

# Adobe CS6: Real-World Productivity for Imaging Professionals

### Introduction

This document presents key findings of a benchmarking project designed to assess the impact of the Adobe CS6 applications on the productivity of designers and creative professionals.

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

This report focuses specifically on features and functionality geared towards the imaging professional. Design, web creation and video production are covered in separate reports.

Adobe Photoshop CS6: Real-Time Liquify
The new Liquify feature in Photoshop CS6 provides near real-time feedback even with very large images.
Adobe Photoshop CS6: Efficiency in Working With Layers4
Photoshop CS6 offers several ways of working more efficiently with layers, speeding up creation and modification of complex documents.
Adobe Photoshop CS6: Auto Adjustments
Photoshop CS6 speeds up image adjustment by providing efficient automatic adjustments for common image corrections.
Adobe Photoshop CS6: Content-Aware Move6
Extending upon the content-aware fill option, Photoshop provides a content-aware move tool to speed up complex editing operations.
Adobe Photoshop CS6 Creative Potential: Blur Gallery
Photoshop CS6 introduces sophisticated interactive blur options, that emulate camera effects such as tilt/shift or field blur, and would be almost impossible to create manually.
About the Benchmarks
Find out more about the methodology and the techniques used to provide a reliable assessment of productivity gains.

### Application Area: Effects Efficiency

# Real-Time Liquify: The Wait Is Over

### What is it all about?

Photoshop CS6 expands the popular Liquify feature in one major way: performance. While Liquify has always provided significant creative potential for image manipulation, it was not very efficient when dealing with larger images.

The new release changes this in a spectacular way, allowing even very large images to be distorted in near real time. Liquify in Photoshop CS6 also supports brush sizes of up to 15 000 pixels diameter - ten times larger than with previous releases.

# 

Liquify (Normandy.psd @ 33.39

### **About the Benchmarks**

The benchmark results for the Liquify feature in Photoshop CS6 were very impressive: certain operations were over 100 times faster than using the older version of Photoshop.

CS6	
(2.64%)	

**CS5.x (or older)** (100%)

Photoshop CS6: 11.71 sec. Photoshop CS5.1: 7 min. 23 sec. Shorter is better.

Average result from 15 individual benchmarks, executing multiple distortions and corrections in the Liquify dialog box, with files ranging from 500MB to 1.2GB.

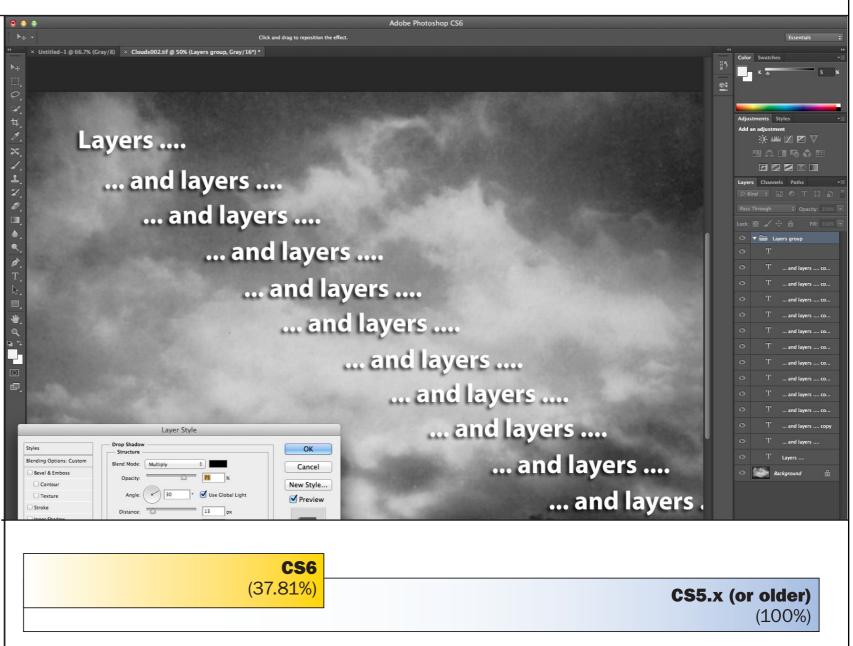
### Application Area: Working with Layers

# Photoshop Layers: A New Level of Efficiency

### What is it all about?

Layers have been an essential feature of Adobe Photoshop<sup>®</sup> for many years. Photoshop CS6 adds several essential options: Layer Styles can now be applied not only to individual layers, but to groups (as in our illustration).

Other productivity enhancements include a sophisticated search function, that can help locate layers by name or type, speeding up work with complex documents significantly.



Photoshop CS6: 11.53 sec. Photoshop CS5.1: 30.50 sec. Shorter is better.

Average results from 12 individual benchmarks, executing a selection of layer-related operations, including applying effects to multiple layers, locating a specific layer in complex file by name or by type, and renaming multiple layers.

### **About the Benchmarks**

Our benchmarks covered the key productivity enhancements to the layer architecture in Photoshop CS6.

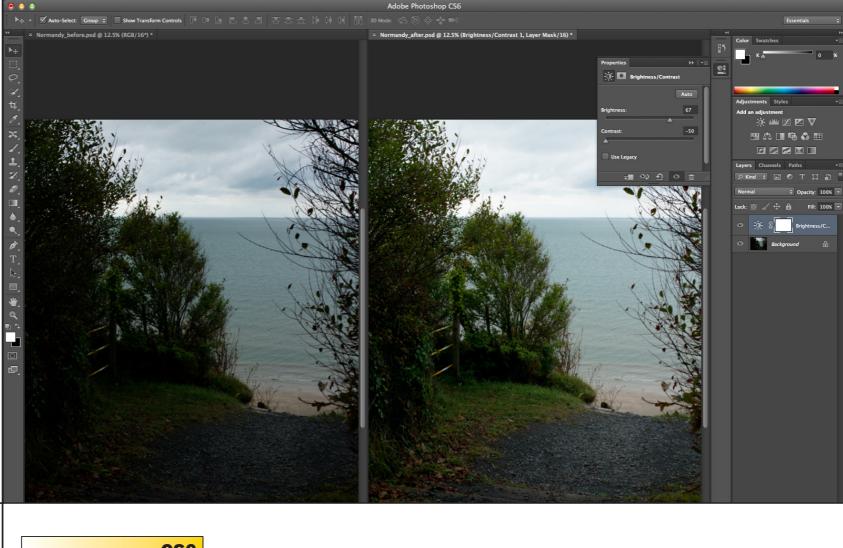
### Application Area: Image Adjustments

# How Auto Adjustments Speed Up Color Correction

### What is it all about?

In Photoshop CS6, several adjustment layers, such as Brightness/Contrast and Curves, now feature an Auto option, that calculates automatic adjustments based on the color values present in the selected image.

Frequently, the automatic adjustment offers a balanced first approach to the correction, and can save significant time in the color optimization process.



### **About the Benchmarks**

For our benchmarks we first tested the Auto option in Photoshop CS6 to assess the viability of the suggested image adjustment, then measured the time to obtain a comparable adjustment manually in Photoshop CS5.5.

CS6	
(22.89%)	CS5.x (or older)
	(100%)

Photoshop CS6: 5.40 sec. Photoshop CS5.1: 23.57 sec. Shorter is better.

Average results from 12 individual benchmarks, comparing the time for Photoshop CS6 Auto Adjustment with the time necessary to achieve a comparable result by manually applying brightness, contrast and levels corrections to several images.

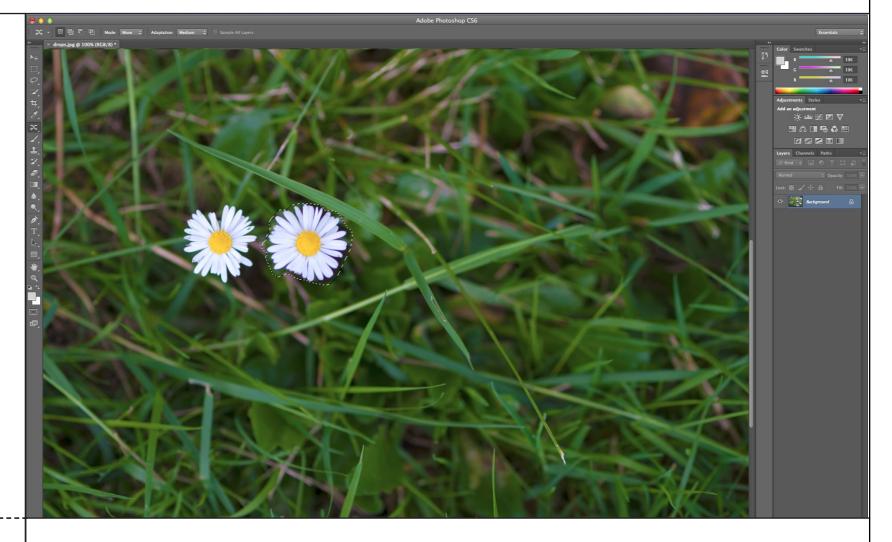
### Application Area: Retouching

## **Content-Aware Move:** Accelerating Complex Retouching Operations

### What is it all about?

The Content-Aware Move Tool in Photoshop CS6 expands on the Content-Aware Patch feature in the previous release of the program.

The user draws a rough outline around the object that needs to be moved, and moves it to the desired location. Photoshop CS6 then fills in the background based on the image around it. While in many cases, some minor retouching and fine-tuning may be needed, the process is significantly faster than using the features available in earlier releases.



### **About the Benchmarks**

We benchmarked the Content-Aware Move Tool to reposition a flower over a leave background. In Photoshop CS5.1, the Content Aware Patch function was used.

	CS6
CS5.x (or older)	(46.94%)
(100%)	

Photoshop CS6: 14.24 sec. Photoshop CS5.5: 30.34 sec. Shorter is better.

Average of six benchmarks, covering the move/copy of a portion of the image and the retouching necessary to reconstruct the surface behind. No manual retouching was necessary.

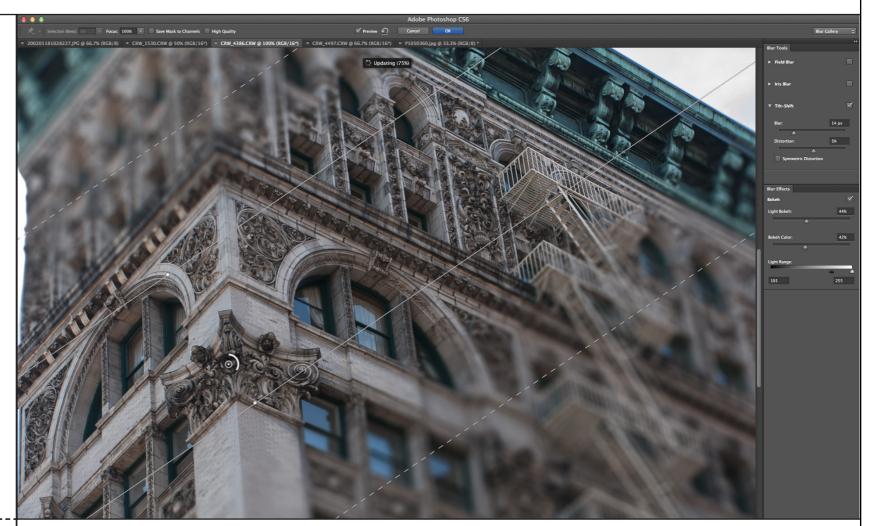
### Application Area: Creative Potential

# Creating Sophisticated Photographic Blur Effects

### What is it all about?

The Blur Gallery in Photoshop CS6 allows the interactive creation and fintuning of region-based blurring. The feature emulates effects traditionally achieved with the camera, in some cases, as with the Tilt-Shift blur, requiring specialty lenses.

Since several focus points can be created, the Blur effects can create images impossible to shot with a camera—while retaining a very "photographic" look.



### **About the Benchmarks**

We used the Tilt-Shift Blur feature to illustrate the creative potential that the photographic blur effects in Photoshop CS6 hold.

CS6	???
Photoshop CS6: 40.63 sec.	

It took under a minute to create this sophisticated Tilt-Shift effect using one of the new interactive photographic blur tools in Photoshop CS6. Manually creating such an effect in an earlier release would be difficult if not impossible.

### About the Benchmarks: How We Measure Productivity

#### About the Adobe CS6 Productivity Benchmarks

The productivity figures in this report are part of an extensive productivity benchmarking project commissioned by Adobe, in order to independently assess the productivity gains that CS6 applications can provide creative professionals.

Pfeiffer Consulting independently developed and executed the benchmarks presented here. 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.

#### Hardware

Benchmarks for this document were conducted on several different Mac and Windows workstations and notebook computers with 8-16 GB of RAM (see complete benchmark report for details.)

### **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 CS6 Productivity Benchmark Report, as well as other benchmark reports and research studies at www.pfeifferreport.com.

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