



Photoshop Mastery

Taking Photoshop to the next level

■ BY BEN WILLMORE

Make Life Easier with Variables

If you need to create dozens or even hundreds of documents that have a common underlying design, and in which the only variables are text and graphic elements (e.g., business cards, invitations, packaging, or awards), then you'll go nuts for the new Variables feature in Adobe Photoshop CS2.

The first step in implementing Variables is to create a template file—an everyday Photoshop file that will contain placeholder text and graphics that you'd like to swap out later with other content. You'll need to create a separate layer for each item you want to swap out. Using our example of a business card, you'll likely end up with separate layers for name, address, email, and telephone number, as well as one for the company logo (if it needs to vary between cards).

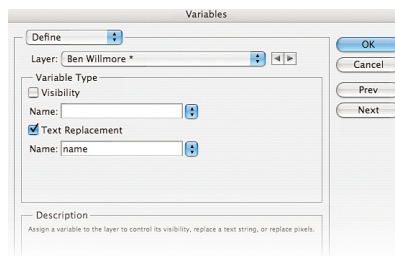


Template file

Next, we'll define as Variables those layers we want to be able to change. Choose Image>Variables>Define, select the layer name from the Layer pop-up menu, and choose the Variable type, for example:

- **Visibility** allows you to show or hide the contents of a layer. A True entry makes your layer visible, or use False if you'd like to it to be hidden.
- **Text Replacement** allows you to swap out a string of text (name, address, and telephone in our example), with alternative text from an external file.
- **Pixel Replacement** lets you replace the contents of a pixel-based layer with an external image file: for example, a different logo for each card. You'll need to list the exact filename for the graphic file you'd like substituted, and these graphic

files must be located in the same folder as the text file that you're creating.



[For a tutorial using Pixel Replacement variables, see "Data-Driven Graphics in Photoshop CS2," in Photoshop User, December 2005, p. 60—Ed.]

We used only text replacement variables for our example. Next, we need to specify a descriptive name for each variable; for example, we defined the layer called "12 Placeholder Way" as a variable named "address" (without quotation marks). Try to stick with single-word lowercase names that contain no numbers or special characters, because these can cause problems later in the process.

Create text files

Now that you've created your template and defined as many variables as you need, it's time to define the text and graphics that will replace your placeholder layers. All Photoshop needs is a simple text file, but creating it isn't as easy as you might expect. Let's look at a basic example.

We created our example file in a spreadsheet program with four vari-

ables—name, address, phone, and email—with enough data to produce four business cards. The first line is a simple list of the four variables that were defined in the template file (matching the spelling and capitalization exactly). Each of the lines below the top one is known as a Data Set and will produce a separate graphic file when it's brought into Photoshop. When you're done creating the text, save it as a tab- or comma-delimited text (TXT) file.

If your text replacement data contains any quotation marks, commas, or returns, then surround the entire entry in quotes like this:

"Robert "Billy" Jones
Nederland, CO 80466"

When you're ready to bring the text file into Photoshop, choose File>Import>Variable Data Sets, select the text file you'd like to use, and click Load. To preview the results, choose Image>Variables>Data Sets, turn on the Preview checkbox, and click the Arrow icons next to the Data Set name.

Finally, to generate separate graphics files for each data set, choose File>Export>Data Sets as Files, click on Select Folder, and navigate to where you want the files to be located (or select New Folder). Then choose All Data Sets from the Data Set field and click OK. The number of files that will be created is limited only by the number of Data Sets you defined in the text file...the potential is unlimited. ■

name	address	phone	email
Ben Willmore	7157 Magnolia Dr.	303-555-3191	book@digitalmastery.com
Regina Cleveland	63 Longmont Dam Rd.	303-555-1234	regina@digitalmastery.com
Nik Willmore	18 110th St	212-555-1418	nik@e-dot.com
Nate Willmore	12 Main St.	303-555-4467	doesnt@haveone.com

Ben Willmore is author of Photoshop CS2 Studio Techniques and Photoshop CS2: Up to Speed, and co-author of How to Wow: Photoshop for Photography. Find out more about Ben by visiting his blog at www.WherelsBen.com.