Chapter 22
Icon Themes

As you create devices, programs, and groups, you place icons for them on the displays shown in the display pane. HCA includes a varied selection of icons for the devices you may have in your home. However, HCA may not have anticipated all your icon needs. With Icon Themes, you can add additional icons that you have created.

You can draw icons using many popular graphics programs, including the good old Paint program that is part of your Windows installation. HCA can load icons from Windows bitmap files, those that end with a .BMP file extension, JPEGs, or PNG files that contain a transparency layers.

This chapter discusses the icon gallery and how to use it. Topics covered include:

- What are Icon themes
- Choosing a theme for a display and a default them for your design
- Adding icons to an existing theme
- Modifying theme icons
- Creating a new theme
- Important facts about icons

What are icon themes

An icon theme is a set of icons that HCA gives a name to. When stored on the disk, a theme is a folder and the members of that theme are the bitmap files contained in that folder.

When HCA installs, in your documents area a folder called "Icon themes" is created as a sub-folder of "HCA". In that folder are all the themes.

Each theme contains a number of icons. If you examine these folders you can see that they contain a number of image files and a file called Theme.txt. Here is theme.txt from the one theme:

```
[Metrics]
cxStandard=54
cyStandard=54
cxCell=108
cyCell=108
```

The cxStandard and cyStandard supplies the size, in pixels, of the width and height of each icon in this theme. The xcCell and cyCell supplies the spacing of icons on a HCA display showing icons that has the auto arrange option enabled.
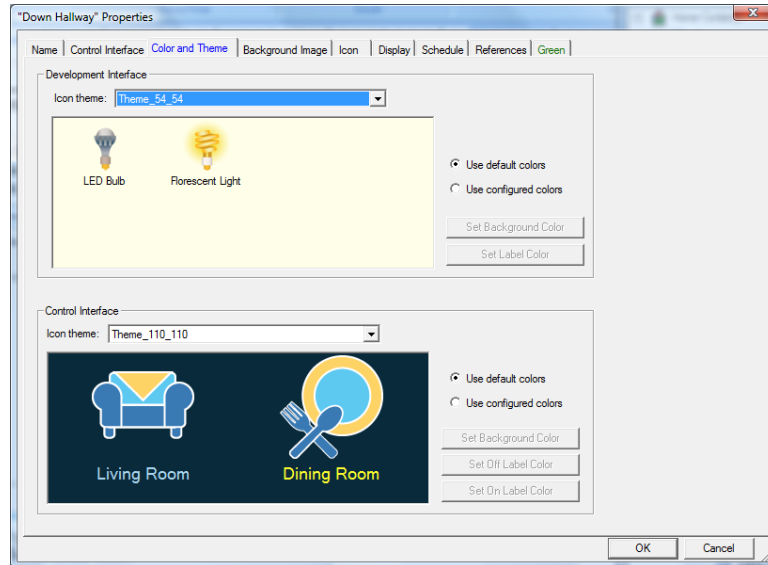
Each icon theme has a different theme.txt file and as such can be a set of icons of whatever size you need. The only requirement is that all icons in a theme are the same size.

Within the theme folder the filenames of the bitmap files are the names that you work with in HCA. For example, if there is an image file called "Table Lamp.png", then in HCA where you select an icon for a device, program, or group, you will see the name "Table Lamp".

If an icon has different representations based upon state – on, off, or dim – the image file is suffixed with "_on", "_off", or "_dim
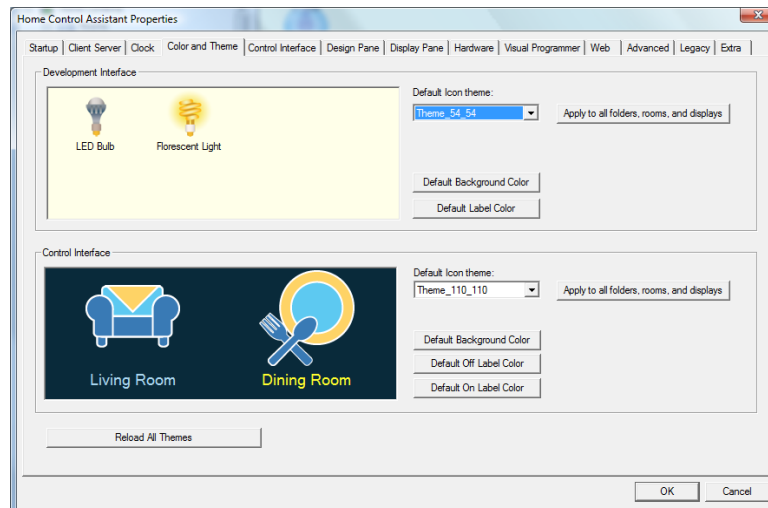
Choosing a theme for a display and a default theme for your design

Each folder in HCA shows icons from a selected theme. To select the theme for a display, open the properties for the display and choose the Color and Theme tab.

All you need do to change the theme for this display is to select a different theme name.

To change the default theme used by HCA for all new displays created, select from *HCA Options* the Color and Theme tab:

In addition to selecting the theme for all new displays, you can apply the theme to all existing displays using the *Apply to all folder, rooms, and displays* button.

Adding icons to an existing theme

To add a new icon to a theme is very easy. Create the image files with appropriate names and then put them into the theme folder.

To have HCA detect the new icons, either restart HCA or press the "Reload All Themes" button on the HCA Options tab shown above.

Modifying theme icons

To change icons in a theme just edit the image files with your changes.

To have HCA detect the changes, either restart HCA or press the "Reload All Themes" button on the HCA – Properties Display Pane tab.

Creating a new theme

To add a new theme is also very easy. Follow these steps.

- Create the image files for your theme with the names you want.
- Create a new sub-folder in the Icon Themes folder with the name of the theme you want and place all your bitmap files in that folder.
- Create a Theme.txt file as described above.

To have HCA detect the changes, either restart HCA or press the "Reload All Themes" button on the HCA – Properties Display Pane tab.

Important facts about creating icons

When you create your own icons for HCA, there are a few things you will want to remember, both about creating the icons for use in your HCA design.

- All icons in a theme must be the same size and that size must match what is specified in theme.txt. If an image file is read that has a smaller or larger size it is forced to that size – either cropping the bitmap or expanding it.
- If your display contains a DXF floor plan, as the HCA window is resized, the floor plan and any icons on that floor plan are also scaled. Because of this scaling, you should not draw icons containing very fine detail or text—these features don't scale well, and the icons may not look the way you want them to in some sizes.
- When you select an icon during creation of a device, program, or group, HCA uses the default theme for the design to show the icon choices.
- Not all themes need contain the same set of icons. Because each display may have a different theme there may be times where an icon is looked for in a theme and not found. When this happens a substitute icon is used. The design inspector looks for this sort of them and makes notes on that.