

## What is NAT vs. Port Forwarding

**NAT** is an acronym for Network Address Translation. It allows you to use private IP addresses (e.g., 192.168.x.x, 10.x.x.x, etc.) and share a single public IP address (e.g., 123.123.123.123) among several systems (PCs). The NAT device then translates the multiple private IP addresses into a single IP address for the rest of the world to see, and back again when response traffic comes back. Further, since private IP address space is not allowed on the public Internet it effectively *hides* your network and makes it much more difficult to get to from the Internet.

**Port Forwarding** is an adjunct to NAT which allows that single public IP address to support traditional services (i.e., web server, mail server, FTP server, etc.) thru a single public IP address by directing those inbound service requests to a private IP address *behind* the firewall/NAT device. Some people refer to Port Forwarding as "making pinholes" in your firewall because you allow some restricted and controlled types of traffic *in* through your firewall.

Documents Posted on Netgear Forum by KWheelerAZ