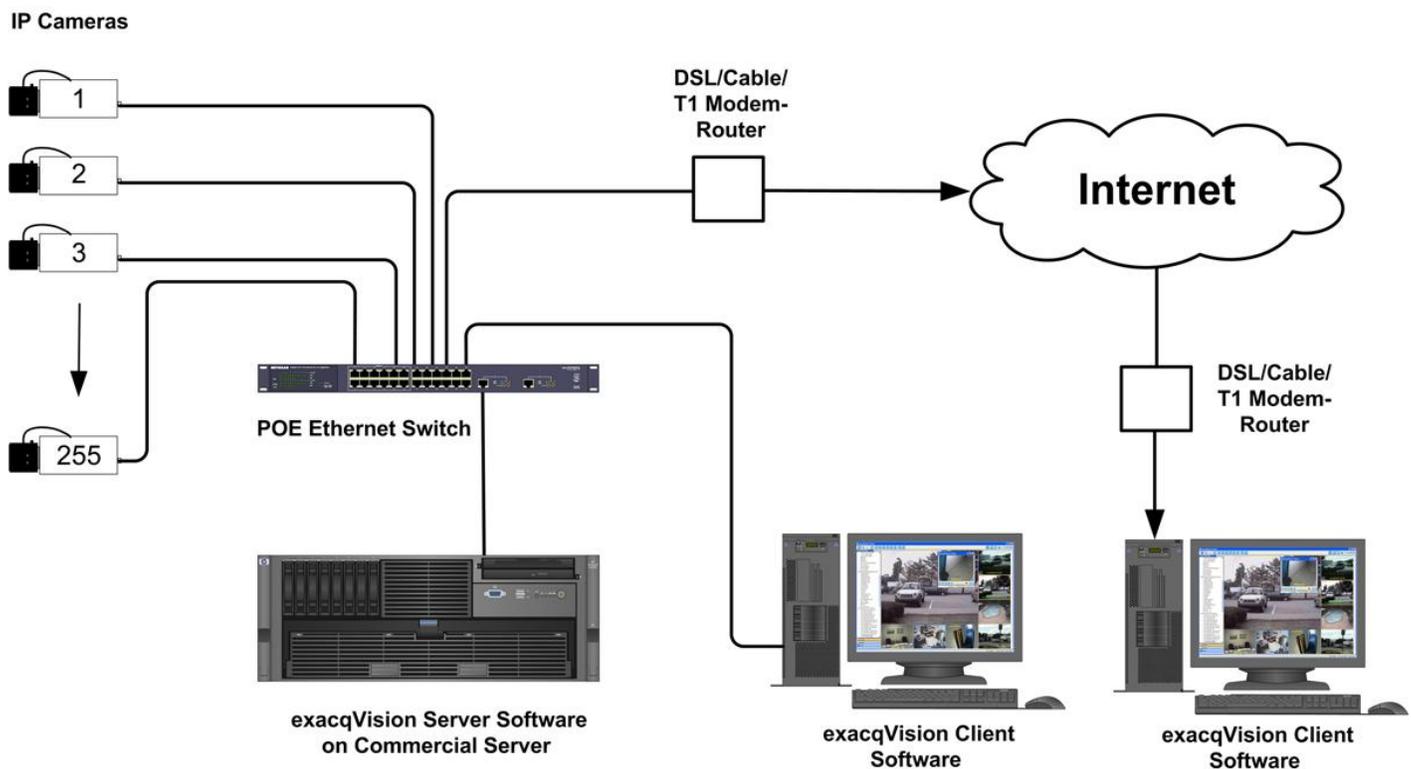


The exacqVision NVR software is full-featured network video surveillance package that operates on any Windows XP or Debian Linux computer. The exacqVision Server captures and records video and other surveillance data from IP network devices (it has no user interface). The exacqVision Client presents a user interface for viewing live and recorded video and configuring the exacqVision Server. Multiple exacqVision Clients can be connected to a single exacqVision Server, and a single exacqVision Client can connect to multiple exacqVision Servers.

## 1 Connections

Connect the cables as shown in the following diagram.

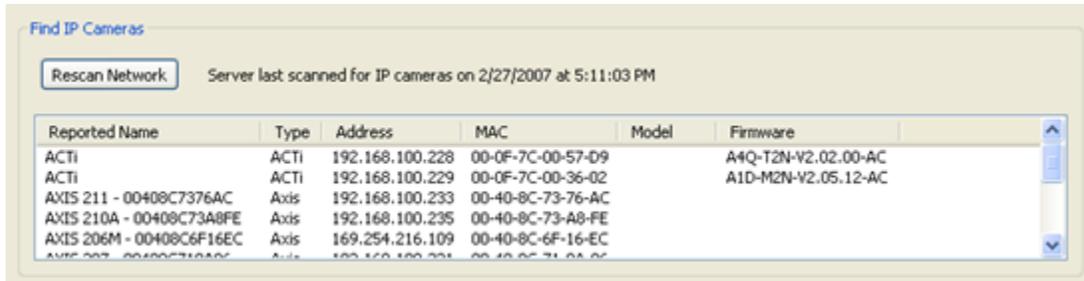


Run the exacqVision installer to install both the exacqVision Server and Client. You can install the exacqVision Client on additional computers if desired. After the installation (and each time the computer restarts), the exacqVision Server automatically runs as a background service, and video from all cameras that have been *added and configured* (see sections 2 and 3) is recorded. The exacqVision Server continues recording even if no user is logged and the exacqVision Client is closed. It will stop recording only if

- the system is shut down.
- the exacqVision Server service is stopped from the Service Control Manager.
- the process is stopped from the Task Manager.

## 2 Add IP Cameras

First, ensure that your IP cameras are powered and connected to same LAN as the exacqVision Server. Next, you'll need to find the IP address of the cameras on your network using the Exacq IP Camera Finder on the IP Cameras  screen in the exacqVision Client. This will find cameras from any of the supported manufacturers if they are on the same network subnet as the exacqVision Server.

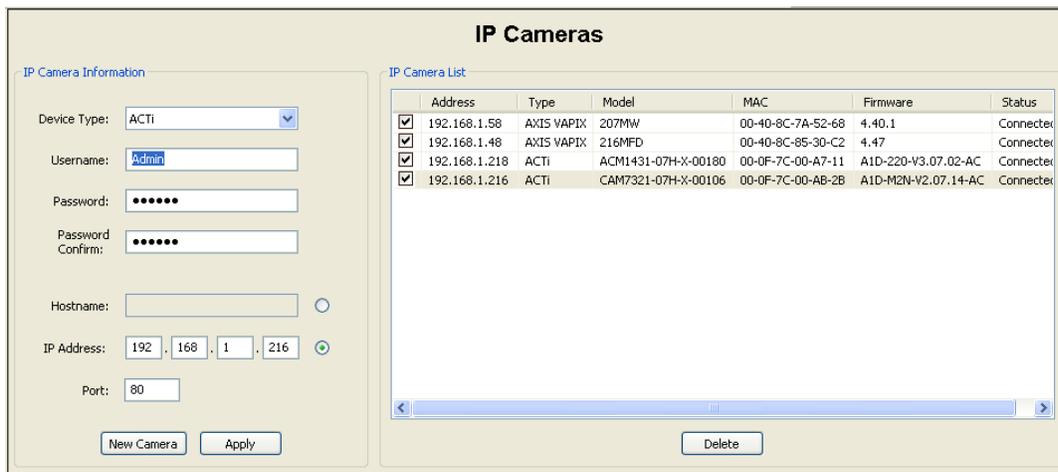


If an IP camera is not found, change the camera's IP address to match an available address on the same LAN subnet as the exacqVision server. You can do this using the camera manufacturer's software; see the exacqVision IP Manufacturer Specific Addendum in this QuickStart guide for more information.

Next, on the IP Cameras  screen of the exacqVision Client, add the cameras to the list of IP cameras that your exacqVision Server will connect to. When IP cameras have been added to the IP Camera List, your exacqVision Client application can configure the camera settings (see section 3) and view live and recorded video.

To add an IP camera to your IP Camera List, select the camera in the finder panel. Enter the username, password, and confirmed password, then click the Apply button. The new camera is displayed in the IP Camera List, along with the camera type and IP address.

**NOTE:** To allow access to all configuration settings on the camera, the IP camera credentials must have an Admin permission level.



To make cameras available in the Configuration, Live, and Search trees, select the appropriate boxes listed in the IP Camera List. You can select only as many IP devices as your license permits. Contact Exacq Technologies to purchase additional permits if necessary.

## 3 IP Camera Setup

By default, the exacqVision Server records only the video in which motion has been detected. Ensure that your cameras have valid motion detection settings (using the IP Camera Setup  page), or change the recording schedule to Free Run (using the Schedule  page).

The camera's default image resolution and frame rate settings are used unless they are changed by the user. These values should be checked and updated if necessary (using the IP Camera Recording Setup  page). If the default resolution is not 4:3 aspect ratio, the resolution is marked as "invalid." Make sure the 4:3 resolution is selected in the Resolutions drop-down menu for properly scaled video recording.

For more detailed instructions, see the IP Camera Setup section of the exacqVision User Manual or the context-sensitive online help file.

## 4 Network Configuration

If you plan to have clients from outside your local network access your exacqVision Server, you will need to change your router settings to forward port 22609 to the exacqVision Server's IP address. See your router manual or go to [www.portforward.com /routers.htm](http://www.portforward.com/routers.htm) for instructions.

# Manufacturer-Specific Addendum

Each IP camera manufacturer provides a utility to find cameras on the local network and set their IP addresses. This utility is typically available on the software CD shipped with your camera, or from the camera manufacturer's web site. Please refer to the documentation provided by your camera's manufacturer if you have questions after reading this guide.

Although some IP camera manufacturers support DHCP addressing, Exacq **highly recommends** assigning a static IP address to your IP cameras to keep unexpected network events from changing the IP address of the camera. If the camera's IP address changes, the exacqVision Server will not be able to record from that camera until a user manually reassigns the camera's IP address or changes the address setting in the exacqVision Server to match the camera's new address.

**NOTE:** If you have Windows Firewall enabled on your computer, you will see the following dialog box when you run any of the camera manufacturer's utilities. Click Unblock to allow the utility to work properly.



## Supported Manufacturers:

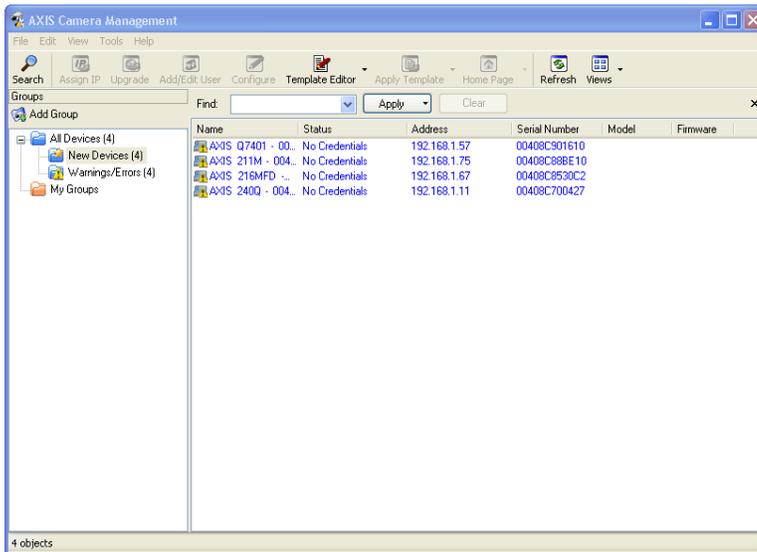
1. Axis
2. IQinVision
3. Sony
4. Panasonic
5. ACTi
6. Vivotek
7. Arecont
8. ioimage
9. StarDot
10. Ganz
11. Basler
12. IPX
13. Sanyo
14. Pelco

For a complete, updated list of supported IP cameras and devices, visit the Exacq web site at:

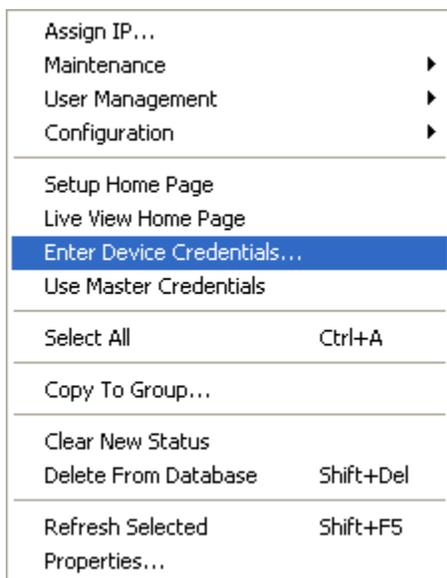
<http://www.exacq.com/support/ipcameras.html>

# 1 AXIS

AXIS provides the *AXIS Camera Management Utility* to find IP cameras. Run the utility to display the following window:



This program will search for AXIS cameras on the network.



Right-click a camera and select **Enter Device Credentials....** Enter the username and password for the device.



Right-click the camera again and select **Assign IP....**

Enter the IP address, subnet mask, and default router. Click OK to apply the IP address.

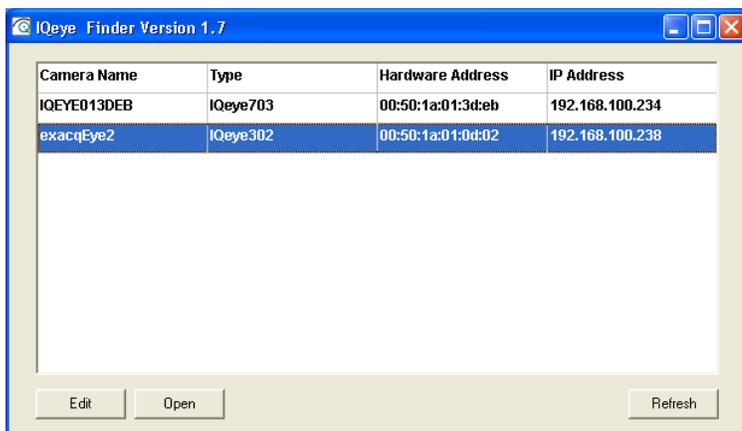
**NOTE:** The factory default login for Axis IP cameras is:

- username: **root**
- password: **pass**

You will need the username and password when you add this camera to your exacqVision system.

## 2 IQinVision

IQinVision provides the *iqfinder* utility to find IP cameras. Run the utility to display the following window:



Select the camera and click Edit to change the camera's IP properties.



IQinVision cameras typically do not use DHCP by factory default. If you have a DHCP server (or router) on the network, it can automatically assign your camera an IP address if you select Obtain an IP address ... . You must manually assign the camera an IP address if you manually assigned the exacqVision Server's IP address, if there is no DHCP server on your local network, or if you want to assign a static IP address to the IP camera to ensure that its IP address is not inadvertently changed. If so, enter an IP address that is not used by any other device on your local network, ensuring that the first three numbers match the first three numbers of your exacqVision Server's IP address. Set the subnet to 255.255.255.0 and click Apply.

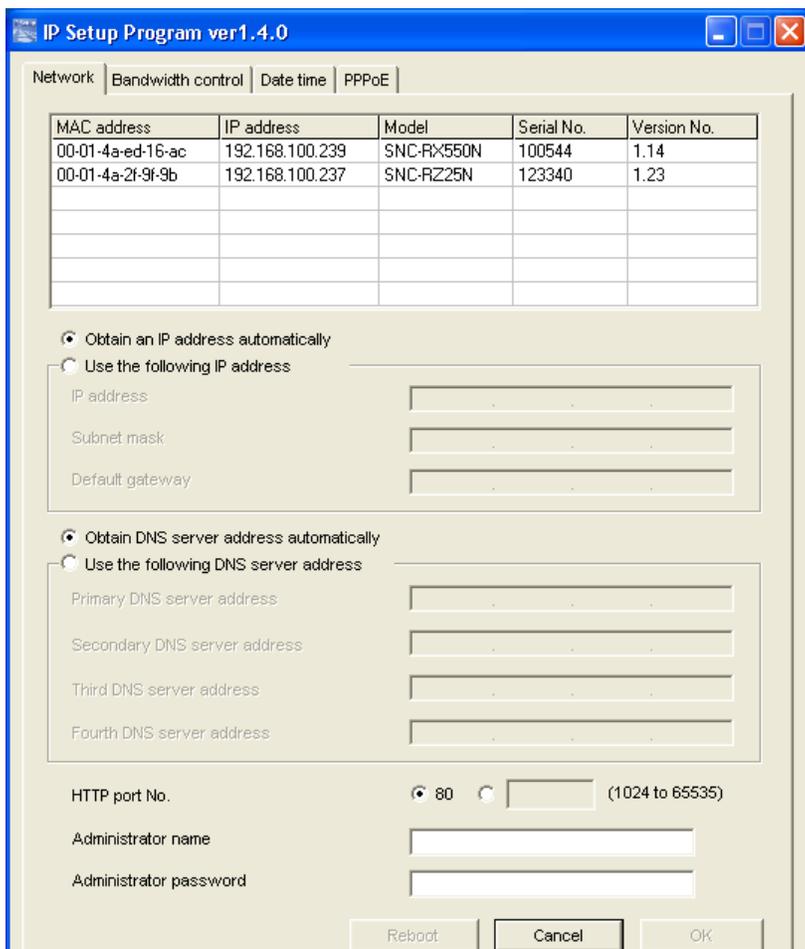
**NOTE:** The factory default login for IQinVision IP cameras is:

- username: **root**
- password: **system**

You will need the username and password when you add this camera to your exacqVision system. To get the IQinVision camera to factory defaults, hold the reset button in while powering on the camera.

# 3 Sony

Sony provides the *IP Setup* utility to find IP cameras. Run the utility to display the following window:



Select the camera to edit the camera IP properties.

Sony cameras typically do not use DHCP by factory default. If you have a DHCP server (router) on the network, it can automatically assign your camera an IP address if you select Obtain an IP address ... . You must manually assign the camera an IP address if you manually assigned the exacqVision Server's IP address, if there is no DHCP server on your local network, or if you want to assign a static IP address to the IP camera to ensure that its IP address is not inadvertently changed. If so, enter an IP address that is not used by any other device on your local network, ensuring that the first three numbers match the first three numbers of your exacqVision Server's IP address. Set the subnet to 255.255.255.0, leave the HTTP port at 80, enter the camera's Administrator name and password, and click Apply.

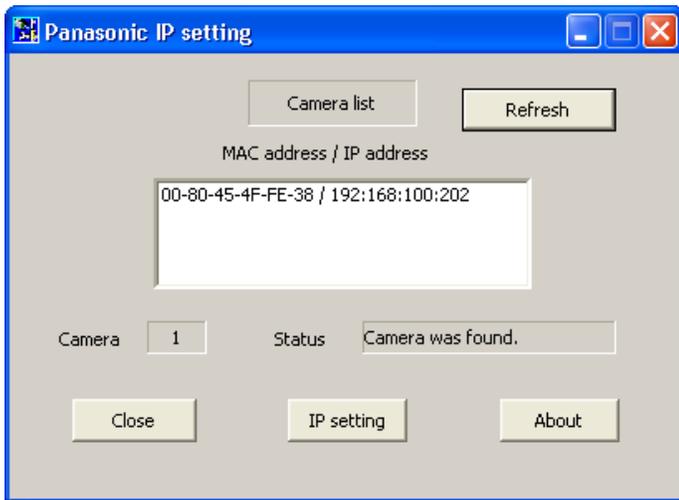
**NOTE:** The factory default login for Sony IP cameras is:

- username: **admin**
- password: **admin**

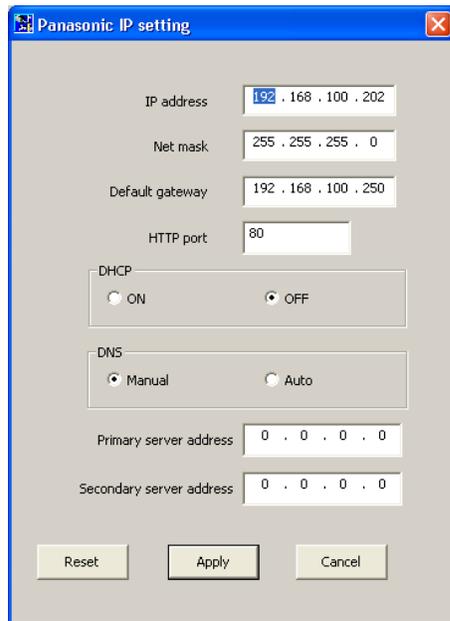
You will need the username and password when you add this camera to your exacqVision system.

## 4 Panasonic

Panasonic provides the *EasyIpSetup\_Pro* utility to find IP cameras. Run the utility to display the following window:



Select a camera and click the IP Setting button to view and edit the camera's IP properties.



Panasonic cameras typically do not use DHCP by factory default. If you have a DHCP server (router) on the network, it can automatically assign your camera an IP address if you select On in the DHCP area. You must manually assign the camera an IP address if you manually assigned the exacqVision Server's IP address, if there is no DHCP server on your local network, or if you want to assign a static IP address to the IP camera to ensure that its IP address is not inadvertently changed. If so, enter an IP address that is not used by any other device on your local network, ensuring that the first three numbers match the first three numbers of your exacqVision Server's IP address. Set the net mask to 255.255.255.0, leave the HTTP port at 80, enter the camera's Administrator name and password, and click Apply.

**NOTE:** Panasonic cameras automatically disable their response to configuration queries twenty minutes after being reset. If your camera has been running for more than twenty minutes, you must reset or power cycle it before querying or configuring its IP address through either Exacq's IP camera finder or Panasonic's *EasyIPSetup* utility.

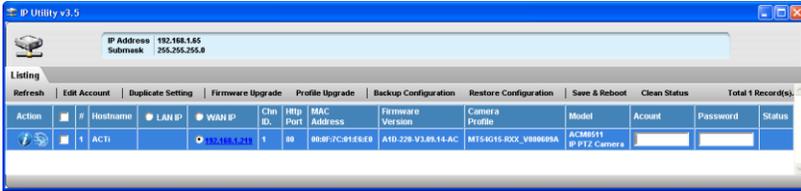
**NOTE:** The factory default login for Panasonic IP cameras is:

- username: **admin**
- password: **12345**

You will need the username and password when you add this camera to your exacqVision system.

# 5 ACTi

ACTi provides the ACTi *IP Utility* to find IP cameras. This is located on the installation CD in the \Professional\Utility\IP Utility.exe directory. You might need to install the ACTi Streaming Activator Software from the CD to find the ACTi IP utility. Run the utility to display the following window.



Enter the Account name and Password in the appropriate fields, and then click Configure Camera Settings (the wheel button at the far left side of the row).



Change the WAN IP address to an IP address that is not used on your network. You cannot turn on DHCP here; that can be done only on the camera webpage. After you enter the IP address and subnet mask entered, click Apply and Save & Reboot.

**NOTE:** The factory default login for ACTi IP cameras is:

- username: **Admin**
- password: **123456**

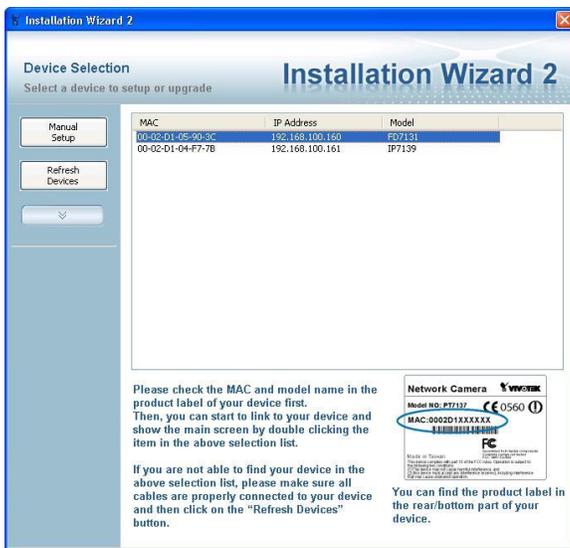
You will need the username and password when you add this camera to your exacqVision system.

# 6 Vivotek

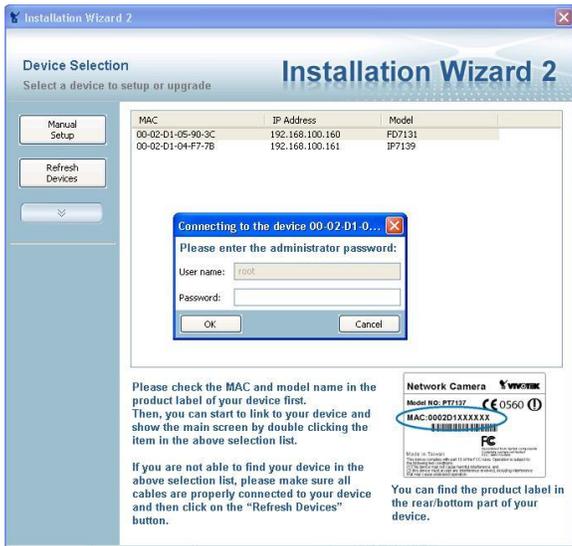
Vivotek provides an *Installation Wizard* utility to find IP cameras. This is provided on the CD included in the box with the camera. Run the utility to display the following window:



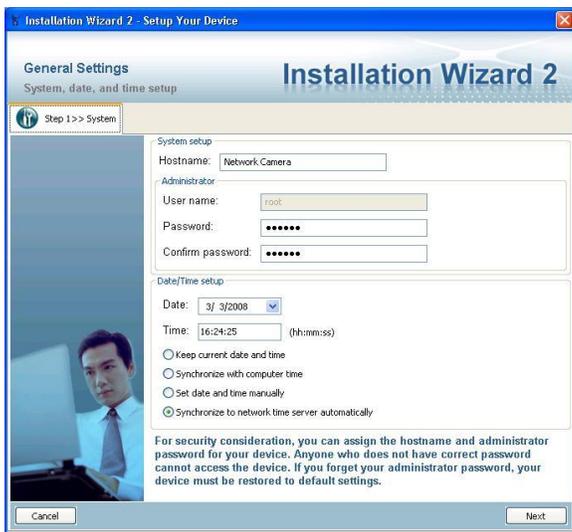
This should detect and display your type of network. Click Next to continue.



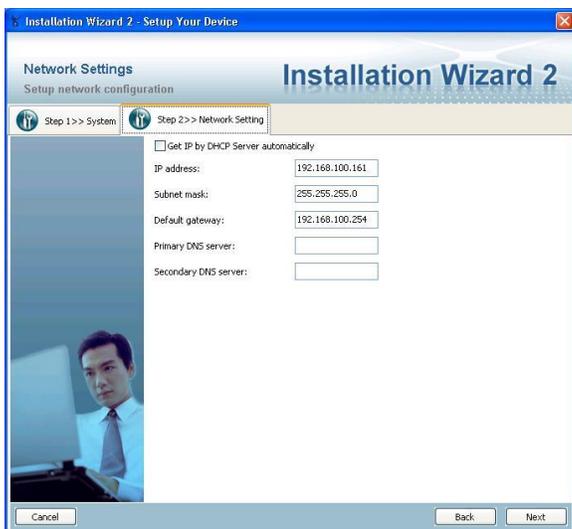
All Vivotek network cameras in your subnet are displayed. If the program does not detect the camera, verify that the cameras are actually in your local subnet. Double click the camera that you want to configure.



Enter the root password for the Vivotek camera. If you have not set up the camera previously, the default password is blank.



Enter in the new root password and keep the default Date/Time settings. Click Next.



Enter the IP address, subnet mask, default gateway, primary DNS (optional), and secondary DNS server (optional). Select Get IP by DHCP Server Automatically if necessary. Click Next to continue.

Use the default ports.



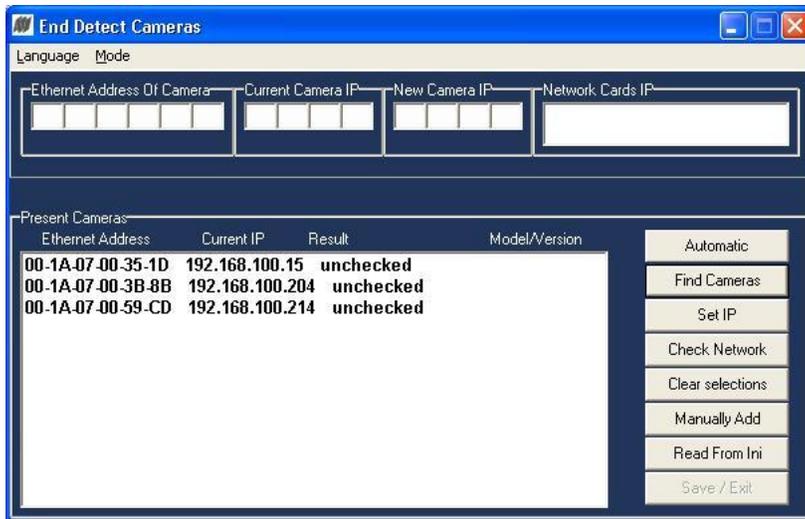
Do not select Enable DDNS unless you are planning to put this camera on the Internet. This is not recommended.



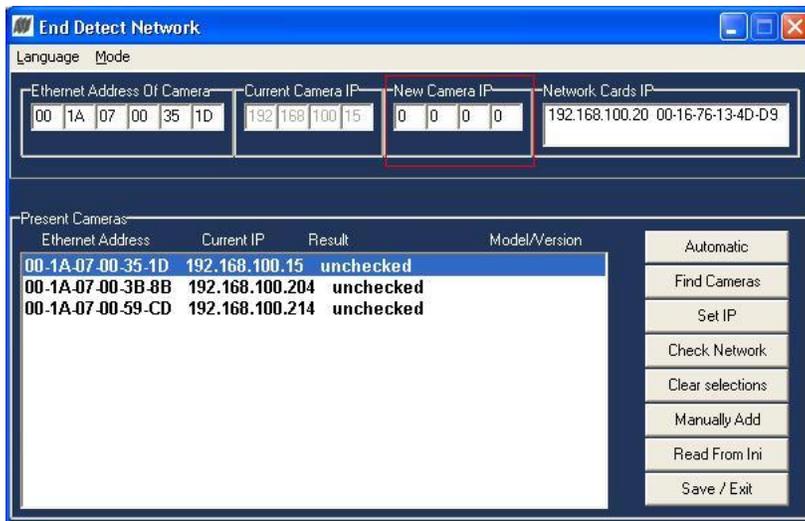
Click Next to complete the configuration.

# 7 Arecont

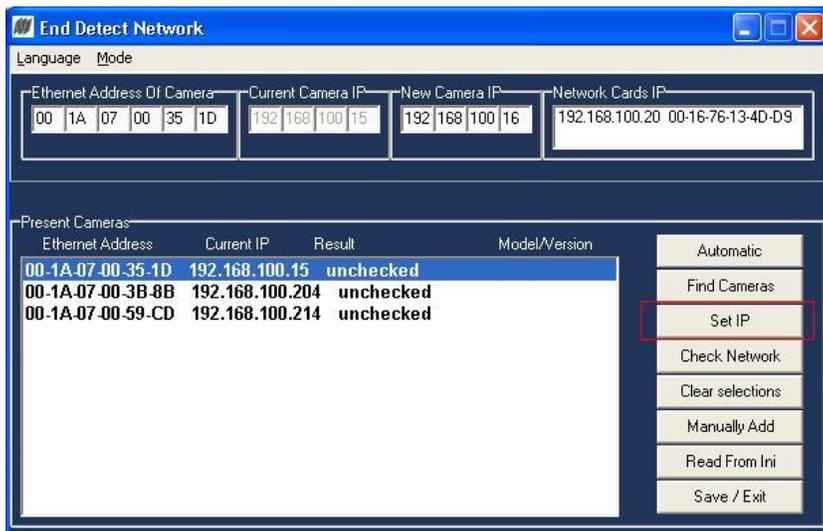
Arecont provides a utility to find IP cameras on the CD included with the camera. Run the utility to show the following window:



Click Find Cameras to search for Arecont IP cameras on the local subnet. If the program does not detect the camera, verify that the cameras are actually in your local subnet.



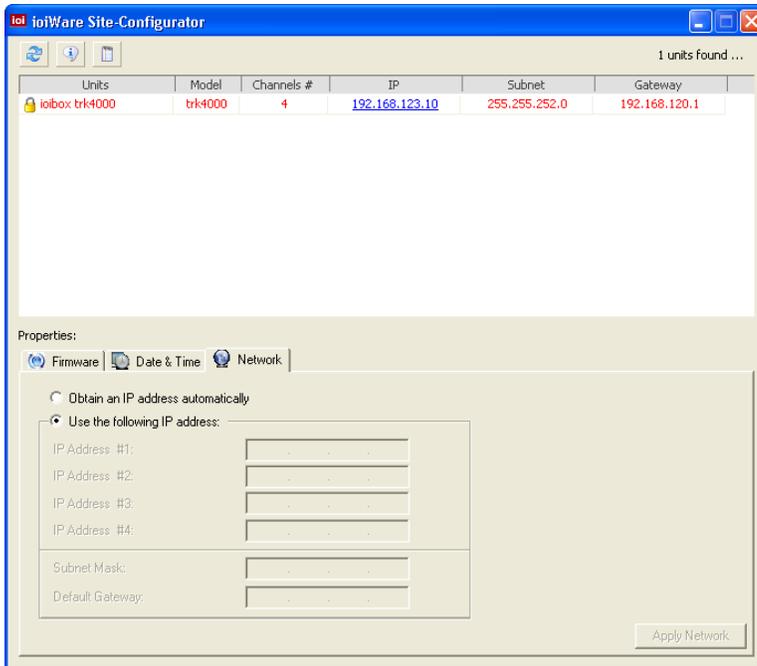
Enter the IP Address in the New Camera IP field.



Click Set IP to set the IP address for the camera. To configure additional information for the camera, go to the camera's web page.

# 8 ioimage

ioimage provides a utility to find IP cameras called the *ioiWare Site-Configurator*. This utility is provided on the CD included in with the camera. Run the utility to display the following window:

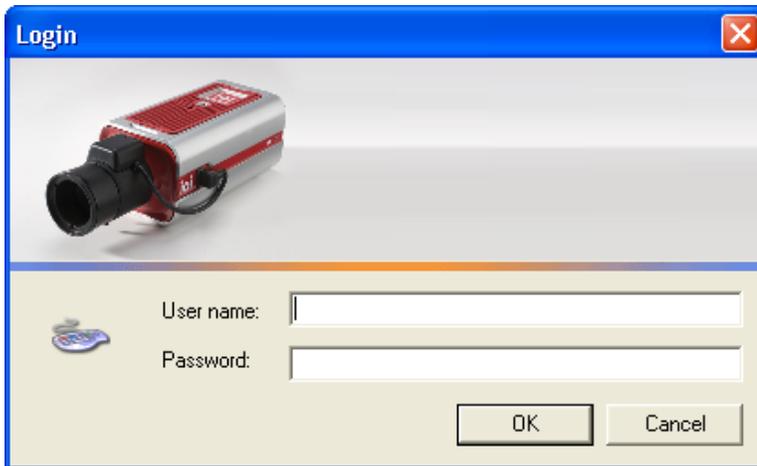


You must change your own IP address so that you can reach the IP address 192.168.123.10.

When you run the ioiWare Site-Configurator, it detects the device. Select the device and then the Network tab.

You can configure the device's IP address to be static or obtain an IP address automatically.

When finished, click Apply Network.



Enter the username and password for the device. Click OK to set the IP address and reboot the device.

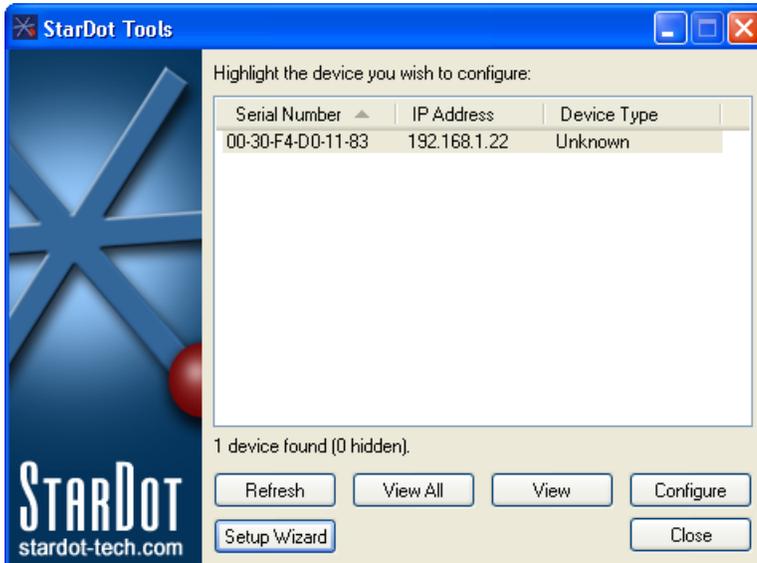
**NOTE:** The factory default login for ioimage devices is:

- username: **admin**
- password: **admin**

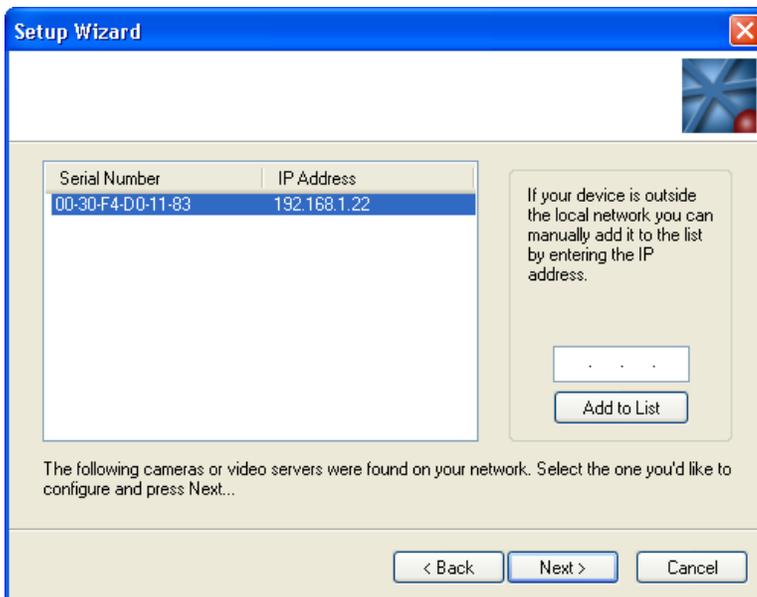
You will need the username and password when you add this camera to your exacqVision system.

## 9 StarDot

StarDot provides a utility to find IP cameras called *StarDot Tools*. This utility is provided on the CD included with the camera. Run the utility to display the following window:



The StarDot Tools utility detects cameras that are on your network. To configure the IP address, select the Camera and then click Setup Wizard.



Select the method used to connect to the camera and then click Next. Select the IP camera from the list and click Next.

The configuration of the camera is then displayed. Select the primary method of communication, which is usually Network.

**Setup Wizard**

Enter the following information. Consult your network administrator if you're not sure. If you're running this on a private network behind a DSL/cable router, your address, subnet and gateway will likely be in the 192.168.1.X range.

IP Address:

Subnet Mask:

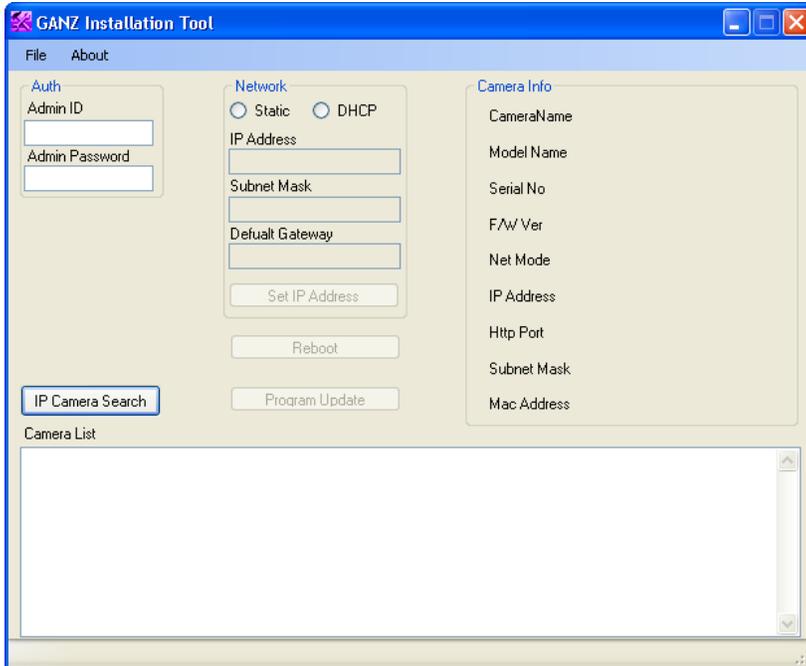
Gateway:

Select either Static IP Address, or Server-Assigned IP Address (DHCP). If you select Static IP Address, enter the IP address, subnet mask, and gateway.

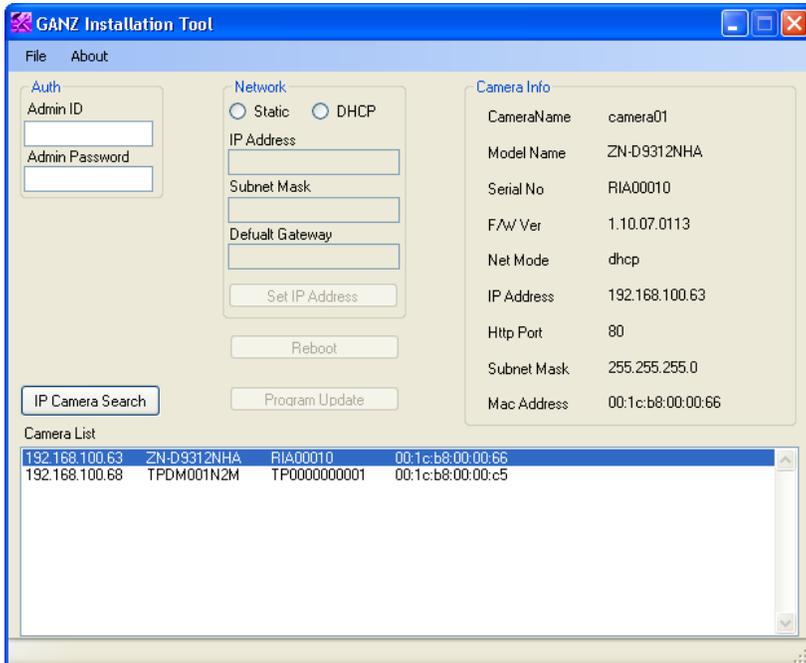
Select Only Serve Images on Request, No Upload, Then click Next, and then click Next again to reboot the camera to the new IP address.

# 10 Ganz

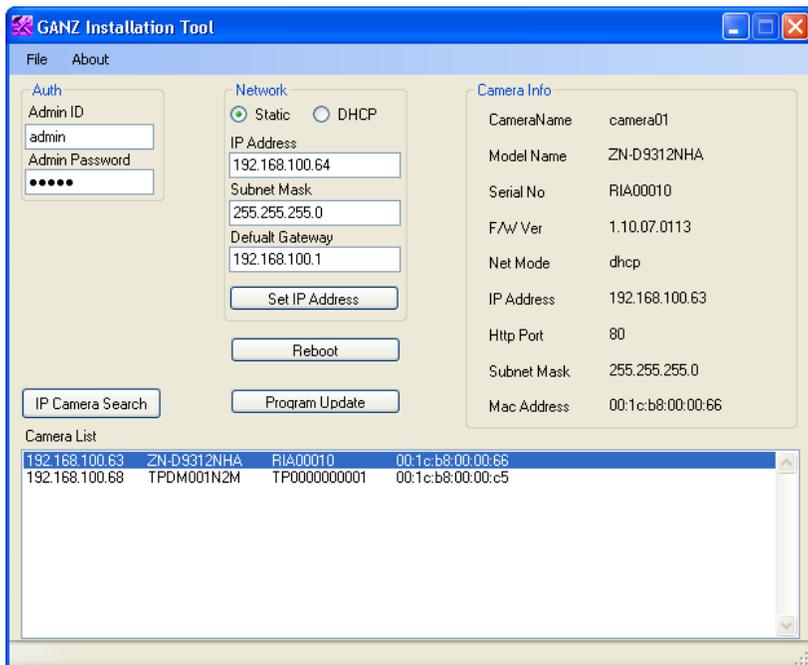
Ganz provides the Ganz Installation Tool to find IP cameras. This utility is provided on the CD included with the camera. Run the utility to display the following window.



Click IP Camera Search to search for Ganz IP cameras on the local subnet. If the program does not detect the camera, please verify that the cameras are in your local subnet.



All Ganz IP cameras on the local subnet are listed in the Camera List section. Select a camera to display information in the Camera Info area.



To change the IP address of the selected camera, select Static in the Network area. Enter the IP address and default gateway, and then click Set IP Address.

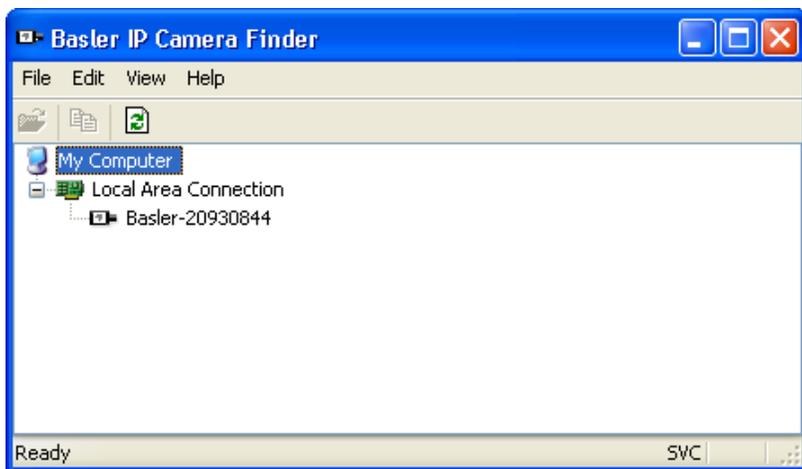
**NOTE:** The factory default login for Ganz devices is:

- username: **admin**
- password: **admin**

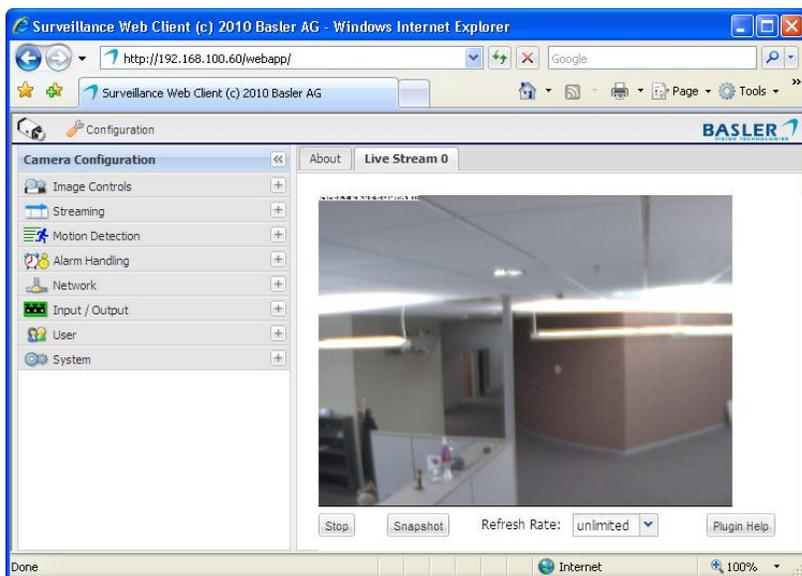
You will need the username and password when you add this camera to your exacqVision system.

# 11 Basler

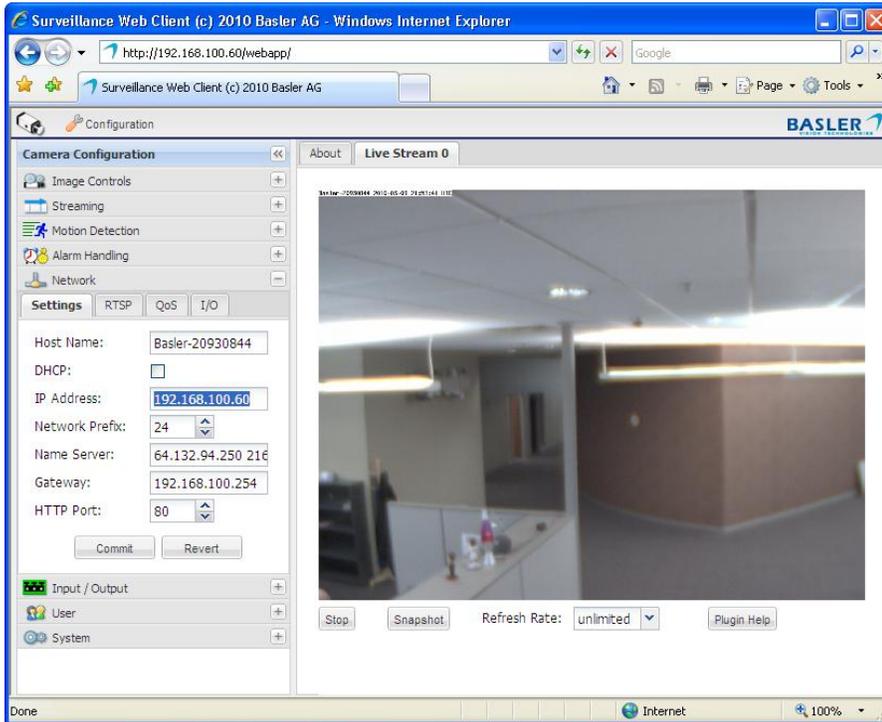
Basler provides the IP Camera Finder to find Basler IP cameras. This utility is provided on the CD included with the camera. Run the utility to display the following window.



All the Basler IP cameras on the local subnet are displayed under Local Area Connection. To configure a camera, right click and select Open In Browser.



Click Configuration to display the Camera Configuration panel.



Expand the Network panel to display the camera's Settings tab. Deselect DHCP and then change the IP address and other information as appropriate. Click Commit when finished.

**NOTE:** The factory default login for Basler cameras is:

- username: **admin**
- password: **admin**

You will need the username and password when you add this camera to your exacqVision system.

# 12 IPX

To change the camera's IP address, make sure the DIP switch on the camera's left flank panel is set to 4 (STATIC IP).

To run the utility, connect the camera to a computer using a USB cable. The following window is displayed.

The screenshot shows the 'USB Configuration v1.03' utility window. The title bar reads 'USB Configuration v1.03'. The window is divided into several sections:

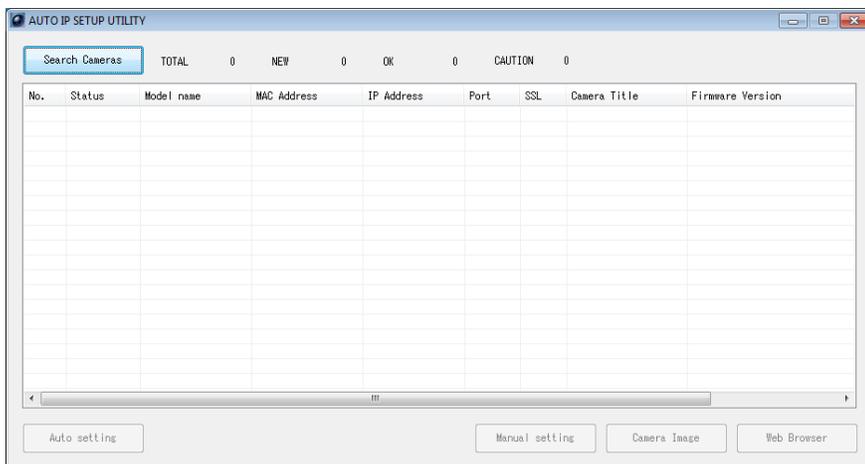
- Title:** ipxcam(00:0C:0C:01:73:CF)
- IP Address:** 192, 168, 1, 61
- Gateway:** 192, 168, 1, 254
- HTTP Port:** 80
- PPPoE Enable:** OFF (dropdown menu)
- Account:** (empty text field)
- Mode Setting:**  Infra-structure  Ad-Hoc
- Channel:** (empty dropdown menu)
- Default Key:**  1  2  3  4
- Key1:** (empty text field)
- Key3:** (empty text field)
- DHCP:** OFF (dropdown menu)
- Netmask:** 255, 255, 255, 0
- DNS Server:** 64, 132, 94, 250
- Password:** (empty text field)
- ESSID:** (empty text field)
- WEP Key:**  Disable  64 bit  128 bit
- Key2:** (empty text field)
- Key4:** (empty text field)

At the bottom of the window, there are three buttons: 'Launch(L)', 'Apply(A)', and 'Exit(E)'.

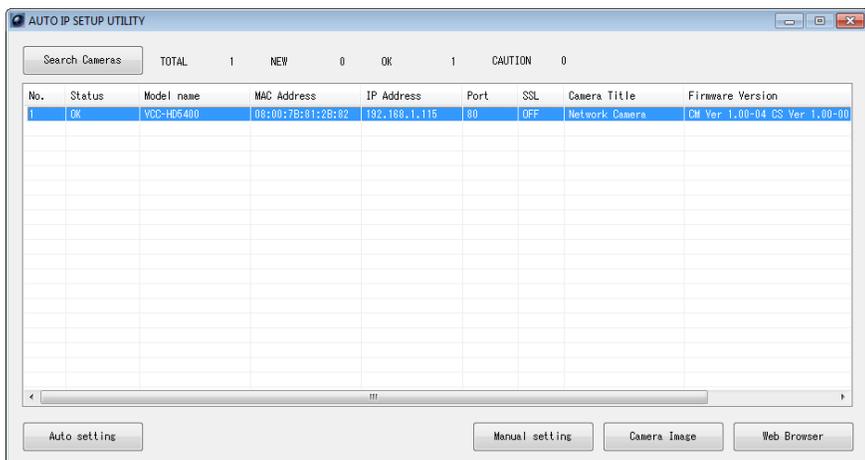
Select OFF from the DHCP drop-down list in the utility. Enter the IP address, netmask, gateway, DNS server, and HTTP port information. Click Apply and then Exit when finished.

# 13 Sanyo

Sanyo provides the Auto IP Setup utility to find and configure IP settings on Sanyo cameras. Run the utility (you must be logged in as an Administrator in Windows 7) to display the following window.



Click Search Cameras to locate Sanyo cameras on your network. This process can take several minutes to complete.



When the camera appears in the Search results list, select the camera and click Auto Setting. This automatically assigns an IP address and other network information to your camera.

The screenshot shows the 'LOGIN' window. It contains the following fields and options:

- Text: "Please input User name and Password of the camera."
- Text input field: "User name"
- Text input field: "Password"
- Text: "Set below as well when using SSL or changed port number."
- Text input field: "Port" with the value "80"
- Radio buttons: "SSL" with options "ON" and "OFF" (selected).
- Buttons: "Execute" and "Cancel"

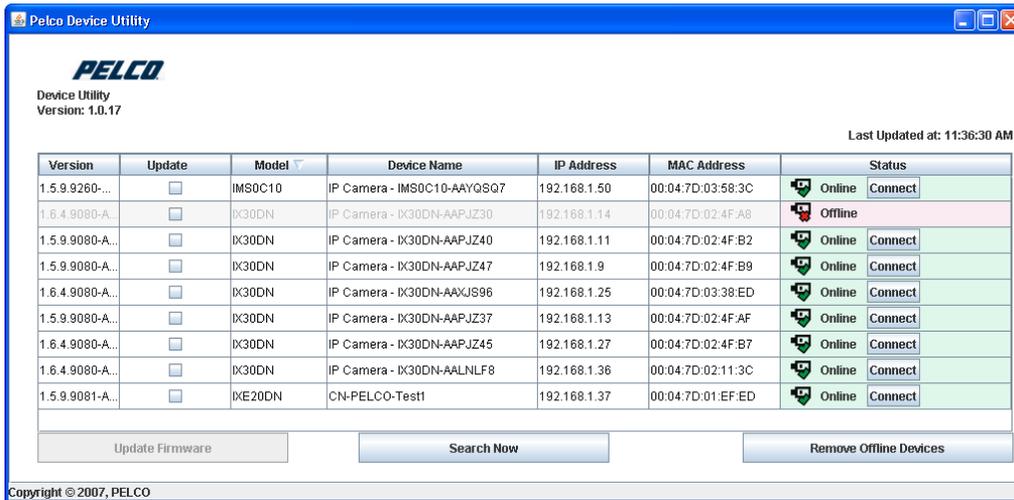
To assign a specific IP address to the camera, click Manual. This opens a Login window; enter the default credentials and click Execute. When you are logged in, you can assign IP information to the camera. When finished, click Execute. After the camera completes the update, the newly assigned camera information is displayed in the Search results list.

**NOTE:** The factory default login for Sanyo cameras is:

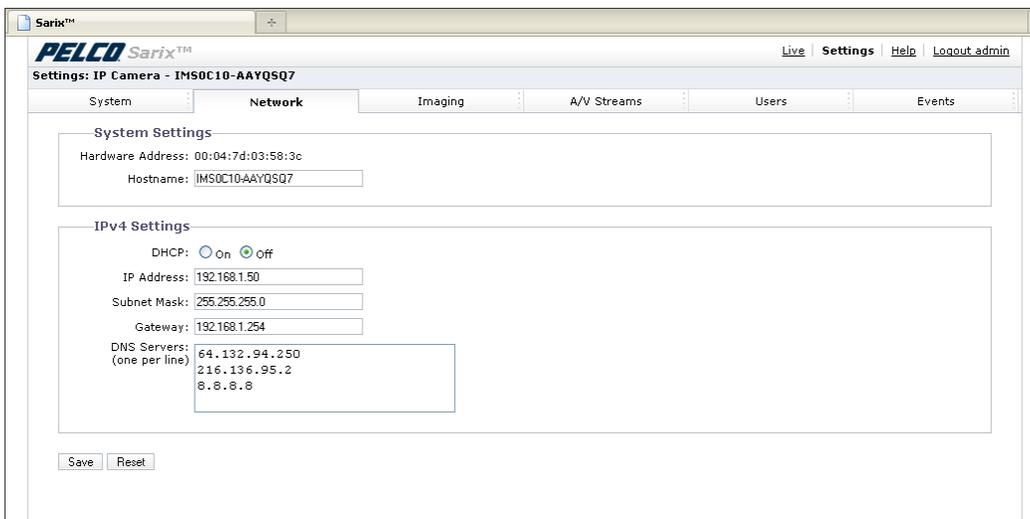
- username: **admin**
- password: **admin**

Pelco provides the Pelco Device Utility to find and configure IP settings on Pelco cameras. Run the utility to display the following window.

**NOTE:** To run the Pelco Device Utility, Java must be installed on the computer. For complete information about the Pelco Device Utility, see the manufacturer's documentation.



All Pelco cameras on your network are listed in the utility. Click Search Now to update the list. To change the network settings for a camera, select Connect in the appropriate row in the Status column. This opens the camera's web page in the default browser.



To change the IP address, select Off next to DHCP and type the address. Click Save when finished.

**NOTE:** The factory default login for Pelco cameras is:

- username: **admin**
- password: **admin**