

# DIGILINX™ Application Note

## Configuring Panasonic® IP Cameras

The  
IP-Based  
Distributed  
Entertainment  
Company.

### Products Included:

*DigiLinX*

## Introduction

This application note will explain how to integrate the *DigiLinX* IP-Based Multi-Room Audio system with one or more supported Panasonic IP cameras.

## Requirements

Before you begin installing and configuring IP Cameras into a *DigiLinX* IP-Based Multi-Room Audio and Control system, please note the following requirements.

### ***Equipment and Software***

This configuration requires:

- the latest *DigiLinX* Dealer Setup Program (this includes the latest IR firmware updates),
- a supported IP camera, and
- camera configuration software that comes with the camera.

### ***Installer Requirements***

This document assumes the installer:

- has completed *DigiLinX* Dealer Certification Training and other training such as CEDIA boot camp,
- knows how to use basic installation tools such as an RJ-45 crimper to terminate CAT5e cables,
- knows how to use a cable tester,
- understands basic Microsoft® Windows® commands such as how to browse, create folders, save files, etc.

## Reference Material

This document assumes you have read and understood the Dealer documentation provided to you on the *NetStreams* web site. All *NetStreams* manuals can be downloaded by authorized *NetStreams* dealers from the Dealer section of the *NetStreams* web site at [www.netstreams.com](http://www.netstreams.com).



## Camera Setup

1. Disable antivirus software.
2. Insert the camera manufacturer's CD into the computer attached to the *SwitchLinX™*. The software will autorun. A setup screen displays (see Figure 1).



**Figure 1** Network Camera window

3. Select **Camera Setup**. You are prompted to temporarily disable anti-virus software (see Figure 2).

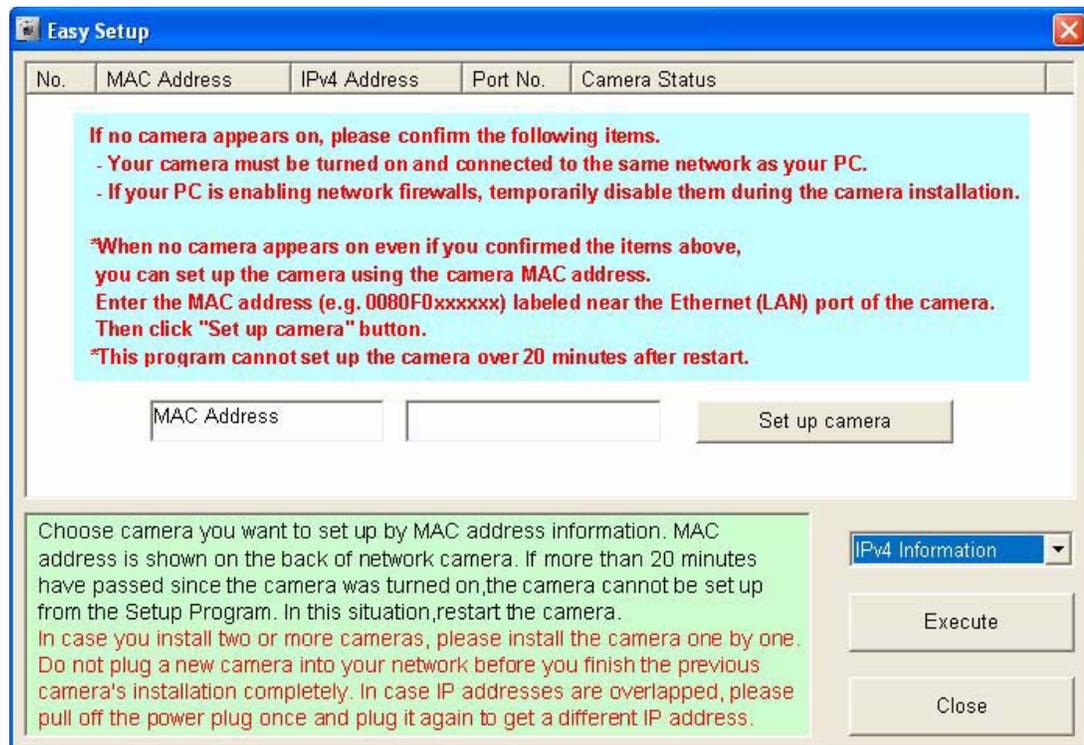


**Figure 2** Disable anti-virus software prompt

4. Select **OK**.

The Easy Setup Administration page displays (see Figure 3).

**NOTE:** Any previously-installed and configured cameras will display. This example shows no previously-installed cameras.



**Figure 3** Easy Setup Administration page (no entry)

5. Connect a CAT5e cable from the IP camera to the *SwitchLinX*.

6. Connect power to the IP camera.

The new camera displays in the Easy Setup Administration page (see Figure 4).

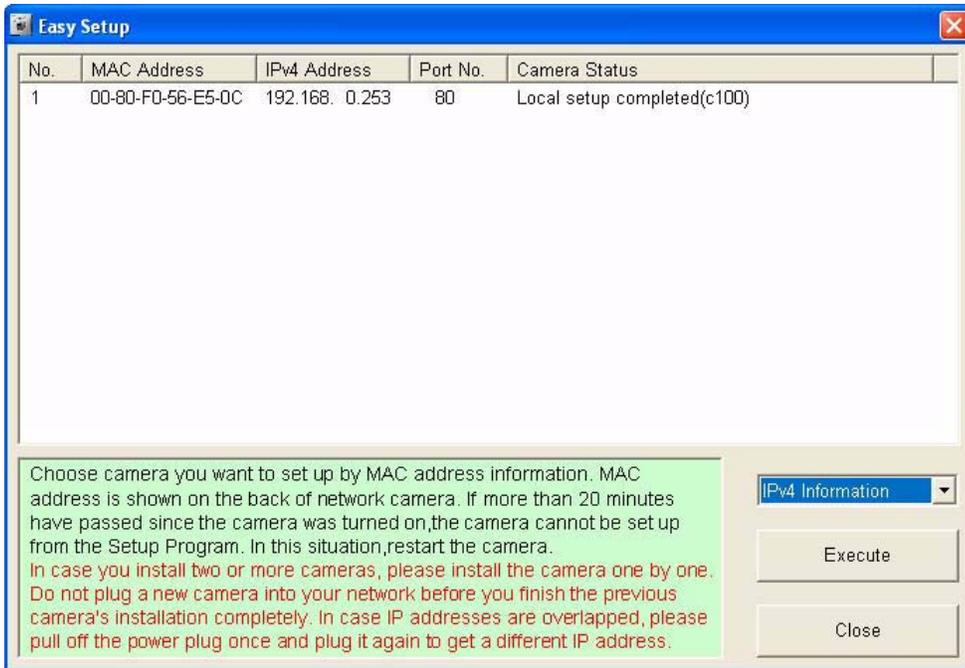


Figure 4 Easy Setup Administration page (with camera)

7. Highlight the camera you are configuring.

8. Select **Execute**.

The MAC Address window displays (see Figure 5).

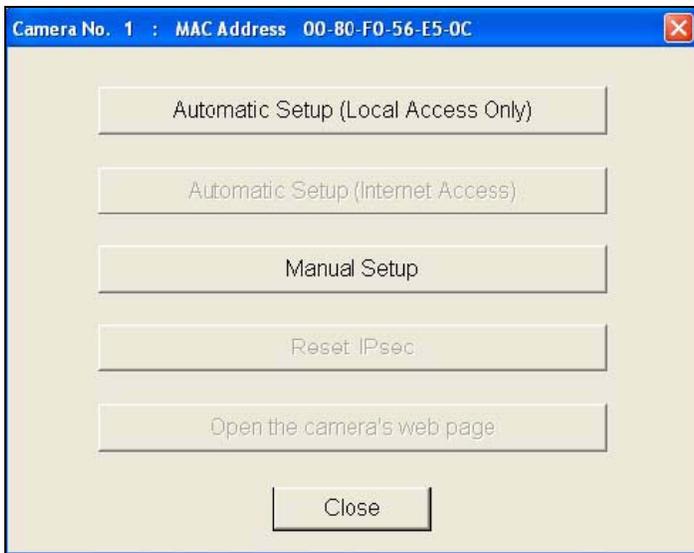


Figure 5 Automatic or Manual setup prompt

9. Select **Manual Setup**.

The Manual Setup window displays (see Figure 6).

**Manual Setup**

Camera Name: My Desk

Port Number: 80

Static

IP Address: 10 . 15 . 100 . 253

Subnet Mask: 255 . 0 . 0 . 0

DHCP

Host Name:

Default Gateway: 0 . 0 . 0 . 0

DNS Server1: 0 . 0 . 0 . 0

DNS Server2: 0 . 0 . 0 . 0

Band Width: Unlimited

Set up Port forwarding(\*1) on the router to access the camera from the Internet.  
 (\*1) Port forwarding is sometimes called "Address translation", "Static IP Masquerade", "Virtual server" or "Port mapping".

Save Close

**Figure 6** Manual Setup window

**NOTE:** Previously-installed and configured cameras will display in the window. Note the IP address range used by cameras already installed (if applicable). If no other cameras display, see *Finding IP Settings* on page 1-14.

**10.** Enter camera information (the same IP Address range as your *DigiLinX* devices) as follows:

- Static IP Address
- Static Subnet Mask
- Default Gateway
- DNS Server1

**11.** Select **Save**.

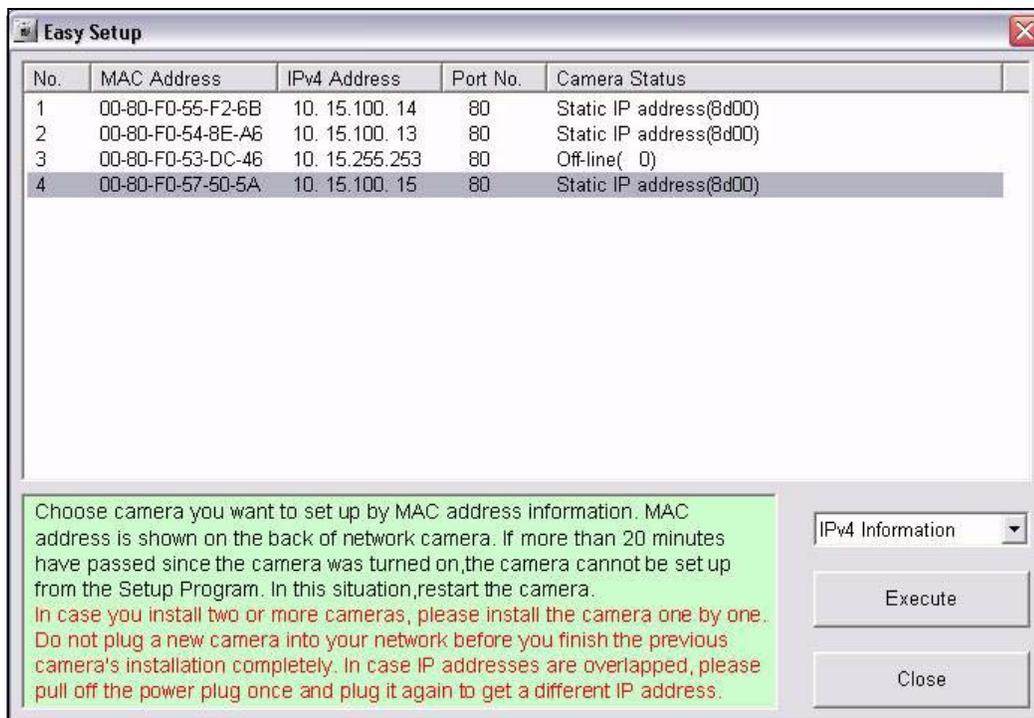
You are notified that the camera setup was completed (see Figure 7).



**Figure 7** Setup Complete window

**12.** Select **Close**.

The camera is configured. You are taken to the Security: Administrator page (see Figure 8).



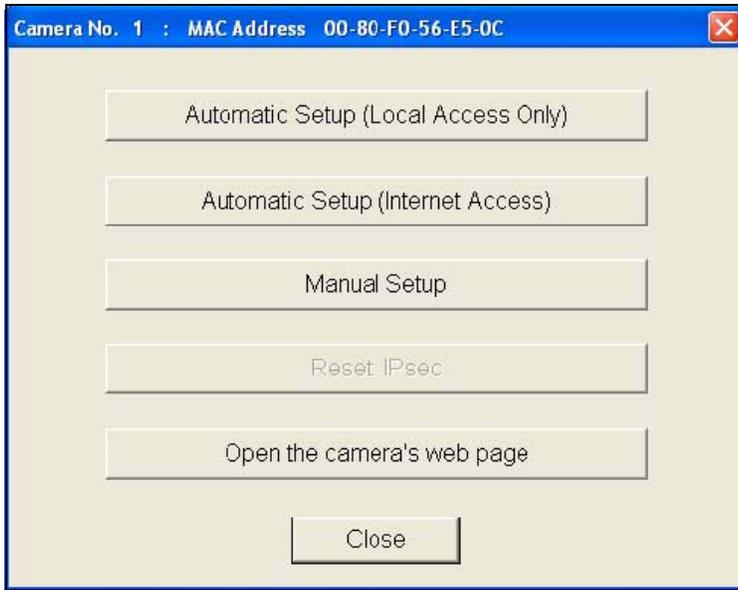
**Figure 8** Security Administrator page

**13.** Continue to *Setting Camera Security*.

## Setting Camera Security

After installing and configuring the IP camera, the security must be enabled for a guest account. Complete the following procedures to set up the guest account:

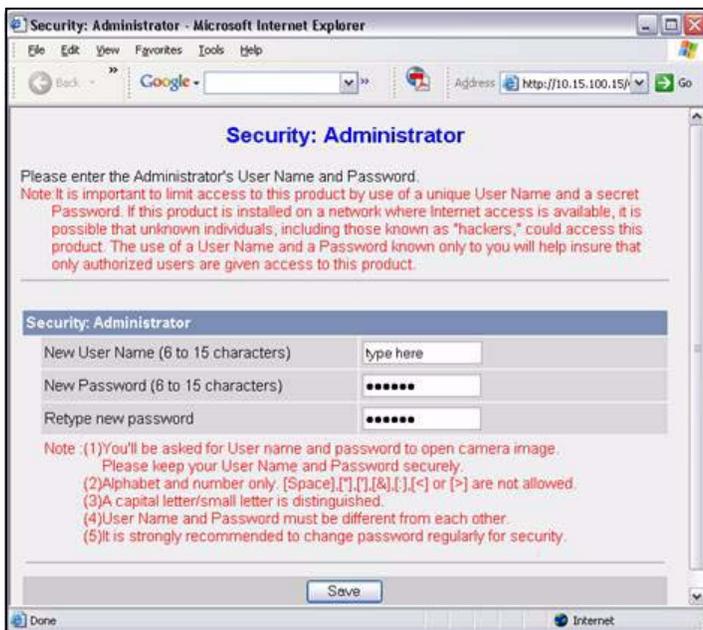
- From the Easy Setup Administration page, highlight the camera you are configuring and select **Execute**. The MAC Address window displays (see Figure 9).



**Figure 9** Mac Address window.

**2. Select **Open the camera's web page.****

A Web browser window opens to the Security: Administrator page (see Figure 10).



**Figure 10** Security:Administrator page

**3. From this screen:**

- Enter a User Name.
- Enter a Password.
- Retype the password.

4. Select **Save**.

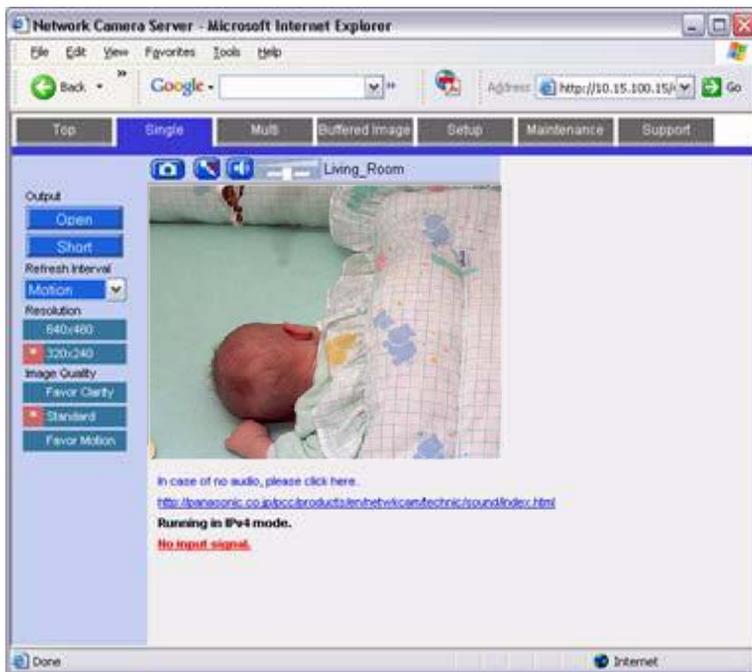
You are prompted to enter the Administrator User name and Password you've just created (see Figure 11).



**Figure 11** User name and Password prompt

5. Select **OK**.

The screen displays the live camera view (see Figure 12).



**Figure 12** Live motion video

6. Select **Setup**.

The Network information window displays (see Figure 13).

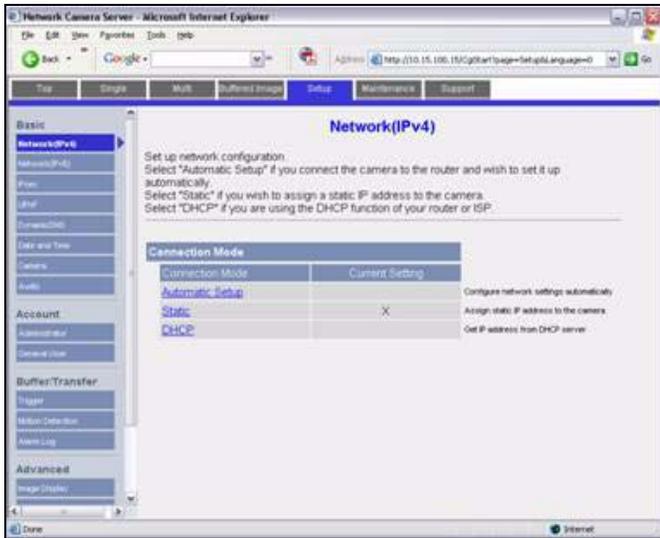


Figure 13 Network information window

7. Select **Administrator** under Account.  
Administrator options display (see Figure 14).



Figure 14 Administrator options window

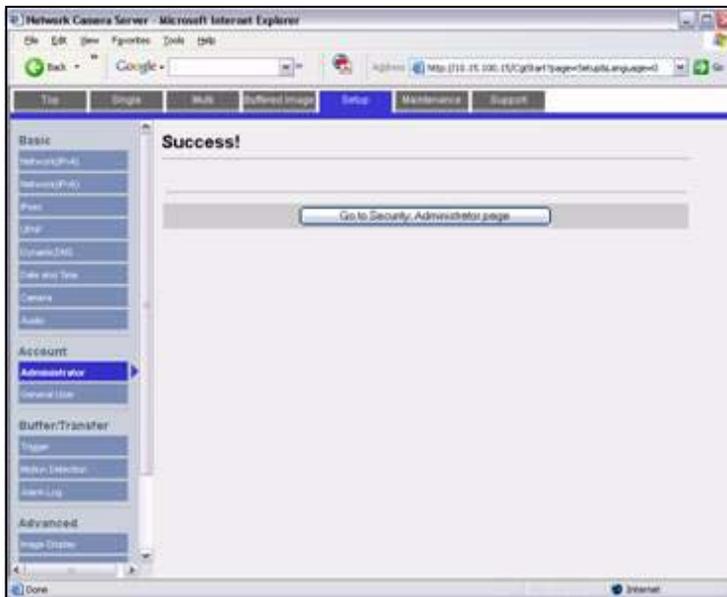
8. Select **Permit access from guest users**.
9. Select **Save**.  
You are prompted that by enabling guest user access, there may be security issues (see Figure 15).



**Figure 15** User access prompt

**10.** Select **OK**.

Your settings are saved (see Figure 16).



**Figure 16** Administrator options saved

**11.** Select **General User** under Account.

The General User window displays (see Figure 17).

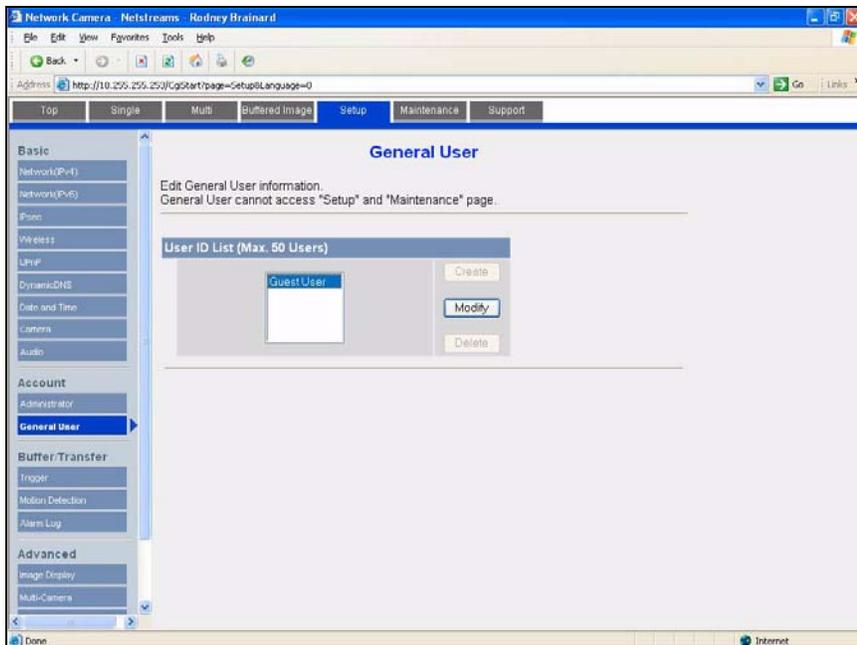


Figure 17 General User window

12. Select **Guest User**.

13. Select **Modify**.

The Modify General User registration information screen displays (see Figure 18).

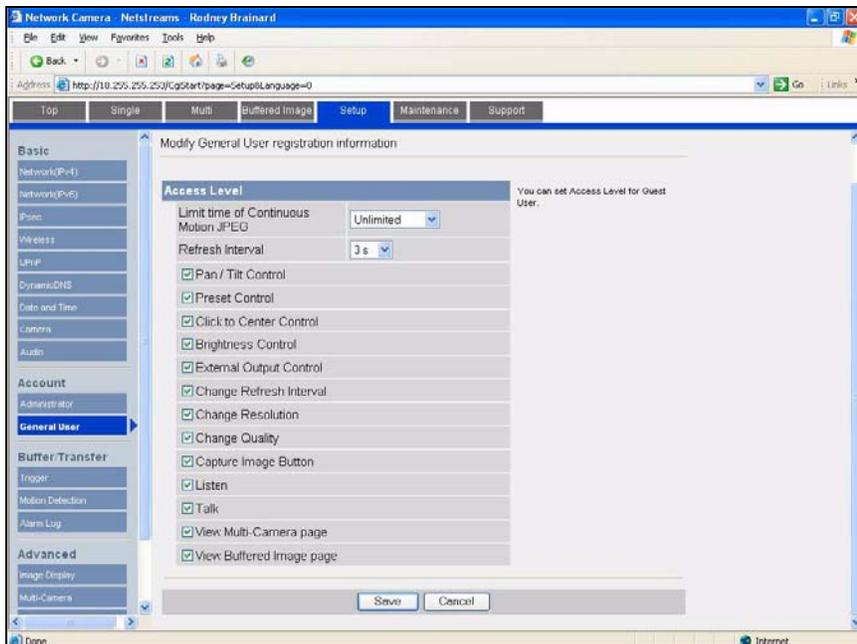


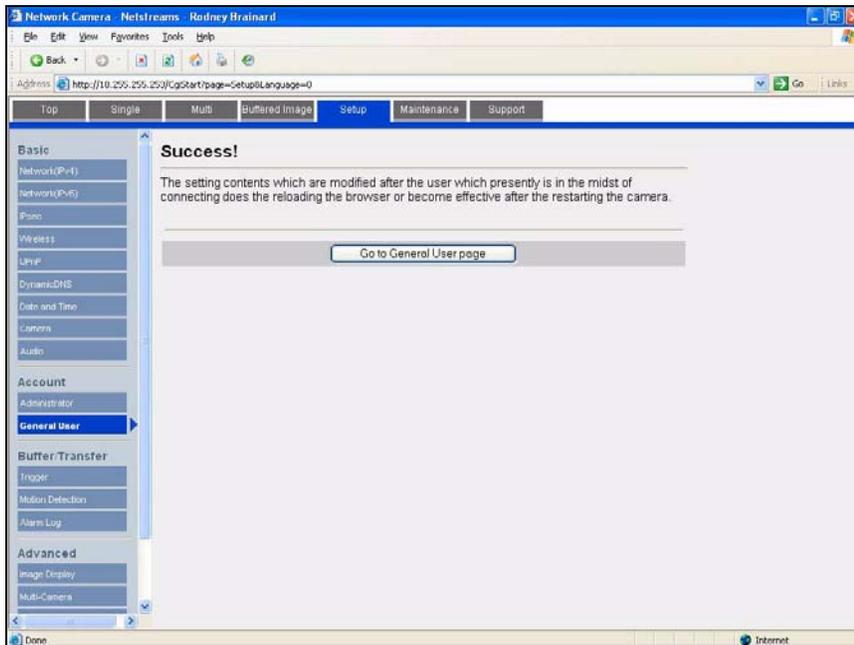
Figure 18 Modify General User registration information screen

14. Select **Enable Pan/Tilt** control.

15. Select **Preset Controls**.

16. Select **Save**.

Your settings are saved (see Figure 19).



**Figure 19** Settings Saved

## Configuring the IP Camera in Dealer Setup

To add devices to the project, complete the following steps:

1. Open *DigiLinX* Dealer Setup.  
You are asked if you want to use the Wizard.
2. Select **No**.
3. Select **File>Open** to open the project.  
The project window opens in the left half of the screen (see Figure 20).



**Figure 20** Project window

4. Select the **Add Devices** icon (  ).

A Devices area displays in the right window pane (see Figure 21).



Figure 21 Add Devices

5. Enter a 1 next to IP camera.
6. Select **Add to Project**.  
You are prompted for camera information (see Figure 22).



Figure 22 IP Camera Information

7. Enter the following:
  - Camera Name. Descriptive name for the unique camera. For instance, "Kitchen Camera."

**NOTE:** This name appears on all user interfaces.

- ❑ IP Address. This is the IP address that you should have set the camera to when the camera was initially set up.
- ❑ Camera Type. This is the brand of camera you're using. Select from the dropdown list (using the down arrow key) to choose a camera type.

See Figure 23 for an example of the completed device information.



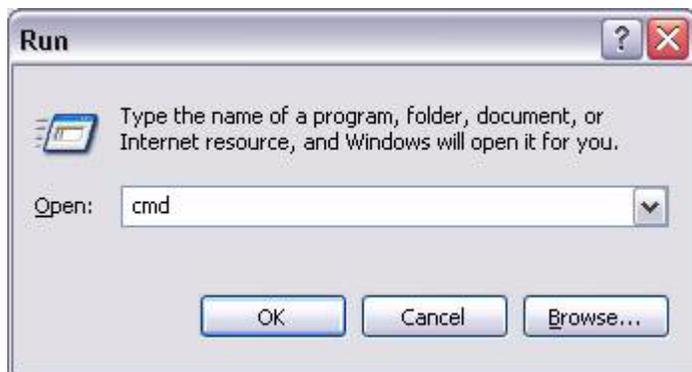
**Figure 23** IP Camera dialog box

8. Select **Save & Continue**.  
Configuration for that camera is complete.

## Finding IP Settings

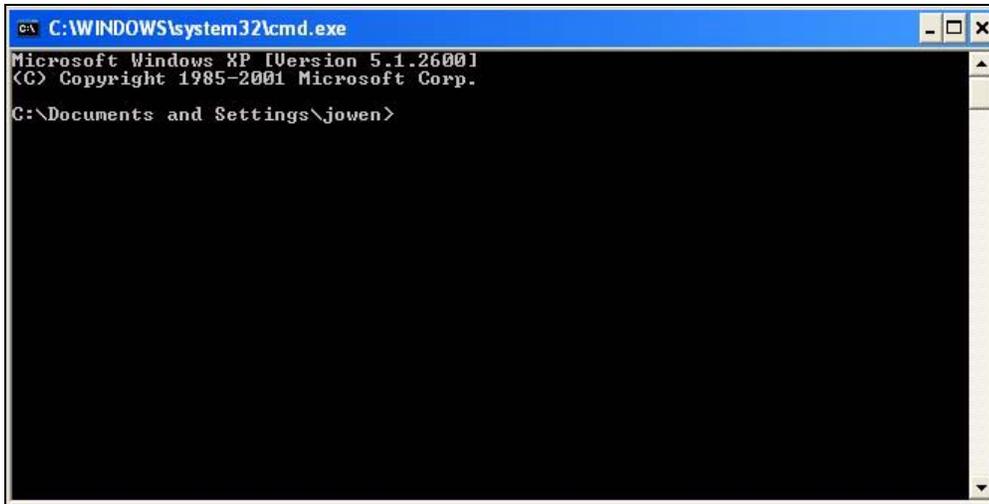
To find the gateway and DNS settings, complete the following steps:

1. From the PC connected to the *DigiLinX* and select **Start>Run**.  
The Run window displays (see Figure 24).



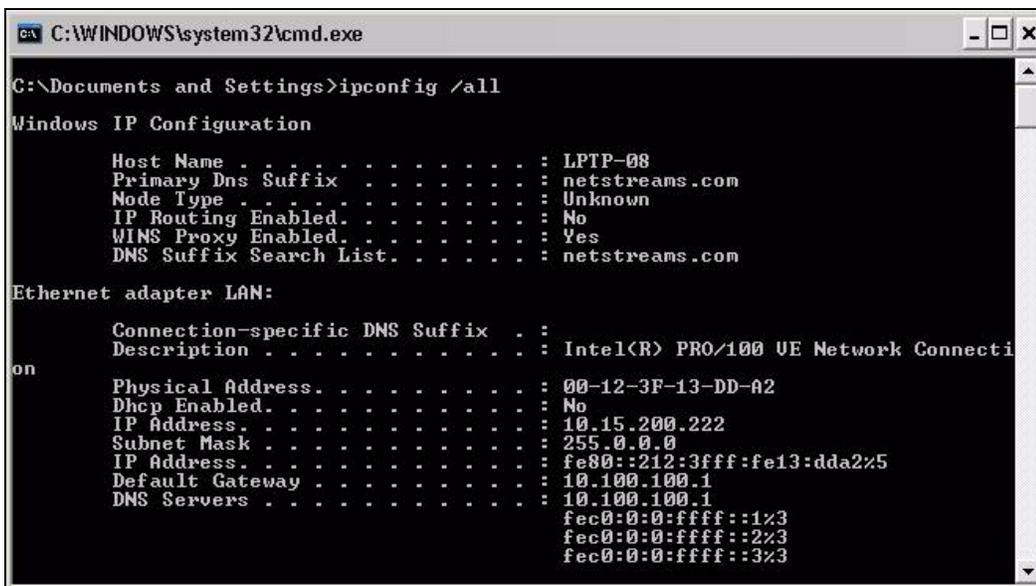
**Figure 24** Run window

2. Enter **cmd**.
3. Select **OK**.  
A DOS window displays (see Figure 25).



**Figure 25** DOS window

4. Type `ipconfig /all` and press **Enter**.  
The IP configuration displays (see Figure 26).



**Figure 26** IP configuration

5. Copy the Default Gateway and DNS Servers information into the camera.
6. Close the DOS window.