

Re: RRAS Win2003: Cannot reach public IP reserved hosts behind our NAT

Source:

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.networking/2004-08/0032.html>

From: Phillip Windell (_at_)

Date: 08/02/04

Date: Mon, 2 Aug 2004 09:22:43 -0500

If you want some reference material on this issue look in this article about two-thirds the way down under the heading called "14120 Errors"

[Those are underscores, not spaces between the words]

14120 Errors; Discussion and Solution

http://www.isaserver.org/articles/14120_Errors_Discussion_and_Solution.html

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Phillip Windell [MCP, MVP, CCNA]

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"Phillip Windell" <@.> wrote in message

news:uJ6rRuJeEHA.1764@TK2MSFTNGP10.phx.gbl...

> "Nick" <Nick@discussions.microsoft.com> wrote in message

> news:1A20D5E0-1056-4D97-9687-19DBCFAD2B5B@microsoft.com...

> > The problem is, we are unable to access them by their public IP address

> from our intranet. From within our intranet we can access the machines by

> their private addresses (10.x.x.x) just fine, as these packets are not

> routed to our RRAS box.

>

> Since you are accessing by IP# there isn't any DNS involved here (sorry,

> guys). What you describe is exactly the way it is supposed to behave if

> you

> are "reverse-NATting" (Static NATing) from public IP#s bound to the

> external Interface of the Router back to these machines on your internal

> LAN.

>

> Contrary to popular misconception, Ethernet runs on MAC addresses not on

> IP#s. The role of the IP# in Ethernet is only to provide a Layer3 routing

> mechanism and to provide a means to resolve the MAC address (ARP). The

> reason intranet host must use the private addresses to access the servers

is

> because NAT can't make "u-turns". When you send a packet to the external

> IP# the "NAT" process takes it and creates a situation where the source

and

> destination MAC addresses in the packet headers are the same address. It

> can't go from itself to itself and shoots itself in the head.

>

> These types of situations will work with other types of "processing" like

> the "Web Publishing" or "Server Publishing" features of ISA & Proxy2

because

> the internal methodology is different, but it will not work with a NAT

> Device.

microsoft.public.windows.server.networking: Re: RRAS Win2003: Cannot reach public IP reserved hosts behind our NAT

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>  
> So when outside your system use the public IP# and when inside the system  
> use the private IP#. If you want to access by "FQDN" then make sure your  
> DNS functions properly to resolve to the proper IP# as the other guys are  
> describing.  
>  
> --  
>  
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> www.wandtv.com  
>  
>
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