DDNS

To use the DDNS function, you must put your DVR system into the WAN. In the circumstance that your DVR system is behind a router or gateway, you need to open the port on that router for DVR system behind it.

1、Router configuration

Contact your network administrator, or call technical support for the configuration on router, if you not sure how to configure your computer.

There are two ways to put the DVR system into WAN with router: Virtual Service and DMZ.

Virtual Service used to put one service of a host in LAN to WAN, but when there are many services, using Virtual service will be complex, then you can use DMZ to set the host as a DMZ host.

Both the two ways can put the DVR system behind router into WAN.

Take D-LINK Router for example:

1.1 Virtual Service

log on the router. Select "Advanced" tab on the top, and click on "Virtual Service" bottom on the left. The following page will be display. The screen might be very different regarding to the different model of routers.

uol Server	er is used to allow Internet		AN SEMICES.	
		ed 🔘 Disabled		-
Name		remote service	Clear	J
plications Private IP	192.168.0	.102		
Protocol Ty	De TCP 👱			
ers Private Port	4000			
Public Port	4000			
Schedule	🗵 Alway	's		
	O From	time 00	 : 00 AM AM 	l 🔽 to
-		day Sun	💌 to Sun 💌	
				-

Notice: do not copy the configuration above; it is different according setting on each router.

The picture above shows an example for how to open the service port on router for a DVR in local network.

- Check the "Enabled" radio button.
- In "Name" box, type in a name for this router' entry, in above example, I type in "myDVR's remote service".
- In "Private IP" box, type in the IP address of DVR system, which is the IP address you type in "IP ADDRESS" filed in "Network" setting menu on DVR. In above example, I type in "192.168.0.102".
- Select "TCP" in "Protocol Type" drop down menu.
- In both "Private Port" and "Public Port", type in the service port number, in above example, it is 4000. The port is the port that you put in "TCP PORT" field in "NETWORK" menu on the DVR.

• Select "Always" radio button.

After click "Apply", the service port 4000 will be opened on the router for the DVR on 192.168.0.102. The DVR Net View and other client tools will be able to connect to this DVR from public network by connecting to the router's IP address and TCP port.

Follow the same process, add another entry for HTTP port service. After this service port is open, the web browser client from public network will be able to connect to this DVR by connecting to the router's IP address.

1.2 DMZ

log on the router. Select "Advanced" tab on the top, and click on "DMZ" bottom on the left. The following page will be display. The screen might be very different regarding to the different model of routers.

	Home	Advanced	Tools	Status	Help
UPnP	DMZ DM7 (Demilitarize	ed Zone) is used to allo	w a single comput	er on the LAN to he	exposed to
Port Forwarding	the Internet.	Enabled O Disabled 10. 1. 1 10	N I		CAPCOOL IS
DMZ					
Filters				Solution Apply	🥝 🔂 Cancel Help
Firewall					
NAT					
ATM					

Notice: do not copy the configuration above; it is different according setting on each router.

The picture above shows an example for how to open the service port on router for a DVR in local network.

- Check the "Enabled" radio button.
- In "IP Address" box, type in the IP address of DVR system, which is the IP address you type in "IP ADDRESS" filed in "Network" setting menu on DVR. In above example, I type in "10.1.1.10".
 After click "Apply", all the services will be opened on the router for the DVR on 10.1.0.10. The DVR Net View and other client tools will be able to connect to this DVR from public network by connecting to the router's IP address.

2、DDNS with dyndns

2.1 Please visit the dyndns server website(www.dyndns.com) and register a user, add a domain name as below:

by Dynamic N	NS.com			My Cart My Services Log Or
	About Se	rvices Acc	ount Support	News
Vly Account	Host Services			Add New Hostname - Host Update Lo
My Services				
Dynamic DNS Pro	<u>Hostname</u>	Service	Details	Last Updated
Internet Guide	allen34.dyndns.org	Host	60.191.94.124	Jan. 04, 2010 12:17 AM
SLA				
Premier Support				
Zone Level Services Domain registration and transfer, DNS hosting, MailHop services				
Host Services Dynamic DNS hosts, WebHop URL Forwarding				
Spring Server VPS				
MailHop Outbound				
Recursive DNS				
Network Monitoring				
SSL Certificates				
Renew Services				
Auto Renew Settings				
Sync Expirations				
Account Settings				
silling				
My Cart				

2.2 Search the DNS server's IP address:

-

1) You need a PC connect the modem directly, and confirm your PC and login internet.

2) You enter the cmd state, (click "start→run→input "cmd"", then click enter).

99007			
Internet Explorer Internet Explorer E-mail Microsoft Office Outlook MSN Command Prompt Out Windows Media Player Image: The sand Settings Transfer Wizard Microsoft Office Word 2003 All Programs	My Documents My Computer My Network Places My Network Places My Network Places Administrative Tools Administrative Tools Administrative Tools Printers and Faxes Search Run	Run Image: Type the name of a program, folder, document, Internet resource, and Windows will open it for Open: Open: OK Cancel	, or you.
🥼 start 📄 A-NS	Command Prompt	🛃 start 📄 A-N5 🛛 🗖	Command I

3) Input the order: ipconfig/all, then enter:

ex C:\W	NDOWS\system32\cmd.exe	- 🗆 🗙
	ft Windows XP [Version 5.1.2600]	-
(C) Cop	yright 1985-2001 Microsoft Corp.	
C: \Docu	ments and Settings\99007>ipconfig /all_	
		-
🗪 C:\WI	NDOWS\system32\cmd.exe	- 🗆 🗙
C:\Docur	nents and Settings\99007>ipconfig /all	-
Windows	IP Configuration	
	Host Name	
	Primary Dns Suffix : dahuatech.com	
	Node Type : Unknown	
	IP Routing Enabled : No	
	WINS Proxy Enabled : No DNS Suffix Search List : dahuatech.com	
	DNS Suffix Search List : Ganuatech.com	
Ethernet	t adapter Local Area Connection:	
	Connection-specific DNS Suffix . :	
	Description Broadcom NetXtreme 57xx Gigabit	Gont
roller		
	Physical Address	
	Dhop Enabled No	
	IP Address	
	Subnet Mask : 255.255.0.0 Default Gateway : 10.15.0.1	
	DNS Servers	
	10.1.2.81	
C: Docur	nents and Settings\99007>_	-

4) You can receive the DNS servers IP address:

E.p: 10.1.2.80 or 10.1.2.81

2.3 Setup the DNS menu on web client as below, and input the DNS servers IP address in this blank.

Configuration	
Control Panel Query System Info Query System Info Query System Info Query System Config GENERAL GENERA	Preferred DNS 10 . 1 . 2 . 80 Alternate DNS 0 . 0 . 0 . 0
	Save Refresh

2.4 Setup the DDNS menu on web client as below, input the domain name, port, username, password and dyndns server IP in the blank. There are two ways to setup the menu:

Configuration				\mathbf{X}
Control Panel Version Version Version Version General General Encode Schedulz	DDNS Type Server IP Port Domain Name User Name	Dyndns DDNS 💌 members. dyndns. org 80 allen34. dyndns. org allen34	1~65535	
NETWORK EMAIL ODNS NAS NAS ALARM CENTER ALARM DETECT PAN/TILL/ZOOM DEFAULT/BACKUP	Password Alive	*****	1~30000	
ADVANCED ADVANCED HDD MANAGEMENT ABNORMITY Alarm I/O Config Record ACCOUNT SNAPSHOT AUTO MAINTENANCE ADDTIONAL FUNCTION Preferred DNS				Save Refresh

You can also setup the menu like this:

Configuration					
Control Panel Query System Info VERSION	DDNS Type		DDNS F Enable		
HDD INFO IDG System Config GENERAL ENCODE SCHEDULE	Server IP Port Domain Name User Name	204. 13. 248. 112 80 allen34. dyndns. org allen34	1~65535		
E PETWORK PEMAIL DDNS PAS PAS PEMAINN PEMAINN P	Password Alive	***** 300	1~30000		
ALARM DETECT FAN/TILT/ZOOM DEFAULT/BACKUP ADVANCED HDD MANAGEMENT BOORMITY					
 Alarm I/O Config Record ACCOUNT SNAPSHOT AUTO MAINTENANCE 				Save	Refresh
- 🧀 ADDTIONAL FUNCTION					

Note:

1) The IP address 204.13.248.112 is the server IP of members.dyndns.org, you can have a try to ping members.dyndns.org, and you will see the IP.

2) The port of DDNS must be 80, the reason is as below.

	Username Password Log in
	About Services Account Support News
Developers' Connection	Perform Update
DNS Update API Flow Diagram Detect IP Change Perform Update Process Return Policies Guidelines & Notes Client Blocks	When a change in IP address is found or a user alters any of their settings, the client should perform an update. All updates are sent using a well-formed HTTP request. DynDNS will pass back a <u>return code</u> that the client needs to parse. The update API is a REST- based system. If you have questions about the syntax, please <u>contact DynDNS Support</u> .
DynDNS.com Certified	The HTTP Request
My Cart <u>0 items</u>	Updates can be performed over HTTP or SSL-encrypted HTTPS Hostname: members.dyndns.org (preferred). HTTP ports: 80, 8245
Search	All requests should be sent to members.dyndns.org. Hard coding the IP address is not acceptable as the IP address may change.
Search	The update interface listens on ports 80 and 8245 for HTTP, and 443 for HTTPS. Port 8245 may be used to bypass transparent HTTP proxies. It is not necessary to open any incoming ports (or allow incoming ICMP) for updating.
	All clients must send a well-formed user agent that includes company name, model number, and software build revision. An example would be: Mellenium Inc Router 25001 - 1.1
	Examples
	These examples are provided only as samples. See <u>RFC 2616</u> for information about the HTTP Protocol.

2.5 The configuration is ok. You need wait for five minutes. Then login in the dyndns website to check whether this domain name have received the IP address as below.

	About	Services	Acco	unt	Support	News	
My Account	Host Servic	es				Ad	d New Hostname - Host Update Loo
My Services							
Dynamic DNS Pro Internet Guide SLA Premier Support Zone Level Services Domain registration and transfer, DNS hosting, Mallhop services Host Services Dynamic DNS hosts, WebHop URL Forwarding Spring Server VPS Mallhop Outbound Recursive DNS Network Monitoring SSL certificates Auto Renew Settings Sync Expirations Account Settings	Host allen34.dyndns.org	<u>name</u>	Host	60.191.	<u>Details</u> 94.124	Ja	L <u>ast Updated</u> n. 04, 2010 12:17 AM
My Cart Oitems							

E.p: allen34.dyndns.org have received the IP address 60.191.94.124

3、DDNS with No-IP

Please double click NO-IP DDNS to go to the configuration interface you can see an interface is shown

as in Figure 1.

	DDNS
DDNS Type	NO-IP DDNS 🔻 🗌 Enable
Server IP	
Port	0
Domain Name	
User Name	
Password	
	OK Cancel



- DDNS Type: You can select from the dropdown list. There are five options: No-IP, DynDNS, CN99, Private and Oray.
- Server IP: You can use ping command to get server's IP
- **Port:** input server port here.
- Domain Name: Get the domain name you get from your DDNS service provider.
- User: Get the user name you get from your DDNS service provider.
- **Password:** Enter corresponding password.

Highlight the icon 🛄 in front of Enable to enable the DDNS server configuration.

No-IP DDNS example: it's a system of dynamic DNS service. If you do not have a Static IP address on the Internet, you need to have a dynamic IP. It is to say your IP address changes after a certain period of time.

You can follow the steps listed below to display image on your DVR even your IP is dynamic.

You need to use a DDNS service and create a domain name that is not necessarily direct use the IP

address.

After completed configuration in the DVR, DDNS service can constantly inform the latest DVR's connection IP, and modify its IP on the table of data from the server. Then we have a constant domain name in the Web browser, along with the HTTP port, send a request to identify the car IP of the domain name typed. The server will direct the domain name to the IP connection, thus allowing access to the

DVR which does not have a fixed IP in the network.

Note: It is important to note that to gain access to the DVR in a local network, it is necessary to achieve

the redirect the port of your modem or router to your DVR.

To receive domain name in the No-IP DDNS service, please follow the steps listed below.

3.1 Please visit <u>www.no-ip.com</u>; the page of No-IP appears as below. See Figure 2.



Figure 2 NO-IP

3.2 Left click mouse on the "Create Account" button, account Information interface is shown as in Figure

3

no ip				A Home A	Contact Us 🛅
The DNS Service Provider	Home	Download	Services	Support	Company
No-IP is Free, Sign up N	ow!				
me 🕨 <u>Free SignUp</u>					
Create Your No-IP Account					
rou already have an account then you can <u>(sign in here)</u>					
🍰 Account Information:					
Ema	il:				
Passwor	d:				
Confirm Passwor	d:				
(1) About You:					
First Nam	e:				
Last Nam	e:				
How did you hear about us	?: - Select One -	-			
Zip/Postal Cod	e:				

Figure 3 Account Information

3.3 Fill in the requested fields and click I Accept button. Then you can get an email containing username and password. You can use this account to access the service.

3.4 Open the e-mail sent by trusted rmação No-IP and double-click the link that is below the phrase "To activate your account please click the following URL:" in the body of the email. See Figure 4.

sunto: No-IP.com Activation	
ongratulations, the No-IP account 'henrique@intelbras.com.br' has been created. To activate your account lease click on the activation URL below.	
o-IP's basic dynamic DNS service is free, made possible by our paid services. If you are interested in ynamic DNS for your own domain please consider our No-IP Plus service. For more information about our pa ervices visit <u>http://www.no-ip.com/services</u> .	id
o activate your account please click the following URL: ttp://www.no-ip.com/activate?lid=e6aecf8ecc3ada8a	
emember that you can use our dynamic update client to automatically update your host when your dynamic IP ddress changes. You can download the client at <u>http://www.no-ip.com/downloads.php</u> .	
f you have any further questions, please refer to our FAQ at http://www.no-ip.com/faq.php and guides sect to http://www.no-ip.com/faq.php and guides sect to http://www.no-ip.com/faq.php and guides sect to sect to sect to support by opening a trouble ticket http://www.no-ip.com/faq.php and guides sect to support by opening a trouble ticket http://www.no-ip.com/faq.php and guides sect to support by opening a trouble ticket http://www.no-ip.com/faq.php and guides sect http://www.no-ip.com/ticket/ .	
hank you for choosing No-IP.com	

Figure 4 E-mail received

3.5 Now you can see an interface is shown as in Figure 5. You have successfully created an account.



Figure 5 Account Confirmed

3.6 In Figure 5, click to sign and enter the email address and password you get earlier. Click "login" to

sign up, you can see the welcome interface and configuration option of account. See Figure 6. You can

highlight manage host item.



Figure 6 Configuration option of account

3.7 The Manage Hosts interface is shown as in Figure 7. Click the Add Host button you can access the creation of a domain name.



Figure 7 Manage hosts

3.8 In Figure 8, input corresponding host name in the filed. You can use this name to access DVR from an external network. In the field to the right of the name, select the desired area. This is your domain name for access to the DVR. Click "Create Host" button at the bottom of the page.

The DNS Service	e Provider			E Return t	o No-IP.com	Your No-IP Account S	upport Log Out
Hosts/Redirects Plus	Managed DNS Domain R	egistration	SSL Certificat	tes Mail	Monitoring	Squared Backup DNS	Renew/Activate
Hosts/Redirects Add Host	Add a l	nost					
 Manage Hosts Manage Groups 	Fill out the following field	s to configure	your host. After	you are done	click 'Create Ho	st to add your host.	
+ Download Client + Upgrade to Enhanced	• Own a domain nam Use your own domain i		r DNS system. A	Add your doma	in name now o	r read more for pricing and	features.
Need redundancy	Hostname Informatio	D					
for your mail server? Click here for more info	Hostname:				no-ip.biz		• 0
24/7 Server Monitoring and Failover	Host Type:	Host Type: DNS Host (A) DNS Host (Round Robin) DNS Alias (CNAME) Port 80 Redirect Port 80 Redirect					
Click here for more info	IP Address:						0
A Need Help?	Assign to Group:	- No Group -	-		- Configu	ire Groups	0
+ Support Center	Enable Wildcard:	Wildcards a	re a Plus / Enha	inced feature.	Upgrade Now!		0
 Basic Troubleshooting Guide 							
Support Ticket Contact Us	Accept Mail for you LetNo-IP do the dirty w		P or forwarding	for your name			
	Mail Options						
	MX Record			MX P	riority		
	Erter the name of you	r external ma	il exchangers (n	nx records) as	hostnames no	t IP addresses.	
				5	•		0
	If you would like a mo	re MX records	, please upgrad	le to <u>No-IP Plu</u>	s or <u>Enhanced</u> .		
						Revert	Create Host

Figure 8 Domain name

3.9 Now you can see an interface is shown as in Figure 9. Here you can view domain name and the computer's current IP setup. If you already have a domain name equal to trusted, you must define another name for the host.

		Return to No-IP.com	Your No-IP Account Su	pport Log Out		
is no ip		Logged in as:	Logged in as:			
The DNS Service F	Provider					
Hosts/Redirects Plus M	lanaged DNS Domain Registration	SSL Certificates Mail Monitorin	g Squared Backup DNS	Renew/Activat		
Hosts/Redirects	Manage Host	e				
Add Host	- Jananage nost	3				
Manage Hosts						
Manage Groups	Host vd16s480st.no-ip.biz cro	eated				
Download Client						
Upgrade to Enhanced						
	Current Hosts: 1 of 5 Need More	Hosts? Enhance Your Account!	e u	ograde Now!		
Need redundancy						
for your mail server?	Host	IP/URL	Action			
Click here for more info	🚱 Hosts By Domain					
24/7 Server Monitoring	no-ip.biz					
and Failover	vd16s480st.no-ip.biz	200.200.200.198	Modify 🔏 Remove			
Chick here for more into	2					

Figure 9 Host successfully created

3.10 Now you need to define the definition of the server's IP in IP-DVR able to access this service DDNS. To get DDNS service, you need to have a computer connected to the Internet on the same network with DVR. Then please type the command dynupdate. no ping-ip.com at the command prompt, Windows ®. The server's IP will be displayed on the screen. See Figure 10. Your DVR can use this IP to find the No-IP server.

C:\>ping dynupdate.no-ip.com
Disparando dynupdate.no-ip.com [204.16.252.79] com 32 bytes de dados:
Resposta de 204.16.252.79: bytes=32 tempo=309ms TTL=235 Resposta de 204.16.252.79: bytes=32 tempo=318ms TTL=235 Resposta de 204.16.252.79: bytes=32 tempo=304ms TTL=235 Resposta de 204.16.252.79: bytes=32 tempo=329ms TTL=235
Estatísticas do Ping para 204.16.252.79: Pacotes: Enviados = 4, Recebidos = 4, Perdidos = 0 (0% de perda).
Aproximar um número redondo de vezes em milissegundos: Mínimo = 304ms, Máximo = 329ms, Média = 315ms
C:\>_

Figure 10 Ping dynupdate.no-ip.com

3.11 Please go to the DVR and access the MAIN MENU> SETTING> NETWORK> DDNS. Input server

IP you get in the above step. Select the DDNS Type as No-IP DDNS and highlight the icon 🛄 in front

of Enable to enable the DDNS function. Now fill the fields as described below, and click OK to save

current setup.

- Server IP: Enter the IP noted in step 10.
- Port: Enter the port 80.
- Domain Name: Enter the domain name created in step 8.
- User: Enter your username (email address) created in step 3.
- Password: Enter the password created in step 3.

The figure Configuration file of No-IP is shown as in Figure 11.

	DDNS	×	<	
DDNS Type		🔲 Enable		
Server IP	204.16.252.79			
Port	80			
Domain Name	dhdvr.no-ip.com			
User Name	username			
Password	•••••			
OK Cancel				



3.12 Now you have completed DVR setup. Open Internet Explorer ® in another foreign network with Internet access, unlike the network where the DVR is connected to, you need to follow the steps listed below:

1). Enter the address into your browser: http://nome the field created in step 8. For example:

http://vd16s480st.no-ip.biz

2). If the DVR HTTP port is 80, just type the domain name. Otherwise, enter in the browser address as: http://nome the field created in Step 8: port number of HTTP. For example:

http://vd16s480st.no-ip.biz:9090

3). Press Enter. The system will ask install application webrec.cab control or not. Please click Yes to perform a successful connection.

4). If the page does not appear on the computer screen, you need to lower your system safety setup. From Tools> Internet Options> Security, select Internet and then click Custom Level, you can enable ActiveX controls. See Figure 12. Then open your browser and re-enter the domain name of the DVR.

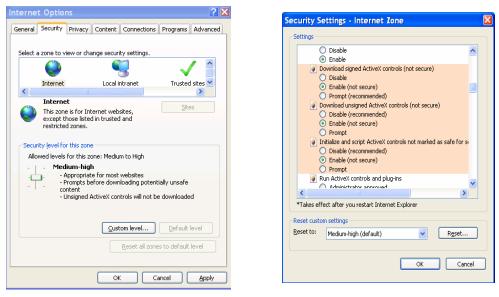


Figure 12 Lower security settings