General Information
Summary of Strata Live 3D, Strata Live 3D PDF and Web 3D Features

Strata Live 3D Capabilities

- Reads VRML and K3D format files
- Automatically extracts geometry, appearance, and animation
- Edit hierarchy and object names
- Copy/Paste sections of the hierarchy
- Copy/Paste parts between different models
- Scale, rotate, and move mesh data
- Adjust positions, orientation, and pivot points of objects
- Insert flexible wires, cables, straps and sheets, using dynamic Elliptical Hermite Lofts
- Adjust scene lighting and orientation
- Create new range-of-motion animations
- Create material swaps (for texture or color changes)
- Create color curve animations
- Create object and material fade animations
- Edit material properties: color, texture, lighting
- Edit mesh smoothing groups
- Set up initial object position, zoom and rotate limits, etc.
- Graphically create animation scripts moving multiple parts, camera view, scene orientation, and lighting
- Easily specify conditional relationships between scripts, to create robust simulations
- Automatically select texture and geometry compression parameters
- Preview web compression and streaming prior to export
- Handles models with hundreds of megabytes of texture
- Handles models with millions of polygons
- Optimizer automatically reduces polygon count, under user control
- Optimizer automatically eliminates unneeded hierarchy
- Easily edit underlying XML representation of Master Model
- Create and Edit meta-data associated with the model
- Export animated models to plug-in-free Web 3D
- Export animated models to plug-in-free 3D PDF
- Available for both Windows & Mac

3D PDF Capabilities

- 3D PDF requires no special plug-ins: works in Adobe Reader 7 or later
- Generate 3D PDF directly from Strata Live 3D, no Acrobat required
- Edit generated 3D PDFs using Illustrator or Acrobat
- Insert animated 3D models in any PDF using Acrobat Pro
- Automatically includes all animation behavior: no Javascripting required
- Automatically includes Strata Live 3D's easy-to-use interactive Toolbar
- Automatically includes unique "Measure" feature
- Automatically compresses all textures to ensure best performance on all hardware
- Uses Strata Live 3D optimization to produce far smaller PDF files (typically 50-70% smaller than other tools)
- Most robust U3D compressor in the industry -- easily handles models that crash other tools
- Only solution that supports enhanced, dynamic lighting models not found in U3D
- Only solution that supports real-time texture and color swaps

General Information

- Available for both Windows & Mac

Web Capabilities

- Strata Live 3D Web viewer requires no special plug-ins: relies on Java 1.1 (circa 1997) or later
- Strata Live 3D Web "Just works" on more than 90% of computers (Windows, Mac, Linux, Solaris, etc...)
- Strata Live 3D Web is the dominant 3D viewer used by major product companies
- Uses sophisticated Meson Platform for rich 2D interfaces and dynamic 3D scenes
- Comprehensive optimization produces the smallest files in the industry
- All HTML generated completely automatically
- Web viewer 2D capabilities:
  - Alpha channel compositing of an arbitrary numbers of layers
  - Smooth animation of any attribute (such as alpha, or position)
  - Hot areas, including pickable pixels, and rectangular areas
  - Mouse cursor control
  - Context (right click) menu
  - Unicode support for multi-lingual applications
  - Anti-aliasing text engine with CSS-like font control, drop shadow generation, and internationalized word-wrapping capability
  - Multi-state images and text (for mouse-over or push-button effects, for example)
  - Separate images for color/alpha information (for example, to use a JPEG image for color, and a grayscale GIF for the alpha channel)
  - Image tiling (primarily for repeating backgrounds)
  - Rotation, scale, skew, bilinear-filtering, and oversampling of any 2D element, including rendered text or even the rendered 3D scene
  - Wavelet-streaming encoded images
- Web viewer 3D capabilities:
  - Dedkov compression produces the smallest 3D models across the largest range of model types (from photo-real high-texture models, to untextured scanned models)
  - JPEG, GIF, and Wavelet-streaming textures
  - Dynamic textures can be generated by a Meson program:
    - To embed 3D scenes onto texture in 3D scenes (for example, to show a moving scene on a camcorder model's view screen)
    - To use rendered text in the 3D scene (for example, to simulate the menu system of a mobile phone)
  - Real-time, dynamically generated shadows
  - Perspective-correct bi-linear filtered textures of unlimited dimensions
  - Mip-map style continuous texture anti-aliasing
  - 32-bit ARGB, 16- and 12-bit YCrCb, and 8-bit Y (constant CrCb) texture pixel formats, with optional error-diffusion dither
  - Photoshop-compatible color curves applied to texture images in real time
  - Real-time edge anti-aliasing
  - Stable-scene 256x oversample progressive anti-aliasing
  - Perspective-correct Phong shader with no performance penalty
  - Specular highlights and chrome shading model (to convey shininess without the need for cumbersome reflection maps)
  - Dynamically-generated flexible objects (elliptical hermite lofts), for modeling wires, ribbon cables, straps, paper, etc.
  - Illustration rendering mode automatically turns 3D models into "sketches." Support for both line drawing over realistic shading, and line drawing over flat color.

General Information

- Reuse the animated master model in 3D PDF, and on the Web.

Unique solution ID: #1094
Author: Strata Software
Last update: 2010-10-25 23:04