

HOW TO **cheat** The art of design and animation IN **Adobe Flash CC**[®]

Fully updated for Flash CC



Chris Georgenes



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cheat
IN
Adobe Flash CC

The art of design and animation



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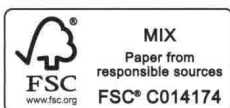
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Foreword

Over ten years ago in a dimly lit basement, I started using the Flash authoring tool to create unpalatable, short, frame-by-frame animations – and discovered it was much easier than other tools I had been using to do the same thing. It's hard to believe what Flash has become over the years, and how many more people are out there using it to create content and share their work. One of the nice and inspiring things about Flash is that it attracts so many different users, from creative animators to hardcore programmers, and all sorts of people in-between.

I was assigned to work on testing a new type of motion tween for Flash a few years ago. Because the feature was already developed (but at the time untested), I needed to learn how everything worked from the ground up. Similar to other migrating Flash users, I have experienced and understand the learning curve between new and classic motion tweens! The new motion tweens are a different way of thinking about animation in Flash, however they do offer many advantages such as fewer “broken” tweens, attached motion paths, independent tweenable properties, tween presets, and preset eases. Some animations I've created in the past were faster or easier to accomplish after a bit of time spent with the new model. What about using “classic” motion tweens? Yes, there are some workflows where classic tweens are necessary and a couple cases where they're faster to use. However, the goal is to enhance and improve new motion tweens and the Motion Editor so using them is always possible and preferred.

You certainly don't need to learn everything there is to know about Flash and ActionScript to master the tool – you can choose to focus your talents on design or development, or challenge yourself from time to time by crossing over between graphics and code. But now that Flash is full of features and capable of so much, the tools can seem rather daunting to learn. But if you have helpful resources at your side, like this book, learning Flash doesn't need to be difficult. I believe the key to learning Flash is to keep it simple when you start out, take it slow, use the available resources (like books), and try to be patient. Also don't be afraid to go online and ask for help, we've all been there! Learning Flash takes some time, but it is a lot of fun and very rewarding.

Flash is an incredible tool for expressing your creativity, style, and unique ideas. Whether you're a new or existing Flash user, now is a great time to learn or use the software and get involved with the Flash community online. I hope that you use Flash with this book to get inspired, learn valuable new tricks and techniques, and create some wonderful animation. And of course, make sure to have fun with the software while you read and learn all about how to animate!

Jen deHaan

*Sr. Software Quality Engineer, Flash Authoring
Adobe Systems Inc.*

How to cheat, and why

The truth about cheating

The word “cheat”, in most cases, has a negative connotation. To “cheat” implies deception and trickery associated with a fraudulent act. In some ways this book will show you how you can trick your audience, not unlike a magician’s “sleight of hand” technique where you can control not only what is being seen, but how the viewer sees it. But this book will certainly not teach you how to be a fraud.

To “cheat” in Flash is to find shortcuts to help you work more efficiently and economically. Time translates to money and if you can deliver a great looking project on time, that means you stayed within budget and everybody wins.

My philosophy

At the end of the day, if I didn’t have any fun, then it would be time to find another job. But I had to learn this lesson the hard way a few years ago while working with an animation company designing a network television series. I was designing the main characters for a show called *Science Court* (ABC), and there was a conflict between us and the network as to the choice of skin color for one of the characters. I liked green and the network preferred orange. I felt strongly that my color choice was the best and I admit I may have let myself become emotionally charged about the issue. One day I went to lunch with the animation director and we were casually talking about the color issue. It was something he said that changed my outlook on work from that day forward: *“We must have pretty cool jobs when the most stressful part of our day is whether or not a character looks too much like a frog.”*

I stopped dead in my tracks, instantly realizing how right he was and how silly I felt about the matter. After lunch we returned to the studio where I immediately changed the character to orange and never uttered another word about it. I even ended up liking the orange more than the green. Since then, my philosophy has always been to have fun no matter how stressful my workday gets. My job, in comparison to all other possible occupations, is the best job even on the worst of days.

Workthroughs and examples

Each workthrough in this book is designed as a double-page spread so you can prop the book up behind your keyboard or next to your monitor as a visual reference while working alongside it. Many of the workthroughs are real-world client projects I have been commissioned to design and animate. Using these projects as examples has allowed me to provide you with a downloadable zip file containing the source files for you to open and explore. Each chapter ends with an Interlude in which I talk about

everything from my own experiences as a designer and animator as well as some relevant and useful information based on the topic at hand.

Flash terminology

Not much has changed when it comes to terminology in Flash. **Symbols** have been around since the beginning and so has the behavior any symbol can have (Graphic, Movie Clip and Button). The **Timeline** has remained unchanged and **nesting** still pertains to assets and animations within symbols, one of the key strengths of Flash. If you already have a basic understanding of Flash then you will most likely be familiar with most of the terminology in this book.

Download Example Files

The download icon indicates the source file for that particular example is available for you to download from www.howtocheatinfash.com/downloads. Download the ZIP file and unpackage it to your local hard drive. The unpackaged file contains all the example files found in this book and are for your learning pleasure.



Companion Website

Please visit the companion website for this book by navigating your browser to www.howtocheatinfash.com where you can keep up to date with the information regarding this book and download the example files.

Beyond the book



Be social. Visit facebook.com/howtocheatinfash to ask questions, get answers or post your own works of art and animation.



Follow me on Twitter@keyframer. I'm pretty consistent when it comes to tweeting about trends and technologies as well as cool new gadgets. You can also find out where and when my next speaking engagement will be.



Acknowledgments

This book is dedicated to James Williamson, who I'm proud to call my friend.

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David Bevans of Focal Press for his support and dealing with all of my missed deadlines.

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Tom Barclay and the entire Adobe Flash team for continuing to evolve Flash, the coolest animation program on the planet.

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Foreword vii
 How to cheat, and why viii
 Acknowledgments x
 How to use this book 1

1 What's new in CC 2

Under the hood 4
 Darker User Interface 6
 Unlimited pasteboard size 8
 Distribute symbols & bitmaps to keyframes . 10
 Swap multiple symbols & bitmaps 12
 Toggle Guides & Masks 14
 Scale to Anchor Point 16
 DragonBones Extension 18
 Multi-device connectivity 22
 Exporting Video 24
 Find & Replace enhancements 26
 Live preview for drawing tools 28
 Other notable enhancements 29
 Deprecated features 30

Interlude: Adobe Creative Cloud 32

2 Design styles 36

Drawing with basic shapes 38
 Geometric and organic shapes 40

The Brush tool 42
 Mixing colors 46
 Advanced color effect 48
 Animated color effect 50
 Using gradients 52
 Adding texture 54
 The Pen tool 58
 Trace Bitmap 60
 Image Trace (Illustrator) 62
 Shading 1: line trick 64
 Shading 2: shape it 66
 Shading 3: paint selected 68
 Shading 4: outlines 70
 Realism with gradients 72
 UI Design 76
 Character design 80
 Object Drawing 82

Interlude: Being subtle 84

3 Transformation & distortion 86

Distorting bitmaps 88
 The Envelope tool 90
 Warping 92
 Card flip 94
 3D Rotation 96

| | |
|---|-----|
| Butterfly | 98 |
| Squash and stretch | 100 |
| <i>Interlude: A moment of clarity</i> | 102 |

4 Masking..... 104

| | |
|------------------------------------|-----|
| Rotating globe..... | 106 |
| Flag waving..... | 108 |
| Iris transition..... | 110 |
| Handwriting..... | 112 |
| Spotlight..... | 114 |
| Focus..... | 116 |
| Feathered mask (ActionScript)..... | 118 |
| Medical pack..... | 120 |

Interlude: Learning to be simple..... 122

5 Motion techniques....124

| | |
|--------------------------------|-----|
| Motion and Classic tweens..... | 126 |
| Creating Motion tweens..... | 128 |
| Working with Motion spans..... | 130 |
| Editing Motion paths..... | 132 |

| | |
|---------------------------|-----|
| Motion Presets..... | 134 |
| Motion tweens and 3D..... | 136 |
| 3D Position and View..... | 138 |
| Basic shadow..... | 140 |
| Drop shadow..... | 142 |
| Perspective shadow..... | 144 |
| Flying text..... | 146 |
| Combining effects..... | 148 |
| Blur filter (text)..... | 150 |
| Selective blurring..... | 152 |
| Background blurring..... | 154 |

Interlude: How did I get here?..... 156

6 Character animation..160

| | |
|-----------------------------------|-----|
| 2.5D basics..... | 162 |
| 2.5D advanced..... | 164 |
| 2.5D monkey..... | 166 |
| Lip syncing (swap method)..... | 168 |
| Lip syncing (nesting method)..... | 170 |
| To sync or not to sync..... | 172 |
| Sync (Classic tweens)..... | 174 |
| Sync (Motion tweens)..... | 176 |
| Hinging body parts..... | 178 |

| | |
|--------------------------------------|-----|
| Closing the gaps | 180 |
| Bitmap animation (Jib Jab) | 182 |
| PSD Importer (Jib Jab) | 184 |
| Motion guides (Jib Jab) | 186 |
| Walk cycle | 188 |
| Advanced walk cycle | 192 |
| Walk cycle examples | 194 |
| Anticipation | 196 |
| Drawing upon oneself | 198 |
| Tradigital animation | 200 |
| Brush animation | 204 |

Interlude: Embracing challenges 212

| | |
|-----------------------------|-----|
| Soft reveal | 230 |
| Star Wars text | 232 |
| Color adjustments | 234 |
| Vertigo | 236 |
| Let it rain | 238 |
| Playing with fire | 240 |
| Torch | 242 |
| Lightning | 244 |
| Winter wonderland | 246 |
| 3D perspective | 248 |
| Sausage grinder | 250 |

Interlude: From the inside out 254

7 Animation examples 214

| | |
|---|-----|
| Super text effect | 216 |
| Page turn | 218 |
| Smoke with gradients | 220 |
| Smoke stylized | 222 |
| Full steam ahead | 224 |
| Handwriting effect (frame-by-frame) | 226 |
| Fireworks | 228 |

8 Working with sound 256

| | |
|----------------------------------|-----|
| Recording sounds | 258 |
| Samson USB Microphones | 260 |
| Audacity® | 262 |
| Adobe® Audition® CC | 264 |
| Sound in Flash | 266 |
| Dynamic sounds (AS3) | 268 |

Interlude: My wish list for Flash CC 270

9 Flash to video..... 272

| | |
|------------------------------|-----|
| Document setup..... | 274 |
| Title and action safety..... | 276 |
| CC video templates..... | 278 |
| Safe colors..... | 280 |
| Ape Escape..... | 282 |
| Keeping it all in sync..... | 284 |
| QuickTime Exporter..... | 286 |
| SWF & FLV Toolbox..... | 288 |

Interlude: Wacom tablets..... 290

10 Interactivity..... 294

| | |
|--------------|-----|
| Stage 1..... | 296 |
| Stage 2..... | 308 |
| Stage 3..... | 318 |
| Stage 4..... | 336 |
| Stage 5..... | 344 |
| Stage 6..... | 354 |

Interlude: Thank you..... 374

Index..... 376



How to use this book

I am a digital animator – a *Digimator* if you will. I learned how to animate using a computer. Any animation program can have a mechanical feel to it since we work by selecting options from menus much of the time. The trick I have learned is how to make a software program like Flash feel more organic, as if it were a ball of clay, starting with a basic shape and pushing and pulling it into something unique. If this book teaches anything, I hope it teaches you to think differently as to how you approach Flash. Just because the Help docs, online resources or even other books tell you how something can or should be done, don't take that as carved in stone. Take it as carved in clay, meaning you can continue to expand upon the ways the tools are used, even beyond what you may have read elsewhere.

The first few chapters focus on some of the basics of using Flash in real-world situations. I do not explain the rudimentary features of Flash, such as how to convert objects to symbols and what the differences are between Movie Clips and Graphic symbols. That is what the Help docs are for and are simply a keystroke (F1) or a Google search away. You bought this book to learn what goes beyond the Help docs and what can only be learned through the span of several years of experience using Flash. For you, this is the true essence of "cheating" because this book condenses those years into 300+ pages.

Just in case you do get stuck on something that you simply can't find an explanation to, I'm a pretty easy guy to find if you want to send me your questions. You can send me a tweet **@keyframer** or message me on Facebook:

www.facebook.com/howtocheatinfash



FL

Adobe Creative Cloud™
Flash Professional® CC

Building Workspace...

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■ It's back to basics for Flash CC as the least used tools and features have been removed completely. Most of us weren't using them anyway, so chances are they won't be missed.

1 What's new in CC

ADOBE FLASH PROFESSIONAL CC MAY BE PROOF THAT less is more. The least popular and lesser-used features have been stripped from the Flash authoring tool. This lighter, more streamlined version of Flash is the version that finally fits into that polka dot bikini just in time for summer.

Let's take a look at what's new in Flash CC and what's been exiled to the land of misfit features.

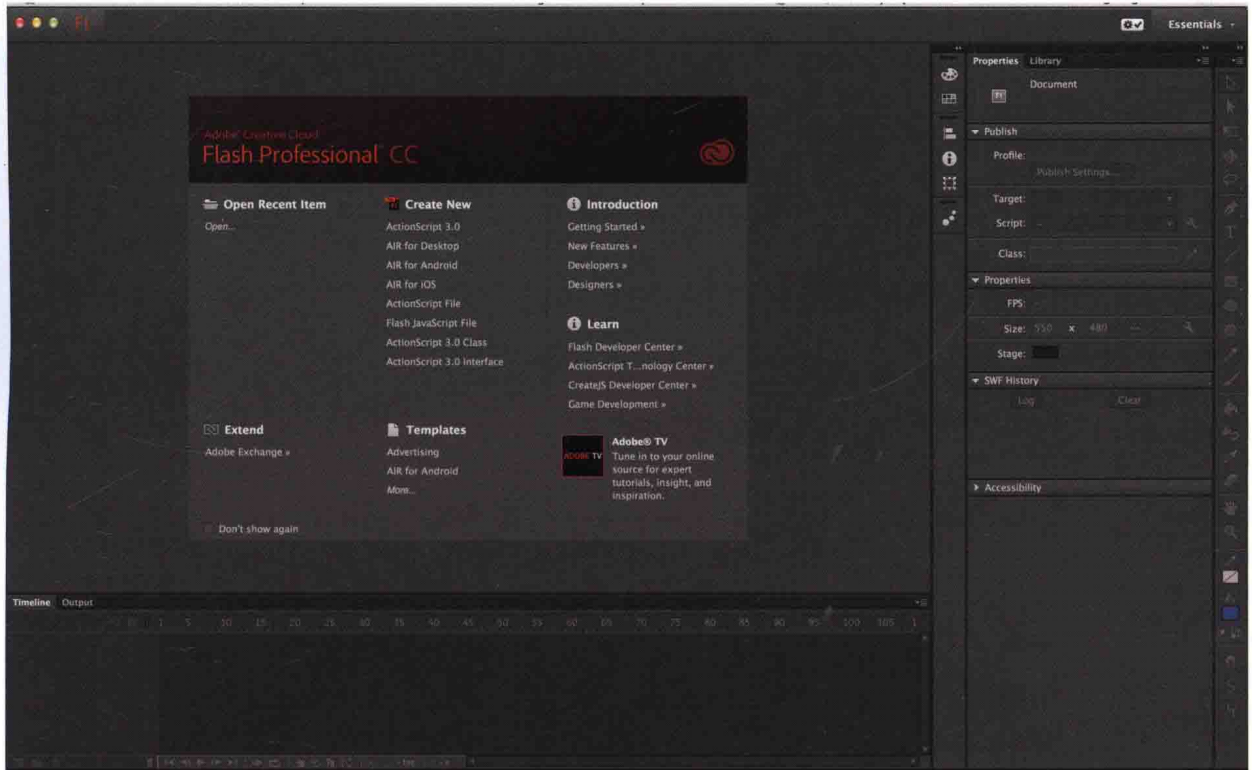
Under the hood

WITH EACH NEW UPDATE comes new expectations for Flash to be better, faster and packed with more features. Flash CC is an interesting release because in many ways it meets these expectations and even exceeds them. But in other ways Flash CC may come up short for some users due to features that have been removed completely. This chapter takes a look at how the latest version of Flash stacks up for the designer and animator.



Right off the bat, you will notice something different about Adobe Flash Professional CC. It happens so quickly, there's a chance you might miss it. Launching Flash CC takes merely seconds thanks to a complete rewrite of its code base to support the Cocoa framework on Mac OS X. My unofficial benchmark testing shows Flash CC takes about 3 seconds to fully launch. Previous versions of Flash, such as CS6, take upwards of 30 seconds or more to launch. The updated code base is not just to speed up start times but more importantly to improve the overall stability and performance of Flash to ensure longevity on OS X.

Based on my experience running Flash CC for several months throughout the prerelease and now the shipped version, this may be the most stable version of Flash I have ever used. Flash CC has yet to crash on my system (Mavericks, the newest Mac OS X) and I have it running nearly all day, every day. I even purposely leave it running while putting my MacBook Pro into sleep mode, just to try and get Flash to crash when waking up the operating system. So far, Flash has proven stable.



Flash Professional CC has been enhanced to support HiDPI displays including Retina Display available on the new MacBook Pro. HiDPI display facilitates a dramatic improvement in image fidelity and resolution. With Flash Professional CS6, which was not native to HiDPI display, the text was not as sharp and images did not have much detailing. The increased resolution of these displays required the Flash Professional user interface to be updated completely and ensure that

the content is displayed with appropriate levels of fidelity. With Flash Professional CC, the icons, font, drawing on stage, general content rendering, and the whole IDE itself are displayed with superior clarity and crispness.

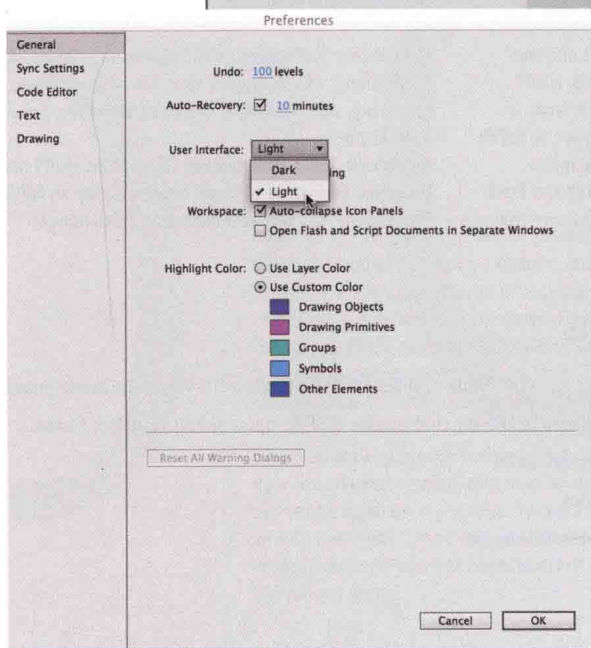
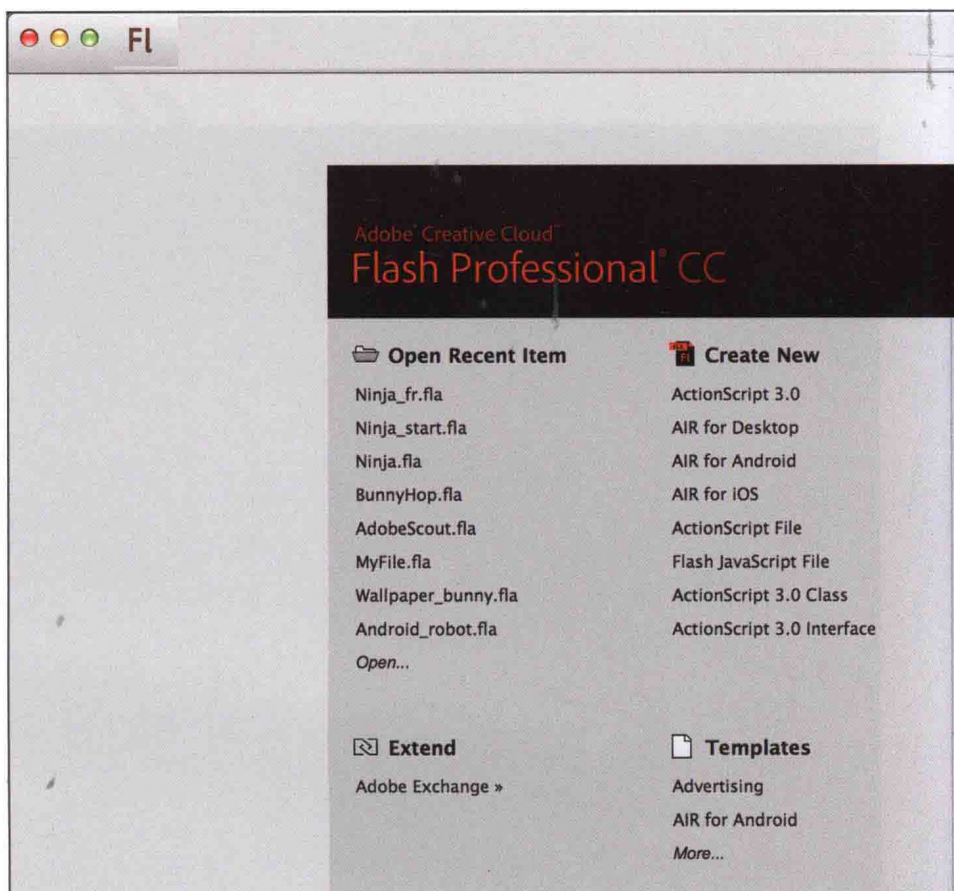
By default, Flash Professional CC enables HiDPI display on MAC. However, you could turn off retina display on MAC, and Flash Professional CC will accommodate this change.

Other performance improvements

- Publishing time improved significantly for FLA/XFL files, having a large number of AS linkages with Warnings mode enabled.
- Performance improvements for Import to Stage and Import to Library that ensure the file open dialog launches faster.
- Launch time for Flash Professional has been reduced significantly.
- Significantly reduced time for opening AS & FLA/XFL files.
- Smoother drawing experiences with the live color preview of objects.
- Unlimited pasteboard size.

Darker user interface

SINCE ITS INCEPTION, Flash has sported a very bright interface. From the white of the stage to the light gray menus, Flash has been a beacon of brightness in an otherwise contrasting suite of tools. When Flash became part of the Adobe Creative Suite, the contrast suddenly became more apparent as applications such as Photoshop and After Effects had already converted to a bold, dark interface design. Now with a complete overhaul to its core code base, we have the choice between the light or the dark side of Flash CC.



1 Your choice of interface schemes is simply dark or light. Go to Preferences > General and select your color scheme using the User Interface drop-down menu.