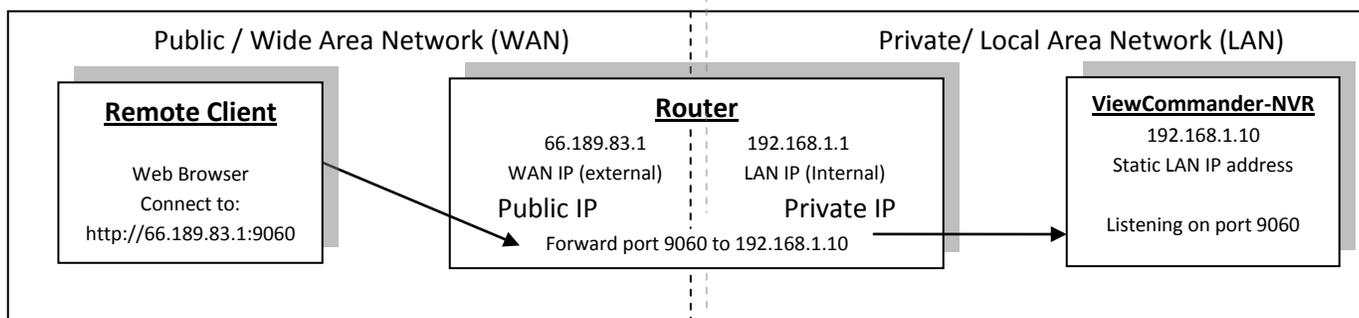


Accessing ViewCommander-NVR Remotely

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This example illustrates how to remotely access a Network Video Recorder (NVR) located on a private network. This example can also be applied to remotely accessing IP cameras located on private networks.



Remote Client – This is an application on the client computer (PC, laptop, mobile phone) such as a web browser. The client in this example is a web browser used to connect to the NVR.

Router - Your router allows network traffic from the LAN to access data from a WAN (such as the Internet), and vice versa. Your router has two IP addresses:

- The WAN IP Address (also called a public, Internet, or external IP address) is the IP address assigned to your router by your Internet service provider (Cable modem, DSL, wireless card, etc...). Use this address when connecting to the NVR from outside your LAN.
- The LAN IP Address (also called a private or internal IP address) is an IP address that only computers on your Internal LAN can connect to.

NVR – In this example, the NVR is a software program on a computer in your local network you want to access from outside your LAN.

In order for the Remote Client to connect to the NVR, the network traffic must pass through the Router. For security reasons, most routers do not allow public traffic to pass through and connect to devices located on your private network. To allow this, you must enable "Port Forwarding" on your router. Consult your router manual for instructions on how to change the Port Forwarding settings (also called Network Address Translation or NAT).

When you enable Port Forwarding on the router, the router needs to know a few things:

- The port number to forward. This must match the listening port on the NVR. Port 80 is the default for web traffic. (see 'useful tips' below)
- The IP address of the NVR. The IP address of the NVR should be a static IP address.
- Type of traffic (TCP and/or UDP). Choose TCP for most NVR's and IP cameras.

Quick this steps:

- 1) Assign the NVR a static IP Address. (192.168.1.10 in this example)
- 2) Configure NVR to use any port number you choose. (Port 9060 in this example)
- 3) Log into the router and enable port forwarding. Forward the port number (from step 2) to the IP address of the NVR (step 1)
- 4) Log into the router to determine the Public (WAN) IP address. You can also use sites like <http://whatismyip.com> from the NVR PC.
- 5) Use the Public (WAN) IP Address and Port combination to access your NVR. In this example enter : <http://66.189.83.110:9060>

Some useful tips:

- Port 80 is the default web port. You can use it, but be aware that some ISP's block port 80. Also, the NVR may be picked up by search engines. Additionally, automated bots can attempt to break into your system. Port values higher than 1024 are recommended.
- You should enable password protection for the NVR.
- If your Internet service provider does not assign you a static WAN IP address, you can use Dynamic DNS services such as dyndns.org to monitor IP address changes. You can then use an easy name to access your NVR, such as <http://mynvr.dyndns.org:9060>.