Camera Configuration Tool v2.0.6

User Guide

Table of Contents

1 Introduction 3
2 Discovering and Viewing Cameras on the Network 4
3 Configuring Cameras 6
3.1 Basic Configuration 6
3.2 Reboot 6
3.3 Retrieve Debug Logs 6
3.4 Network Configuration 6
3.5 Advanced Configuration 7
4 Upgrading Cameras 8
4.1 Halocam IP Camera 8
4.1.1 Software Upgrade (.hlfp file) 8
4.1.2 Restore Configuration Files 8
4.2 Evolution Camera 9
4.2.1 Software Upgrade (.elfi file) 9
4.2.2 Restore Camera Configuration 9

1 Introduction

This document describes how to use the Oncam Grandeye Camera Configuration Tool to find, configure and upgrade your cameras. The application makes things easier to list all Oncam Grandeye Halocam IP and Evolution cameras. Also, it provides information about device network settings and camera runtime status.

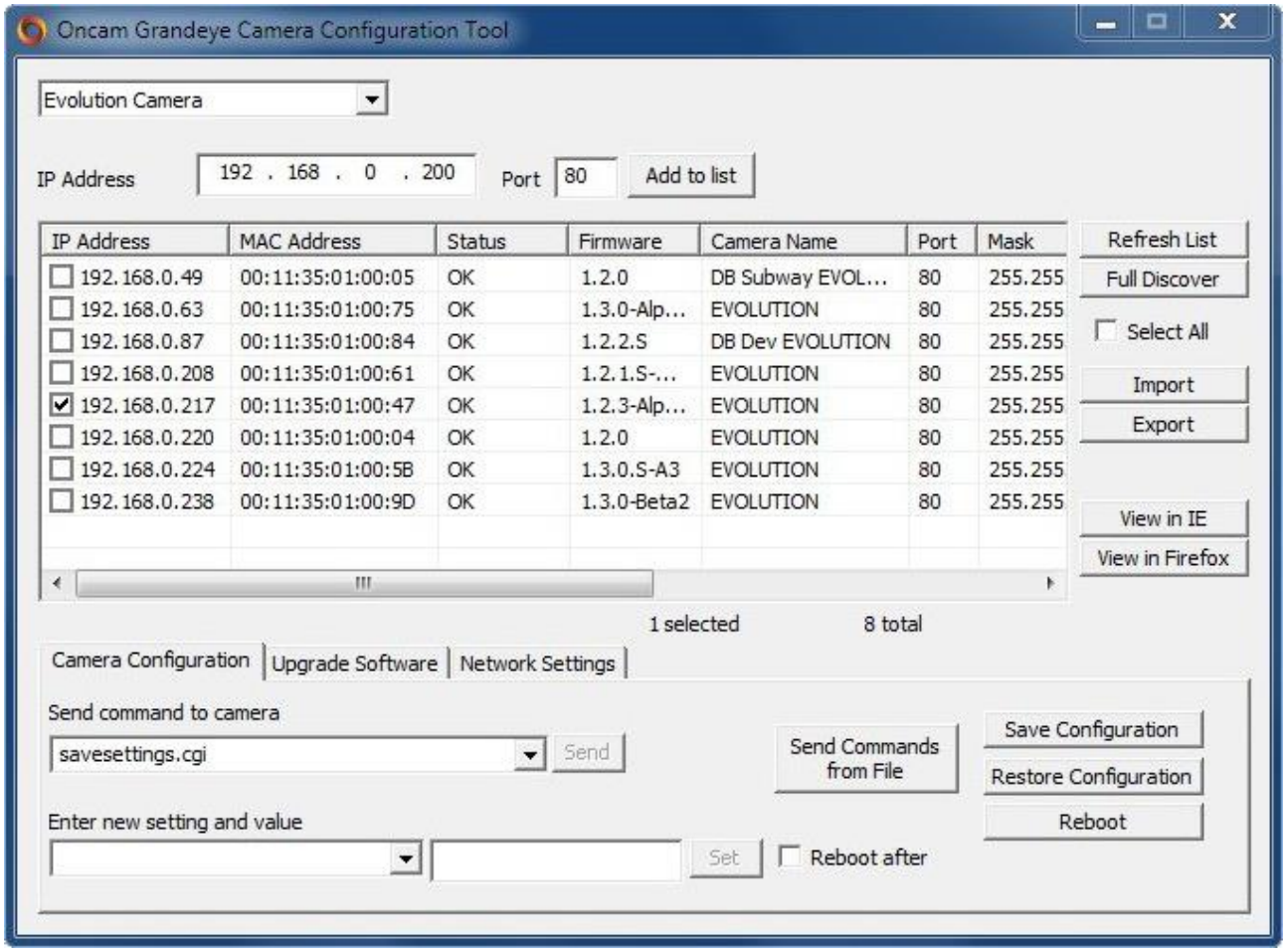

Fig. 1. Example screenshot of Camera Configuration Tool, after Refresh List

Notation: This font is used for exact commands and buttons.

2 Discovering and Viewing Cameras on the Network

1. Select Product (Camera) from the dropdown list (Fig. 1). Only those cameras of the selected product type will be displayed in the list.

2. Refresh List to automatically *discover* all cameras on the network. This sends a multicast message and waits for replies from the IP Cameras for a fixed period of time. Details of connected cameras will then be displayed.

3. Full Discover is another mechanism to automatically *discover* all cameras on the network. This sends a multicast message, waits for replies from the IP cameras for a fixed period of time, and then sends an HTTP request for further details from each camera. The camera's username and passwords need to be entered for HTTP requests (admin,admin by default).

4. Alternatively, enter the IP address of your camera manually and Add to List. This will query the network for a camera at the specified address and, if successful, display the camera details in the list. The camera model must match the selected product type to be entered into the list.

   The following information is displayed after a Refresh:
   - IP Address. This displays the active IP address of the camera
   - MAC Address.
   - Status – current status of the camera
     i. Unknown (Halocam IP camera versions pre 39.3)
     ii. Not Accessible (Halocam IP camera versions 39.4+) multicast failed to find camera that was previously in the list (matched by MAC address); May be upgrading; been removed from network; been powered down.
     iii. IP Invalid (Software Stopped) (Halocam IP camera versions 39.4+): IP address of camera and IP addresses of PC and subnet masks does not allow network traffic. Software not running. See Note 1 below.
     iv. IP Invalid (Software Running) (Halocam IP camera versions 39.4+): IP address of camera and IP addresses of PC and subnet masks do not allow network traffic. See Note 1 below.
     v. Accessible (Halocam IP camera versions pre 39.3) after full Discovery previously done: IP address of camera and IP addresses of PC and subnet masks allows network traffic

[1] **Access to cameras marked as IP Invalid**
If the IP address of the camera is not accessible due to network configurations of the camera and the PC, the IP Configuration Tool will attempt to allocate the local PC with a link-local address (in the range of 169.254.0.0 – 169.254.255.255), which requires administrative privileges.
In Windows 7 and Windows Vista, you will be prompted for Administrative access via the User Account Control dialogue when you attempt to access functions that require this functionality.
In Windows XP, you will need to run the application as an Administrator. To do this, right-click on the IP Configuration Tool icon and select "Run As…", and select Administrator.

vi. Accessible(Software Stopped) (Halocam IP camera versions 39.4+) camera is accessible on network from PC and software has stopped running (may be upgrading, or software failure)
vii. Accessible(Evolution camera) (version 0.1) camera is accessible on network from PC and software is running;
viii. OK (Halocam IP camera versions 39.4+) - camera is accessible on network from PC and software is running;

- Software Version. Current software version. After a Refresh, the software version will display for Halocam IP camera versions 39.4+. After a Discovery, the software version will display for all camera versions, where the software is running.
- Camera Name. Current name of the camera.
- Port Number. HTTP port number.
- Subnet Mask. Subnet mask set by user for use when static network configuration is chosen. If camera is running DHCP, the subnet mask actually being used may be different to that shown.
- Link Local IP Address. Secondary IP address within the link-local range 169.254.x.x

The following additional information is displayed after a Discovery:

- Gateway. Gateway set by user for use when static network configuration is chosen. If camera is running DHCP, the gateway actually being used may be different to that shown.

3 Configuring Cameras

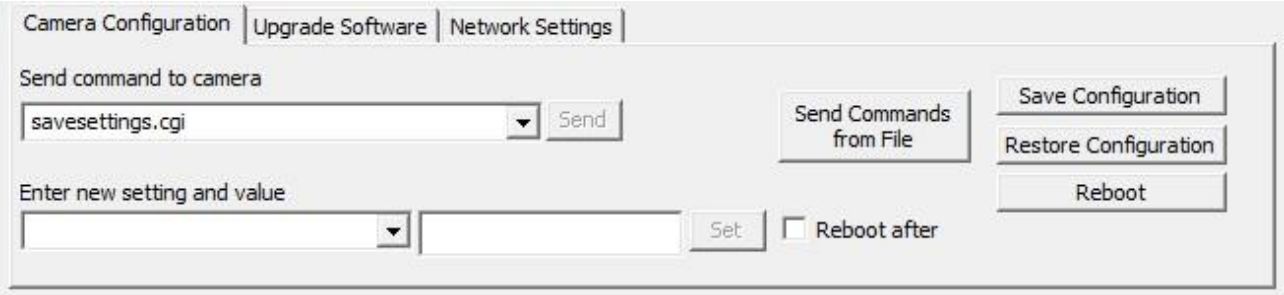

Fig. 2. Camera Configuration Tab

3.1 Basic Configuration

The Camera Configuration tab (Fig. 2) enables the configuration of many cameras at a time. For example, you may wish to set every camera to use a web server port of 891. This can be achieved by:

1. Select the cameras you wish to configure.
2. Select the Camera Configuration tab.
3. Select webserverport from the drop-down list and enter the port number, e.g. 891. Select to Save Settings in order for the port number to have immediate effect. In order to send any further commands to the selected cameras, you will have to Refresh List again for the software to confirm that these changes have taken effect.

Any setting can be typed into the Enter Setting and Value field. In the same way, any command can be typed into the Send command to camera field, and sent to any number of cameras. Please refer to the Halocam Compact IP API Functional Description for full details of commands and parameters.

3.2 Reboot

The Camera Configuration tab (Fig. 2) Reboot function enables multiple cameras to be rebooted at a time.

3.3 Retrieve Debug Logs

The Camera Configuration tab (Fig. 2) Retrieve Debug Logs enables debugging and upgrade information to be downloaded from the camera. This does not require the software to be running on the camera, but it does require the camera to be accessible from the PC's network.

! This feature is not available for the Evolution camera.

3.4 Network Configuration

The Network Settings tab (Fig. 1) enables network settings to be sent to many cameras at a time.

1. To retrieve network settings from a single camera, select Get Network Settings.
2. To save network settings to many cameras, select the cameras you wish to configure and Save Network Settings. For the settings to be sent to the camera, you must define a Default Gateway (even if one does not exist on your network). The Subnet Mask must match the Static IP Address and the Default Gateway, even if DHCP is switched on.

3. To send sequential IP Addresses to a number of cameras, select the cameras you wish to configure, enter the starting IP address, subnet mask and gateway and Save Network Settings. The same subnet mask and gateway will be sent to all cameras. The application will give you an opportunity to review the IP addresses before sending them to the cameras.

3.5 Advanced Configuration

A series of commands written in a file can be sent to the camera for processing. Refer to the camera API documentation for full details of commands and parameters.

An example file to set the camera name, image brightness, contrast and saturation levels of two VCams, and to retrieve the software version would be as follows:

setparam.cgi?cameraname=newName
setparam.cgi?vcambrightnesstarget0=10&vcamcontrast0=1&vcamsaturation0=1.6
setparam.cgi?vcambrightnesstarget1=10&vcamcontrast1=1&vcamsaturation1=1.6
savesettings.cgi
getparam.cgi?softwareversion

From the Camera Configuration tab, select Send Commands from File. Select the commands file. The commands will be sent to the cameras selected, any errors in processing will be displayed in a pop-up box. If an error is encountered, no further commands are sent to that camera.

NB: it is recommended that you test the commands file on one camera to ensure your settings are correct before sending potentially erroneous commands to many cameras.

4 Upgrading Cameras

4.1 Halocam IP Camera

4.1.1 Software Upgrade (.hlfp file)

1. In the camera list, under IP Address, use the left-hand checkboxes to select the cameras to be upgraded.
2. Select the Upgrade Software tab (Fig. 1).
3. Browse to the .hlfp file
4. Upgrade.
5. A prompt to Save Configuration will be displayed. We recommend saving User Settings which will save all configuration files. The type of configuration files to be restored can be chosen later. Continue and select which folder to save the files to. A sub-folder for each selected camera will be created (based on the MAC address), into which the configuration files will be saved into. Please do not modify these saved files. Doing so will result in them not being able to be restored.
6. A status report of all the configuration files from all devices being saved will be displayed. Once complete, a summary of the number of successes and failures is displayed, with any errors being reported at this time.
7. When prompted, continue to Upload Pack.
8. Once the upload is complete, a Success/Fail summary will be displayed.
9. The cameras will now be upgrading. This will take approximately 8 minutes from when the pack was fully received.
10. To confirm which cameras have successfully upgraded, Refresh List or Full Discover and verify the software version (Firmware) is the new software version.
11. The configuration files saved in 5 above now need to be restored. Follow the instructions in Section 4.1.2.

4.1.2 Restore Configuration Files

1. Select the cameras onto which you wish to restore the configuration files.
2. Select the Camera Configuration tab (Fig. 2).
3. Restore Configuration.
4. Select which configuration files to restore.
5. Browse to the folder which you selected in Step 5 above (section 4.1). Each sub-folder will be matched to each selected camera, based on the MAC address of each camera.

4.2 Evolution Camera

4.2.1 Software Upgrade (.elfi file)

1. In the camera list, under IP Address, use the left-hand checkboxes to select the cameras to be upgraded.
2. Select the Upgrade Software tab (Fig. 1).
3. Browse to the .elfi file
4. Upgrade. Please note that the uploading process may take several minutes. The camera is being upgraded during this process.
5. A prompt to Save Configuration will be displayed for each selected camera. Please choose a path where you want to save a backup file.
6. A status report of all the configuration files from all devices being saved will be displayed.
7. Once the upload is complete, a Success/Fail summary will be displayed.
8. To confirm which cameras have successfully upgraded, Refresh List or Full Discover.

4.2.2 Restore Camera Configuration

1. Select which cameras you wish to restore configuration.
2. Select the Camera Configuration tab (Fig. 2).
3. Restore Configuration.
4. Select a configuration file (.ecs) to restore camera settings.
5. Wait for a short while until Evolution camera refreshes.