



Step by Step MPEG4 DVR Networking Setup for Linksys router user

By Jack Kuo

CPCAM CCTV CANADA CORP.

1.778.219.9970

2nd floor, 128-13982 Cambie Road,
Richmond, BC CANADA V6V 2K2

<http://www.cpcamcctv.ca>

Set up an IP address for your DVR

1. Please log in to the router and check the external IP address in its **Status** page.

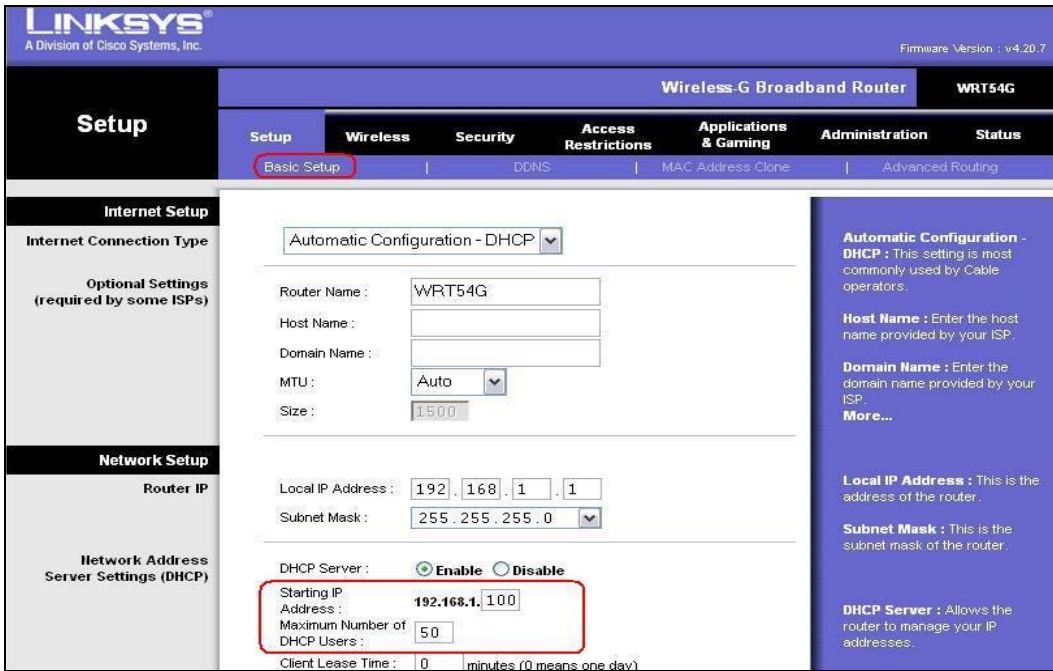
The screenshot shows the Linksys WRT54G router's status page. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Applications & Gaming', 'Administration', and 'Status'. The 'Status' page is divided into 'Router Information' and 'Internet' sections. The 'Internet' section shows the configuration type as 'Automatic Configuration - DHCP' and the IP address as '123.45.67.89'. A red box highlights the IP address field. The 'Router Information' section displays details such as Firmware Version (v4.20.7), Current Time (Tue, 18 Jul 2006 11:36:09), MAC Address (00:13:10:FC:51:41), Router Name (WRT54G), Host Name (leohomestudioRT1), and Domain Name (vc.shawcable.net). A right-hand sidebar provides explanatory text for various fields.

| Router Information | Internet |
|---|---|
| Firmware Version : v4.20.7, Aug. 18, 2005 | Login Type : Automatic Configuration - DHCP |
| Current Time : Tue, 18 Jul 2006 11:36:09 | IP Address : 123.45.67.89 |
| MAC Address : 00:13:10:FC:51:41 | Subnet Mask : 255.255.255.0 |
| Router Name : WRT54G | Default Gateway : 123.45.67.1 |
| Host Name : leohomestudioRT1 | DNS 1 : 64.59.144.92 |
| Domain Name : vc.shawcable.net | DNS 2 : 64.59.144.93 |
| | DNS 3 : |
| | MTU : 1500 |

Make sure the internet IP address is valid. **The internet IP address can not be a local IP address like 192.168.X.X**, otherwise please contact with your network administrator.

Note: For Verizon DSL user, if the IP address is 192.168.1.45, please contact Verizon technical support to configure your DSL modem as a bridge.

- In DHCP settings, there is DHCP starting IP address and maximum numbers of DHCP users. We don't want DVR using a DHCP released IP address. So, we need to avoid DVR using an IP address which is in the DHCP addresses range.



- If you are using **Linksys router**, we could try to the setting below in DVR:

In DVR's menu, go to **Advance > Network >** enter a port number 8888 for DVR (any number greater than 1024 is fine but need to be the same numbers on port forwarding setting on next step). Choose "Static" for **Network type** and press enter. In Static IP address setting (4), key in an IP address 192.168.001.099. Also, key in gateway address as router's internal IP address 192.168.001.001. Then press "menu" key to quick the menu.



- Return to Router's configuration page on web browser. Create a new entry of port forwarding in the router like the one in the picture below. Make sure your port numbers and IP address are match with DVR's setting.

Wireless-G Broadband Router WRT54G

Applications & Gaming

Setup | Wireless | Security | Access Restrictions | **Applications & Gaming** | Administration | Status

Port Range Forward | Port Triggering | DMZ | QoS

Port Range Forward

| Port Range | | | | | |
|-------------|-------|---------|----------|---------------|-------------------------------------|
| Application | Start | End | Protocol | IP Address | Enable |
| DVR | 8888 | to 8888 | Both | 192.168.1.99 | <input checked="" type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.100 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.100 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.100 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.104 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.104 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.104 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.102 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.100 | <input type="checkbox"/> |
| | 0 | to 0 | Both | 192.168.1.100 | <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...**

Save Settings | Cancel Changes

CISCO SYSTEMS

- After finished these setting. Please reboot the router first and then DVR.

DDNS settings on Linksys router

1. Open a web browser and go to <http://www.dyndns.com>. Click on Sign up Now for apply free membership of Dynamic DNS service.

The screenshot shows the DynDNS website homepage. At the top left is the DynDNS logo. To the right are input fields for 'User:' and 'Pass:' with a 'Login' button. Below these are links for 'Lost Password?' and 'Sign Up Now' (the latter is highlighted with a red box). A yellow navigation bar contains links for 'About', 'Services', 'Account', 'Support', and 'News'. The main content area features a large banner with the headline 'Invisible Reliability, Obvious Value.' and a list of benefits: '- Run your own server', '- Mail delivery solutions', '- Static and dynamic IPs', '- Easy-to-use web interface', and '- Top-notch technical support'. A 'Learn more...' button is positioned at the bottom right of the banner. To the right of the banner are four service categories: 'DNS Services', 'MailHop Services', 'Network Monitoring', and 'SSL Certificates', each with a brief description. Below the banner is a 'News' section with a link to 'DynDNS Receives "Best Buy" Ranking From Consumer Guide' and a 'Notify' section for 'Automatic Renewals'. At the bottom, there are four columns of links: 'Resources' (What is DNS?, Home Solutions, Business Solutions), 'Services' (Custom DNS, Dynamic DNS, MailHop Outbound), 'Support' (Knowledge Base, Update Clients, 24/7 Premier Support), and 'About DynDNS' (Search DynDNS, DynDNS Careers, Contact Us). The footer contains copyright information: 'Copyright © 1999-2006 Dynamic Network Services, Inc. - Privacy Policy - Acceptable Use Policy - Trademark Notices'.

2. Fill out the form for creating new account. Please use **valid email address**, because DynDNS will send out email for activate new account.

Create Account

Please complete the form below to create your account. You will receive an e-mail containing instructions to activate your account. If you do not follow these directions within 48 hours, you will need to recreate your account.

Acceptable Use Policy

Policy Last Modified: February 6, 2006

1. ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE

2. DESCRIPTION OF SERVICE

I have read and agree to the Acceptable Use Policy above:

I understand that each Member may have only one (1) free account, and acknowledge that any creation of multiple free accounts will result in the termination of all of my accounts:

Username

Username:

Your username will be used to login to your account and make changes.

E-mail Address

E-mail Address: Confirm E-mail Address:

The e-mail address you enter must be valid. Instructions to activate your account will be sent to the e-mail address provided. You must keep this address current. Any accounts with invalid e-mail addresses are subject to removal without warning. We do not sell our account information to anyone. Read more about our [privacy policy](#).

Password

Password: Confirm Password:

The password you enter will be used to access your account. It must be more than 5 characters and cannot be the same as your username. Do not choose a password that is a common word, or can otherwise be easily guessed.

Mailing Lists

Optional Information

How did you hear about us: Details:

Providing this information will help us to better understand our customers, and tailor future offerings more accurately to your needs. Thanks for your help!

3. Check your email for new account confirmation.

Your DynDNS Account Information [Inbox](#)

★ **DynDNS Support** <support@dyndns.com> to me [More options](#) 1:04 pm(13 minutes ago)

Your DynDNS user account ' ' has been created. You must visit the confirmation address below within 48 hours of the time this e-mail was sent to complete the account creation process.

Our basic service offerings are free, but they are supported by our premium services. See <http://www.dyndns.com/services/> for a full listing of all of our available services.

To confirm your account, please go to the address below:

<https://www.dyndns.com/account/confirm/woSGhs068iwtst1ErSBHNQ>

Please note: If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site and requesting an account.

Sincerely,
The DynDNS Team

And, click on the confirmation link on the email to activate your account.

4. Once your account has been confirmed, please login for setting up free DynDNS service.

The screenshot shows the DynDNS website interface. At the top right, there is a login form with fields for 'User:' and 'Pass:' and a 'Login' button. Below the login form is a navigation menu with links for 'About', 'Services', 'Account', 'Support', and 'News'. On the left side, there is a 'My Account' sidebar with links for 'Create Account', 'Login', and 'Lost Password?'. The main content area displays a message titled 'Account Confirmed' with the text: 'The account " " has been confirmed. You can now [login](#) and start using your account.' Below this message is a paragraph about a mailing list subscription.

5. After login, choose “Services” tag to add a new DDNS service.

The screenshot shows the DynDNS website interface after logging in. The top right corner displays 'Logged In User: test' and links for 'My Services', 'My Cart', and 'Settings'. The navigation menu has 'Services' highlighted. The left sidebar has links for 'My Account', 'My Services', 'Account Settings', and 'Billing'. The main content area displays a message titled 'Account Summary for test' and a section for 'My Services' with the text: 'View, modify, purchase, and delete your services in [My Services...](#)'

6. Under **Services** tag, Choose “**Dynamic DNS**” in DNS Services.

DynDNS
Logged In User: [My Services](#) - [My Cart](#) - [Settings](#) - [Log Out](#)

About Services Account Support News

Services

DynDNS provides a variety of services that help enhance your home or business Internet experience. We offer superior domain name services (DNS), high quality domain management, world-class e-mail services, web redirection, and network monitoring. All of our services include free technical support by e-mail or phone where you speak to a highly trained engineer rather than a call center reading a script off of a screen.

DNS Services

- [Custom DNS](#) - Our flagship DNS management tool for your own domain
- [Secondary DNS](#) - Add reliability to your own nameservers
- [Recursive DNS](#) - Ensure DNS resolution for your DNS queries
- [Dynamic DNS](#) - A free DNS service for those with dynamic IP addresses**
- [Static DNS](#) - A free DNS service for those with static IP addresses
- [TLD DNS](#) - DNS for operators of ccTLDs and gTLDs

7. Under **Dynamic DNS** page, please click on “**Add Dynamic DNS**” to create new DDNS service.

Dynamic DNSSM

The free Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the [many domains](#) we offer, allowing your computer to be more easily accessed from various locations on the Internet. We provide this service, for up to five (5) hostnames, free to the Internet community.

The Dynamic DNS service is ideal for a home website, file server, or just to keep a pointer back to your home PC so you can access those important documents while you're at work. Using one of the available third-party [update clients](#) you can keep your hostname always pointing to your IP address, no matter how often your ISP changes it. No more fumbling to find that piece of paper where you wrote down your IP address, or e-mailing all your friends every time it changes. Just tell them to visit yourname.dyndns.org instead!

[Add Dynamic DNS](#) [Manage Existing Hosts](#)

8. Type in your own **host name**, pick up a **domain name**, and click on “**Add host**”. The IP address will be detected by the website and it's the external IP address from your ISP.

New Dynamic DNSSM Host

Hostname:

IP Address:

Enable Wildcard:

Mail Exchanger (optional):

[Add Host](#) [Reset Form](#)

Pick up your own domain name here

9. Double check on the settings, and then close the browser window.

Hostname Created [Dynamic DNS Home](#)

The hostname you have requested has been created. The information now in the database and DNS system is:

| | |
|-----------------|--|
| Hostname: | cpcamtest.dyndns.org |
| IP Address: | 123.45.67.89 |
| Wildcard: | N |
| Mail Exchanger: | None |
| Backup MX: | N |

10. Open web browser and login router's configuration page again. Go to DDNS setup, type in all the settings, and save.

LINKSYS
A Division of Cisco Systems, Inc. Firmware Version : v4.20.7

Wireless-G Broadband Router WRT54G

Setup | Setup | Wireless | Security | Access Restrictions | Applications & Gaming | Administration | Status

Basic Setup | **DDNS** | MAC Address Clone | Advanced Routing

DDNS

DDNS Service :

user name and password for DynDNS website

the host name you created plus the picked domain name.

User Name :

Password :

Host Name :

Internet IP Address : 123.45.67.89

Status : DDNS is updated successfully

DDNS Service : DDNS allows you to access your network using domain names instead of IP addresses. The service manages changing IP address and updates your domain information dynamically. You must sign up for service through TZO.com or DynDNS.org. **More...**

CISCO SYSTEMS

11. Now, you can use a host name instead of an IP address to connect to your DVR.

The image shows two screenshots related to a DVR's web interface. The top screenshot is a 'LOGIN' screen with the version number '1.0.4.5'. It features a navigation bar with icons for Home, Search, Refresh, Logout, and Download. Below this are input fields for Username (containing 'admin'), Password (masked with '*****'), IP (containing 'cpctest.dyndns.org'), and Port (containing '8888'). A green arrow icon with the text 'click here to login' is positioned below the IP field. The bottom screenshot is a Microsoft Internet Explorer browser window displaying the 'VIDEO WEB SERVER' interface. The address bar shows 'http://cpctest.dyndns.org:8888'. The main content area has a blue background with the text 'Any time & Any where' and 'IP Surveillance New GenerationVideo Web Server'. A note states 'both username and password are "admin" as default'. Below this is a login form with 'Username' (admin) and 'Password' (masked) fields. At the bottom, there are buttons for 'Reset', 'Submit', 'Download AP', and 'Download Java'. A note points to the 'Download Java' button, stating 'click here to download Java Runtime plug-in to be able viewing DVR with web browser'. Another note points to the 'Submit' button, stating 'click here to download client software'.

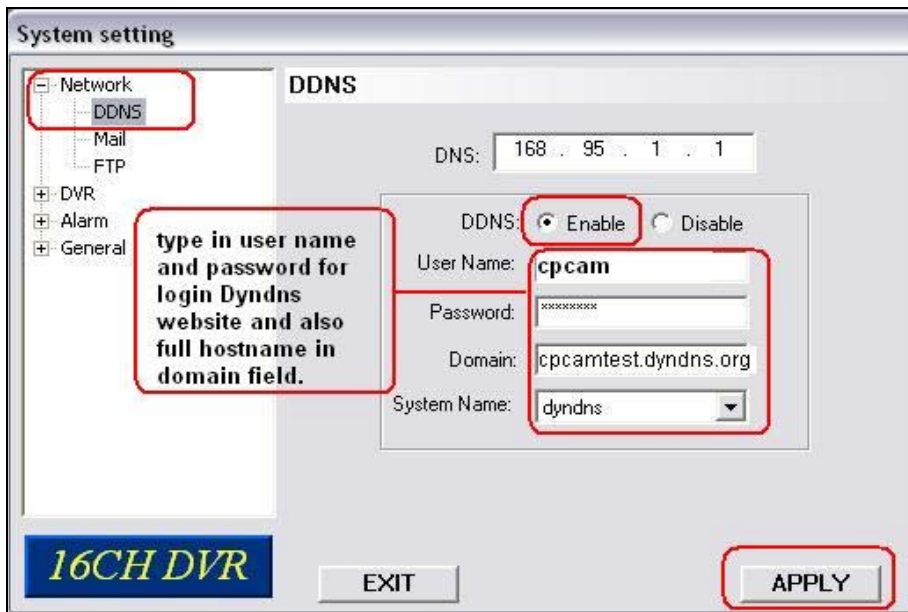
12. If there is not DDNS supported by the router, you could enable DDNS service of Video Service E client software on DVR.

DDNS settings on Video Server E software

1. Login DVR with Video Server E software and click on the icon on the top right corner – system configuration.



2. Under **Network** menu, Choose **DDNS** and entry all settings for DDNS service.



3. After click on “**Apply**”, DVR will update IP information to DynDNS website’s database every 5-10 mins.