



# IconBuilder Pro

A Step-By-Step Tutorial

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### Welcome to the IconBuilder Pro Tutorial

IconBuilder Pro is not an icon editor, but a tool you can use to organize and streamline construction of icons for both the Macintosh and Windows platforms and all version of their operating systems.

The purpose of this tutorial is to familiarize you with the features and controls of IconBuilder Pro through hands-on practice. We recommend that all users read through the entire tutorial since each section contains useful information about the filter and icon creation that is not platform-specific.

The first section leads you through the steps to import art and create an icon for Mac OS X using IconBuilder Pro's QuickBuild™ feature and the IconBuilder Assistant Photoshop Action.

Section two is devoted to how to create icons with Open / Drop states that appear to animate in Mac OS X.

The last section mainly covers how to create icons for Windows XP, but contains useful information for all users including manually resizing icons and adding drop shadow effects.

Throughout the tutorial you will notice color coded words. The **Blue** highlighted words represent actions. **Orange** highlighted words represent locations.

This step-by-step guide assumes that you have read the IconBuilder Pro User's Guide and have a good understanding of the interface and controls in the filter.

If you have not read the User's Guide or are a beginner to IconBuilder Pro, we recommend that you go back at this time and read the User's Guide before proceeding with this tutorial.

## How To Install IconBuilder Pro

Drag and drop the IconBuilder Pro folder from the disk image you downloaded from The Iconfactory into your Adobe Photoshop Plug-Ins folder. The Plug-Ins Folder should be located in the main Applications folder of your Mac's hard drive.

## Loading IconBuilder Assistant (Photoshop Action)

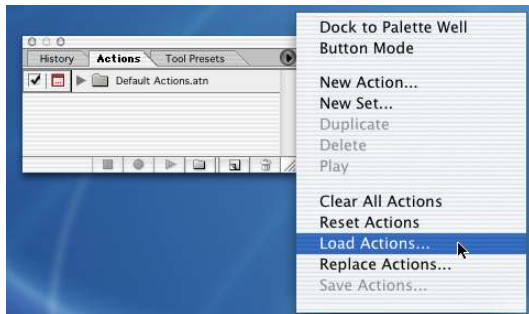
The IconBuilder Assistant Photoshop Action file (IB Assistant.atn) included in the IconBuilder Pro download is pre-built and ready to be loaded into Photoshop. Using IconBuilder Assistant can greatly reduce the effort and time needed to construct Mac OS X icons by automatically creating icon sizes from a base 128x128 graphic.

To load IconBuilder Assistant, launch Photoshop by clicking its application icon in the Dock. Once running, activate the Actions palette by selecting **Window > Actions** from the main menu.

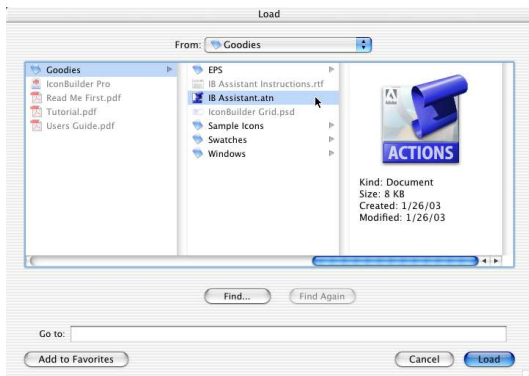
Next, click the small triangle on the top right side of the palette to access the menu options for Actions. Select **Load Actions...** and a standard Mac OS X dialog box will open. (fig. 1)

Then, to locate the IconBuilder Assistant action file, navigate your hard drive using the following route: **Applications > Adobe Photoshop > Plug-Ins > IconBuilder Pro > Goodies > IB Assistant.atn**. Select and click **Load** to import the action into Photoshop (fig. 2).

You are now ready to use IconBuilder Assistant. Simply select it from the Actions Palette or assign it a command-key shortcut.



**Load IconBuilder Assistant (fig. 1)** - IconBuilder Assistant must be loaded from within Adobe Photoshop before you can use it.



**Locate IconBuilder Assistant (fig. 2)** - IconBuilder Assistant is located in the Goodies folder of the main IconBuilder Pro download under the filename IB Assistant.atn.

## Uninstalling IconBuilder Pro

To uninstall IconBuilder Pro, simply drag the IconBuilder Pro folder to the Trash. The folder should be located on your hard drive in **Applications > Adobe Photoshop > Plug-ins**.

## Introduction

There are many different approaches that can be taken to create a Macintosh OS X icon. The process that is outlined in this section is the most direct, and by far the easiest method for going from raw artwork to a finished icon.

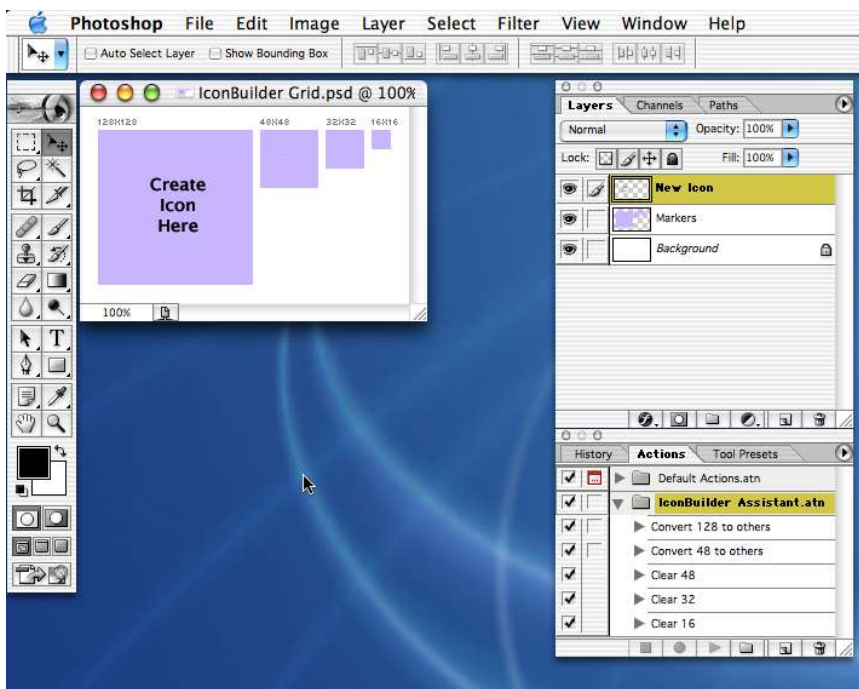
The goal of this section is to familiarize you with the basic controls of IconBuilder Pro including the QuickBuild™ command and the IconBuilder Assistant Action that comes with the filter.

When IconBuilder Assistant is used in conjunction with 128x128 base art, a Mac OS X icon can be generated in just a few mouse clicks. This saves a great deal of time and lets you focus on finetuning the design of the icon itself instead of its construction. Also covered are some tips and tricks that come in handy when building Mac OS X icons.

### 1) Setting Up The Work Area

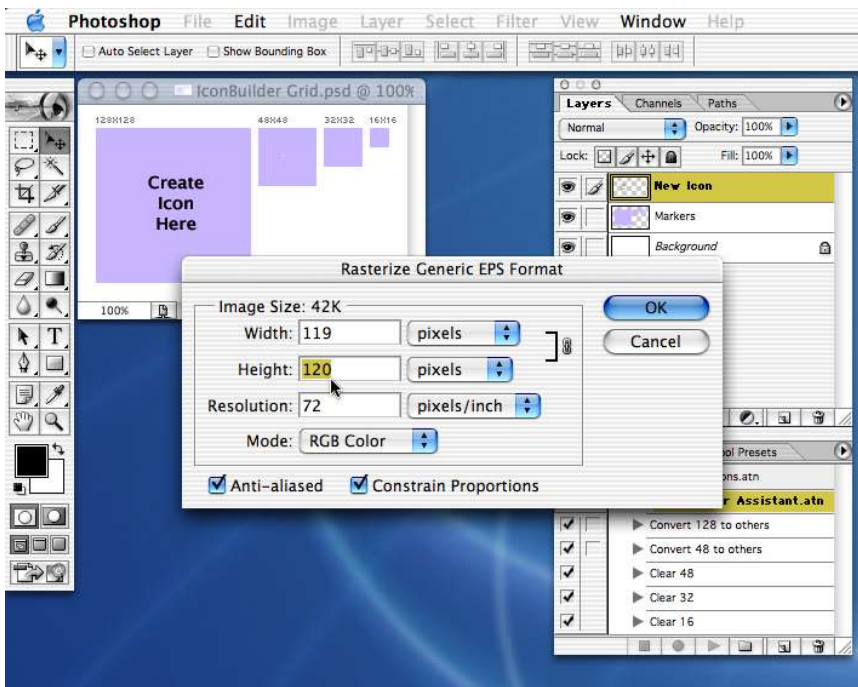
- Open the **IconBuilder Grid.psd** file located in the / Applications / Adobe Photoshop / Plug-Ins / IconBuilder Pro 4 / Goodies folder.

This file is formatted for the sizes most commonly used when creating Mac OS X icons. It consists of 16, 32, 48, and 128 pixel squares for placing your icons into during the production process.



(fig. 3)

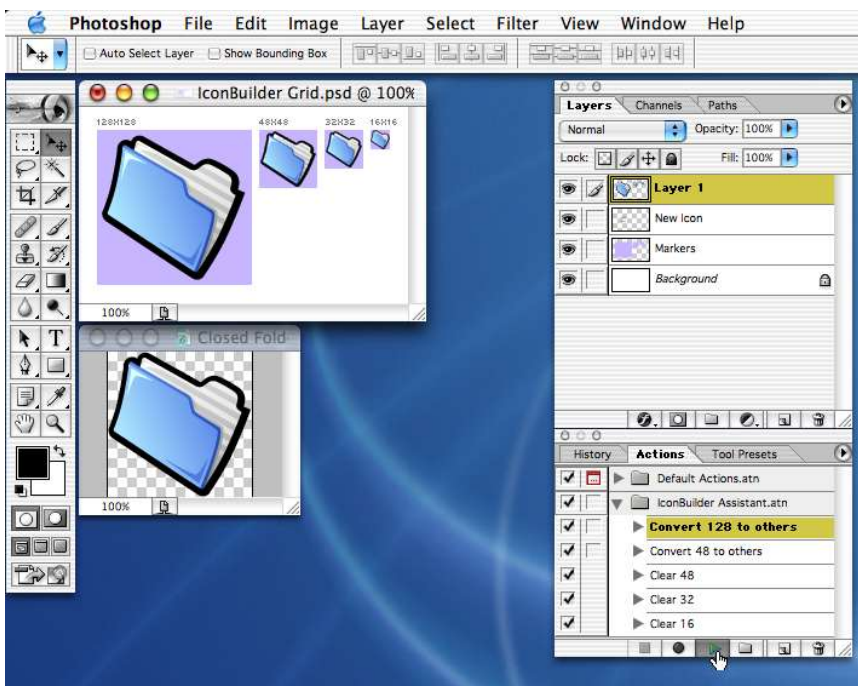
We recommend that you DO NOT alter the position of the squares in the IconBuilder Grid.psd. The IconBuilder Assistant Action (ATN) relies on the default arrangement of the squares to function properly.



(fig. 4)

### 2) Importing & Placing the 128x128 Pixel Art

- Open the **Closed Folder.eps** file in the **Goodies** folder.
- Enter **120 pixels** in the height field of the **Rasterize Generic EPS Format** dialog box and click **OK**. (fig. 4)
- Make the **Closed Folder.eps** the active document and choose **All** from the **Select Menu**.
- Choose **Copy** from the **Edit Menu** or type **Command-C** to copy the selected image.
- Click on the **IconBuilder Grid.psd** file to make it the active document.
- Choose **Paste** from the **Edit Menu** or type **Command-V**. The **Closed Folder.eps** file will be copied to a new layer called **Layer 1**.
- Use the **Hand tool** to center the image of the folder within the **128x128 square**.



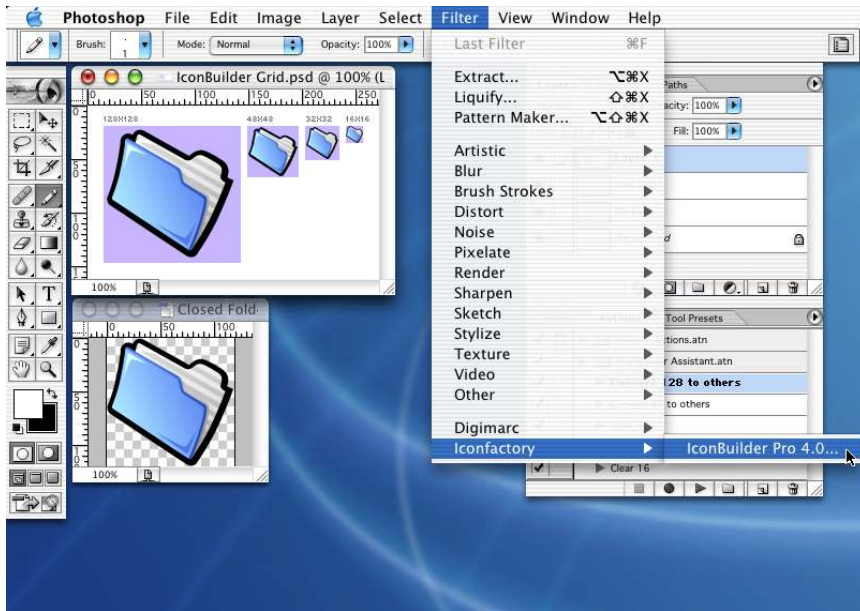
(fig. 5)

### 3) Running The IconBuilder Assistant Action

- While keeping **Layer 1** active, go to the **Actions Palette** and highlight the action named **Copy 128 to others** and click **Play Selection** (the triangular icon at the bottom of the Actions palette). (fig. 5)

The IconBuilder Assistant helps you by automatically creating the other sizes you will need. This greatly reduces the time it takes to manually resize the image for the other icon resources.

If you prefer to resize the artwork by hand (add sharpening or other effects, etc.) you may do so, but be sure to merge your layers prior to launching the filter or QuickBuild™ will not function properly.

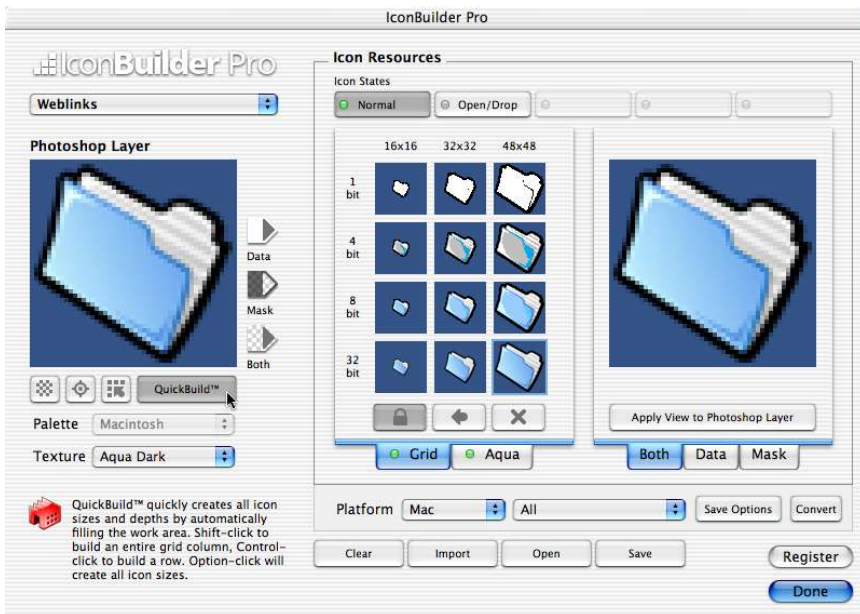


(fig. 6)

**4) Launch IconBuilder Pro**

- Make sure Layer 1 is highlighted and select **Filter > Iconfactory > IconBuilder Pro 4.0** to launch the software. (fig. 6)

The first time the filter is launched, you will see a help screen that provides some useful tips and tricks. On subsequent launches these tips will not appear.



(fig. 7)

**5) Use Quickbuild™ To Construct The Icon**

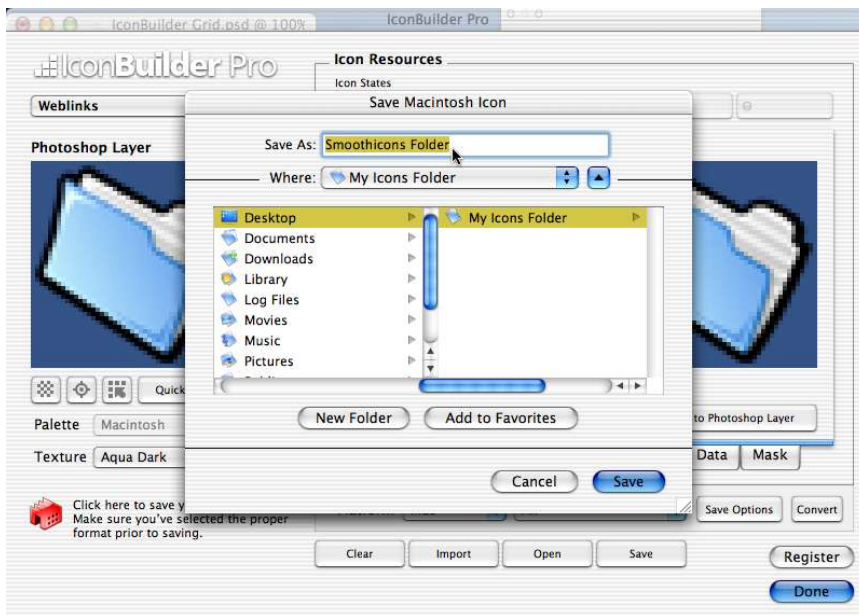
After IconBuilder Pro has launched, you will notice that the 48x48 grid cell is selected by default.

- While holding down the **Option Key**, click the **QuickBuild™** button. (fig. 5)

This command will fill all of the sizes and bit depths in the Icon Resource Grid. If you click on the Aqua Tab, you can view the 128x128 pixel resource that has been added to your icon.

You can easily tell if there is data in a particular view by the small indicator lights on the tabs and buttons. If these indicators are green, than that view contains icon data. If it is grayed out, than the view is empty.





(fig. 8)

### 6) Saving Your Icon To The Desktop

- Check that the **Platform Menu** is set to **Mac** and the **OS/File Type Menu** is set to **All**.
- Click **Save** to open the Save dialog box.
- Navigate to your Desktop to save the icon and name the file **Smoothicons Folder**. (fig. 8)
- Click **Save**.
- Click **Done** to exit the IconBuilder Pro 4.0 filter.

You can now go to the Desktop to view your icon. Congratulations, you've created your first icon with IconBuilder Pro!

### Introduction

Mac OS 10.2 introduced the use of “icon states.” This allows an artist to design and produce icons that change visually when certain things happen in the Finder. As of Mac OS 10.2.3, the only states currently supported by Apple are the Normal and Open / Drop states.

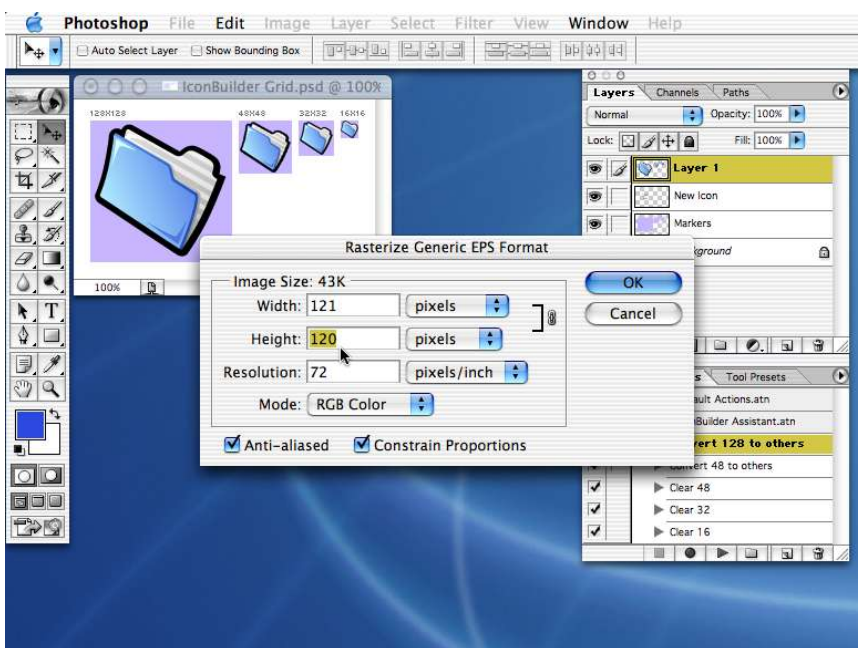
The Open / Drop state is a secondary set of resources in the icon file that makes the icon appear to move when a file or folder is dragged over it.

The goal of this section is to familiarize you with IconBuilder Pro’s “icon states” controls and custom save options.

### 1) Rasterizing the Open / Drop Version

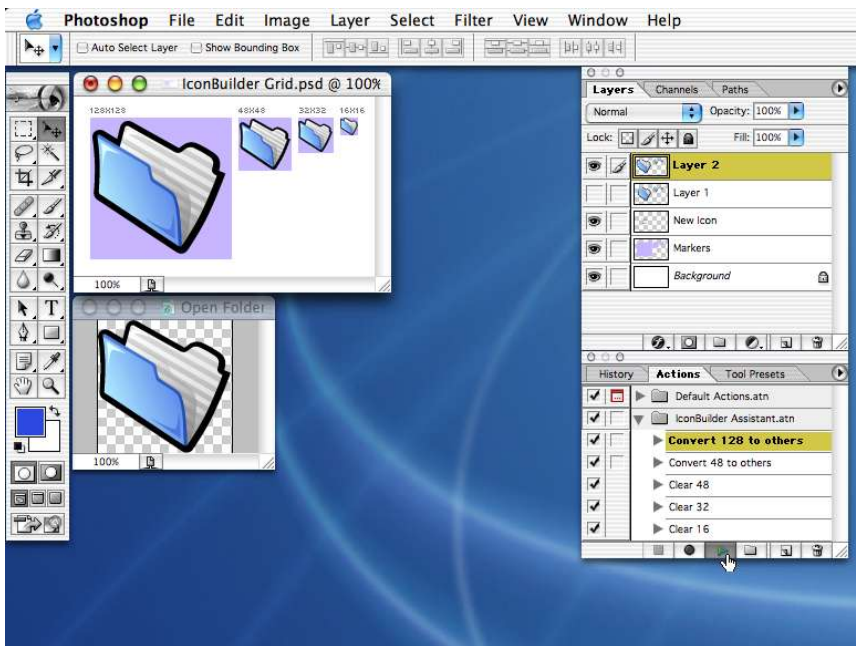
The Open / Drop state is a secondary set of resources in the icon file that makes the folder appear to “open” when a file or folder is dragged over it.

- Double-click the [Open Folder.eps](#) file from the [/ Applications / Adobe Photoshop / Plug-Ins / IconBuilder Pro 4.0 / Goodies](#) folder to open it.
- After the [Rasterize Generic EPS Format](#) dialog box appears on screen, enter **120** in the [Height](#) field and click **OK**. (fig. 9)
- Make the [Open Folder.eps](#) the active window and choose [All](#) from the [Select](#) menu.
- Choose [Copy](#) from the [Edit Menu](#) or type [Command-C](#) to copy the image.
- Click on the [IconBuilder Grid.psd](#) to make it the active window.
- Choose [Paste](#) from the [Edit Menu](#) or type [Command-V](#) to paste the image onto a new Layer.



(fig. 9)





(fig. 10)

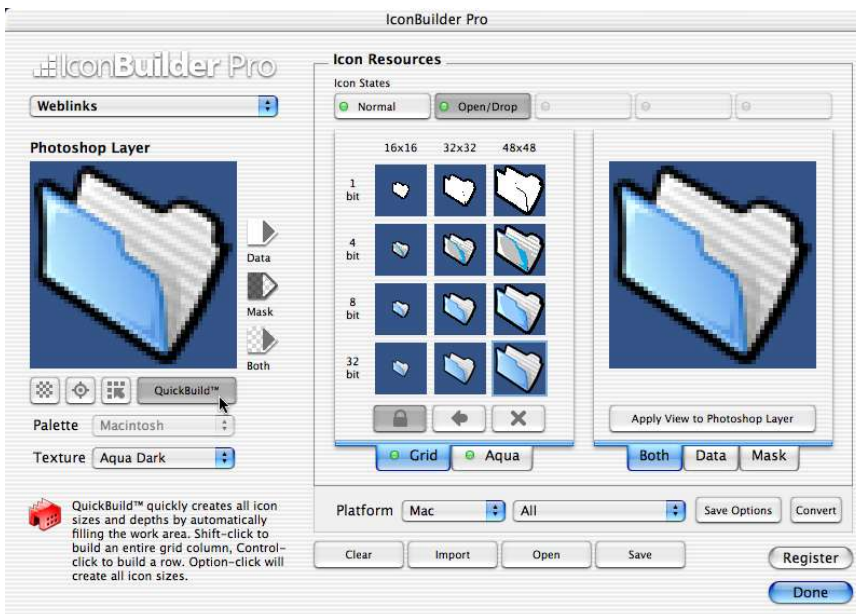
**2) Align the Image & Run IconBuilder Assistant**

- Use the **Hand tool** to move the image of the folder around to overlay the version of the Closed Folder as closely as possible.

It is important to make sure the two folders line up precisely to prevent the icon from appearing to “jump” when a user drags a file over it.

- Make sure the layer with the **Open Folder.eps** is selected and click **Play** on the **Copy 128 to others** Action. (fig. 10) The additional sizes will be created and placed on a single layer.

You'll be able to tell if the Open / Drop state isn't aligned with the normal state by clicking the two state buttons and comparing the visual display. You can make small adjustments to the position of the graphic in the grid cell using the arrow keys to nudge the layer.



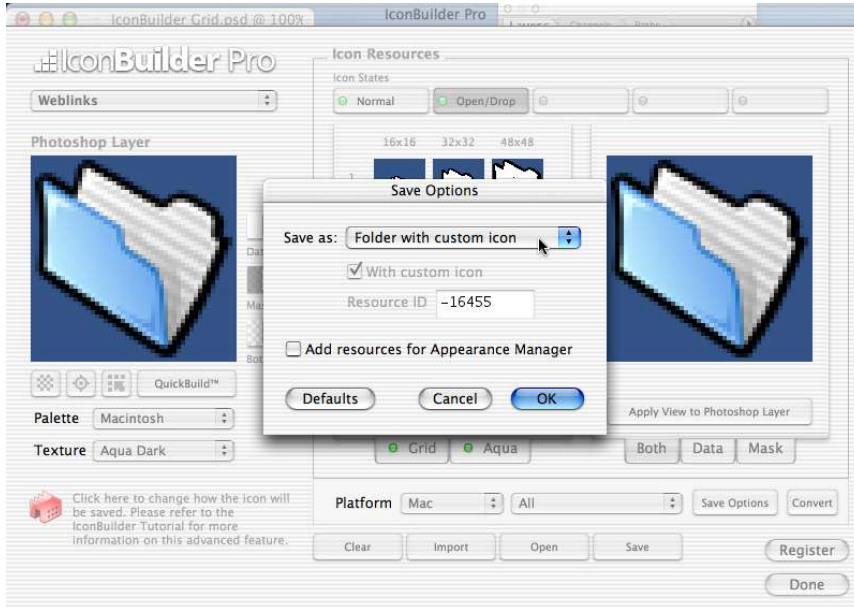
(fig. 11)

**3) Add the Open / Drop Resources to the Existing Icon**

- Click on the **Filter** menu and choose **Iconfactory > IconBuilderPro 4.0** to run the filter.

Once you are within the filter you will notice that the Closed Folder icon you created earlier will still be in the Icon Resources Grid.

- Click the **Open/Drop** button from the Icon Resources section (at the top of the filter's interface) to display the Open / Drop state resource grid.
- Hold the **Option** key while clicking the **QuickBuild™** button to fill in the grid. (fig. 11)



(fig. 12)

#### 4) Saving the Icon as a Custom Folder

Now that you have added the Open / Drop state information to the icon, you need to set the Save Options to include that information in your final file. Otherwise, left in default mode IconBuilder Pro will save the icon as an icon resource which will not display the second state you just added.

- Click **Save Options** and choose **Folder with custom icon** in the Save As pop-up. (fig. 12)
- Click **OK**.
- Choose **Save** from the filter window. When you name the file, be sure to give it a new, unique name.
- Click **Save**.

Congratulations! Your folder will now have a second state and will “magically” pop open when you drag a document or folder over it in the Macintosh Finder.

When building a desktop icon that contains an Open / Drop state, you **MUST** use the **Save Options** to set the save format to **Folder with Custom Icon**. Saving the icon as a standard resource file will not format the icon correctly and you will not see the Open / Drop state function in the Mac OS X Finder.

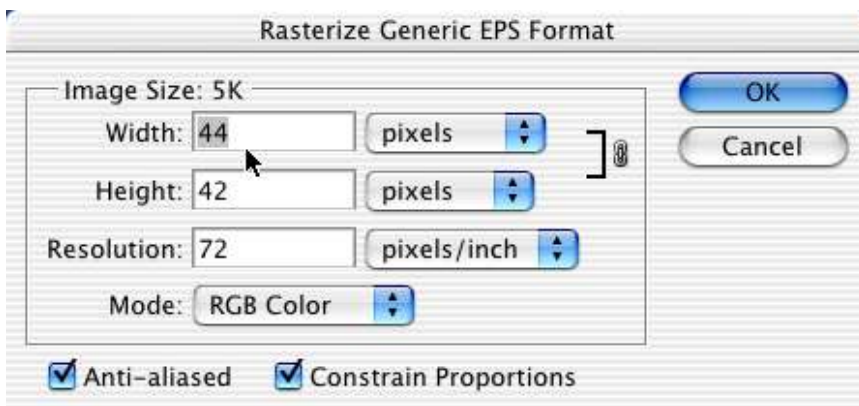
However, since IconBuilder Pro cannot read the states from an icon saved in this fashion, we recommend that this is the final step you perform when constructing Open / Drop folders.

### Introduction

The goal of this section is to familiarize you with how to manually resize images to fit each appropriate grid cell, add XP-style drop shadows, and save icons for the Windows platform.

The manual process does take longer, but can give you more precise placing and sizing control than using the IconBuilder Assistant action. This is important as you will also add the XP style drop shadow to the image and will need adequate room to place the icon in the grid cell.

The file you will be working with is formatted for Mac OS X and consists of 16, 32, 48, and 128 pixel squares. In this section you will only use the 16, 32 and 48 pixel sizes since those are the Windows XP sizes most commonly used.



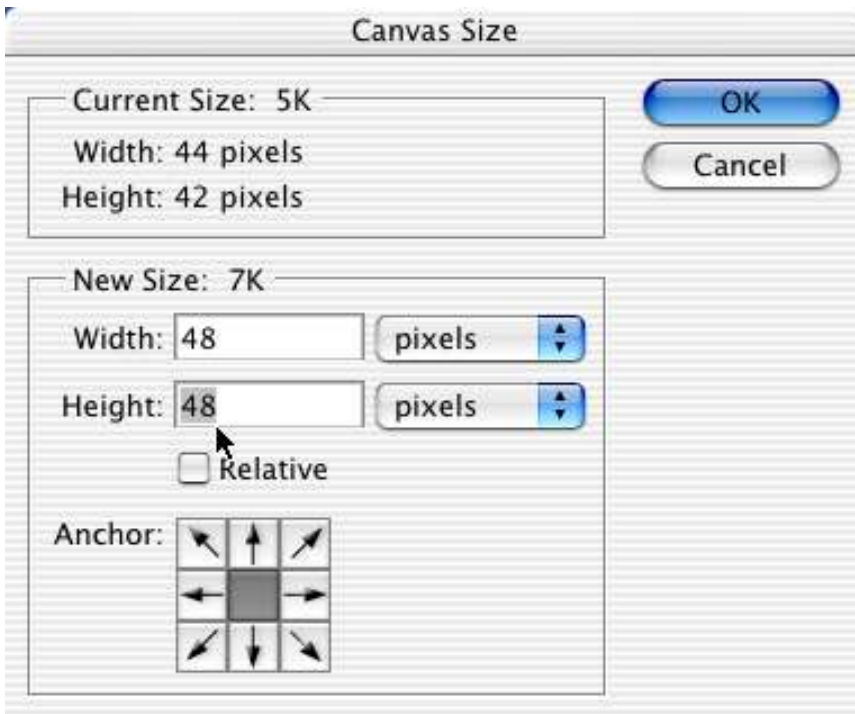
(fig. 13)

### 1) Rasterize the XP Folder Base Art

- Open the [Document.eps](#) file located in the `/ Applications / Adobe Photoshop / Plug-Ins / IconBuilder Pro 4 / Goodies` folder.
- Enter a value of [44 pixels](#) in the [Width](#) field of the [Rasterize Generic EPS Format](#) dialog box. (fig. 13)

You entered 44 pixels in the Width field instead of 48 pixels to allow enough room to apply a drop shadow later.

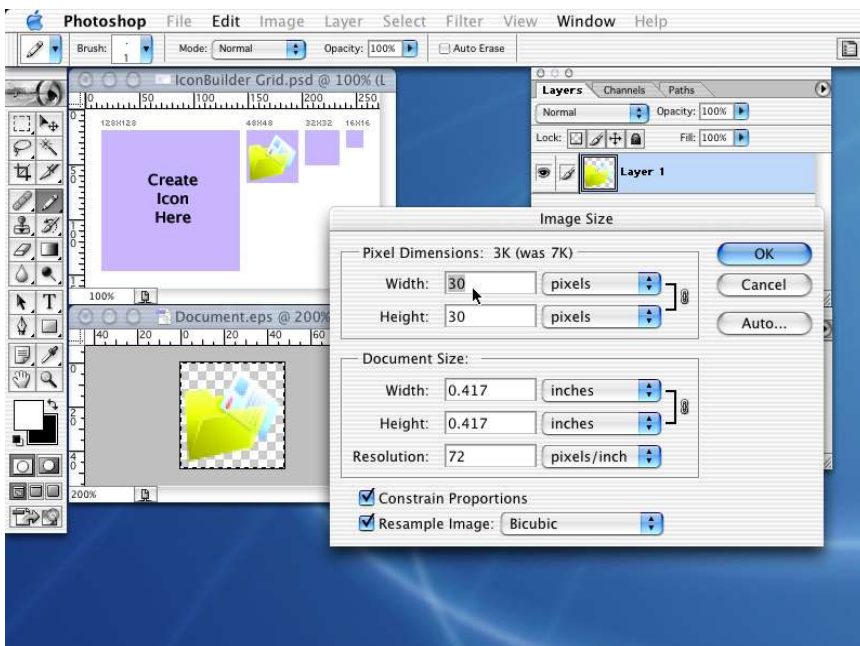
- Click [OK](#).



(fig. 14)

**2) Increase the Canvas Size**

- Choose **Canvas** from the **Image menu**.
- Enter a value of **48 pixels** into both the **Height** and **Width** fields. (fig. 14)
- Make **Document.eps** the active window and choose **All** from the **Select menu**.
- Select **Copy** from the **Edit menu** or type **Command-C**.
- Click the **IconBuilder Grid.psd** file to make it active.
- Choose **Paste** from the **Edit menu** or type **Command-V** to paste the image onto a new layer.



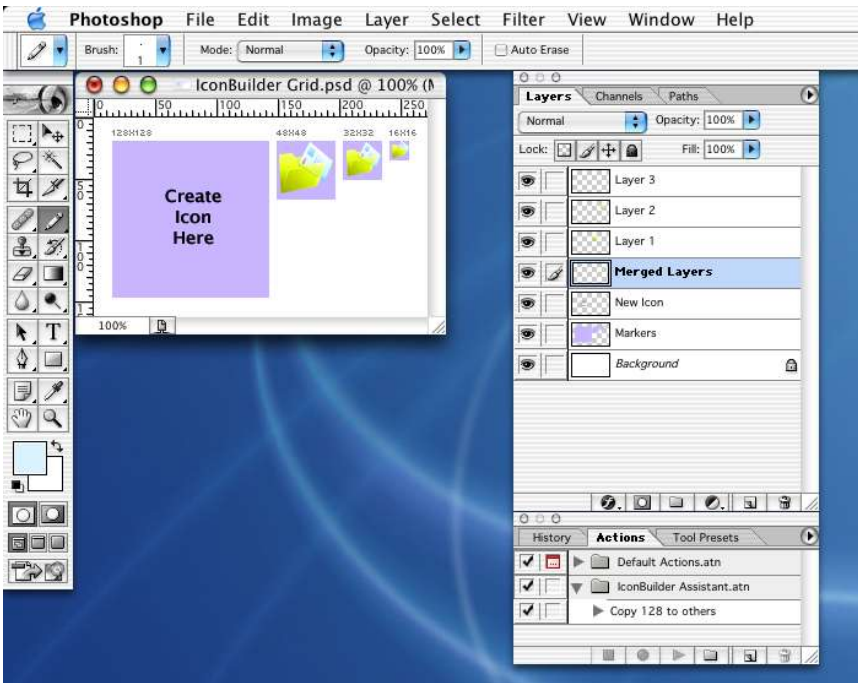
(fig. 15)

**3) Resize the Image for the 32x32 & 16x16 Versions**

In this step, we're going to fill the 32x32 and 16x16 template squares manually. The trick is to leave enough space (usually at least 2 pixels) for the application of the XP drop shadow. Therefore, before the drop shadow is added, the maximum width or height XP icons should be is 30x30 and 14x14 pixels.

Sometimes, artists choose not to apply the drop shadow to the smaller version of the icon, in which case you can use the full 16x16 size.

- Select **Image Size** from the **Image menu**.
- Set the **Width** of the image to **30 pixels**. (fig. 15)
- **Copy** the image and **paste** it into the **IconBuilder Grid.psd**.
- Use the **Hand tool** to position it within the 32x32 square.
- Return to the image you just resized. Select **Image Size** again and set the **Width** to **14x14 pixels**.
- **Copy** and **paste** the image into the **IconBuilder Grid.psd**.
- Use the **Hand tool** to position it within the 16x16 square.

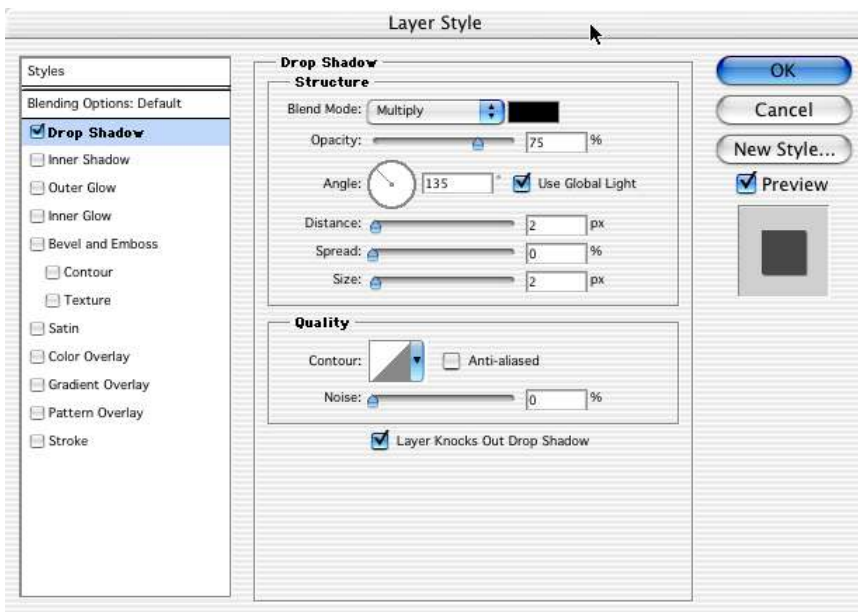


(fig. 16)

**4) Merge the Layers Into One**

You should now have three individual layers, each one containing a different version of the icon. Before you add the XP drop shadow to these icons and run the filter, you must merge the layers into a single layer.

- Select **Layer 3** to highlight it.
- Select **Layer > Merge Down (Command-E)**. This will merge Layer 3 down to Layer 2. (fig. 16)
- Repeat with Layer 2. This will leave you with one layer that will contain all three image sizes.



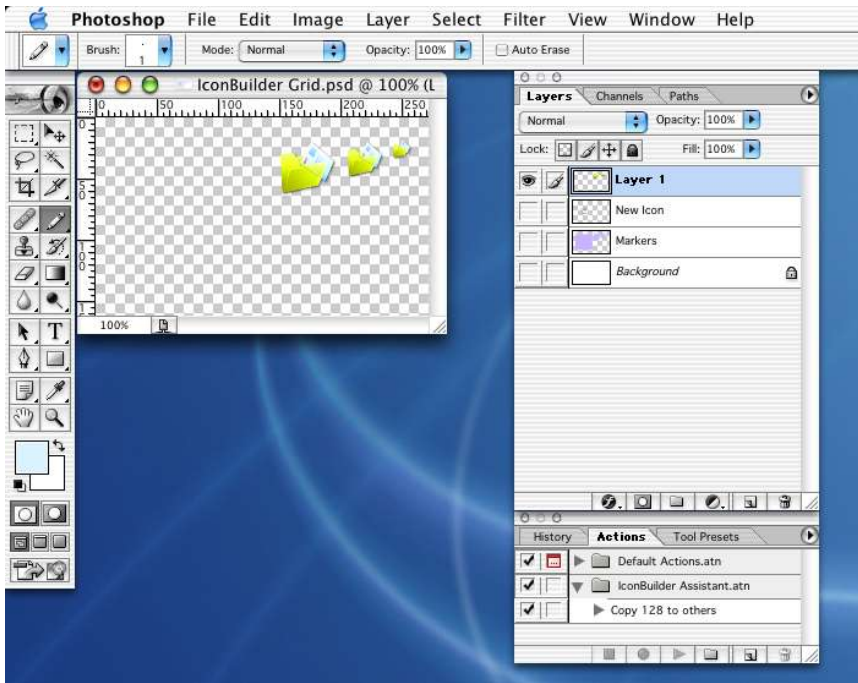
(fig. 17)

**5) Add the XP Drop Shadow**

Now that the layers are merged, use Photoshop's built-in Layer Effects to add the XP-style drop shadow to the icon.

- Choose **Layer > Layer Style > Drop Shadow...**
- Enter the following values into the **Drop Shadow** area: (fig. 17)
  - Blending Mode: **Multiply**
  - Opacity **75%**
  - Angle: **135**
  - Distance: **2**
  - Spread: **0**
  - Size: **2**
- Click **OK**.



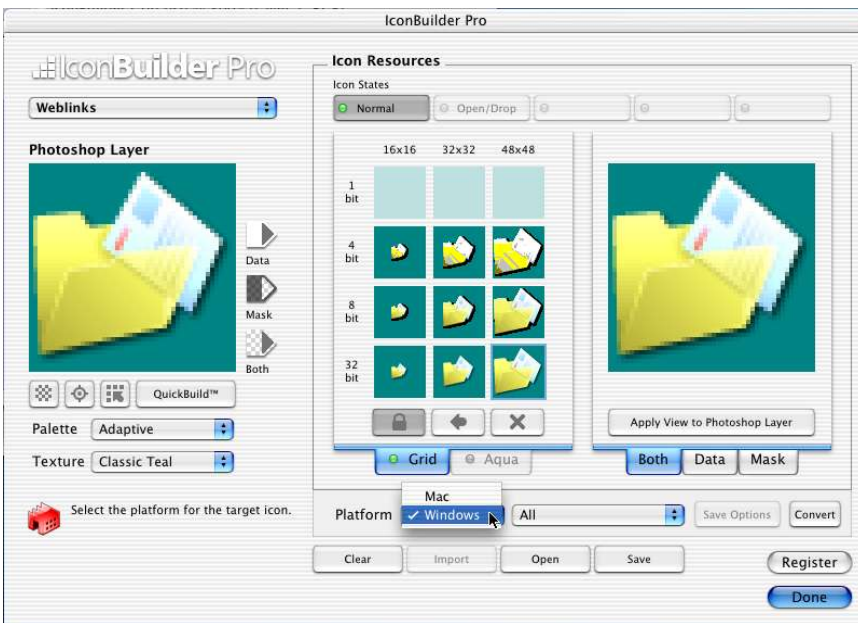


(fig. 18)

**6) Merge the Layer Effect**

In order for IconBuilder Pro to read the drop shadow correctly you'll need to merge the Layer Effect onto the layer itself.

- Create a new layer (**Command-N**).
- Drag **Layer 1** below the layer containing the icons.
- Toggle the visibility for all other layers off by clicking the small "eye icons" to the left of each layer. You should now only see the icons and the checkerboard pattern of the transparent background.
- Choose **Merge Visible** from the **Layer** menu. This will merge the drop shadow effect with the icons into a single layer that Iconbuilder Pro can use. (fig. 18)



(fig. 19)

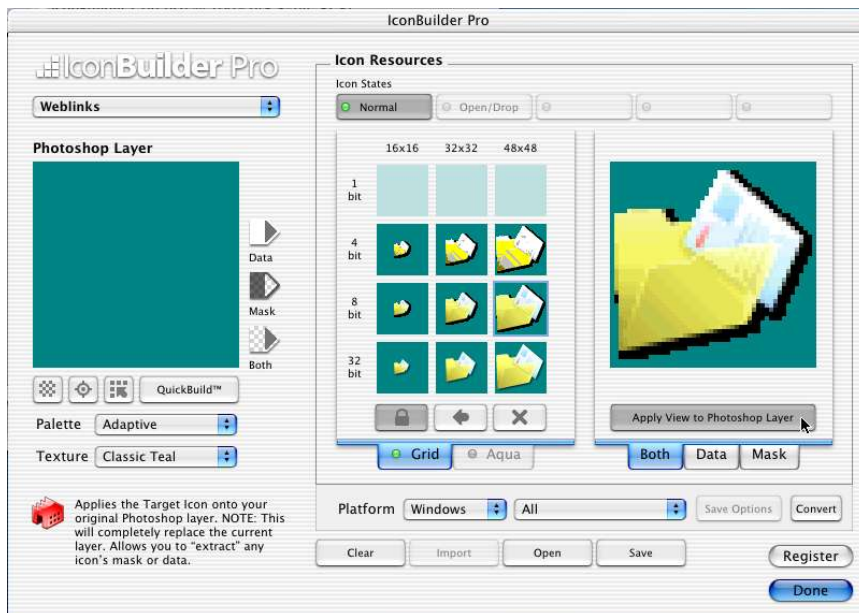
**7) Run IconBuilder Pro, Align, & QuickBuild™**

- Highlight the new, **merged layer** by selecting it.
- Run **IconBuilder 4.0** from the **Filter** menu.
- Click and select **Windows** from the **Platform** pull-down menu to build the icon for Windows instead of the Macintosh.
- Select the **48x48, 32-bit** grid cell by clicking on it.
- Center the icon to your satisfaction in the **Photoshop Layer window** (on the left).
- Hold down the **Option** key and click the **QuickBuild™** button. (fig. 19)

This will fill the grid in completely. Notice the heavy black shadows on all the 4-bit and 8-bit versions. This happens because of the lack of 256 levels of transparency in these resources. The gray, semi-transparent pixels of the drop shadow are converted to either on (black) or off (white).

In order for this icon to look as good as possible on earlier versions of Windows that do not support 32-bit icons, these layers must be cleaned up and added back into the icon.





(fig. 20)

## 8) Extract the 48x48 Resource to Photoshop for Editing

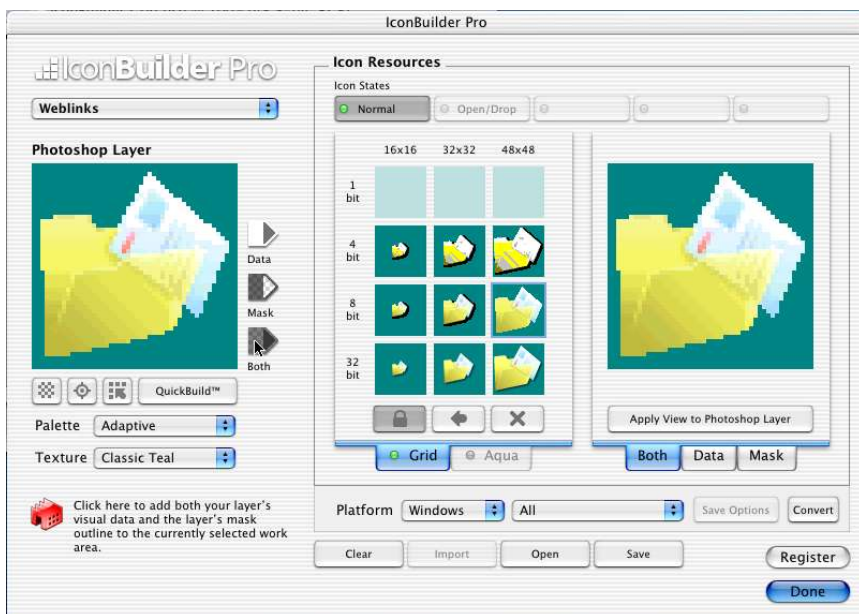
Before you can edit the 48x48 resource, you need to save the current version of the icon for later reference.

- Click [Save](#) and name your icon.

Before you can edit the 48x48/ 8-bit version, you need to create a new, blank layer so you do not erase the previous work you've already accomplished.

- Click [Done](#) and then [OK](#) when asked to discard the changes.
- Create a new layer and name it [48 8-bit](#).
- Make sure the layer is selected by clicking on it.
- Choose [IconBuilderPro 4.0](#) from the [Filter Menu](#).
- Highlight the [48x48 pixel/8-bit grid cell](#) and click [Apply to Photoshop Layer](#). (fig. 20)

The icon is copied to the new layer and can now be edited to remove the opaque shadow. If you had simply clicked the [Apply to Photoshop Layer](#) button without creating a new layer first, the icons on the current layer would have been erased and replaced with this version instead.



(fig. 21)

## 9) Replace the 48x48 8-Bit Resource

Now that the icon is copied to the new layer, you can use Photoshop's pencil and eraser tools to erase the heavy, dark pixels that were created by the drop shadow and clean up any dithering with which you are not satisfied.

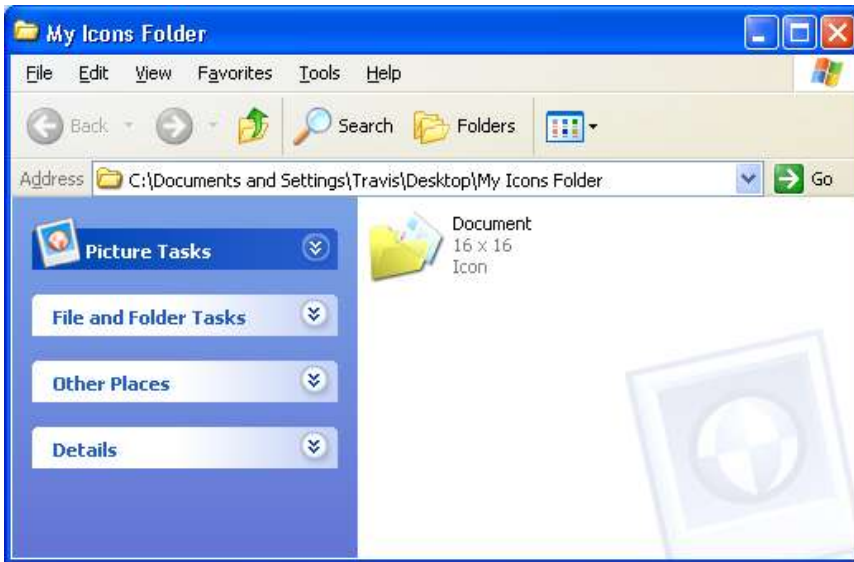
Cleaning up drop shadows or other edges on Mac icons is not recommended because it will leave a "halo" effect due to a shared mask problem.

After you have edited the icon to your liking, you'll need to add it back into the icon resource.

- Click the [48 8-bit](#) layer to make sure it is selected.
- Launch [IconBuilder Pro](#) from the [Filter Menu](#).
- After Iconbuilder launches, select the [48x48/8-bit grid cell](#).

You will see the old icon in the [Target Icon](#) window on the right side where you applied it to a Photoshop layer.

- Center the icon in the [Source Layer](#) (on the left side).
- Click [Both](#) to add only the single icon resource. If the icon shifts position too much, realign it in the [Source Layer](#) on the left and click [Both](#) again. (fig. 21)
- Once you are satisfied with the placement of the resource, click [Save](#) to save the icon. Leave the file name the same, and simply save over the previous version.



## 10) Replace Other Resources & Test

You can continue to clean up and replace the other resources within the icon by repeating Steps 8 and 9. Apply the resource to a Photoshop layer, clean it up, and then use the Add Both button to replace the existing version with the clean one. Save over the file each time. When you are done you will be left with a version of the icon that will look as good as possible across all versions of Windows.

Finally, it is important to bring your .ico file to a Windows PC and view it to make sure the icon is displaying correctly. An executable file named **ICONTEST.EXE** will help you test your icons in a Windows user interface. It is located in the **Goodies > Windows** folder of the IconBuilder Pro download.

There are other tips and tricks when dealing with Windows icons. Be sure to read the **IconBuilder Pro User's Guide** and check The Iconfactory website's FAQ pages for the latest IconBuilder Pro information.