7.3.1 Rigging - Armatures - Introduction

Armatures

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Introduction

An “armature” is a type of object used for *rigging*. Armature object borrows many ideas from real life skeletons.

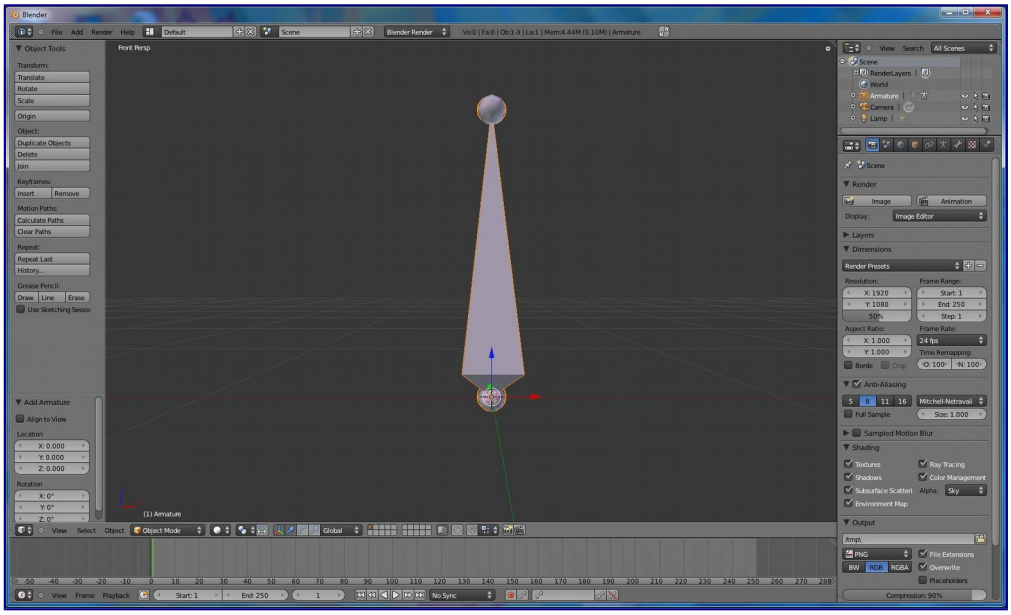
Your first armature

In order to see what we’re talking about, let’s try to add the default armature in Blender.

(Note that armature editing details are explained in the *armatures editing section*).

Open a default scene, then:

- delete all objects in the scene
- make sure the cursor is in the world origin with `Shift-C`
- press `Numpad1` to see the world in Front view
- then, either: - in the Main Menu, Go to Add > Armature > Single Bone - -or- in the 3D view, add an armature with `Shift-A` pop-up ‣ Armature ‣ Single Bone
- press `NumpadDelete` to see the armature at maximum zoom



The default armature Toolbox: –> Add Armature –> Single Bone

The armature object

As you can see, an armature is like any other object type in Blender:

- It has a center, a position, a rotation and a scale factor.
- It has an ObData data-block, that can be edited in *Edit mode*.
- It can be linked to other scenes, and the same armature data can be reused on multiple objects.
- All animation you do in *Object mode* is only working on the whole object, not the armature's bones (use the *Pose mode* to do this).

As armatures are designed to be posed, either for a static or animated scene, they have a specific state, called "rest position". This is the armature's default "shape", the default position/rotation/scale of its bones, as set in *Edit mode*.

In *Edit mode*, you will always see your armature in rest position, whereas in *Object* and *Pose mode*, you usually get the current "pose" of the armature (unless you enable the *Rest Position* button of the *Armature* panel).

Armature chapter overview

In the "Armatures" section, we will only talk about armatures themselves, and specifically we will talk about:

- the armature object *panels*
- the basics of *bones*
- the different *armature visualizations*
- the armature *structure types*
- how to *select* its parts,
- how to *edit an armature*
- how to *Edit Bones*
- how to *edit bones properties*
- how to sketch armatures with the *Etch-a-Ton tool*
- how to use *templates*