

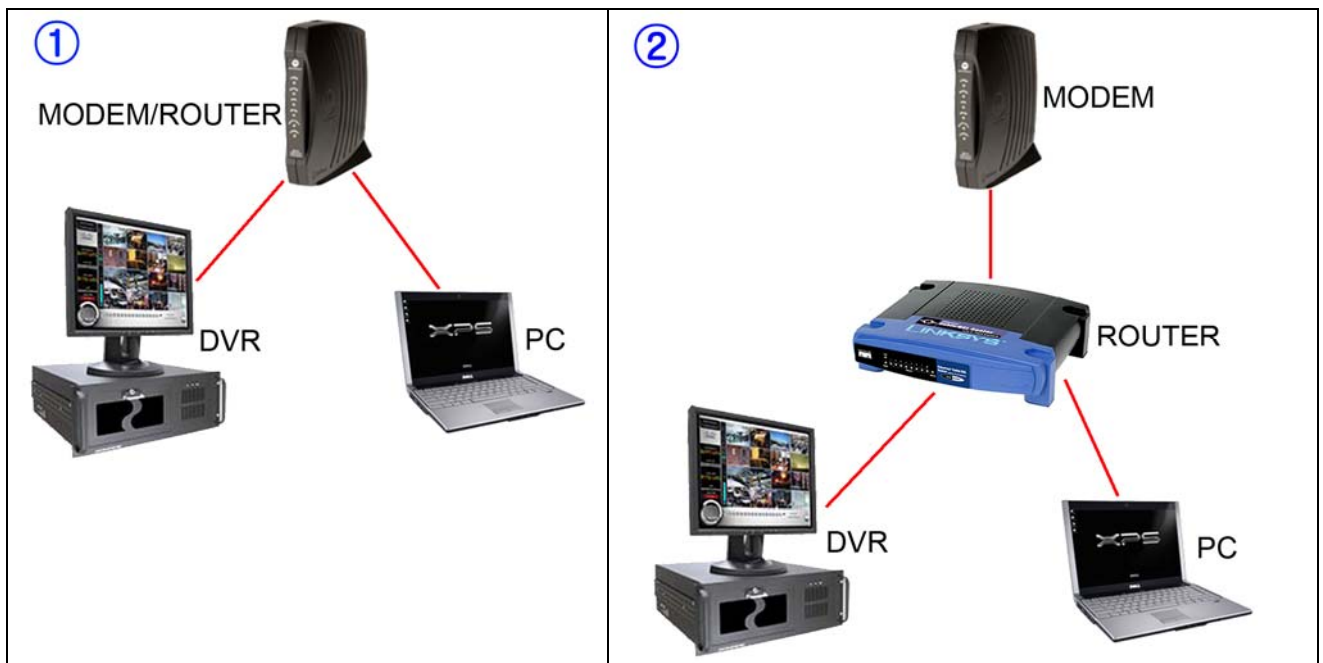
# STATIC IP

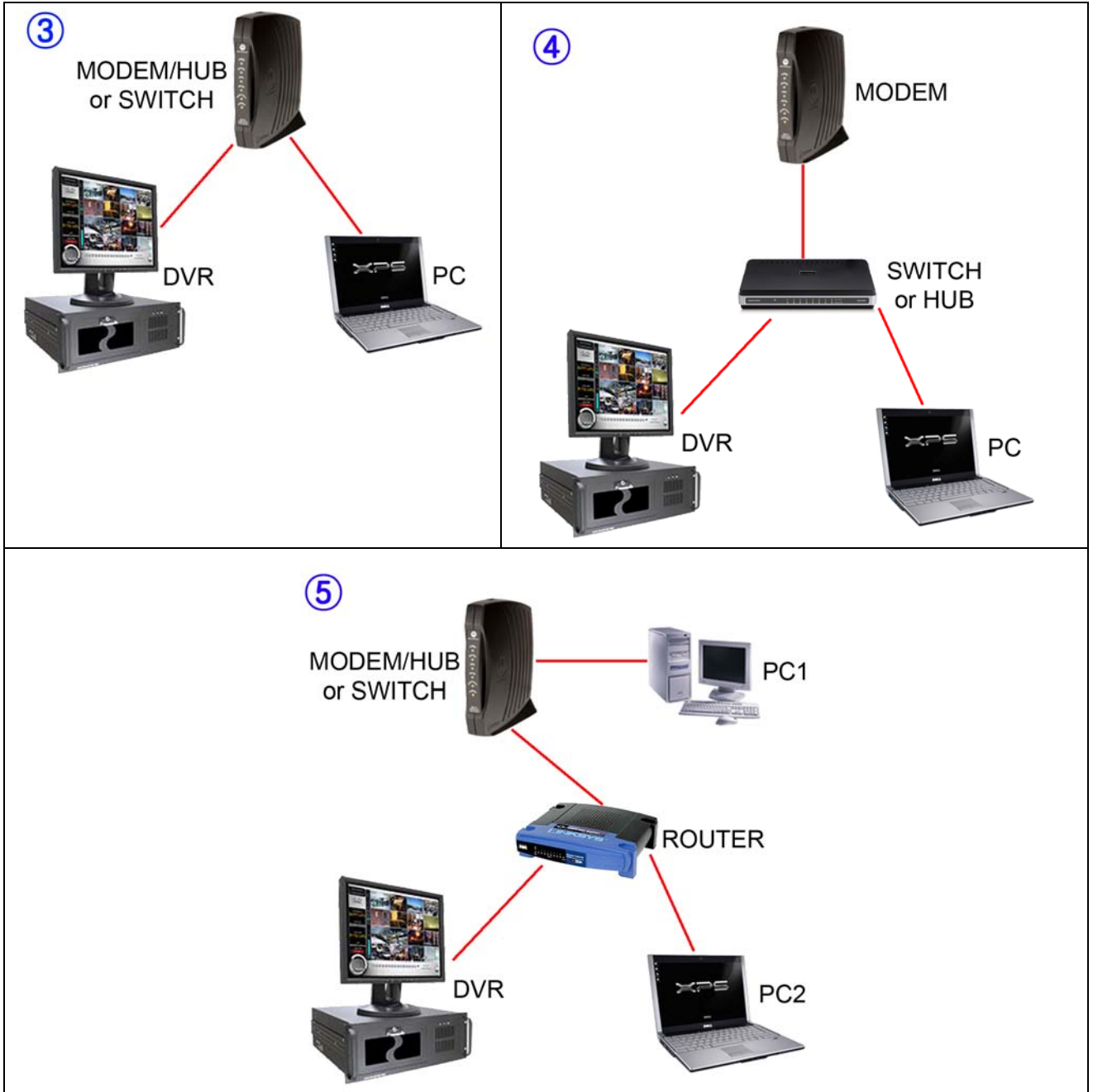
We will need the following information from **ISP** (Internet Service Provider).

- 1) **IP ADDRESS** (ex. 99.23.75.50~55)
- 2) **SUBNET MASK** (ex. 255.255.255.248)
- 3) **GATEWAY** (ex. 99.23.75.1)
- 4) **Primary DNS** (ex. 65.45.22.98)
- 5) **Secondary DNS** (ex. 65.45.23.98)

Once we have all those information from your ISP you will need to check the **physical wiring of Network**.

We recommend the following options.





Now that we know the type of Network connection we only need to configure the Network settings.

## DIAGRAM 1, 3 and 4

Since we have STATIC IP the NETWORK settings for the diagram 1, 3, and 4 will be pretty much similar. ***In this case we won't need to open any ports.***

**Let's use Diagram 4 as example.**

From our ISP we have the following information.

**IP ADDRESS: 99.23.75.50~55**  
**SUBNET MASK: 255.255.255.248**  
**GATEWAY: 99.23.75.1**  
**Primary DNS: 65.45.22.98**  
**Secondary DNS: 65.45.23.98**

### NETWORK SETTING ON DVR

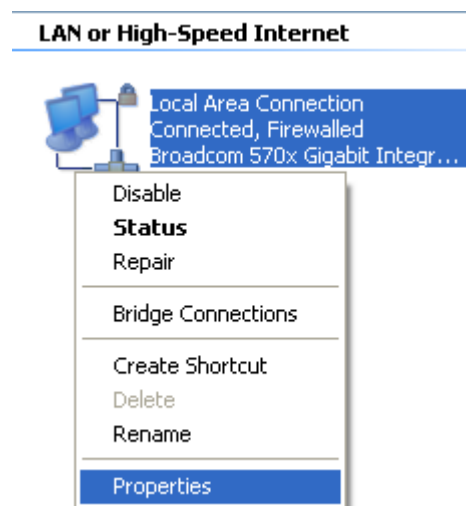
**NOTE:** in this example the IP ADDRESS range is from 99.23.75.50 to 99.23.75.55, which means you can choose any number from 50~55.

IP address:	99.23.75.52
Subnet mask:	255.255.255.248
Default gateway:	99.23.75.1
Preferred DNS server:	65.45.22.98
Alternate DNS server:	65.45.23.98

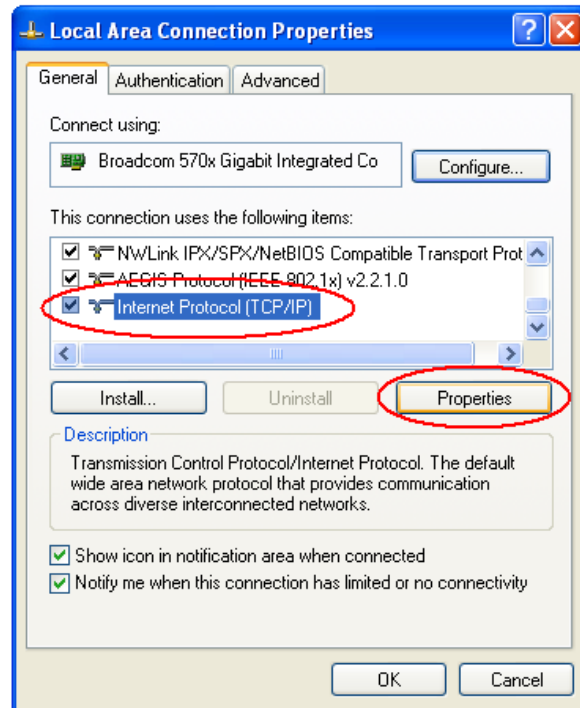
**1) On WINDOWS desktop: Right click MY NETWORK PLACES -> click PROPERTIES**



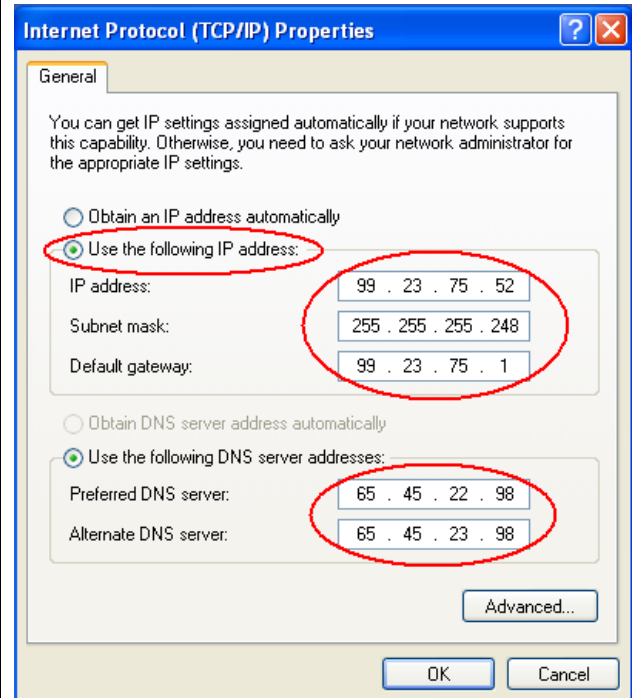
**2) In Network Connections: Right click Local Area Connection -> click PROPERTIES**



**3) In Local Area Connection Properties (on General tab): Select Internet Protocol (TCP/IP) -> click PROPERTIES**



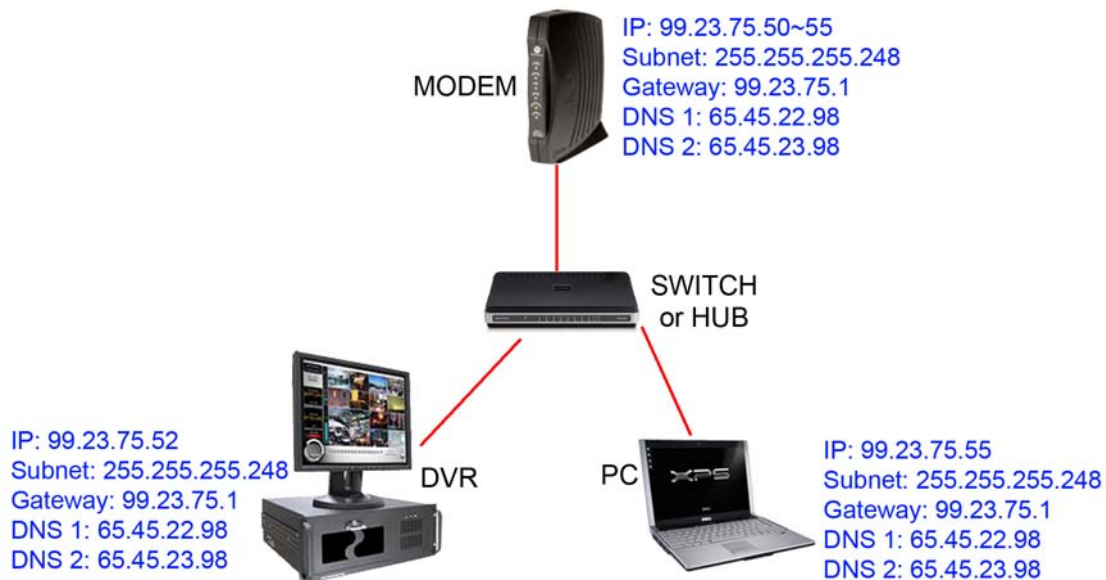
**4) In Internet Protocol (TCP/IP) Properties (on General tab): Select "Use the following IP address", and enter the information that ISP gave you.**



## **NETWORK SETTING ON PC**

The steps are same as "**NETWORK SETTING ON DVR**". The only thing that will change is the IP address. Since DVR is using the IP 99.23.75.52, the IP address available for PC would be 99.23.75.50~1 and 99.23.75.53~55.

**This diagram will help you understand better what you have done in the Network setting.**



## WHAT IP DO I USE TO CONNECT TO DVR?

In this case we use the following IP to connect remotely.

If you are trying to connect from LAN (LOCAL AREA NETWORK)  
DVR IP = 99.23.75.52

If you are trying to connect from OUTSIDE  
DVR IP = 99.23.75.52

## DIAGRAM 2 & 5

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Since we have STATIC IP the NETWORK settings for the diagram 2 and 5 will be pretty much similar. In this case we will need to open ports for the DVR.

**Let's use Diagram 5 as example.**

From our ISP we have the following information.

**IP ADDRESS: 99.23.75.50~55**

**SUBNET MASK: 255.255.255.248**

**GATEWAY: 99.23.75.1**

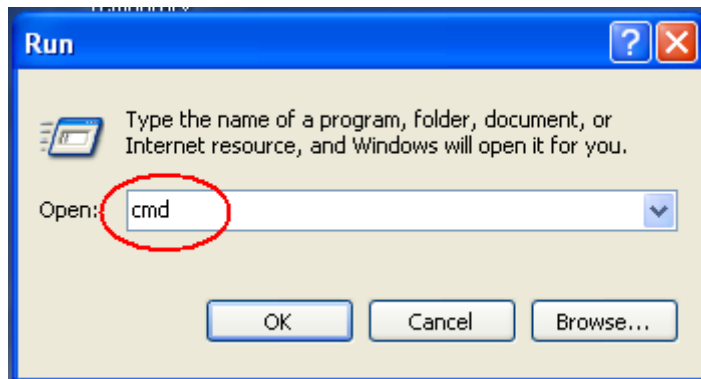
**Primary DNS: 65.45.22.98**

**Secondary DNS: 65.45.23.98**

## ROUTER SETTING

From any computer connected to this ROUTER do the following steps.

- 1) From WINDOWS desktop: **START -> RUN -> type "cmd" -> OK**



- 2) On Command windows type "**ipconfig /all**". Write down the following information:  
**IP ADDRESS** (ex. 192.168.1.100)  
**SUBNET MASK** (ex. 255.255.255.0)  
**GATEWAY** (ex. 192.168.1.1)  
**DNS** (ex. 192.168.1.254)

```
C:\WINDOWS\system32\cmd.exe
C:\W>ipconfig /all

Windows IP Configuration

Host Name . . . . . : kdr2
Primary Dns Suffix . . . . . :
Node Type . . . . . : Broadcast
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter Local Area Connection:

Connection-specific DNS Suffix . :
Description . . . . . : Broadcom 570x Gigabit Integrated Con
troller
Physical Address. . . . . : 00-0F-1F-A6-1E-7E
Dhcp Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 192.168.1.100
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
DHCP Server . . . . . : 192.168.1.1
DNS Servers . . . . . : 192.168.1.254
Lease Obtained. . . . . : 2009년 4월 10일 오전 1:49:06
Lease Expires . . . . . : 2009년 4월 11일 오전 1:49:06
```

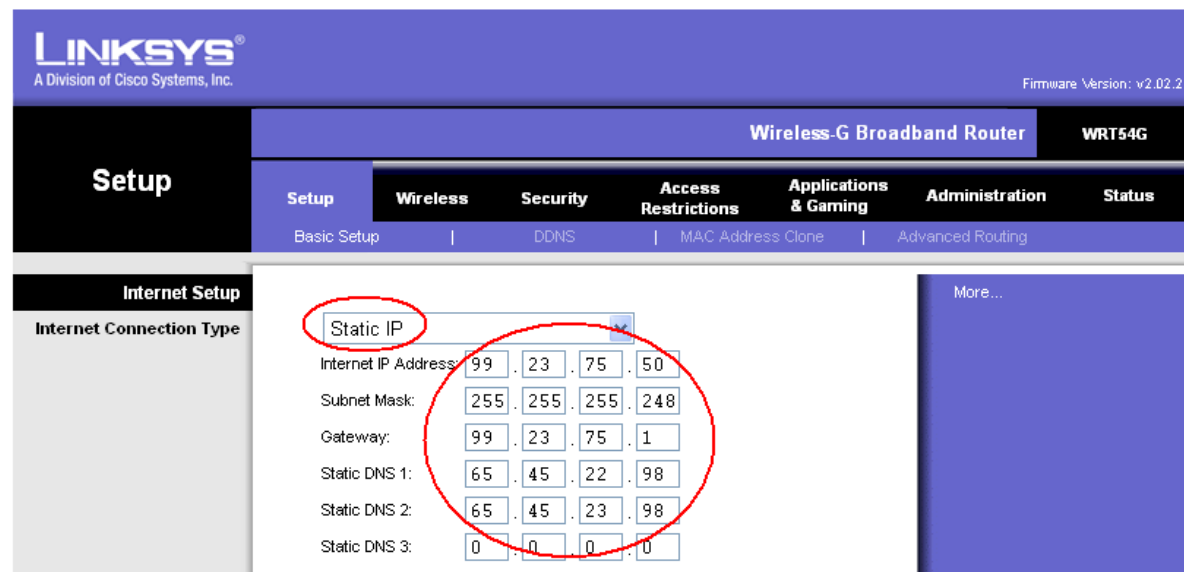
3) Open IE (Internet Explorer) browser and type “192.168.1.1” to access to the router.

*If you don't know the username and password for the router, please contact to the router's company to find out.*



5) Enter the **STATIC information** that ISP gave you as shown below.  
In case of **Linksys-WRT54G** it's under **SETUP – BASIC SETUP**

*If you don't know where you can set the STATIC IP in your router, please contact to the router's company or check on router's manual to find out.*



Once you save it, the router will be linked to the modem.

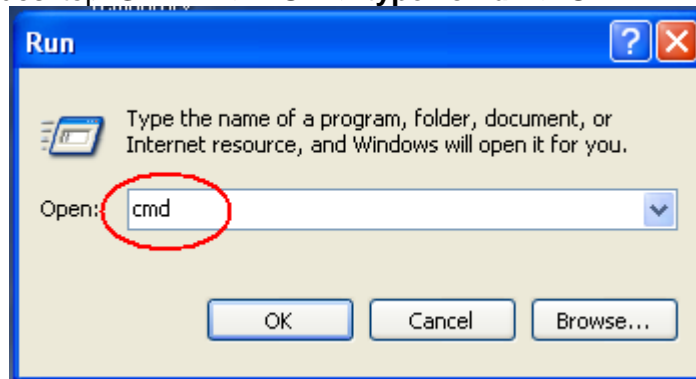
## NETWORK SETTING ON DVR

Now that we have linked from MODEM to ROUTER, we need to link **DVR to ROUTER**.

**In this example we use EYEMAX 9000 SERIES.**

From DVR do the following:

1) From WINDOWS desktop: **START -> RUN -> type "cmd" -> OK**



2) On Command windows type "**ipconfig /all**" – **ENTER**. Write down the following information:

**IP ADDRESS** (ex. 192.168.1.100)

**SUBNET MASK** (ex. 255.255.255.0)

**GATEWAY** (ex. 192.168.1.1)

**DNS:** (ex. 192.168.1.254)

```
C:\WINDOWS\system32\cmd.exe
C:\W>ipconfig /all

Windows IP Configuration

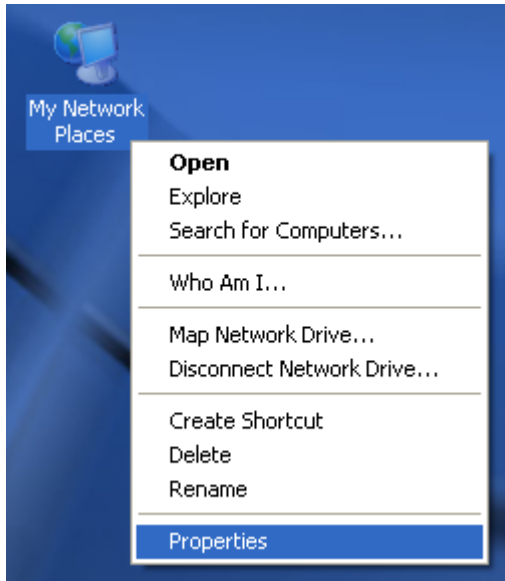
    Host Name . . . . . : kdr2
    Primary Dns Suffix . . . . . :
    Node Type . . . . . : Broadcast
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No

Ethernet adapter Local Area Connection:

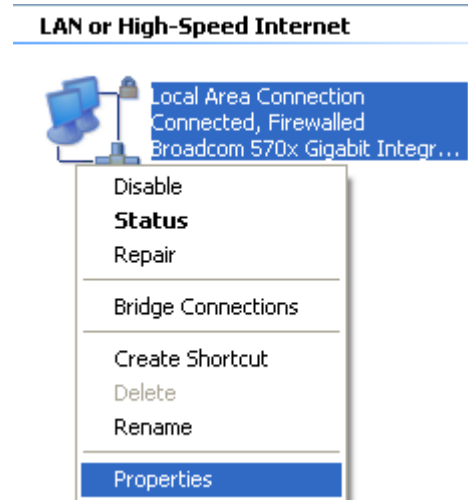
    Connection-specific DNS Suffix  . :
    Description . . . . . : Broadcom 570x Gigabit Integrated Con
troller
    Physical Address. . . . . : 00-0F-1F-A6-1E-7E
    Dhcp Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes
    IP Address. . . . . : 192.168.1.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1
    DHCP Server . . . . . : 192.168.1.1
    DNS Servers . . . . . : 192.168.1.254
    Lease Obtained. . . . . : 2009년 4월 10일 오후 1:49:06
    Lease Expires . . . . . : 2009년 4월 11일 오후 1:49:06
```



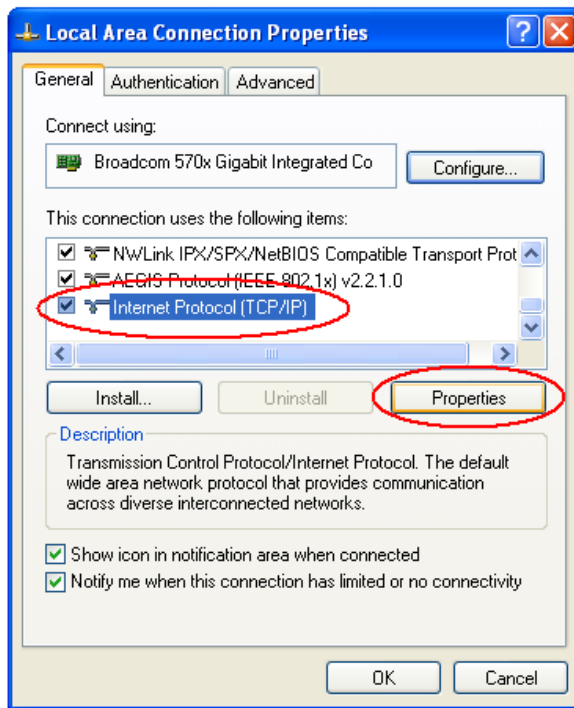
3) On WINDOW desktop: **Right click MY NETWORK PLACES -> click PROPERTIES**



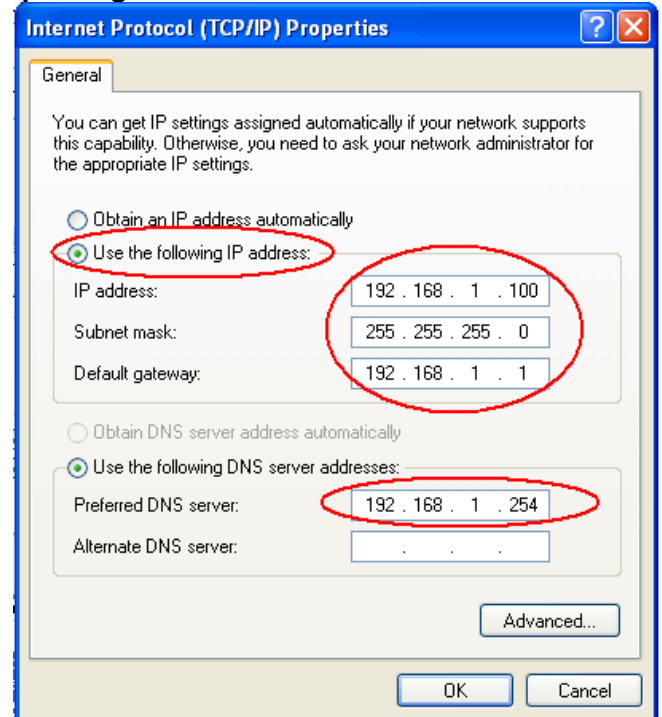
4) In Network Connections: **Right click Local Area Connection -> click PROPERTIES**



5) In Local Area Connection Properties (on General tab): **Select Internet Protocol (TCP/IP) -> click PROPERTIES**



6) In Internet Protocol (TCP/IP) Properties (on General tab): **Select "Use the following IP address", and enter the information from ipconfig /all.**



7) Now that DVR is connected to ROUTER using fixed IP, we need to open some ports linking to DVR IP which is 192.168.1.100

The EYEMAX 9000 Series use the following PORT number as default:

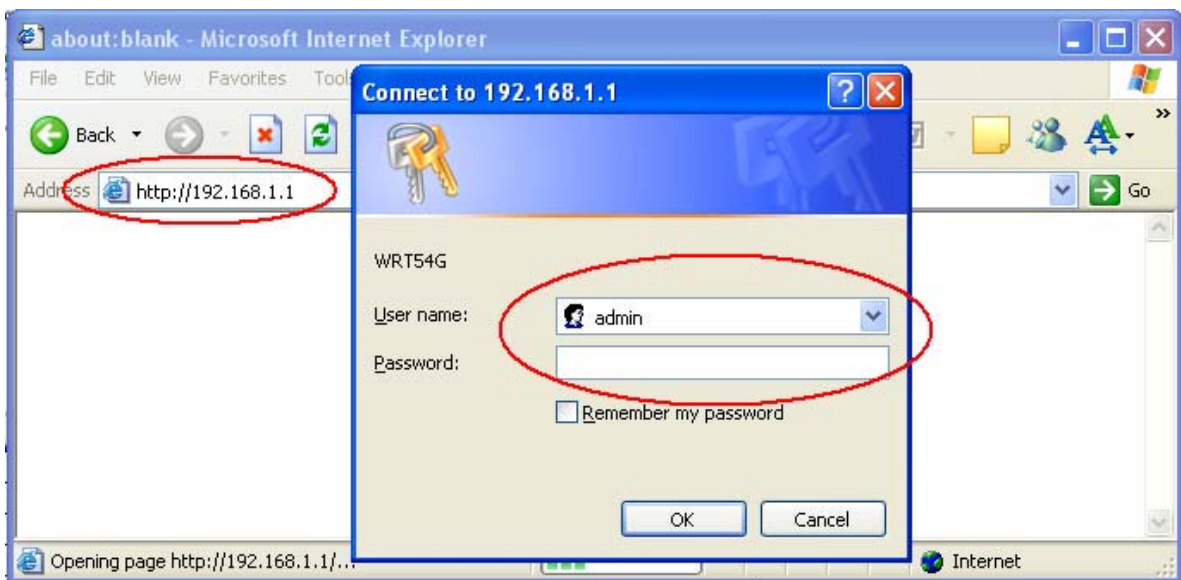
**Client port = 9091~9112**

**Web port = 80**

*Every DVR use different PORT numbers, usually it can be found in NETWORK MENU of DVR. If you can't find the PORT of your DVR, please read the DVR manual or call at UNIX CCTV([www.unixcctv.com](http://www.unixcctv.com))*

8) Open **IE browser** and type the current **GATEWAY**, which in this case is "192.168.1.1" to access to the **ROUTER**.

*If you don't know the username and password for the router, please contact to the router's company to find out.*



9) The Port Forwarding Menu for **LINKSYS – WRT54G** it's located in:

### Applications & Gaming -> Port Range Forward

The port-forwarding menu varies depending on router but the general rule are same, which is linking the Port number to specific IP address.

In this case we are linking the **Ports 9091~9112** and **80** to **IP address 192.168.1.100**

The screenshot shows the Linksys WRT54G web interface. The top navigation bar includes 'Applications & Gaming', 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Applications & Gaming', 'Administration', and 'Status'. The 'Applications & Gaming' menu is highlighted in red. Below it, the 'Port Range Forward' sub-menu is also highlighted in red. The main content area shows a table with the following data:

Application	Start	End	Protocol	IP Address	Enable
DVR	9091	to 9112	Both	192.168.1.100	<input checked="" type="checkbox"/>
DVR-WEB	80	to 80	Both	192.168.1.100	<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"/>

### NETWORK SETTING ON PC1

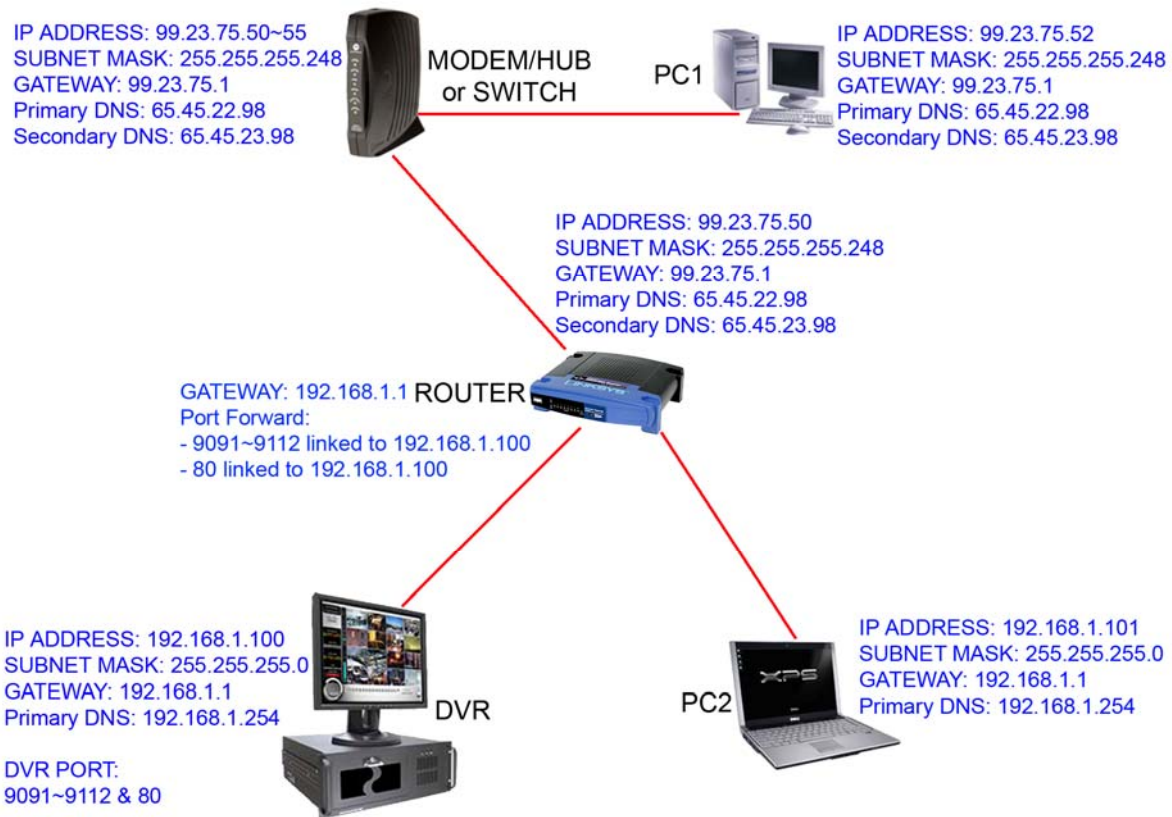
The steps are same as “**NETWORK SETTING ON DVR**” from **DIAGRAM 1, 3 and 4**. The only thing that will change is the IP address. Since ROUTER is using the IP 99.23.75.50, the IP address available for PC1 would be 99.23.75.51~55.

### NETWORK SETTING ON PC2

The steps are same as “**NETWORK SETTING ON DVR**” from **DIAGRAM 2 & 5**. But we **skip steps 7, 8 and 9**, since we don't need to open any ports for PC2.

The only thing that will change is the IP address. Since the DVR is using the IP 192.168.1.100, we will use 192.168.1.101 for PC2, or any other number close to it.

**The Diagram below shows what you have done on Network Setting.**



### **WHAT IP DO I USE TO CONNECT TO DVR?**

In this case we use the following IP to connect remotely.

If you are trying to connect from LAN (LOCAL AREA NETWORK)

DVR IP = 192.168.1.100 from PC2

DVR IP = 99.23.75.50 from PC1

If you are trying to connect from OUTSIDE

DVR IP = 99.23.75.50