
Subject: Weapons Explained

Posted by [Anonymous](#) on Mon, 14 Oct 2002 04:15:00 GMT

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Ok I know allot of you people have been trying to figure out how to create your weapons so they are correctly positioned and oriented depending on if its viewed in 1st or 3rd person or if its on the character's back. Well I'll try to make it easy to understand. First you need 3 individual models for the weapon. It's always a good idea to use same name convention WW uses for their models, I'll use the auto-rifle weapon for the example. - Weapon models for 3rd person view are named like this: `w_rifl.w3d` (where `rifl` is your weapon name) - Weapon models for when the gun is on the character's back are named like this: `w_rifl_b.w3d` - Weapon models for 1st person view are named like this: `f_gm_rifl.w3d` (`gm` proly stands for Gun Mesh or Gun Model, or whatever you prefer) 3rd person weapon models:-----All characters have a "gun bone" that tells renegade which hand does hold the gun. the weapon's pivot point is positioned at this "gun bone" position. In other words, once you have created your weapon mesh, move its pivot where you want the hand to be. you fix the style that the character should hold the gun in Level Editor i.e.: Shoulder: uses both hands (second hand position is set automatically by Renegade) Pistol: uses one hand etc... Now the weapon and its pivot needs to be correctly oriented in RenX: Weapon Orientation: Viewing from top, the weapon should be pointing to the right, and the top side of the weapon is facing you. Pivots Axes: X is pointing to the front of the gun (right in top view) Y is pointing to the top side of the gun (pointing at you in top view) Z is pointing to the right side of the gun (down in top view) Weapons Bones: MuzzleA0, A1: position at which bullets are fired, muzzle bones pivots axes are oriented the same way the weapon's pivot is. eject: position at which shells exits, its pivot's Z axis is pointing to the back of the gun and its pivot's X or Y determines which way the shell exits (I think X does) Origin: use world axes coordinate, positioned a little back of the weapon's pivot (approximately at elbow's position) If you use a muzzle flash aggregate, link it to the muzzle just like for vehicles. 1st person weapon models:-----For 1st person view, you can use the same model, or create a simplified version of it with details only in the viewable parts of the gun. Also, for 1st person view, you have to create a magazine mesh for the reload anim. Like for 3rd person view, the weapon's pivot position determines where the hand should hold the gun. Weapon Orientation: Orientation of the weapon for first person view is different then the 3rd person. Viewing from top, the weapon should be pointing down, its right side facing you. Weapon Pivot axes: X is pointing to the top side of the gun (right in top view) Y is pointing to the back side of the gun (up in top view) Z is pointing to the right side of the gun (pointing at you in top view) Magazine Pivot axes and position: X is pointing to the right side of the gun (pointing at you in top view) Y is pointing to the back side of the gun (up in top view) Z is pointing to the top side of the gun (right in top view) The pivot of the magazine is positioned at the top of the magazine mesh (pivot's Z max), back most of the magazine (pivot's Y max) and left most of the weapon side (pivot's X axis). The magazine mesh itself is positioned wherever you want it to be on the gun. Name the magazine: `f_cm_rifl` (where `rifl` matches your weapon's name) Bones: MuzzleA0, A1: for 1st person view, muzzle bone uses a different pivot orientation, X points direction of bullets (down in top view) Y is pointing to the right side of the gun (pointing at you in top view) Z is pointing to the top side of the gun (right in top view) eject: eject bone's pivot orientation is also different from 3rd person view, X should be pointing direction of shells to exit (right, up 45 degree) Y is pointing to the back side of the weapon (up in top view) Z is pointing right, down (45 degree) Origin: Origin might be determining how far the gun is from the camera, in the auto-rifle w3d, it is centred to the weapon's pivot position, aligned with world coordinates. Back weapon models:-----This is the model used

when on the back of the character, there is no bones for this model. Only the mesh itself and its origin. Weapon orientation: Same orientation of the 3rd person model. Viewing from top, the weapon should be pointing to the right, and the top side of the weapon is facing you. Weapon's pivot orientation: Since it is on the character's back and that the weapon is not straight on the back, the pivot axes determines the angle of the weapon on the character's back. Since this would be hard to explain, here's the XYZ rotation in absolute world coordinates for the auto-rifle. To set your weapon's pivot rotation simply click on the "affect pivot only" in the hierarchy tab, then right click on the rotate tool and type this in absolute world X,Y,Z: X: -0.9516 Y: -7.6463 Z: 7.3055. Weapon's pivot is centred with the weapon origin. Origin is positioned at the same point where the hand should hold the gun in 3rd person view. (weapon's pivot point of 3rd view model) Origin using world axes coordinate as always.----- Ok that's it for the RenX part, now all the rest is set in Level Edit, try messing around with settings until you get the results you wish. Hope that helped, Abjab [October 15, 2002, 20:09: Message edited by: Abjab]
