

- [Table of Contents](#)
- [Index](#)
- [Reviews](#)
- [Reader Reviews](#)
- [Errata](#)
- [Academic](#)

## **Flash Hacks**

By [Sham Bhangal](#)

Publisher: O'Reilly  
Pub Date: June 2004  
ISBN: 0-596-00645-4  
Pages: 480

[Copyright](#)

[Credits](#)

[About the Author](#)

[Contributors](#)

[Acknowledgments](#)

[Foreword](#)

[Preface](#)

[Why Flash Hacks?](#)

[Who This Book Is For](#)

[How to Use This Book](#)

[How This Book Is Organized](#)

[Conventions Used in This Book](#)

[Using Code Examples](#)

[Comments and Questions](#)

[Chapter 1. Visual Effects](#)

[Hacks #1-7](#)

[Section 1. Fake Per-Pixel Transitions](#)

[Section 2. Per-Pixel Text Effects](#)

[Section 3. Simulate Old Film Grain](#)

[Section 4. Create SWFs from Animated GIFs](#)

[Section 5. Animate Photoshop PSD Files with Flash](#)

[Section 6. A Tree Grows in Brooklyn](#)

[Section 7. Blowin' in the Wind: Simulate Tree Movement](#)

[Chapter 2. Color Effects](#)

[Hacks #8-13](#)

[Section 8. Video Color Effects](#)

[Section 9. Video Fade to Black and Fade to White](#)

[Section 10. A Custom Color Transform Class](#)

[Section 11. Create and Organize Custom Swatches](#)

[Section 12. Borrow Color Schemes from Nature](#)

[Section 13. Simulate Sepia Effects](#)

[Chapter 3. Drawing and Masking](#)

[Hacks #14-25](#)

[Section 14. Create Filled Circles Quickly at Runtime](#)

[Section 15. Create Synthetic Art](#)

[Section 16. Create Seamless Tiles](#)

[Section 17. Fill Areas with Patterns](#)

[Section 18. Imitate Escher](#)

[Section 19. Fix Alpha Property Inaccuracies](#)

[Section 20. Use Complex Shapes as Masks](#)

[Section 21. Interference Patterns and Ripple Effects](#)

[Section 22. Feather Bitmap Edges](#)

[Section 23. Add a Vector Edge to a Bitmap](#)

[Section 24. Solve the Bitmap-Shift Bug](#)

[Section 25. A Page-Turn Effect \(Exploit Symmetry and Masking\)](#)

[Chapter 4. Animation](#)

[Hacks #26-34](#)

[Section 26. Smooth Scripted Motion](#)

[Section 27. Time-Controlled Movement](#)

[Section 28. Quick, Bandwidth-Efficient Character Animation](#)

[Section 29. alt-Flash: Motion Graphics Alternatives](#)

[Section 30. Deja New Animations](#)

[Section 31. Hacking The Matrix](#)

[Section 32. Computer-Generated Character Animation](#)

[Section 33. Particle Effects](#)

[Section 34. Shape Tweening Complex Shapes](#)

[Chapter 5. 3D and Physics](#)

[Hacks #35-41](#)

[Section 35. Simulate 3D](#)

[Section 36. Panoramic Images](#)

[Section 37. An Optimized 3D Plotter](#)

[Section 38. Use Acceleration to Simulate Gravity and Friction](#)

[Section 39. Simulate a Throw](#)

[Section 40. Detect Multiple Collisions](#)

[Section 41. Turn Toward a Point](#)

[Chapter 6. Text](#)

[Hacks #42-51](#)

[Fonts](#)

[Section 42. Keep Text Legible](#)

[Section 43. Autocomplete Text Fields](#)

[Section 44. Store a List of All Input Words](#)

[Section 45. Import Complex Formatting in Flash](#)

[Section 46. HTML and CSS in Flash](#)

[Section 47. Use Accessibility Text as Help Text](#)

[Section 48. Text Effect Framework](#)

[Section 49. Typewriter Effect](#)

[Section 50. Time-Based Text Effects](#)

[Section 51. Timeline Text Effects](#)

[Chapter 7. Sound](#)

[Hacks #52-60](#)

[Section 52. Create a Flash Speech Synthesizer](#)

[Section 53. A Talking, Lip-Synched Avatar](#)

[Section 54. The Ubiquitous Sound-Kicker Hack](#)

[Section 55. Turn Low-Bandwidth Monaural Sounds into Stereo Sounds](#)

[Section 56. Real-Time Sound Effects](#)

[Section 57. Quickly Create UI Sounds](#)

[Section 58. Optimize Sound](#)

[Section 59. Sound Time Codes \(Cue Points\)](#)

[Section 60. A Custom Sound Transform Class](#)

[Chapter 8. User Interface Elements](#)

[Hacks #61-64](#)

[Section 61. Amit's Dials \(Interactive Testing\)](#)

[Section 62. Right and Middle Mouse Buttons](#)

[Section 63. Button Movie Clips](#)

[Section 64. Dude, Where's My Scrollbar?](#)

[Chapter 9. Performance and Optimization](#)

[Hacks #65-73](#)

[Optimize Filesize and Download Time](#)

[Optimize Graphics](#)

[Increase Code Performance](#)

[Section 65. Beat Flash File Bloat](#)

[Section 66. Bandwidth Testing for Complex Sites](#)

[Section 67. Hide Low-Quality Settings](#)

[Section 68. Optimize Graphics for Performance](#)

[Section 69. Benchmark Runtime Performance](#)

[Section 70. Adjust the Animation Complexity Dynamically](#)

[Section 71. Performance Budget](#)

[Section 72. Substitute Bitmaps for Vectors](#)

[Section 73. Optimize Component Downloading and Usage](#)

[Chapter 10. ActionScript](#)

[Hacks #74-85](#)

[Changes in Flash MX 2004](#)

[Section 74. External Script Editors](#)

[Section 75. Strict Typing and Casual Scripters](#)

[Section 76. Code Hints](#)

[Section 77. Clone an Object](#)

[Section 78. An Idle Timer \(Timeout Event\)](#)

[Section 79. Fast ActionScript Searches](#)

[Section 80. Lock the actions Layer](#)

[Section 81. Debug with trace\(\)](#)

[Section 82. Undocumented ActionScript](#)

[Section 83. ASnative\(\) Back Door](#)

[Section 84. Obscure Operators](#)

[Section 85. Import ASC Files as XML](#)

[Chapter 11. Browser Integration](#)

[Hacks #86-96](#)

[Section 86. Keep Your Site Browser Friendly](#)

[Section 87. A Universal Flash Plugin Sniffer](#)

[Section 88. Test Multiple Flash Plugins](#)

[Section 89. Preferences and Publishing Defaults](#)

[Section 90. Center Your SWF Without Scaling](#)

[Section 91. CSS-Based Browser Centering](#)

[Section 92. Dynamically Resize Content](#)

[Section 93. Create HTML Links in Flash](#)

[Section 94. Integrate the Back Button with Flash](#)

[Section 95. Give the Flash SWF Keyboard Focus](#)

[Section 96. Add Key Shortcuts to Your Site](#)

[Chapter 12. Security](#)

[Hacks #97-100](#)

[Privacy Settings](#)

[Cross-Domain Policy](#)

[Handling Local Executables](#)

[Section 97. Recover Content from a SWF](#)

[Section 98. Protect and Obfuscate Your Flash Files](#)

[Section 99. Make Your SWF Phone Home](#)

[Section 100. Review Compiled ActionScript](#)

[Colophon](#)

[Index](#)

< Day Day Up >