## **Computer Animation III**

Technical Standards – REVISION - October 22

- 1) The master content folder is located on the ASH CA III Server machine. It is in the Documents subfolder under the cs334 login's home folder.
- 2) The master content folder has the following subfolders.

Objects For all geometry. Note that while surface information is saved with the geometry file,

texture maps are not.

Scenes For all scene files. This includes not only the shots from the film but any active character

setup files, light files, etc.

Images For all image maps used as textures, backdrops, or any other way that Lightwave knows

about. Note that paint fixes and other painted frames also live in this folder.

Renders For all frames that are generated by Lightwave. These will NOT be backed up on a

nightly basis like all of the other folders. They will only be backed up when they are

approved.

Comps For all frames that have been composited from renders, paint fixes, 2D effects, etc.

NOTE – this is really editorial's realm so please discuss it with them.

Art For all reference artwork, surface samples, etc.

- 3) All models have at least two versions: <modelname>Hero.lwo and <modelname>Proxy.lwo, with the Hero file being the master model and the Proxy file being a standin for layout purposes.
- 4) The actual shot files will be named A#tag.lws and B#tag.lws, corresponding to the shots from the above and below ground units, respectively. If shots are inserted late in the game, lowercase letters can be appended to keep the shot numbers in alphabetical sequence (e.g., A5b.lws). The tag part of the name MUST be used to identify the version of the shot. Here are examples:

TAG	EXAMPLE	DESCRIPTION
layout	B3layout.lws	The layout version of B3.
layoutFinal	A16layoutFinal.lws	The final layout of A16.
anim	A2anim.lws	In-progress animation of A2. Note that version numbers should be added so we can go backwards if necessary (A2anim2.lws, A2anim3.lws, etc).
animFinal	C1animFinal.lws	The final animation of C1.
light	B12light.lws	The in-progress lighting of B12.
lightFinal	B2lightFinal.lws	The final lighting of B2.

- 5) For cross-machine compatibility, no files in the Objects, Scenes, or Images folders will have spaces in their names and all extensions will be three letters long (e.g., "Roper Skin.tiff" is bad. "RoperSkin.tif" is good).
- 6) Rendered frames will be kept in subfolders of the Renders folder. Each shot will have its own folder. Frames should be named with the shot name as a prefix, then with words to identify what kind of render it is:

TAG	EXAMPLE	DESCRIPTION
full	B3c_full_094.tif	A frame at film resolution (1150 x 622)
half	A16_half_001.tif	A frame at half resolution (575 x 311)
final	A2 full final 121.tif	A frame that has been rendered with the agreed-upon settings for
		antialiasing and motion blur.

(continued)

(others)

(as necessary)

7) People should NEVER use the master content folder as their working content folder! A mistake could mess up the entire show. Instead, the necessary files should be copied to a temporary local folder and be used there. Here's how:

Run Lightwave.

Set your content folder to the master content folder.

Load the scene you are going to work with. IF YOU SEE ANY ERRORS OR MISSING FILES, contact the unit lead responsible for the scene and let them know what you saw. Emailing the entire class list is better than nothing if you can't find the contact's information.

Under the Scene tab, under the Utilities category you will find Generics. This pulldown menu contains, among other things, a plugin called Content Manager. Select it.

Use export scene mode, give it a new (temporary, local) content folder, and run. If you want to automatically have Lightwave reload the exported scene, select that option.

Content Manager is documented on page 6.26 of the Lightwave 7 pdf manual (page 128 of the 1078-page pdf file). Please learn how it works so you can play well with the rest of us!

- 8) After local work is complete, the necessary files must be re-installed to the master content folder. A one line email to the class list before copying over the changed files should suffice as warning that this is happening, as long as you're sure to check your own mail before re-installing (just in case someone else made a change to the same scene and re-installed their work while you were doing yours).
- 9) All scene files that are to become actual shots in the movie should have the following properties set. A template scene with these properties (named shotTemplate.lws) should be made available in the Scenes folder for you to duplicate.

Camera Properties: resolution 1150x622. Pixel aspect ratio 1.0. For aperture height, choose the 35mm film option (0.5906"). Instead of "zoom factor" we should work in lens focal lengths (mm). When antialiasing/motion blurring, use dithered motion blur with a blur length of 34.5%.

General options (o): 24 frames per second.

Display options (d): camera view tab, alternate aspect overlay set to 1.33.

Render options: data overlay should be Frame Number (with the scene file name as the label). Of course, this should be turned off for final renders!

All rendered frames that need to go to editorial should be TIFF 24 or TIFF 32. Note that the Lightwave image exporting routines don't compress.