CyberMotion

Adobe After Effects Helps CyberMotion Deliver High-Quality, Low-Cost Effects to Corporations and to the Film and Video Industries

Adobe™ After Effects™
in 2D Motion Graphics

Key Benefits Summary

- Multiple effects per layer eliminates 75-80 percent of nesting.
- The ability to import files directly from Adobe Illustrator™ and Adobe Photoshop™ saves time.
- Continuous rasterization of Adobe Illustrator files provides capabilities previously available only with high-end systems.
- After Effects enables CyberMotion to compete directly with expensive post-production studios.

CyberMotion probably would not exist if it weren't for Adobe After Effects, says Trish Meyer, principal of the firm. An entrepreneur moving from a background in print media to 2D animation, Meyer could hardly afford an expensive Quantel machine or most of the other pieces of dedicated hardware typically required for post-production tasks. But using Adobe After Effects software running on an Apple® Macintosh® computer was well within her budget. And, as Meyer soon discovered, not only could After Effects do more than many of the more expensive systems, but, in many instances, it could also do it better.

"We have no trouble bidding and winning projects that once would have gone to expensive studios for production on Quantel machines," says Meyer. "After Effects is the cornerstone of our business. It lets us deliver high-quality animation at a reasonable cost. That keeps customers coming back and also attracts new ones."

CyberMotion specializes in 2D animation, creating animated videos for corporate and commercial clients. For corporate clients, Meyer generates affordable animations for training films and recruitment and sales videos. For commercial clients, she provides the highest-quality output at an affordable price.

"Producers are starved for creative, animated opens, bumpers, trailers, and other elements at an affordable price," says Meyer. "We can provide that service. What we charge for a whole day would cover only an hour of time on some high-end systems."

Corrective Vision for Robot

Film producers are like kids in a toy store when it comes to the effects Meyer can create for them. They want everything because, for once, they can afford it. In one instance, the producers of a science fiction film approached Meyer requesting special effects to show the world through the eyes of a robot operating 40 years in the future.

This particular robot was super-intelligent and could scan people's teeth to identify them. However, because the client was concerned about the quality of effects available, the first concept was to rely on the stock effect of making the robot's vision appear pixelated and at a lower frame rate. Meyer countered that if this robot was so perfect, why couldn't it see better? And, she informed the client, she had the tools on her Macintosh to create a fresh visual effect while staying within budget.

The frames of untreated footage were delivered on Exabyte tape as individual PICT files, which were brought directly into After Effects as a PICT sequence. A combination of plug-in filters for Adobe Photoshop software were applied, including Patchwork and Glowing Edges from the Adobe Gallery Effects™ family of plug-ins. These gave the impression of the robot breaking the image into a number of cells. Then an edge scan was performed, eliminating the need for tedious, frame-by-frame rotoscoping.

The ability within After Effects to deal with unlimited layers meant this complex composite could be built in one pass, which eliminated rendering intermediate passes and recompiling the results. Meyer was then able to give the client a choice of output resolutions, including film resolution. "The client was absolutely thrilled with the results," Meyer notes.

"One of the best features of After Effects is its ability to handle both video and film rates, as well as image sizes up to 4,000 pixels square," says Meyer. "Some of the high-end dedicated machines in some post-production houses can't even do that."

Adobe

In another case, Meyer was able to render in a single pass more than 100 layers—including a sound layer of 1950s' rock and roll—for the open of Time-Warner's History of Rock and Roll series. The open comprises several 1.5-second segments, each featuring five or six singers or musicians masked in various geometric shapes. Meyer relied heavily on the masking capabilities of After Effects to produce the open.

New Power with Adobe After Effects 3.0

More recently, Meyer completed an open for Creative Expo 95, a road show sponsored by Adobe, Apple Computer, and Radius Corporation. The show, targeted toward art directors, travels to eight metropolitan areas, where it would be shown in local museums.

Because of the audience, Meyer knew that her open had to be exceptional. However, she had only six days to deliver the finished product. To produce the effects she wanted, Meyer relied on some of the capabilities delivered with After Effects 3.0.

"I like to use music as the basis for my pieces," says Meyer. "My partner, Chris, had already created a soundtrack on the Macintosh with a strong beat and a speech on computers in art. So the first thing I did was take it into Adobe Premiere™ software and spot the sections and major beats."

Meyer then moved into After Effects. To structure the images within the music, she began with the word *Creative*, using one letter for each city. Each letter would zoom from the logo to fill the screen and reveal a series of animations representing each city. For example, the *C* in *Creative* scaled up and transitioned to the *San Francisco* section, featuring the Golden Gate Bridge and other images. All of the images were taken from Meyer's extensive CD-ROM library.

Using Adobe Fetch™ software, Meyer located possible images for each city in her own CD files—complete with masks and alpha channels—and loaded them onto a disk. After importing the images into After Effects, she began compositing, eventually creating almost 100 layers.

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—Trish Meyer, CyberMotion

"The ability in version 3.0 to apply multiple effects in a single layer is invaluable," says Meyer. "It eliminates 75 to 80 percent of the nesting that would normally have to be done. In addition, you don't have to plan ahead as much because After Effects gives you the flexibility to add elements anywhere. With only six days to complete the project, this feature was a real time-saver."

For scaling the letters, Meyer relied on the continuous rasterization of Adobe Illustrator files, new in version 3.0. She created the lettering in Adobe Illustrator and imported the resulting files into After Effects. Then, manipulating the Adobe Illustrator files in After Effects, the images were scaled up to 2,500 percent with no loss of resolution.

"I couldn't have done these effects without After Effects 3.0," Meyer says. "Each scale rasterized as it rendered. I didn't lose any resolution. Each frame was as sharp and clear as the original."

Each of the eight city modules, including the images and transitions in and out, was rendered in After Effects as its own 10-second movie. The movies were imported into Adobe Premiere, along with the soundtrack, and they were sequenced back to back.

"Then, I simply made a composite QuickTime® movie, transferred it to Beta SP, and shipped it to the customer," says Meyer. "My client called me from the airport—he thought the open was fabulous.

"Without After Effects, I couldn't have been as creative with this project," Meyer says, "especially within the time constraints. It's a perfect example of how After Effects makes CyberMotion a reality."

CyberMotion Systems at-a-Glance

Hardware

Apple Power Macintosh® 8100/110 with 144 MB of RAM
- Radius™ VideoVision™ Telecast
- Sony® Beta SP tape deck
- Seagate™ Elite 9 drive
- Exabyte tape drive
- Roland MA-12C speakers
- 20″ standard monitor
- 13″ NTSC color monitor
- ProMax 8-GB removable hard disk array with ATTO card

Apple Macintosh Quadra® 950 with a PowerPC™ accelerator card and 100 MB of RAM
- Radius VideoVision Studio
- Digidesign Audio Media II card
- 20″ standard monitor
- 13″ NTSC Color monitor
- ProMax 8-GB removable hard disk array

Apple Macintosh Quadra 950 with a PowerPC accelerator card and 90 MB of RAM
- Radius VideoVision Studio
- Scanner
- 20″ standard monitor
- ProMax 8-GB removable hard disk array with ATTO card

Software
- Adobe After Effects
- Adobe Fetch
- Adobe Gallery Effects
- Adobe Illustrator
- Adobe Photoshop
- Adobe Premiere

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