

Adobe Photoshop Extensibility and Productivity Track

Photoshop World,
Boston 2009

John Nack, Jeffrey Tranberry,
and Tom Ruark



What You Will Learn

- Concept behind Adobe Configurator.
- Install and launch Configurator.
 - Installer on class CD - configurator_p1_111808.air – or online at <http://labs.adobe.com/technologies/configurator/>
- Create a panel in Configurator using Tools, Commands, Actions, Simple Text, and Feature Search Widgets.
- Export a panel to Photoshop and run it.
- See examples of what is possible using Configurator and custom Flash Panels in Photoshop.

Creating a panel in Adobe Configurator

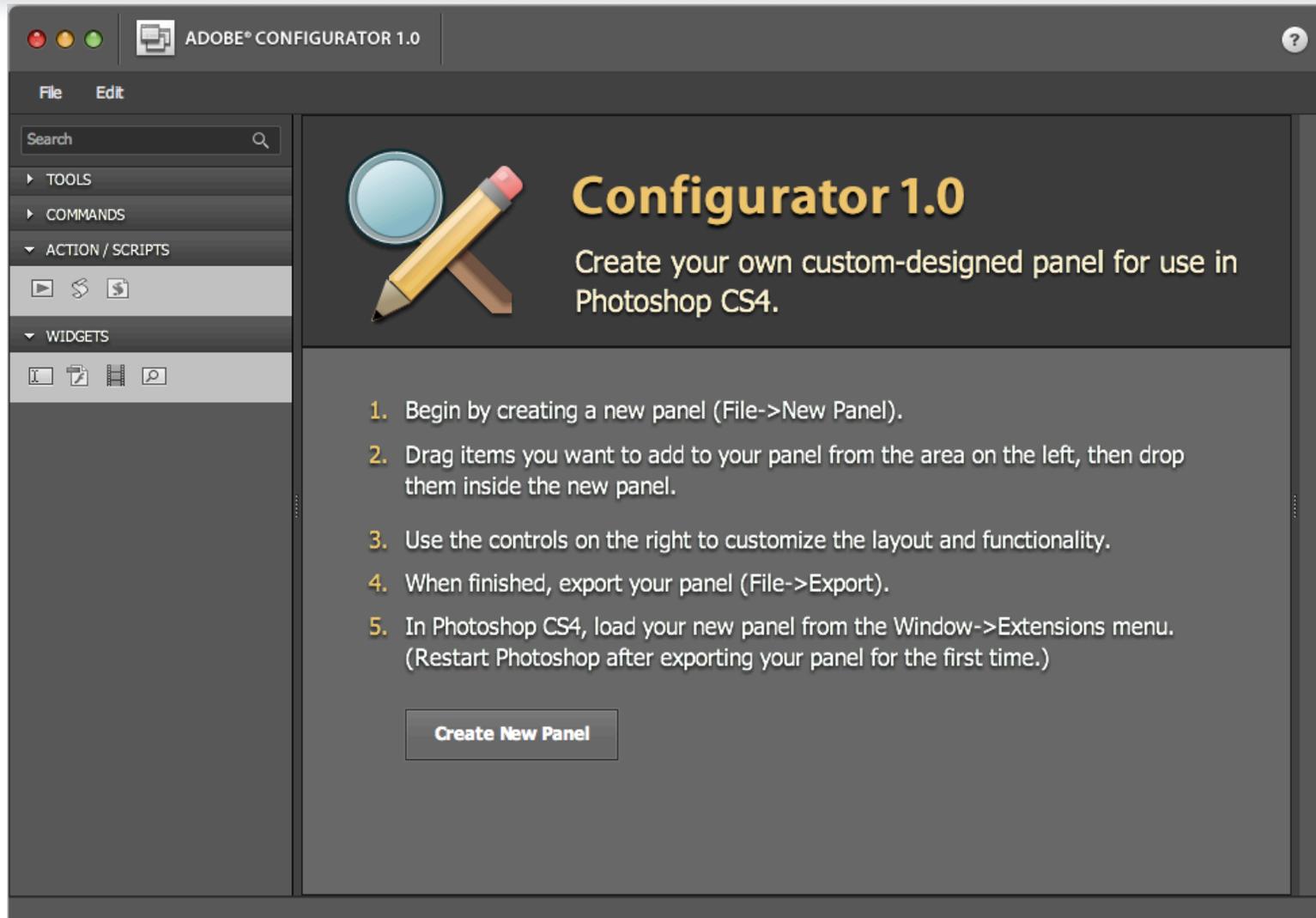
All the pieces you need:

- Adobe Configurator
 - Installer on class CD - configurator_p1_111808.air – or online at <http://labs.adobe.com/technologies/configurator/>
- Adobe Photoshop CS4

What is Adobe Configurator?

- It's a "box of Legos" for Photoshop.
- Drag and drop tools, menu items, actions, scripts, and prefab widgets (video, text, search, etc.).
- Don't just remix existing UI elements: contextual them in meaningful ways.

Adobe Configurator - Demo



Where To Go For More Help With Adobe Configurator

Panel Resources (see class CD) :

- 0_PanelAndScriptingResources.pdf (Handout)
 - Links to Configurator Resources & 3rd Party Panels
- Configurator.mov (on class CD)
 - 10 minute intro and demo of Configurator
- ConfiguratorKnownIssues.pdf (on class CD)
- ConfiguratorUserGuide.pdf (on class CD)

Extending Adobe Configurator with Scripts

Jeffrey Tranberry

QE Product Lead, Photoshop



Tips For This Class

- We WILL be looking at javascript, HTML and XML code.
- Do NOT try and write down any of the code that you see on screen.
- All the code you will see today is on the handout CD and online at tranberry.com.

What You Will Learn

- What's is Scripting?
- Write some beginner scripts using the ExtendScript Toolkit CS4.
- Look at the Photoshop DOM.
- Create scripts to run from Configurator.
- Create a branded panel that relies on external resources.
- Create a cross-platform, installable .MXP file using Extension Manager CS4.
- Modify an .MXI file to install multiple files to multiple locations.

Extending Adobe Configurator with Scripts

All the pieces you need:

- Adobe Photoshop CS4
 - ExtendScript Toolkit CS4 (installed with Photoshop)
 - Extension Manager CS4 (installed with Photoshop)
- Adobe Configurator
 - Installer on class CD - configurator_p1_111808.air – or online at <http://labs.adobe.com/technologies/configurator/>

Creating Your First Panel

BeginnerScripts:

Delete all Channels

- Use the DOM to unlock new functionality.

Delete all Channels with 1 Undo

- Use suspendHistory to improve the user experience.

Super-Flatten

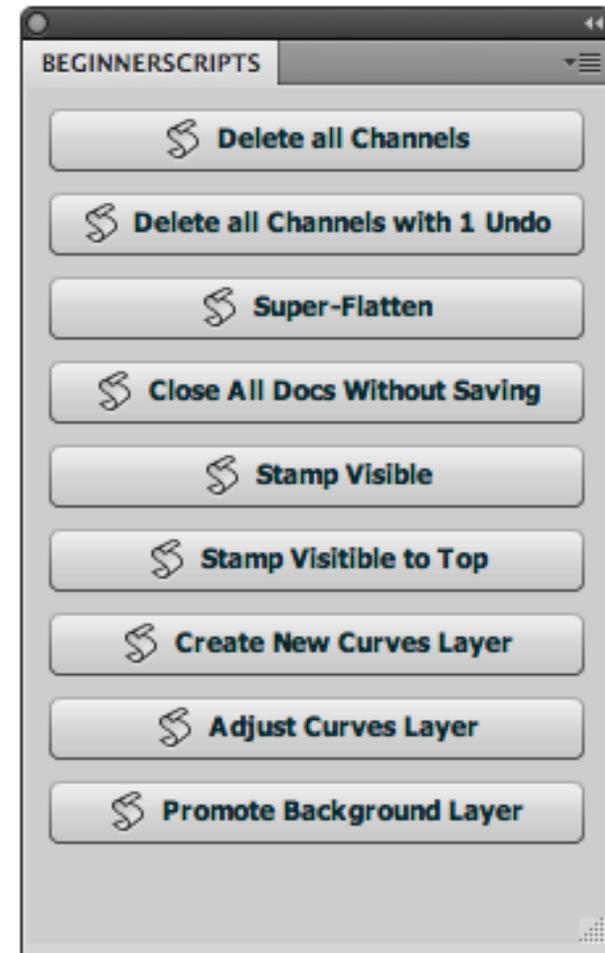
- Create a multi-step workflow for production: Flatten the file, remove channels and paths.

Close All Docs Without Saving

- Use a while loop to process all open documents.

Stamp Visible

- Use the scripting listener to get at hard to find commands.



Creating Your First Panel (continued)

BeginnerScripts:

Stamp Visible to Top

- Add some additional conditionals to improve the user experience

Create New Curves Layer

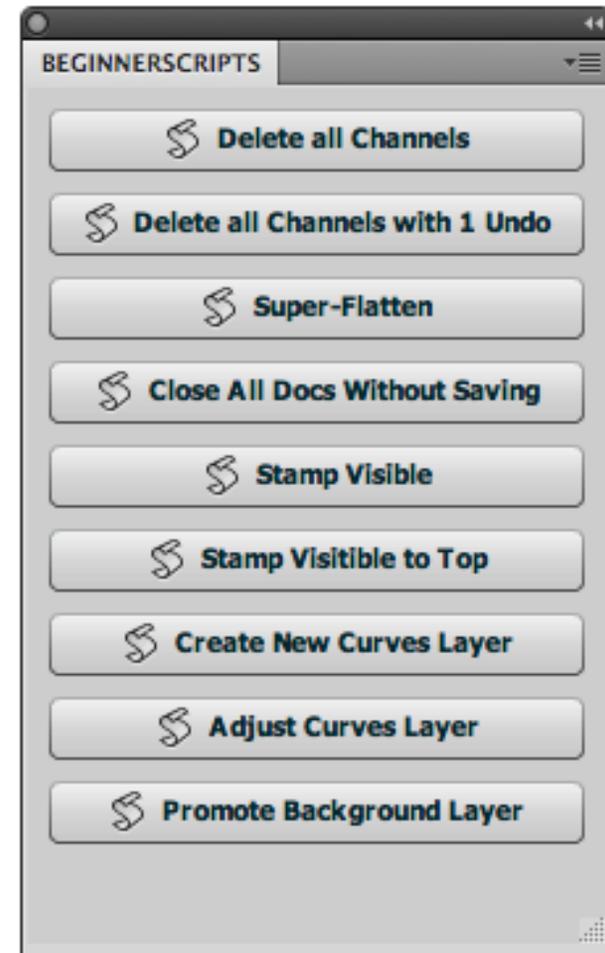
- Use scripting listener to unlock deprecated functionality

Adjust New Curves Layer

- Use scripting listener to unlock deprecated functionality and add additional conditionals to improve the user experience

Promote Background Layer

- Add even more conditionals to improve the user experience



Creating Your Second Panel

PanosFX:

Brand a Panel

- Add an image using relative paths.
- Add collapsed panel icons.

Understand the Configurator export process

Run and install an action

- Understand error handling and load an action via a ExtendScript.

Add a button that launches a URL

- Reference and execute an external file using the file.execute method in ExtendScript

Create an installer using the MXI file and Extension Manager CS4

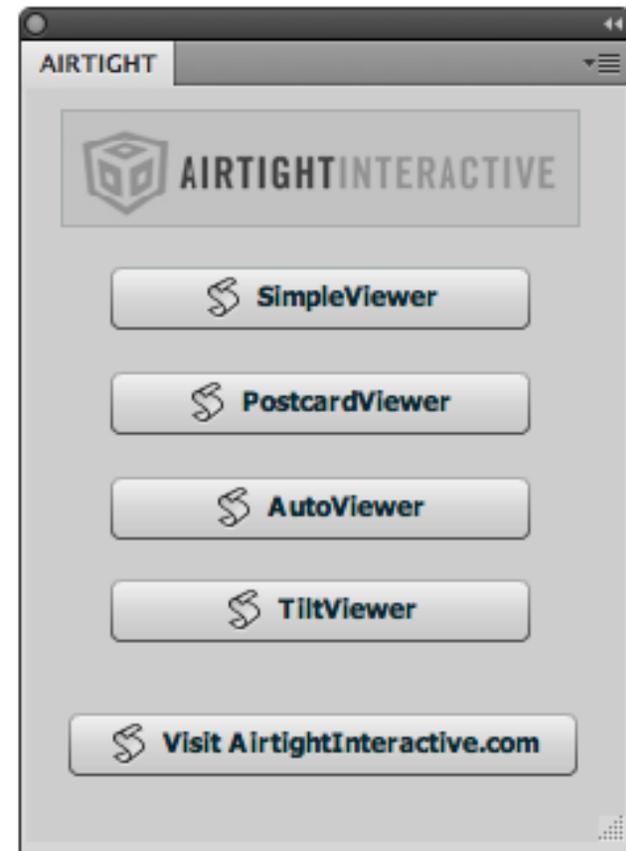


Creating Your Third Panel

Airtight:

Reference external scripts

Modifying the MXI file to install multiple files



What Is Scripting?

How is Scripting different from Actions?

- Actions are easy to use. You hit record, do your steps, hit stop and play back.
- Actions while powerful enough for most users, are basically “monkey see, monkey do.”

What Is Scripting?

With Scripting you can:

Get information from Photoshop:

- Intelligent renaming of files
- Perform Conditional Actions

Process multiple Images:

- Process folders of images.
- Process all open documents.
- Create documents from scratch

What Is Scripting?

With Scripting you can:

Process multiple parts of documents:

- Layers
- Comps
- Channels

Create text files with information from processed images:

- .csv/spreadsheets
- .xml & .html
- .js/javascript

What Is Scripting?

With Scripting you can:

Manipulate the file system:

- Create new folders.
- Open, save, copy, move, and load files.

Design User Interfaces:

- Create an easy to use interface for non-scripters.

What Is Scripting?

Photoshop supports 3 scripting languages:

- AppleScript
 - VB Script
 - JavaScript
-
- AppleScript and VB Script are platform specific scripting languages.

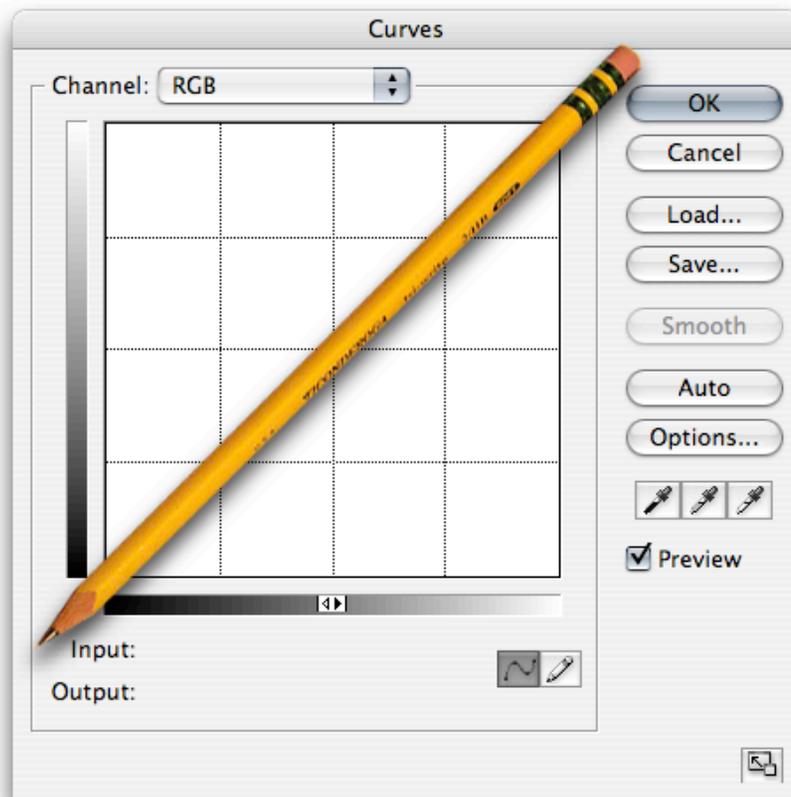
What Is Scripting?

Focus on JavaScript:

- JavaScript is NOT Java.
- JavaScript is not compiled.
- Requires only a text editor to create.
- Like HTML, it's easy to start with templates, and/or learn from someone else's code.

What Is Scripting?

Where do you begin scripting: Metaphors



What Is Scripting?

Where do you begin scripting: Metaphors

MAD LIBS[®]

PILOT TO PASSENGERS

Ladies and gentlemen, welcome aboard smudged ADJECTIVE Airline's Flight 750. This is your captain and pilot, Julie Andrews CELEBRITY. We have a/an cochety ADJECTIVE tailwind and will soon be flying through a heavy road NOUN storm. So I'll have to ask you all to fasten your hair raising ADJECTIVE belts and wallow VERB your trays to the long ADJECTIVE position. In the meantime, I hope you have a/an hard ADJECTIVE trip.

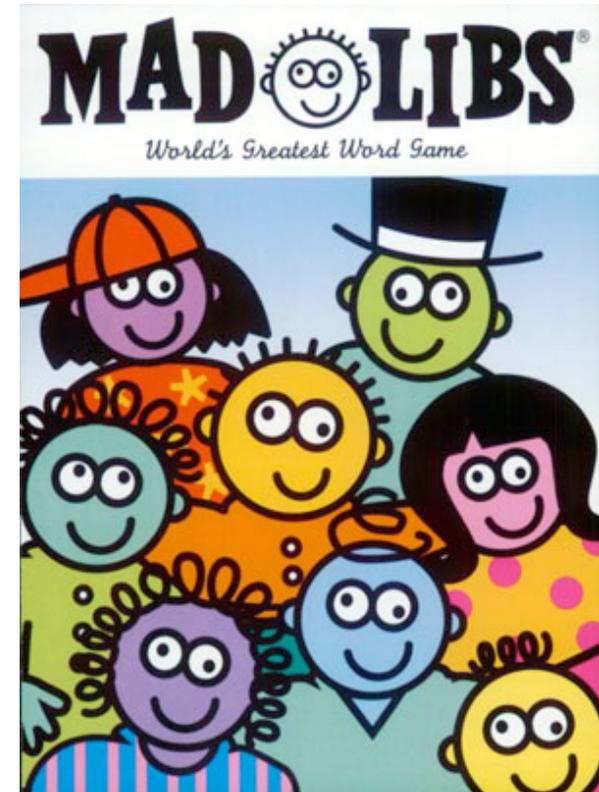
For tomorrow's Mad Libs[®] choose:



What Is Scripting?

Where do you begin scripting: Learn Script Grammar

- You don't need to write the whole story
- Only need to know a few things about grammar:
- Verbs and Nouns



What Is Scripting?

Where do you begin scripting: Learn Script Grammar

- You don't need to write an entire script
- Nouns = Documents, Layers and Channels
- Verbs = Methods and Functions



What Is Scripting?

Where do you begin scripting: Recipes

1 cup boiling water 1 pkg. Strawberry JELL-O

2 cups mixed berries

1 pkg. (8 oz.) PHILADELPHIA Cream Cheese

1-1/4 cups cold milk

1 pkg. Vanilla JELL-O Instant Pudding

1 tub (8 oz.) COOL WHIP Topping, thawed
1 pkg. (12 oz.) pound cake, cubed



What Is Scripting?

Where do you begin scripting: Reuse complex ingredients

Ingredients: sugar, gelatin, adipic acid (for tartness), less than 2% of artificial flavor, disodium phosphate and sodium citrate (to control acidity), fumaric acid (for tartness), and the colorant red 40.



Writing Your First Script

Extend Script Toolkit CS4 (ESTK):



Macintosh:

Applications/Utilities/Adobe Utilities/ExtendScript Toolkit CS4

Windows:

C:\Program Files\Adobe\Adobe Utilities\ExtendScript Toolkit CS4

Where To Go For More Help With Scripting & Panels

<http://www.tranberry.com/>

Where To Go For More Help With Scripting & Panels

Panel And Scripting Resources:

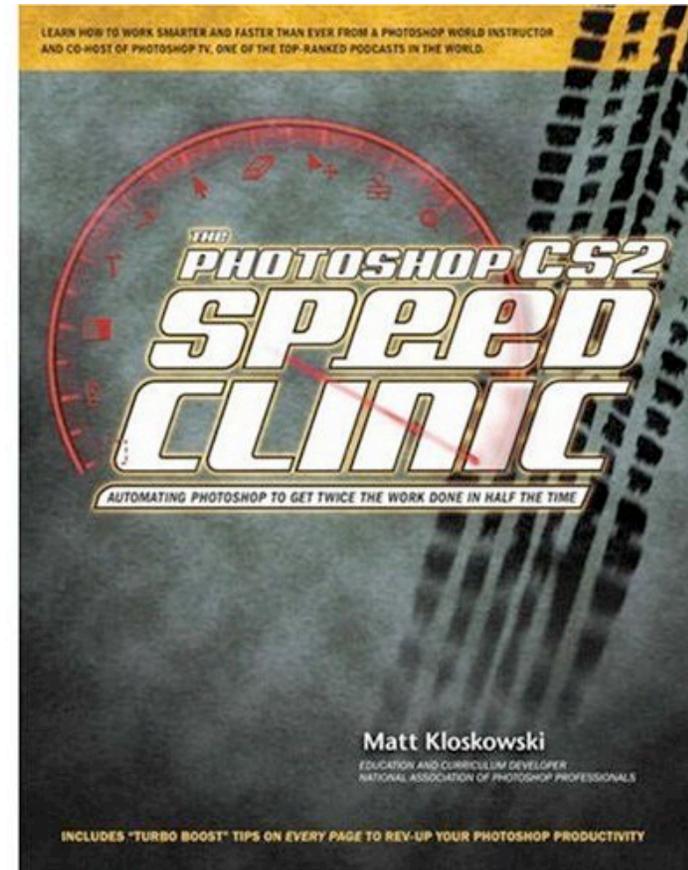
- 0_PanelAndScriptingResources.pdf (see class CD)
 - Documentation
 - Tutorials
 - 3rd Party Panels
 - Configurator Resources
- Adobe User To User Forums
 - <http://www.adobe.com/forums>

Where To Go For More Help With Scripting

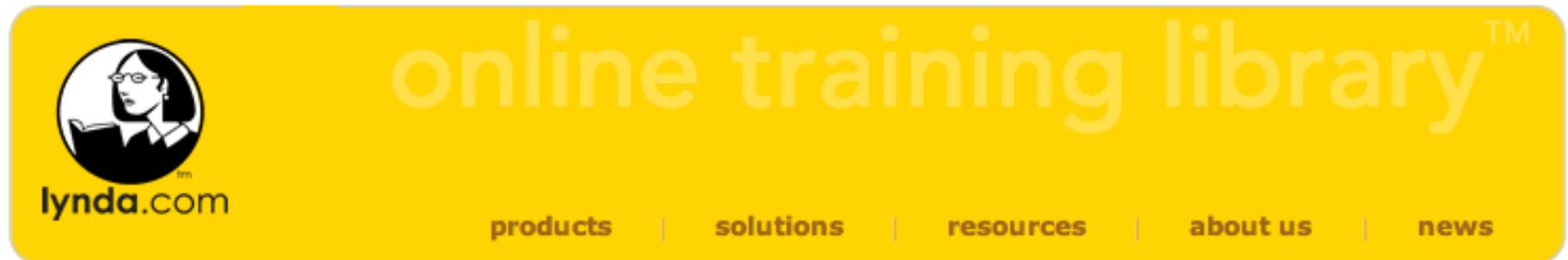
The Photoshop Speed Clinic:

The Photoshop CS2 Speed Clinic:
Automating Photoshop to Get Twice the
Work Done in Half the Time

by Matt Kloskowski



Where To Go For More Help With Scripting



[Online Training Library™](#) » [Adobe](#) » [Photoshop CS2 Actions and Automation](#)

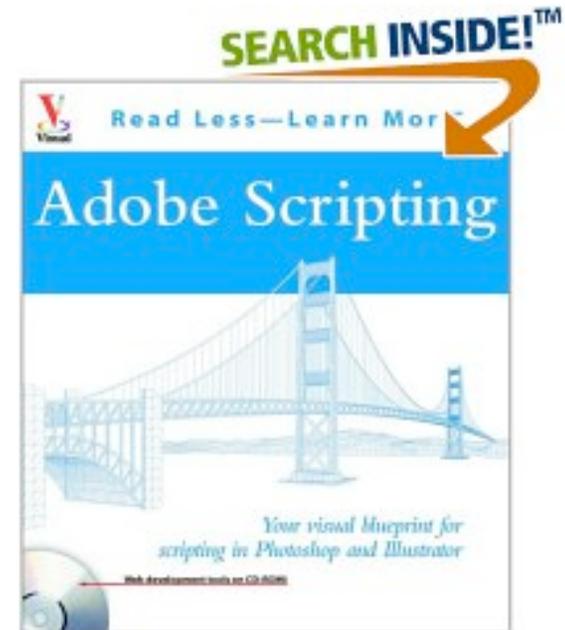
Photoshop CS2 Actions and Automation **with: [Deke McClelland](#)**

Recording actions and automating common tasks saves time and makes performing repetitive tasks more efficient. In *Photoshop CS2 Actions and Automation*, Certified Adobe instructor Deke McClelland teaches users how to build actions more efficiently and reliably, identifies places where automation functions can be improved, and provides an understanding of JavaScript commands to dramatically expand automation possibilities. Better still, he discusses how to troubleshoot when things go wrong. The instructor also explores the power of workspaces and batch processing, and describes Droplets inside out. The training shows how to turn Photoshop into an industrious, image-crunching, timesaving tool -- and the instructor shares his top insights and techniques. This training title offers expert guidance and instruction to prepare users to automate common (and occasionally complex) tasks.

Where To Go For More Help With Scripting

Adobe Scripting:

Your Visual Blueprint to Scripting in
Photoshop and Illustrator
by Chandler McWilliams





Adobe

Creating a Custom SWF Widget for Adobe Configurator

Jeffrey Tranberry

QE Product Lead, Photoshop

Tom Ruark

Senior Computer Scientist,
Photoshop



What You Will Learn

- Create a new project in Flex 3.0.
- Import an archived Flex Project.
- Walk through MXML code for a simple RSS reader.
- Walk through MXML code for a simple web hosted training video.
- Export a release build (optimized swf).
- Integrate the swf widget into an Adobe Configurator panel and run it in Photoshop.

Creating a Custom SWF Widget for Adobe Configurator

All the pieces you need:

- Adobe Photoshop CS4
- Adobe Flex Builder 3
 - (free 30 day demo available on adobe.com)
- Adobe Configurator
- SWF Widget source code (see class CD)

Sample Projects Source Code

PS_Insider_RSS.zip

- Flex Project Archive
 - (on class CD)

PhotoshopTV.zip

- Flex Project Archive
 - (on class CD)

| Posts | Date |
|---------------------------------|--------------------------------|
| Now Read This Blog From Right | Fri, 20 Mar 2009 07:01:18 +000 |
| Follow-up to my Elinchrom BXRI | Fri, 20 Mar 2009 06:37:26 +000 |
| My Day Shooting Tiger | Thu, 19 Mar 2009 06:26:48 +00 |
| Thursday News Stuff (and some | Thu, 19 Mar 2009 06:02:34 +00 |
| It's "Guest Blog Wednesday" fea | Wed, 18 Mar 2009 04:01:16 +00 |

On Tuesday I got lucky enough to spend the day shooting Tiger Woods and some of the best golfers in the world at the Tavistock Cup in Orlando, Florida. My buddy, and top-notch sports shooter Mike Olivella, (who was covering the event for AP), was able to score me an "inside the ropes" all-access media [...]

[Read Full Post](#)



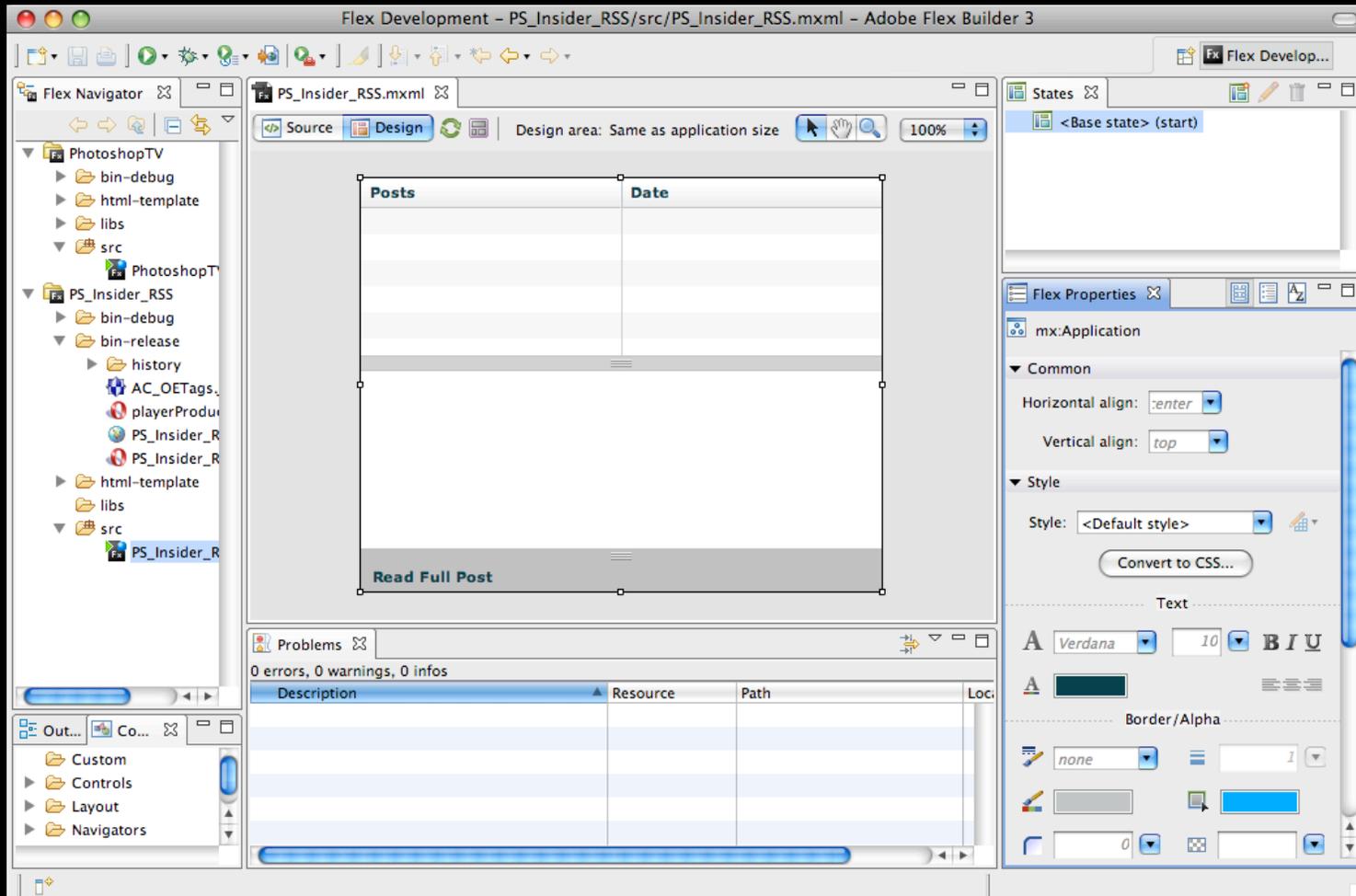
Photoshop Insider RSS swf Widget

Using Flex 3.0:

- **Source View** – allows the user to create a panel using a text editor.
- **Design View** – allows the user to create a panel using a WYSIWYG interface.

DEMO

Photoshop Insider RSS swf Widget



Creating the Watermark Panel

Panel And Scripting Resources:

- 0_PanelAndScriptingResources.pdf (see class CD)
 - Documentation
 - Tutorials
 - 3rd Party Panels
 - Configurator Resources
- Adobe User To User Forums
 - <http://www.adobe.com/forums>



Adobe

Creating a Custom Panel in Flex 3.0

Tom Ruark

Senior Computer Scientist,
Photoshop



What You Will Learn

- Become familiar with the "Photoshop Panel Developer's Guide."
- Create panels for Photoshop using Adobe Flex Builder 3.0.
- Take a step by step look at the MXML and Extendscript code for the Watermark panel demoed at the Photoshop World keynote.

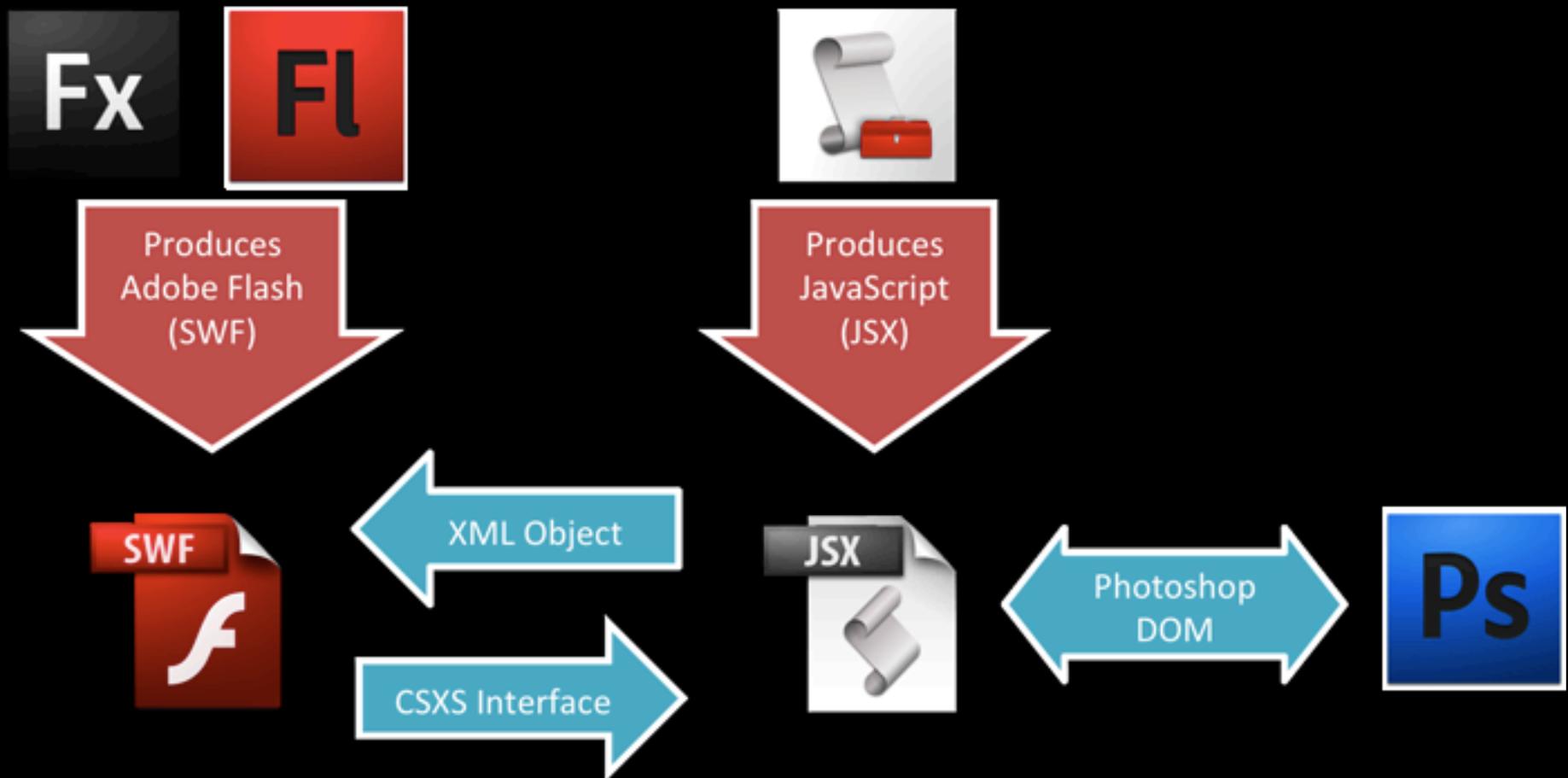
Creating the Watermark Panel

All the pieces you need:

- Adobe Photoshop CS4
- Adobe Flex Builder 3
 - (free 30 day demo available on adobe.com)
- Photoshop Panel Developer's Guide (see class CD)
 - <http://www.adobe.com/devnet/photoshop/>
- Watermark source code (see class CD)

Creating the Watermark Panel

Chutes and Ladders:



Creating the Watermark Panel

Photoshop Panel Developer's Guide:

▪ Sample Projects

- hello world
- color picker
- filters preview
- flickr search
- per layer metadata
- photoshop tv
- sample pictures
- shortcut buttons

Creating the Watermark Panel

Photoshop Panel Developer's Guide (Cont.):

- Documentation
- Step by step instructions
- Excellent starting place

Creating the Watermark Panel

Building the examples:

- Save directly to Photoshop
- Save to default then copy
- Adding in Watermark example

Creating the Watermark Panel

MXML and Flex creates the SWF:

- Let's look at some code in Flex Builder 3.0



Creating the Watermark Panel

JSX talks to the Photoshop DOM:

- DOM –Document Object Model
 - `app.documents.add();`

Creating the Watermark Panel

Build a Release version:

- Project > Export Release Build

Creating the Watermark Panel

Panel And Scripting Resources:

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 - 3rd Party Panels
 - Configurator Resources
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Adobe

Panel, Plug-In and Scripting Workshop

Jeffrey Tranberry

QE Product Lead,
Photoshop

Tom Ruark

Senior Computer
Scientist, Photoshop



Panel, Plug-In and Scripting Workshop

- Now is a time for you to experiment writing your first scripts and/or creating your own panels.
- Questions about creating panels?
- Questions about Scripting?
- Questions about developing plug-ins?



Adobe