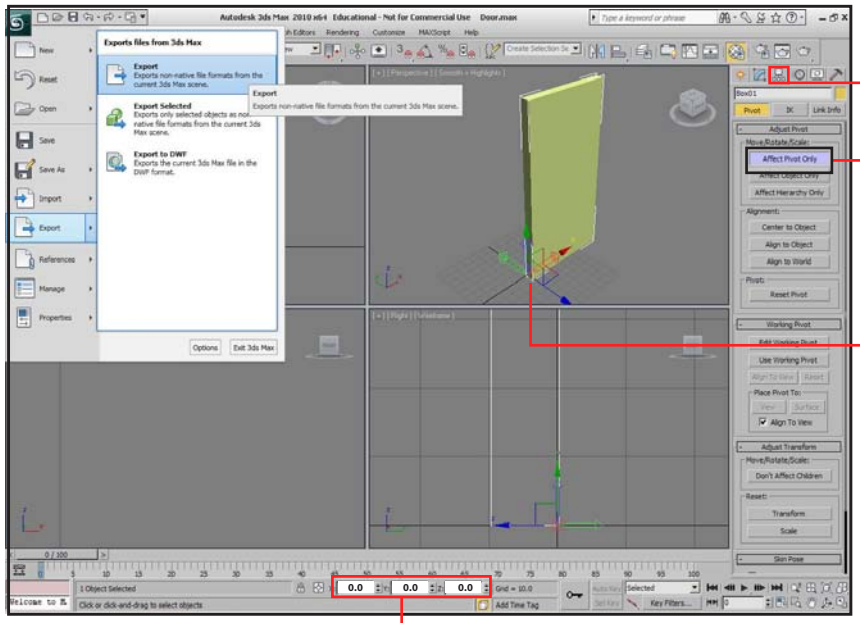


First we need a door

1. In 3D Max create a box using "Generic" units :
Length = 10
Width = 100
Height =200

2. Open the "Hierarchy Panel", select "Affect Pivot Only" and with the cursor move the boxes pivot point to the edge of the box, as if it were a hinge.

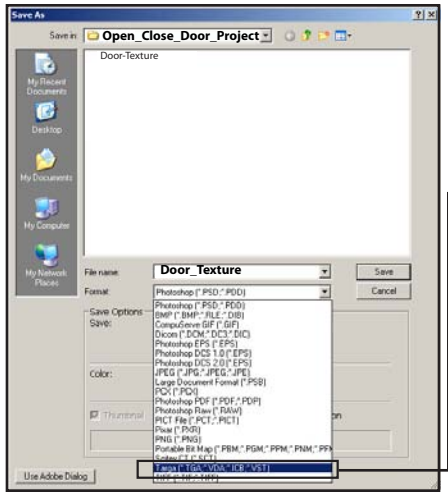
3. Close the "Hierarchy Panel"

4. Make sure the Box is selected and type , 0, 0, 0 in the coordinate system. This places the box(Door) in the middle of 3D Max space.

Now we need to apply a "Material" to the door.

5. Go to CGTextures.com and find a usable door texture.

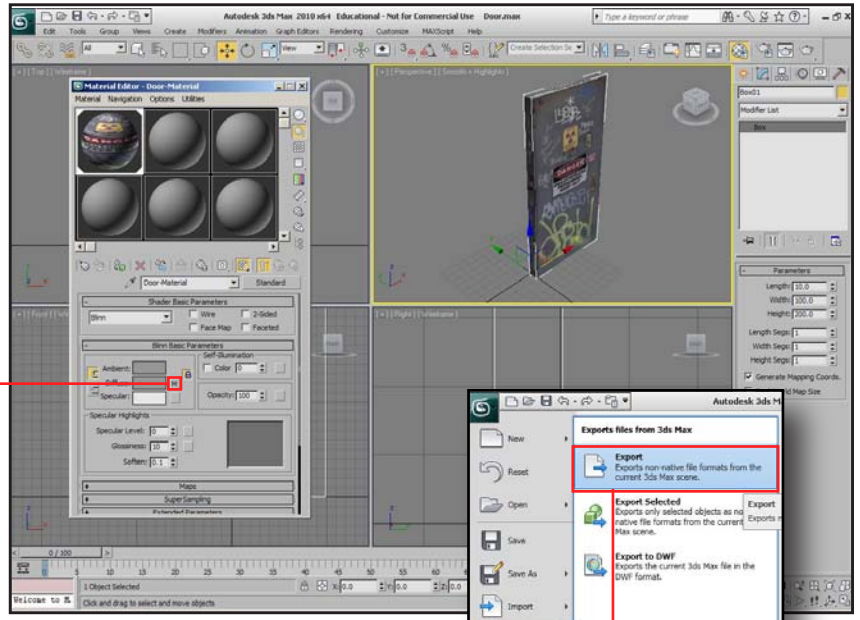
6. Right click on the large version and select "Save Picture As". Save the texture picture in your project folder.



7. Open PhotoShop and then open the texture file in PhotoShop and size it to 256 x 64 pixels.

8. Click "File" - "Save As" and resave the texture as a "Targa" file.

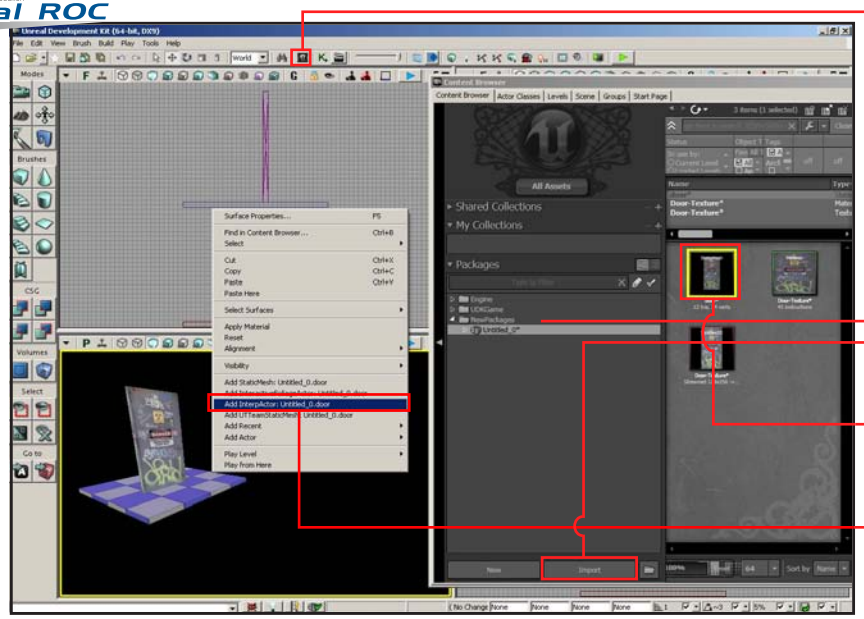
9. In 3D Max open the door texture in the "Diffuse" slot in the "Material Editor".



10. Apply the material to the door.

11. Save the 3D Max file.

12. Export the door as an FBX file.



Now we'll open up UnReal (UDK) Engine and import the FBX file.

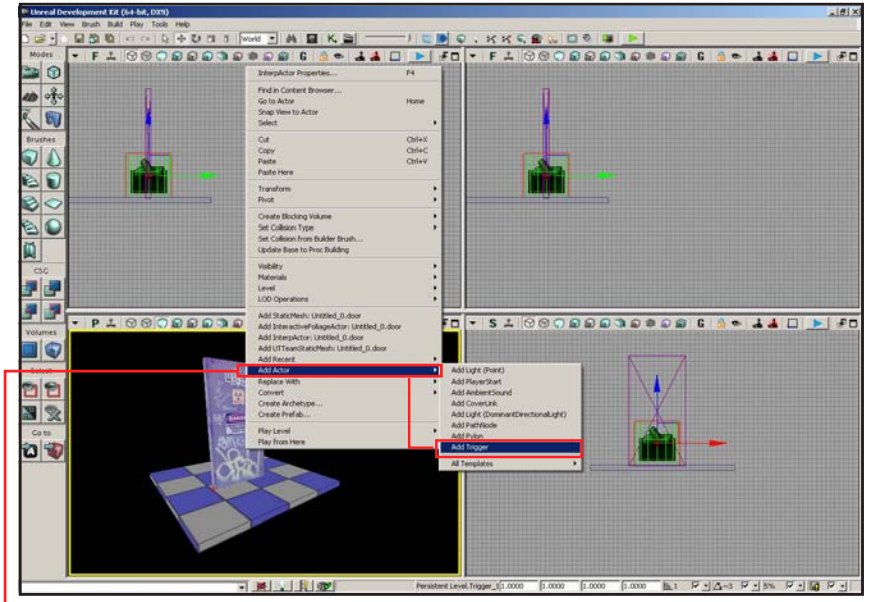
1. Open the UnReal Editor

2. In the "Content Browser" select "New Packages".

3. Click "Import" and open your FBX door file.

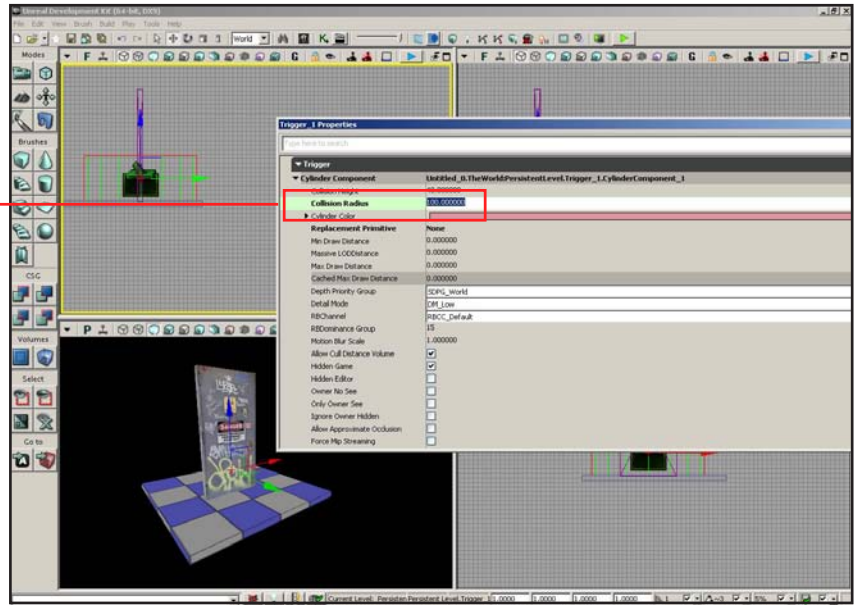
4. Next, create a small platform for the door to stand on.

5. With the Door Static Mesh selected, right click on the platform and choose "Add InterpActor".



Now we need a trigger to tell the door when to open.

6. Right click on the Door and select "Add Actor" then "Trigger".



Now we'll set the radius of the trigger

7. Position the trigger in the middle of the doorway.

8. Right click on the trigger and open it's properties

9. Select "Collision Radius" and type in an amount large enough to circle the doors width, let's say 70.0000

Next we will set up the animation for the door. For this we use "Kismet". Kismet is UnReals animation module.

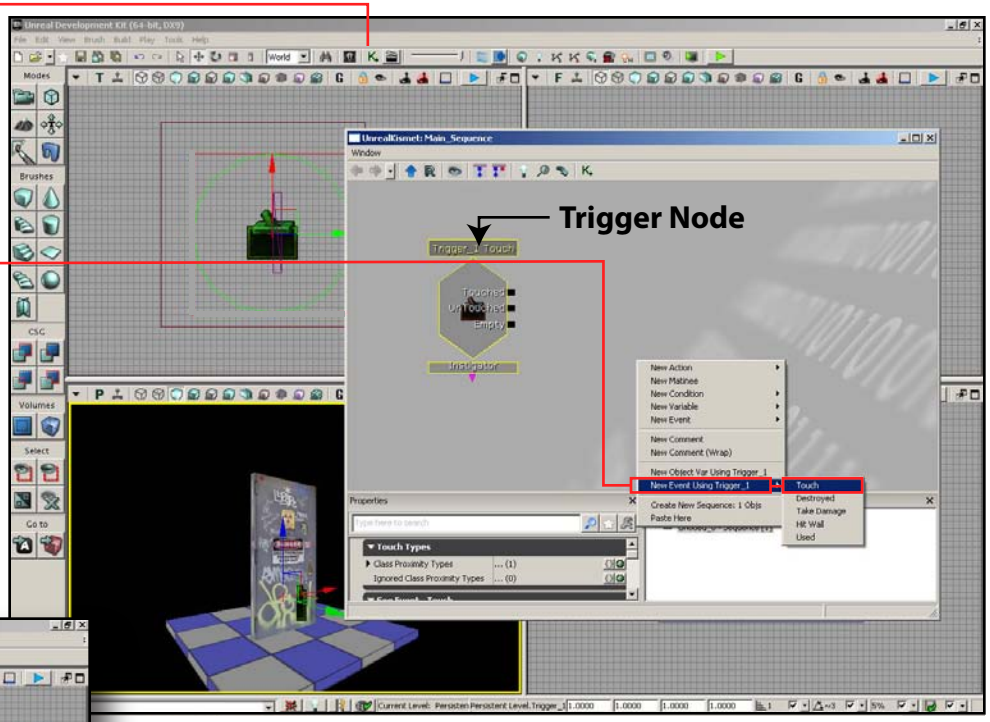
1. Note: Make sure you have the "Trigger" selected

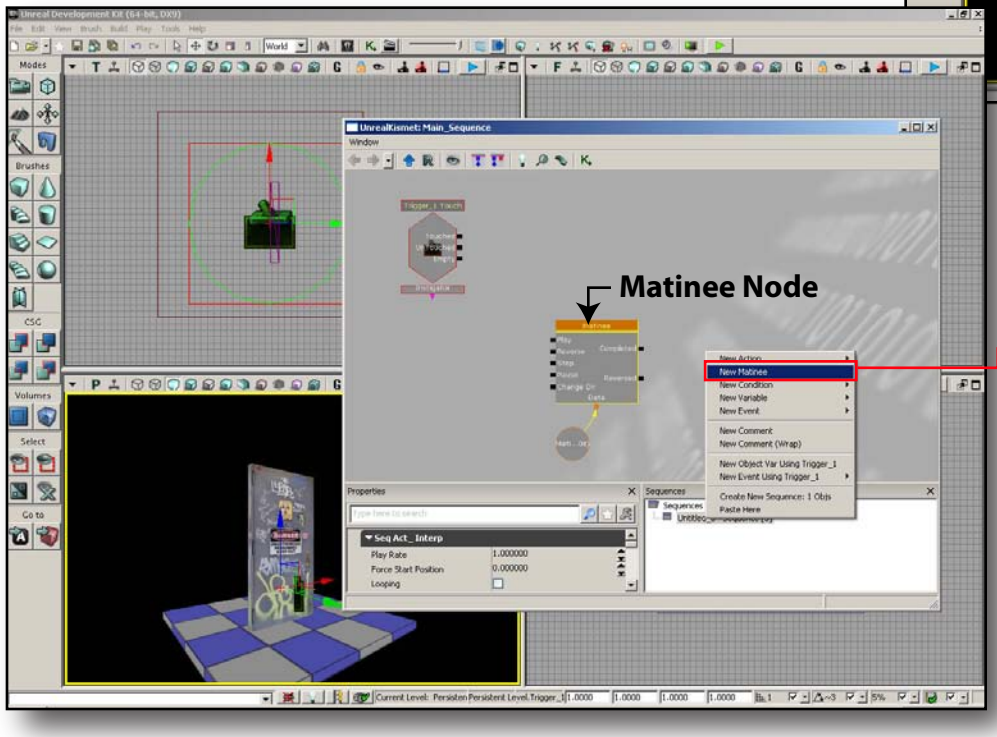
2. Open "Kismet" by selecting the green "K" on the tool bar.

3. Right click in the Kismet panel and select "New Event Using Trigger".

4. Then select "Touch".

An object will appear on the Kismet panel called a "Node".



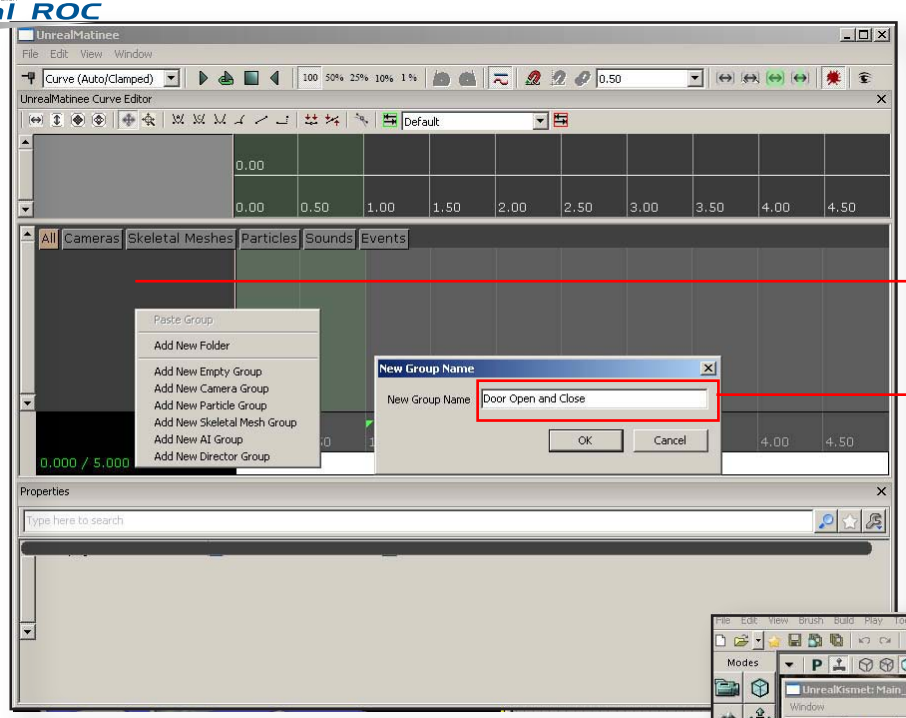


Next we'll create a "Matinee". This is the node that creates animation.

5. Right click in the Kismet panel and select "New Matinee".

Matinee is UnReal's Animation" module.

6. Double click the Matinee Node and the the Matinee Editor (see next page) will open.

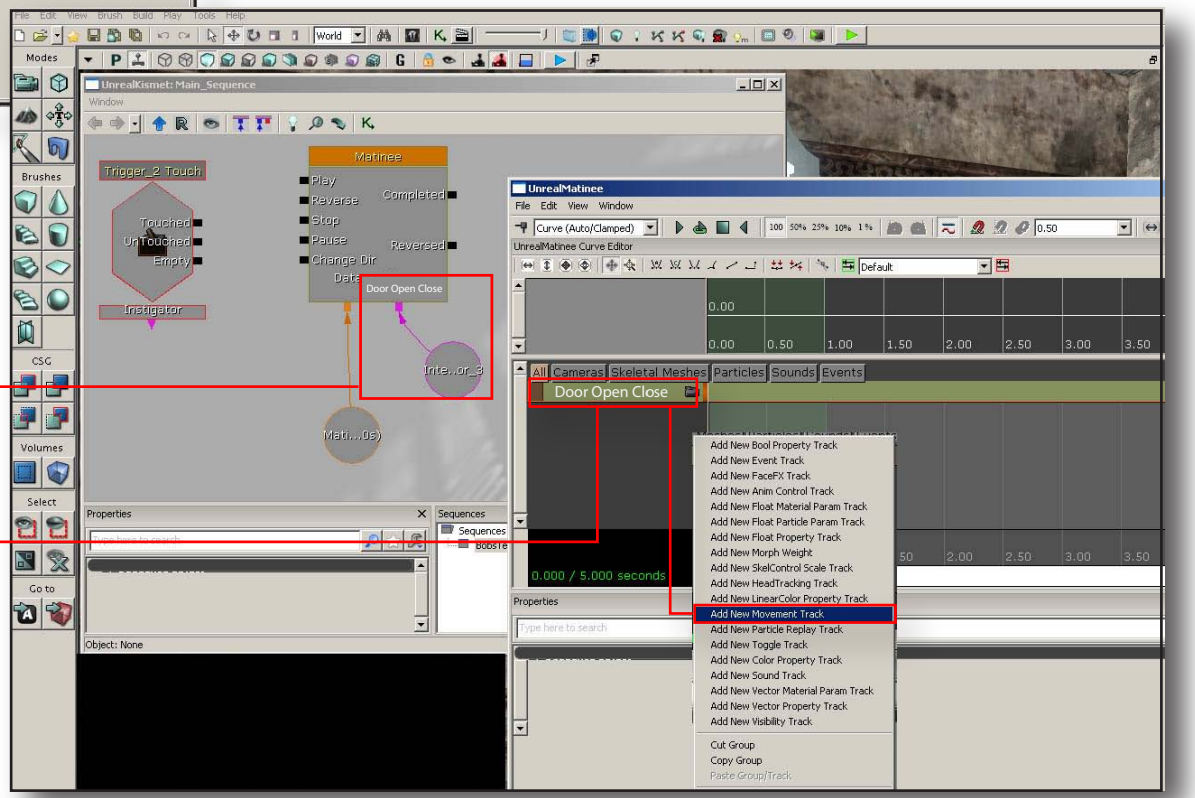


1. In the perspective viewport, select the door.

2. Right click in the gray box area and bring up the menu.

3. Select "Add New Empty Group".
Name the group "Door_Open_and_Close" (no spaces between words)

4. Click "OK".



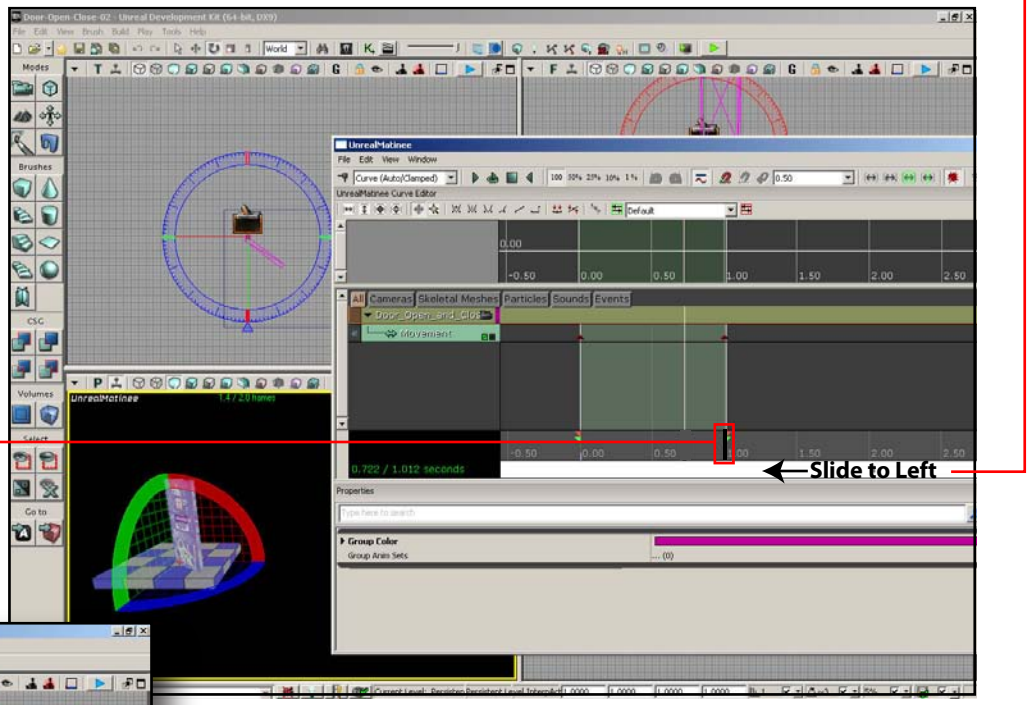
Now you can see the link between the Door animation and the Door Mesh in the Kismet panel.

5. Next, we will right click the "Door Open and Close" track in the Matinee Editor and select

6. Select "Add New Movement Track".

UnReal automatically sets timeline with a"Keyframe" to begin the door animation.
All we will do is set another keyframe that ends the door animation. In other words - Closed to Open

Note: "The Timeline Marker" may be difficult to see. So, slide the white bar underneath the Timeline to the left.



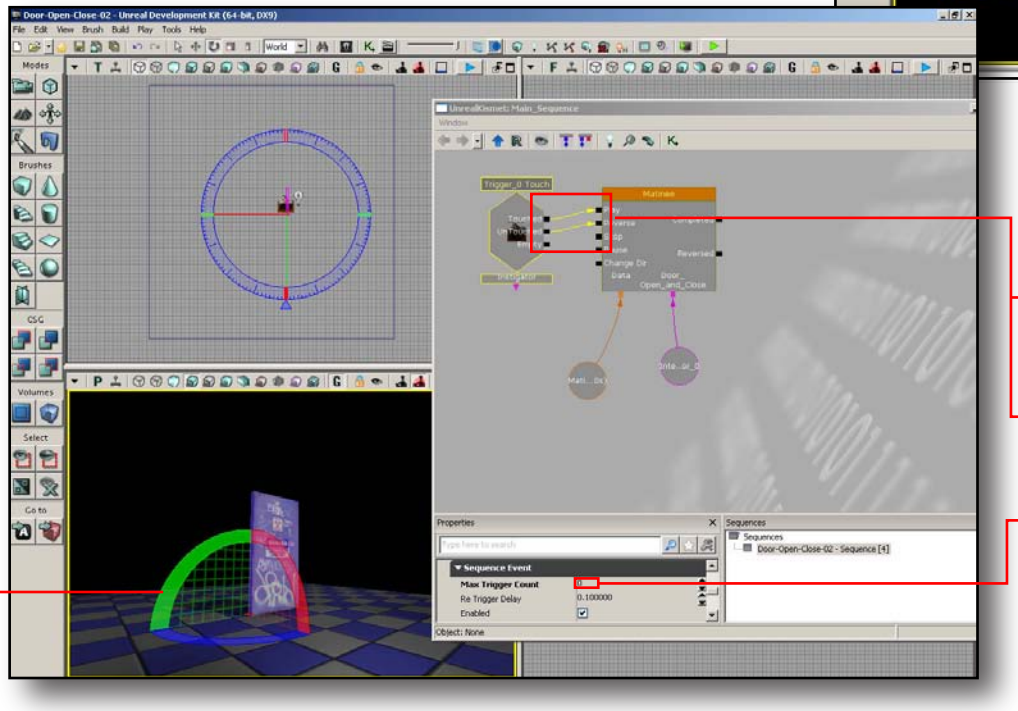
1. Move the timeline marker to 1.00 seconds. (The "marker" is the vertical black bar)

2. Then click the "enter" button on your keyboard. Automatically, a new keyframe has been added.

Now we will animate the door

3. Make sure the keyframe at 1.00 is selected

4. In the viewport, select the door and rotate it from a closed position to an open position.



Last we will hook the 2 Kismet nodes together, the trigger and the matinee nodes.

5. Link the the "Touch" node to the "Play" node by dragging a connection wire.

Link the "Untouched" to the "Reverse" node, this will allow the door close.

6. Select the "Trigger" node and set the "Max Trigger Count" to "0", this allows the door to open and close multiple times.

Save the file. Add a light and play the game.