

# User's Manual



# Shepherd II

Collective Management & Configuration Utility for  
VIVOTEK Cameras



Rev. 1.0

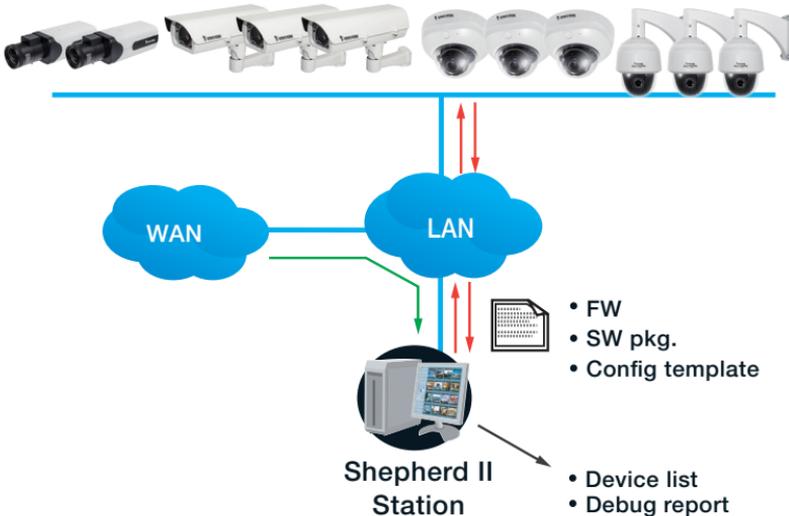


## About this Document

Rev. 1.0: This document is written for Shepherd II revision 2.1.0.0 or later.

## How It Works

The Shepherd utility is an installation and management tool that helps facilitate the configuration of multiple cameras. The tool can be used to automatically search the network for cameras, assign IP addresses, display connectivity, manage firmware/software upgrades, and collectively configure multiple cameras.



## I. Requirements

Shepherd II rev. 2.0 supports Windows OSes. You should upgrade your operating system with the latest service packs:

- Windows 8, 7, or Vista
- Windows Server 2012

- Below are typical TCP ports for access to individual network cameras

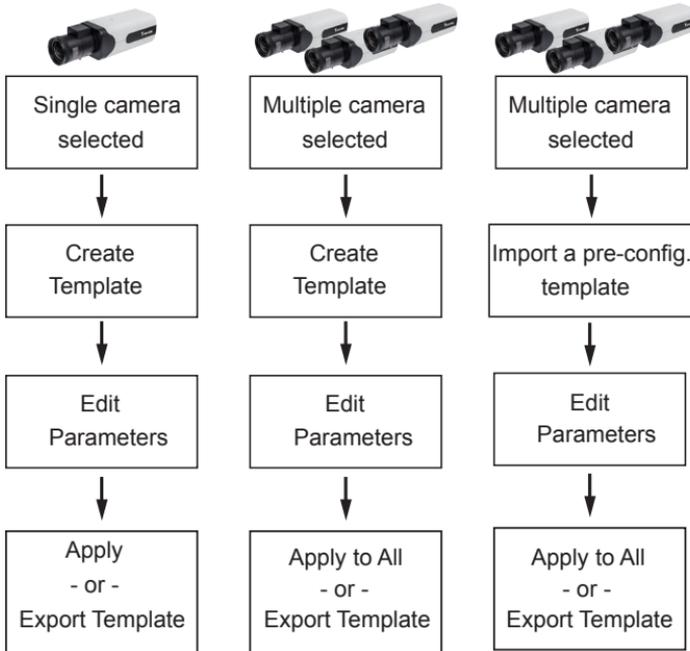
Network General settings:

HTTPS = 443  
 FTP = 21

Streaming:

HTTP = 80  
 Secondary HTTP = 8080  
 RTSP = 554  
 RTP for video = 5556  
 RTCP for video = 5557  
 RTP for audio = 5558

- To start using the Shepherd II utility, you can select one or multiple cameras to create a new template, and then edit the detailed parameters. If you already have a standard template, you can import the template and then apply it to one or multiple cameras.



VAST server and NVR will appear on the device list. However, they can not be selected for configuration.

## II. Configuration Procedure

1. A few seconds after the utility is started, all cameras in the same subnet should be listed on the home page. Shepherd can locate cameras residing in the same network section having the same first two address octet values, such as "172.18.x.x."
2. You can then use the combination of mouse clicks and the **Shift** or **Ctrl** key to select one or multiple cameras.

Status	Model	IP	MAC	Firmware
	FD8137H	169.254.197.14	00-02-D1-24-C5-0E	0100b
	IP816A-LPC(Str...	169.254.180.115	00-02-D1-31-B4-73	0200b
	FE8191	169.254.57.79	00-02-D1-32-39-4F	0100f
	FE8182	169.254.140.163	00-02-D1-36-8C-A3	0100e
	FE8191	169.254.57.163	00-02-D1-32-8C-7F	0100f
	FE8191	169.254.57.209	00-02-D1-32-C6-D1	0100f

**Shift**  
- or -  
**Ctrl**

Ctrl + A to select all cameras.

You can access the cameras outside your current subnet by manually entering their IP address.



If you have a **Device list** you previously exported to the computer, you can also use the Device list to quickly access the cameras saved into your configuration profile. A Device list created on another Shepherd instance in a different subnet can also be used for access to the cameras in a different subnet.

You can use the **Selected** tab to check the statuses of all selected cameras.

Each connected camera will be displayed with the following information:

**Status:** An online icon is displayed when the camera is connected. This icon will be absent if the Shepherd utility cannot connect the camera.

**Model:** The camera's model name.

**IP:** The camera's IP address. Note that if cameras cannot acquire IP addresses from a DHCP server, the cameras will assume the default 169.254.x.x addresses.

**MAC:** The MAC address that comes with the camera.

**Firmware:** The firmware revision number.

If you need to open a web console with a camera, double-click on the camera's entry on the list.

8 device(s) found

202.18.83

All devices Selected

Status	Model	IP	MAC	Firmware
	IP8335H	172.18.202.11	00-02-01-14-FE-AF	0300F
	IP8330	172.18.202.8	00-02-01-18-59-15	0104a
	IP8372	172.18.202.14	00-02-01-18-13-AD	0200h
	IP8364	172.18.202.13	00-02-01-21-4B-1F	0100b
	IP8371E	172.18.202.21	00-02-01-23-5F-86	0300b



Double-click to open a web console with a camera.

With many cameras in the subnet, you can use the search panel to locate specific cameras:

1. By entering a part of their model names, such as:

- "IP" for VIVOTEK's outdoor bullets.
- "FD" for fixed dome,
- "SD" for speed dome,
- "IB" for later outdoor bullets, etc.

Any alpha-numeric characters in the model name can be used as the search condition.

2. The list of cameras can also be narrowed down using IP address as the search condition; e.g., entering **172.18.202.x**. Only the cameras with the same Class C addresses will be listed.

3. MAC address and firmware revision number can also be used, provided that a dash, "-", should be used between every dual digits in the MAC, e.g., **"31-b4."**

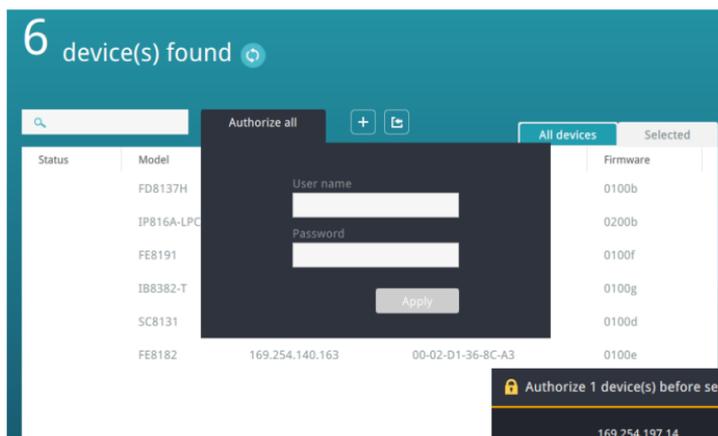
4. You can combine the search conditions using a space.

For example, enter **"202.x IP83"**, and then only the cameras belonging to the **IP83xx** series in the **172.18.202.x** subnet will be listed.

You cannot directly manage a VIVOCam PoE switch. However, you can search and then double-click to open a web console.

For cameras protected by preset passwords, left-click to select it and click the **Authorize** button. This authorizes the access to the camera for it to be selected for further configuration.

Without the Authorization, you will be prompted for a password every time you select the camera for configuration.



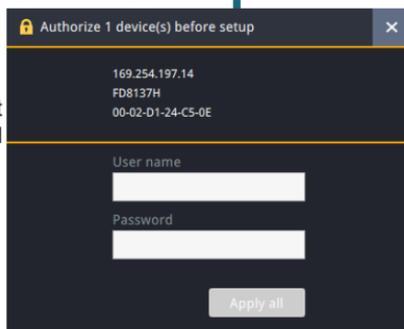
6 device(s) found

Authorize all

Status	Model	Firmware
	FD8137H	0100b
	IP816A-LPC	0200b
	FE8191	0100f
	IB8382-T	0100g
	SC8131	0100d
	FE8182	0100e

User name  
Password  
Apply

Without the authorization, the credential prompt will appear every time the camera is selected for any of the functions.



Authorize 1 device(s) before setup

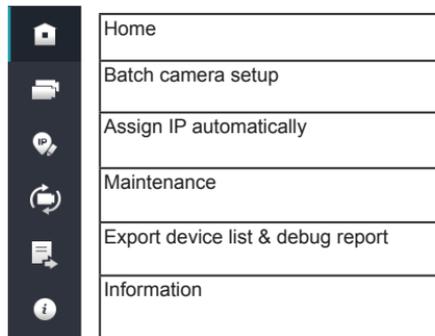
169.254.197.14  
FD8137H  
00-02-D1-24-C5-0E

User name  
Password  
Apply all



## IMPORTANT:

All functional windows under the Home page will only become usable when at least one camera is selected.



Home
Batch camera setup
Assign IP automatically
Maintenance
Export device list & debug report
Information



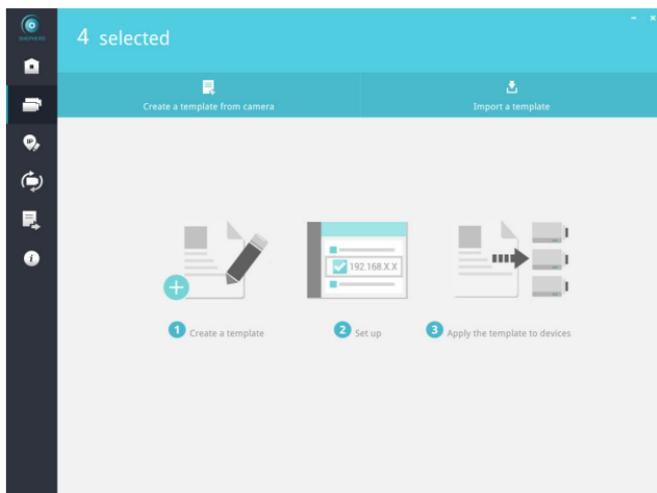
## NOTE:

- Cameras of different models and firmware can be selected for the configuration.
- When parameters have been changed, such as those for Audio or Stream settings, all applicable changes will be applied to all selected cameras. For changes that cannot be applied to specific cameras, e.g., changing a video stream to MPEG-4 on a model that does not support MPEG-4, the changes will be automatically ignored.

4. With selected cameras, you can start configuring camera parameters, IP addresses, upgrade firmware, reset, restore, etc. Click on the functional icons on the left of the screen.

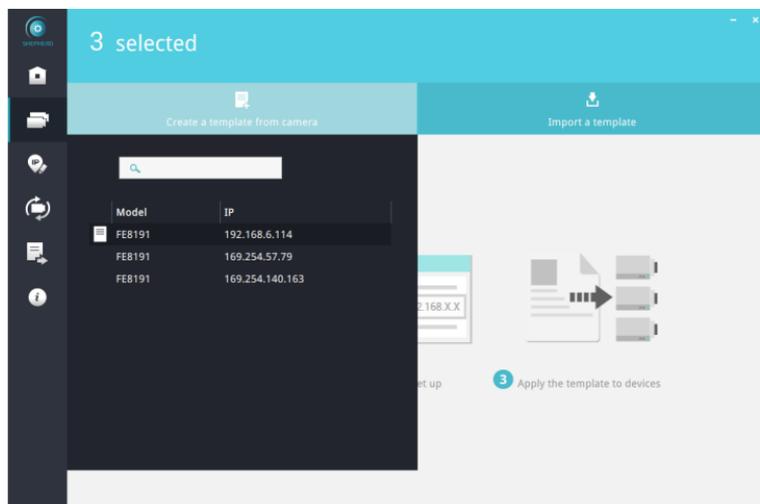
Click on **Batch camera setup** on the left panel.

Click on **Create a template from camera**; or, if you already have a template, click on **Import a template**.

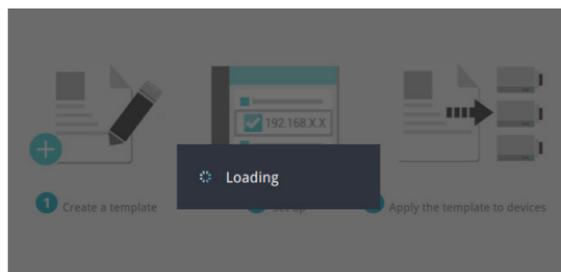


5. Select one camera from the drop down list. Double-click to select a camera. Configuration will begin using the camera's configuration profile. Parameters should only be modified by experienced users.

Note that not all camera parameters can be accessed from Shepherd.



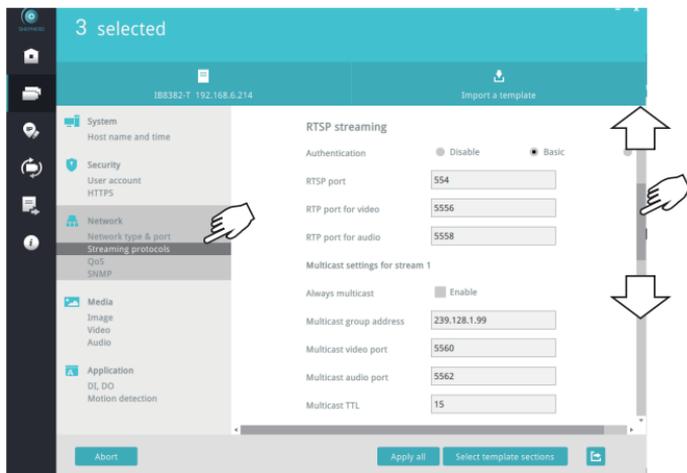
It takes a short while to access and retrieve the camera's configuration.



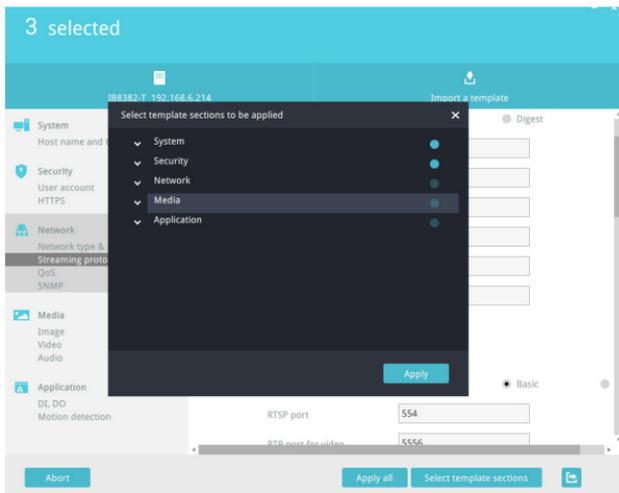
6. The configuration page will appear with sub-windows starting from System, Security, Network, Media, and Application.

For details about each configurable option, please refer to the documentation that came with each camera.

The sub-windows contain numerous options. Use the scroll bar on the side to access all of the options.

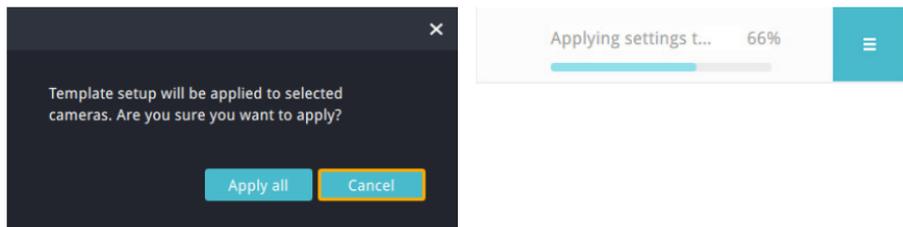


You may not need to apply all parameter changes to cameras. When applying changes in parameters, you can use the **template section** selector at the bottom of the screen to designate the sections to apply.



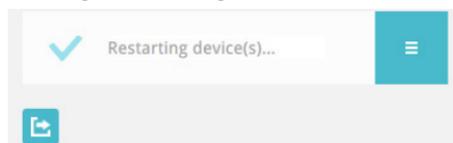
7. When you finish editing the configurable parameters, click the **Apply all** button to apply changes to selected cameras, or click the **Export**  button to save changes to a template. The camera configuration template will be saved in a csv (Comma Separated Values) file.

To abandon the changes, click the Abort button.



If problems occur when applying the changes, e.g., due to a connection problem, you can use the restart button to retry the apply process.

You may then return to the Home page, or click the **Export**  button to save your configuration changes. .

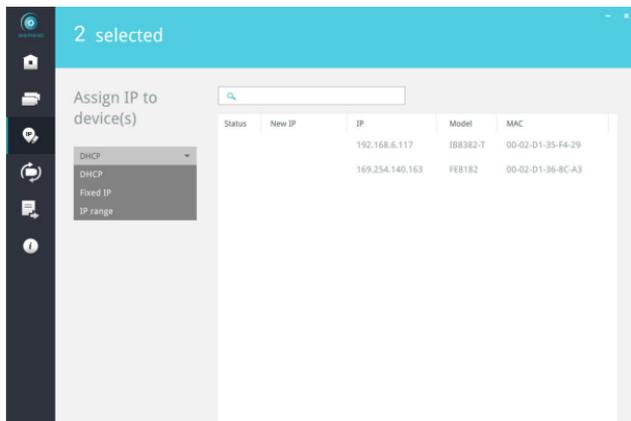


## Assign IP

In here, you can assign IP addresses to one or multiple devices.

- IPs can be obtained automatically from a DHCP server.
- IPs can be assigned with an IP address range.

Note that when manually assigning a fixed IP, you should select only one camera.



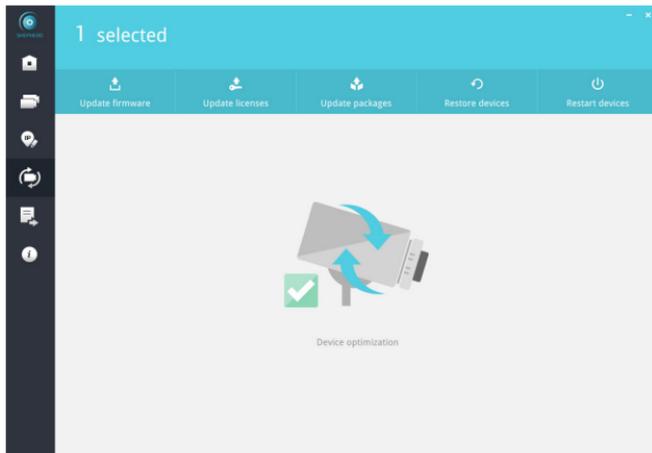
Consult your network administrator for network settings. Also ensure the correct Gateway and DNS server addresses are provided.

## Maintenance

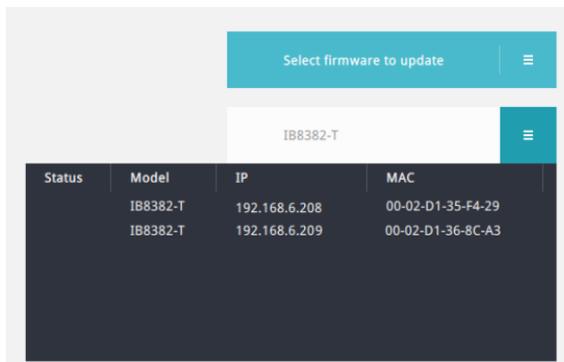
One or more cameras can have its firmware, license, and packages (VCA packages, such as line/field detection, or people counting) updated via this page. Cameras can also be reset or restored to its defaults.

Select the cameras to be configured from the home page, click on the **Maintenance** button, and then click to perform one of the update functions from the top menu.

Please note that the firmware, software license, and software packages should be manually downloaded to the client computer running this utility. The Shepherd utility does not automatically search for the latest updates.



Select a firmware/software file for the listed model on screen. If you have multiple cameras of the same model, they will be listed using the List button on the right. You can then upgrade their firmware at the same time.

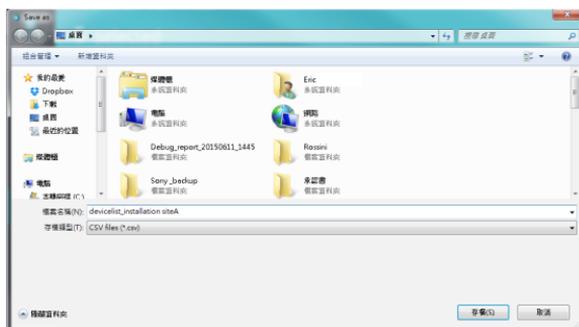
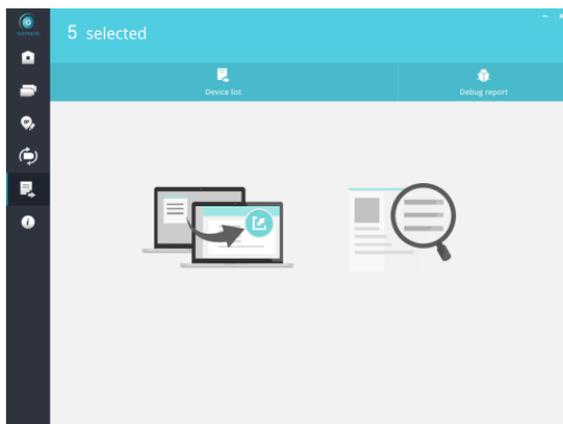


## Export device list and debug report

This window contains the following:

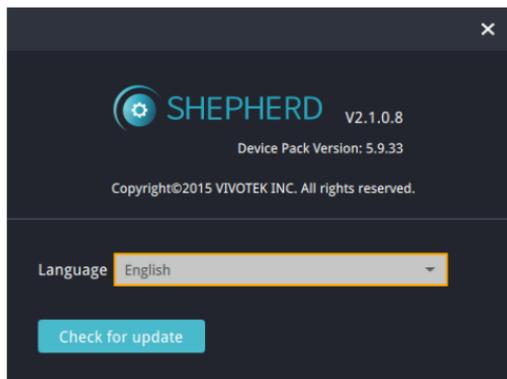
- A **Device list** contains information of selected cameras. You can also import a previously-saved device list from the home page to connect and select all cameras from an established deployment. This is especially the case if your deployment include cameras residing in different subnets.
- A **Debug report** contains event messages, connection statuses, and parameters that facilitate problem solving if the need should arise when you need to contact VIVOTEK's technical support.

Note that when you export a debug report, you need to create a new file folder to contain the debug report.



## Information

The information page provides access to the UI text Language selector and an automatic update search button for the utility.



## Device Pack

To update a device pack that contains information for the latest VIVOTEK cameras,

1. Download the latest device pack (\*.vdp) from VIVOTEK website.



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### VIVOTEK Downloads

Reset   Filter by  Sort by

Category	Version	Date
Design Tool App		
Device Pack	Ver. 5.9.32	2015.12
	Ver. 5.9.34	2015.12
EZConnect App		
IPVSDT	Ver. 8	2015.11

2. Save the file and decompress it to the same folder where the Shepherd.exe file is located. Re-start the Shepherd II utility. The Shepherd II utility will automatically accommodate the latest parameters brought by the device pack file.



