



Using a Dynamic DNS Service to Connect to Your DVR

IP Addresses on the Internet

When you connect to the Internet, through dialup connection, cable, DSL, or by other means, your Internet Service Provider assigns you an IP (Internet Protocol) address. This is a set of numbers that lets other computers on the Internet get in touch with you. An example of an IP address is 192.168.1.100. Any computer or network device connected to the Internet must have an IP address to be able to communicate over the internet.

Of course, when you connect to a web site or another type of server over the Internet, you usually don't type an IP address to get there. Instead you type something like <http://www.burtek.com>. "cnn.com" is a domain name, or host name. A host name is an easy-to-remember alias for an IP.

Unfortunately computers don't understand host names, they understand IP addresses.

DNS

DNS, or the Domain Name System, is the system that translates host names into IP addresses for the entire Internet. Whenever you type a domain name into your web browser, DNS translates that name into an IP address with which your computer can communicate. DNS is an Internet directory service; think of it as the Yellow Pages of the Internet.

Connecting to your DVR

As mentioned earlier, your ISP assigns you your IP address. Using this address and your remote access software, you are able to connect to your DVR. Unfortunately, if you do not have the most recent address assigned to you, you will be unable to connect. Most, if not all ISPs offer a premium service where they will assign a "Fixed" or "Static" IP address which will never change, this will no doubt resolve your issue.

Unfortunately this premium service is usually 3 times more expensive than your regular service... an added cost that most customers will not accept.

Dynamic DNS

DDNS is a service that maps Internet domain names to IP address, much like DNS.

Unlike DNS, which only works with static IP addresses, DDNS works with dynamic IP addresses, such as those assigned by ISPs. To use DDNS, one simply signs up with a provider and installs the network software on any PC behind the modem, to monitor it's IP address.

The DDNS service gives your connection a friendly name on the internet. You can register your-dvr-name.com and have it point to your connection. Your unique host name will point to your connection as long as it is alive, no matter how often your dynamic IP address changes.

Most DDNS service providers offer free, yes free, packages. Most will limit you by having to add their service name to your unique name: yourdvrname.theirname.org, a small price to pay for a free service.



How it works

The application you install on your PC behind your modem is in constant communication with the DDNS servers on the Internet. There is a user specified setting which will send the IP address of the PC it is installed on anywhere between 1 to 30 minutes. The DDNS servers will update its database for your entry if necessary.

When you try to communicate with `yourdvr.theirname.org`, the request is processed by their servers and redirected to your connection. It's that simple.

The Capture line of DVRs allows you to directly type your DDNS name in the address space of the remote client software.

This is the basic functionality, to find out more, open your favourite search engine and type DDNS or Dynamic DNS.

You will see that there are many providers, offering different features. Here are a few of the popular names I came across:

www.dyndns.org

www.no-ip.com

www.tzo.com

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