

<b>Title:</b>	Remote Access Via Internet		
<b>Date:</b>	12/21/2011	<b>Version:</b>	1.1
<b>Product:</b>	Hikvision DVR		
<b>Action Required:</b>	Information Only		

The following steps will guide you through the steps necessary to access your Hikvision DVR remotely via the internet. Before proceeding, please connect your DVR to your router and obtain a computer that is connected to the same router. And make sure that your computer can access internet. After properly port forwarding your router, you will be able to access your DVR through Internet Explorer and our client software.

## STEP 1: Obtaining Your Network Settings

- Open a command prompt on the computer
  - Windows Vista and 7 users
    - Locate the Windows Icon in the bottom left corner of the task bar.
    - In the Search box, type “cmd” or “command” to locate the command prompt.
    - Following the available prompt, type “ipconfig” and press Enter.
  - Windows NT, 2000, and XP users
    - Locate the Windows Icon in the bottom left corner of the task bar.
    - Click Run.
    - Type cmd or command and press enter.
    - Following the available prompt, type “ipconfig” and press Enter.

This will bring up a display of your network settings. Make sure to write down the IP Address, Subnet Mask and Default Gateway. This will display the address of your router.

```
cmd C:\Windows\system32\cmd.exe
Windows IP Configuration

Wireless LAN adapter Wireless Network Connection:
    Connection-specific DNS Suffix . . . . . :
    Link-local IPv6 Address . . . . . : fe80::bd65:39c:322f:ef40%11
    IPv4 Address. . . . . : 192.168.1.3
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Local Area Connection:
    Connection-specific DNS Suffix . . . . . :
    IPv4 Address. . . . . : 10.102.103.99
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.102.103.1

Tunnel adapter Reusable ISATAP Interface {7D0E67A9-BF9C-41D4-BF1C-7B26456B1263}:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

Tunnel adapter isatap.{C05AD519-926E-46DA-A286-D6B3A0E85834}:
    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . :

Tunnel adapter Teredo Tunneling Pseudo-Interface:
    Connection-specific DNS Suffix . . . . . :
    IPv6 Address. . . . . : 2001:0:4137:9e76:2cf1:1a5:f599:989c
    Link-local IPv6 Address . . . . . : fe80::2cf1:1a5:f599:989c%12
    Default Gateway . . . . . :
```

• Now check for an open address on the network, make sure to use an address that is in the same subnet. (Example: if you're gateway is 192.168.1.1 you want to check for an address available like 192.168.1.4 or 192.168.1.5, and so forth.)

- Option 1 (Static IP Address):

- You can check the address availability by performing the "Ping" operation. To do this, in the command prompt, type "ping 192.168.1.4".

- If there is a reply the address is already in use.

```
Pinging 10.9.6.77 with 32 bytes of data:
Reply from 10.9.6.77: bytes=32 time<1ms TTL=64
Reply from 10.9.6.77: bytes=32 time<1ms TTL=64
Reply from 10.9.6.77: bytes=32 time<1ms TTL=64
Reply from 10.9.6.77: bytes=32 time<1ms TTL=64

Ping statistics for 10.9.6.77:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

- If there is no reply (request timed out) the address is available for use.

```
C:\Users\Rachel Yu>ping 10.9.6.111
Pinging 10.9.6.111 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 10.9.6.111:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

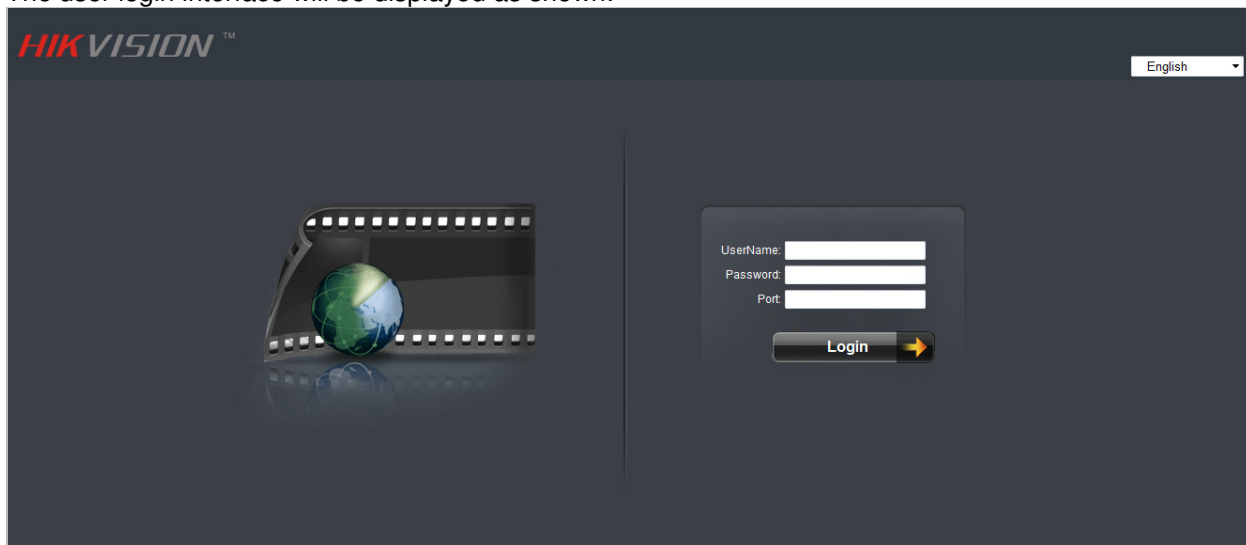
- You have found an available address in the same subnet, you can assign this address (Static Address) to the DVR.
  1. Enter the Network Configuration interface of the DVR.
  2. Access Main Menu by right clicking on the monitor using a mouse and enter the password at the prompt.
  3. Go to System Configuration >> Network Configuration.
    - Enter the available static address
    - Subnet Mask (255.255.255.0, etc.)
    - Enter Default Gateway address you made a note of earlier.

- Option 2 (Dynamic IP Address):

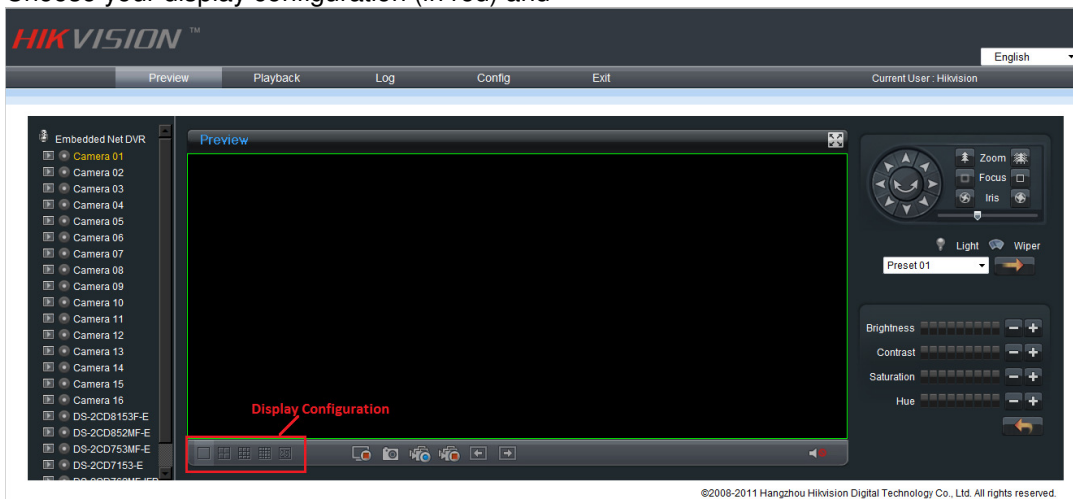
- You can enable the DHCP checkbox in the DVR Network Configuration interface.
  1. Enter the Network Configuration interface of the DVR.
  2. Access Main Menu by right clicking on the monitor using a mouse and enter the password at the prompt.
  3. Go to System Configuration >> Network Configuration.
    - Check the DHCP radio box, and click Save.
    - Reboot the system.
    - Return to the Network Configuration to check what the current IP address is. It will be listed under Current Configuration >> IP Address.

### STEP 2: Confirm your DVR Connection

- Open the Internet Explorer browser.
  - \*Note that Internet Explorer (64-bit) is not currently supported.
- Type the IP address of the DVR in the Internet Explorer address bar.
- Internet Explorer will prompt you to install the ActiveX control.
- Click and install the ActiveX control.
- The user login interface will be displayed as shown:



- Input the correct user name, password, and port.
- The default manufacturer login information is:
  - user name: admin
  - password: 12345
  - port: 8000
- After successful log in, the following interface will appear.



- Double click on “Embedded Net DVR”. Your cameras will populate live view.

## STEP 3: Port Forwarding Your Router

- By default, Hikvision uses:
  - HTTP Port: 80
  - Device Port: 8000
- Enabling Ports to be forwarded to a device on your local network will give users remote access to the device from the internet. (For more information about Port Forwarding, refer to [Port Forwarding.pdf](#) and [Port Forwarding on a Netgear Router.pdf](#))
- Once you have accessed the router successfully, follow the steps to guide yourself to the port forwarding interface. Once in the interface forward the following ports: http port and client port.
  - By default, Hikvision uses:
    - HTTP Port: 80
    - Device Port: 8000
- Every model of Router is different. A very helpful site is: <http://www.pcwintech.com/port-forwarding-guides> or refer to your ISP providers and router manual.

\*Helpful Tip:

- If you are unable to access the default router address, use the “Default Gateway” address.
- A reboot and reset of the default router settings may be necessary.

## STEP 4: Confirm your DVR Remote Connection

- Open an Internet Explorer browser and proceed to the website: <http://www.yougetsignal.com/tools/open-ports>.
  - This tester will provide you your external IP address and a port’s status.
    1. Enter ‘80’ (or your http port) in the Port number field
    2. Click on the Check button.If you’re port is forwarded successfully, you status will be shown as open.

The screenshot shows the 'you get signal' website's 'Port Forwarding Tester' tool. At the top, there's a blue banner for '4G for Business' with a search for coverage button and a list of service features: 'Installation in 3-5 days', 'Scalable bandwidth', '99.99% uptime guaranteed', and '24/7 local technical support'. A 'you get signal' logo is on the left. The main content area is titled 'Port Forwarding Tester' and includes a 'your external address' field with the value '173.200.91.66'. Below that is an 'open port finder' section with 'Remote Address' set to '173.200.91.66' and 'Port Number' set to '80'. A 'Check' button is next to the port number. A red box highlights the 'Port 80 is open on 173.200.91.66.' message. To the right, there's a 'common ports' list: 21 FTP, 22 SSH, 23 TELNET, 25 SMTP, 53 DNS, 80 HTTP, 110 POP3, 115 SFTP, 135 RPC, 139 NetBIOS, 143 IMAP, 194 IRC, 443 SSL, 445 SMB, 1433 MSSQL, 3306 MySQL, 3389 Remote Desktop, 5632 PCAnywhere, 5900 VNC, 6112 Warcraft III, and Scan All Common Ports. An 'about' section explains the tool's purpose and provides a link to a Wikipedia article. At the bottom, there are social media icons and a 'help me pay for school (PayPal)' button.

3. Repeat step 1 and 2 for port 8000 (or your client port).
4. If both ports are forwarded properly, use the external IP address to connect remotely to your DVR from outside the network.
5. To test this, have someone connect to the external IP address via Internet Explorer off site, your login information will be the same as the DVR once connected.

For further information, or if you need help with the above steps, feel free to contact Hikvision Technical Support.