

Re: FSMO roles and BDC.

Source:

<http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.general/2007-03/msg01565.html>

- *From:* "leew [MVP]" <useContactPage@xxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Fri, 30 Mar 2007 02:54:27 -0400
-

David wrote:

"Herb Martin" <news@xxxxxxxxxxxxxxxx> wrote in message
[news:OIpYr\\$ncHHA.4836@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:OIpYr$ncHHA.4836@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

"David" <needsomehelp@xxxxxxxxxx> wrote in message
[news:460c752c\\$0\\$17133\\$4c368faf@xxxxxxxxxxxxxxxxxxxxxx](mailto:news:460c752c$0$17133$4c368faf@xxxxxxxxxxxxxxxxxxxxxx)

My new server at minimum will be a BDC, and even though I know it is not recommended to have exchange on a BDC, that is the way it is with my present configuration and I have no problems whatsoever.

It isn't a BDC unless it is running NT rather than Win2000+.

I know I was using wrong terminology but the DC that has the FSMO roles is a win2k server and the other DC is win2k server and it also has exchange2003. And the setup works quite well for us.

To reiterate what herb said, Exchange on a DC, while supported, is NOT considered a best practice. There are potential issues that may not crop up until something happens. I would recommend reviewing this blog and the links provided in it.

<http://blogs.brnets.com/michael/archive/2005/01/24/319.aspx>

Most experts suggest relatively strongly that you put the Exchange on a regular server but it CAN run on a DC.

I haven't had problems other than I am running out of drive space on the exchange 2003 machine, and I don't have the ability to add more gigs.

Why not? There are many ways to add more space. For example, you could get a SATA RAID card and an

Re: FSMO roles and BDC.

external SATA controller and add 2+ TB. Or you could replace your existing drives. There may be no physical space left inside the machine, but I find it difficult to believe you don't have options for increasing storage capacity.

The question that I have is that both of the old servers that I have now, both PDC and BDC are around 7 years old. So I am afraid of something really bad happening, like the motherboard quit working and not being able to get a replacement.

So add a third DC, or keep REALLY good backups.

But if a motherboard diode becomes pregnant and ruins the whole thing, and I can't get a replacement, then what good is a REALLY good backup?

That's what they made e-bay for. And for that matter, How much would a replacement cost NOW? Why not order some crucial spare parts – you could probably get everything in your 7 year old servers for under \$100 on ebay right now and have spares on hand to minimize downtime and ensure recovery. Heck, play it safe, buy two sets of spares for each system... still would probably cost less than \$250 for the crucial parts (CPU, mainboards)

Also I don't have the space to add a third machine, otherwise that *would* be the simplest solution... But there is something else as I will mention below..

Have you heard of Virtualization? There's no reason you can't setup a NON-DC as your Exchange box and run another domain controller (or two even – though that's getting excessive) in a virtual server. That's how I run my own home network, to ensure if a DC fails, I don't lose my accounts and other critical directory information. Works just fine with virtually no additional load on the server.

Make sure you always

have at least TWO of them because if you lose one you are way to close to the edge if you don't trust the hardware.

Well, I built one with mostly Intel hardware and it has done a famously good job, but it is 6 years old. The other one (the exchange 2003) is an old dell poweredge 1400...which also is fine, but after 7 years, ya gotta start wondering.

Re: FSMO roles and BDC.

Re: FSMO roles and BDC.

Another reason to put Exchange on another server — by the way, if you don't have a lot of users then ANY modern machine has enough horsepower.

We have around 20 users, but this is a Cardiologist office and we can't afford to be down for any amount of time. You obviously can guess why. Also, we really don't have the space to add another machine. Also our Ultrasound servers and workstations has to be upgraded...(they are not in our domain, they are just workgrouped) but they are expensive.... We are looking at a 200,000 dollar pricetag there...And that came out of the blue.... Stupid medical IT vendors don't take their clients budgets into consideration... :o(

So they are willing/able to shell out \$200,000 on medical equipment, but can't come up with \$2000–\$4000 for servers/server hardware? If this is so business critical, then this amount should not be a problem. The servers are 7 years old! It's TIME to replace them.

BUT if you are going to run certain new versions of Exchange you must run on 64 bit hardware (as I understand it.)

LOL!.....Yeah and as I understand it, if you want to do internet email, you actually have to have 2 64bit machines.... I read that off of CDW.... Microsoft :o(

Anyways, this used to not be very bad when we were running SBS, but unfortunately SBS won't allow for trusts and we MUST be able to have a trust with the hospital next door so we can see their info systems... I wish Microsoft would give the option to certain customers to purchase a trust on SBS for a fee... That would have cut down on my headaches over the years. I wish they would think a little more about us little customers. I only need ONE trust.... What is the big deal about that?

The fee is the transition pack which removes the restrictions of SBS. You're one of those rare exceptions where SBS probably wasn't the best choice.

So if I am going to have the new server (with exchange) be a BDC, should I just transfer the FSMO roles and make it the PDC just in case something happens to my 7 year old PDC machine?

You can do this now or later — the Single Master Roles are not terribly critical minute to minute and so you can transfer them after a failure.

How can you transfer them if the machine they are on is not recoverable in any way, shape or form?

Re: FSMO roles and BDC.

Re: FSMO roles and BDC.

You must have a functional DC – ANY functional 2000/2003 DC will do. Then you seize the rolls, using NTDSUTIL. It's recommended that you do NOT do this – unless you have to... in other words, do it only if a DC fails, not to try it for fun. (If you want to test things – always a good idea – build a virtual network in Virtual PC or VMWare or Virtual Server and experiment in a NON-Production environment.

The most important thing is to ensure you have every DC a GC in a single domain forest-- add DNS server(s) and if you have more than one subnet WINS Server(s).

It is late... What is GC?

Global Catalog – here's a couple of links describing it in greater detail.

<http://www.awprofessional.com/articles/article.asp?p=26961&rl=1>

<http://technet2.microsoft.com/WindowsServer/en/library/440e44ab-ea05-4bd8-a68c-12cf8fb1af501033.mspx?mfr=t>

Now I've seen some people recommend no more than one GC and others recommend every DC is a GC. In my opinion, since GCs (especially in larger organizations) can generate large amounts of replication traffic, especially problematic over slow links, setup 2 GCs per major site... and in general, unless you are a huge company, there's not much point in having more than 2 DCs per site... (so in that respect, each server would be a GC).

We have 20 users on a single subnet. Btw. The new server that I bought has server2003.... I have already ran both preps..... forest and domain..... and didn't have any problems... AD is pretty healthy here...

Is it Server 2003 or Server 2003 R2? R2 has another prep on the second CD you have to run if you want to make it a DC.

Also if down the road I do lose the PDC and I haven't transfered the FSMO roles over, and there is no way to recover the PDC, can I still promote the BDC to PDC, or will I always have issues?

There is no PDC or BDC in AD running Win2000 or Win2003.

I know, I was just in a hurry.

Any more suggestions or comments would be appreciated, Herb.... Thanks already...

Re: FSMO roles and BDC.

David