>Key 0.

Elevators can be built in the same way as the door above. For door that turn on a pivot simply rotate the mover brush to the proper place when you are selecting Key 1.