

preparing to animate



Cascade Group ~ *States menu* ~ Previously, it was stated that picking the “parent” axis followed by each of the Bones axes in the correct order would still produce a haphazard hierarchical grouping when used in conjunction with the **GROUP** command. However, by selecting **CASCADE GROUP**, the correct grouping hierarchy will result. Picking the axes in the correct order is all-important when using this grouping command.

To summarise; the object’s axis should be picked first, forming the “parent” of the group. The first Bones axis being used to anchor the object’s geometry is multi-picked next, then the Bones axis controlling the geometry at the first joint and so on until the last Bones axis governing the very last joint at the tip or end of the object is multi-picked. Once all the axes have been picked and in the correct order, using the **CASCADE GROUP** command will link all the axes in a “chain”.

Faces

Having defined sufficient Bones axes to control the articulating areas of the object’s geometry, correctly grouped them in a cascading hierarchy with the object’s axis as the parent, the faces that will move and those that should deform at each joint can now be assigned to their controlling Bones axes. As we have seen earlier (see “Chapter 2”) selections of faces can be linked together to form Subgroups. In **Imagine**, the Bones animation system uses two types of Subgroups of faces to define which areas of geometry move and/or rotate with the controlling Bones axis and which will stretch or compress at the joint areas. This may initially appear to be a relatively complicated system, but it does allow far greater control over the geometry. Each Bones axis must have both Small and

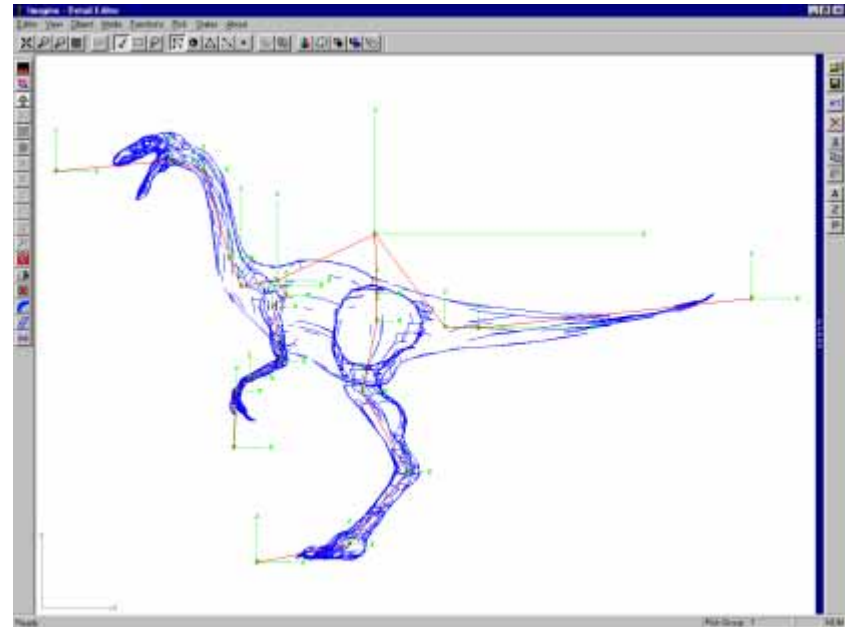


Figure 6-24: Selecting the axes in exactly the same order as in Figure: 6-23 but using **CASCADE GROUP**, connects all the objects in proper hierarchical manner.