



Backup to Basics

Stephen Rodda checks out Hewlett-Packard's new Windows 95 DAT backup package, has an argument with Winfaw Pro 7.0 and creates web pages with the help of a Hot Dog.

With Yuletide firmly in mind, I have been perusing the world wide web, and I've found a few locations which we of the networking fraternity might find interesting: <http://www.engr.wisc.edu/~ballard/bofhserver.html> contains almost everything a BOFH ("Bastard Operator From Hell") could wish to read, including an excuse server: this gives you an excuse of the day for why the network isn't working. And there are several stories from <http://prime-mover.cc.waikato.ac.nz/simon.html> which might give you some ideas about what you can do to your users. Don't think that I actually *condone* any of the activities he gets up to, though.

In a more serious vein, I've been looking at the latest present from Hewlett-Packard, Colorado Backup for Windows 95 which, it is said, will back up under Windows 95 to a SCSI DAT. I tried it out, backing up my 3Gb of (visible) disk space and the NetWare server to my drive. It seemed to have worked perfectly. But being a sceptic to the last, I decided to do a test restore. Unfortunately, the whole thing blew up in my face as it was reading the tape, and caused an exception error.

Giving it the benefit of the doubt, I tried again, just backing up one 1Gb partition, but no — a gig of files (perhaps it's got something to do with the number of files on the partition) was too much for it. I think this version must have escaped, rather than being released. Whilst I was writing this column, H-P released another version, 1.01, which is now available and seems to have most of the bugs fixed. I downloaded it from CIX and tried again.

I installed the program, and this time it seemed to work properly, turning in a very

respectable 25Mb per minute in backup speed. "This is too good to be true," I thought. I waited until the backup was complete and then left it to compare. Once this was over, with no errors, I thought I'd restore a few files to another area of the disk. This I did, and compared them using the DOS utility. I found that they all compared.

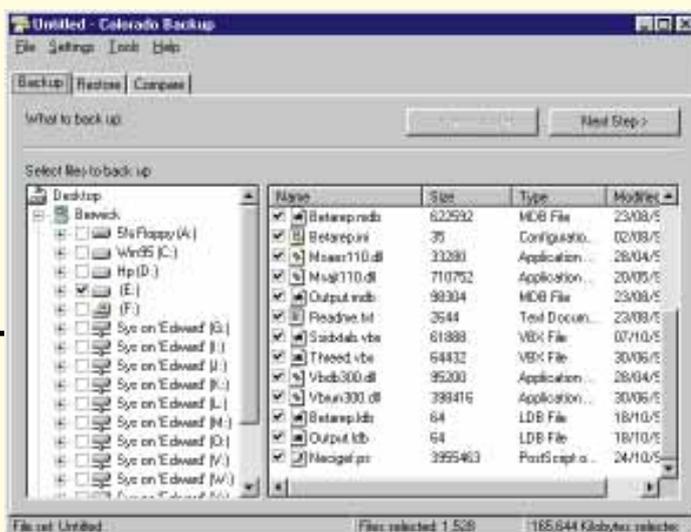
Remember, it's not enough to back files up, you should restore a random selection and compare them with the source files. That way you can be sure you have a valid backup. It's also a good idea to occasionally try restoring a few files from an archived tape since you never know when you might need them, and it'd be a pity if your drive couldn't read them due to head wear or misalignment. Don't forget it's important to clean a DAT regularly (and any other form of tape drive too, for that matter). Some DATs will give an error condition if they have not been cleaned frequently enough. Sometimes this error condition will, unfortunately, indicate that it's too late for cleaning and

the drive needs to be returned for servicing. A DAT uses approximately the same sort of transport technology as a video recorder, only it's a little more choosy. Please keep your heads clean and only use a proper cleaning tape.

Windows NT

Just hitting the BBSs as I write is the Microsoft Windows NT service pack 2 for 3.51. Version 3.5's service pack 3 has arrived, too. Both these are included on this month's cover CD. I still find, however, that the new NT Explorer shell (also available on MSN and Compuserve), doesn't seem to approve of either of these service packs, so you either get your bugs fixed or you have the new shell. Service Pack 2 addresses a few bugs found in the disk utility of NT and in Services for Macintosh, as well as a few esoteric ones (which, incidentally I haven't noticed) in

H-P Colorado Backup for Windows backup screen



Problem solving

More hard disk on NetWare

I was recently passed a page torn from your article in *PCW* addressing the problem of upgrading a 2G hard disk on NetWare 3.12 to a 4.2G hard disk. I have mirrored the disk successfully and have even set it active, and everybody here at our office is using it — however, the remaining disk space is still unavailable.

How do you partition span? Is it a option within Install or is it a little more fundamental with FDISK? I've tried various methods to no avail. Can you help?

SN@cis

First and foremost, I suggest you get a subscription to PCW, so that you don't have to rely on the generosity of others in order to read my column. Seriously, though, I'm sorry I didn't give the complete procedure in my article, but for the benefit of you and all the others who asked the same question, here follows the procedure:

*First set up the new disk, naturally with a DOS boot partition and, still in DOS, having formatted the DOS partition with the /s switch to transfer the operating system, use XCOPY C:.*D: /s to copy all the files and directories from that partition to the new disk.*

Make sure that you have a boot floppy with a copy of FDISK on it to hand. Now run AUTOEXEC.BAT to load the server and start NetWare. Once the server is started, load the install NLM, choose the Disk option, and edit the partition table of the new disk to give it one large NetWare partition, spanning the whole of the available hard disk surface.

Hot fix areas are not important with modern hard disks as they do their own hot fixing, so a small hot fix area (of about half of one percent should be enough). If you see any NetWare hot fix areas being used, this is a danger sign, it means that the disk's own hot fix area is now full, and the disk is probably on its way out.

Now choose the volume option and make a note of the exact size of the old volume. Create a volume with the same number of blocks on the new disk, and establish a mirror between the new volume and the old. Now go away and leave NetWare to its own devices until the new has mirrored the old. Break the mirror and down the server.

Change the new disk to be the primary boot disk, either removing the old disk or re-addressing it as another drive. Now boot using the floppy and run FDISK to activate the DOS partition of the new drive as bootable. Removing the floppy and FDISK should now reboot your system. With NetWare up and running, load install once again and select



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other modules. I know there's a school of thought which says "If it ain't broke, don't fix it" but the patches for NT are wide-ranging, and I recommend that you pop the CD into the drive and run the patch routine.

Winfax Pro 7.0

I tried installing the Beta version of Delrina's Winfax Pro 7.0: I imagine the version numbers were skipped so that it integrates with Microsoft Office 95 (also running currently as 7.0, of course) under Windows NT 3.51 with the explorer shell.

It gave me a somewhat enigmatic message, telling me that I had to be installing it under Windows 95, Windows NT 3.5 or later. "I have got a later version," I yelled. Unfortunately, Winfax wasn't paying attention.

Turning this time to Windows 95, Winfax installed very smoothly and even managed a small amount of MAPI integration.

The second quarter of next year should see voice messages integrated into Winfax (for those with voice modems) so

perhaps I may have some of my wishes granted by Santa this year.

It seems a pity that more people don't use modems as they're intended. As far as sending faxes is concerned, they're great. Many people though, seem to forget the technology by which these modems (even over ordinary telephone lines) can extend your network arbitrarily.

This technology isn't *totally* seamless but if you know someone will use a modem to pick up your fax, and that the technology is capable of doing it, using either Windows MS At Work Fax or Winfax's Fax a File, it is possible to send things quickly. I know one firm with an email account which has only just got around to teaching one of its staff members how to use it.

Unfortunately, this particular member of staff is generally out of the office, so their email system is out of commission for more than 50 percent of the time. I'm currently waiting for a file from them, and I'd get it faster if they were to parcel up the floppy disk up and sent it by



Problem solving (contd)

the volume option. Add the free space to SYS: and your new drive's full extent is now addressable under NetWare. Oh, just one thing. Don't even think about this (or any form of server upgrade) unless you have three working backups on separate tapes. You never know what might happen; backup tapes seem to be very attracted to mugs of hot coffee.

Two machines on one modem

Mr Rodda, I know that you are a busy man but could I pick your brain about networks and connecting to the internet?

I have two machines which run under Microsoft's Windows 95 peer-to-peer network using TPX/SPX protocol with Genius Ethernet adaptor cards. I know they are cheap, but they seem to work OK and I also have a dial-up internet connection. I wonder if it is possible to connect to the internet on both machines using only one modem? Can you enlighten me on this subject, or point me in the direction of some good books to read?

Alex McF@cityscape

There seems only to be one question: "Can I share my modem or internet connection over the LAN?"

There is a great number of answers. The most expensive (and almost definitely overkill for you) is to use the Instant Internet box which I reviewed. Since it's in the region of £3,000 (and you did mention that the Ethernet adaptors are cheap and cheerful), I reckon that you, like me, would find this out of your price range. The other methods all involve sharing the modem.

One method which doesn't really involve sharing the modem would be to buy a modem for the other machine so that it could access the internet all by itself. This may not be as stupid as it seems, since sharing software can cost as much as a modem.

The other method would be to share the modem over the network using Winport from Lansource (contactable as lansource@cix.compulink.co.uk). About £100 for (I think) five users.

Install Windows NT on the one computer that has the modem connected. That will share the TCP/IP connection over the LAN. This method may well be cheaper, because you may find someone with an unwanted copy of Windows NT who would be willing to sell it for a small consideration.

I hope this answers your question (it may however, only pose more...).

international courier.

Kodak XLS 8600 PS Printer

This month I managed to get Kodak to let me look at the XLS 8600, a colour PostScript printer which also allows its input to be in a raster format — useful if you're initially working with a raster image, such as in Photoshop. You can select this raster input format from the control panel (it's not available concurrently with the PostScript mode). The new printer has quite an advantage over the Kodak ColorEase PS which I last reviewed. Whereas the ColorEase PS had a maximum print area of 10ins x 8ins; with its different ribbon and media the new machine will print full A4, with trim marks. It also comes with an optional Ethernet interface for network connection, supporting TCP/IP, NetWare and Apple EtherTalk.

It comes as standard with an external SCSI connector and 32Mb of RAM. This external SCSI connector may be used in PostScript mode by an external hard disk, or in raster mode by a machine which can transfer the raster image data to it direct

(as can the Ethernet connection). It uses thermal transfer technology and fonts are sharpened by anti-aliasing.

The result is near-photographic image representation. My graphic designer colleague, Jeff, tried it out from his Macintosh: he was impressed, and Jeff isn't easily impressed by computer equipment.

I set it up on my NT server, installed the correct driver for the printer and networked it around the Windows network in about three minutes, publishing a spooler for the printer onto the AppleTalk network at the same time. I reflected that it would have taken me between ten and 15 minutes to do this under NetWare. Although this sort of printer shouldn't be looked upon primarily as a production printer, at £2 per sheet it compares favourably with a small run on a four-colour press. Especially when you consider that the ribbon will also (optionally) laminate the print.

The PostScript interpreter didn't seem to know anything about creating multiple copies. I later spoke to the people at



Kodak and they told me that the interpreter would certainly create multiple copies — either our test program or the driver must have had a buglet.

The three-colour print technology consisting of yellow, magenta and cyan is extremely lifelike, although CMYK ribbons are available for pre-press colour proofing. I tested it as well with monochrome prints.

Apart from a very slight mis-registration between the process colours (yes, I was being *extremely* critical), the



Hot Dog editing one of my Netscape bookmark HTML pages

Christmas wishes

Dear Sinterklaas

According to legend in the Netherlands, Santa Claus (known there as Sinterklaas) comes from Spain on the 5th December, along with his Moroccan helper, Piet who deals

with naughty children by putting them in his sack to take to Spain in his boat.

Last year I asked him for an 8Gb DAT drive with software which runs on any platform you care to throw at it, more hard disk space, and a super turbo nutter machine with a truecolour adaptor and a 21in monitor.

I got the H-P SureStore 6000 8Gb DAT and a really nice H-P 2Gb hard disk. I suppose if I really wanted to, I could actually backup and restore using a much-ported UNIX utility called "tar", which will run on every operating system I use. It reads all of its own backups, no matter which platform they came from along the way, but I'd really prefer a friendlier utility. So far I've tried Arcada, ArcServe and H-P's Beta



version of Colorado. I confess my favourite is Arcada, but at present I'm still looking for something which will run on every platform I have, and Arcada doesn't quite do that yet.

With last year's failings out of the way I shall deal with this Christmas. Apart from the super turbo nutter machine, I'd like a leased line to an internet service provider. And I want the internet to go faster. Oh, yes, I'd like totally integrated telephony and communications, dealing seamlessly with data, fax, email and voice.

Oh, yes, please give all my friends PCs if they haven't got them, and an internet connection too, so that I can talk to them via internet telephony, saving international telephone calls. Oh, just save yourself time and effort: cable up the whole world with fibre optic data and television and give us all our own IP addresses while you're about it.

Hey, Piet, Put me down! I don't want to go to Benidorm.

black was good and solid. Kodak tells me there is also a monochrome ribbon available. In all cases, the output was near-photographic.

The cost of this printer is \$10,000, (about £6,000). This is cheaper than the ColorEase which weighed in at about £7,000. Now I know this isn't a cheap option, but for a professional in repro, or even for a firm's DTP department where presentation quality is all-important, it will soon justify its cost.

Hot Dog

Just as a very quick aside, I've recently been creating a few world wide web pages (with Jeff looking over my shoulder now

and again, making helpful comments like "Ugh!") and I've found that by far the best product was Hot Dog. I recommend it to anyone trying out HTML editing. It's written in Visual Basic and as a result it may possibly be a little sluggish with a few files open, but on my 486-50 it seemed tolerably fast. I'll be comparing it to Netscape Gold when that's available and will let you know all about it. At the moment, though, Hot Dog's the business.

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