

## Chapter 22

### Calendar

The Calendar is a feature in HCA that lets you associate actions with different days of the year. This is done by assigning each day to one of eight different categories. For example, you may want all weekdays to be in one category, Saturday and Sunday to be in a different category, and all the days in August to be in a third category.

Each midnight HCA looks at how you have configured the calendar and if the category for the day just past is different than the category for the day just beginning then:

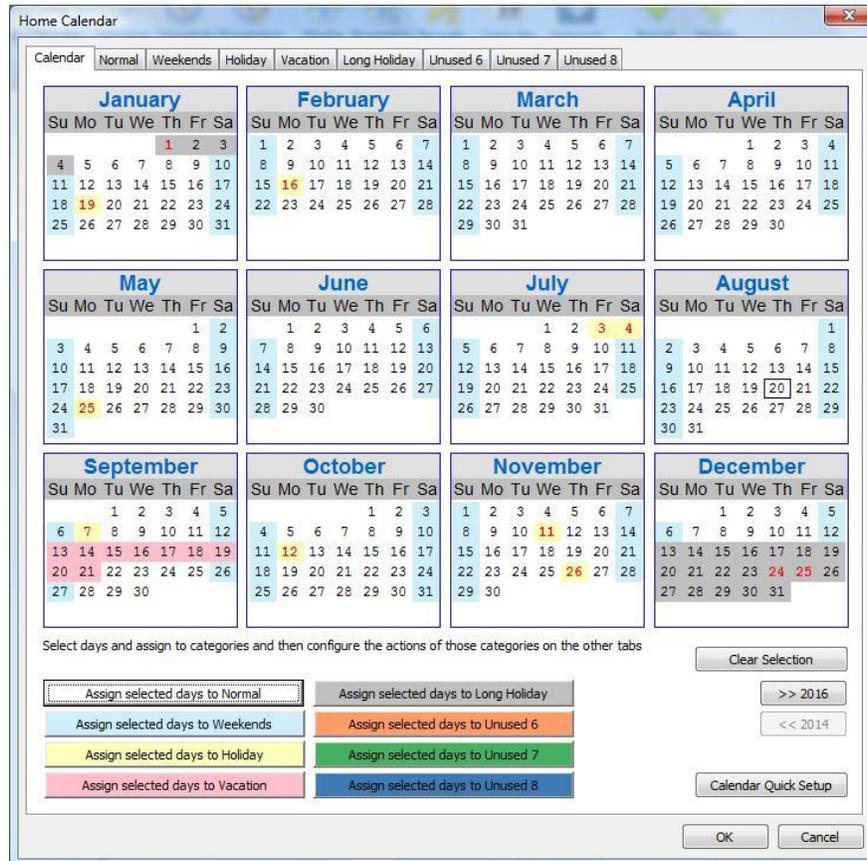
- A specified schedule can be made the current schedule
- A program can be executed when a category, based upon the calendar day, becomes the active category. That is, run the program upon entering the category
- A program can be executed when a category, based upon the calendar day, is about to no longer be the active category. That is, run a program just before leaving the category

*Why would you use the calendar?*

The calendar makes it simpler to do different things on select days of the year. Without the calendar you have to create programs that run everyday and then in the program test the day and see if that day is the day you cared about. This also makes it much simpler to switch from schedule to schedule based upon blocks of days like weekends, vacations, or holidays.

## Calendar display

To open the calendar, select the *Calendar* button in the *Design* ribbon category. The calendar opens:



The calendar covers 5 years and you can move from year to year by using the year buttons at the lower right of the dialog.

The calendar days are colored based upon the category that day belongs to. As an example, in the above calendar September is configured like this:

- Days 1-4 are in the Normal category
- Days 5-6 are in the Weekends category
- Day 7 is in the Holiday category
- Day 8-11 are in the Normal category
- Day 12 is in the Weekend category
- Days 13-21 are in the Vacation category
- Days 22-25 are in the Normal category
- Days 26-27 are in the Weekend category
- Days 28-30 are in the Normal category

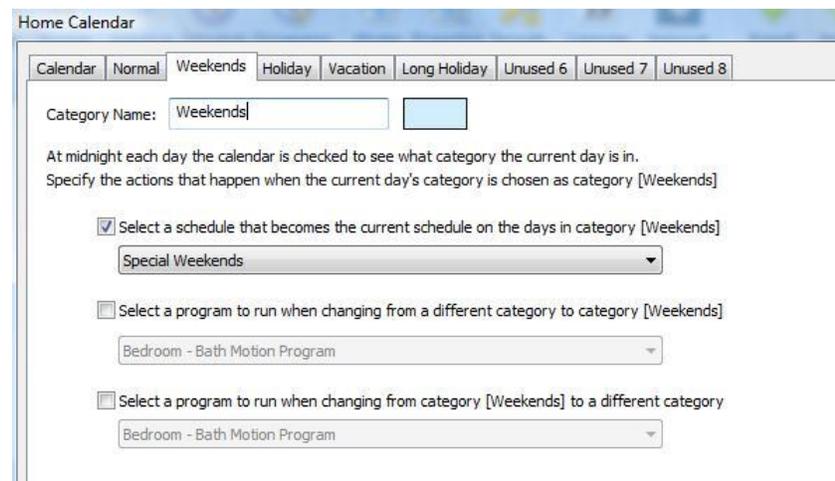
Where do the names of the categories come from? Initially HCA assigns then simple names "Category 1", "Category 2", etc. When you configure the category then you can change its name to something that is useful in your design.

When you open the calendar most day numbers show in black text and some display in red text. The days in red are holidays as defined by the holiday file.

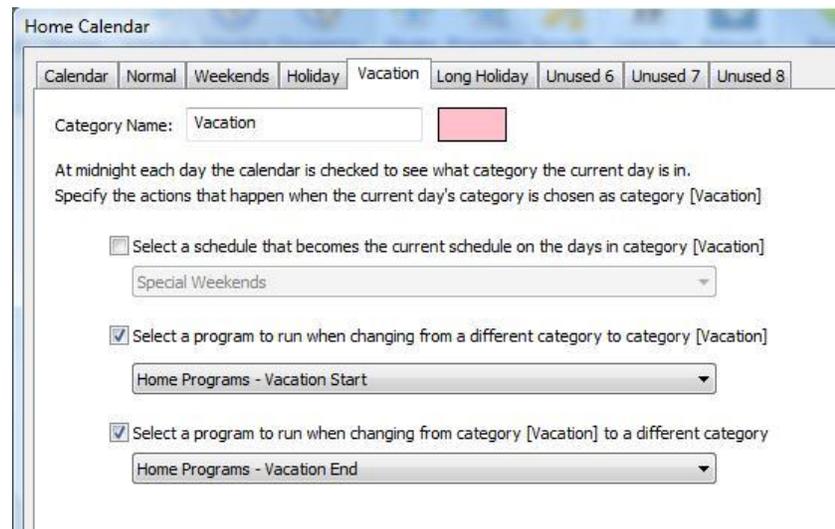
**Tip:** HCA ships with a holiday definition file that contains the observed dates for the US Federal holidays for the next 5 years. This file, called holidays.csv is in the HCA installation in the "Program" sub-folder. Its format is simple and can be edited if you want to add or change the shown holidays.

## Category Setup

To configure a category, click on the category tab in the top of the dialog. In the tab you can change the name of the category and determine the actions. In the example below, the "Special Weekends" schedule is made the current schedule on any days that are assigned to the "Weekends" category.



In this next example, the program "Vacation Start" is run when the "Vacations" category becomes the active category. The program "Vacation End" is runs just before the active category is changed to a different category – not "Vacation".



## Pairing one or more days with a category

To assign one or more days to a category, click on the days in the calendar and those days are marked temporarily with a red background. In this example the last two weeks of July are selected.

May							June							July							August						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
					1	2	1	2	3	4	5	6	1	2	3	4						1					
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30	26	27	28	29	30	31	23	24	25	26	27	28	29					
31																				30	31						

Then press one of the “Assign” buttons below the calendar display and the selected days are assigned to that category. You can see that has happened as the selected days are then displayed with the selected category background color.

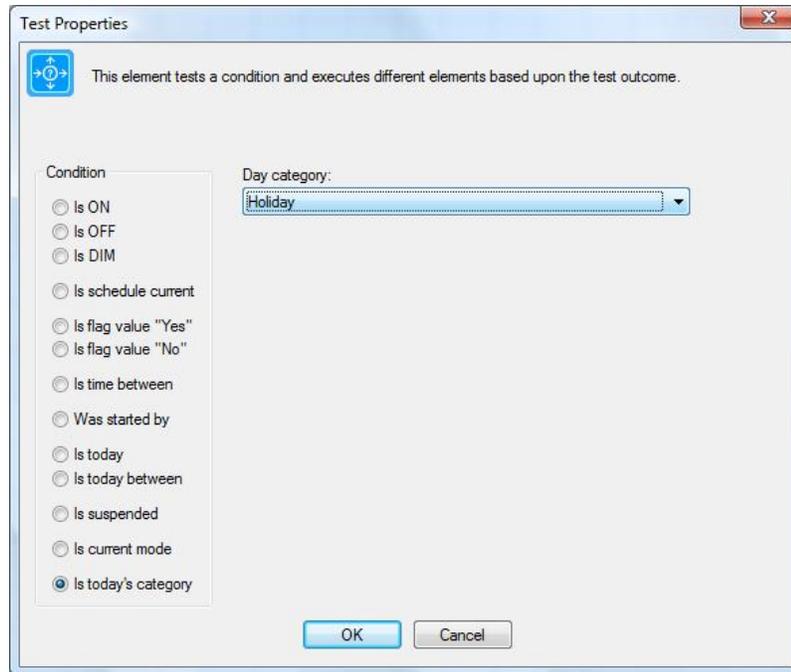
In this example, those two weeks that were selected in the image above were assigned to the “Vacation” schedule. As you can see in the next picture they now show in the “Vacation” schedule color – which in this example is gray.

May							June							July							August						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
					1	2	1	2	3	4	5	6	1	2	3	4						1					
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30	26	27	28	29	30	31	23	24	25	26	27	28	29					
31																				30	31						

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## Programs and the Calendar

If in a program you want to test to see if the current day is or isn't a selected category you can do this with the Test element.



When the program executes that contains this element, if the current day category is "Holiday" then the next element follows the "Yes" path, otherwise if the current day is a different category it follows the "No" path.