

Table of Contents

Introduction

This document presents key findings of a benchmarking project designed to assess the impact of the Adobe Creative Suite 4 on the productivity of creative professionals.

Benchmarks were designed to measure how specific functions speed up everyday tasks. For details on the methodology used to conduct these benchmarks, see "About the Benchmarks" at the end of this report.

This report focuses on features and functionality most relevant to professional web and interactive designers and developers. Design, digital imaging, and video production are covered in separate reports.

Overall, Adobe Creative Suite 4 can save a web professional hours of work every month, quickly paying for the upgrade through increased productivity.

>	Dreamweaver CS4: Live View and Live Code
	Toggling between your web design program and a browser is a thing of the past—and the time savings are significant.
>	Dreamweaver CS4: Photoshop Smart Objects4
	The latest release of Dreamweaver allows users to place and edit Photoshop files directly in a web page, which can result in significant productivity gains.
>	Flash CS4 Professional: Simplified Animation Controls 5
	Flash CS4 provides a completely new—and much more intuitive—way of creating and modifying animations that makes tweening faster than ever.
>	Flash CS4 Professional: Editing Animations 6
	Managing your existing clips in a project could be quite time-consuming but now Flash CS4 reduces the burden.
>	Illustrator CS4: The New Gradient Tool
	Illustrator CS4 makes it easier and faster to manage gradients.
>	Fireworks CS4: CSS for Designers8
	Fireworks CS4 allows designers to export a web design including CSS information, driving impressive productivity gains.
>	Photoshop CS4: The Adjustments Panel9
	Photoshop CS4 helps you make non-destructive adjustments faster.
>	Bridge CS4: Manage Images More Efficiently10
	Bridge CS4 can save you a lot of time sorting, choosing, managing images.
>	Creative Potential: Inverse Kinematics with Flash CS411
	Find out how Flash CS4 can help you add complex linked motion effects without code.
>	The Bigger Picture12
	How the Creative Suite 4 helps you save time and money.
>	About the Benchmarks13
	Find out more about the methodology and the techniques used to provide a reliable assessment of productivity gains.

Live View and Live Code Will Change How You Create Web Pages

What is it all about?

Previewing web pages in a browser is one of those time-consuming operations that seem to be an inevitable part of web site design. Dreamweaver CS4 revolutionizes web authoring by including a standards-compliant web browser under the hood that makes it possible to test web pages without losing access to live code.

How do I use it?

As soon as you click on the Live View or Live Code button in the Dreamweaver CS4 document bar, the program displays not only a simple preview, but the web page as it would look in a browser. Live Code displays code as it is executed, and a "freeze code" feature stops execution to make fine tuning easier.

Software:

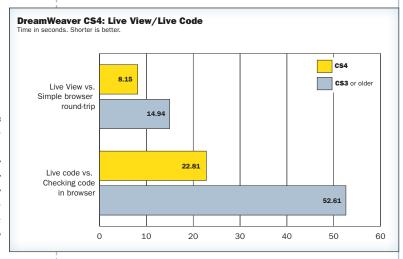
Dreamweaver CS4

Live View and Live
Code are essential
improvements to
Dreamweaver;
indeed there is no
need to conduct any
benchmarks to sense
that the productivity
gains from these
two features for web
professionals are gamechanging.

The feature: Live View and Live Code interactively link the rendered web page and the underlying code, making error detection much faster.



Live View and Live Code essentially reinvent the concept of WYSIWYG (what you see is what you get) for web development. How it affects
productivity: Even
with a simple example,
Live View and Live
Code make the code
authoring process more
than twice as fast than
the same operation
through a round-trip
to the browser.





Bottom Line: Live View/Live Code can save you 4 hours a month.

Photoshop Smart Objects Can Save You a Lot of Time

What is it all about?

Photoshop Smart Objects allow Dreamweaver CS4 users to place and edit native, multi-layered Photoshop files in a web page, with links maintained between the images and their source files. Whenever the original Photoshop file gets modified, the placed image in the Dreamweaver CS4 document is updated automatically.

How do I use it?

You place a Photoshop file the same way you would place any other image file. At that point, Dreamweaver lets you choose the web-compliant file format and compression level, and a save location for the image. When the image is inserted into the web page, Dreamweaver creates a Photoshop Smart Object linking the image with the original file and updates it whenever changes occur.

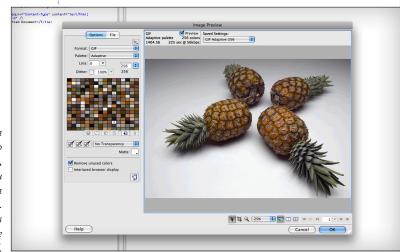
▶ Software:
Dreamweaver CS4

Photoshop Smart Objects are particularly useful since they let you update the same Photoshop file in several locations at

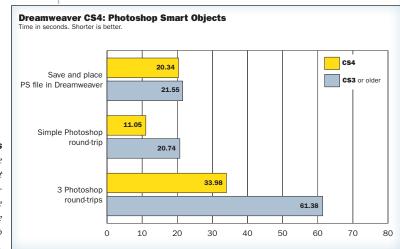
once automatically.

The feature: When you place a Photoshop image on a web page, Dreamweaver lets you choose the compression method and file format.

Subsequent changes to the original file are automatically updated.



How it affects
productivity: The
more subsequent
Photoshop roundtrips occur, the more
significant are the time
savings of Photoshop
Smart Objects.



 Photoshop Smart Objects are a good example of intelligent file sharing between applications.

Pfeiffer

Bottom Line: Photoshop Smart Objects can save you over two hours per month.

How Flash CS4 Professional Speeds Up Creating Animations

What is it all about?

Flash Professional is a powerful animation and motion design tool, and each new release extends the possibilities for both designers and developers. Flash CS4 represents a major overhaul of the program and introduces a completely new and more direct animation model (alongside the methods already in place).

How do I use it?

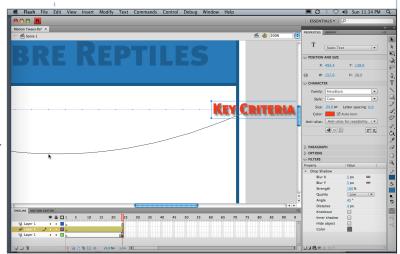
Creating a simple motion tween has been significantly streamlined in Flash CS4. All you need to do is select an object, right-click, and select Motion Tween from the pop-up menu. The application automatically inserts keyframes and a motion path that can be visually adjusted.

Software:

Flash CS4 Professional

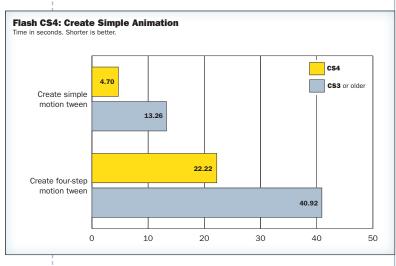
For designers who want to explore the Flash authoring environment but find it intimidating, the new release is a major improvement that incorporates many Adobe ease-of-use conventions that have been missing from previous releases.

The feature: When one creates a motion tween, Flash CS4 automates the tasks of creating the necessary keyframes. Even more important, the program automatically creates a Bézier-curve motion path that can be easily modified.



Flash CS4 Professional demonstrates a significantly deeper integration with the Adobe Creative Suite environment.

How it affects
productivity: Creating
a simple animation
in Flash CS4 takes
one third of the
time required in
previous releases.





Bottom Line: New animation tools can save you 1 hour 30 minutes per month.

Flash CS4 Professional: How To Save Time Editing Animations

What is it all about?

Creating an animation is one thing. But what happens if you need to spread it out or scale it down? Flash CS4 Professional makes managing the animation timeline as simple as drag and drop.

How do I use it?

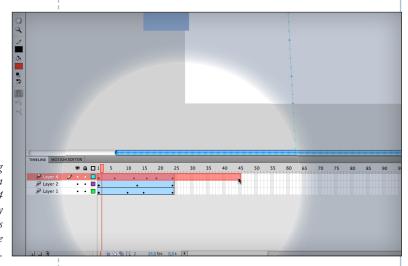
To scale the timespan of an animation up or down, all you need to do is to drag the end-point of the timeline to the new position. Flash CS4 automatically recalculates the relative position of all keyframes on the clip based on the new overall length. Previous releases of Flash Professional required you to calculate the new position of each keyframe and reposition it individually.

Software:

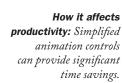
Flash CS4 Professional

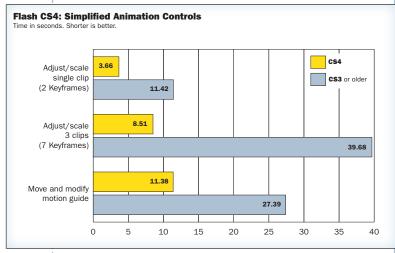
In addition to sophisticated new animation features such as inverse kinematics, Flash CS4 Professional also offers users a streamlined user interface and key productivity features that deliver long-term productivity and timesaving benefits for many repetitive tasks.

The feature: Scaling
an animation
in Flash CS4
automatically
repositions keyframes
with respect to the
overall length.



► Flash CS4 Professional reduces the necessary steps to create many common animation and motion effects, resulting in significant time savings.





Pfeiffer

Bottom Line: Flash CS4 animation controls can save you over 3 hours per month.

Creating and Modifying Gradients in a More Efficient Way

What is it all about?

Gradients are one of the most fundamental features Illustrator provides. The new gradient tool provides one of the most groundbreaking improvements of this functionality since the introduction of the program over two decades ago.

How do I use it?

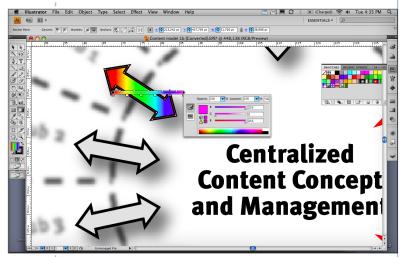
The gradient tool is essentially the same tool you have always used, just better. Gradients can now be directly modified with the gradient tool, including complex, multi-color gradients. Saving a modified gradient has been significantly streamlined.

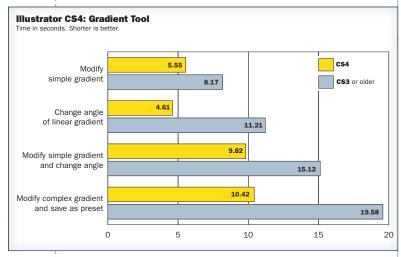
Software:

Illustrator CS4

- The new gradient tool is particularly efficient when you work on a larger screen, where mouse movements to the various panels take more time than on smaller displays.
- ► The new gradient tool offers innovative options such as the possibility of skewing circular gradients interactively.

The feature: The new gradient tool displays a color-bar with colorswatches that can be modified directly, without going back to the Swatches panel.





The new gradient tool makes creating and modifying gradients significantly faster.

How it affects productivity:

Modifying a simple gradient is almost twice as fast with the new gradient tool.



Bottom Line: The new gradient tool can save over an hour per month.

How Designers Can Create CSS — Without Even Knowing It

What is it all about?

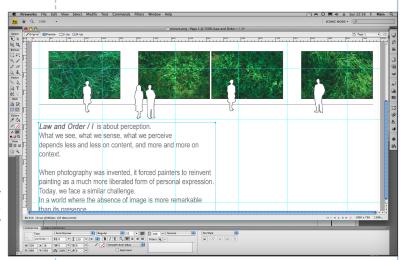
Fireworks CS4 is the first release of the application that allows you to export formatting information using cascading style sheets (CSS), providing considerable productivity gains at the site creation stage. In addition, Dreamweaver CS4 adds simplified tools for navigating and modifying CSS-based sites.

How do I use it?

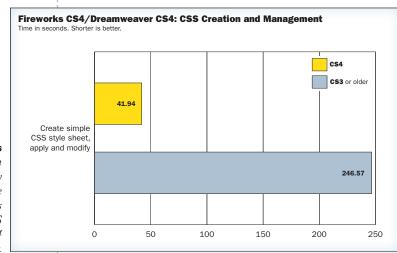
Simple: Format your Fireworks CS4 page and export it to CSS. Instead of exporting the page as HTML tables with rasterized text, Fireworks CS4 creates the necessary CSS style sheet that can then be fine-tuned in Dreamweaver.

- ► Software:
 Fireworks CS4
 Dreamweaver CS4
- Whether you are a hard-core CSS coder or new to web development, the combination of Fireworks CS4 and Dreamweaver CS4 offers a spectacularly simpler—and faster—way to build a modern web page.
- The productivity gains over previous releases of the same programs are spectacular.

The feature: Text formatting information in a Fireworks CS4 document is exported as CSS style sheet that is directly recognized and managed by Dreamweaver CS4.



How it affects
productivity: Even
with an extremely
simple example, the
productivity gains
of creating CSS
in Fireworks CS4
are spectacular.



Fireworks CS4 could do for CSS what WYSIWYG HTML editors did for web design: Make it accessible for designers without programming skills.

Pfeiffer Consulting

Bottom Line: Creating CSS with Fireworks CS4 can save you over 3 hours per week.

How the Adjustments Panel Can Speed Up Non-destructive Image Correction

What is it all about?

The Adjustments Panel was introduced in Photoshop CS4 to streamline the process of making non-destructive changes to images. Previously, in order to make such changes, it was necessary to create an adjustment layer, choose the kind of adjustment (Levels, Contrast, etc), and then adjust desired settings. With The Adjustments Panel, all you need to do is to select the option and choose the setting in one convenient panel.

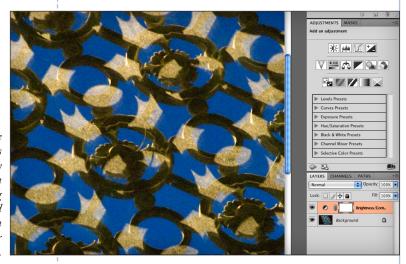
How do I use it?

In fact, you don't need to do anything: Photoshop CS4 automatically creates a new adjustment layer as soon as you select an option. The program also automatically creates a layer mask and presents presets for each adjustment option within the panel, saving many round-trips to the menu-bar.

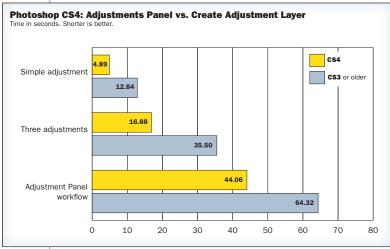
► Software:
Photoshop CS4

- ► The Adjustments
 Panel speeds up
 non-destructive
 image modifications
 considerably by
 eliminating several
 time-consuming steps.
- Cumulative productivity gains linked to the Adjustments Panel are significant, especially if you spend a lot of time tweaking images to look just right.

The feature: The Adjustments Panel offers fast access to frequently used image modification options by placing them in a panel and automating the creation of an adjustment layer and layer mask.



How it affects productivity: With the Adjustments Panel, applying changes to an image in Photoshop CS4 takes less than half the time required in previous Photoshop releases.



The Adjustments Panel eliminates several unnecessary steps in the non-destructive image modification workflow.

Bottom Line: Using the Adjustments Panel can save you over an hour each week.



How Bridge CS4 Helps You Streamline Image Management

What is it all about?

Bridge CS4 offers a wide range of document management options specific to creative workflows. The new Review mode for the selection of files provides significant efficiency gains for sorting and selecting large quantities of images.

How do I use it?

Bridge has evolved enormously since its introduction as part of the Adobe Creative Suite 2, efficiently handling a vast array of file-management options ranging from file import to selection, metadata management, and operations such as the creation of PDF contact sheets or web galleries from a variety of document types. Because of its tight integration with the rest of the Creative Suite, Bridge CS4 is the closest we have ever come to an operating system for creative data.

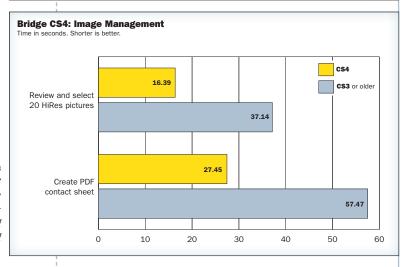
- ▶ Software: Bridge CS4
- Bridge CS4 has matured and now provides a variety of file-related tasks that are unmatched by operating system options, and tailored to the needs of creative professionals.

the appropriate
images from dozens
or hundreds is a timeconsuming task that
the new Review mode
in Bridge CS4 speeds
up significantly.



► The integration of Bridge CS4 with the other applications of the Creative Suite 4 creates a powerful file management environment.

How it affects productivity:
Bridge CS4 is twice as fast as previous releases in file-related tasks benchmarked for this project.





Bottom Line: Bridge CS4 can save you close to 1 hour 30 minutes per month.

Inverse Kinematics Pushes the Envelope of Flash Animation

What is it all about?

Inverse Kinematicss, or IK, is one of the staples of sophisticated animation techniques. IK means to apply an underlying skeleton to a shape that defines the connections and relationships between different elements of that shape. When IK effects are applied to the image of a tree, moving the branch causes the leaves to flutter.

How do I use it?

Sound complicated? It is actually quite simple: all you need to do is to use the new Bones tool in Flash CS4 to draw links between the objects you want to move in relation to each other.

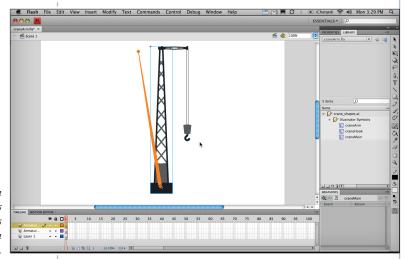
A few clicks opens up the considerable creative potential of this complex animation effect—without requiring any programming.

Software:

Flash CS4 Professional

▶ While traditionally, inverse kinematics is used for character animation, the availability of this technique as a visual drawing tool in Flash opens up a host of innovative possibilities to Flash users of every level.

Defining the skeleton for inverse kinematics just takes a few clicks using the Bones tool in Flash CS4 Professional.



Adding inverse kinematics to Flash CS4 dramatically expands the possibilities for rich and engaging interactivity.

Once the logical structure is created, moving one element automatically pulls the connected structure.





Bottom Line: Inverse Kinematics in Flash CS4 proves that sophisticated animation techniques do not necessarily need to be complex or require extensive coding.

Return On Investment (ROI) Projections

How does it all add up?

This document looks at some key figures extracted from the extensive productivity benchmarking project Pfeiffer Consulting has conducted on Adobe Creative Suite 4 software.

While the complete benchmarking project comprises over 120 individual benchmarks, we have picked **key features of Adobe Creative**Suite 4 that are common in a wide range of creative workflows, and are usually repeated over and over again.

Even seemingly minimal productivity gains—say, a few seconds for a single operation—add up over time, when an operation is frequently repeated.

Every mouse click counts, and every second adds up. This is particularly true for workflows executed under enormous deadline pressure.

Just the few features analyzed

here can save you many hours over the course of a month precious time gained to be more creative, more time to explore visual ideas, to take your work to the next level. And this is without taking into account all the other productivity enhancements in the Adobe Creative

Suite 4.

Feature	Reptitions of Benchmarked Operations/day	Time saved per month	Time saved per year
► Dreamweaver CS4: Live View/Live Code	20	4 h. 03 min.	44 h. 43 min.
► Dreamweaver CS4: Photoshop Smart Objects	10	2 h. 07 min.	23 h. 24 min.
► Flash CS4 Professional: Create Simple Animation	10	1 h. 30 min.	16 h. 39 min.
► Flash CS4 Professional: Editing Animations	10	3 h. 03 min.	33 h. 34 min.
► Illustrator CS4: The Gradient Tool	10	1 h. 18 min.	14 h. 28 min.
► Fireworks CS4: CSS Creation for Designers	3	3 h. 24 min.	37 h. 30 min.
► Photoshop CS4: The Adjustments Panel	3	3 h. 24 min.	41 h. 00 min.
Bridge CS4:Managing Images	5	1 h. 24 min.	15 h. 30 min.

This table only looks at a small selection of new features introduced by the Adobe Creative Suite 4. It is clear that even seemingly minimal productivity gains of frequently repeated operations can save creative professionals hours or even days over the course of a year.

Figures calculated from the number of repetitions of benchmarked operations for each feature. See feature pages for detail.

About the Benchmarks: How We Measure Productivity

- This benchmark project was commissioned by Adobe and independently executed by Pfeiffer Consulting.
- All the productivity measures presented in this document are based on real-world workflow examples designed and executed by professionals.
- No scripting or programming of any kind was used during the execution of the benchmarks.
- ► For an in-depth description of the benchmark methodology, complete list of benchmarks and detailed results, please download the complete Adobe CS4 Productivity Benchmark Report at www.pfeifferreport.com

About the Adobe CS4 Productivity Benchmarks

The productivity figures in this report are part of an extensive and ongoing productivity benchmarking project commissioned by Adobe, in order to independently assess the productivity gains that the latest release of Adobe Creative Suite can provide creative professionals.

Pfeiffer Consulting independently developed and executed the benchmarks presented here, by analyzing creative workflows in four different segments of activity: design, web and interactive, digital imaging, and video. The benchmarks were designed and executed by creative professionals.

How we design the benchmarks

The basic approach is simple: in order to assess productivity gains that a new release or a different product may (or may not) bring, we start by analyzing the minimum number of steps necessary to achieve a given result in each of the applications that have to be compared.

Once this list of actions has been clearly established, we start to execute the operation or workflow in each program, with the help of seasoned professionals who have long-standing experience in the field and with the programs that are tested.

In order to be certain that no lag or operator-induced delays are included in the productivity measures, each benchmarked example is cut down into small segments of three or four steps each. After an initial training phase, each segment is executed three times,

and the average time is used as a result. The cumulative times for all segments that form a complete workflow example are then used as benchmark results.

How we prepare hardware for testing

We use factory-standard configuration hardware, that has been completely re-initialized prior to benchmarking. Only the system software and application software necessary for tests, as well as all required updates at the time of testing, are installed on the benchmark system. No peripherals other than the ones required for the benchmarks are connected. Network access is only enabled when required by the benchmark protocol, or for software activation.

Hardware

Benchmarks for this document were conducted on a 2008 release 2.8GHz Mac Pro equipped with 4GB of RAM. Future benchmarks for this ongoing project will also be executed on a similarly configured Windows system.

About Pfeiffer Consulting

Pfeiffer Consulting is an independent technology research institute and benchmarking operation focused on the needs of publishing, digital content production, and new media professionals.

Download the full Adobe Creative Suite 4 Productivity Benchmark Report, as well as other benchmark reports and research studies at www.pfeifferreport.com.



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