

## Appendix 14

### Cameras

This appendix describes support for Phillips Hue devices. Included are these sections:

- What cameras are supported?
- Camera definition files
- Adding a camera to your design
- Camera Visual Programmer element
- Snapshots in a tile on a display

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#### What Cameras are supported and in what manner?

IP cameras that use the Foscam command set for control are supported. Once added to your design you can control the operation of the camera and direct it to capture an image that can be saved in a file.

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#### Camera Operation definition file

All the actions you can take with a camera is defined in a file external to HCA so it can be modified. The camera definition file is stored in the HCA installation in the file called Camera\_Foscam.txt. This file is stored in a tab-delimited format and contains these columns:

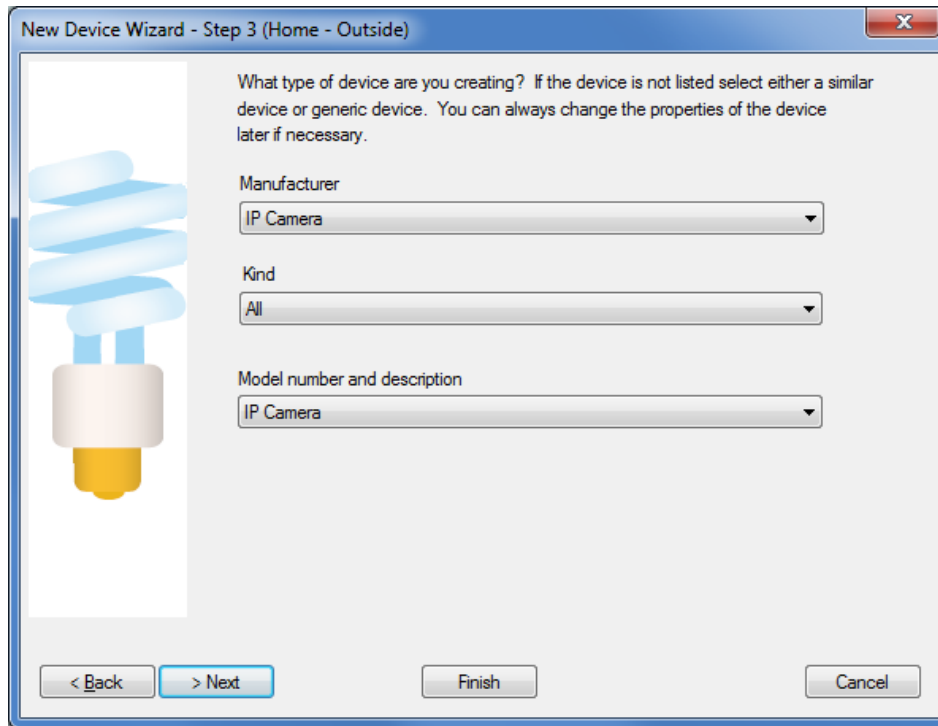
- Code
- Command name
- Command action – the HTTP template for this command

Within the command action are replacement sections. For example, %pwd% and %user% for the username and password needed to access the camera. There are other placeholders used by some of the commands. The text that replaces these placeholders is specified in the Camera Visual Programmer element when you add that element to your program and choose a command that contains placeholders in its command.

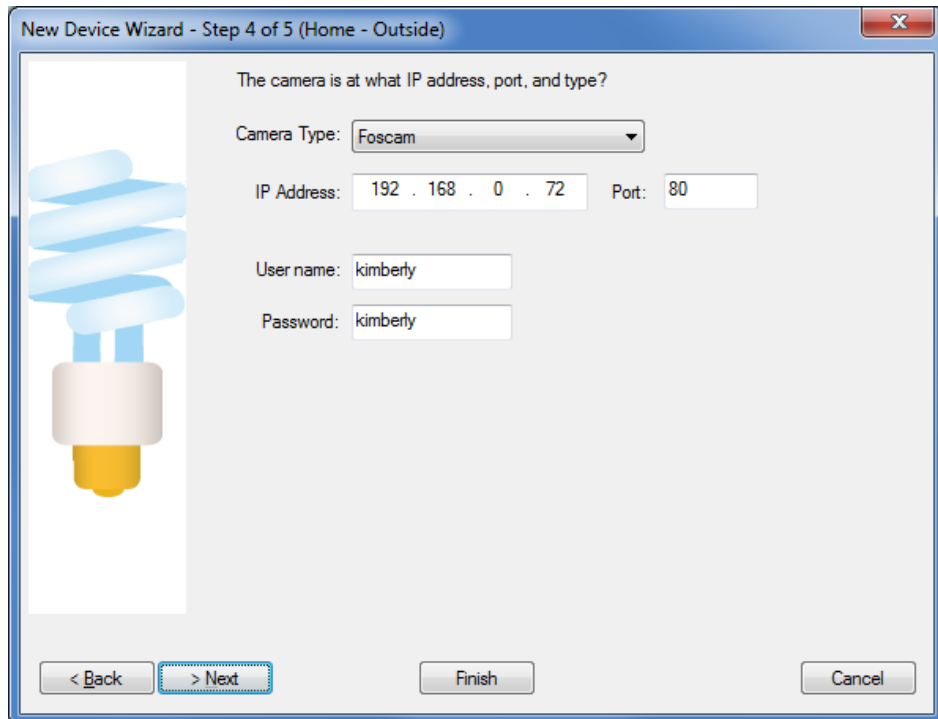
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#### Adding a Camera to your HCA Design

Cameras are added to your design using the same New Device Wizard as usual.



In the next step, the specific camera type and parameters are entered.

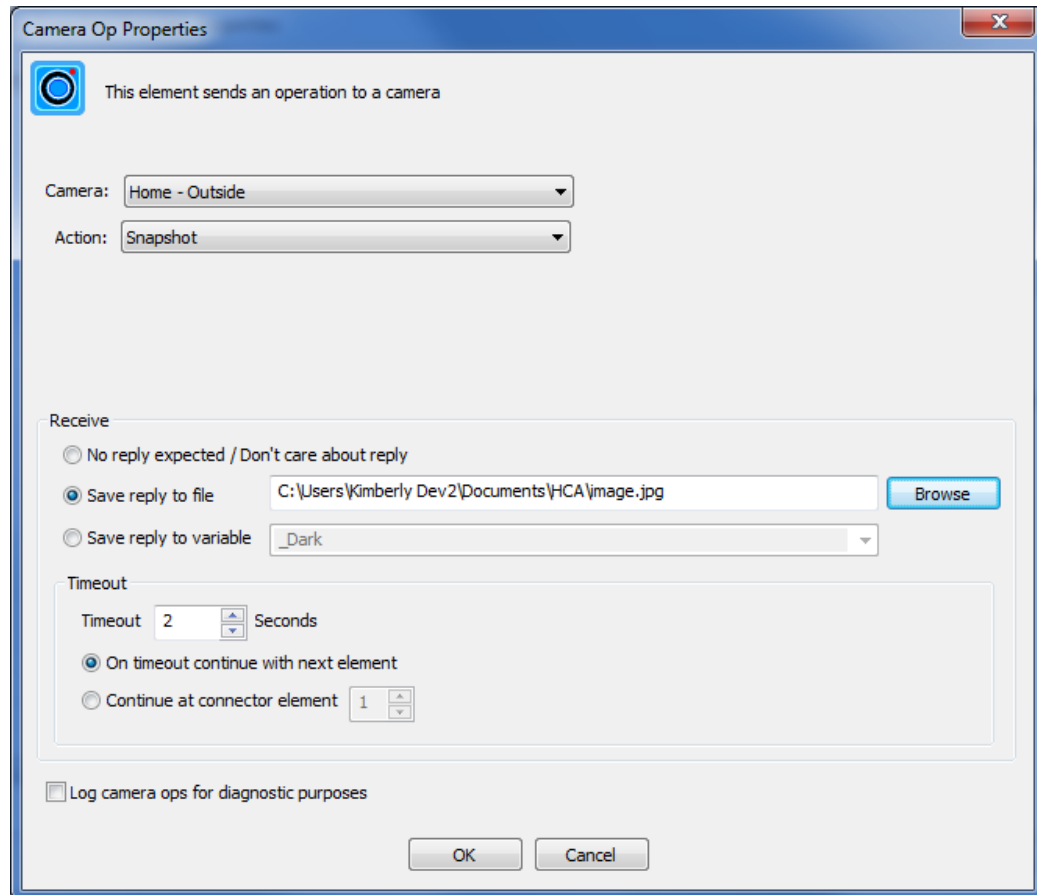


The camera type specifies what command set the camera uses. At this time the only selection is "Foscam".

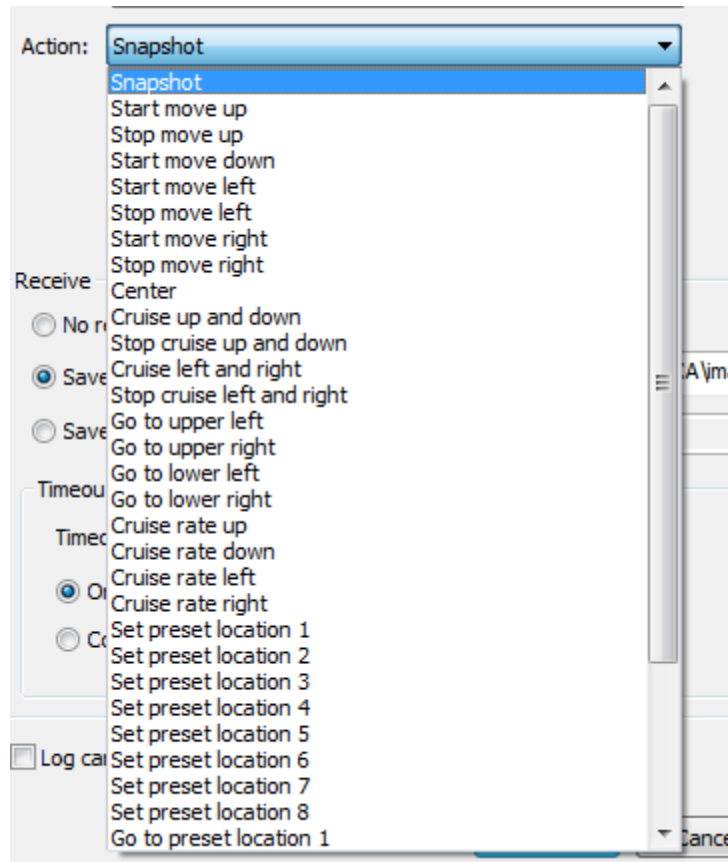
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## Camera Visual Programmer Element

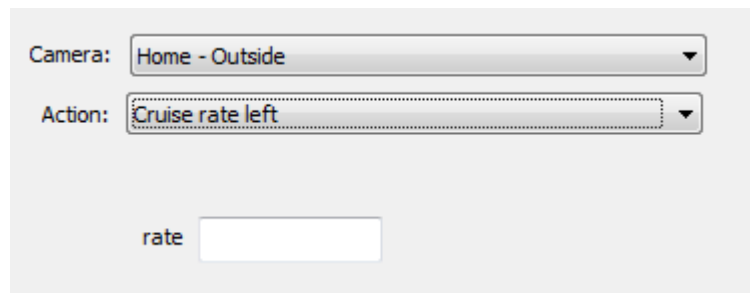
Actions with the camera are done using the Camera Visual Programmer element. The camera and action are specified as well as where the result goes. If you are performing an operation like moving the camera you probably don't care about the result. If you are capturing an image then the result can be directed to a file.



There is a long list of operations that can be done with the camera:



If an operation requires parameters, those can then be selected.



## Snapshots, Tiles, and Displays

One nice way to use the camera is to capture a snapshot to a file. You can then use the messaging element to send you the file or you could have a display that has a tile for each camera.

One type of tile is an image tile that displays an image file. If you also associate the snapshot program with a tap on the tile you can have a nice UI that updates with a tap.

Image Tile Properties

Name:  Label:

X:  Y:  Width:  Height:  Stretch:

Enable Auto Refresh  Minutes

Set specific tile colors

Short Tap Action:

Long Tap Action:

Path:

Scale image to fit tile