OBJECT MAKING PROCEDURE

This document outlines the basic steps and requirements for creating the model for an object, animating a skeleton with the proper registration, exporting the resultant skeletal animation, and rendering the resultant object. The primary goal of this document is to provide a trackable procedure to allow for the identification of mistakes and to allow new resources to come up to speed more quickly.

The creation of an object is entirely coordinated by the Object Database (DB) and SourceSafe(SS).

CREATING THE MODEL

1) Open DB, look at description of object. Check animations required and check sprites required.
2) Build model in MAX. Use relevant lighting, material and geometric templates. The following restrictions must be observed:
    - All moving objects or object groups must have a dummy object as the handle for transformation, **example**: a refrigerator door made up of many objects would have as a parent object a dummy used for rotating the door as it opens.
    - No dummy object may have a renderable object as a parent
    - All objects in the model, dummy or rendering, must have a single master dummy as parent
    - All dummy objects must have a corresponding entry in Max's selection sets popdown menu
    - All objects belonging to a separate sprite must have a corresponding entry in max's selection set popdown menu under the name of the sprite it is associated with.
3) Using the master dummy, translate the object by 1 tile (3.0 feet) in the direction required for the skeletal animation. In almost all cases, this will be –3.0 feet in World Y. Then freeze the master dummy.
4) Save file named as in DB. In SS, add the max file to the object's project in TDSContent, entering a comment in the comment window that the model is "ready for skeletal animation", and describing and unusual or important information about the model the animator may need to know. (MORE INFO HERE AS DEVELOPS)

ANIMATING THE SKELETON

1) Open DB, look at description of required animations in the DB, the number of frames in any animating sprite, and note all specified skill names.
2) Check out object .max file.
3) Open file. Create 2 biped skeletons. Load <skeleton>.fig, the skeleton that will be used for the animation.
4) On the skeleton that will actually be exported, load the appropriate starting template .bip file to establish the 1st footsteps in the correct standard position. On the 2nd skeleton, load the appropriate Comparison Bip .bip file.
5) Animate the skeleton, using copy and paste from the 2nd skeleton to ensure that the exporting skeleton has the required start and stop poses. Animate the model using the provided dummies. The master dummy is NEVER animated
6) Tag the animation.
7) Save and export the animation. Use the name of the max file as the export name of the .cmx and its associated files.
8) Repeat steps 3 through 7 for any animations that cannot be dreived from the original animation with the use of tags.
9) Add the .cmx, .bin, and .txt files to the TDS\TDSContent\People\cmx\ project.
10) Check in the object .max file, commenting that the skeletal and object animation have been done, and the skeletal animation exported.

RENDERING THE OBJECT SPRITES

1) Check out object .max file. Save it under a second name, then check original back in, with comment that the spawned copy has been made.
2) Using the xevt tags for sprite drawing as a guide, set a transform key at each xevt time location for each animating dummy.

3) Move each transform key so that the first key is at time zero and that each successive key is in sequential frames, with no time left between each frame. Example, before, xevt1's time might =f23, xevt2=f45, and xevt 3=f67. Afterwards, the keys would be at time 0,1,2…..
4) In the new file, unfreeze the master dummy and translate the model back to the cage tile, 0,0,0. Freeze the dummy.
5) Using the selection set menu, hide the parts of the model that correspond to other sprites.
6) Set the frame count in the Z-sprite generator to the correct number and render.
7) Repeat steps 3-4 until all parts of the model have generated .tga's
8) Add .max file file to the object's project in TDSContent, commenting that the time was collapse, the renders were made and listing the names of the resultant .tga's
9) In Photoshop or Debabelizer, create an 8bit .bmp version of each .tga, all .bmp's sharing the same palette. Add all .tga's and .bmp's to the object's project in TDSContent.