

POWERANIMATOR

THE ART OF ADDICTION

FOR GAMES & INTERACTIVE MEDIA



Image courtesy of Naughty Dog. "Crash Bandicoot" is a trademark and copyrighted property of Universal Interactive Studios, Inc.



Wing Commander IV
C. Douglas, M. Vearrier,
S. Murphy, Origin Systems, Inc.



Mr. Bones™
Courtesy of
Sega of
America



ADVANCED TOOLS THAT MATCH THE PACE OF YOUR IMAGINATION.

TODAY'S GAMES

need to be faster, smoother, and more believable than ever. You need to squeeze more polygons, textures, and animation into the game.

We know that.

And you can do it all as an artist — in a single unified environment that makes it easy to move from modeling to texturing to animation and back again in any order as you continuously refine and reinvent.

It's no wonder that some of the hottest selling titles were created with PowerAnimator™ — Crash

Bandicoot, ESPN Extreme Sports, Quake and Tunnel B1.

Better displays. Better selection modes. More translators.

Let the players' addiction begin.

MORE TASK SPECIFIC TOOLS FOR GREATER CREATIVE EXPRESSION.

PowerAnimator is a complete system that helps you focus your creative vision, turning out rich, lifelike, captivating models that are as efficient and fast as your twitcher can handle.

PowerAnimator gives you amazingly accurate polygonal texture placement, a new texture UV initializer that will reset UV's on imported or stitched models, and over 40 polygon modeling and editing tools.

Improved display and polygon selection modes make it easier to isolate what you're working on without the distraction of other elements.

Not only does the system calculate and store colors on each polygon vertex — great for rendering stuff like highlights and shadows — in version 8.0 we added shaded color-per-vertex display for better preview.

Use the integrated particle system to add an incredible dimension of realism that other systems just can't match. Smoke, clouds, even hair.

Use Digital OptiF/X™ to create ultra-vivid explosions, light beams, embers, lava, photon torpedoes, motion blur and fire.

Everything reacts with everything else.



Image courtesy of Naughty Dog. "Crash Bandicoot" is a trademark and copyrighted property of Universal Interactive Studios, Inc.



Silicon Valley Courtesy of DMA Design, Ltd.



G. Bruvel



Disruptor
Insomniac Games, Inc.



Kronos

METACYCLE — IT HAS 'MADE FOR GAMERS' WRITTEN ALL OVER IT.

If you've never worked with PowerAnimator, you've never seen anything like MetaCycle™.

MetaCycle lets you create a network of short cycles of movements, and then create transitions that blend the cycles together.

Nothing else helps you run cycles around the competition like MetaCycle.

Cycle Smoother™ blends the start and end frames of short

cycle segments to create a totally seamless cycle.

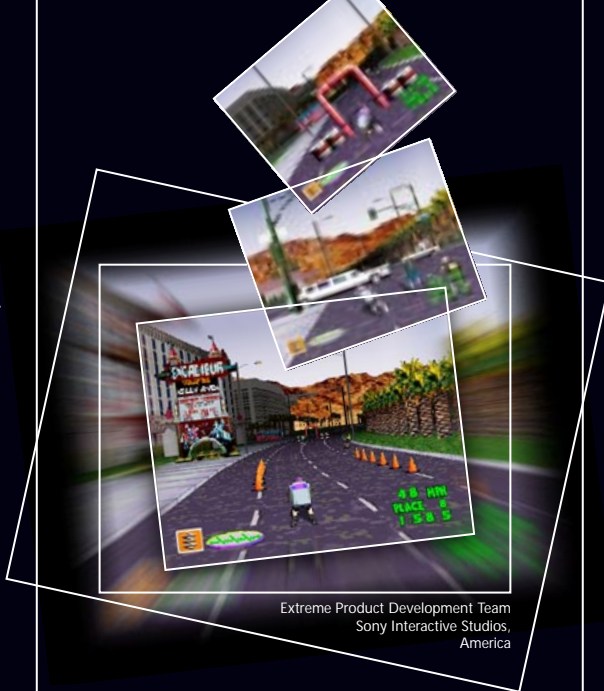
And if you're developing for the PlayStation™, MetaCycle gives you sample code to work with.

MetaCycle lets you branch from virtually any point in a cycle to the next cycle smoothly. Slice and dice all you want — with MetaCycle, your animation is never rough around the edges.

Dynamics Engines™ allows you to apply separate dynamic properties to parts of the geometry to give

characters and objects a more realistic look. So now you can get your character to run — and have a belly jiggle differently from the rest of the character. In fact, you can combine any movement with run-time computed dynamics properties for unique and controlled animation playback on the game platform.

You can even give your characters a stretched and squashed animated look, similar to the Tex Avery characters of traditional animation.



Extreme Product Development Team
Sony Interactive Studios,
America

API AND IMPORT — NO BORDERS HERE.

Complete open access via a standard API means you can write your own plug-ins to manipulate your work and modify the data you want — polygons, animations, lights, cameras, shaders, textures, whatever — with both file-level and live memory access to the internal data structure.

You can even add customized menus and dialog boxes.

And we support loads of input formats like OBJ, DXF, and IGES, and a whack of output formats including OBJ, Inventor, VRML 1.0, VRML 2.0, IGES, DXF, QuickTime, TIFF, RIB, etc.

CERTIFIED FOR EXPORT

Alias|Wavefront is certified for development translators on all three major console platforms: Nintendo, Sega, and Sony. And now PowerAnimator lets you export directly to Microsoft's Direct3D for the PC market. Output includes geometry, textures, animation, and MetaCycle information.

For web site developers, VRML 2.0 is the standard for 3D content delivery. Our translator converts polygonal geometry, textures, animation, and http links into the VRML 2.0 file standard. And you can easily combine PowerAnimator with Silicon Graphics' Cosmo™ web tools for viewing and VRML output.

DID WE FORGET TO MENTION...

PowerAnimator also has industrial strength NURBS modeling tools, animation capabilities that would astound you, and a Hollywood-famous renderer. Our completely open and accessible system has been used to create the pixels that earn some of the best shelf space around with titles like Donkey Kong Country, Killer Instinct, Wing Commander IV, Phantasmagoria, Mech Warrior 2, and many more. PowerAnimator has all the tools you need to create the ultimate look for cinematics or real-time gameplay.



TUNNEL B1, Courtesy of NEON
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GTE Entertainment Graphics Department

POWERANIMATOR FOR GAMES & INTERACTIVE MEDIA



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Polygon Modeling

Tools for creating and manipulating vertices, edges, and faces

- **Create Polygons** - build polygon by polygon, start from a polygonal primitive, or convert from a NURBS surface.
- **Surface Building** - create polygon surfaces using any of the standard modeling tools.
- **Extrude** - create new shapes by extruding, scaling or rotating edges and n-sided polygons - with surface and edge snapping.
- **Stitch Curves** - create polygonal surfaces by defining two curves.
- **Transform** - move, rotate and scale edges and polygons either in world space or in local space as defined by the polygon or edge normals - with surface and edge snapping.
- **Insert** - manually or automatically add vertices and edges.
- **Delete** - delete edges and vertices.
- **Extract polygons** - separate a subset of polygons from an existing polyset.
- **Combine Polygons** - create a polyset from a collection of independent polygons or polysets.
- **Split** - automatically divide polygons using a number of parameters.
- **Collapse** - remove edges and polygons by collapsing related vertices.
- **Clean Polygonal Data** - remove redundant vertices, two point and zero area polygons, and concurrent polygons.
- **Polygon Reduction** - automatically reduce the number of polygons in a polyset or a selected area.
- **Normal Control** - flip individual normals, or unify all normals in a connected polygonal mesh.
- **Polygon Display** - display backface-culled polygons, display topology (view surface boundaries), display selected polygon, display color-per-vertex (wireframe or Gouraud shaded).



OpenModel / OpenAlias

Open data access through an established API

- **Complete Access** - view and edit all information about geometry, textures, cameras, lights and animation in a model.
- **OpenModel™** - create stand-alone and batch capable translators and file filters.
- **OpenAlias™** - create plugins to transparently add tools, menu items, and option boxes to the PowerAnimator interface. Add realtime functions to delete or modify geometry, textures or animation stored in memory. Also create plugins that add user definable data to any object, polygon, or vertex.
- **Modifiable** - source code to many tools and translators provided as templates.
- **Current** - API revisions are included simultaneously with each product release.

MetaCycle

Non-linear character animation system

- **Transitions** - automatically generate all selected transitions between multiple animation cycles.
- **Cycle Smoother** - blends first and last frames to create seamless cyclical animation.
- **Output** - automatically create a console downloadable state table and all generated transitions.
- **File Management** - manage multiple characters and animations across multiple files and stages.
- **Modify Animation** - correct motion capture problems and allow changes to neutral positions.
- **Create** - develop new animations by blending existing animations together.
- **Interactive testing** - allow artists to preview transitions without programming.

Game Export Tools

Convert files from PowerAnimator to game specific file formats

- Nintendo64™
- Sony PlayStation™
- Real Time Games (RTG) ASCII output
- SEGA Saturn™
- Inventor™ / VRML 1.0, VRML 2.0
- Microsoft® Direct 3D™

For a complete list of modeling, rendering, and animation features, see our PowerAnimator 8.0 brochure.

Textures

Tools for creating and placing textures on polygons

- **Create** - generate textures using a wide variety of procedural options for natural materials.
- **Texture Placement** - project, rotate, scale, tile, and offset external file textures on individual polygons or across polysets.
- **Texture Space Editor** - move individual or groups of texture vertices in texture space.
- **Color-per-vertex** - calculate, store, and display individual colors-per-vertex on a model. (Supported in SDL format).
- **Pre-lighting** - automatically calculate and store pre-lighting information for Gouraud shaded display.

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