

# Chapter 10

## Groups

Now that you've created devices you may be interested in setting up groups for the control of the devices. Groups are a convenient way of having several devices act together in response to the same command, and still maintain individual control over each device. For example, if you have set up groups in HCA, you could turn on five living room lights (as a group), and turn off one of them independently. Rather like having your cake, and eating it, too!

This chapter discusses groups, provides an example, and walks you through creating a group. Sections in this chapter include:

- About groups
  - An example
- Planning your groups
- Creating a group
- Modifying an existing group
  - Deleting a group
- Groups and Switch Stored Scenes

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### About Groups

Groups are very useful concepts in some circumstances. The best way to describe what a group is, and why you would want one, is by an example, which follows. However, it might help to have some of the facts about groups up front.

- You can control a group, and also control separately the devices in a group.
- The devices collected in a group are called the members of that group.
- The members of a group can be devices or programs, but not another group. Groups can contain device of different protocols.
- Groups can have icons that appear on displays like devices and programs.
- You can create schedule entries that control the group (and each of its members) like you do for devices.
- Not all devices types can be added to a group. For example, IR and thermostat devices can't be added to a group.

As with devices, groups can have icons (that are placed on displays), restart options, and so on. You can inspect or change the properties for a group using the same methods as for devices.

There are two reasons to use groups. The first is just to control a set of devices more conveniently than just device by device. You can schedule the group or use Visual Programmer elements rather than work with each device independently.

The other reason is more complex and has to do with providing a trigger for the group that sends commands out to each group member when the trigger is received. This is best shown by an example.

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## A Group example

Much of what Groups do can be done by Insteon scenes or UPB links. But for older style devices, groups can be useful. Here is an example from older style X10 devices.

Suppose that in your home you have a number of outside lights. One light is in the front, one by the driveway, and another by the back door. There is a separate wall switch for each one, and you are going to replace the manual switches for each of these with controllable wall switches.

After you install the wall switches, you need to know what settings to use for them. You might want to turn them all on, off, or dim at the same time. So, you could set them all to the same house code and unit code. For this example, assume that setting is B-4. Using a control panel, if you press B-4 ON, all three lights come on. If you press B-4 OFF, then all go off.

Now, while this is very convenient, there are still some times when you want to control each light independently. So you set them all differently. For this example, assume the front light is set to B-4, the driveway to B-5, and the back light to B-6. Now you can control each light from a control panel independently, but you can no longer turn them all on or off with one button.

An HCA group is designed to solve this, allowing you to control each device independently, or all three as a group, with one control.

- First, you set each light to have a separate address (B-4, B-5, and B-6).
- Then, you create a group that has these three devices as members.
- Next, you assign a house code and unit code to the group, so that you can control it (C-1).

When HCA receives a command with the trigger for the group, that command is routed to each member. In the example, we have created a group called “outside lights” and assigned it to C-1. When you send an ON command from a control panel to C-1, then HCA receives it and sends an ON command to each group member, and the three outside lights go on. If you send a C-1 OFF command, all the lights go off. Since each light that is a member of the group also has a different house code and unit code, you can also control each one independently. The best of all worlds!

Don't forget that groups can contain devices using different technologies – X10, Insteon and UPB. HCA does the best it can in translating what you are doing with the group into the appropriate commands for each technology.

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## Planning your groups

Before you start creating groups in HCA, there are several decisions you need to make, aside from the name of the group and where to place it. You should decide why you want a group and what you want the group to do. This may include deciding:

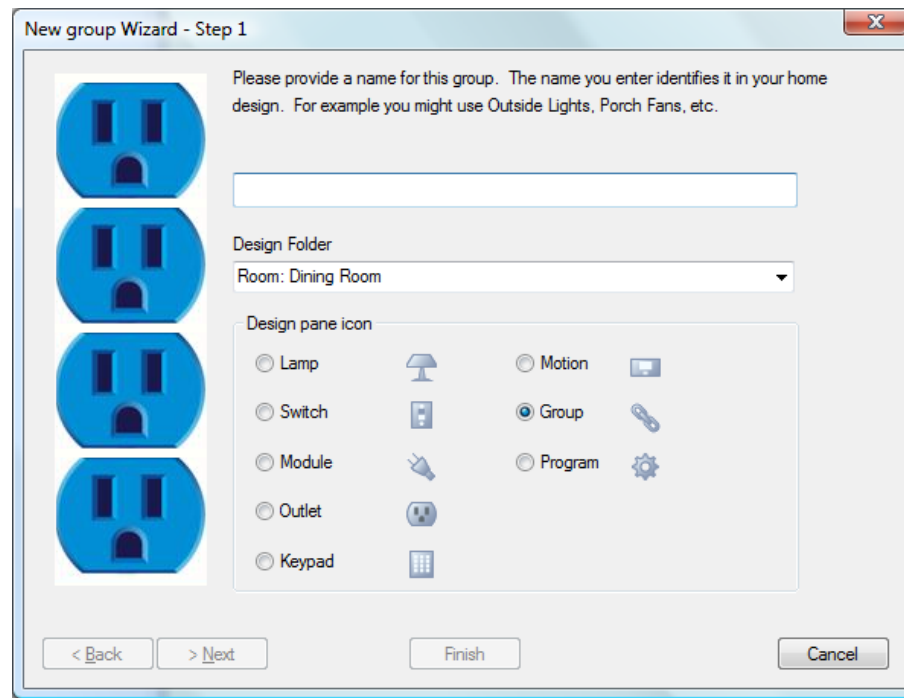
- What is the purpose of the group?
- When will you use the group control?
- Will you typically control the group, the individual members, or both?
- Do you want programs included in the group?
- Will you control the group from a control panel, or only through an HCA schedule?

Using devices, schedules, groups, and programs together may get complicated. Some of these choices involve careful planning.

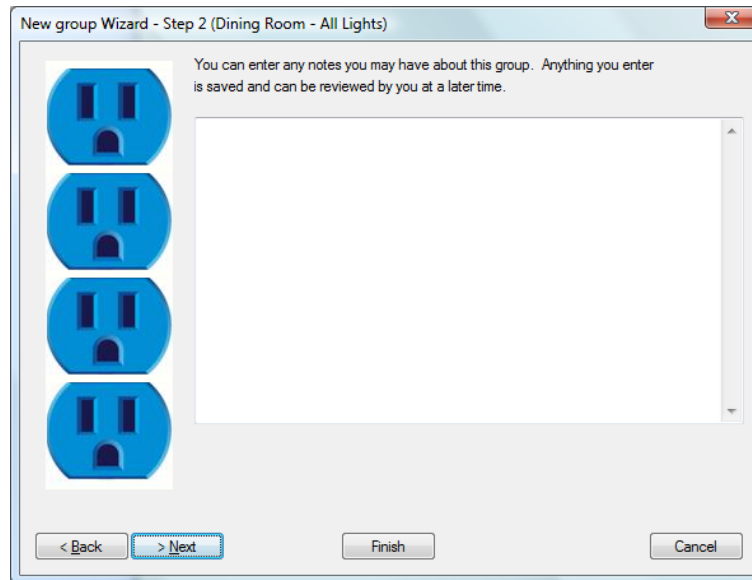
## Creating a group

You create a group using the New Group Wizard. Most of the steps are exactly the same as when you create a device. However, there is one additional step specific to the New Group Wizard—specifying which devices and programs are members of this group.

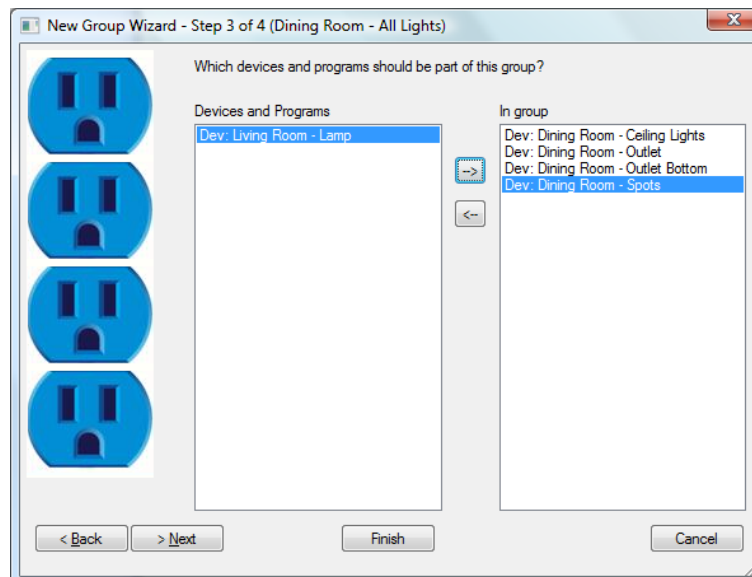
1. On the Home Control Assistant menu bar, click New, and then choose Group. This opens the New Group Wizard.
2. Type in a name for the group and type in or choose an existing folder to store the group. The name you choose must be unique within the folder. If you don't have two-part names enabled, then the group name must be unique within your design. To help you later, you can name groups with descriptions, or function identifiers. For instance, you could name a group: Entry lights, My Room, or Welcome Home.



3. Click Next and add any notes you might want to remember about this group. The notes can tell you what the group controls or why you created it. You can review and revise or delete these notes later at any time. These notes also popup in a window when you move the mouse over a group icon on a display.



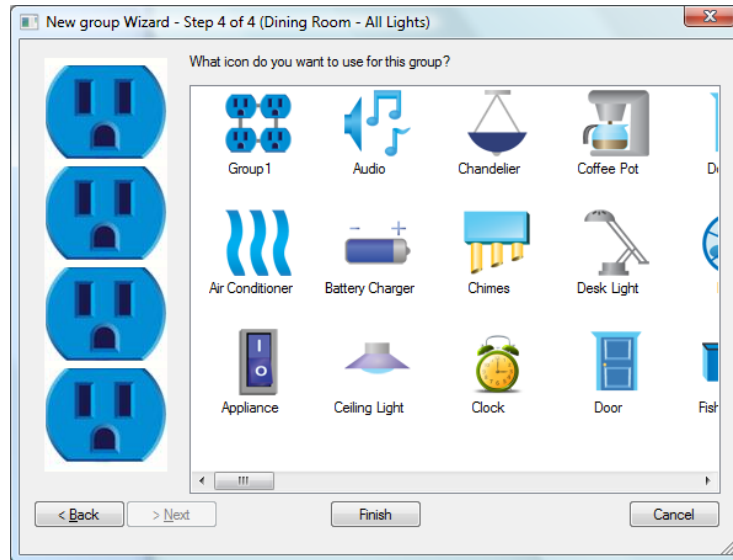
4. This is the step where you specify which devices and or programs are part of the group. There are two lists—*Not in group*, and *In group*. You can move device and program names between lists (that is, in or out of the group) by selecting the device or program name and clicking the appropriate arrow.



Group members can be devices or programs, but not other groups; so there are no groups listed in the left column for you to choose.

When you have the correct devices or programs included in your group, click Next.

5. Now you choose an icon to represent this group.



This screen lists all the icons that can be used for a group. Click the icon that you want to use, and then click Finish.

A last note on groups is that for a group you can create schedule entries that control the group (and each of its members). Refer to the Schedule and Schedule Entries Chapter for specific details.

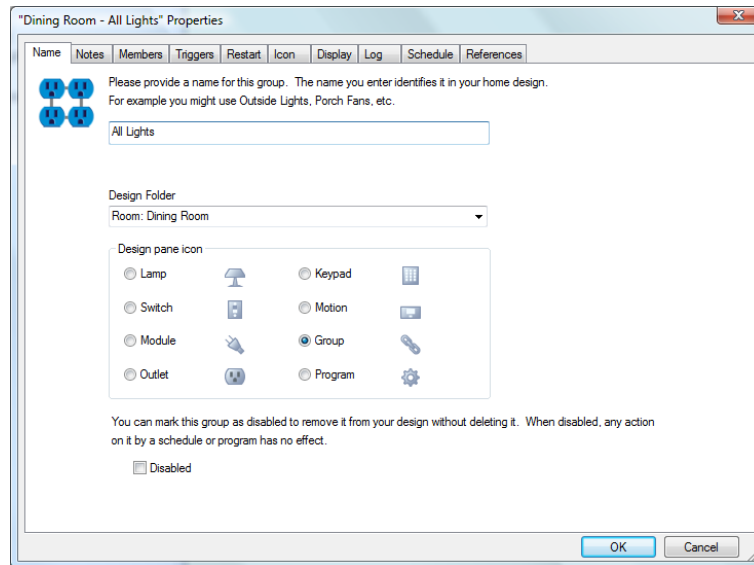
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## Modifying an existing group

As with devices, you can inspect and change the properties for a group using the same methods as for devices. You do this in the Properties dialog for the particular group. There are two ways that you can get to the group properties:

1. Select either
  - the group icon on the display
  - the group name in the design pane
2. Click the right mouse button.
3. From the popup menu, select Properties.

The Properties dialog box title reflects the name of the group you selected. Each tab is like one step in the New Group Wizard.



4. Click the tab you want to change properties on, or click each to review the settings for this group. You can change whatever you like, and click OK to save your changes.

There are additional things you can do with a group using its property dialog that you can't do in the wizard. These are to establish triggers, select restart parameters, add a group icon to one or more displays, set log properties, show and modify schedule entries, and see where the group is referenced in your design. These properties are the same as for devices so refer to that chapter for information.

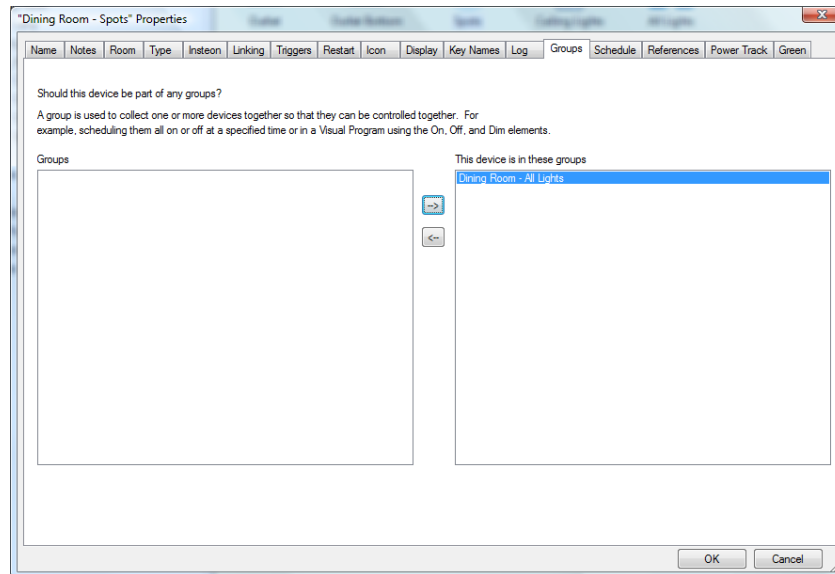
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## “Group” tab in device properties

You can always open a group’s properties and change the group members but there is another way to modify a group.

The “members” tab of a group’s property dialog provides you an answer to the question: *What are the members of this group?*

When you open the properties of a device there is a “Group” tab that answers the question: *What groups is this device a member of?*



You can remove the device from a group or add it to a group using this tab.

**Hint:** Which way should you modify a group? By using the group properties “members” tab or the “Group” tab on devices? Either method accomplishes the same task – adding or removing members. Sometimes you want to focus on the device and sometimes on the group. It’s up to you.

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## Adding to a group using drag and drop

You can always open a group’s property dialog and change the group members but there is another way to modify a group.

You can also add a device to a group by dragging the device name or icon and dropping it on a group name or icon. Using this method you can only add and not remove from the group.

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## Deleting a group

If you find that you have created a group that doesn’t work the way you want it to, you have two options.

- You can modify the properties for the group. For instance, you can change the devices that it controls.
- You can delete the entire group.

**To delete a group:**

1. Use the right mouse button to click the group name in the design pane of HCA.
2. Click Delete.

HCA removes the group name from the design pane, and removes the group icon from the display.

**Warning:** Be sure to check all aspects of a group before you delete it. If you delete a group, it is gone, and schedule entries you created for it are destroyed, and any programs that control it are put into a state where they will not start.

**Hint:** You can use the Undo button on the Quick Access toolbar or on the Design ribbon category to restore the deleted group. It will undo just the last change you have made—so if you delete two groups in succession, you can undo the deletion of only the second one.

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## Groups and Local Stored Scenes

If any devices in the group are capable of storing scenes then the group can be thought of as containing those scenes as well.

For example, suppose that your group contains three devices: Lights1, Light2, and Light3. Further, suppose that the three lights have these scenes defined:

Light1: Late Night, TV, Dinner

Light2: Late Night, Welcome Home, Dinner

Light3: Late Night, TV, Welcome Home

When you right click on the group, in addition to the ON, OFF, and Dim menu selections in the popup menu it also contains, Late Night, TV, Dinner, and Welcome Home.

If you select any of those scene names then the commands to activate that scene is sent to any of the group members that have that scene defined for it.

In the same way if you schedule the group and select a scene name, or create a program with a *Scene* element using the group and a scene, then HCA sends the scene activation command to those members with the scene. If you select a scene that is not defined in each group member, the inspector makes a note about the schedule or program because you may want to know that you are controlling the group with a scene that is not defined in each member.



