

# ARX Config &dash; Week Three



Don MacVittie, 2010-04-02

Well, I'll bet you're wondering how it's going?

First, the reasons for my silence that you haven't heard. Last Thursday my wonderful [Dell Latitude D820](#) died. I loved this machine, thought so much of it that last time I updated my home machine I got a D830. But sadly, it was over three years old, and I spend 8+ hours a day abusing it, so no surprise.

The warranty ran out in December, so that left me (IT actually) no option but to replace it. The real reason to include this is to point out to you that F5 IT rocks, and many IT departments could learn from them. I'm a remote worker, I was limping by working on my home machine which had most of what I needed, but some key software like MS Project wasn't installed, and webmail is... painful in any situation.

I told IT the machine was definitely dead late on Tuesday, on Wednesday I had a new machine. With my login info and the licensed corporate software installed. You don't do any better than that.

So they sent me a Latitude E6400, and honestly, I'm pleased as can be. The only little problem I've had with it was (so far) not work related. I listen to DVD lectures from [The Teaching Company](#) in the evenings while working or painting or writing for non-work, and for some reason my newest set of DVDs plays fine on the machine but doesn't have sound. Local WMV files play and have sound, the DVDs work on my home machine... So I don't exactly know what's going on there, but *everything* else works perfectly, so I'm happy. I'll figure out what oddity makes them work on other Dell Machines and not on this one.

And I was complaining that I was out of space for VMs... No more! Much larger hard disk.

Anyway, you can imagine that getting the machine, pulling the hard disk from my old one (don't tell IT, I'm not certain they'd approve), hooking up the disk via USB and dumping all the important stuff, reconfiguring just about everything – from bookmarks to networking settings – to work well in my environment sucked up just a bit of my time.

On the bright side, the days that I had no machine (it was nearly a week because we'd hoped we could fix the old one, but alas, Dell said "motherboard, fixing is a bad choice") gave me a chance to get my storage house in order.

What did I do? Well I wiped the box running ADS and started over. It had ADS and DNS installed from who-knows-how-long-ago, but it was shut down... So I tried with the installed copies, but wasn't real confident and it wasn't working the best.

So I wiped the server and reinstalled, set ADS up again, joined my home laptop to the ADS domain, then worked at getting the storage into the domain. One required using the WINS name instead of the domain name to get it to work, the other required that I add it by had to ADS and DNS, and THEN tell the storage to join the domain. And as usually happens in that case, all went well.

Finally a chance to join the [ARX](#) to the domain. This is something I had not attempted up to that point because I wanted to have the things an ARX requires – storage and users – in ADS so that once it was joined I could get rolling. So I went to join the ARX into the domain... And realized I did not have the faintest idea how to do so.

Active Directory Forest	Domain Type	Windows Domain	IP Address	Service	Preferred
<input checked="" type="checkbox"/> Active Directory Forest	forest-root	internal.nandgate.com	192.168.42.158	KDC DNS	Yes
<input type="checkbox"/> internal.nandgate.com					

AD Forest/domain list.

RTFM time, so I went and looked. The help on the system I have is very nice, and coworkers tell me that the help on DMOS 5.X is indeed very nice overall. That helped me get rolling, as did the logs, which are very verbose and I cannot recommend enough. In fact, all the oddities I've encountered to date – failure to access disks for metadata, failure to connect to shares, failure to negotiate NFS versions... All were ultimately the fault of my storage, and all we ultimately made clear to me via the ARX logs.

Log	Date	Size
<a href="#">error.log</a>	Feb 4, 2010 11:29:14 PM	212 k
<a href="#">fastpath</a>	Jan 28, 2010 12:58:24 AM	0
<a href="#">ha-reboot-history.log</a>	Jan 28, 2010 1:19:06 AM	203
<a href="#">syslog</a>	Feb 4, 2010 11:31:22 PM	47 M
<a href="#">trace.log</a>	Feb 3, 2010 11:02:16 AM	5.7 k

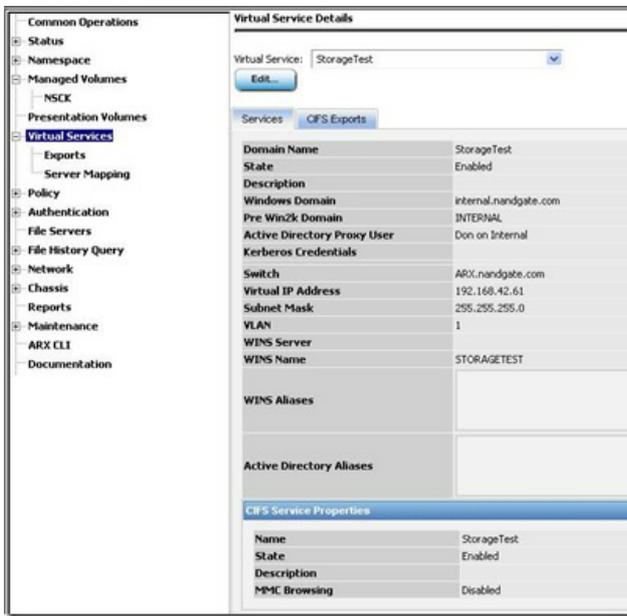
Lots of logs – and this does not count the automatically generated reports for lots of common activities.

The screenshot shows the ARX Manager interface with the 'Managed Volumes' section selected. The 'Volume' tab is active, displaying the following configuration details:

- Volume Name: /
- Admin State: Enabled
- Status: Normal
- Description:
- Protocols: CIFS
- Metadata Size: 44 MB
- Metadata Free Space: 483 GB
- Free Space: 483 GB
- Shares: 1 of 1 enabled
- Files: 138 k (8.4 k dirs) of 3.9 M
- WPU: 1 (domain 2)
- Processor: 1.1
- Auto Reserve Files: Enabled
- Shadow Target: No
- Snapshots: Not Enabled
- Snapshot Timeout: 50 seconds
- Snapshot Directory: --snapshot
- Free Space Calculation: Automatic
- Import Conflict: Files and directories can be renamed during import and a re-import. (per share setting)
- Auto Synchronize: On
- File Subshares: Enabled
- Oplock Support: Enabled
- Access Based Enumeration: Disabled
- CIFS Characteristics: Persistent ACLs, Unicode on disk

The Managed Volume created under ADS.

One really odd thing I ran into that I am working around by ignoring it – because I can – is that I have a Namespace whose drive mountings failed – a leftover from the work I was doing in NFS and CIFS without Active Directory. It is stuck in the “starting” state, and I can’t get it out. Since the ARX won’t let me delete it, I’m ignoring it for now, and need to look up how to point out to the ARX that it will never finish starting since it has no volumes allocated to it. I’m pretty certain that this is a user error, so don’t judge the ARX poorly, even if it *is* an ARX error, you can ignore a single Namespace easily enough. Or better, don’t use SMB class storage so you’re not jerking the poor ARX around for three weeks ;-).



A Virtual defined on the ADS domain Internal.

Everything before that last picture that I've talked about has been the backend. Now that all the backend pieces were working together, it was time for me to set up the user-facing bit... The Virtual Service. This is the presentation "volume" – where the device advertises the Virtual Directory Tree to the network. It went easy enough on creation and making CIFS exports, and it's up and running now.

The problem I'm stopped at now is another RTFM – I need to join the Virtual to the domain, but haven't read how – it told me that I needed to and how to do so when I created the exports on the Virtual Service, but it was 3am and I thought "I'll figure that out later..." And indeed I will, for this blog is long enough, and that's where I'll pick up the next installment.

Until then, enjoying my new laptop and seeing this all working together.

Oh yeah, and I have to make my regular everyday user not be SuperADSMAN. I toggled him up to Enterprise ne'er-do-well while testing, and don't want to forget to make him normal, and create the storage background users I need. More on that next time, when I'm sure what storage background users I want/need.

Don.

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