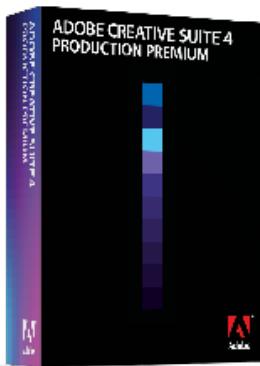


# ADOBE® CREATIVE SUITE® 4 PRODUCTION PREMIUM

Accelerate your HD workflows with 64-bit optimization



**Adobe Creative Suite 4  
Production Premium combines  
full versions of:**

- Adobe After Effects CS4
- Adobe Premiere Pro CS4
- Adobe Photoshop CS4 Extended
- Adobe Flash® CS4 Professional
- Adobe Illustrator® CS4
- Adobe Soundbooth® CS4
- Adobe OnLocation™ CS4
- Adobe Encore® CS4

Plus:

- Adobe Device Central CS4
- Adobe Bridge CS4
- Adobe Dynamic Link

Today's video production workflows benefit tremendously from applications that are architected and optimized for 64-bit operating systems. You can experience 50% to 200% faster high-definition (HD) workflows moving from 32-bit with 4GB of RAM to 64-bit with 16GB of RAM. Performance gains include increased editing speed, rapid switching among tools, and faster rendering—all of which give you more time to be creative with CS4 Production Premium. Jan Ozer of Digital Content Producer and EventDV tested CS4 Production Premium on 32-bit and 64-bit systems and concluded that “rendering trials clearly demonstrated that a 64-bit system delivered superior performance with most formats\*... the 64-bit system was 67% faster on my standard DV test file, up to 63% faster on HDV-related tests, up to 50% faster on AVCHD tests, and up to 227% faster on tests using footage from the RED camera.\*\*”

Because of these benefits, the majority of video professionals have already transitioned to 64-bit capable systems, including Mac OS X Leopard, Snow Leopard, or 64-bit versions of Windows® Vista® and Windows 7 operating systems.

## 64-bit support in Creative Suite 4:

All Adobe Creative Suite 4 software components are tested on 64-bit operating systems (OS). In addition:

- Adobe Photoshop® CS4 Extended software offers native 64-bit support for Microsoft® Windows Vista®. Native 64-bit support for Mac OS is planned in a future release.
- Adobe After Effects® CS4 software is architected and optimized for 64-bit OSes.
- Adobe Premiere® Pro CS4 software is architected and optimized for 64-bit OSes.
- Photoshop Lightroom® 2 software supports 64-bit processing, utilizing the advanced memory handling capabilities on the latest Mac OS and Windows systems.

## Future releases of Adobe® Premiere® Pro and After Effects® will only support 64-bit operating systems

After optimizing and architecting three versions of Adobe Premiere Pro and After Effects software for 64-bit systems, future versions of Adobe Premiere Pro and After Effects will offer native support for 64-bit operating systems. Because 64-bit operating systems offer superior performance, future releases of these products will not be supported on 32-bit operating systems. Please refer to the FAQ section on page 4 for more information.

\* “CS4 and 64-bit systems [Part 1](#) and [Part 2](#)” by Jan Ozer, [www.digitalcontentproducer.com](http://www.digitalcontentproducer.com)

\*\* “[The Moving Picture: CS4 at 64](#)” by Jan Ozer, [www.eventdv.net](http://www.eventdv.net)

## Why 64-bit operating systems matter in video production

Digital video production's demand for computing power—necessitated by increasingly high resolutions and the expectation of real-time responsiveness—is making 64-bit operating systems a core component of today's editing workflow. The number of processing cores per CPU continues to increase, as does the amount of RAM (32GB or more in some cases) that each CPU can access.

*"...the 64-bit system was 67% faster on my standard DV test file, up to 63% faster on HDV-related tests, up to 50% faster on AVCHD tests, and up to 227% faster on tests using footage from the RED camera."*

*Jan Ozer, Event DV*

Video production is inherently multidisciplinary, and shrinking budgets and increasingly powerful software mean production specialists in every area are stretching beyond their core strengths to handle other aspects of a production. Because 64-bit systems make it possible to run many applications simultaneously while maintaining real-time playback, such systems can speed up the production process considerably by providing instant access to a broad array of creative options. For hands-on users, the benefits are tangible—they can maintain momentum from creating to refining productions, which translates into a more enjoyable working process and higher quality results.

A number of key trends in video technology and video production will make 64-bit operating systems even more important moving forward:

- As the native resolution of cameras continues to increase, so do the bandwidth requirements—multiple layers or multiple streams of video increase demands at a higher rate. Only a 64-bit operating system can keep up with these demands.
- As color depth requirements increase, data rates increase dramatically. For example, a 4:4:4 12-bit file requires three times the bandwidth of a 4:2:0 8-bit file of the same resolution.
- As producers become more cost conscious, 64-bit systems can allow producers to shave time from schedules by handling more tasks in parallel.
- As standards rapidly evolve, content creators must work at high resolutions throughout production to meet the quality requirements for distribution. HD is increasingly common, even for web-based video distribution. Popular video websites now offer HD content.

## Advantages of 64-bit operating systems with CS4 Production Premium

When you use Adobe Creative Suite 4 Production Premium or Master Collection on a 64-bit OS, you can expect to see tangible benefits right away:

- Faster editing performance in Adobe Premiere Pro, especially when working with high-resolution files
- Better multi-core rendering and longer RAM previews in After Effects
- The ability to run multiple CS4 Production Premium components simultaneously and leverage new integration like Dynamic Link to move content between them
- Faster performance in native 64-bit Photoshop (on Windows Vista), especially when working with extremely large PSD files
- Projects further in resolution and complexity, because of the additional available memory
- Background processes running more efficiently

Adobe Premiere Pro CS4 and After Effects CS4 have been rearchitected for 64-bit operating systems to use large memory more effectively (up to 20GB of memory for Adobe Premiere Pro alone, and up to 64GB of memory for a large Production Premium workflow).

*Adobe Premiere Pro CS4 and After Effects CS4 are architected and optimized for the range of 2GB to 16GB of memory—supporting Production Premium workflows that show strong performance benefits at 16GB of memory or more.*

Photoshop CS4 Extended is native 64-bit on Windows Vista today. In early testing of 64-bit Windows Vista support in Photoshop, Adobe has observed overall performance gains in the range of 8%-12%. Those who work with extremely large files may realize noticeably larger gains in performance, in some cases as dramatic as ten times the previous speed. This gain is because 64-bit applications can address larger amounts of memory, resulting in less file-swapping—one of the biggest factors that can affect data processing speed.

Consider a typical workflow in CS4 Production Premium, where at any given time you might be performing several of these tasks in parallel:

- Compositing in After Effects
- Editing HD content in Adobe Premiere Pro
- Using compositions created with After Effects in Adobe Premiere Pro timeline via Dynamic Link
- Encoding a sequence from Adobe Premiere Pro in the background with Adobe Media Encoder
- Burning a Blu-ray disc in Encore using content imported via Dynamic Link from Adobe Premiere Pro

These five concurrent activities initiate approximately ten processes, each of which can use a separate 4GB chunk of memory. Thanks to 64-bit optimization, CS4 Production Premium helps you spend less time switching between applications and waiting for memory to page back in from disk. With more memory available for frame caching, played content is available in the cache longer, and it gets swapped out for more recently played frames. This translates into better editing interactivity, particularly for detail work on high-resolution content or when editing complex projects.

#### **Adobe’s plans for further 64-bit optimization**

Adobe has consistently focused on architecting and optimizing for leading-edge systems, using Moore’s law to predict trends in users’ system capacity.

*When buying new hardware, consider a 64-bit system to ensure that you have headroom in RAM to leverage the power and scalability of CS4 Production Premium.*

	Common workflow	Higher end workflows	% of amount of RAM in systems:	
			80% of editing systems	20% of editing systems
2004	SD	HD	1GB	6GB
2008	HD	2K, 4K, RAW	2GB	16GB
Future	4K	8K and more, stereo, higher bit depth	8GB	64GB

Adobe Premiere Pro CS4 and After Effects CS4 are architected and optimized for the range of 2GB to 16GB of memory—supporting Production Premium workflows that show strong performance benefits at 16GB of memory or more.

In the labs, Adobe continues to work on versions of CS4 Production Premium and Master Collection that are architected and optimized for higher CPU and core counts with more memory—opening the door for even more demanding workflows. Future versions of Adobe Premiere Pro and After Effects will *only* offer native support for 64-bit operating systems, and will not be supported on 32-bit operating systems.

When buying new hardware, consider a 64-bit system to ensure that you have headroom in RAM to leverage the power and scalability of CS4 Production Premium and Master Collection. Additionally, most tower systems available since 2006 and most laptops available since 2007 are 64-bit capable, so you may be able to experience the 64-bit performance boost today simply by upgrading your operating system and adding more RAM.

## **FAQ: Future releases of Adobe Premiere Pro and After Effects will only support 64-bit operating systems**

### **Q. What is Adobe announcing?**

A. After optimizing and architecting three versions of Adobe Premiere Pro and After Effects software for 64-bit systems, future versions of Adobe Premiere Pro and After Effects will offer native support for 64-bit operating systems. Because 64-bit operating systems offer superior performance, future releases of these products will not be supported on 32-bit operating systems.

### **Q. Why is 64-bit so important?**

A: Today's video production workflows benefit tremendously from the additional RAM available on 64-bit operating systems. Performance gains include increased editing speed, rapid switching among tools, and faster rendering—all of which give you more time to be creative. Future releases, because they will offer native support, will offer even greater performance gains by enabling Adobe Premiere Pro and After Effects to access more of your system's RAM.

Because of these benefits, the majority of video professionals have already transitioned to 64-bit capable systems, including Mac OS X Leopard, Snow Leopard, or 64-bit versions of Windows® Vista® and Windows 7 operating systems.

### **Q. Why is Adobe making this decision?**

A. Creative Suite customers benefit from working on the latest hardware and operating systems. The majority of video professionals have already transitioned to 64-bit capable systems, such as Mac OS X Leopard, Snow Leopard, or 64-bit versions of Windows (Vista, Win 7), prompting Adobe to prioritize development for 64-bit operating systems.

### **Q: How can I learn more about the benefits of 64-bit in the video production workflow?**

A. Here are some additional resources about the benefits of using 64-bit systems for video production:

- [“The 64-bit question: does more compute power matter to your bottom line?”](#) by Giles Baker, Studio Daily.
- “CS4 and 64-bit systems [Part 1](#) and [Part 2](#)” by Jan Ozer, [www.digitalcontentproducer.com](http://www.digitalcontentproducer.com)
- [“The Moving Picture: CS4 at 64”](#) by Jan Ozer, [www.eventdv.net](http://www.eventdv.net)

### **Q. Why is Adobe making this announcement now?**

A. Adobe recognizes the investment that our customers have in our software and believes in giving fair notice of any changes regarding the operating systems and hardware that our

solutions support. By announcing our intentions early, we are giving customers who are not yet on 64-bit systems time to plan their migration strategies accordingly.

**Q. Will Adobe continue to support the version of Adobe Premiere Pro or After Effects that I am currently running on a 32-bit system?**

A. Adobe plans to continue offering support according to the existing complimentary and paid support programs. For details on these programs, visit [www.adobe.com/support/main.html](http://www.adobe.com/support/main.html).

**Q. What's the difference between 32-bit and 64-bit operating systems?**

A. 64-bit operating systems offer a wider address system and data path, providing access to essentially unlimited RAM. On 32-bit systems, each application is limited to 4GB of RAM (and in practice this number is actually smaller). More RAM means applications can manipulate larger chunks of data, cache more information, and handle a wide range of tasks more efficiently.

**Q. How can I be ready for the future 64-bit only versions of Adobe Premiere Pro and After Effects?**

A. While Adobe Premiere Pro CS4 and After Effects CS4 run on both 32-bit and 64-bit systems today, we recommend upgrading to a 64-bit operating system to take advantage of 64-bit performance improvements in CS4 and to be ready for future releases that will run only on 64-bit operating systems. Most PCs purchased since 2005 either are already running 64-bit operating systems or can be upgraded to one.

**Q. What do I need to do to upgrade to 64-bit operating system on a Mac?**

A. Mac OS Leopard and Snow Leopard are already 64-bit capable and ready to use additional memory. All you need to do is add more RAM to start seeing the benefits.

**Q. What do I need to do to upgrade to 64-bit operating system on Windows?**

A. When you install 64-bit Windows Vista, make sure your hardware drivers are available for the 64-bit edition. Specific Windows Vista 64-bit drivers are necessary to run the hardware — 32-bit drivers do not work. In addition, you must have Service Pack 1 installed on Windows Vista to run CS4.

**When running CS4 on 64-bit Windows Vista—here are some tips to maximize performance:**

- For Adobe Premiere Pro, use version 4.1. This free update contains changes that allow Adobe Premiere Pro to use more than 4GB of RAM in the system by making multiple instances of itself each time 4GB has been used.
- For After Effects, be sure you have the 9.0.1 update, and adjust the amount of memory per core for the Memory & Multiprocessing option under Preferences. After Effects will also instance itself, but it does this per CPU core, and each core can use 4GB.

For Windows, CS4 Production Premium requires Microsoft Windows XP with Service Pack 2 (Service Pack 3 recommended) or Windows Vista Home Premium, Business, Ultimate, or Enterprise with Service Pack 1 (certified for 32-bit Windows XP and 32- and 64-bit Windows Vista).

The Mac version requires a multicore Intel® processor and Mac OS X v10.4.11–10.5.4.

For updates to system requirements and information about video hardware compatibility, visit [www.adobe.com/products/creativesuite/production/systemreqs](http://www.adobe.com/products/creativesuite/production/systemreqs).

**Q. What are Adobe's plans for the other components of Creative Suite? Will the rest of Adobe Creative Suite be 64-bit native on Mac OS and Windows?**

A. Adobe continues to prioritize 64-bit support based on the potential user benefits and the complexity of the code transition. At this time, After Effects and Premiere Pro are the only products that we are announcing will be 64-bit only in the next major release.

**Q. I am a customer running an earlier version of After Effects and Premiere Pro software on a 32-bit operating system. What are my options for upgrading to Creative Suite 4?**

A. Adobe has a number of upgrade paths available to current Creative Suite customers. Visit [www.adobe.com/products/creativesuite/upgrade](http://www.adobe.com/products/creativesuite/upgrade) for full details on your upgrade options.

**Q. What are the recommended system configurations for video production?**

A. For high-end workflows, more memory benefits performance significantly, making a 64-bit operating system essential. From our experience, these guidelines will help you, although your mileage will vary:

	Adobe Premiere Pro	After Effects	Production Premium and Master Collection
Solid baseline workflow	4GB	4GB	4GB
High-performance configuration	8GB	8GB	16GB
Memory rarely an issue	16GB	16GB	32GB

**What does this mean for you?**

Most laptops take only 4GB of memory. That will allow for a basic video workflow, but if you can add more memory, you're likely to experience performance gains.

**For more information**

For more details about Adobe Creative Suite 4 Production Premium, visit [www.adobe.com/go/creativesuiteproduction](http://www.adobe.com/go/creativesuiteproduction).

