Technology Corner



Building an INEXPENSIVE Network File Server

By Jairo Rugel

LAST MONTH I TALKED ABOUT BACKING UP YOUR DATA TO AN EXTERNAL USB HARD DRIVE. IF YOU'VE ALREADY PURCHASED ONE AND STARTED BACKING UP YOUR DATA, I COMMEND YOU. IF YOU'RE STILL WAITING TO GET STARTED AND HAVE A SPARE PC, THEN I'VE GOT ANOTHER USEFUL AND INEXPENSIVE PROJECT YOU MIGHT BE INTERESTED IN: A NETWORK FILE SERVER.

A network file server is a location other than your primary computer where data can be stored. If something happens to the computer, your data is not damaged or lost and you can access it from another computer. This file-server design does not include strong security; it is meant for use in an "open" environment like a home or home office, not a business network where sensitive data is stored.

To complete this project you should be familiar with computer hardware and software and have a basic understanding of networking.

For starters, you'll need a spare PC with these minimum requirements:

- o Pentium or better processor
- o 64MB or more RAM
- o 1 internal hard drive
- o CD-ROM drive
- o Floppy disk drive and a blank floppy disk
- o Internal network adapter (not a dial-up modem)
- o Keyboard

You'll also need:

- o Internet access
- o CD recorder
- o CD recording software
- o A blank CD
- A copy of NASLite 2.0 CDD version (Buy it from http://www.serverelements.com/naslite-2-cdd.php)
- o Network switch

Note: The spare PC must be in working condition. You should also back up any data that you want to keep since you'll delete existing data from that PC.

Once you've removed any important data from the spare PC and downloaded a copy of NASLite 2.0 CDD version, you'll need to create the bootable NASLite 2.0 CD. Check out this site for step-by-step instructions on burning CDs: http://www.petri.co.il/how_to_write_iso_files_to_cd.htm.

Once you've created your bootable NASLite 2.0 CD, insert it into the spare PC along with a blank floppy disk. Restart the PC and wait for NASLite 2.0 to boot up. The following steps will guide you through the set up and configuration of your new NASLite file server:

1. Login to NASLite 2: At the login prompt enter: Username - admin / Password - nas (make sure to press ENTER after each).

2. Provide License ID: Select option L and enter the license information that you received via email after purchasing NASLite 2.0.

3. Configure Network Settings: Select option 1 to configure the spare PC's network address (Hint: If your network uses an addressing scheme such as 192.168.1.X, configure the spare PC with a similar address, but not one already in use). Your subnet mask will be automatically configured by NASLite. You should leave the default gateway as is.

4. Change Administration Password: Select option 5 to change the default admin password from "nas" to something more secure that you'll remember.

5. Save Configuration Settings: Select option 9 to save the system configuration to floppy disk.

6. Reboot to Apply Configuration: Select option 7 to restart the NASLite PC and apply the configuration changes.

7. Unlock NASLite-2: Log into the admin interface as in step 1 and choose the Unlock option. Follow the instructions to unlock the rest of the features included in NASLite 2.0 (Hint: From now on you can access the spare PC across your network via a web browser such as Internet Explorer or Firefox).

8. Configure Storage Disks: Select option 3 to configure the internal hard drive in the spare PC. Remember that this step will erase any data on the existing hard drives.

9. Save Configuration Settings: Select option 9 to save the configuration information from the last 8 steps.

10. Reboot to Unlock and Mount Storage Disks: Rebooting the spare PC will ensure the updated configuration data on the floppy loads properly.

Now you should have a fully configured NASLite file server. You can check out its features by opening a web browser window on another computer and entering the IP address of the new server from step 3 above. You can also download the user manual at http://www.serverelements.com/file.php?dl=NASLite-2-Manual.pdf.

I hope the information in this article proves useful. Let me know if you have any questions about this or any other technology article previously published in Rhode Island Home Living and Design. You can reach me by phone at 401-619-1085 or via email at solutions@atc-tech.net.

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