

## Configurator: The Family History

Configurator is based on a new technology introduced by Adobe in early 2008. “AIR”, which stands for Adobe Integrated Runtime, is a development environment, (a system run-time multi-platform) that allows developers to create desktop applications using web development tools and technologies such as Flash and Flex (Flash Builder), and Adobe’s AJAX, HTML, Javascript or some combination. Applications developed in this environment are identified by an .air suffix (Figure 1).



**Figure 1.** The usual icon of an AIR application.

These applications are cross-platform and can be used directly on your computer regardless of operating system. They require that AIR be installed. All Adobe products, including Creative Suite, install it auto-

matically. If for some reason you don’t have it, you can download it at <http://get.adobe.com/air/>.

Our installer can be opened like any other file, except that you must have Photoshop installed. You do not have to have the Configurator application itself unless you are planning to develop your own panels. If you wish to do so, Configurator is a free download at: <http://labs.adobe.com/downloads/configurator.html>.

This brief introduction explains why you occasionally receive notification of updates to AIR when you are using Configurator or any other extension program that requires it. If you see a window like Figure 2, you should proceed with the update.



## AIR: What Is It?

Applications based on AIR technology are called RIAs, Rich Internet Applications that run locally.

These applications are able to interact with the operating system, our local computer, and a web server to receive data from the Internet and view it locally without the help of a browser. They are somewhat of a middle ground between web-based applications (which require a browser) and traditional desktop software such as Photoshop or Excel.

Given the integration of Flash panels in Photoshop, for example, these characteristics allow Adobe Configurator to display movies from the Internet and access other external resources. Photoshop will be able to control and interact via the Web application to send commands through its scripting system.

AIR, in practice, acts as a shell, allowing these applications to work locally on our computers and bypass the limitations posed by a web browser.

## The Two Versions Of Configurator

Adobe Configurator is a free utility that allows us to create custom panels for Photoshop CS5. These simple words scarcely hint at how useful the concept is, or its many potential fields of application and amazing potential.

The first two releases of Configurator are version-specific, creating panels that work only in one version of Photoshop.

Configurator 1.0 can only create panels for Photoshop CS4.

Configurator 2.0 can only create panels for Photoshop CS5 or InDesign CS5.

The two versions are basically incompatible because there have been significant programming changes. Version 2.0, however, can import panels created with 1.0 and repurpose them for use in Photoshop CS5.

## Why Configurator Is Almost Unknown

Configurator has remained in the shadows since its first release. Although it is being used by some programmers, businesses and individual Photoshop or InDesign professionals, its use cannot be said to be

widespread.

The reasons are somewhat mysterious, but among the leading causes I would offer three possibilities.

1. The first is that the proliferation on the market of a huge amount of products. The documentation of what they do is often inadequate. This makes it even more difficult to comprehend the usefulness of a new product, considering that all of us are being forced to cut the amount of time dedicated to learning to the bare minimum.
2. The second is surely due to various limitations in the first released version of Configurator, 1.0. Sins of youth are of course understandable, but as I said, time is precious, and we insist on getting everything at once.
3. The third is in my opinion the most important and extends beyond Adobe Configurator.

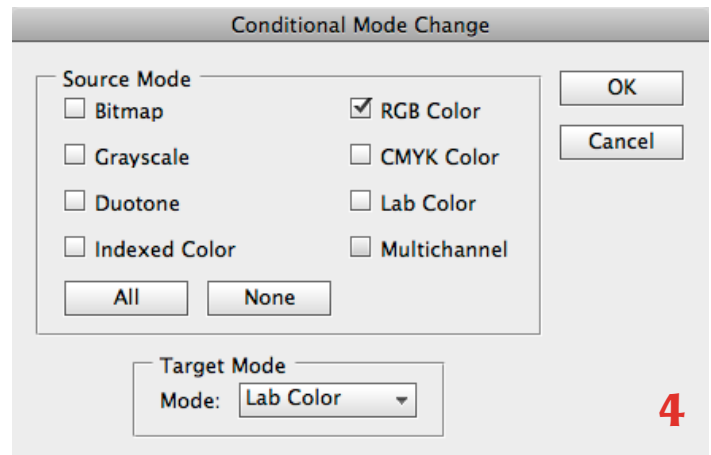
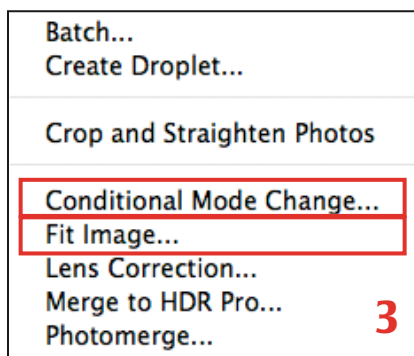
Photoshop and the entire Adobe Creative Suite offer many methods of automation. They constitute one of the most important offerings of the product, yet are generally poorly understood. Batching, scripts, droplets, actions, commands, panels, workspaces are words that we all know, some more intimately than others, but they are not always used properly in the workflow. Some automation methods are used unknowingly. Conversely, some remain abstract words that have meaning only on paper but do not seem to have much to do with your workflow. Whichever the reason, the result is that they very often are not exploited fully.

It is weird that, for example, hardly anyone who uses Photoshop actions combine them with other methods of automation. Among the available possibilities, for example, is to attach a condition to be met before the action is performed on the image.

Here is a practical example to clarify what I am talking about: if you create an action designed to act exclusively on an RGB file, we could enter, or better, record into the action a conditional step to recognize the image's colorspace and convert it through

File>Automate>Conditional Mode Change (Figure 3).

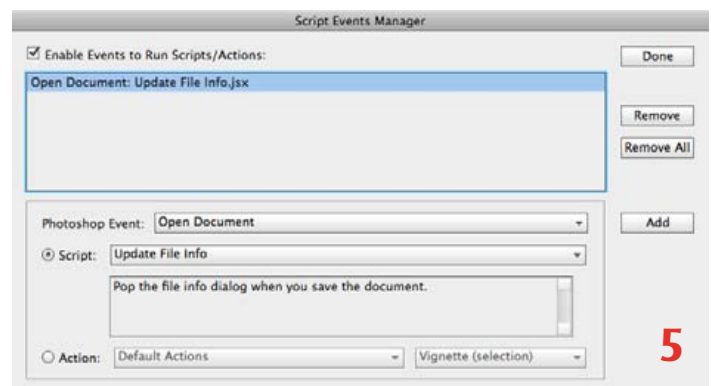
You can enable only the RGB checkbox like shown in Figure 4 and select the conversion you want in the target mode



section and then proceed recording further steps of the action. This one will stop if the image is in a different workspace than RGB.

If you want to resize your images considering both Landscape and portraits, you can insert the fit Image automation from the menu File>Automate and inserting the same value in both width and High field (Figure 3).

Or attach an action script like shown in Figure 5 or a batch when a certain event is met. An example would be to automatically add metadata, such as author and copyright information, each time a file is opened.



These are just two examples of synergy between methods of automation, and many more examples could be offered. But it requires a thorough knowledge of the various possibilities offered by each method to understand how far we can push the envelope. Of course we can go further through scripting with AppleScript, JavaScript or VBScript, which are in the realm of "advanced automation", but we would go far beyond the scope of this article. I want to show, instead, how Configurator's power and ease of use can meet the most demanding needs for customization.

Photoshop's automation possibilities are almost unlimited. Through scripting you can get things oth-

erwise unimaginable, but one need not be an expert to use what's ready to go in Photoshop. There are limitations, of course, but one can go well beyond the normal use of the program.

## What Is Automation?

Before exploring the many issues to which automation can be put in Photoshop it is perhaps best to ask what the word means.

A filter, for example, which changes the appearance of the image, could be considered an automated process, as it generates new pixels based on the sum or combination of multiple steps or calculations.

A panel, even if it doesn't directly modify the image, should be considered as an automated storage of objects designed to speed up your workflow. It therefore can be seen as a container of multiple automation tools.

We therefore have an absolute definition of automation as a utility instrument.

In reality, however, the concept of automated utility is also often associated with something not particularly productive, and therefore is thought to be of secondary importance.

A filter produces a visible change in the image pixels and, if properly applied, the small investment of time is always justified. A utility is often dismissed as either a waste of time or something that can be done without. Nothing could be more mistaken.

Instead both should be considered for their characteristics.

We'll talk about automation, considering only those functions whose characteristic is the combining of multiple steps into a single one, to be executed without further manual intervention whenever we want.

Consider these tools to organize commands, tools and automatic single argument to make our workflow more efficient, keeping everything at your fingertips.

## Automating Repetitive Tasks

Personally, although if the question is purely subjective, I use a filter only if it is a way to save time or returns a result I cannot replicate with other traditional tools of Photoshop. But I cannot do without certain amenities such as batch processing, actions, and scripting, which reduce the hundreds of steps in Photoshop to a single click, allowing me to reapply the effect or to replicate a fixed workflow whenever I like.

My slothfulness is fairly well known, and if to correct a certain sky requires ten steps, I might well decide to forego the privilege. Doing it with an auto-

mated mechanism such as a simple action is more inviting, allows more time for creativity and image analysis, and permits making several variations and choosing the most satisfying result.

Processing hundreds of photos that all need the same changes can become tiresome. What better solution than automation? A workflow punctuated by repetitive steps or one that needs to be replicated at a later time can benefit today from many tools available in Photoshop proper or produced by third parties.

Through automation Photoshop can be transformed into an interactive tool that lets us work faster, saving time improving workflow, and increasing productivity in both quantitative and qualitative terms.

## The Battle

I always like to imagine our daily life as taking place in a comic strip by Walt Disney. In this fanciful reality, Photoshop would certainly be portrayed as a battlefield and the pending image as the enemy that offers us combat.

Before us in the field are soldiers (automation) and the weapons granted to me (commands, curves, filters, etc.) I try to coordinate and devise, as a good general would, a battle plan (or action plan), taking into consideration what the most useful tactics will be for my purposes, and what alternatives I have to deal with different situations that may arise.

I would try to entrust specialized jobs to the "troops" (actions). I would not hesitate to put "tanks" (batch events, scripts...) into the field for the most repetitive work.

For managing these elements, I would put my faith in two excellent organizers within Photoshop: workspaces and panels (both those provided by Photoshop and custom ones from other sources).

Workspaces will pre-configure the battle plan. Panels will be the base camp areas with a utility that subdivide the weapons into groups organized by type and for maximum efficiency. The risk is great. Who will win? I may be the victim and lose the battle completely.

It goes without saying that we must have the skills to face a battle. Concentration and focus are still the winning army, marching straight to the objective with no distractions.

Some might argue that a lot of time is lost during the preparations, but the answer is equally obvious: the reward is far greater than the time spent.

We should also take into account that:

1. Preparations today will also be used for other battles in the future.

2. We will then be facing a type of enemy that has been previously defeated.
3. Our losses will be minimal, which means that the quality of the battle has been excellent.

## What Is Configurator's Role?

The first time I opened Configurator I thought immediately that it is the ideal tool, finally, to organize actions created in Photoshop. Without it, as the Actions palette fills up over time it becomes increasingly easy to get lost in the bedlam of actions loaded and/or created. The effort of searching the palette for the desired action gets really exhausting.

As time went on I came to appreciate the great potential of this program, which can be considered as the younger brother of Adobe Flex (a program for creating extensions, now become Flash Builder). It lacks a fair number of tools found in its older brother, but noting the big change for the better after the first release, I expect for more and more functionality and larger libraries in the future.

Looking beyond the current features of Adobe Configurator reveals a vista of tremendous potential. This, however is not the time to talk about them. I would avoid talking about technologies that need to be explained in detail and would make little sense for those just becoming acquainted with this software.

The important thing is to understand how fast, easy to use, and helpful in their workflow this product can be.

All the tools in Photoshop are at your disposal and you can organize them as you wish. You can regroup and launch specific actions, scripts, various auto-

mated procedures, filters, retrieve palettes and on and on. This way you can design a specific panel to be used depending on the workflow that you face.

For example, you could create panels for specific work streams for printing, or for different printing conditions, panels for the production of images for web, etc. Organize all the individual steps for a particular workflow, and group the most useful tools so they don't get lost meandering through the maze of Photoshop menus.

In short, you can stay focused on your goal without distractions. You can share the panel between different computers, pass it on to others, create tutorials, insert movies to be viewed in Photoshop, load web pages images that reside on the network or make use of external elements such as Flash files.

Once you start using Configurator, it will be your own imagination and needs that will guide you to greater productivity.

## Configurator, a Practical Example

An important and instructive example of Configurator's use is the panel shown in Figure 6 to 9 that follows the Picture Postcard Workflow (PPW).

This panel clearly shows the utility of Configurator, although some features were implemented with scripting. It also demonstrates a dual utility, for it is as profitable for the savvy followers of this workflow, as it is for users who are just beginning to adopt this effective and logical system for image correction and enhancement developed by Dan Margulis.

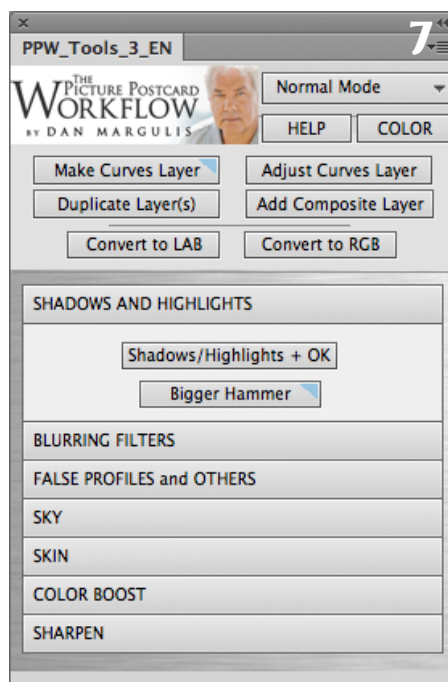
You can run all the actions and Photoshop commands in just one click, you can read documentation without leaving Photoshop, you can update the panel and all its content at the same time in just a snap.

All the tools you need at your fingertips to follow the flow as quickly as possible without wasting time searching for what you need. Just as you would with the television remote control.

## Configurator Is Child's Play

Whoever thinks that is complex to use Configurator panels may be disappointed.

The learning curve is like the con-



**Figure 6 and 7.** The PPW TOOLS panel in the Advanced and Normal mode.



**Figure 8 and 9.** The two additional panels inside the PPW TOOLS: the preferences for some of actions available and the layout, and the documentation accessible through the help button in the main panel shown in Figure 6 and 7.

trast curve of Dan Margulis: “steep” in the sense that comprehension comes quickly and leads to many practical uses. This is a characteristic of good software. Contrary to what some think, the better designed and structured a program is, the more intuitive and less complex the interface, and the easier to use and understand.

And the results can be likened to the effects of the Color Boost action, or Margulis himself: always colorful.

Although it is always a good idea to read the manual,

particularly one as thorough as ours, the fact is that it may not make much of a difference. The work environment is extremely simple and very intuitive. The interface is divided into three main areas like shown in Figure 10 and we believe it is virtually impossible to get confused or go wrong. In the first section you find the menu shown in Figure 11. Here, there’s nothing to explain as it’s really self intuitive. Just below, there’s a search field to quickly find the tool or command you are looking for (Figure 12).

Underneath, you can find the Object menu from which you can drag and drop on the stage: tools; every Photoshop command, even the sub menus and palette menu ones; buttons to run your actions; script to insert and script that reference to an external file; widgets for inserting text, images, movie, external panel, an html page; and finally containers object to

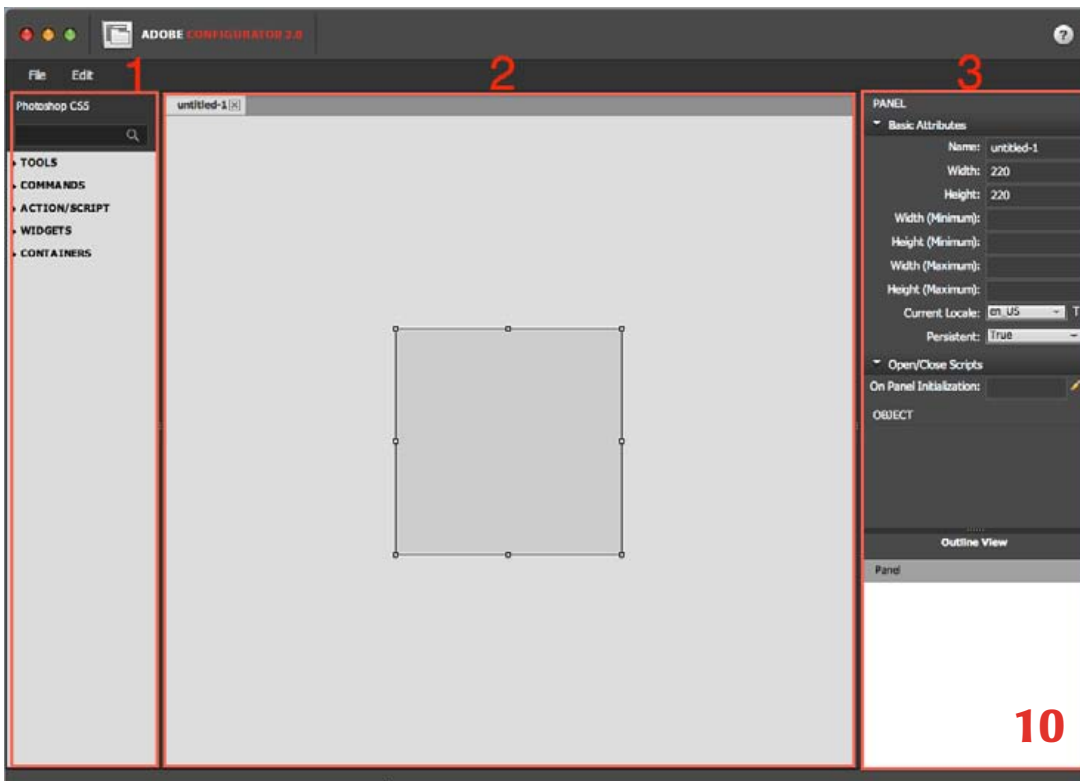
display and access to your contents (Figure 13 to 17).

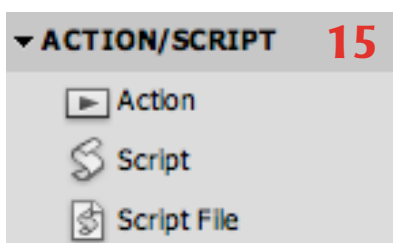
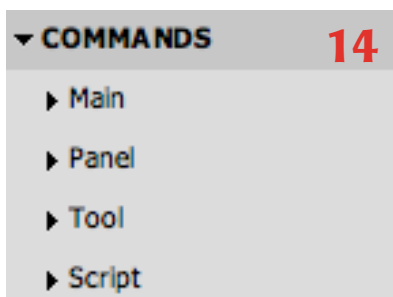
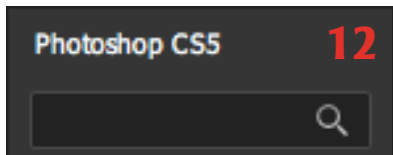
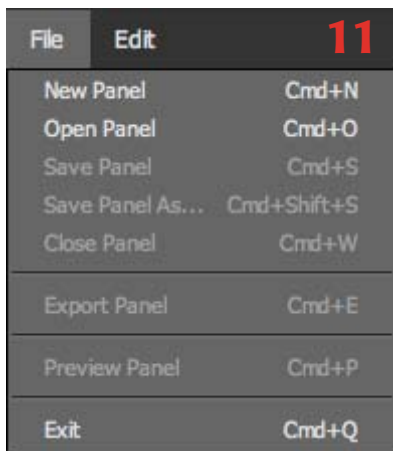
The middle section is the canvas where you’ll create your panel. After choosing File>New Panel, a panel of 220x220 pixel is created by default (see handled box in section 2). This is your actual working area. You can drag the handles to resize the panel manually or you can insert the exact size in pixel in the Panel section on the right (section 3).

From the Object menu on the left you can select

any element and drag it into the panel. Once it’s inside the panel, you can manually resize it by moving its handles or can set the exact size in pixels in the Inspector (section 3) on the right.

Now, let’s take a look at this section, actually the most important. The Inspector is a contextual area in which the upper part is always related to the panel itself. Underneath you’ll find the Object section in which every field changes depending on what is currently selected in the panel (buttons, contain-





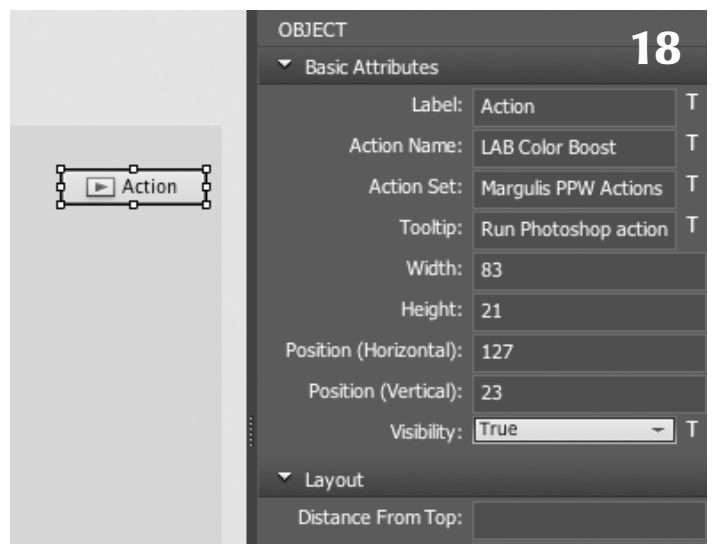
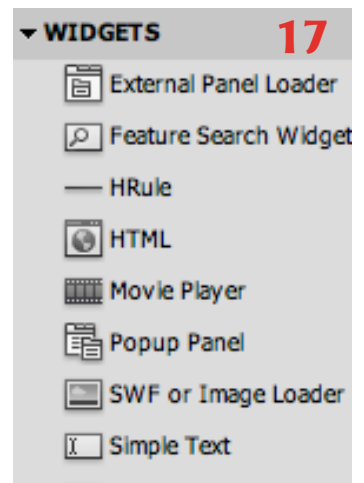
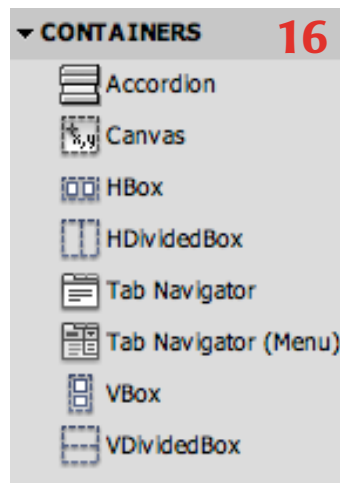
ers or anything else). For every element you can set its name, size, position and any other parameter necessary for its full functionality.

Everything is quite intuitive: all you need is to follow the meaning of the words and you're on the right track.

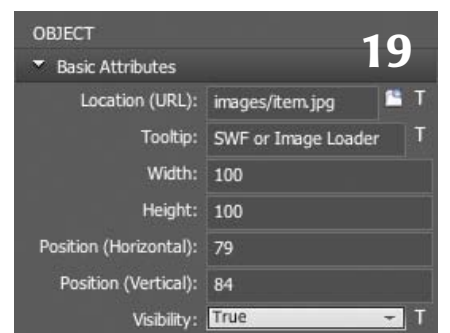
Let's give an easy example. Drag on the panel an action button taken from the menu on the left. While keeping it selected, you can link it to an action by inserting, in the Object section, the Action's Name and Set that you have previously created inside Photoshop (Figure 18). To avoid errors you can copy the action's name directly from the Actions palette in Photoshop and then paste it in the right field. The same can be done for the Action set's name. The button's size can be adjusted manually by dragging the handles or, for a more precise work, you can insert the exact size and position in the object

section like shown in Figure 18. So easy? Yes, indeed.

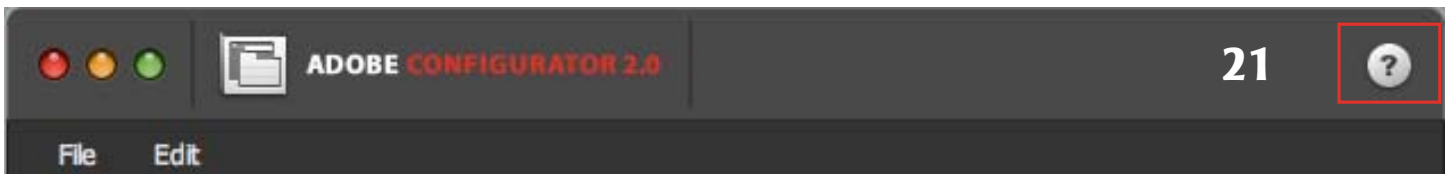
Now, let's suppose that you want to insert some graphics for giving a more customized look at you panel. From the image tools menu on the left, just select "SWF or Image Loader" (Figure 17) and drag it into the panel. Adjust the size and then click on the icon besides the Location field. You'll be prompted to



choose the file you want to use. It can be an image or any other media, but here comes a little trick. You should create a folder inside the one containing your panel to be sure that the link will be a relative one (images/item.jpg) like shown in Figure 19. Also, the image you're going to use should be the same size in pixels of your container, if you don't want it to be rescaled by Configurator.



Once you have completed your panel with all the buttons and graphics, it's time to export it. First, I would suggest to take a final look at what you have created by choosing Preview Panel from the File menu. Here, you'll have a good idea of how the panel will look once you're in Photoshop and can test all the buttons. After that, you can finally export your panel directly into the Photoshop Plug-ins folder by choos-



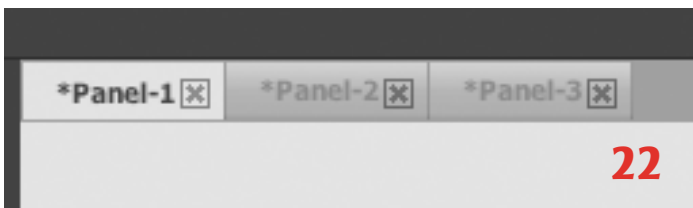
ing Export Panel from the File menu.

When you're prompted, choose the Plug-ins folder into the Adobe Photoshop CS5 folder, and you're done. Easy, isn't it? You will need to quit and reopen Photoshop in order to use the panel and, for showing it, you will need to choose Window>Extensions>*your\_panel*.

If you want to share your panel with someone else, the procedure can be done in two ways. The first is fully manual. Go into the folder Adobe Photoshop CS5>Plug-ins>Panels and copy the panel's folder to the desired location on your disk. Before sending it by e-mail, it's a good idea to compress your panel's folder into a .zip file.

A second and smarter way can be to create an installer with an easy procedure that requires different steps. I would leave this pleasure to you by taking a look at the manual. Like you'll see it isn't complicated at all, like many other things in Configurator.

Now, few technical notes. You can work on many panels at the same time, as shown in Figure 22, and you can copy and paste any element in all of them.



Though Configurator is a simple software, it's not really an evolved one, not yet at least. This means that you can create panels for anything you need, but for more complicated purposes you'll need to find out more complicated solutions. Scripting is one of them and it's not suitable for the average user, unless you're confident with the scripting language used by Configurator.

If you want to investigate this or go more in depth, I would suggest you to access first the Help documentation by clicking on the question mark on the right in the bar shown in Figure 21. If not enough, there are some online resources you can access, but not so much.

Anyway, I think that what we have seen so far can help 90% of users to speed up and automate any common but repetitive task in daily use.

The PPW TOOLS panel was actually created in line with this philosophy, as it speeds up the workflow created by Dan Margulis, and you may desire to create your own one for the same good reasons.

So, don't be scared. Open Configurator and start to build your panel. I can assure that, after the very first time, you will be addicted to. And you will find it much easier than you may think. Granted.

### CREDITS

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