

Client and Server System Requirements

Minimum Server Requirements

Motherboard

Asus P4P800, Intel 915G, Intel D865PERL

CPU Processor

Celeron 2.6/Intel P4 2.0 or greater for DVR's with 4-8 channels
Intel P4 for 4-64 channels

VGA Video Card

NVIDIA 6600, 6600GT Series
ATI 9250 (up to 8 channels), 9550 Series
Other VGA/Video cards may work, but these are the recommended parts list. Please do not use onboard video at all. We support AGP/PCI/PCIX cards.

Memory Ram

At least 512DDR Memory

Power Supply

At least a 450Watt PSU

Minimum Client/Remote Requirements

Video Ram should be at least 64MB's. For optimal performance, please use a 128MB VGA Card. Please note that Pentium III or less is not supported. When viewing remotely, a PC must be able to handle the amount of pixels being broadcasted from the streaming video. Please see FAQ guide for troubleshooting

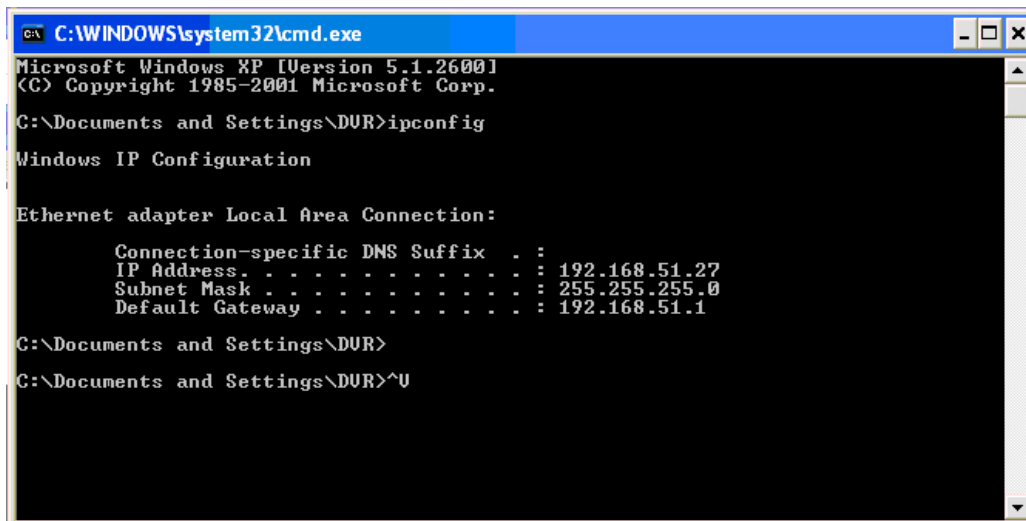
Network Setup

I. Server Networking

You need to have a router installed and have a minimum of 1 PC and 1 DVR on your LAN (Local area Network). Please note, some DSL and Cable ISP's do not allow you to do this on your own. You will have to contact them to see if you are allowed to do so.

Internal LAN (Local Area Network) Static IP Address- Current IP Address
Find your current IP address:

1. Open Windows **Start** menu.
2. Select **Run**. Type: **cmd** and click **OK**.
3. At the blinking cursor, type: **ipconfig** and press Enter. Take note on what your IP Address, Subnet Mask and Default Gateway are.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\DUR>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

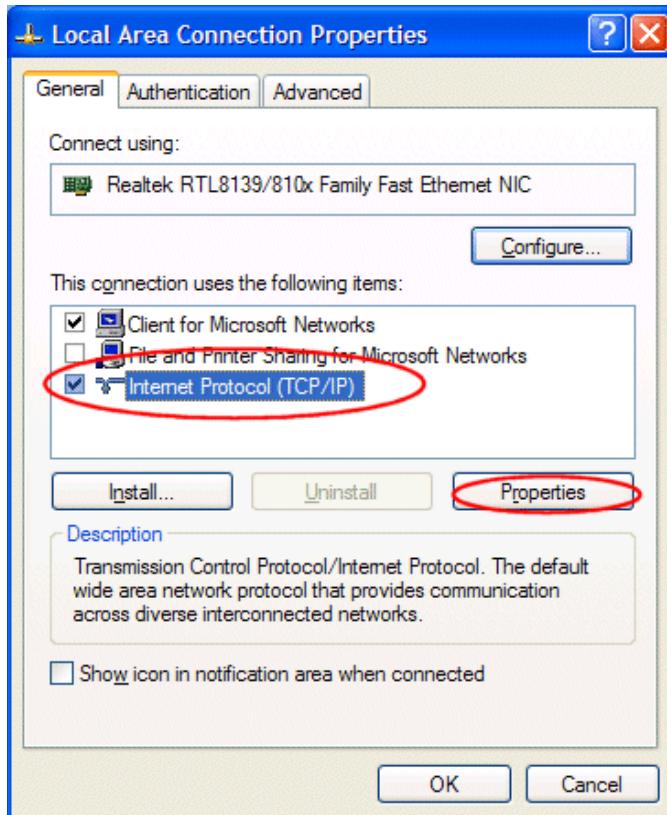
    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 192.168.51.27
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.51.1

C:\Documents and Settings\DUR>
C:\Documents and Settings\DUR>^U
```

To set a static IP address:

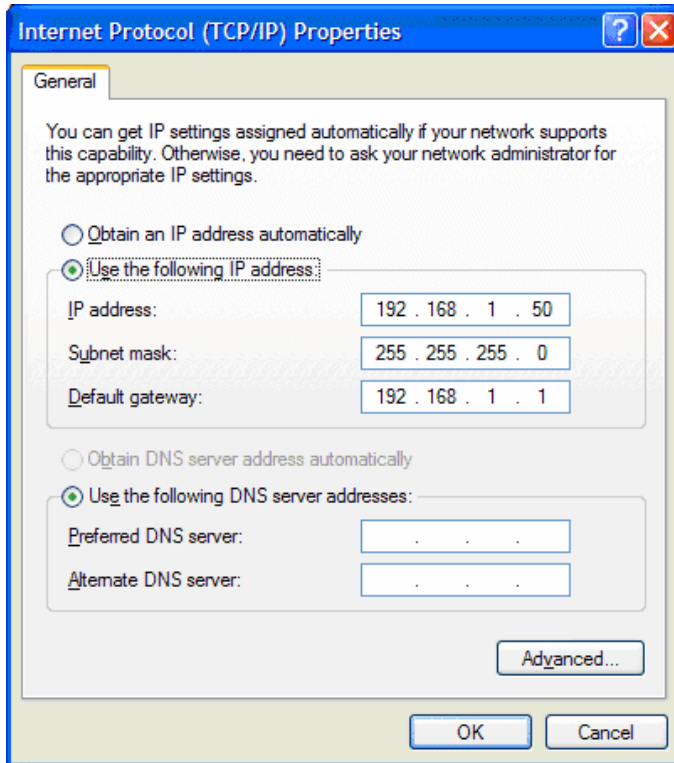
1. Open Windows **Start** menu.
2. Open **Control Panel**.
3. Classic view: Open **Network Connections**
Category view: Select **Network and Internet Connections**, and then **Network Connections**.
4. Double-click on your active **LAN or Internet connection**.
5. Click **Properties**.
6. This opens the Local Area Connections Properties window. In the **General** tab, highlight the **Internet Protocol (TCP/IP)** item, and click **Properties**.

Server/Client Side Network Setup



7. This opens the Internet Protocol (TCP/IP) Properties window. 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. Example 192.168.1.1.
*****DO NOT COPY THESE SETTINGS IN THIS SECTION*****

9. Click **OK**.



10. Click **OK** to close each window.
11. Restart your computer.

A. External WAN (Wide Area Network) IP- Please visit www.whatismyip.com this site will show you what is your external IP address.

If you have a static IP, call you're ISP (internet service provider), if you do not, please visit www.no-ip.com to gain a free one. Follow their instructions on how to set this up. The reason to do this is that you will have a yourname.no-ip.com instead of a numerical value. This will ensure that you can always connect to your DVR location and ping it from the outside. This will only work with PC based. We do not support www.no-ip.com for tech support. Please contact your network administrator to help guide you.

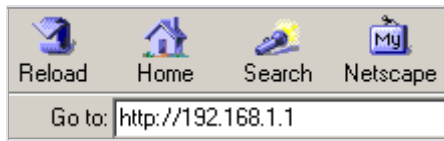
Ports for DVR to forward:

Commercial DVR Ports -5100-5100 and 8000-8000 for the web port
Professional DVR Ports – 50000-50049, 51000-51000, 60001-60001
Embedded H264 DVR Ports- 8000-8000

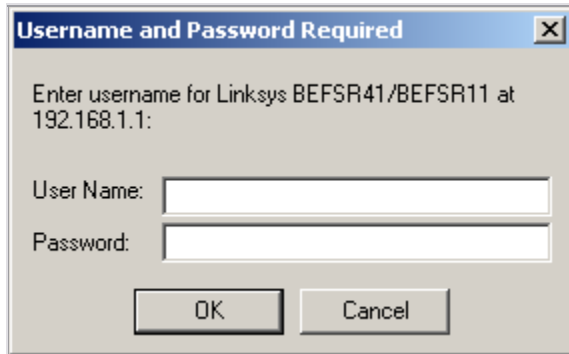
Please refer to your Router manual to configure your port forwarding or contact your network administrator for further assistance. We have enclosed a sample from Linksys routers on how to forward ports.

To log onto your Linksys router, type in "192.168.1.1" into your web browser.

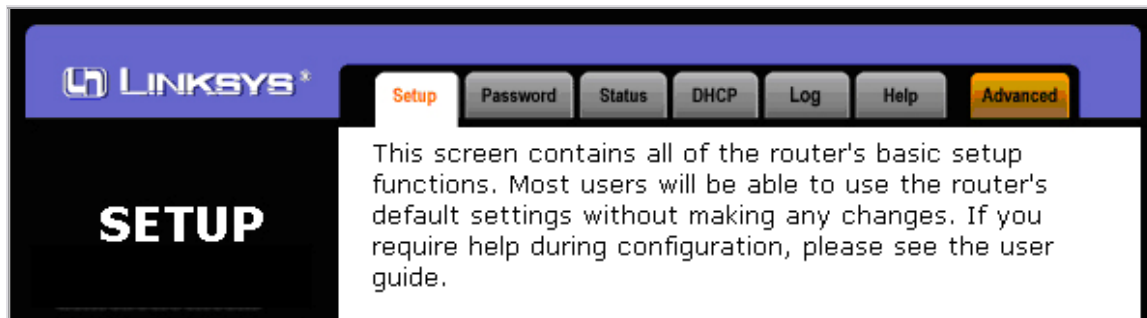
Server/Client Side Network Setup



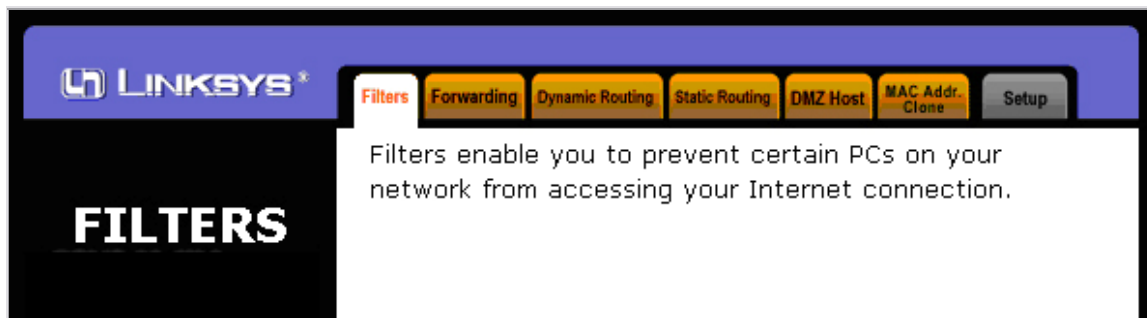
You'll see the following prompt asking for the username and password.



This is the first page you'll see when you log onto your Linksys router. Please read your user manual to retrieve your login/password if you do not know it. Usually the default login is blank and the password is "admin".



Click on the orange tab labeled "Advanced".



Click on the orange tab labeled "Forwarding".

LINKSYS

Filters Forwarding Dynamic Routing Static Routing DMZ Host MAC Addr. Close Setup

FORWARDING

Port forwarding can be used to set up public services on your network. When users from the Internet make certain requests on your router, they will be redirected to the specified IP.

Service Port Range	Protocol	IP Address
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0
0 ~ 0	Both	192.168.1.0

**Well-known Ports
(Commonly Used Ports)**

7 (Echo)
21 (FTP)
23 (TELNET)
25 (SMTP)
53 (DNS)
53 (finger)
79 (HTTP)
80 (HTTP)
110 (POP3)
119 (NNTP)
161 (SNMP)
162 (SNMP Trap)

Apply Cancel Help

The DVR (server) we want to forward the port to in our example has the IP number of "192.168.1.20". If you want to specify only a single port number, enter the same number in both boxes. If you want to specify a range, enter the lower and upper numbers of the range in the two boxes. Click on "Apply" at the bottom of the screen and you're done! The changes take place immediately and you should be able to access your DVR by typing in the IP number of your DSL or Cable Modem (WAN IP number). Note: You can also access your server from the internal IP number (LAN), but this does not test if your port forwarding is working correctly or not.

II. Client Side Networking

A. To ping your DVR Server on your LAN on windows XP, please go to start>run>cmd> then type "ping 192.168.1.20" (w/o the quotes) and you should be able to ping the DVR. If you are unable to ping it, make sure it is connected to your LAN. If you do not have a Linksys by default, your default gateway IP address may be different. Please visit your routers manual for assistance.

B. Follow your DVR software manual on how to connect remotely via your Remote software. To connect via internet explorer, please just simply change the port number on your DVR web server configuration to 8000 (most ISP's block port 80 by default), restart your server software and try to connect locally to <http://192.168.1.20:8000> This will determine if you have all of your settings correct. Make sure you have all known windows and 3rd party firewall/antivirus software turned off. It will block this if you have it turned on at the time of connection. Depending on your default gateway, your IP address may differ.