

**Client:** Adobe

**Project:** Adobe Creative Suite 5 Benchmarks

**Complete Benchmark Report**

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	<b>Document:</b> Complete Benchmark Report	

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## About the Benchmarks

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## About the Benchmark Project

### Aim of the benchmark project

This benchmark project was defined to measure the productivity and efficiency increases linked to features and user interface improvements introduced by the Adobe Creative Suite 5, released in early 2010, as compared with the Adobe Creative Suite 4.

Specific benchmarks and workflow efficiency measures were conducted focussing on key productivity features introduced with Adobe Photoshop CS5, Illustrator CS5 and InDesign CS5.

## Technical Details

### Computer Models Used for Benchmarking

- **2.8GHz Mac Pro (8-core)**
- **System software and configuration**
  - The benchmark systems were completely re-initialized prior to the benchmarks, using **a standard installation of Mac OS X Snow Leopard 10.6.3.**
- **Memory**
  - All Mac computers were equipped with **4GB of RAM.**
- **Configuration**
  - All benchmarks were conducted on **standard configuration** workstations completely re-initialized for the benchmarks.
  - No external hard drives or other peripherals were connected during benchmarking.
  - System functions accessing the network were disabled unless required.

### Application Software

The benchmarks were conducted using **a default installation of the Adobe Creative Suite 5** Master Collection.

**Default settings** were used for memory allocation and other settings unless otherwise stated.

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## Benchmark Methodology

### The Pfeiffer Consulting Methodology for Productivity Benchmarks

The *Pfeiffer Consulting Methodology for Productivity Benchmarks* is based on **real world tasks and assignments executed by operators**, rather than relying on computer scripting. These highly perfected measures provide a reliable way to document the impact of technology on productivity in a way no simple performance benchmark can. More importantly, these productivity measures document the impact of user interface efficiency as well as hardware performance.

The basic aim of the methodology is simple: to emulate **the real-world productivity achieved by an experienced operator**. Benchmarks are defined and executed in such a way that only the actual time necessary to achieve a given result is measured.

The *Pfeiffer Consulting Methodology for Productivity Benchmarks* is extremely flexible, and has been used over the last decade to measure aspects as diverse as workflow productivity of creative software; the impact of screen-size on operator efficiency; real-world productivity increases linked to different computing platforms; or hard to quantify aspects such as menu latency and user interface friction. Please visit [www.pfeifferreport.com](http://www.pfeifferreport.com) for more information and a wide variety of benchmark reports.

### Benchmark Definition and Execution

All benchmarks conducted **were specifically defined for this project by experienced professionals** with a deep understanding of the workflows in question.

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 3 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.

**No scripting** was used for the execution of the benchmarks.

The use of **common keyboard shortcuts and contextual menus** was authorized.

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## Complete List of Benchmarks

### Introduction

The benchmarks have **been grouped by application software and type of benchmark**. For each benchmark, the list shows the feature that was tested first, followed by a short description of the benchmark. When the benchmarks compare two different ways of achieving the same result, the description lists the CS5 functionality first, followed by the conventional method of achieving the same result.

For example:

- ▶ **Content-Aware Fill vs. Manual cloning/patching:** *Remove object from photograph* describes the benchmark of the Content-Aware fill feature introduced in Photoshop CS5 that automatically fills a selected area with elements from the surrounding background, in comparison with traditional methods of cloning and touching up practiced with previous releases of the software.
- For any additional questions regarding the benchmarks or the methodology, please contact [research@pfeifferreport.com](mailto:research@pfeifferreport.com)
- For any question regarding the features in Adobe Creative Suite 5 please visit [www.adobe.com](http://www.adobe.com)

### Benchmarks

- **Photoshop CS5: New Features**

Feature Productivity benchmarks of Photoshop CS5 looked at the newly introduced Content-Aware Fill feature, that automatically fills a selected area with elements from the surrounding background. Also tested was new capability to drag/drop images directly on to new layers in an open Photoshop document from Adobe Bridge and Photoshop's new and improved option for straightening image.

- ▶ **Content-Aware Fill**

- Remove object from photograph: Simple example
- Remove object from photograph: Complex example

- ▶ **Drag/Drop Images to Layers**

- Add Single Image as layer to open PS document
- Add 3 Images as layers to open PS document

- ▶ **Straighten Images**

- Straighten image with Ruler Tool.
- Straighten image with Ruler Tool and crop

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- **Illustrator CS5: Beautiful Strokes**

Illustrator feature benchmarks focused on the new set of options with the collective name of Beautiful Strokes, as well as the productivity enhancements introduced with precise arrowheads and joining individual paths.

- ▶ **Stroke Width**

- Make simple modification of stroke width
    - Make multiple modifications of stroke width

- ▶ **Precise Arrowheads**

- Add arrowhead to existing path and adjust size

- ▶ **Join Paths**

- Join 3 individual paths
    - Join 6 individual paths

- **InDesign CS5: New Features**

For these benchmarks, we looked at 3 key productivity features introduced with InDesign CS5: the Span Columns feature; the re-designed Selection Tool; and the new Gap Tool.

- ▶ **Span Columns**

- Format headline to span 3 columns
    - Create 3-column paragraph in single-column page
    - Workflow: Format page with multi-column headline, intro and pull-quote

- ▶ **Selection Tool**

- Scale box, crop and rotate image
    - Scale and rotate box, scale, crop and rotate image
    - Workflow: Scale and crop 6 images in a page layout
    - Workflow: Scale, crop and rotate 6 images in a page layout

- ▶ **Gap Tool**

- Change gap between two images (reduce gap)
    - Change width of four images

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## Complete Results: Tables

CS5	CS4
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**Photoshop CS5: Content-Aware Fill vs. Manual cloning/patching**

Remove object from photograph: Simple example	18.25	73.33
Remove object from photograph: Complex example	24.04	108.33

**Photoshop CS5: Drag/drop Image to layer**

Add Single Image as layer to open PS document	3.24	9.96
Add 3 Images as layers to open PS document	6.03	18.89

**Photoshop CS5: Straighten Image**

Straighten image with Ruler Tool.	7.73	12.89
Straighten image with Ruler Tool and crop	8.16	32.21

**Illustrator CS5: Beautiful Strokes**

Make simple modification of stroke width	8.84	32.15
Make multiple modifications of stroke width	15.66	43.63

**Illustrator CS5: Arrowheads**

Add arrowhead to existing path and adjust size	23.70	72.00
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**Illustrator CS5: Join Paths**

Join 3 individual paths	6.46	12.00
Join 6 individual paths	8.72	26.64

Time scale in seconds. Shorter is better.

CS5	CS4
-----	-----

**InDesign CS5: Span/split columns**

Format headline to span 3 columns	9.73	19.27
Create 3-column paragraph in single-column page	13.50	73.31
Workflow: Format page with multi-column headline, intro and pull-quote	36.86	89.43

**InDesign CS5: Span Columns workflow (detail)**

Phase 1: Format headline	9.99	24.98
Phase 2: Format introduction	14.16	32.02
Phase 3: Format pull quote	12.71	32.44
<b>Total</b>	<b>36.86</b>	<b>89.43</b>

**InDesign CS5: Content Tool**

Scale box, crop and rotate image	12.37	20.72
Scale and rotate box, scale, crop and rotate image	18.29	32.12
Workflow: Scale and crop 6 images in a page layout	39.30	63.98
Workflow: Scale, crop and rotate 6 images in a page layout	77.69	144.71

**InDesign CS5: Gap Tool**

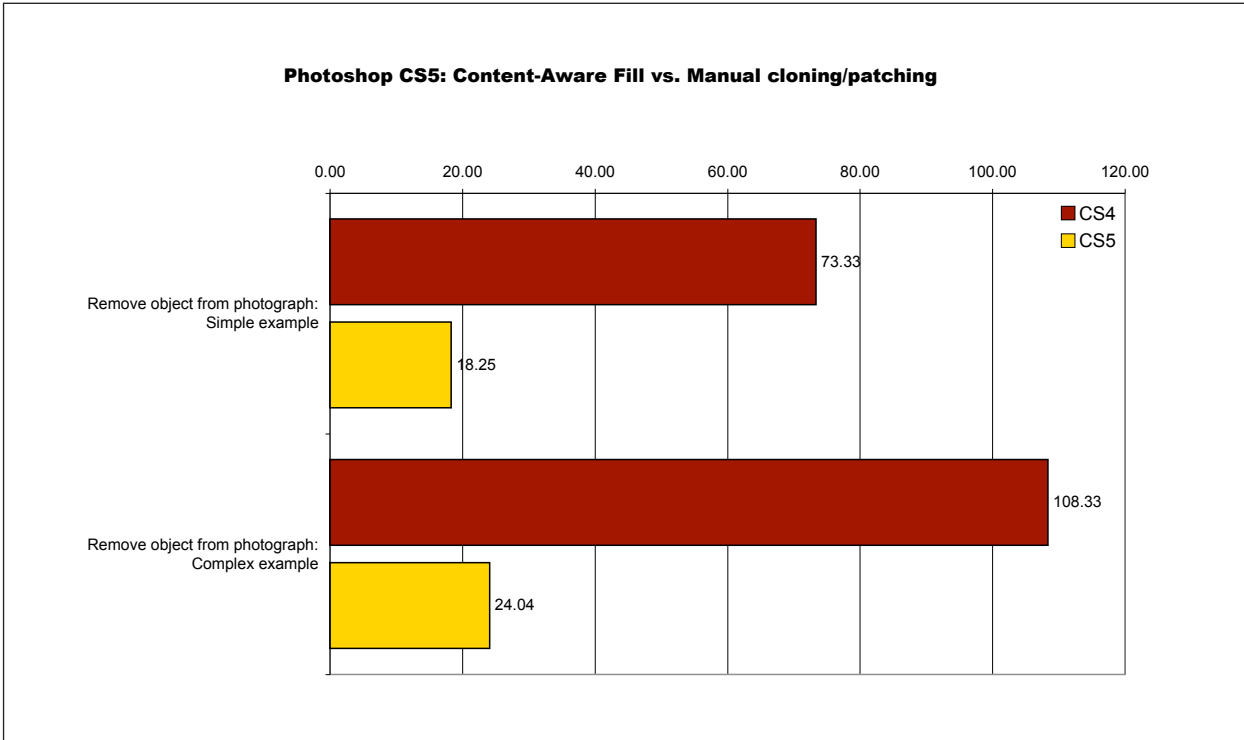
Change gap between two images (reduce gap)	4.18	10.30
Change width of four images	7.27	17.78

Time scale in seconds. Shorter is better.

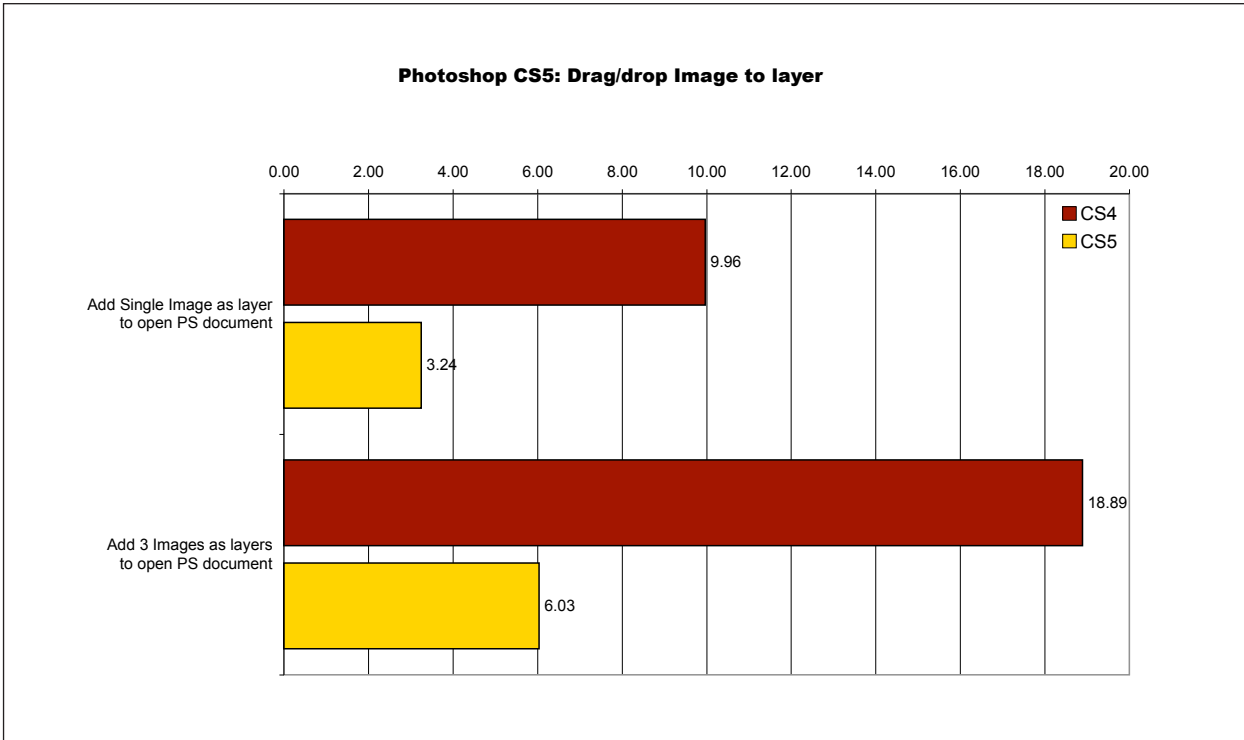
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## Complete Results: Charts

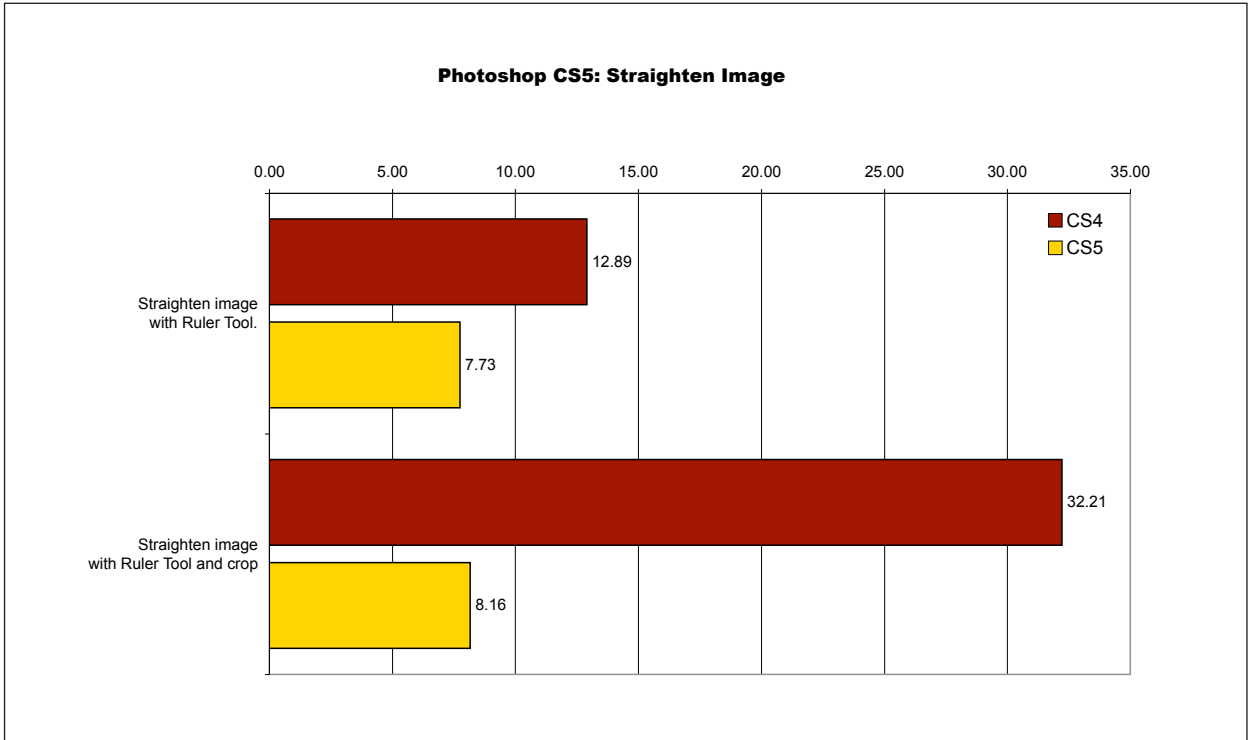
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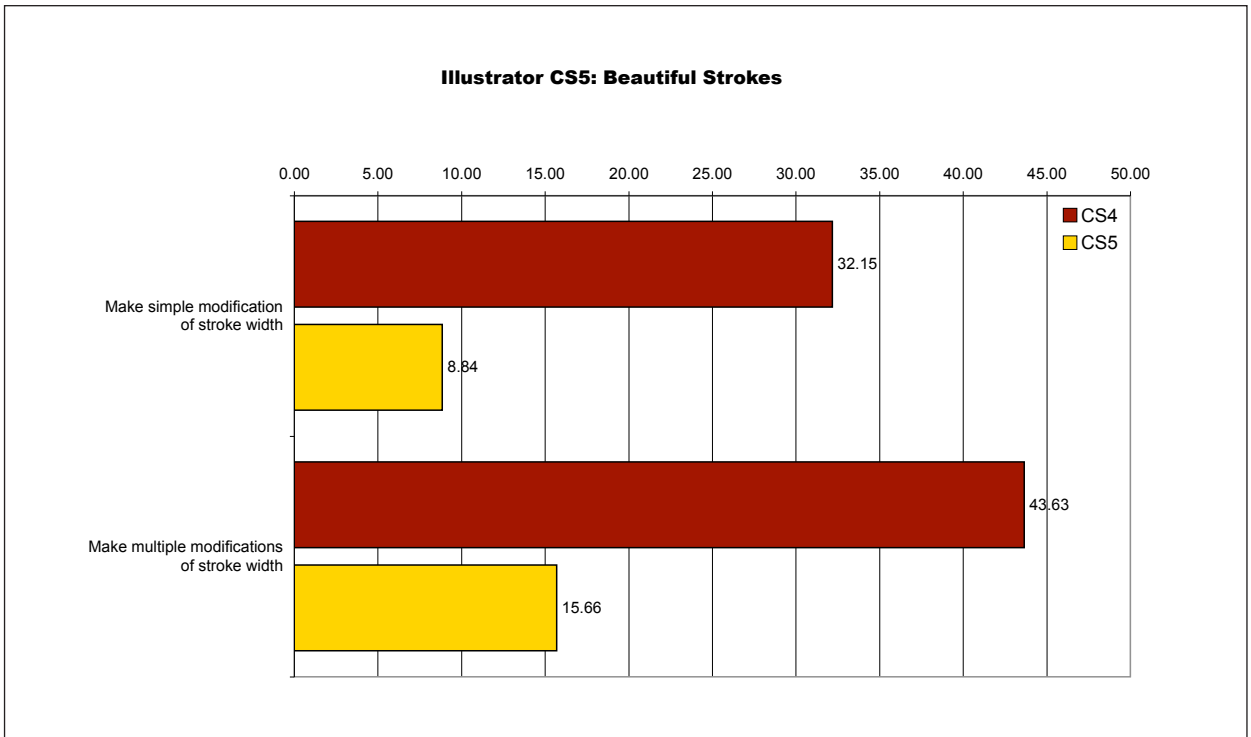
Time scale in seconds. Shorter is better.



Time scale in seconds. Shorter is better.

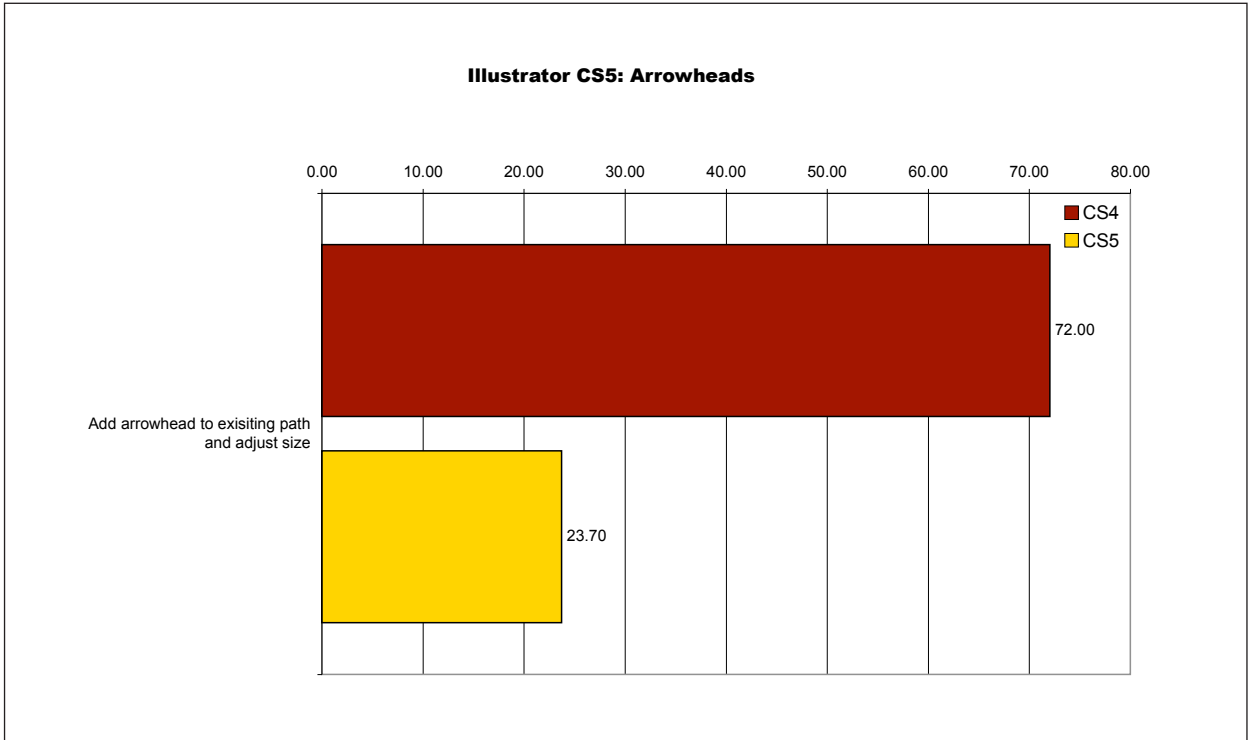


Time scale in seconds. Shorter is better.

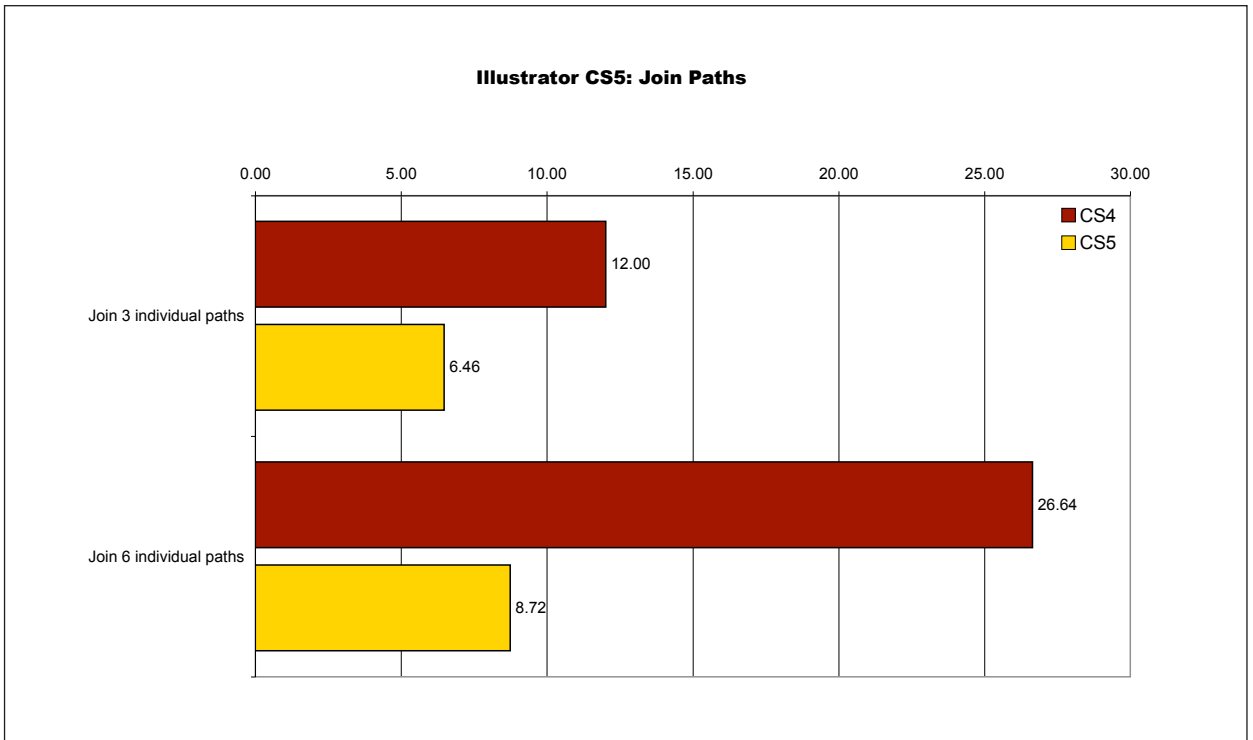


Time scale in seconds. Shorter is better.

**Complete Results: Charts**

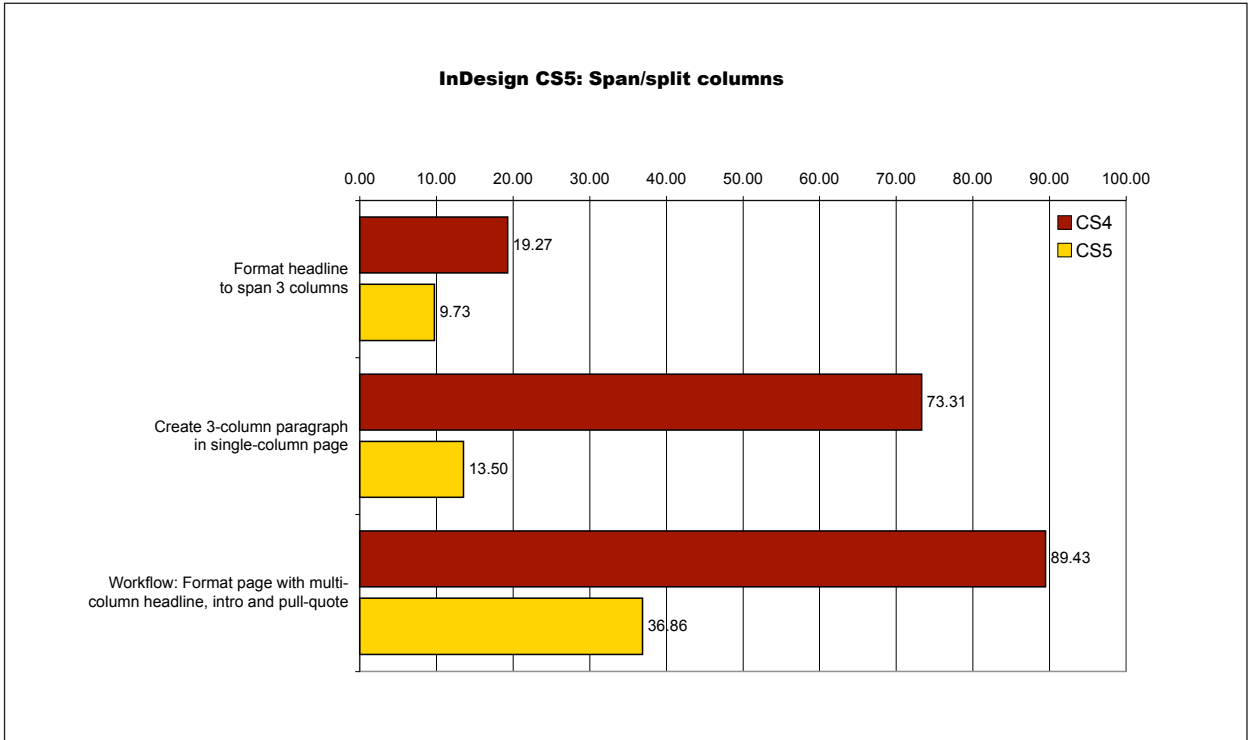


Time scale in seconds. Shorter is better.

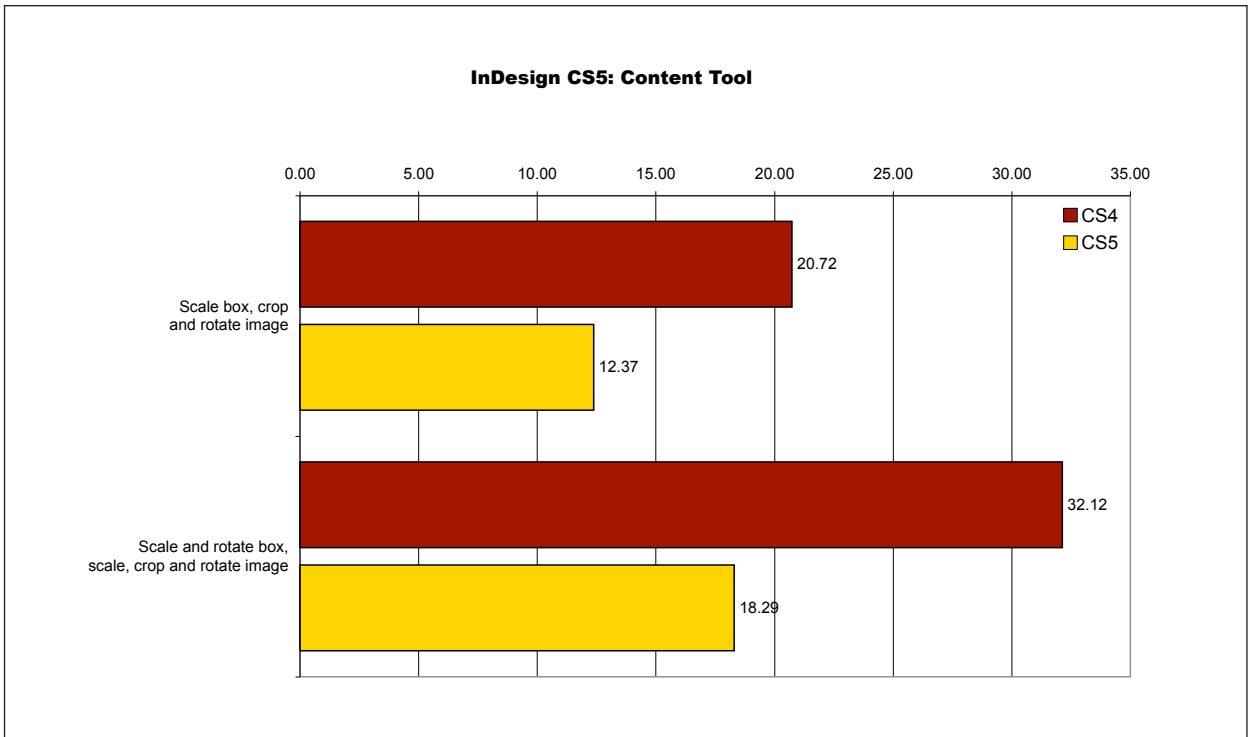


Time scale in seconds. Shorter is better.

**Complete Results: Charts**

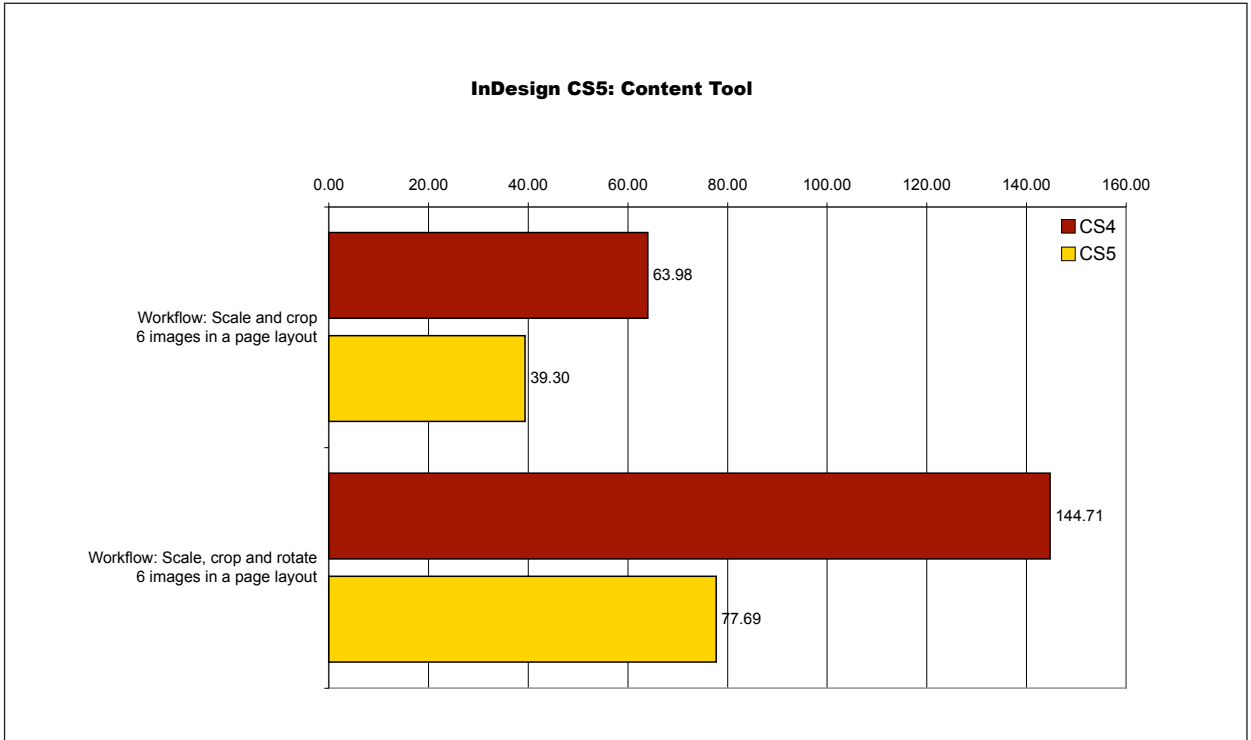


Time scale in seconds. Shorter is better.

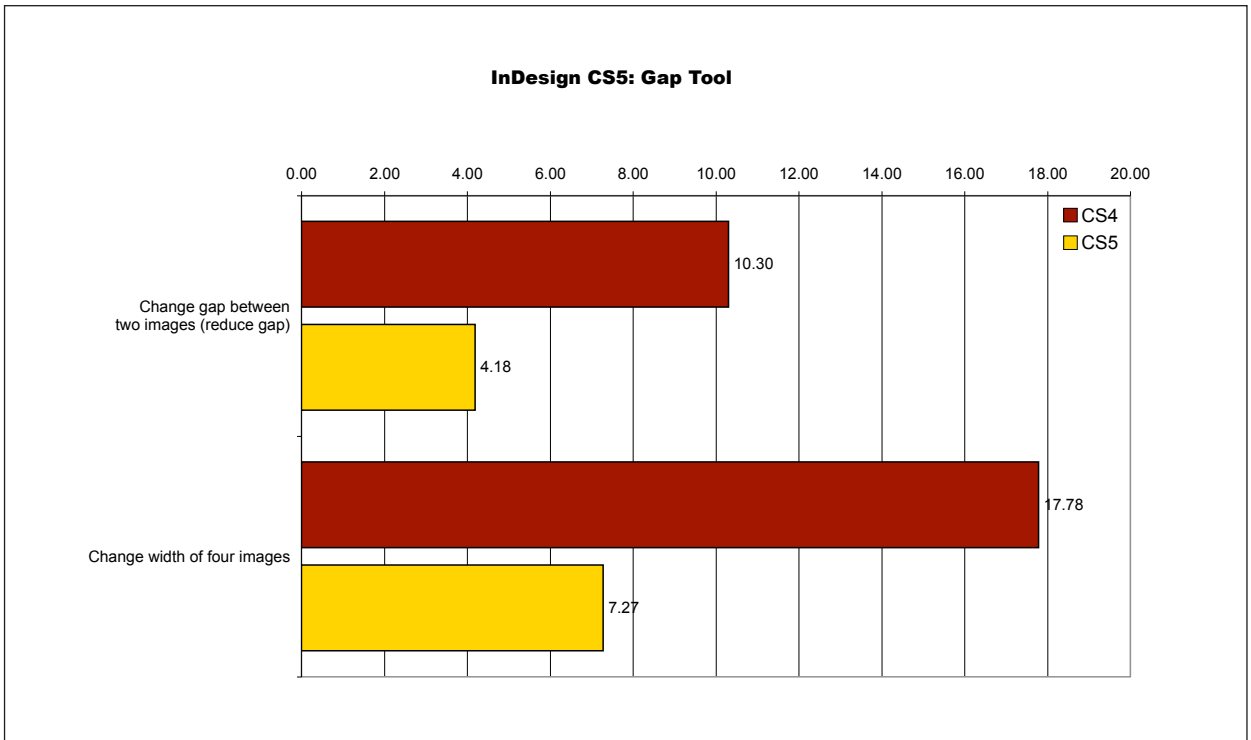


Time scale in seconds. Shorter is better.

**Complete Results: Charts**



Time scale in seconds. Shorter is better.



Time scale in seconds. Shorter is better.

**Complete Results: Charts**