

Re: Network Design

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- *From:* "buf" <robertsg@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Fri, 24 Oct 2008 11:36:23 -0400
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Thanks.. I thought that was all overkill :) I wanted to keep it a single subnet but was curious on best practice for that... Users are mostly office users (word, excel) We have a drafting department that does CAD but there are only 3 users there and they aren't doing intensive CAD or 3D stuff.. It's mostly file and print.. I'm moving to a SAN because we are doing a lot of scanning documents and image type things and will get more involved with that later.. I'm currently running out of space..

It is currently set up in the 172.22 range... It is a Win2k domain.. I'm moving to a Win2008 domain..

In a VLAN case how do users authenticate if the DC is in Say VLAN1 and you have users in VLAN2 or VLAN3..

I have a watchguard x550e in place that acts as the firewall.. From that goes into a dell powerconnect 5212 which the servers are connected to then to two other dell switches which the users are connected to..

I am pretty much re-doing the entire network so I'm wondering best practice for optimal performance.. I'll probably be playing with the NEW network for a while in the a test environment for learning purposes and then migrate everyone over. Being it isn't that big of a network I kind of have that luxury..

I am getting :

1- Dell PowerEdge 1950 this will be a Windows 2008 64 bit. This will be the DC (AD, DHCP, DNS, printer server)

1 - Dell PowerEdge 2950 (Backup DC, SQL server)

1 - Dell Equallogic PS5000E - ISCSI SAN.

2 - Dell PowerConnect 5424 GB switches to connect the SAN to the servers..

2 older servers from old network that I'll use to do things like (Anti-Virus server, fax server, web server, etc.)

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Thanks for your input!

"Paul Weterings" <Paul-nospam-@syncpuls-dot-com> wrote in message
[news:4901e6d7\\$0\\$15820\\$e4fe514c@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:4901e6d7$0$15820$e4fe514c@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

60 users?

It is very likely that the below setup is overkill, assuming the 60 users are not streaming video all the time, but are regular office users.

I would not split up the network in subnets if at all avoidable, there's no reason I can think of that is worth the extra hassle in this situation.

Without spending too much money I would do the following, keeping some level of scalability in mind.

1. two decent brand managable 48 port 100 Mbit switches for the users, you might want to consider vlanning depending on user activity.
2. A decent brand (juniper, cisco) router to the internet
3. Gigabit switch for the SAN backbone, assuming you are using iSCSI. Otherwise FC.
4. Internal IP scheme, something less obvious in the 172 or 10 range (for example 10.46.8.x) this will give you 254 ip addresses. (not 10.0.0.0 please... if you ever try to connect other LAN's you'll find that they will have done this; forcing you to renumber) You may want to consider using a B class to allow for scalability.

For a small setup like this the KISS principle applies.... Keep It Simple. The admins will thank you for it.

/) Regards,
// _____
|||_) Paul Weterings
/ (O_) <http://www.servercare.nl>
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buf1 wrote:

Curious on best practice for network design of a relatively small network of 60 users, 5 printers, 3 servers, one storage array, one firewall to

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the internet...

I'm wondering if I split up into 2 subnets just to break it up a bit.
I'm thinking two switches for the SAN that connects to servers on the backend.

Then two switches (1 for each subnet) that would connect to all servers
Then 2 user switches that would connect users in each sub net..

Is it over kill?? Or am I on the right track.. It's building a network from scratch..

What is best practice for private internal IP address scheme..

Thanks.