version

Adobe® After Effects® 5.0

An Overview of Adobe After Effects

This overview introduces you to the key features of After Effects. If you're an experienced After Effects user, you may want to scan this overview and then skip to "What's New in After Effects 5.0."

After Effects is available in two versions. The Standard version provides the core 2D/3D compositing, animation, and effects tools that motion graphics professionals, Web designers, and video professionals need. The Production Bundle version meets the needs of visual effects professionals, and includes all of the tools in the Standard Version plus additional keying, motion control, and distortion tools, audio effects, 3D channel effects, 16-bit-per-channel color, vector paint, and support for network rendering.

Superior Adobe product integration

After Effects features the award-winning Adobe user interface, familiar to anyone who uses Adobe Photoshop®, Adobe Illustrator®, or Adobe Premiere®. The tabbed windows—along with Adobe's popular tabbed palettes, similar tools, and common keyboard shortcuts—make it possible to work more efficiently and move among the programs with ease. After Effects, Premiere, and Adobe LiveMotion™ use a similar time-based interface, so moving among the applications is a snap. Productivity-boosting features such the pen tool, Align palette, rulers and guides, editing tools, and free transform mode work in After Effects just as they do in other popular Adobe products.

Adobe Photoshop

You can transform layered Photoshop images into animations with complete ease. Import Photoshop files as compositions one at a time or in batches. After Effects preserves layers, common layer effects, adjustment layers, alpha channels, transfer modes, vector masks, and more. You can then apply visual effects to color-correct, stylize, or manipulate each layer, and animate these layers over time. Use Photoshop paths as mask or motion points. Move easily between Photoshop and After Effects to complete your work.
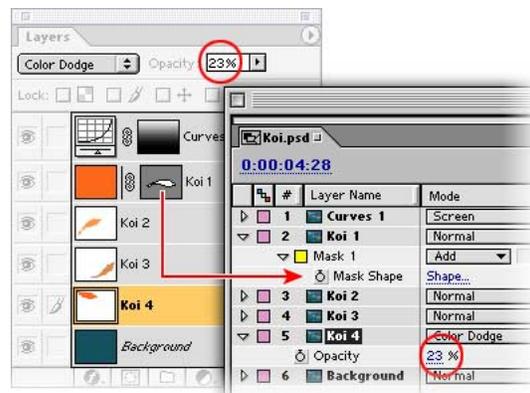
When you import a layered Photoshop file as a composition, After Effects retains layers and other key Photoshop settings.

Adobe

Adobe Illustrator

Want to add first-rate typography or eye-catching graphics to your motion graphics and visual effects? Simply import layered files as compositions one at a time or in batches. Choose whether After Effects preserves the layers or merges them on import. Then resize the Illustrator layers to any resolution without losing detail, and animate them with complete control. Copy paths in Illustrator and paste them in After Effects as masks or motion points. With Illustrator 9 files, you can preserve transparency and transfer modes. In addition, you can continuously rasterize Illustrator layers in both 2D and 3D.

Adobe Premiere

After Effects can import Premiere projects as compositions. Each video, audio, and still-image clip appears on its own layer, arranged in the correct time-based sequence in the Time Layout window. You can then manipulate these clips to create the sophisticated effects and animations best produced in After Effects. If you use the After Effects filters included with Premiere 6, those effects and their associated keyframes are also imported. In addition, you can embed a link in the After Effects movies you output so that you can use the Edit Original command in Premiere to open the original project.

Adobe GoLive

When creating a marker in After Effects, you can add a URL link that will be embedded in rendered movies. When these movies are included in Web pages created by applications such as Adobe GoLive®, the embedded URL is recognized during playback, initiating a jump to the specified URL. You can even target a specific frame within the Web page.

Adobe LiveMotion

Create elaborate animations in After Effects and then import them into LiveMotion as Macromedia Flash files. After Effects and LiveMotion use a similar time-based interface, so moving between the two applications is easy.

Powerful masking

Extensive masking capabilities give you extraordinary control in After Effects. You can create, edit, and animate as many as 127 masks on every layer. Draw paths to create transparencies or to add new objects to an animation, such as stroked lines—even animate text along a mask path. Combine paths to make unusual shapes using Boolean operations such as Add, Subtract, and Intersect. Rotate and scale masks, and apply opacity settings to make masks appear and disappear over time. Lock masks to protect them from change. You can even copy and paste masks into your compositions from Adobe Illustrator and Adobe Photoshop.
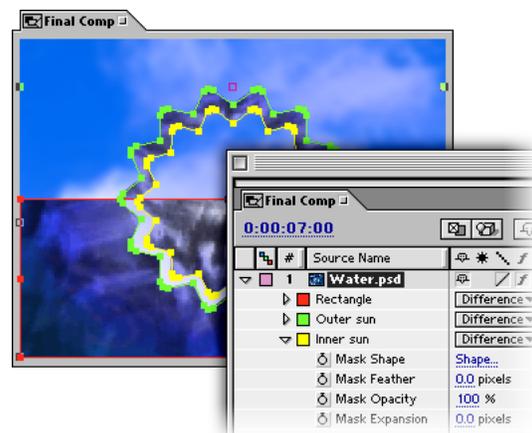

After Effects 5 allows multiple masks per layer; you can edit masks in the Composition window or in Layer windows.

2D & 3D compositing

You can work in either 2D or 3D, or mix and match on a layer-by-layer basis. Use the 3D Layer switch to toggle a layer between 2D and 3D at any time. While both types of layers can move horizontally or vertically, 3D layers can also animate numerous properties—such as z-position, xyz-rotation, and orientation—in 3D space while interacting with lights, shadows, and cameras.

Choose a light type to create a specific look. For example, spot lights provide dramatic lighting effects by pointing a cone of light at the point you define. Unparalleled shadow controls determine whether lights cast shadows when they interact with other layers.

Create as many lights as you need, and then adjust and animate each light's properties, controlling its shadow and illumination. Create as many cameras as you need to produce the results you envision. Enable a Depth of Field setting to automatically change camera focus between foreground and background information. You can then animate camera properties such as zoom and focal length, move cameras in space, and cut between cameras.
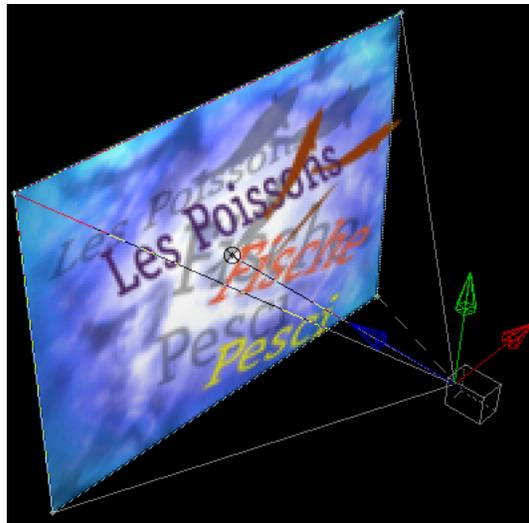
Animate layers, cameras, and lights in 3D space.

Extensive motion controls

For impeccable animations, rely on the powerful motion controls in After Effects. Instantly stagger selected layers over a timeframe with the Sequence Layers Keyframe Assistant. Then add unlimited keyframes to animate any layer attribute, including position, rotation, scale, anchor point, and opacity. Position your layers with subpixel accuracy. Refine the look and movement of your motion paths using roving keyframes. When animating static images, apply Motion Blur to create more realistic movement. Use Time Remapping to make frames stutter, play backwards, move in slow motion, or freeze. Create sophisticated animations by defining a parent-child relationship between layers. Use expressions to define relationships between parameters so that you can create procedural-type animations without using keyframes.

Keyframes

Animate layers by setting keyframes for the layer's properties at different points in time. Keyframes mark the point in time where you've set layer property values. For example,
if you want a layer to expand as the clip plays, you would set two or more keyframes containing different scale property values.

Motion Sketch and Smoother

Draw animation paths as easily as sketching with a pencil on paper using the Motion Sketch tool. Simply select the tool and draw the animation path on-screen. Adjust your drawing speed to vary the velocity of the path. After Effects automatically creates the keyframes for you. Then use the Smoother tool to smooth the shape of the path and fine-tune it until the animation moves exactly as you want.

Leading-edge video and audio effects

After Effects delivers powerful, precise tools for creating a limitless range of visual and audio effects. You can stylize, enhance, and manipulate layers using a wide array of effects plug-ins; categories include Blur & Sharpen, Channel manipulation, Distortion, Keying, Perspective, Render, Stylize, Transition, and Audio. Apply an unlimited number of visual effects to every layer, and animate every control. Save your most frequently used effects (including keyframes) as Favorites, which you can apply instantly and share with colleagues. Expand your effects toolkit even further with numerous third-party plug-ins.

Use the Path Text effect to move text along a Bezier path and animate text attributes such as tracking.

In addition to applying a number of audio effects to your footage files, you can change the volume levels of audio layers, preview them at a specified quality, and identify and mark locations. Use the familiar Audio palette to set the volume levels of an audio level, or use the Timeline window to view the waveform values and apply time remapping.

Flexible media handling

Take advantage of previewing capabilities in After Effects to see results as you work, instead of waiting to render movies. With RAM preview, dynamic preview, intelligent caching, and other preview enhancements, you can specify the quality and speed of your playback to maximize efficiency.

When you're ready to convert your final composition for playback on the medium of your choice, use the versatile Render Queue to render the composition into a finished movie. If you're using the Production Bundle version, you can render using a network of computers.

RAM Preview

One of the big challenges in designing motion graphics and visual effects is imagining how they will look in their final form. Playback controls help, but they don't really capture the final experience. That's what makes the RAM Preview feature so exciting. You can play back your compositions in real time without having to render them. You can even preview audio along with the video. If you like the segment that you played back in RAM Preview, you can save it to a file directly.
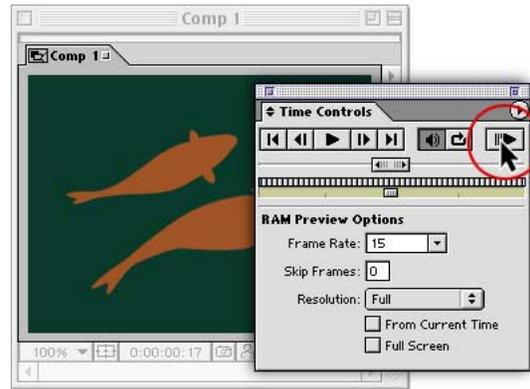
RAM Preview lets you play a preview at the frame rate of your composition, or as fast as your system allows.

To improve performance, you can narrow the region of interest in the Composition window so that only the specified area of your composition is previewed.

Dynamic preview

Get better visual feedback as you work in the Composition window. Instead of defaulting to a wireframe view when you move, rotate, scale, or otherwise change elements in a composition, After Effects transforms layers interactively, displaying results as you make changes. If the image can't be updated quickly enough, After Effects temporarily reduces image resolution to maintain optimal interactivity.

Intelligent caching

When you view your work in the Composition window—either by scrubbing along the timeline or using the RAM Preview option—After Effects stores, or caches, frames in memory. Cached frames are saved until you make an edit to the composition that renders them obsolete, allowing for faster previews. For example, changing a single keyframe now causes only cached frames between the keyframe you modified and adjacent ones to be invalidated. A green bar beneath the time scale in the Timeline window indicates cached frames.

Resolution independence

You can mix file resolutions from tiny thumbnails up to 30,000-x-30,000-pixel frames within a composition. For example, you could import a high-resolution Adobe Photoshop image into a lower-resolution composition to create a panning background. When you're done, you can output files at any resolution—from the small sizes preferred for animated GIF files to the high-resolution output required for film.

Render queue

Using the Render queue, you can prepare your files once and then output them to film, video, multimedia, or the Web with equal ease. Perform multiple renders of a composition in various sizes and formats simultaneously, or batch-render any number of different compositions. You can even save render templates for future use.

In addition, the Collect Files command helps you gather files for rendering or archiving. This command automatically copies a project and all of its associated source footage to a single location, along with a report that lists the footage, effects, and fonts necessary to render the project.

Web delivery

After Effects includes several features that optimize output for Web delivery, including Macromedia Flash support, embedded URLs, audio compression, and QuickTime streaming.

Macromedia Flash (SWF) support

Export compositions, including audio, as compact, vector-based Flash (SWF) files for use on the Web. You can control whether effects are rasterized as JPEG frames or ignored; you can also generate an HTML report that provides details on the elements that were skipped.

Embed URLs in Web output

Create URL flips in exported Flash files and QuickTime movies by associating an embedded URL with a layer marker.

Audio compression

Both QuickTime and MP3 audio compression codecs are now supported, so you can create files that are even quicker to download on the Web.

QuickTime streaming

Instead of using the After Effects Render Queue, you can export items using components provided by QuickTime. With this QuickTime support, you can prepare streaming video and audio for Web distribution and export AVI files on Windows and Mac OS platforms. If you install new QuickTime export components as they become available from Apple or other third parties, those modules appear on the File > Export submenu in After Effects.

Production Bundle features

To meet the needs of different audiences, After Effects is available in two versions—the Standard version and the Production Bundle version.

Visual effects

After Effects offers a variety of exciting types of visual effects including Warping and Particle Playground. You can warp images over time using Bézier Warp, Mesh Warp, and Reshape effects; displace pixels from one layer to another using Displacement Map; or apply the Glow effect to create a diffuse halo along an object's edge. With Particle Playground, you can animate a large number of objects (dots, images, or text) so that they move independently and yet produce consistent group behavior. Use Fractal Noise to create textures and objects that cannot be described using simple geometric shapes. Other effects include Corner Pin, Lightning, Scatter, Ripple, Bulge, Wave Warp, Optics Compensation, and Twirl.
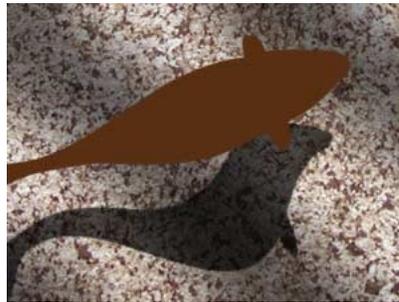
The Displacement Map effect was applied to the fish's shadow to make it move realistically over the ocean floor.

Keying effects

The Production Bundle of After Effects delivers sophisticated keying controls for producing precise composites. The Linear Color Key uses the RGB, hue, or chroma information you specify to create transparency from a key color. With the Color Difference key, you can produce combination mattes to control hard-to-key images such as smoke, shadows, or glass. The Spill Suppressor makes it easy to remove key-color traces from light reflecting off a screen and onto your subject. Create clean mattes with the Simple Choker, or choke and spread the matte to create clean edges with the Matte Choker. The Inner/Outer Key effect makes it easy to extract an object from its background. And you can perform other specialized keying tasks with the Extract, Difference Matte, Color Range, and Alpha Levels keys.
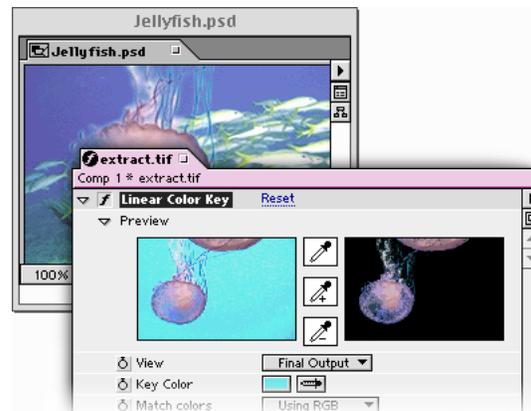
After Effects color keying lets you isolate objects from a colored background for compositing with different layers.

Motion tools

From reducing unwanted motion to creating natural-looking zoom effects, After Effects delivers the tools you need to produce the highest-quality animations. Use the Motion Tracker to isolate a moving element on one layer and precisely track it to a moving element on another layer. The Motion Stabilizer tracks a single element on a layer to stabilize unwanted motion. With the Wiggler, you can simulate more realistic motion by adding random changes to any property over time.

Automate the creation of motion and effects by writing custom scripts with the Motion Math tool—or run the Motion Math scripts included with After Effects. You can even simulate the accelerating effect of a zoom lens using the Exponential Scale tool, which converts linear scaling of a layer to exponential scaling.

Audio effects

The Production Bundle expands the range of high-quality audio effects you can incorporate into a composition. Add depth and character to a sound with Flange, or make one voice or instrument sound like many with Chorus. Apply Parametric EQ to isolate and fine-tune specific ranges of sound. With Reverb, simulate a spacious, acoustically live interior. Create simple tonal sounds (such as a doorbell) by applying Tone, or use Modulator to precisely control audio delay and modulation, creating echo and chorus effects. You can also enhance sounds by removing high and low frequencies with the High-Low Pass filter.
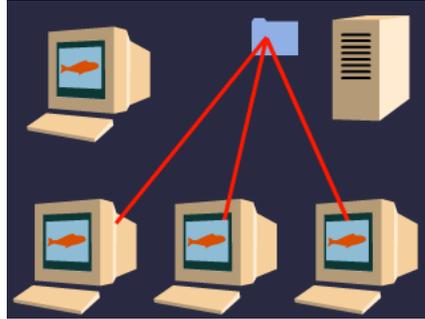
3D Channel effects

Use the 3D Channel effects to create effects with the auxiliary channel information stored in imported 3D files, including RLA, Softimage PIC/ZPIC, and ElectricImage EI/EIZ files. Use the Depth Matte effect to read the z-depth information in a 3D file, and then slice the image along the z-axis to insert other objects. The Depth of Field Blur effect simulates a camera that focuses on one area in a 3D scene while allowing other areas to blur. The ID Matte isolates objects in a 3D scene for editing. The 3D Fog effect applies a fog effect along the z-axis, so that distant parts of a 3D scene look hazier or even disappear. The 3D Channel Extract effect makes auxiliary channels visible as either grayscale or multichannel color images, which you can use as image maps or in other specialized effects.

The 3D fog effect applies a fog effect along the z-axis of the 3D file.

Render Engine

Take advantage of network rendering using the Render Engine, which includes an unlimited license. Install multiple copies to streamline your rendering process. Each Render Engine can monitor a Watch folder on a network. If you use the Collect Files command to copy projects (and their associated footage) to this Watch folder, each Render Engine starts rendering those projects as soon as they appear. You can monitor the progress using a standard Web browser.

When you save an After Effects project to a Watch folder, multiple computers can render individual frames and compositions of the project.

16-bit-per-channel color

Deep color support means that you get higher-quality output. After Effects 5.0 can work in 16-bit-per-channel mode, making a larger range of colors available. And when you work with high-resolution images that use a narrow range of colors, such as when you're creating film effects or output for HDTV, the difference is easily visible: transitions between colors are smoother with less visible banding, and more detail is preserved.

You can choose whether to work in 8-bit-per-channel or 16-bit-per-channel color mode for each project. You can directly import 16-bit images, including those from Photoshop, and you can composite and color-correct footage in 16-bit mode; the Info palette displays 16-bit color values with exact precision. To optimize performance, quickly rough out a composition in 8-bit color mode, and then finalize and output 16-bit files for maximum quality.

Vector paint tools

The nondestructive vector paint tools in After Effects 5.0 open up a host of new creative possibilities, from strokes that reveal an image over time to animated cartoons and painted textures that change from frame to frame. Use brush controls to specify exactly how the strokes you paint will look. Characteristics such as brush radius, color, and opacity can be modified to get the exact desired look. Use the Onion Skin mode to paint strokes frame by frame. Take advantage of numerous options to control how the paint strokes interact with the layer they appear on. For more control over the final results, you can also choose whether strokes continuously paint or are recorded to the current frame, to sequential frames, or in real time.

Vector Paint lets you paint strokes over time.