ADDING AN NAS DRIVE TO YOUR NETWORK (Part 1 of 2)

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A few months back, I presented two articles in Boca Bits on setting up a wireless home network. And, I reviewed the big advantages of using the Cisco program "Network Magic" to configure and manage your network settings, and elements.

With your network, you can share files, printers, et al quite simply. But, to share files from a given computer, for example, the computer having those files must be up and running. And if you want to share a printer on the network, the computer where that printer is installed, and of course, the printer, must be up and running.

There is a quick and easy way around this, and that is to use an NAS (network attached storage) device. This is essentially a hard drive, within an enclosure, which has a "mini" operating system included, which takes the place of a computer, and provides the user with a simple way to then connect the hard drive(s) to the network, and provide access to the contents thereon. Access to everything on the NAS device is available at all times.

And, many of these NAS devices also provide a USB port for use with printers and other accessories. Putting a hub on this port will allow the use of whatever USB devices that one wants to put on the network. For devices which require an installation, such as a printer, or scanner, the computer wanting to use that device must have had the install procedure run, just as one would do when that device is connected directly there.

OVERVIEW OF NAS DEVICES

There are several varieties of NAS devices out there. The three main flavors are

1. Small self contained units which include one or two hard drives, ready to go

2. Medium size units with no hard drives included. The user gets his own hard drives and installs them into the unit.

3. Large (and expensive) units, not really designed for home users, and also priced too high for home use.

MAXIMUM FILE SIZE

When I started looking into NAS units, there was one area where I was confused, since no units that I could locate could handle hard drives with the NTFS formatting capability. I wanted this to be able to store images created by True Image, for my system backups. These image files are usually 20-30 GB, but the limit in FAT32 and EXT2/EXT3 is 4 GB (minus 1 byte). So to store a 20 GB file from True Image, it breaks it up into 4 GB chunks.

Apparently, to use NTFS, which is a Microsoft format in Windows versions from Windows NT, XP, and onward, there are fees which one must pay to Microsoft. And few manufacturers, if any, want to pay this fee, so they settle on either FAT32 (the older Windows file system), or EXT2/EXT3, which is a Linux file system. These choices are fully compatible with Microsoft Windows - all versions.

I finally decided to accept this formatting system, and decided that I would not use the NAS drive to store True Image backups. The read and write speeds, working on a home network NAS drive, are very much slower than working to an internal SATA drive in my machine, and also much slower than working to a USB drive connected to a computer. So I would just use the NAS unit to have all my data and files on the network, and instantly available to any computer on my network.

WHICH NAS UNIT TO GET

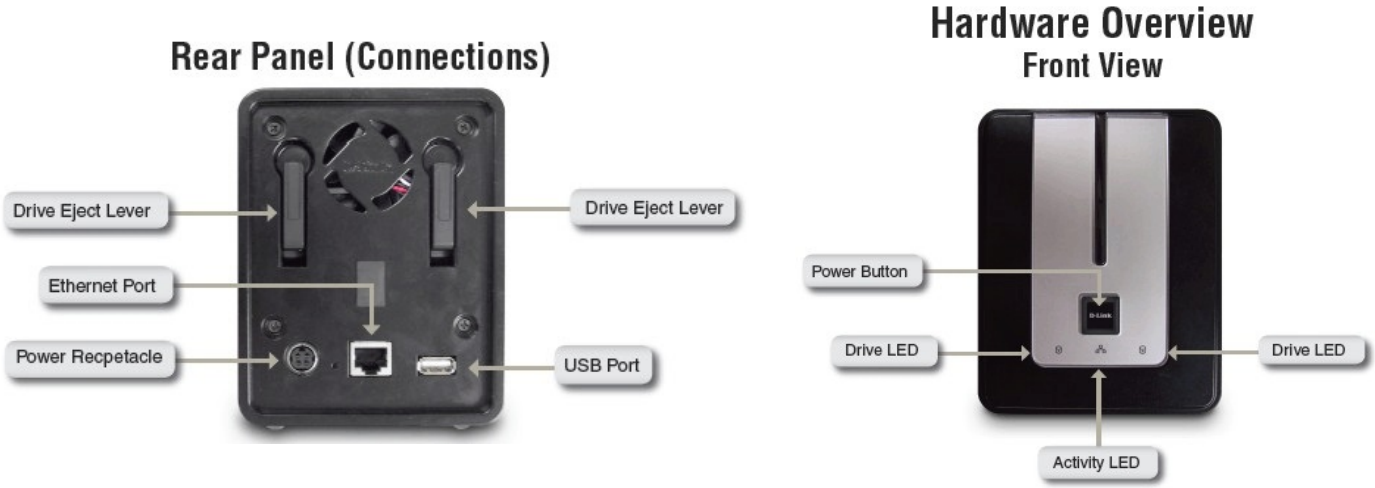
I did a lot of searching , reading user reviews, and checking prices. I hadn't realized that there were so many choices out there. I considered price, quality, ease of use, and many customer reviews on a variety of sites. I finally decided on the D-Link DNS-323.

This unit has an all aluminum case, holds 2 SATA drives, has in internal fan, seemed to be a well manufactured. And, the price for the unit from Amazon was $158, with a $30 mail-in rebate. I also ordered two 1 TB drives to go with the unit. The total price of $338 for everything is a very competitive total price, to get 2 terabytes of storage onto the network

This unit also has a USB 2.0 port on it, as shown below. So users can attach whatever USB devices they want to be available on the network

PUTTING IT ALL TOGETHER

There was very little to assemble when everything arrived. The case and its front cover are very nicely manufactured, and show excellent quality. The front cover of the unit slips off very easily - actually too easily. Then the drives are merely slid into the case where their connectors engage the mating connectors inside the back of the case. Then the cover is put back on, and the assembly part is all done. Below are two pix of the front and back of the case. To remove the drives, slip off the front of the case, and use the “drive eject” levers on the rea of the case..



On thing that the rear view does not show, nor did the manual mention it, is the small pinhole sized openng alongside the Ethernet port, which is the opening to insert the end of a paper clip, to reset the unit. I will discuss resetting later on.

In part 2, I'll review the process of installing the the DNS-323 onto my network, and offer some tips on getting everything into smooth working order.

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