

IDS 4687 Games Engines – UnrealEd Tutorial 10

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This document can be downloaded at: www.planetunreal.com/squacky/UnrealEd-Tutorial10.doc

Tutorial 10 – Inventory / Bot Pathing

Adding inventory is simple. Open the Actor Class Browser and select the item you want to place in your map. Then right click in the 3D Window on the floor and place the item. The UT weapons and pickups are located in the following places:

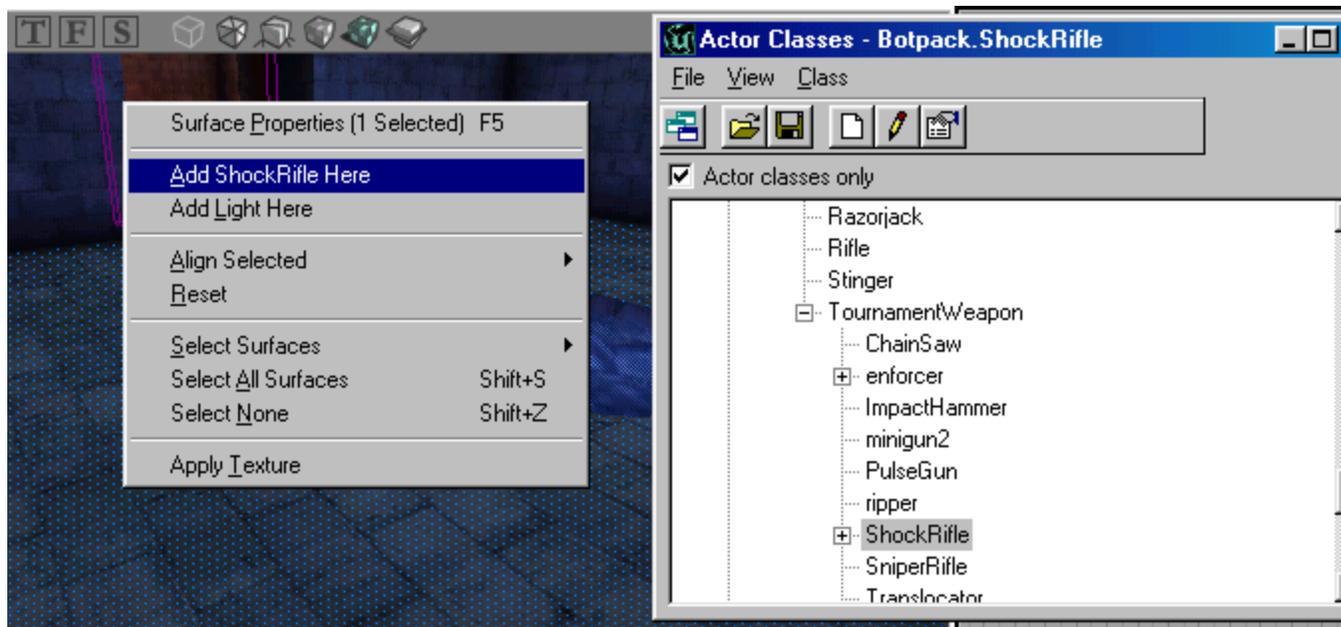
Inventory>>Pickup>>Ammo>>TournamentAmmo

Inventory>>Pickup>>Health>>TournamentHealth

Inventory>>Pickup>>TournamentPickup

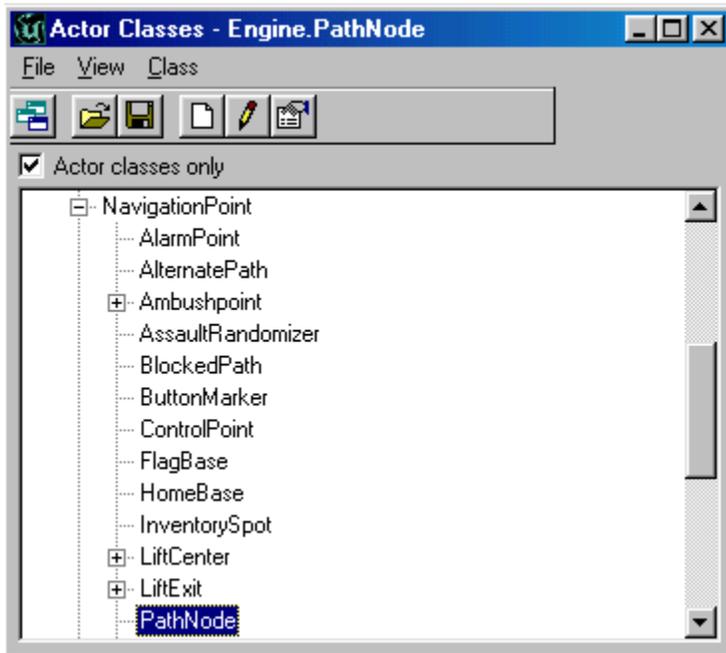
Inventory>>Weapon>>TournamentWeapon

Don't add any other pickups or weapons listed because they are from Unreal 1 and may not function properly in UT. Place 1 weapon and some ammo in each of the two rooms of your map. The main things to remember when placing inventory are: 1) don't place items too close to walls or Bots may not be able to get them, 2) don't place items on top of each other since it looks bad and 3) make sure the items are not buried partially in the floor. This happens sometimes.



Now we will add BotPaths to the map. These are the paths the UT Bots follow around the map. First add a few more player starts in each room of your map. You can watch how Bots navigate your map by typing "Ghost" into the console when you are running the map, and then flying outside the map where the Bots cannot see you. This map is very small so after you start the map you can type "killpawns" to kill all the Bots and then type "addbots 1" to add a single bot.

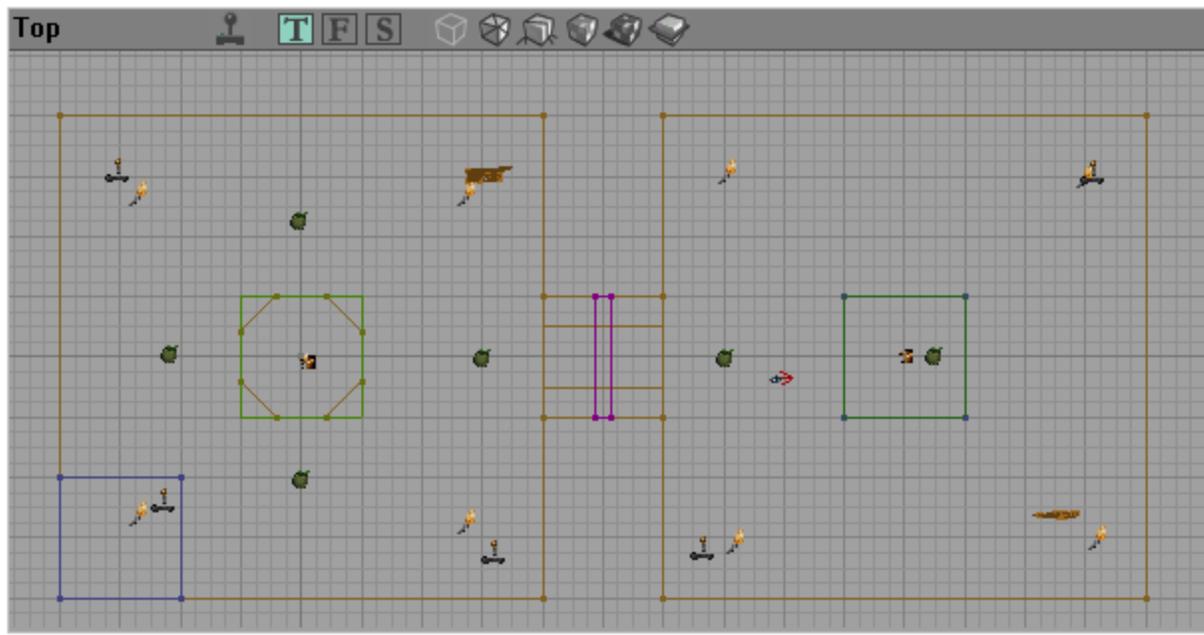
Bot paths made by placing PathNodes in your map. These are found in the Actor Class Browser under NavigationPoint>>PathNode.



Their icon looks like a small apple. When placing your PathNodes remember the following.

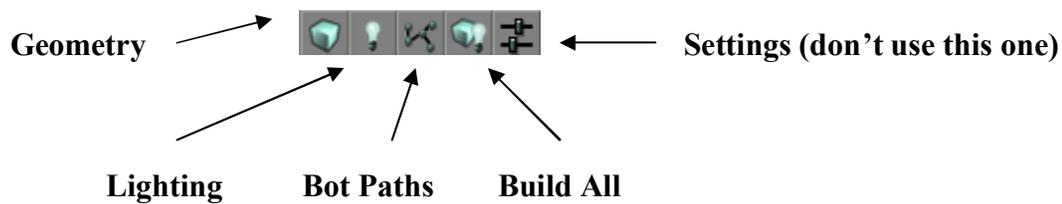
- 1) There must be a straight, un-obstructed line between each PathNode.
- 2) Navigation Points, like PlayerStarts, act as PathNodes, so don't place a PathNode next to a PlayerStart.
- 3) Inventory items act as a PathNodes as well, so don't place any PathNodes on top of Inventory.

Using the 3D window click on the floor in the map where you wish to place the PathNode. Arrange your path nodes like in the map below.

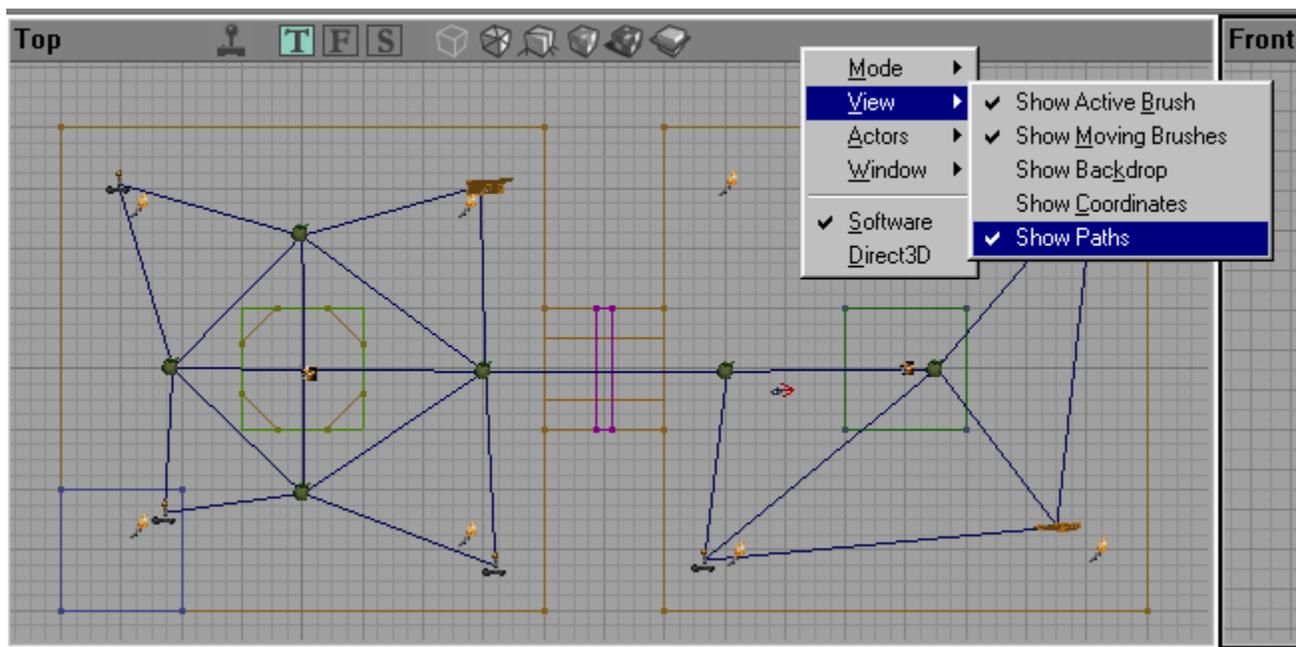


In the left side room we want the bots to walk around the pool. The right side room just requires a node by the door and a node in the center of the room.

Now hit “Build Paths” to calculate your bot paths. Note that you can build geometry, lighting, or paths separately, or do them all at once using “BuildAll”.



To see the calculated paths right click the top of a window and select View>>ShowPaths.



Blue paths are “good” paths the bots will use. Red paths have some type of problem and the bots will not use them. Below a path node was moved to cause a “Broken” or red path. The cause is likely because the direct line between the two paths will cause a Bot’s collision radius to hit the wall. Remember not to place your path nodes too close to walls.

