



HCA Tech Note 133

Adding your own icons to HCA

Everyone wants more icons. It is the most common request sent to technical support. But adding them isn't something HCA Central does often, so this note describes how you can do it yourself, and offers some suggestions.

Icon Themes, Theme names, and Icon Names

HCA ships with several different icon themes. You can see all the themes in the HCA documents area "Icon Themes" sub-folder. Mostly the difference between one theme and another is the size of the icons. HCA ships with 3 different icon sizes: 36x36, 54x54, and 110x110. There is also another theme where the icons are the 110x110 sized, but the display spaces them differently.

If you investigate a theme folder you will see that all the icons are in PNG format. If an icon has only a single representation then it has an unqualified name, for example: "Appliance". If the icon has multiple representations – a different image for when the device is on or off – then the name of the icon is suffixed with `_On` or `_Off`. For example: "Audio_Off" and "Audio_On".

In addition to the differently sized themes there is also a theme name suffixed with "`_G`". In the "`_G`" themes, each icon has two representations in all cases, unlike the non "`_G`" themes where only some icons have two representations. In the "`_G`" themes, the off representation is always greyscale, and the on representation is in color.

The icon name you see in HCA is the same as the filename. If there are multiple representations, the icon name is the filename without the on/off suffix. If you change a filename then any device that uses that icon will lose connection to it, and then HCA shows a replacement icon - probably not what you want. The names of the theme folders are the names that you see in HCA when you select a theme for a display. Again, if you change the theme folder name, then HCA will not be able to locate the theme.

When HCA ships it has the same icons in all themes. For example, there is a "bookshelf lights" icon in all themes – sized appropriately for each theme. That makes it easy to switch from theme to theme and see the same icon images, just in different scale. If you add your own icons to a theme you don't have to add them to all themes. If you exclusively use the 110x110 theme, just put any new icons you want in there.

TechSup@HCATech.com

www.homecontrolassistant.com



HCA Tech Note 133

The word “Icon”

We use the word “icon” to represent the image that we see on the display for a device, program, group, display, etc. Don’t get confused with the .ico file type in Windows. That is also a kind of image file, but not in the format needed. You want PNG files not ICO files.

Your own icons

When you create your own icons, you must ensure that they are the correct size before adding them to a theme. Wherever you get them, or if you draw your own, just make sure that you have them correctly sized for the theme you are adding to.

Where to get icons

Search the web! A very good place to go is <https://www.iconfinder.com/>

This site has both free icons and icons that are very inexpensive. Just find what you want and download in PNG format. This way the background blends around the icon. Also, always download a larger size if available than you need if you don’t find exactly the size needed – download a 256x256 if available – and resize as needed.

Correctly sizing icons

There are many image editors available. We here at HCA Central use Axialis IconWorkshop.
<https://www.axialis.com/iconworkshop/>

It is reasonably priced, has a 30-day trial, is easy to use, and does a very good job resizing images without losing much detail when resizing to a smaller size.

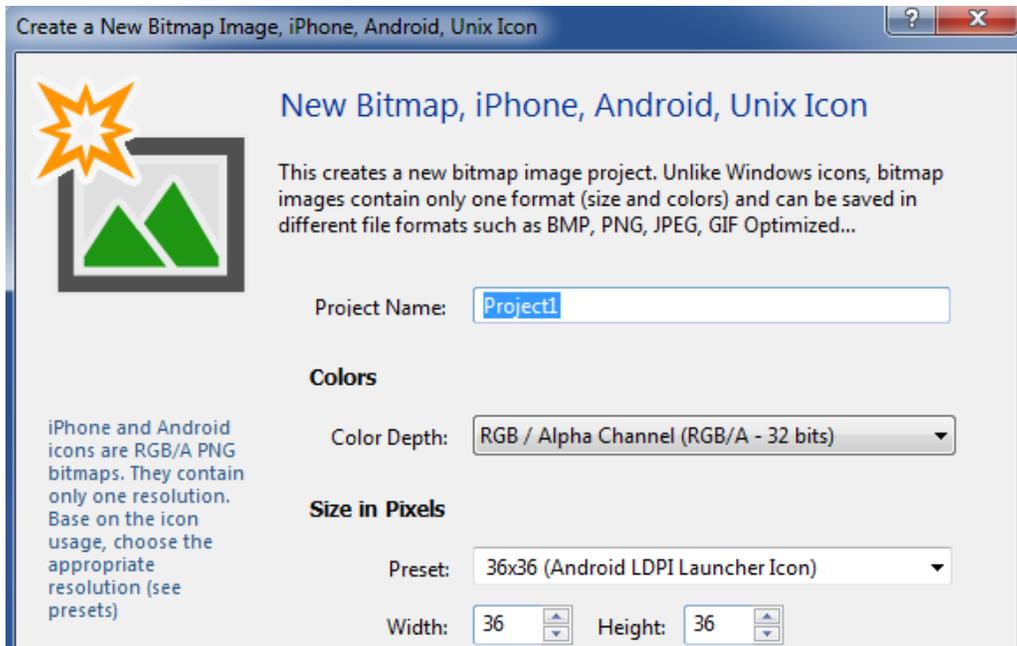
Here are some instructions if you are using Icon Workshop: After starting the application, load the PNG file downloaded from your source, for example from icon finder. Then select the entire image and copy to the clipboard. Next, create a new image using File – New and in the popup select “New Bitmap Project”. Then use the controls to set the size you want. For example: width=110 and height=110. Also set the color depth to “RGB / Alpha Channel”.

TechSup@HCATech.com

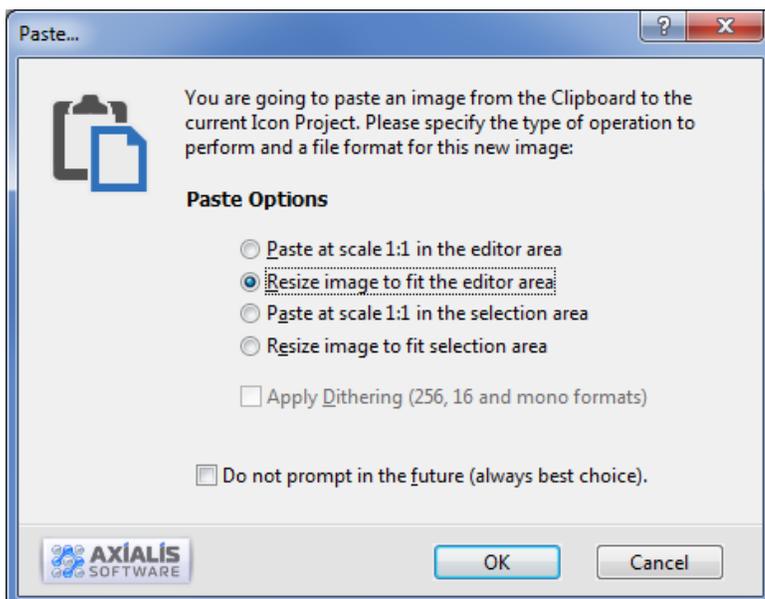
www.homecontrolassistant.com



HCA Tech Note 133



The project name is unimportant. When the canvas appears, paste the image. A popup asks about image pasting. Choose to resize.



TechSup@HCATech.com

www.homecontrolassistant.com



HCA Tech Note 133

Chose the resize option. At that point you can save the image to the theme you want. If it is an ON representation, save with the filename you want - remember it becomes the icon name in HCA - and end with “_On”.

File name: Kim Bookshelf Lights_On
Save as type: Portable Network Graphic (*.PNG)

Also make sure that the type is “PNG” as shown above.

If you then want to make a greyscale OFF image, Icon Workshop can do that for you with this menu selection.

Image – Adjustments/Effects - Grayscale

Now File-SaveAs and change the “_On” suffix to “_Off”.

Creating a whole theme

If you want, you could create a whole new theme. What you would do is create a new theme folder and put all your image files in it. Next, you must create the theme information file called theme.txt and place it in that theme folder. A suggestion is to copy it from one of the other theme folders and then edit it. It has a “Metrics” section that defines the size of the images and also the “cell size” – basically how the icons are spaced apart in the display. It should be obvious what values to use.

Getting HCA to work with the new icons

After you create and add icons to a theme, either restart HCA or open HCA Options, and on the “Color and Theme” tab press the “Reload all themes” button.

Final Thoughts

If you run HCA on multiple computers – server on one, clients on others - you must copy those new icons to each of the machines. For the iOS mobile application there is a method to get new icons on to it. Open the menu and select “settings – Icons”. This shows what icons are on the mobile device and which ones are on the server, and lets you copy the new ones in. It only copies icons from the 110x110G theme. This is not supported on the Android application at this time.

##end##

TechSup@HCATech.com

www.homecontrolassistant.com