

Re: 2 DHCP Servers and 2 Domains

Source:

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From: Phillip Windell (_at_)

Date: 09/14/04

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Let me clear up a few things first.

Forget worrying about the "Domains". The Domains have absolutely no bearing on DHCP, IP#, or Subnets. You can have one Domain with a dozen subnets, and by the same token you can have a dozen Domains on one subnet,...there just simply is no relationship between the two. You could even run a network that doesn't even have TCP/IP at all (by using NetBEUI or SPX/IPX) and you would still have Windows Domains. (I know,... AD requires DNS, hence TCP/IP,...I'm just trying to make a point here).

DHCP is a Layer3 (TCP/IP only) entity. It is concerned with the Layer3 topology of your network (subnets & routers). You can have one single DHCP serve a dozen subnets,..or you could have a dozen DHCP Servers handle the same subnet,...so there is no direct relationship between the number of subnets and the number of DHCP Server you run either. For example, I run 7 subnets and have two DHCP Servers. They are configured identically (except for the Exclusions) so that either one can serve all of my subnet by itself if it had to,...I only run two for redundancy's sake.

Now, here's what you are looking at...

If you run two DHCP Servers you can set them up identically since you only have one subnet. Then you use Exclusions on each DHCP to block out the addresses that you don't want that particular DHCP to give out. However, there is no way that you can control which DHCP answers the Client's request,..it is first-come-first-serve the first time around and which ever DHCP is the "quickest to the draw" will answer the request.

Now once the Client has successfully received a network config it will then always attempt to request the same address from the same DHCP everytime after that unless that server happens to be unavailable. In that case, it would broadcast the request and the other DHCP would have a chance to answer the request.

The only way to have any real control over this is to segment your network into two subnets. You can parallel the Domains with the subnets if you wish, but that is a "human" thing because the computers couldn't care less. You

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then would have two DHCPs, one in each subnet, with the proper Scope,...or you could have one DHCP with two Scopes in one subnet and the Router between the subnets would be rigged to forward the DHCP requests from the opposite subnet to the subnet where the DHCP is sitting. The Router includes information in the "forward" so that the DHCP knows which Scope to get the configuration from.

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Phillip Windell [MCP, MVP, CCNA]
www.wandtv.com
"Chris C." <anonymous@discussions.microsoft.com> wrote in message
news:216d01c49a81$e3df08c0$a301280a@phx.gbl...
> There isn't any device separating the networks except
> wireless building to building bridges that bring the
> connection from the main building (calvaryadmin) to the
> lab building (calvarylab)
>
> How do I setup the DHCP class on the servers and also on
> the clients?
> >-----Original Message-----
> >Are there any routers between one and the other LAN? If
> this is only one LAN
> >then you can't really prevent what DHCP assigns what IP
> to what client.
> >Client will take IP and other settings from first DHCP
> that will respond.
> >What you can do is setup one DHCP that will lease IPs
> based on DHCP Class
> >ID. If e.g. DHCP Class ID is "CalvaryAdmin" client would
> get one set of
> >settings (e.g. different DNS settings) and if DHCP Class
> ID would be
> >"CalvaryLab" clients would get another set of settings...
> >
> >You will still have to reconfigure the clients. To do
> this you could use
> >logon script that would set appropriate DHCP Class IDs
> based on domain
> >membership.
> >
> >Mike
> >
> >(Sorry about first empty post)...
> >
> >"Chris Chase" <anonymous@discussions.microsoft.com>
> wrote in message
> >news:008701c49a7d$7efc4cf0$a401280a@phx.gbl...
> >> I have a network that consists of 2 windows 2003
> servers
> >> One is Domain Controller for the CalvaryLab Domain and
> the
> >> other is controller for the CalvaryAdmin. Each one
> does
> >> user logins, mapped drives, and also leases the ip
> >> addresses for their domains. My question is how do I
> keep
> >> computers on the calvarylab domain from getting their
> IP
> >> addresses from the CalvaryAdmin domain and it's
> server? I
> >> do need the two domain's to be able to talk to each
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> other
> >> because I share an internet connection via a soho
> device
> >> and also I like to be able to remote desktop the
> servers
> >> and PC's so that I can work on them from the other
> >> building. Thanks!
> >>
> >> Chris
> >
> >
> >.
> >
```