

On the HP xw6600, CS3 took 3:03 (min:sec), while CS4 was slightly slower at 3:52. On the Mac, CS4 produced the file in 2:57.

Interestingly, in a 1-minute HD multicam production in Windows, CS3 rendered to Blu-ray-compatible MPEG-2 format in 10:59, while CS4 burned through the job in 1:54. Mac performance was even faster: Rendering was complete in 1:14. Overall, it appears that CS4 should be about as fast as CS3 for normal productions, with some significant upside in multicamera jobs.

With Premiere Pro CS4, Adobe nailed the really big workflow issues, making the editing program much more efficient for almost all users. The company also sprinkled in enough goodies—metadata, audio to text, and pop-up Blu-ray menus—that help Premiere Pro users further monetize their content and distinguish their productions from projects produced with other editing and authoring tools. Unless someone is considering CS4 solely for the waveform scope in OnLocation, it's hard to imagine any CS3 user who shouldn't consider this a must-

# Adobe After Effects CS4

## Usability features rule, but motion tracking also gets a flashy boost.

REVIEWER: FRANKLIN MCMAHON

Adobe After Effects marches on with a spiffy new version for the Creative Suite 4 (CS4) Production Premium and Master Collection packages. As always, there are numerous new features and enhancements. But there's also the inclusion of an entirely new program, Imagineer Systems mocha for After Effects, which provides professional-level 2.5D planar motion tracking.

One of the best new features for me is not the sexiest: Timelines and nested compositions are now searchable. Previous versions had basic search functions. You could go into the effects panel and type in a phrase, and the program would produce results. But because After Effects (AE) is a, let's say, scrolling-intensive program, getting to where you wanted to be always took a little moving around—especially once you started to stack up the effect layers and nest compositions inside other compositions.

Adobe has improved the search function greatly in After Effects CS4—it's practically on every panel. In the project window, a search input lets you locate quickly a video clip or image that resides within your current composition. Now there's search in the actual composition as well. Want to look at the transformations of all your objects? Just type in "transform." Trying to find a colored background that you know is buried somewhere in your presentation? Just search. A few versions back, Adobe added a lot of keyboard commands (type "R," for example,



to see only the rotation parameters). Granted, these are still useful, but once you start using search, you'll see how convenient it is to type a few letters to find exactly the parameters you want to tweak. You have the option to search just the selected layer or search the entire project.

I use AE a lot for producing podcasts for clients. Several have weekly shows, and the titles often change from week to week. For these projects, I can tag a text layer with a keyword so that it pops up immediately via search. I have one client who swaps between two sets of different credits. I simply named one set "c1" and the other "c2." When I load up After Effects to do a new render, I just type in the keyword

**Adobe has added search fields to many areas of After Effects CS4 (note the light-gray boxes). Also pictured is the new CPU memory preferences and Adobe Bridge CS4, which comes with lots of royalty-free content for use in After Effects.**

## ▶ **bottomline**

**Company:** Adobe

[www.adobe.com](http://www.adobe.com)

**Product:** After Effects CS4

**Assets:** Includes Imagineer Systems mocha for camera tracking, improved search functions, new memory settings, Composition Navigator creates easy-to-follow flowchart of projects, new version supports Photoshop 3D layers file format for rendering and animating, greater integration with Flash CS4 Professional, can independently keyframe elements.

**Caveats:** Mocha interface differs from that of After Effects.

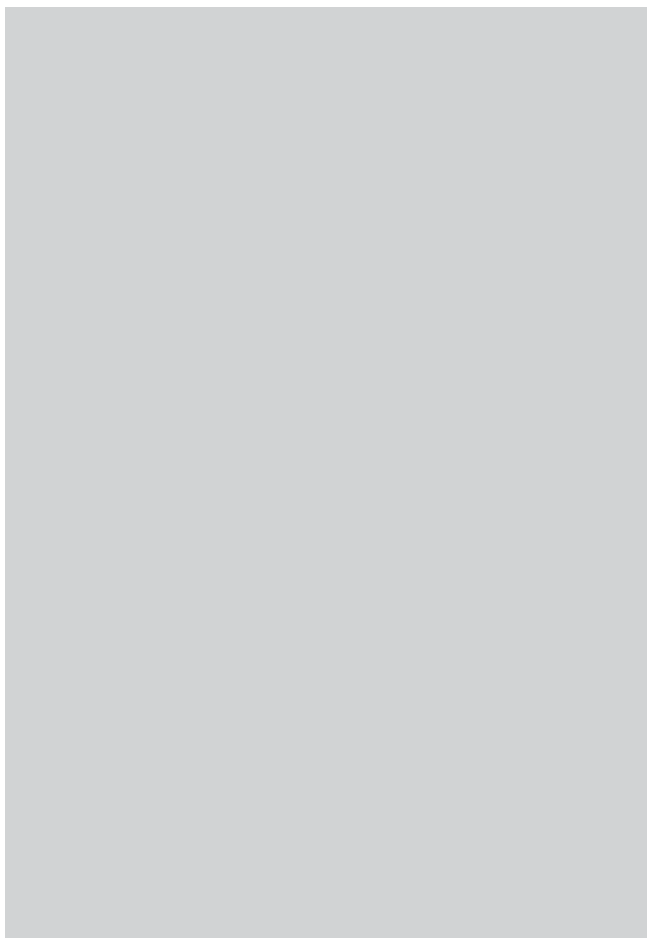
**Demographic:** Anyone doing compositing.

**PRICE: \$999 (FULL);  
\$299 (UPGRADE)**

to search the timeline. The layer pops right up so I can toggle it on or off as needed.

There is also a Help search at the top of the screen in AE CS4. As is becoming more commonplace, it jumps to the Adobe help website for AE. I do miss the built-in help programs we used to have, but obviously this makes help more organic: It can be constantly tweaked, updated, and expanded on Adobe's server.

When After Effects introduced nesting—i.e., putting a sequence inside another sequence—the workflow got a tremendous boost. AE artists were suddenly able to stack and layer within different sub-sequences. But all this power quickly proved difficult to manage. Tracking effects and changes via the timeline was tough enough; it was doubly so when sequences began inside each other. Adobe did add a flowchart, which provided a bird's-eye view. But this lived on a separate screen, so it was a little bit of a chore to toggle back and forth.



To solve this problem in CS4, there's another unsexy yet vital new feature called Composition Navigator. On the top of each composition panel (your main middle panel) is a pop-up miniature flowchart, which displays hierarchical text-based panels that describe incoming nested compositions and outgoing parent compositions. Think of it as Google Maps for AE. It's now easy to figure out where you are as you drill down into sub-sequences. This more manageable mini flowchart lives on the same screen where you do most of your work, as an immediate reminder of your current position within the composition.

Adobe Photoshop CS4 Extended offers many powerful new 3D features such as painting and texturizing (see p. 37 of this issue for my review), and AE CS4 now supports the Photoshop 3D layers file format for rendering and animating. AE is already up for 3D, and you can import 3D objects from Photoshop and apply effects, lighting, and camera movements in true 3D. The combination of Photoshop Extended and AE now stands as a compelling alternative to dedicated 3D programs, which typically incur a steep learning curve. Too often they're overkill for studio and boutiques that want to create the occasional 3D-animated sequence.

Also new on the export/import front: Adobe has greatly improved AE's integration with Flash CS4 Professional. You can now export entire layer-based composition projects directly into Flash CS4 for web deployment.

It's funny that as AE advances, Adobe adds fewer new filters—probably because of the third-party marketplace and the wealth of existing filters. After Effects CS4 gets one new filter, which is called Cartoon. It resides in the Stylize category of the Effects menu, and it's perhaps best to think of Cartoon that way—as a stylistic enhancement to video elements to create a unique look, as opposed to a tool for creating actual cartoons. Compared to professional third-party cartoon filters, Adobe's new Cartoon filter stacks up very well, with plenty of parameters to tweak. I prefer it because it's GPU-accelerated, so it uses the graphics power of the Nvidia card in my Mac Pro. As anyone who regularly applies cartoon-style effects can tell you, this class of filters is fairly processor-intensive. Fast-tracking the new Cartoon filter to the GPU speeds things up considerably.

I recently used Cartoon for a video intro for a web show. I applied just a few tweaks to create a stylized video clip. I was able to make the outlines of the onscreen talent thinner than the default, giving the intro a really wispy, more ethereal feel than the more solid and blocky traditional cartoon look would have. Again, if you

think outside the cartoon box, you can really create some impressive results with this new tool.

After Effects CS4 now offers the ability to independently keyframe elements via X, Y, and Z coordinates. This makes camerawork in AE much closer to that of a traditional 3D program. You can now apply complex camera tracking, movement, and swoops with ease. The new unified camera tool lets you use a three-button mouse to switch from axis to axis and orbit your scene.

The inclusion of a completely separate planar motion-tracking program, mocha, is unique: Adobe has bundled the Imagineer Systems program instead of purchasing the program or the company. Imagineer will advance the software independently. The downside is mocha has a different interface from that of CS4. That may change, or maybe not, in future versions. The good news is that mocha does a stunning job of tracking motion in just about any scene. The footage can be low-res with little detail; it can have a shaking camera, motion blur, graininess, or objects moving temporarily out of frame, and mocha tracks it dead-on. The 2D tracking data is easily loaded into After Effects CS4 for final work and rendering. AE has some built-in rigging and tracking features, but mocha blows all those tools out of the water.

One of my favorite features in AE CS4 is performance-related. In the Preferences are new memory settings. Working with an eight-core Mac Pro with 20GB of memory, I'd like to make sure that After Effects is harnessing the speed and the processor cycles. Now I can actually perform some manual adjustments. The Preferences now allow me to toggle on the option to render multiple frames simultaneously, and I can even allocate a gigabyte or two to each CPU for added speed. A slider sweeps from longer RAM previews to faster rendering, handy for longer projects when you need an extra 10 seconds rendered. The settings are easy to use, and more programs should offer these kinds of memory/CPU options.

After Effects CS4 offers a lot of tweaks under the hood and several major new features. It's not a sweeping, ground-breaking release, but there are enough new tools to make it worth the upgrade. To me, it's worth it for the search and nesting navigation alone—it's now much easier to tool around your compositions, especially as they grow in complexity. The new 3D options, processor settings, and the camera-tracking power of mocha make the latest version of an industry staple a good buy. □

# Adobe Photoshop CS4 Extended

**Expanded 3D capabilities and hundreds of other new tweaks fight for your attention.** REVIEWER: FRANKLIN MCMAHON

Adobe has been working really hard lately. Creative Suite 4 (CS4) might be its most substantial update yet. There are now lots of different options for suites—Design Premium, Web Premium, Production Premium, and Master Collection—but common to all is Adobe Photoshop. Some of the new features expand on previous Creative Suite tools, while others are completely new. Adobe has improved Photoshop in the areas of 3D, adjustments, image viewing,

**There's a wide variety of 3D tools offered in Adobe Photoshop CS4 Extended. On the right side is the newly redesigned Adjustments palette, which offers quick one-click, non-destructible presets.**

