

Network my DVR now.

Step one. Acquire network information to insert into DVR

If there are a lot of PC's on the network and they have a network administrator contact the network administrator and tell them you need the following:

Static IP LAN address:

Subnet Mask:

Gateway:

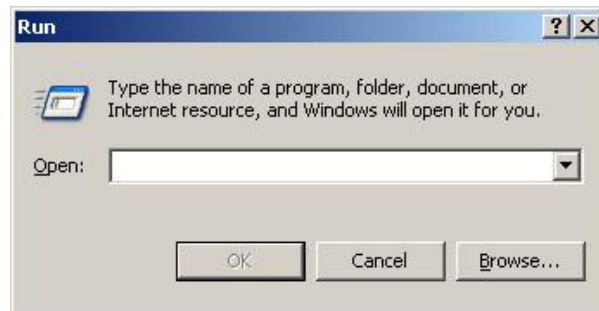
DNS:

Then go to step 5 and provide them the ports that you need to have forwarded to the DVR and let them do it. Then go to Step 2. And you will soon be done.

If they only a few PC's and they have no network administrator then proceed as follows.

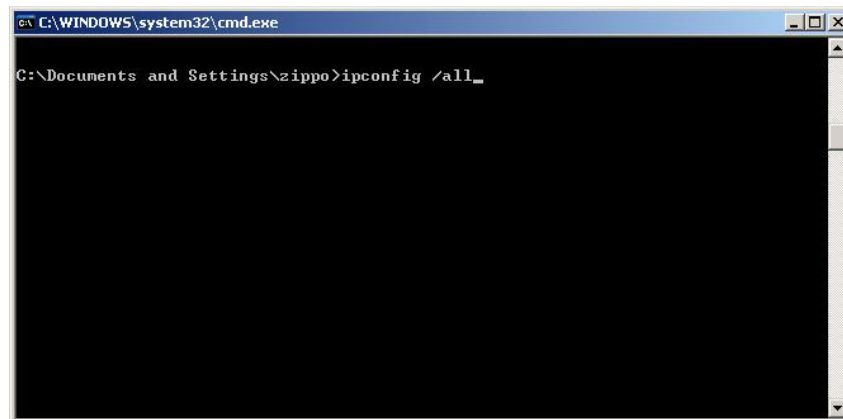
Go to a PC on the Network

Get to the "Run Command" Look in start menu



Type "CMD" into it and click "OK"

This will appear...



Type in "ipconfig /all" (there is one space after ipconfig) at the end of the data line that shows up. When done it will look like above. Hit "enter"

This will show up next

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

Host Name . . . . . : zippo-00c54bfc6
Primary Dns Suffix . . . . . :
Node Type . . . . . : Unknown
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : Belkin

Ethernet adapter Wireless Network Connection 3:

Connection-specific DNS Suffix . : Belkin
Description . . . . . : Belkin F5D8053 N Wireless USB Adapter #3
Physical Address. . . . . : 00-22-75-90-1E-C1
Dhcp Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IP Address. . . . . : 192.168.2.3
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.1
DHCP Server . . . . . : 192.168.2.1
DNS Servers . . . . . : 192.168.2.1
Lease Obtained. . . . . : Tuesday, August 10, 2010 8:56:47 AM
Lease Expires . . . . . : Monday, January 18, 2038 11:14:07 PM
```

Write down the IP address, subnet mask, default gateway and DNS Server of the network that you are working on.

Step 2, add the network information to your DVR

Next Go to DVR and enter everything from the above exactly as it appears **except for one thing!**

You must change the last three digits of the "ip address" to another number. Do not use the gateway number and pick a number between 2 and 253 (the key here is to use a number that is not currently in use by another pc, so use an odd number like 177 or 223 for example). Just pick a number and enter it. **(write down what number you chose, you will need it to access DVR and to do port forwarding!)**

For Embedded DVR's you will find the location of the network settings in the owners manual. Select Static IP in the DVR and enter the data in the correct fields.

For PC-DVR's enter the IP address information into the windows XP field (review the HOW TO information provided here)

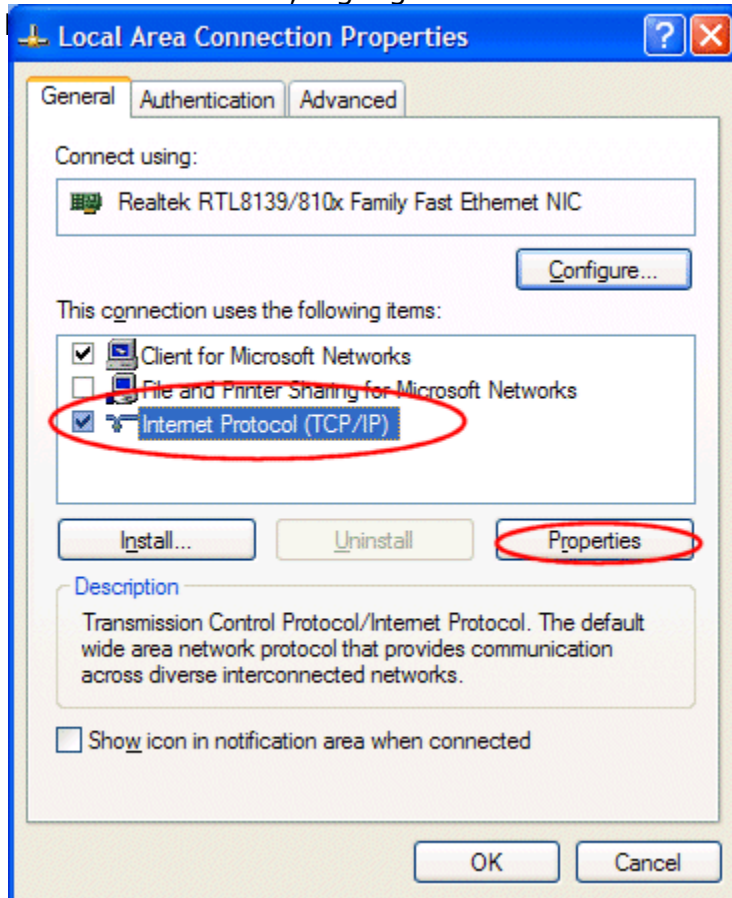
Assign the IP address into a PC DVR.

To set a static IP address:

1. Open Windows **Start** menu.
2. Open **Control Panel**.
3. Classic view: Open **Network Connections**
Category view: Select **Network and Internet Connections**, and then **Network Connections**.
4. Double-click on your active **LAN or Internet connection**.
5. Click **Properties**.

This opens the Local Area Connections Properties window.

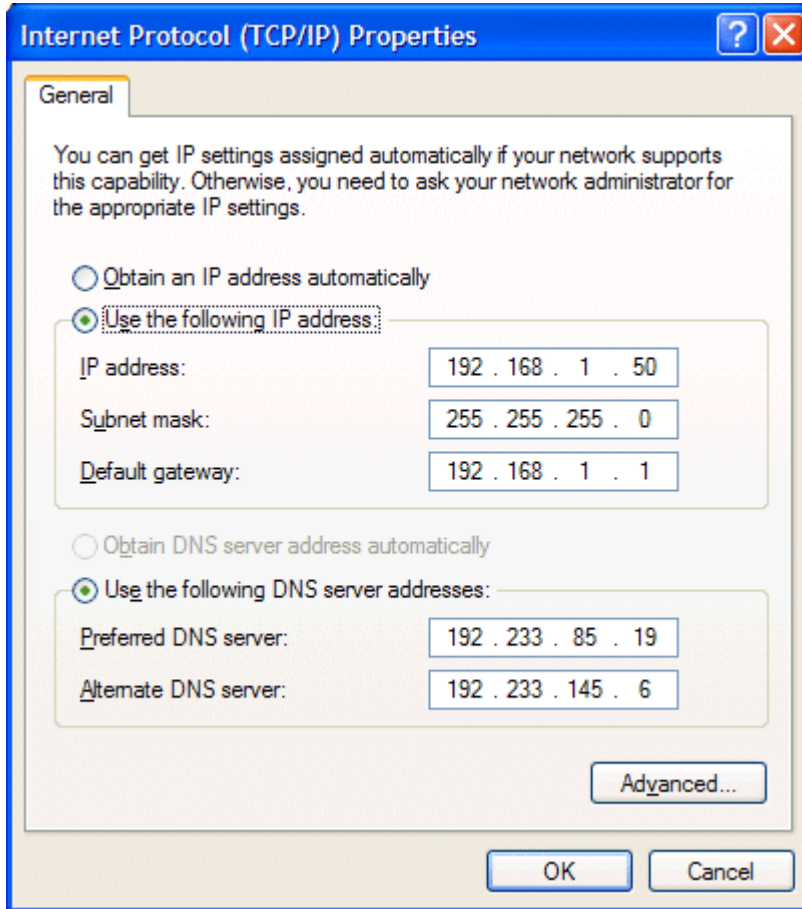
6. In the **General** tab, highlight the **Internet Protocol (TCP/IP)** item, and click



This opens the Internet Protocol (TCP/IP) Properties window.

7. In the General tab, click **Use the following IP address**, and enter:
- IP address. The static IP address you want to assign to this computer.
 - Subnet mask. Subnet mask used by your router.
 - Default gateway. IP address of your router's default gateway.
8. In **Use the following DNS server addresses**, enter all the IP addresses for the DNS servers your router uses.

9. Click **OK**.



Then:

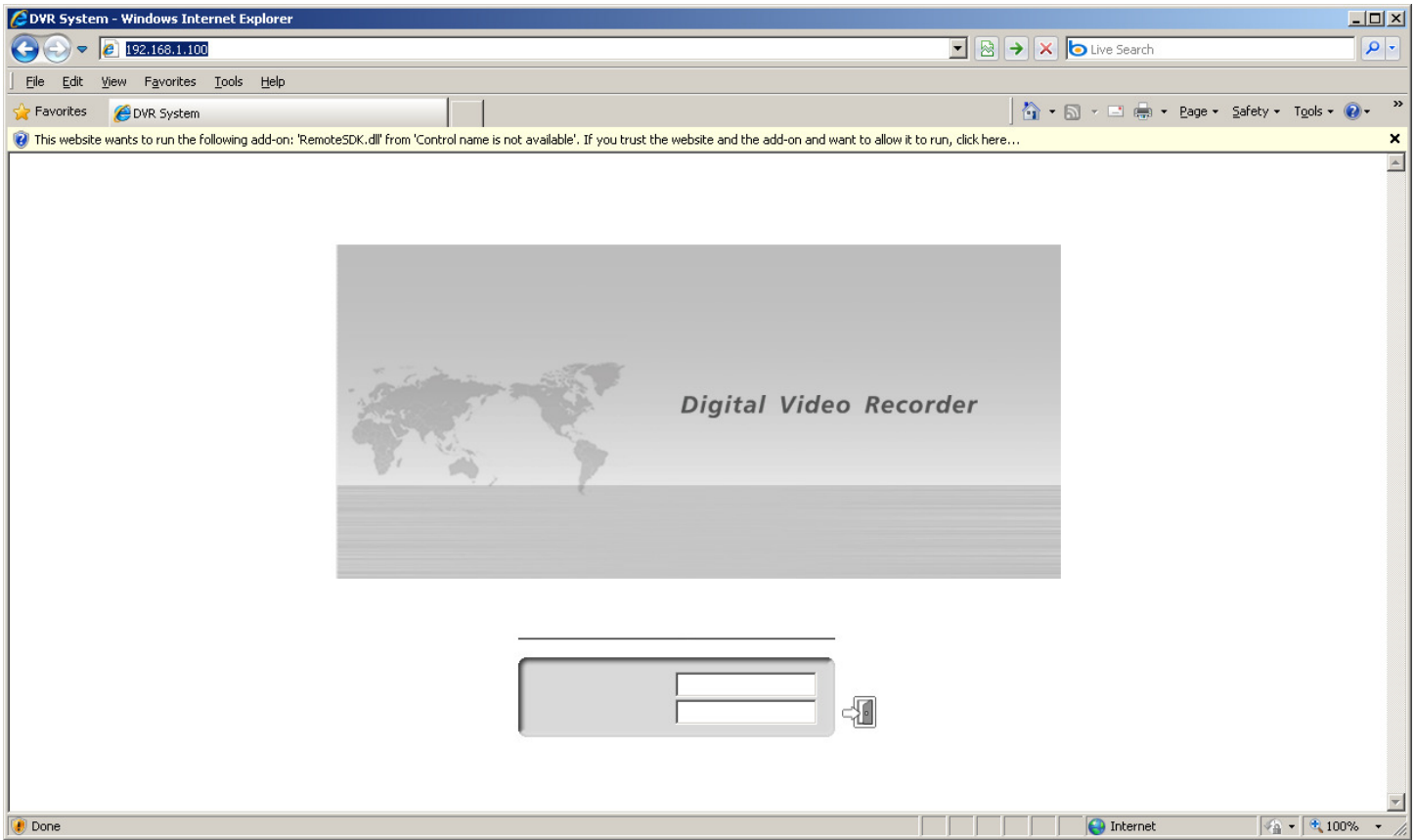
10. Click **OK** to close each window.
11. Restart your computer.
12. Then, [check your IP address again](#), to make sure that the changes were applied.

Step 3. Test your DVR on the local network.

Go back to the PC that you were using and go to the internet. Type into the browser section the IP address that you assigned to the DVR, (it is the one that you changed the last three digits on, remember I told you to write it down!)

Example of what it might look like (192.168.1.50)

Below is an image of the HR series DVR web interface. If you get a log in screen of some sort then GREAT! You have it networked on the local area network. Take your time and download the active X files you must do this the first time through or you will not see video. See "ACTIVE X" to help you log in if you have problems.



Step 4. Determine which type of router you have to see DVR off sight

You must first determine if you have a modem router combination or if you simply have a modem with an external router. **LOOK at the modem.** If you only have one RJ45 plug on the modem and that goes to a separate router then you have a separate router. If you have a modem that has several RJ45 plugs on the back of it then you have a modem router combination.

Example of a modem router combination... (see all the jacks on the back) Plus this will be the only box.



Example of a modem with no internal router (notice only one RJ45 plug on the back)



A modem with no internal router will almost always have an external router that was installed by someone. Here is what that might look like. The modem is above and router is below.



Figure out which one you have!

Step 5. Port forward your router.

Now that you know which router you have let's proceed. If you have a MODEM ROUTER COMBINATION call the internet service provider and ask for technical support to port forward the router! You will need to know which ports you are forwarding, (the ports are listed below) and you will need to port forward them to the IP address that you already assigned to the DVR. A modem router combination is only supported by the internet service provider ie: Verizon, ATT, and so on. We cannot help you with their modem router.

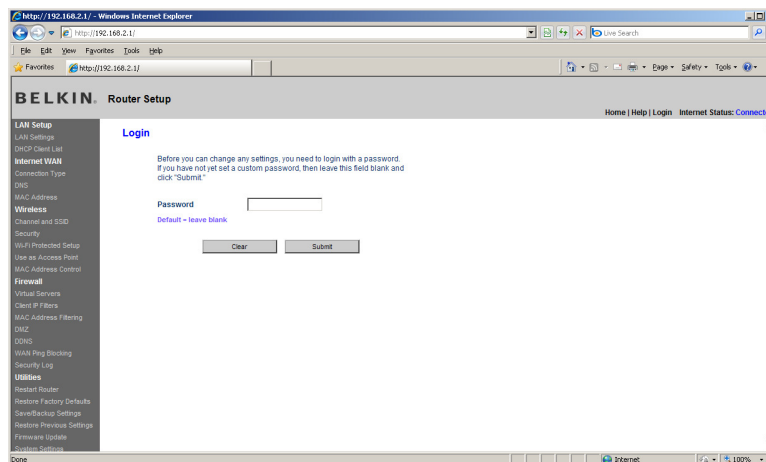
Geovision Ports, 80, 3550, 4550, 5550, 8866

ARK Series Ports, 80, 3000, 3001, 3003, 3007

HR Series Ports 80, 9091, 9092, 65500

DGA/DGS Series Ports 80

If you have a separate router then open up internet explorer and type the "gateway" address into your web browser. It should come up like this.



Or maybe like this



Either way you will need to get the password from the owner of the product.

If they do not know the password then you can enter the make and model number of your router into google with the phrase “default password”...

Or try this link,

<http://www.phenoelit-us.org/dpl/dpl.html>

Most netgear

Log in: admin

Password: 1234 or password

Most Linksys

Log in: “blank” or admin

Password: “blank” or admin

Once you gain access here is an example of what you might find...

Linksys interface

Port Range Forwarding - Mozilla Firefox

http://dvrDNS.org:9393/Forward.htm

LINKSYS®
A Division of Cisco Systems, Inc.

Wireless-G Broadband Router with SpeedBooster WRT54GS

Firmware Version: v1.52.0

Applications & Gaming

Setup Wireless Security Access Restrictions Applications & Gaming Administration Status

Port Range Forwarding | Port Triggering | DMZ | QoS

Port Range					
Application	Start	End	Protocol	IP Address	Enable
VNC1	5900	to 5900	Both	192.168.1.102	<input checked="" type="checkbox"/>
VNCWeb1	5800	to 5800	Both	192.168.1.102	<input checked="" type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>

Port Range Forwarding:
Certain applications may require to open specific ports in order for it to function correctly. Examples of these applications include servers and certain online games. When a request for a certain port comes in from the Internet, the router will route the data to the computer you specify. Due to security concerns, you may want to limit port forwarding to only those ports you are using, and uncheck the Enable checkbox after you are finished.
More...

CISCO SYSTEMS

Done

start | 郵... | Po... | C:... | Po... | Qu... | Un... | rent | Ps Ad... | EN | 4:16 PM

Go to application and gaming/port range forwarding.

Enter a different name for each application (must use a new name for each port Example: dvr, dvr1, dvr2). Then enter the start and stop port (start @ 80 and end @ 80) use both for protocol and enter the IP address that you assigned the DVR. Then check enable and tab down to add another port if needed. When done scroll all the way down to the bottom of the page and check the "save" button.

Or if you have a Netgear router

How is Port Forwarding Configured?

Software ports are numbered connections that a computer uses to sort types of network traffic. A port may support incoming traffic, outgoing traffic, or both. A few services, such as FTP (on port 21), and HTTP (on port 80), are assigned by default to open ports where operating systems can easily find them easily. When a port is opened a service is assigned to it, for example, an online game. For security, by default all ports to the Internet, and most LAN ports are closed so that traffic cannot flow through them.

Common ports are listed in [Port Numbers for Port Forwarding](#).

To test whether your port forwarding is secure, see [How Are a Computer's or a Router's Ports Secured?](#)

Click link for your router's instructions. (There may be more information in the online manual.)

- [For RP614, MR814, WGR101, WGR614, WGT624, WGT634U, WGU624, WGM124, or WPN824](#)
- [For DG834, DG834G, DG824M, FR114W, FM114P, FR114P, FR328S, FVL328, FVS328, FVS338, FVX538, FWAG114, FWG114P, or FVS318v3](#)
- [For RM356, RH340, RH348, RT388, RT311, or RT314](#)
- [For FVM318 or FVS318v2 or FVS318v3](#)
- [For MR314 or RP114](#)

Instructions for RP614, MR814, WGR101, WGR614, WGT624, WGT634U, WGU624, WGM124, or WPN824

These routers do port forwarding by assigning port numbers to a "service" that is associated with the application you want to run.

To Let an Application Use Port Forwarding

1. Type the router's address in an Internet browser's address bar. (By default the router's address is **192.168.0.1**). The Setup Wizard appears.
2. Enter the router's username and password.
3. Under **Advanced**, click **Port Forwarding** on the left menu bar.

Ports

Service & Game Server IP Address

HTTP Add Server

FTP server on port 21

#	Service Name	Start Port	End Port	Server IP Address
<input type="radio"/> 1	FTP	21	21	192.168.0.3
<input type="radio"/> 2	HTTP	80	80	192.168.0.3
<input checked="" type="radio"/> 3	Unreal	7777	7778	192.168.0.4

Web server on port 80

Game setup for Unreal Tournament on ports 7777-7778

Computer 1 running FTP and Web server

Computer 2 running game server

Add Custom Service Edit Service Delete Ser

A Port Forwarding Screen (Varies Slightly by Router)

- From the **Service & Game** (or **Service Name**) pull down, select the service that you will host. The services the router knows about are listed here. If the service does not appear in the drop down, add a service as described in the next section, then return to this step.
- Enter the IP address of your local server in the **Server IP Address** box.
- Click **Add**.
- Click **Logout** to exit from router settings.

To Add a Service for These Routers

To define a service not in the **Service Name** list, determine what port numbers are used by the service.

- Click **Add Custom Service**.
- Enter the first port number in an unused **Start Port** box.
- If only one port number is to be forwarded, enter the same number in **End Port**. To specify a range of ports, enter the last port to be forwarded in the **End Port** box.
- Enter any name you choose for the service.
- Click **Apply**.

Instructions for DG834, DG834G, DG824M, FR114W, FM114P, FR114P, FR328S, FVL328, FVS328, FVS338, FVX538, FWAG114, FWG114P, or FVS318v3

These routers do port forwarding by assigning port numbers to a "service" associated with the application you want to run. "Rules" are set for particular services. Rules block or allow access, based on various conditions such as the time of day and the name of the service.

To Create a New Inbound or Outbound Rule

- Submit the router's address in an Internet browser. (The default is **192.168.0.1**).

2. Enter the router's username and password.
3. From the main menu, click **Security > Rules**.
4. Click **Add** for inbound or outbound traffic, as appropriate to the application you are planning to run.
5. Select the **Service**. The services the router knows about are listed in the drop down. If the service you want is not listed, add it as described in the next section.
6. Select the **Action**, for example **ALLOW always**.
7. For **Send to LAN Server**, enter the IP address of the local server. Note that this is also the IP address the computers on your LAN will access.
8. For **WAN User** choose **Any**, or limit access to particular IP addresses.
9. For **Log** selection it is reasonable to turn logs on, especially at the beginning when you are unsure of the result of the changes you are making. Later, you may want to set logs to "Never" for performance reasons.
10. Click **Apply**.

As noted in user manual for some models:

- Consider using the Dynamic DNS feature on the advanced menu, so that external users can find your network when the DHCP lease is renewed by your ISP.
- If your own LAN server uses DHCP, and your IPs change on rebooting, consider using the Reserved IP Address feature in the LAN IP menu.

To Add a Service for These Routers

1. Click **Security > Services > Add Custom Service**.
2. Enter any name you choose for the service.
3. Select whether the service is to use TCP or UDP. If you are unsure, select both.
4. Enter the lowest port number used by the service.
5. Enter the highest port number used. If the service uses only one port number, enter the same number.
6. Click **Apply**.

To Enable Port Forwarding for RM356, RH340, RH348, RT388, RT311, or RT314

1. Click **Start > Run**.
 2. Type **telnet 192.168.0.1**.
 3. Type the password at the prompt. The default is **1234**. The router menu appears.
 4. Type **15**, and press **Enter** to select **SUA Server Setup**. The Port Forwarding screen appears.
 5. Enter the port number and your server's IP address.
 6. Press **Enter** repeatedly until the cursor comes to the last line and saves the changes.
 7. Type **99** to exit from the router settings.
-

To Enable Port Forwarding for FVM318 or FVS318v1 and v2

These routers do port forwarding by assigning port numbers to a "service" associated with the application you want to run.

To Let an Application Use Port Forwarding

1. Type the router's address in an Internet browser's address bar. (By default the router's address is **192.168.0.1**). The Setup Wizard appears.
2. Enter the router's username and password.
3. Click **Advanced > Ports** on the left menu bar.
4. Click **Add**. The Add Service screen appears.
5. If you click the **Service Name** drop down, a list of services that have been defined appears. (Some are always added by NETGEAR for your convenience by default.) If the service does not appear in the drop down, add a service as described in the next section, then return to this step.
6. Set Action to **ALLOW always**.
7. Enter the IP address of your local server in the **Server IP Address** box.
8. Set WAN Users Address to **Any**.
9. For the **Log** selection it is reasonable to turn logs on, especially at the beginning when you are unsure of the result of the changes you are making. Later, you may want to set logs to "Never" for performance reasons.
10. Click **Apply**.
11. Click **Logout** to exit from router settings.

To Add a Service for These Routers

1. Determine what port numbers are used by the service.
 2. Click **Security > Add Service**. The Add Custom Services window appears.
 3. Enter the first port number in an unused **Start Port** box.
 4. If only one port number is to be forwarded, enter the same number in **End Port**. To specify a range of ports, enter the last port to be forwarded in the **End Port** box.
 5. Enter any name you choose for the service.
 6. Click **Apply**.
-

To Enable Port Forwarding for MR314 or RP114

1. Type the router's address in an Internet browser's address bar. (By default the router's address is **192.168.0.1**).
2. Enter the router's username and password.
3. Click **Advanced > Ports** on the left menu bar.
4. Enter the first port number in an unused **Start Port** box.
5. If only one port number is to be forwarded, enter the same number in **End Port**. To specify a range of ports, enter the last port to be forwarded in the **End Port** box.
6. Enter the IP address of your local server in the **Server IP Address** box.
7. Click **Apply**.

Step 6. Test your port forwarding

Go to

www.canyouseeme.org

CanYouSeeMe.org - Open Port Check Tool

This page will serve as a free utility for remotely verifying a port is open or closed. It will be useful for users who wish to check to see if a server is running or a firewall or ISP is blocking certain ports.

Your IP: 74.70.156.89

What Port?

Common Ports

FTP	21
SSH	22
Telnet	23
SMTP	25
Web	80
Pop 3	110
IMAP	143
Other Applications	
Remote Desktop	3389
PC Anywhere	5631

Sourcefire Intrusion Detection System

[Learn More >>](#)

Sourcefire.com/IDS_System Ads by Google

Background

Most residential ISP's block ports to combat viruses and spam. The most commonly blocked ports are port 80 and port 25.

Type the port into the “what port?” box and click on the “check” box. When the page reloads scroll down to the bottom and read the results

Open Port Check Tool - Windows Internet Explorer

This page will serve as a free utility for remotely verifying a port is open or closed. It will be useful for users who wish to check to see if a server is running or a firewall or ISP is blocking certain ports.

Your IP: 74.70.156.89

What Port?

Common Ports

FTP	21
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Pop 3	110
IMAP	143
Other Applications	
Remote Desktop	3389
PC Anywhere	5631

Error: I could not see your service on 74.70.156.89 on port (80)
Reason: Connection timed out

Background

Most residential ISP's block ports to combat viruses and spam. The most commonly blocked ports are port 80 and port 25.

It will be either “success” I can see your service or “Error” I cannot see your service.

Check all the ports.

Once the ports have been checked and they are correct then you are done. Please make note of the IP address that appears in the www.canyouseeme.org web page. This will be the address that is used off sight.

Step 7: Trouble shooting:

Check the RJ45 patch cable when you cannot connect, a bad cable is **VERY COMMON**.

Use another port in the router or switch

Reboot your DVR

192.168.1.1 **is not** 192.168.100.100 **it is** 192.168.001.001

Go back and recheck your ip address information in the DVR