

## Re: NAT without DHCP? (w2k3)

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  - *Date:* Sun, 13 Aug 2006 17:31:23 +1000
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That is a different address pool. That applies to your public interface and is only used if you have been allocated a number of public IP addresses by your ISP.

(Just to add to the confusion there is another pool of addresses in RRAS which you can allocate to remote access clients. You don't need to do anything with them either in your case).

Alex Smirnoff wrote:

Ok, if I right-click NAT/Basic Firewall node in the tree and then select properties, on address assignment tab I see "Automatically assign IP addresses by using DHCP allocator" – not what I need. If I right-click on my public interface, I see "Address pool" tab but it defines "range of public IP addresses assigned to you", according to the documentation. So how that pool of internal IP addresses is configured?

Configuring DNS was really easy – I just enabled name resolution it in the NAT/Basic firewall properties.

"Bill Grant" wrote:

The dhcp-style allocator in NAT is not configured automatically. If you want to use it, you configure a pool of IP addresses for NAT to allocate to the client machines. (You do this from the NAT Properties sheet). If you do not configure any addresses, you need to set up a DHCP server on the LAN or use static config for the hosts. Either setup should work.

NAT is a fairly simple setup. There are really only a few things that must be set for it to work.

1. The public interface must have a default route out to the Internet.
2. The public and private interfaces to be used must be assigned in NAT.

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3. The client machines must use the NAT router's private interface as their default gateway.

What are you doing about DNS? If the client uses the server's private NIC IP address for DNS, NAT will act as a DNS relay and forward the DNS requests to your ISP (or whatever the server's public NIC uses).

Alex Smirnoff wrote:

When you say "But you do have to configure NAT on the RRAS server, just leave the area for IP addresses blank", what do you mean? NAT is enabled on the public interface of the RRAS server already. What is this "area for IP addresses" – I just dont see it.

"Bill Grant" wrote:

You do not have to use the DHCP-style allocator in NAT. You can use static IPs or you can run DHCP on one of your servers. But you do have to configure NAT on the RRAS server. Just leave the area for IP addresses blank. As long as you set the RRAS server's private IP as the default gateway on the second machine (which you have done) it should work for any 10.x.x.x address.

Alex Smirnoff wrote:

Setup scenario: Windows Server 2003 R2 x64, two network cards – one public and one private. I followed all instructions and installed routing and remote access services, configured one network interface as public and another as private (with IP 10.0.0.16). Everything works fine and server can access internet.

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Then I started configuring another machine on the internal network to use first machine as router and got stuck. I dont want to use DHCP allocator and want to assign internall addresses manually. So I configured second machine as such (it is another W2K3 R2 x64, if it matters):

IP Address. . . . . :  
10.0.2.10  
Subnet Mask . . . . . :  
255.0.0.0  
Default Gateway . . . . . :  
: 10.0.0.16  
DNS Servers . . . . . :  
10.0.0.16

Again, everything works and I can ping one machine from another. But I cannot access outside world from the second machine. I realized that first server will not do NAT because it doesnt know that it should do it for particular internal IP.

So how I can the main server to do NAT for all internal network without using DCHP?

I would really appreciate any help/advice.

Alex