Maya 7 Lets You Do More!

Maya 7 continues Alias’ tradition of 3D Innovation. This feature-packed release will help you realize your creative vision faster and more easily than ever before. Following is a listing of the technical features of Maya 7.

**Maya User Interface**
Maximize your productivity

- Get unmatched productivity through a combination of performance and workflow features including marking menus, 3D manipulators, selective display, and unlimited levels of undo.

**Data and Scene Management Tools**

Dependency graph architecture and scene segmentation tools boost productivity and workflow flexibility

- Fully editable and animatable construction history allows for extensive modification of modeled data without you having to rebuild your models.
- File referencing, scene segmentation and shader organization features enable efficient management of complex scenes with interchangeable levels of detail.

**Features List AT A GLANCE:**

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<td>Intuitive User Interface</td>
<td>Alias® is a world leader in user interface design. Maya includes an array of ease-of-use tools such as marking menus and interactive manipulators.</td>
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<td>Polygon Modeling</td>
<td>A full suite of polygon modeling and UV editing tools focused on games, interactive, and general use.</td>
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<td>NURBS Modeling</td>
<td>Use the most advanced curve and surface modeling tools available – based on award-winning Alias NURBS technology – for a powerful method of creating sophisticated NURBS models.</td>
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<td>Subdivision Surface Modeling</td>
<td>A choice of advanced hierarchical subdivision surface and non-hierarchical polygon mesh tools.</td>
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<td>Comprehensive range of key-frame and non-linear animation editing tools.</td>
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<td>A wide range of sophisticated deformation tools for modeling and animation.</td>
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<td>High-speed precision manipulation of hard and organic objects, with their behavior determined by physical rules, lets you realize a wide range of visual effects.</td>
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<td>Fully integrated particle effects can be controlled by forces based on real-world physics or by deformers.</td>
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Polygon Modeling

*Maya gives you a full complement of sophisticated polygon modeling tools*

**General Polygon Architecture**
- Non-manifold architecture, focused on the details of creating, editing, and texturing polygonal models, includes: polygon reduction; data clean up; multiple sets of animatable color-per-vertex; pre-lighting; user-defined normals, and normal map generation suitable for games/interactive users.
- A complete set of editing tools include: poke; cut; wedge; bevel; extrude; chamfer vertex; extrude along a curve; mirror cut; edge loop; edge ring, and pick walk tools.

**Polygon Texture Assignment/Editing**
- Streamlined workflow for creative texturing – including: UV creation and editing; auto-projection and relaxation; interactive lattice and smudge tools, and quick access to commonly used tools via the UV Texture Editor Toolbar.
- Multiple UV sets allow separate texture coordinates for separate texture channels.

**Optimization Tools**
- Polygon reduction, data clean up, blind data tagging and level-of-detail tools enable scene optimization for interactive display.

NURBS Modeling

*Maya delivers unparalleled, precision surface modeling tools*

**Precise Spline-based Curve and Surface Construction Tools**
- Includes lofting, birail, beveling, extrusion, trim, boundary, offset, boolean, rounding, square, and many other tools.

**Surface Editing and Stitching**
- Surfaces can be attached, detached, aligned, stitched together, extended, filleted, or rebuilt, with a high degree of control over parameterization and continuity.
- Multiple NURBS patches can be merged into a single polygon mesh.

Subdivision Surface Modeling

*Get access to a wide range of versatile subdivision surface tools*

**Smooth Proxy**
- Rapid construction of high-resolution polygon meshes.
- Choice of smoothing techniques provides fine control over the polygon count of the final mesh for rendering or level-of-detail.
- New variable creasing capabilities.

**Hierarchical Subdivision Surfaces**
- A distinctive hierarchical approach for local refinement allows you to begin modeling with a simple object and selectively generate increasing levels of detail only where needed.
- Partial and full creasing tools make it easier to construct both rounded, organic forms and hard-edged objects.
- Streamlined workflow for creative texturing, including UV auto-projection tools and UV Snapshot.
- Easy conversion to polygons or NURBS.

General Animation

*Maya delivers a broad range of specialized tools for keyframe and procedural animation*

**General Keyframing**
- Fast and intuitive controls for keyframing, including cut, copy and paste, allow animations to be created with ease.

**Path Animation**
- Animation of an object along a curve or surface with automatic bank, roll and yaw.
- Editing of motion path or other animation parameters during playback.
Technical Features

Animation Curve Representation
• A choice of Euler and Quaternion math options provide accurate results in all situations.

Graph and Dope Sheet Editors
• Powerful, precise function curves to control how animated attributes change over time.
• Rapid and intuitive global editing of keyframe timing.
• Lattice and fall-off tools aid the manipulation of dense keyframe data such as data from motion capture devices.

Generalized Constraints
• A comprehensive assortment of constraints including: parent, point, aim, orient (with animatable offsets), as well as scale, geometry, normal, tangent, and pole vector.

Blend Channels
• Multiple animation channels can be mixed with each other or with constraints into a single result.

Procedural Animation
• Use MEL procedures and expressions to create complex animation as an alternative to traditional keyframing.

Set Driven Key
• Keyframe complex relationships between animated parameters with this powerful and intuitive tool.
• Multiple attributes can be controlled with a single slider.

Trax Non-Linear Animation
• Non-destructive mixing and editing of poses and animation clips (including constraints and expressions) with total control over all aspects of motion blending.
• Libraries of performances can be stored and edited.
• Mutting and soloing capabilities provide control over each animation sequence in isolation or in the context of other animation.
• Multiple sound tracks can be matched up visually with animation and played back to facilitate character lip-synching and other audio matching requirements.

Animation and Dynamics Muting
• Animation on selected channels or key frames may be temporarily disabled to focus on a specific motion.

Ghosting
• View animation prior to and after the current frame so you can evaluate motion.

Character Animation
Maya gives you the tools you need to animate sophisticated digital characters

Skeletons and Inverse Kinematics (IK)
• Seven built-in IK solvers reduce the time it takes to create high-quality character animation; attributes include joint limits, preferred angles, joint mirroring, etc.
• Spline IK Solver allows for the easy animation of skeletal chains, like a character’s spine or tail, and includes easy-to-use twist and roll controls.
• Single chain and lightweight 2-bone solvers are optimized for real-time interactivity.
• New spring IK solver allows for precise control over multi-jointed appendages such as insect legs.

Full Body IK System
• Fast and easy rigging and posing of characters.
• Delivers natural articulation of biped and quadruped models.

Blendable IK/FK System
• Smooth blending between IK and FK animation.
Technical Features

Skinning
• Precise control of skin behavior, even in the most challenging areas such as shoulders.
• Smooth Bind Skinning allows geometry to be connected to skeletons so that the character deforms smoothly as joints are moved.
• New tools allow for easy editing and transferring of skinning information between models.
• Rigid Bind Skinning provides direct manipulation of geometry by individual joints.

Motion Capture with Dense Data Editing and Re-sampling
• Motion capture data can be easily incorporated into and manipulated inside Maya.

Motion Retargeting
• Motion capture, or other animation data, applied to one character can be reapplied to an entirely different character, even one with a different skeletal hierarchy.

Motion Redirection
• Original direction of existing motion capture, or other animation data, can be changed at any point-in-time.

Deformers
Manipulate geometry or particles into any desired shape

Deformation Tools
• Can be used statically for modeling and sculpting.
• Animated deformers can add life to creatures and other objects.
• Includes Lattices, Sculpt Objects, Skin Clusters, Point on Curve Constraints, Blend Shapes, Wires, Wrinkle Tool, Bind/Detach Skin, Flow, Jiggle, and Wrap deformers.
• Soft Modification tool allows for controllable falloff around vertices or points.
• Most deformations work on all supported geometry types, including particles.

Rigid and Soft Body Dynamics
Create effects through the dynamic interaction of geometry, including collisions between rigid and soft bodies

Rigid-body Dynamics
• Realistic, high-speed simulation of multiple rigid objects.
• Includes dynamic constraints such as nails, hinges, barriers, pins, and springs.

Soft-body Dynamics
• Accurate and rapid simulation of flexible objects allows for the easy creation of secondary motion effects such as muscle jiggle, floppy hats, etc.
• Powerful spring architecture offers precise control of any flexible surface down to the individual spring.

Particles and Fields
Maya delivers industry-leading particle tools acknowledged as the standard in visual effects

Extensible Integrated Particle System
• Fully integrated, with expression-based control over particle attributes, motion, and dynamics.
• Wizard enables easy particle sprite setup.
• Direct manipulators provide interactive control of particles, fields, and emitters.
• Particles can be controlled by texture values.
• Geometry instancing for the placement of individual objects, a sequence of objects, or an array of different objects onto any particles.
• Collision events can trigger multiple procedural animation effects.
Technical Features

Volume Controls and Emitters
- Intuitive control of particles via geometric shapes makes it easier to place particles where and when you want them.
- Standard Maya deformers can be applied and layered – including lattices, clusters, soft modification and non-linear – for non-physically realistic effects.

Field Controls
- Field forces – such as gravity, vortex, air, turbulence, etc. – can be applied to rigid-bodies, soft-bodies, or particle objects.
- Custom fields may be added via the extensive dynamics API.

Clip Effects
- Library of ready-made effects such as fire, curve and surface flow, shatter, fireworks, and lightning.

Maya Paint Effects

Ground-breaking paint technology for creating amazing natural detail on 2D images (including textures) or 3D objects attached to polygonal and NURBS surfaces

Powerful Painting Techniques
- Create animatable effects, such as making plants grow, unfurl and sway in the wind.
- Define a logotype in oil paint, and watch it draw on the screen.
- Paint repeating textures for game levels that update right on the model.

Paint Effects Brushes
- More than 500 editable, pressure-sensitive preset brushes completely integrated within Maya.
- Extensive range of traditional painterly brushes include airbrushes, oil paint, chalk, pastels, pencils, watercolors, wet brushes and markers.
- Options for a vast range of realistic effects including: trees; grass and flowers; realistic hair; eyebrows and beards.
- Special effects like lightning, clouds, rain, star fields, fireworks, fire and sparks.
- Mesh brush type creates organic or hard-edged geometry that is convincing even close up. Used with environment reflections it can create looks such as chrome, glass and shiny paint or displacement/bump mapping.
- Thin Line brush can be used to quickly paint on high-quality hair and render it efficiently.

Brush Attributes
- All brushes can be used in true 3D space (to paint on or between 3D objects in a scene), on a 2D canvas (to create images and textures), or within the 3D Paint tool (to create textures by painting directly on the model).
- Brushes can be blended together to make an infinite range of new, user-customized presets.
- Brushes are fully animatable, and have built-in preset dynamics such as turbulence and gravity.
- Growth attributes include bend, curl, and twirl.

Convert Paint Effects to Polygons and NURBS
- Data can be edited using traditional modeling tools for output to any renderer.

Paint Effects Rendering
- Strokes can be drawn fully-rendered during interactive painting, providing immediate feedback.
- Features fast, resolution-independent final rendering that can include 3D cast shadows, depth-of-field, fog effects, and motion blur.
Technical Features

Toon Shader

• Supports a wide range of non-photorealistic rendering styles for traditional 2D cartoons, comic book-style imagery, Japanese manga / anime, and more.
• Paint Effects brushes can be used on an outline – providing access to an extensive range of painterly effects and line style, placement and width.
• Near real-time interactive previews.
• Can be rendered in mental ray for Maya or the Maya software or hardware renderers.

Maya Artisan

Maya gives you a suite of integrated, pressure-sensitive brush tools with built-in mirroring

Sculpting

• Natural brush interface can be used to interactively sculpt polygon, NURBS and subdivision surfaces.

Paint Selection

• Complex selections of components such as vertices, faces and edges, can be made without selecting through to the back of the model.

Attribute and Script Painting

• Editing smooth skin or soft-body goal weights, painting per vertex color or blind data; adding geometry to the scene or other complex tasks can be quickly performed.

3D Paint

Paints textures directly on surfaces

• Integrated texture painting of color, bump, transparency, displacement, and other effects directly onto polygon, NURBS, and subdivision surfaces.
• Can be used with either image-based brush profiles or any Paint Effects brush.
• Brush modes include paint, smear, blur, clone and erase.
• Automatic conversion of procedural textures and PSD files.

Multiple Rendering Options

Four renderers, tightly integrated through a consistent rendering interface let you create any look from photorealistic imagery to a simple vector graphic.

Maya Software Renderer

• Hybrid design uses fast, selective raytracing for maximum efficiency.
• Multi-threaded, multi-processor support with built-in memory handling maximizes productivity and provides large scene rendering capabilities.
• Full range of effects including depth of field, motion blur, soft shadows and lens flares.
• Advanced attributes, such as light absorbance and chromatic aberration, provide sophisticated, creative options.
• Volumetric materials, such as noise and fog, aid in the creation of environmental effects.
• Ramp Shader effects include glass, stone, cartoon-like shading, x-ray etc.
• Anisotropic and diffraction shaders available.
• High-quality software particle rendering with a comprehensive assortment of effects – including blob, tube and cloud rendering – for gas clouds, fire, liquids, etc.

mental ray for Maya

• Advanced photorealistic lighting features, such as Global Illumination, caustics, ambient occlusion, blurry reflections and refractions, and motion blurred particles.
• Custom mental ray shaders can be used.
• Light baking of shadows and lights, including Global Illumination and Final Gathering, can be converted to file textures or to color-per-vertex data.
• Image-based lighting allows for the emission of photons, caustics or direct illumination lights from spherical image maps; HDR images can be viewed within the Maya UI.
Technical Features

- Photometric lighting support allows for the use of real-world lighting profiles.
- Ability to directly render Maya Fur, Maya Hair, Maya Fluid Effects and shader glow.
- Photon Visualization lets you preview the placement of photons and final gather points in the 3D scene.

**mental ray for Maya Satellite**
- Contains the same functionality as mental ray for Maya.
- Assists in distributing render jobs over processors located across a network.
- Two licenses free with Maya Complete, eight with Maya Unlimited.

**Hardware Renderer**
- Takes advantage of the ever-increasing power of next-generation graphics cards.
- Generates near software-quality images at significantly faster render times for broadcast or pre-visualization needs.
- High-quality rendering in the viewport lets you immediately see the results changes – no need for a separate rendering calculation.
- Support for color-per-vertex both in offline rendering and the interactive viewport.
- Improved CgFX support and new support for ASHLI.

**Vector Renderer**
*Windows® and Mac OS® X operating systems only*
- Can be used to turn 3D content into 2D content for the web or print.
- Output to Macromedia Flash (SWF or SWFT), Adobe Illustrator (.ai), SVG, EPS, or bitmap formats.
- Provides a range of non-photorealistic looks, including hidden-line rendering.

**Rendering Controls and Effects**
*These efficient tools help you set up and evaluate your scene or create popular stylized effects*

**IPR (Interactive Photorealistic Rendering)**
- Instantaneous editing of color, texture, lights, shadows, glows, motion blur, and many other effects in final-rendered-quality imagery.
- Multi-threaded to maximize productivity and creativity.
- Supported by mental ray for Maya and the Maya software renderer.

**HyperShade and Visor**
- Can be used to design and edit simple to complex shading networks.
- Can be used to design and edit simple to complex shading networks.
- Visual outliner (Visor) displays libraries of textures and images, or image swatches for easy management and selection.
- Bins allow for sorting and organization of rendering nodes such as materials, textures and lights.

**Universal Rendering**
- Includes the ability to render on an unlimited number of networked machines of the same OS (mental ray excepted).

**MEL**
*Maya comes with an open interface for customizing and scripting Maya*
- Offers full scripting of any Maya software feature – everything can be accessed.
- Artists and technical directors can easily create custom windows and scripts or reconfigure the Maya user interface to make a completely custom application.
- Commands can be issued from an HTML page – scripts are recognized by the embedded web browser.

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Technical Features

The Maya API/SDK
This key unlocks the power of the Maya software architecture for programmers and technical directors

Direct Access to Maya Software Functionality
- Maya plug-ins and standalone applications that run from the Maya command line can be written using C++.
- Maya scene hierarchy can be traversed with iterators.
- Maya plug-ins can be registered to receive a comprehensive range of Maya messages.
- Maya manipulators and locators can be created.
- New types of Maya objects can be developed – including file translators, hardware shaders, surface shapes and MEL commands.
- Existing Maya objects, such as geometry, lights, shaders, transforms, scene hierarchy and dependency graph nodes, can be queried and modified.
- MEL scripts can be executed from C++.

Development Resources
- Maya API guide.
- Maya Motion Capture API guide.
- MEL Command reference guide.
- Maya API Class reference documentation – names each Maya API / SDK class and is fully searchable and indexed.
- Source code, project Makefiles and a Wizard on Windows® for building examples and generating plug-in templates.

Maya Hair
Create realistic hair and dynamic curves directly within Maya

Creation Tools
- A grid of follicles can be created on any NURBS or polygon surface.
- Follicle attributes can be added, deleted or edited.
- Hair can be copied or transferred from one character to another.

Constraints and Styling
- More than ten hair presets available including pigtail, bun, curls, dreadlocks and highlights.
- Constraints allow for the simulation of effects such as ponytails and hair clips.
- Built-in curl and braid attributes make intricate styles easy to achieve per follicle or over larger areas.

Collisions
- Hair can collide with arbitrary geometry or with implicit volumes.
- Self-collision between clumps makes the realistic simulation of hair/character interaction possible.

Rendering
- Hair can be rendered directly in the Maya software renderer or mental ray for Maya.
- Dynamic curves can also be output to a curve renderer such as Renderman®.

Integrated Dynamics
- Built-in hair gravity and turbulence.
- Connection to the existing dynamic forces of Maya gives real-world results for hair effects.

Dynamic Curves
- Hair system can be used to make any NURBS curve dynamic – for a wide range of dynamic effects such as ropes, chains, dynamic lofted surfaces, etc.
- Can be used to create advanced character rigs using dynamic Spline IK.
Technical Features

**Maya Fluid Effects**
*This state-of-the-art computational fluid dynamics toolset brings a huge range of atmospheric, pyrotechnic, viscous liquid and open water effects to Maya*

**Fast Interactive 2D Solver**
- 2D fluid motion can be simulated in near real-time and rendered as a thin volume, surface, or height field.
- Can be used to create animated textures – giving a unique look to a logo animation, etc.

**3D Fluid Solver**
- Accurate representation of the most complex fluid motion.
- Can be combined with volumetric, hard and soft surface rendering options to create previously unattainable 3D effects.
- High-detail solve mode reduces diffusion of density, velocity and other attributes during fluid simulation – making simulations appear much more detailed without increasing resolution.

**Spring Mesh Solver**
- Allows for the simulation of wakes and ponds with ripples.

**Ocean Shader**
- Create realistic oceans with displacement and shading techniques.

**Ponds**
- Create realistic small bodies of water with true dynamic waves and ripples.

**Wakes**
- Add turbulence, bubbles and ripples to enhance realism of boat wakes.

**Motion Fields**
- Simulated objects moving through a fluid, such as a character walking through thick smoke or fog.

**Presets**
- Atmospheric: Accurate simulation and volumetric rendering of clouds, smoke, snow, steam, fog, etc.
- Pyrotechnic: Explosions and nuclear blast effects.
- Viscous liquids: One of the hardest animated surfaces to accurately represent using existing CG technology; makes lava, mercury, mud, etc. possible.
- Oceans and ponds: Create and preview ocean swells, calm oceans, rough seas, rippling ponds, white caps, foam, etc.

**Integration with Maya**
- Fully integrated with other parts of Maya – for example, a simulating fluid can act as a force on Maya’s particles or soft bodies and can be converted to polygon meshes.
Technical Features

Interactive Control with Maya Artisan
• Attributes such as color, density, fuel, velocity and temperature can be painted directly into the 2D or 3D fluid using the Maya Artisan brush interface.

Rendering
• Integrated rendering in the Maya software renderer and mental ray for Maya.

Maya Cloth
*Maya delivers a production-proven and realistic fabric solution for all your digital clothing requirements*

Create Any Fashion in Any Fabric
• Intuitive stitching of flat clothing patterns similar to traditional garment assembly methods.
• Workflow enables any 3D figure to be dressed and animated with automatic stitching, draping, and gathering of cloth panels into a perfectly fitting garment.
• Create realistic clothing, including jackets with collars, vents and lapels, pants with cuffs and pockets as well as loose or tight-fitting clothing styles.
• Various types of fabric can be simulated, such as heavy cotton, stiff canvas, and thick leather.
• Fabric types can be mixed in one garment.
• Cloth pinching solution addresses the problem of cloth pinched between two objects such as under the arm.
• Controls such as button constraints, or cloth-to-cloth constraints allow for greater control of realistic clothing behavior.

View, Edit and Blend Between Caches
• Support for multiple cloth caches and the ability to blend and interpolate between/among them.

Animation
• Any cloth object can be animated including sails, skins, tents, drapery, bedding, etc.

Unique Solver
• Real-world, physical cloth characteristics can be reproduced with unsurpassed speed and accuracy.
• Multiple independent cloth systems can be animated with their own objects and forces.
• Caching of data supported for real-time playback.
• Cloth can collide with partial meshes.
• Cloth objects can interact with collision objects with different friction values.

Total Integration with Maya
• Clothing moves, folds, and gathers whenever characters move.
• Easy texturing and shading of cloth.
• Property and texture painting with the Maya Artisan brush interface.
• Maya Cloth can be used in conjunction with Maya software’s dynamic forces, such as turbulence, air fields and Maya Fluid Effects to create effects that interact with cloth.

Maya Fur
*Easily create realistic fur, short hair, wool and grass on NURBS or polygonal models*

Maya Artisan User Interface
• Can be used to paint fur attributes, such as clumping, baldness, length and curl, directly across multiple NURBS or polygonal surfaces.
• Allows you to “comb” and style fur.

Fur Types
• Multiple types allowed on each surface, e.g. a head surface can have body fur, eyelashes and whiskers.
Technical Features

• Fur attributes, such as width, length, baldness, opacity, scraggle, curl, and direction, can be set globally, or mapped on a local basis.
• Base and tip colors can be mapped using procedurals or file textures enabling the creation of such effects as random leopard spots, precisely placed tiger stripes, etc.
• Clumping controls allow for the creation of natural looks such as wet, matted or dirty fur.

Presets
• Preset fur descriptions, including squirrel, bear, bison and wet Labrador, provide useful starting points.
• New presets can be created and saved.
• Blending between presets is supported.

Total Integration
• Attractor system allows fur movement to be keyframed or react to dynamic forces within Maya.
• Dynamic curves can be used as attractors.
• All attributes can be animated.
• Animated file texture sequences on any attribute can be used to create complex changes over time.

Rendering
• Integration with the Maya software renderer and mental ray for Maya.
• Results can be output as composite images or as separate render passes for post-processing.
• Maya Fur is self-shadowing, and supports cast shadows and render-efficient root and back shading in the Maya software renderer, as well as ray-traced shadows in mental ray.
• Motion blur and depth of field are fully supported.

Maya Live
Matchmoving tools combine 2D live-action and 3D elements

Match 3D Elements with Live-Action Shots
• Maya Live can be used to extract information from live-action footage to create an exact duplicate of the original camera; precisely match the original motion, and seamlessly blend live-action and CG elements.
• Camera moves not restricted in the live-action scene, i.e. bouncing, hand-held shots, slow pans, dollies, tracking shots, aerial shots, tilts and more are supported.

Flexibility
• Footage of any resolution can be used as source images.
• Information attained automatically.
• Fast image playback and scrubbing.

Fast, Integrated 2D Tracker
• Tracked objects can be occluded and can enter and exit the frame.
• Bi-directional tracking available.
• Tracking observations allow selection of noise level tolerance.
• Pre-track filtering eliminates grain and noise.

Reconstruct Live-action Elements as 3D Geometry
• Placing of locators in true 3D positions (in the live-action scene) aids in the reconstruction of scene geometry and precise positioning of 3D objects relative to the live-action scene.

Output To External Applications
• Supports export to industry-standard compositing solutions.
**Connectivity and Integration**

*Maya delivers tools for integrating Maya content into the production pipeline*

**Adobe Photoshop Integration**

- Create shading networks with connections to layers sets in a PSD file; include procedural or 3D painted textures as starting points, and UV layouts for reference.
- Render layers can now be rendered to layered PSD files.
- Any PSD file can be used as a texture map and rendered directly in the Maya software and hardware renderers and in mental ray for Maya.
- PSD files containing layer sets can be converted into a layered texture within Maya.
- A multi layered PSD file can be automatically connected to multiple material attributes.

**Compositing Integration via New Render Layering Functionality**

Newly re-architected render layers feature:

- Allows multiple passes from any of the Maya software’s four renderers, as well as post processes such as Maya Fur and Maya Paint Effects, to be managed in a single scene.
- Workflow streamlines rendering by preparing renders for optimal output to the composer of choice – or Photoshop (PSD) or Flash (SWFT) output – with objects and elements isolated in individual layers.
- Can be separated into color, shadow, specular and diffuse passes.
- Presets allow for easy setup of commonly used user defined passes.
- Depth and motion vector data can be stored separately and used in post processes.

**Reconstruct Live-action Elements as 3D Geometry**

- Placing of locators in true 3D positions (in the live-action scene) aids in the reconstruction of scene geometry and precise positioning of 3D objects relative to the live-action scene.

**Adobe Illustrator Object Nodes**

- Support both beveling and curves.
- Maintain construction history enables – Illustrator files to be substituted or edited while maintaining the bevel history.

**Web Integration**

- Embedded web browser lets you create and view interactive web pages that can contain MEL scripts in the form of MEL URLs.
- Supports two-way communication between Maya and the browser to provide an easy way to extend the Maya user interface or manage assets and scene data.

**Data Import**

- Supported file types: mayaAscii, mayaBinary, MEL, FBX, DXF, OBJ (.mtl), IGES, aliasWire (StudioTools), AIFF, image, RIB, mov (ascii motion), OpenFlight, VRML2, EPS, Adobe Illustrator, PSD, STL, PNG, DDS, HDR, MAP, CT, ST.

**Data Export**

- Supported image file types: Maya IFF, AVI, Apple® QuickTime®, GIF, Softimage®, Wavefront RLA, bmp, TIFF, SGI® RGB, Alias PIX, JPEG, EPS, Cineon™, Quantel®, Targa®, DDS, PSD, PNG, QuickDraw™, MacPaint®.

**Maya Shockwave 3D Exporter – for Macromedia® Director® 8.5 Shockwave® Studio and above**

- Enables the delivery of high-quality, Maya content to the web via the Macromedia Shockwave Player, which includes 3D capability.

**Plug-ins**

There is an extensive list of third-party plug-ins for Maya. For more information, visit [www.alias.com/conductors](http://www.alias.com/conductors).
Two Options: Maya Complete and Maya Unlimited

Maya® Complete is the most comprehensive 3D software solution for producing professional-quality graphics on desktop PCs or graphics workstations. It integrates all of the foremost tools for 3D modeling, animation, effects and rendering within a single, production-proven workflow. Maya Complete is the number one choice of award-winning digital artists and animators. Its intuitive design makes it a favorite amongst digital content creation artists and enthusiasts of all levels of experience who develop 2D and 3D artwork for film, broadcast, game development, multimedia (print and web) or design visualization.

Maya Complete 7 includes toolsets for:

- Modeling
- Animation
- Visual Effects
- Rendering
- Paint Tools
- Toon Shading

PLUS:

- Maya API/SDK and MEL
- Tutorials & Documentation

The ultimate version of Maya – Maya Unlimited – is the choice of digital artists who are looking to make their 3D projects stand out. Maya Unlimited includes all the functionality found in Maya Complete, plus it provides professional artists and animators with additional industry leading innovations, such as Maya Fluid Effects, Maya Cloth, Maya Hair, Maya Fur and Maya Live, for the creation of superior digital content.

Maya Unlimited 7 includes:

Everything in Maya Complete PLUS:

- Maya Hair
- Maya Fluid Effects
- Maya Cloth
- Maya Fur
- Maya Live

Maya Complete and Maya Unlimited are available on Windows, Mac OS X and Linux®. Floating licenses offer maximum platform flexibility, with the ability to run on all supported operating systems from a single server.

Up-to-date information on qualified hardware can be found at www.alias.com/qual_charts

* Some features unavailable on certain platforms. Contact your local Alias sales office or reseller for more details.