

How to Remotely View Security Cameras Using the Internet



Introduction:

The ability to remotely view security cameras is one of the most useful features of your EZWatch Pro system. It provides the ability to check on your home or business with any computer or lap top which has an internet connection. The remote viewing feature also allows you to remotely review and download the recorded clips as well as view and control security cameras.

The following is intended as a basic guide to help you understand what is required to remotely view your security cameras through your EZWatch Pro DVR/Camera Server. For clarification, the term "DVR/Camera Server" is used to describe a computer which has the EZWatch Pro software installed and the security cameras connected to it. "DVR" stands for Digital Video Recorder. It is the main computer or server.

To accomplish remote viewing, the remote or off site PC uses the internet to connect to the DVR. The DVR acts as the video server to feed the cameras video to the remote PC.

On Site:

First, the security cameras should be connected to the EZWatch Pro DVR. The DVR must be turned on and running the EZWatch Pro software. The DVR must have an internet connection, preferably broad band (DSL or Cable). The DVR will require a static IP address (provided by your internet provider) or you can use our EZWatch IP service which eliminates the need for a static IP address. On page (2) you will find detailed information about choosing to use our EZWatch IP Service or pay your internet provider for a static IP.

Remote Computer:

The remote computer can be a standard PC or a lap top with DSL, Cable or Dial Up Internet access. We highly recommend using DSL or Cable internet connections, especially if you are going to remotely view four or more security cameras. Dial-Up access is acceptable if you are only working with one or two cameras.

Remote Access:

You have two options for remotely viewing your cameras using the internet. You can access the DVR/Server by using Internet Explorer or loading the EZNetwork software on to the remote PC. The EZNetwork software is found on the DC which can with your EZWatch Pro DVR.

Internet Explorer allows you to remotely use the most common functions of the DVR such as viewing cameras and playing back the recorded video clips. If you want the ability to remotely change system configurations such as recording times and time activated events, you will need to install EZNetwork software onto the remote PC. The EZNetwork software allows complete control of all aspects of the system as if you were there .

Internet Access, Viewing Cameras & How it Works

The emergence of high speed internet service in the late 90's brought about the use of static and dynamic IP addresses. These addresses allow users to connect to the internet through Internet Service Providers (ISP). The addresses work just like the mailing address for your home or business. It is the internet address your computer uses while it is connected to the internet.

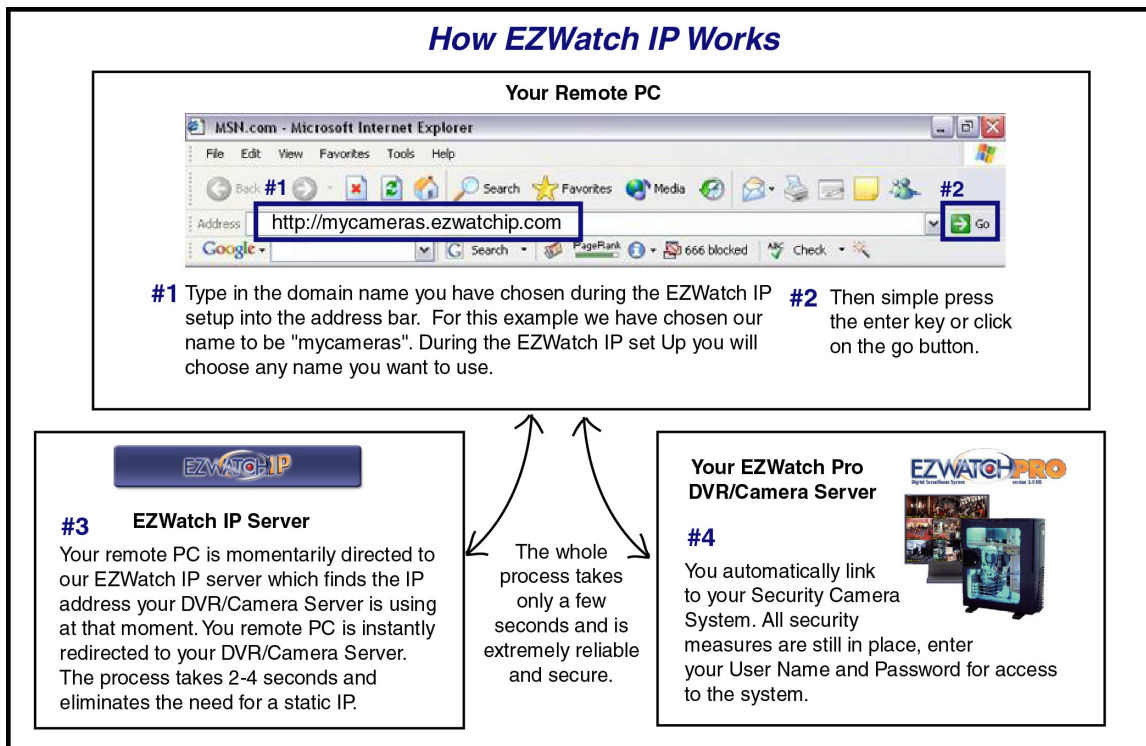
Both static and dynamic addresses work in similar ways. They both allow you access to the internet. But static addresses never change. Every time you access the internet you have the same address or IP. Dynamic addresses can change each time you connect to the internet. Because of this, dynamic addresses cause a problem when trying to link to the same computer multiple times through the internet. The address or IP for the computer you are trying to access can randomly change making it impossible for the remote computer to find the other computer through the internet. All internet providers will issue Dynamic IP address to their customers. Static IP addresses are considered an additional service and cost an additional monthly fee. Because of this you must choose to pay your internet provider for a static IP address or sign up for our EZWatch IP service which eliminates the need to pay for a static IP. We highly recommend using the EZWatch IP service because it usually saves you money and it allows our support technicians to provide complete trouble shooting support.

EZWatch IP Service:

The high cost of static IP addresses and their limited availability is why we have created our EZWatch IP service. This service eliminates the need for static IP addresses. It only requires a normal internet connection at both computers and the service greatly simplifies the set up process. EZWatch IP continuously monitors the IP address of the DVR and when you want to remotely view your cameras the service automatically redirects you to the IP address the DVR/Camera Server is currently using. The cost of our service is \$14.95 per month, usually a fraction of the costs of static IPs.

How EZWatch IP Works:

The EZWatch IP service allows you to custom create a domain name on our server. You simply type that domain name into the address bar on your web browser and the EZWatch IP service automatically redirects you to your DVR/Server anytime you want to log into your system to view and control security cameras. This service greatly simplifies the remote viewing set up.



Setting Up Internet Access Using EZWatch IP Service



Step #1:

First make sure the EZWatch Pro DVR/Camera Server has a connection to the internet. This can be DSL, Cable or Dial Up. Make sure you are able to surf the web before moving to step 2.

Step #2:

Using the DVR/Camera Server, log on to our EZWatch IP web site at www.ezwatchip.com. Click on the Sign Up tab and enter in your information following the steps. After you have entered all your information, click on the download link and save the EZWatch IP Setup program to your computer. Be sure to remember where you saved this program so that you can find it when you are ready to run the installation.

Step #3:

Once the software download is complete. Click on the EZWatchIP-Setup.exe icon and click on Run to install the EZWatchIP software.



Follow the steps indicated. After you have completed the installation, if the program doesn't automatically open the sign on screen, then click on the Red EZWatchIP icon on your desk top.



This will open the log in screen where you will enter the user name and password you created when you signed up for the service. After you enter your information simply click the **Begin Update** button and you are finished. This will send the first communication to our IP server and activate your account.



If you encountered any problems up to this point please call our tech support personnel for help 1-866-241-3400.

After you click the **Begin Update** button the login in screen will disappear and our round red EZWatch IP icon will appear in your task bar. This icon indicates the service is operating.



The EZWatchIP program will check every 30 minutes to see if your Public IP Address has changed. If it has, it will send the new address to our system so that the domain name you created (test.ezwatchip.com for example) will now be changed and allow you to access your system remotely.

Step #4:

Now that you have your EZWatchIP service up and running the next step is to configure the DVR so that you can access it remotely. Following the steps on the next page will guide you through opening your ports on your router or modem so that you can now use the system. Just remember when you go to your remote location(s) when it asks you to enter your IP address you will instead enter your domain name you have created with EZWatchIP.

Configuring Your DVR for Remote Access Using the EZWatch IP Service or a Static IP

Note: The steps listed below are required for use with static IP address or the EZWatch IP service

Overview: This guide will assist you in the setup and configuration of a Router or Cable Modem that is configured with a Dynamic IP Address. The first thing you need to know is whether or not you're using Cable Internet or DSL. Typically, if you're using Cable Internet, you are being assigned an IP Address from your Service Provider dynamically. If using DSL, you will need to check with your Service Provider to see if your IP address is being dynamically assigned. If so, then you will also need to follow the steps below.

Step #1: Finding out your current IP Address: Click "Start", go to Run, and type cmd. This will bring up a command prompt with a blinking cursor. Type, ipconfig/all, this will display all of your current IP information. You will need to write down the following four numbers: IP Address: Subnet Mask: Default Gateway: DNS Servers: [There will be 2 of these addresses]

```
C:\WINDOWS\system32\cmd.exe

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Description . . . . . : Realtek RTL8139 Family PCI Fast Eth
    Physical Address. . . . . : 00-30-18-54-65-AD
    Dhcp Enabled . . . . . : No
    IP Address. . . . . : 192.168.1.17
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1
    DNS Servers . . . . . : 206.81.128.1

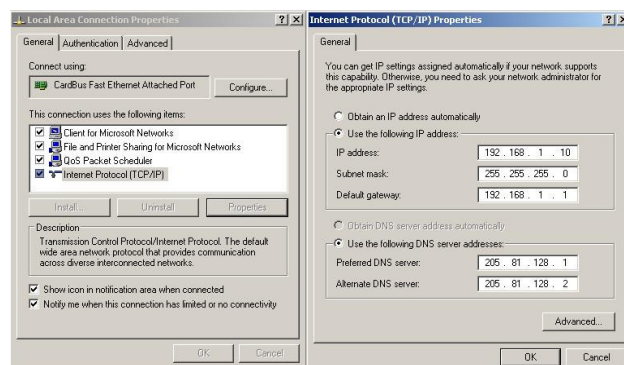
Ethernet adapter Local Area Connection 2:

    Connection-specific DNS Suffix  . : 
    Description . . . . . : Microsoft TU/Video Connection
    Physical Address. . . . . : 00-00-00-00-00-00
    Dhcp Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
    Autoconfiguration IP Address. . . : 4.0.1.0
    Subnet Mask . . . . . : 255.255.255.255
    Default Gateway . . . . . :

C:\Documents and Settings\User>
```

Go to Internet Explorer and type in the following address: <http://www.whatismyip.com> If your IP address is the same here as from ipconfig, then skip to step #6. This indicates that you have no local router and that you are connected directly to the internet. You will not need to set up port forwarding.

Step #2: How to manually configure a local IP address: Click "Start, go to Control Panel. Click "Network and Internet Connections" then "Network Connections". Now, right click on your "Local Area Connection" and go to Properties. Then, left click once on "Internet Protocol (TCP/IP)" so it's highlighted and then below it click "Properties". In the Internet Protocol (TCP/IP) Properties window, you will input all the IP information we wrote down in Step #1. So choose "Use the Following IP Address" and put in your IP information. In the lower box, choose "Use the following DNS server addresses" and input your primary and secondary DNS server addresses. Lastly, click "Ok" at the bottom to save your settings. Now check to make sure you can still access the Internet. If you can, continue to Step #3, if not, you may need to double check your settings or contact our Technical Support Department for further assistance.



Step #3: Accessing your Router or Cable Modem:

First, you will need to find out exactly what brand of router or cable modem you're using. Normally, you can access your router or cable modem thru it's built in LAN interface. To do so, you would pull up Internet Explorer and in the address bar, type the Default Gateway address you wrote down in Step#1.



Hint: If the third portion of your IP address was a 1, then typically you would use 192.168.1.1 to access your router or cable modem. Or if the third portion of your IP address was 0, then you would use 192.168.0.1. Once you have successfully accessed your router or cable modem, you will need to input the user name and password.

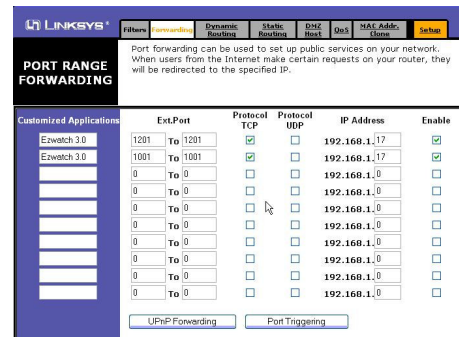


Step #4: Setting up Port Forwarding in your Router or Cable Modem:

Go to the web address www.portforward.com Click on Forwarding at the top and choose the router or cable modem your using and follow the instructions on how to setup port forwarding. You will follow the instructions step by step EXCEPT that you will need to forward on Ports 1201, 1001, 1201 and 1901 with the type being TCP. It will then ask you for an IP address, simply use the same IP address you assigned your computer in Step #1. You should have a button at the bottom that will allow you to save your settings. Click it to save your settings.

Hint: You will have an entry for each one of the ports 1201, 1001, 1201 and 1901. Like the example below.

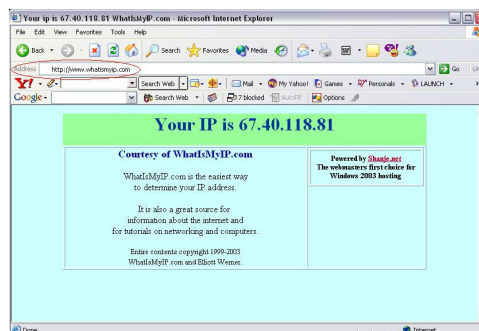
You will also need to forward ports 80 or 8000 for web browser access. **Note:** Some routers already have port 80 forwarded or included. Some ISP's block port 80 to prevent its users from web hosting. It is then necessary to use port 8000 instead. You should use port 8000 if you aren't sure.



Step #5: Finding the IP address of your DSL or Cable Modem:

The easiest way to determine the IP address of your DSL or Cable Modem is to go to the website www.whatismyip.com You will need to write this IP address down and take it with you. When you're at the remote computer, the EzNetwork 3.0 application will prompt you for an IP address. This is the one you will use.

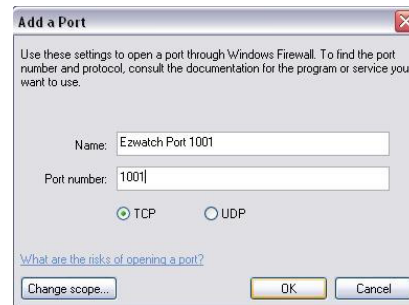
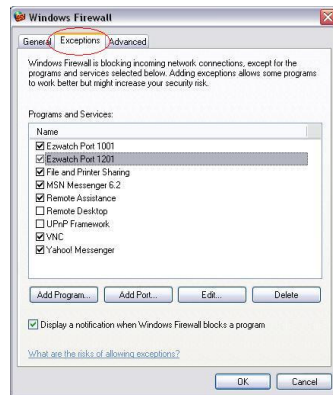
Hint: If you are accessing the computer from inside your network or from a computer that is also connected to the same router or cable modem, then you can input the local IP address of the computer running EzwatchPro 3.0.



Step #6: Firewalls:

If you are using any type of firewall whether it is software or hardware, you will need to open up ports 1201, 1001, 1201, 1901 and 80 or 8000. If not opened, the firewall will block the incoming request and you will not be able to connect. If you are using Window's XP with Service Pack 2 Installed, then you are behind a Firewall. Service Pack 2 in Window's XP has a built in Firewall that is automatically enabled on system start up. So if you're using Window's XP with Service Pack 2, you will need to open up ports 1201, 1001, 1201, 1901 and 80 or 8000 to allow the incoming connection. Follow the steps below to open the ports.

First, click "Start", then go to "Control Panel". In the Control Panel, click on the "Security Center" icon. This should bring up the Window's Security Center window. At the bottom of this page, click on "Windows Firewall", and it will bring up the Windows Firewall page. Here you will click on the "Exceptions" tab, and then click "Add Port" at the bottom to add the ports. You will need to add ports, one for , 1001, 1201, 1901 and 80 or 8000 as shown below. After you have added both ports, you can click "Ok" to save your settings.

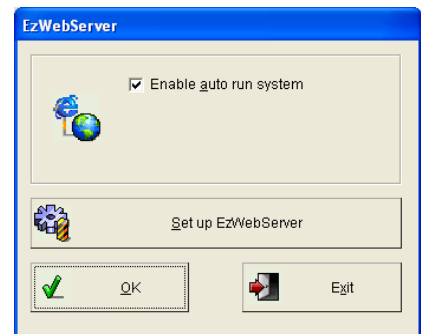


TIP: If you are behind a router or hardware firewall, you can disable windows firewall or any other software firewall on the computer. This allows total access for all the EZWatch applications and makes it easier to setup remote access. You do not need to worry about not having a firewall since a router acts as a firewall.

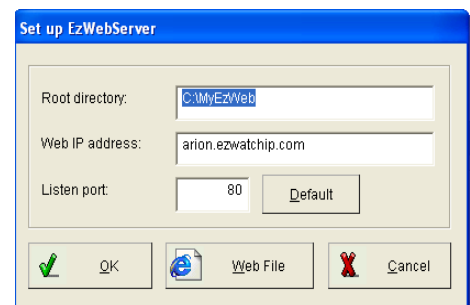
Step #7: How to setup the Internet Explorer browser server or EzWebServer:

The following will help you to set up EzWebServer so you can view your camera system from a remote location via Internet Explorer.

First: Go to start, All Programs, EZWatch 3.0 HD and click on "IE Browse Server – EzWebServer". Now that you are in the program, check "enable auto run system". This is to ensure that the web server will start every time the computer starts. Click on "Setup EzWebServer".

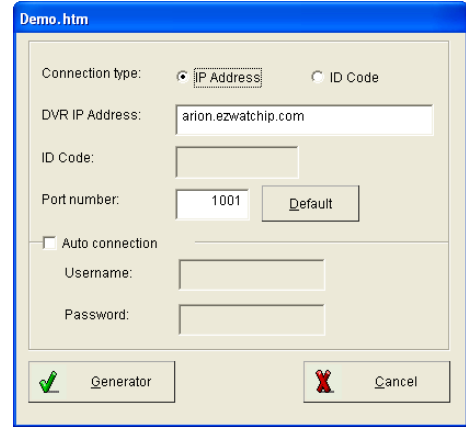


Root Directory is where the web files are stored. You do not need to change this. Web IP address is where you input your internet IP address or the address that you got from <http://www.whatismyip.com> If you have a domain name from our EzWatchIP service or elsewhere, you can insert it here. Listen port is port that the browser uses to connect to the web server. The default is 80. You can either leave it or change it to 8000 as mentioned in step # 4. Click on "Web File".



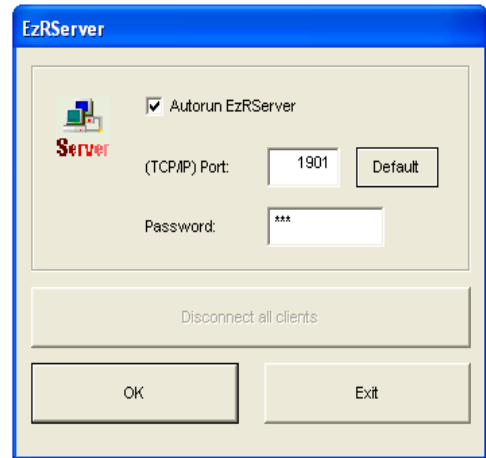
Connection Type: Leave this set to IP Address
 DVR IP Address: Insert your internet IP address or your domain name.
 Port number: This should be set to 1001 or the default.
 Auto connection is optional but not recommended. Check this option, input your username and password if you want the browser to log you in automatically from the remote site.

Click on “Generator” once completed. Then click ok, ok and ok. The EzWebServer is now running. You should be able to access your system remotely via the web browser.



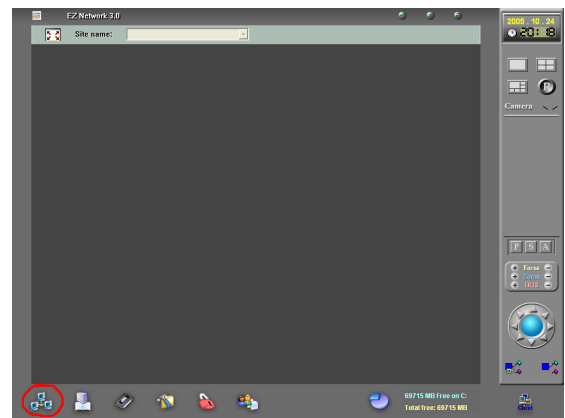
Step #8: How to setup Remote desktop administration or the EzRServer. This section will assist you in setting up the EzRServer so that you can have total control of your camera server from a remote location.

Click on Start, All Programs, EzWatchPro 3.0 HD, and click on “Remote Control Server – EzRServer”. Check “Autorun EzRServer” so that it will start automatically when the PC starts. (TCP/IP) Port: Leave this set to the default port of 1901 Password: Choose a password Click on ok to exit and leave the program running.

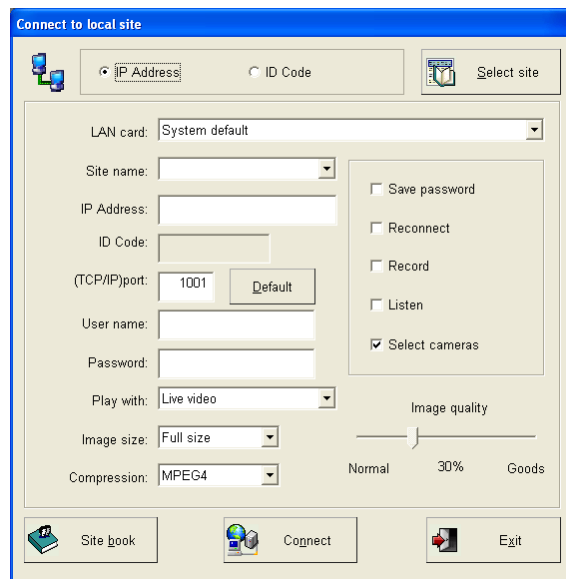


Step #9 How to access your camera system remotely using EzNetwork 3.0 This section will give you a brief overview of how to use EzNetwork 3.0 to view your cameras and to do desktop administration. **You should be at a remote computer or location for these steps.** Installation: EzNetwork 3.0 can be found on your EZWatchPro installation CD. You will need to install this and the Access Runtime “Database” components on your remote PC for the software to function. Once EzNetwork 3.0 has been successfully installed, you can click on the icon on your desktop that says “Remote-Viewer EzNetwork 3.0 to start the program.

To connect to your camera server, click on the “Connect to local site” button located on the bottom right of your screen.

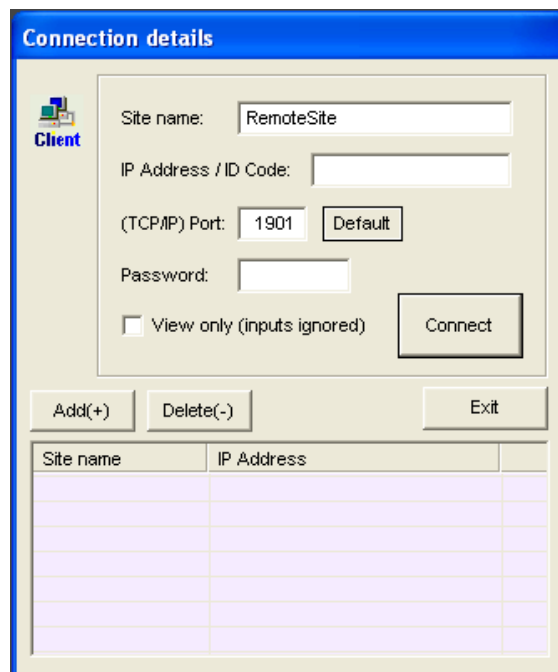
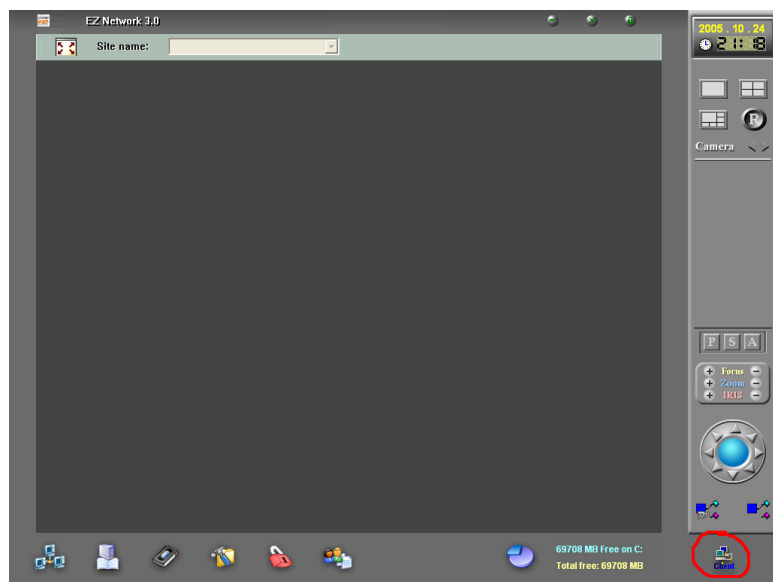


These are the required steps to make a connection. Site name: You must input a site name. It doesn't matter what You decide to name it. IP Address: Input your internet IP address or domain name for your camera server. Leave the TCP/IP at the default port 1001 Input your user name and password from EzWatchPro Surveillance Server. The default user name is "root" and the Default password is "123". Play with: You have 3 choices here. You can watch live video from The camera sever. You can watch previously recorded video clips. And you can download the actual file onto your computer. After entering in the info above, you can click on connect. Provided you followed all steps correctly, you should be able to Select your cameras and view them. **Note:** Do not select ID Code. It is not an active function in this Current release of software.



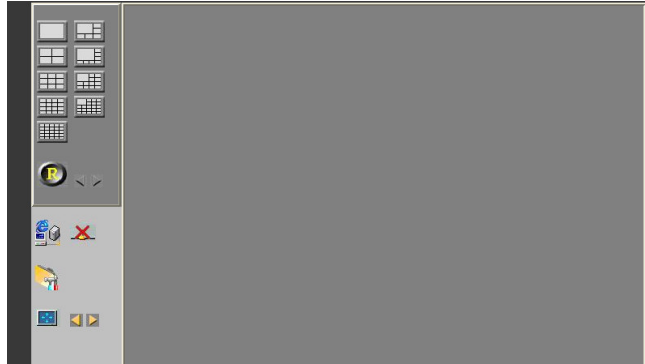
Remote desktop administration:

On the main screen for EzNetwork 3.0 you can find an icon that says "Client". Click on this to get the screen shown to the right. IP Address / ID Code: Input your internet IP address or domain name for your camera server. Enter your password chosen from Step # 9 Click on connect. You should have full control of your Camera server.



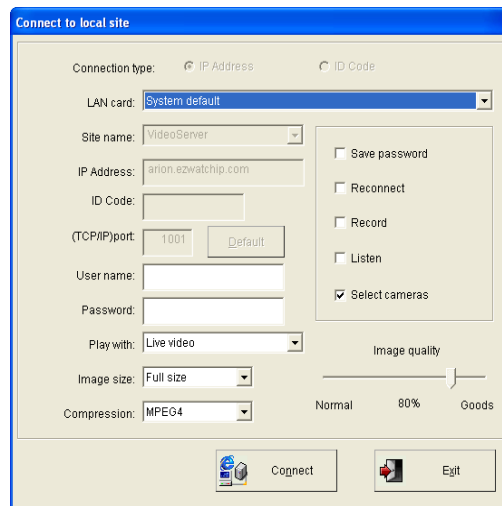
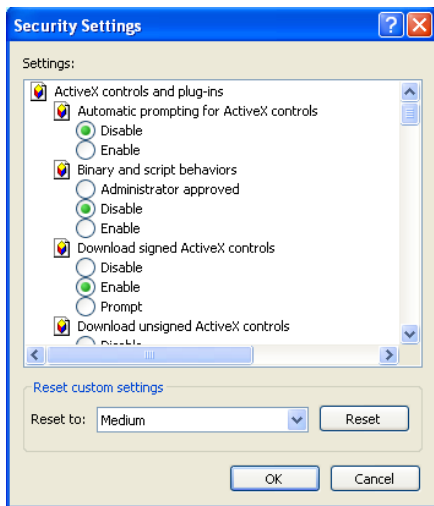
Step #10 How to access your camera server via Internet Explorer.

To access your system via Internet Explorer, simply Input your internet IP address or domain name into The address bar. You can use the following format: For IP address: <http://64.50.125.201:8000/demo.htm> For domain: <http://mydomain.ezwatchip.com/demo.htm> **Note:** When typing in the IP address you can use colon and then your listening port number, either 80 or 8000. Once connected properly you should get the demo.htm page similar to the picture on the left. The web browser Will need to install some ActiveX controls for the Interface. It will either prompt you to install these or install automatically. If you are having problems viewing, you will need to adjust you security settings in Internet Explorer. To do this, do the following: Go to tools, internet options, security, and then to custom level.



The first seven options are for ActiveX controls. Enable all Seven of them and then click ok

Now that you have demo.htm page fully displayed, you can click on “connect to local site” This icon is the one the IE logo and computer. The screen that pops up should look like the one here to the left. You can fill out this box just like the one from EzNetwork 3.0. Click on connect once you are finished. You should be able to select and view all of your cameras.



**For Technical Support on any of the above, feel free to contact our Seasoned Support Staff for any questions or concerns you may have.
Technical Support Toll Free: 866-241-3400**