



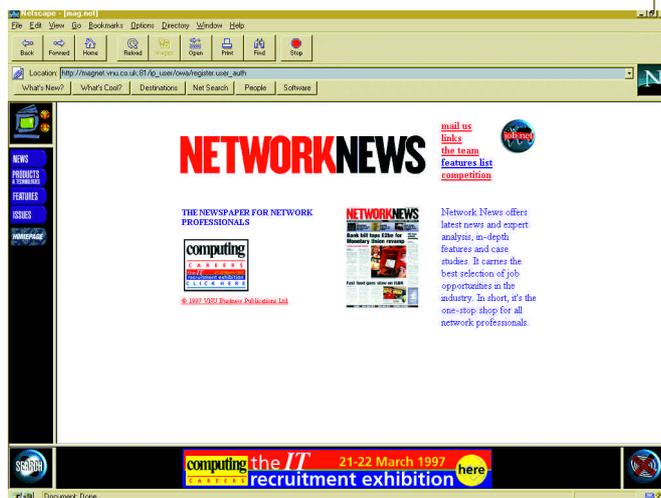
# Suspect packages

Mark Baynes learns his lesson — you must treat each new bit of software with suspicion, no matter which supplier it comes from. A simple installation could turn into a real ordeal.

**M**y Ant Web network is in a far worse state than last month, for the simple reason that we decided to buy a scanner. "What on earth has a scanner got to do with a network?", I hear you ask. I have always considered networks to be not just cables, cards and hubs, but also the PCs, servers and associated gadgets that hang off them.

I bought a Hewlett-Packard ScanJet 4p and decided to install it on one of the clone PCs we use that are running Windows 95. I installed the HP SCSI card and the HP

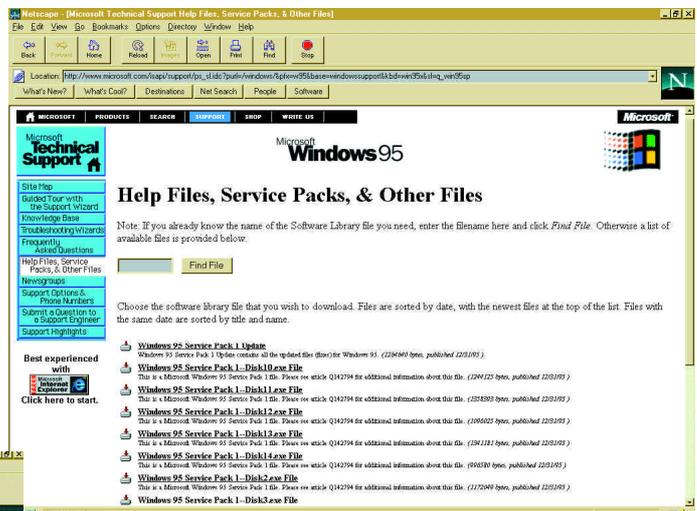
**Right** Make sure you install the Win95 Service Pack 1 update before putting Office 97 on your system  
**Below** Check out the *Network News* web site for a comprehensive set of links to networking companies



Deskscan and Visioneer PaperPort software that comes bundled with it. I re-booted, and the PC froze with a memory exception error. I re-installed. The PC re-froze with the same memory error. Assuming it was the PC that was the problem, I removed the SCSI card and placed it in my own PC. The same thing happened — twice. The problem is that the PC on which I first installed the scanner now crashes whenever any software is run, so I have to reconfigure it.

file. When I did this, the scanner worked but nothing else, so I re-installed Windows 95 on my PC, re-installed the PaperPort software, edited the system.ini file, and then put my applications (Office, HTML editor, just the basics) back on to my machine. It worked OK.

The trouble is that this nonsense took me a whole day to sort out. My LAN was an irrelevancy, with half the PCs trashed. The reason I recount all this is that you should always treat *any* new software as being



I insist that all data is kept on the server, so it's only Windows 95 and the applications that need to be re-installed. I called HP tech support who advised me to remove a couple of lines, referring to the PaperPort software, from the system.ini

suspect until proved otherwise. An important technical note that came out of this is that if you have an original version of Windows 95, especially the upgrade from Windows 3.x, and are going to install Office 97 onto a Windows 95 PC, make sure that you install the MS Windows 95 Service Pack 1 before you install Office 97, which you will find at [www.microsoft.com/windows95/](http://www.microsoft.com/windows95/). I wasted another day before I twigged what was going on.

## Web sites

I am currently overwhelmed by emails from readers and I must apologise if a reply does not appear in print — there isn't enough space to print them all. One FAQ is the whereabouts of good sources of networking information on the web. I don't know of any single site worth visiting, but you could try the home page of PCW's sister publication, *Network News*, at [www.NetworkNews.vnu.co.uk](http://www.NetworkNews.vnu.co.uk) and check out the "Links" hot spot which has a comprehensive list of networking

## Compaq Prosignia 200 workgroup server

I have used Compaq servers for years, and although it is a byword for reliability and performance, Compaq traditionally also means expensive, so I was more than interested to review the new Prosignia 200 workgroup server which you probably will have seen advertised in the national press as starting at under £1,000. The unit I reviewed had a 166MHz Pentium Pro, 48Mb RAM, 1.6Gb SCSI drive and Compaq NetFlex-3 ethernet card pre-installed.

At this price I fully expected the system unit to be rather tacky, but I was proved wrong. The Prosignia has a very solid feel. To get at the inside you unscrew three thumbscrews at the rear — no messing around with screwdrivers, then slide the left-hand panel off. The internal layout is, well, pretty weird. The power supply, floppy drive, CD-ROM and SCSI drive(s) sit at the top of the unit, the motherboard is on the right-hand side with the Pentium Pro halfway up the board. To the rear of the motherboard is a riser board which has two PCI, one ISA/PCI and two ISA slots, but these are almost completely hidden from view by a metal supporting plate (or "expansion backplane brace") which runs the length of the unit.

To install a card you have to disconnect the fan and pull the whole riser sub-assembly out of the unit. This is the first time in six years of configuring servers that I've had to read the manual to install a network card.

Worse was to come when I tried to put the sub-assembly back in, as it needed quite a bit of pressure and I ended up laying the server on its side before applying a final shove to slot the riser board into the motherboard. I was terrified I was going to break something. The next daft thing is that

the SIMM sockets are right at the bottom of the motherboard, so if you move *this* server, do it very carefully. With the power supply and drives at the top of the unit, it is top heavy (and there are no stabilising feet). In fact, the layout of the Prosignia 200 would make much more sense if you were to turn it upside down. No doubt this strange arrangement is the only way Compaq can produce a server at such a low price.

Inside the Prosignia packing there are three packages: one, labelled Server Set-up and Management, contains Compaq's SmartStart and Insight manager software. Another, labelled Software Products, contains versions of Novell's IntranetWare, Cheyenne ARCserve for NT and NetWare, Windows NT Server v3.51 (why not v4.0?), and SCO UnixWare and Netscape Servers, all on CD and optimised for Compaq's hardware. Of course, you will only be able to use the Compaq version of the NOS after you buy the appropriate licences from Compaq, which will then allow you to access the software via a CD key. I was provided with the SmartStart key for IntranetWare so I had to install that. The final package contains basic setup information.

Within the Set-up and Management package there is a SmartStart setup sheet. Once you have the appropriate activation keys, you boot the server from the SmartStart CD. SmartStart is a good idea both in theory and practice, as it will optimise your server operating system which will make a difference to your network's performance.



I did not have the Prosignia 200 on my network for long enough to get a good idea of its reliability, but being a Compaq it should be pretty stable. Would I spend my own money on one? No, I don't think so, because I have the feeling I would break something the first time I put a new expansion card in it.

### PCW Details

**Price** £1,805  
**Contact** Compaq 0181 332 3000  
**Good Points** Integrated NOS installation with SmartStart. Price. Should be reliable.  
**Bad Points** Stupid internal design. Installing network cards is a nightmare.  
**Conclusion** Buy one if you are sure will never need to put in a new network card.

## Another perspective

*"I was interested to read your advice in PCW [April] that it is impossible to run a printer directly as a network device without any PC acting as a server. I can't fault your reasoning, but I can say that we are doing exactly that on our network. We run a peer-to-peer network over 10Base-T. An HP LaserJet 4 printer is connected to the hub via an HP JetDirect card in the printer. No PC is designated to 'serve' the printer, yet every PC can print to it using drivers supplied with the JetDirect card. I have often wondered where the print queue goes. Is it that each PC holds its own queue? Printing is so quick that one rarely sees a printer icon on the task bar. We use Windows 95 but the card claims to support all the main NOSs. I hope this helps your reader."*

David Marshall

companies' web sites. Another useful source of hardcore technical information are books. Two which I swear by are *Understanding Data Communications and Networks* by William A. Shay (PWS Publishing 1995, ISBN 0-534-20244-6) and *Computer Communications* by Beauchamp and Poo (ITP 1995 ISBN 1-85032-168-X).

### Making a connection

**Q.** *"What is the cheapest way to connect the two machines specified below for (preferably complete) access to each other's resources running Win95? What software is needed, and what are the potential pitfalls and problems (e.g. can both machines access the internet from the one card or print to either printer)? For example, would a pair of MediaFORCE BNC Network cards (ISA) from Choice Peripherals (£14 each) be sufficient?"*

- *Machine 1 (four-year-old Dan for Windows) 486DX 33MHz not local bus or PCI, with free ISA slots, upgraded with two-speed CD-ROM, SoundBlaster, additional 1.2Gb hard drive, and now 20Mb RAM. Canon BJC-610E colour inkjet.*
- *Machine 2 (a soon-to-be-purchased Dan Ultimate) Pentium 200MHz (32Mb EDO RAM), free PCI and ISA slots, 28.8/36.6 fax modem, Iomega Zip drive, eight-speed CD-ROM, Wavetable sound card, Brother HL730 laser printer."*

John Rowlett

**A.** Consider what is the most hassle-free way of networking two machines together. Because they are so fundamental an item, network cards are the cause of about 80 percent of network problems, so it is well

worth paying a few extra quid and getting some good ones. I know of network managers who will buy an old clone PC yet insist on branded network cards.

Yes, in theory, a pair of MediaFORCE BNC Network cards plus a length of BNC cable would do the job, but I swear by two brands of card: SMC and 3Com. It is also worth buying what are known as Combo cards which have both BNC and 10BaseT connectors, so you can upgrade to a 10BaseT hub-based network without changing your cards. A 3Com or SMC Combo will cost you about £50 each and are well worth the money, believe me. I've suffered. If you *don't* take my advice and buy A.N.Other cards, then get ones that are at least software configurable. Once you have your cards installed, you can hang a printer off one machine and print to it from another using Win95 only. Accessing the internet is slightly more complicated because you will have to run the dreaded TCP/IP protocol, but get the basics up and running first and take it from there.

### All in the game

**Q.** *"I want to set up a small LAN of three or four computers. They wouldn't be permanently linked as my friends would be bringing their computers round and it wouldn't be used much. I'm looking for a cheap way to network them, for a cost of £150 at most. They would really only be used for games like Quake or Duke Nuke 'em, which require quite fast connections."*

Neil Knapp (Age 14)

**A** At last, someone who wants to use a network for a real reason! Apparently, PC World superstores are now stocking the D-Link DE-905 networking starter kit which includes a small 10BaseT five-port mini-hub, two 16-bit ISA cards, two cables, documentation and software drivers for £99. D-Link will also give you free lifetime technical support. I have yet to get a networked version of Quake running on my own network, which is a pity because it's better than the standalone version.

Happy gaming!

### PCW Contacts

Mark Baynes can be contacted by post via PCW or email [networks@pcw.co.uk](mailto:networks@pcw.co.uk).

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