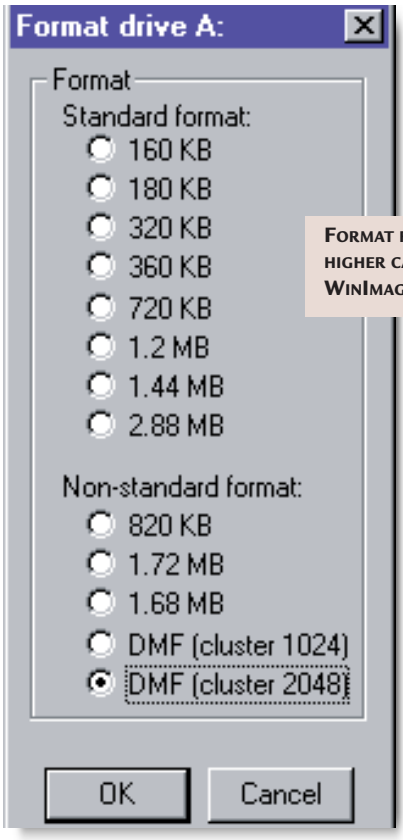
Emergency room

Andrew Ward dishes out repair kits on floppies, and advice on disappearing drives and passwords.

Here's a suggestion from Keith Sullivan, for those who are having trouble with the size of the normal floppy being inadequate for creating emergency repair disks (ERD). Before you start looking at alternatives, however, make sure the registry – which is what gets backed up onto the ERD – is as small as possible. Clearly, you can't just go around deleting software and removing the hardware that you need, but much of the registry will quite often be filled with rubbish that is left over from applications that have long since been deleted.

The problem is how to clean up the registry. The Microsoft tool RegClean was withdrawn with the advent of Service Pack 3 for Windows NT4, made a brief reappearance and then was withdrawn again because of problems.

Currently, you can still download RegClean 4.1a from the Microsoft website, but I wouldn't trust it. I use a little program that I mentioned back in March 1998, RegZap. We even put it on the cover disc for that issue, but you could try searching for it on the Internet.

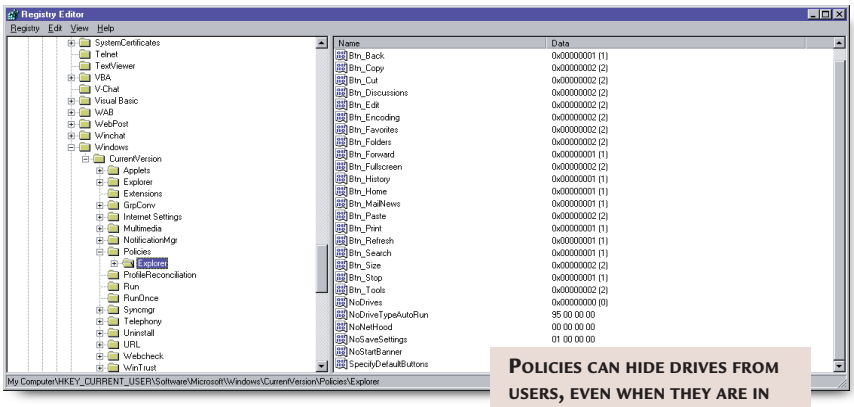


FORMAT FLOPPIES TO HIGHER CAPACITIES WITH WINIMAGE

What Keith Sullivan does to gain a bit more space on a standard floppy disk is use WinImage 5.0. This is designed to copy entire floppy-disk images, thereby allowing you to readily create install disks for an application you've developed, for example. However, it also allows you to format floppies in a number of different non-standard formats that accommodate more than the standard 1.44MB (and in case you've ever wondered why you can't fit 1.44MB on a standard floppy, it's because the capacity is really only just under 1.41MB).

A total of four different formats are offered by WinImage, storing 1.63MB, 1.64MB, 1.68MB and 1.72MB. These sizes aren't much larger than the standard size, but in many cases they will offer just enough to allow you to get away with using a floppy for a bit longer.

Keith has successfully tried all four formats, although he recommends that the first two – which are Microsoft DMF formats – are more reliable, and my own experiments confirm this. And you certainly need an ERD to be reliable.



POLICIES CAN HIDE DRIVES FROM USERS, EVEN WHEN THEY ARE IN THE EXPLORER VIEW

WinImage is shareware, and available from www.winimage.com. If you want to keep it, registration costs $30 and can be performed online.

Vanishing drives

Kevin Stuttard reports a problem that drives don't vanish when they should. In last year's September column I mentioned the following registry setting, which is supposed to hide drives from Explorer:

```
HKEY_CURRENT_USER\Software↙
\Microsoft\Windows\Current↙
Version\Policies\Explorer↙
\NoDrives
```

(*Key:* ↙ *code string continues*)

This is a binary value with one bit for each drive, so hiding drive C should be accomplished by setting the value to four. However, Kevin quite rightly points out that this doesn't work very well because while the drive is hidden from the My Computer window it still appears as normal in the Explorer view.

You can't fit 1.44MB on a floppy, because the capacity is really just under 1.41MB

This was actually a bug in Windows NT, so depending which service pack and hot fixes you have, you may not suffer from it. Nevertheless, I should warn you that NoDrives isn't particularly secure anyway, unless you put a lot of effort into

Quick guide to using Explorer Policies

NoClose removes Shut Down from the Start menu
NoLogoff removes Log Off from the Start Menu
NoFind removes the Find command from Start menu
NoRun removes the Run command from Start menu
NoFavoritesMenu, **NoDesktopUpdate** and **NoRecentDocsMenu** are self-explanatory
NoStartMenuSubFolder hides folders in the top section of the Start menu
NoSetTaskbar removes the Taskbar from the Settings menu
NoFolderOptions removes the Folder Options menu item from the Settings menu
NoSetActiveDesktop removes Active Desktop from the Settings menu
NoCommonGroups removes common program groups from the Start/Programs menu
NoDesktop hides all items on desktop
NoDrives hides drives in My Computer (and sometimes Explorer)
NoNetHood hides the Network Neighbourhood
NoSaveSettings doesn't save settings at exit
NoSetFolders hides the Control Panel and Printers commands and icons
NoStartBanner hides the arrow and Click Here To Begin caption that appear when you start Windows NT
NoDriveTypeAutoRun disables AutoRun
NoTrayContextMenu hides the context-sensitive menus on the taskbar
NoViewContextMenu hides the context-sensitive menus on the desktop and in Explorer
EnforceShellExtension-Security only allows approved shell extensions
NoFileMenu hides the File menu in Windows NT Explorer
NoNetConnect-Disconnect hides the Map Network Drive and Disconnect Network Drive commands
RestrictRun I have covered in a previous column

locking down other aspects of the desktop. And even if NoDrives worked as advertised, users would still be able to access drive C if they could run the File Manager (WINFILE.EXE) or get at a command prompt.

With Service Pack 5, this bug was supposed to have been fixed. Unfortunately, a new problem was introduced. If your desktop included links to folders on local drives that have been disabled by NoDrives – which you might want to do to provide limited access to local data – these links no longer worked after upgrading to Service Pack 5. What will happen with Service Pack 6 remains to be seen. Incidentally, you can set the NoDrives registry entry using the My Computer tab of the TweakUI control panel.

The box above shows many of the other policies that can be specified in the registry or via the System Policy Editor. Note that some of these require the Active Desktop option to work.

Now you see it...

John Howells writes in to say that as soon as he installs Windows NT on any system, he immediately uses the Disk Administrator to change the CD-ROM to drive R – so any subsequent fiddling with the disk drives doesn't affect the CD-ROM drive letter. An excellent idea, and as John points out, you have to do this before you install any application software since applications have a habit of remembering – via a registry entry – the CD-ROM drive letter from which they were installed.

John also kindly explains that you certainly can see the CD-ROM drive in the default Disk Administrator view, contrary to what I claimed in the December issue.

However, what Disk Administrator also does is to remember its window size from one session to the other. This is fine for the horizontal view, since Disk Administrator scales the image to fit the window size. However, it doesn't do this on the vertical axis.

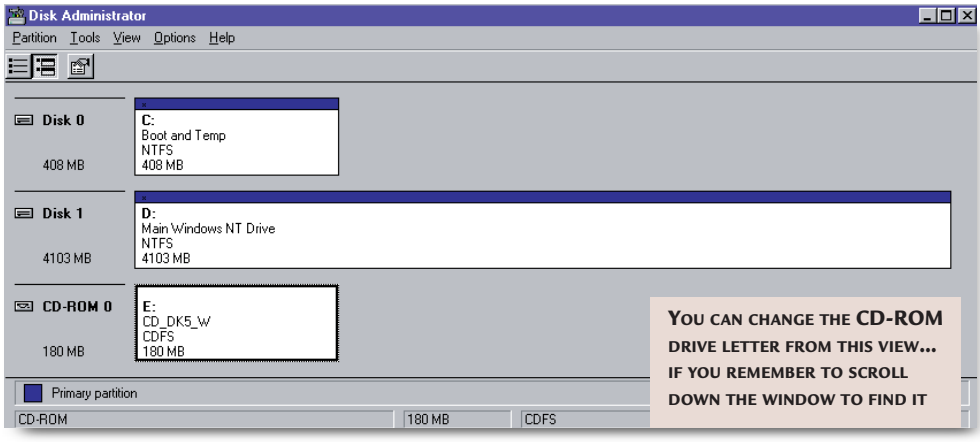
Hence, if you subsequently add a drive or drives to your system, then next time you run Disk Administrator it could be that the CD-ROM drive has disappeared from view by running off the bottom of the window. Unless you either resize the window or use the vertical scroll bar that should have appeared, you won't see the CD-ROM drive.

Forgotten passwords

A common complaint from readers is that they are confronted with having to deal with a Windows NT system where someone has forgotten the password to the administrator account. Sometimes these are systems that have been running quite happily for users and it's only when some reconfiguration is required that people realise no-one knows the administrator password.

Your first tactic should be to try the obvious words – admin is the universal default, and sometimes administrator in full, or even just the word password itself. But failing that, there are plenty of things you can do.

One utility that's been written especially to help with this situation is ResetPassword, available from www.winsrc.freeserve.co.uk (see the web page for the usage conditions). This works on the basis of replacing spoolss.exe with a utility to



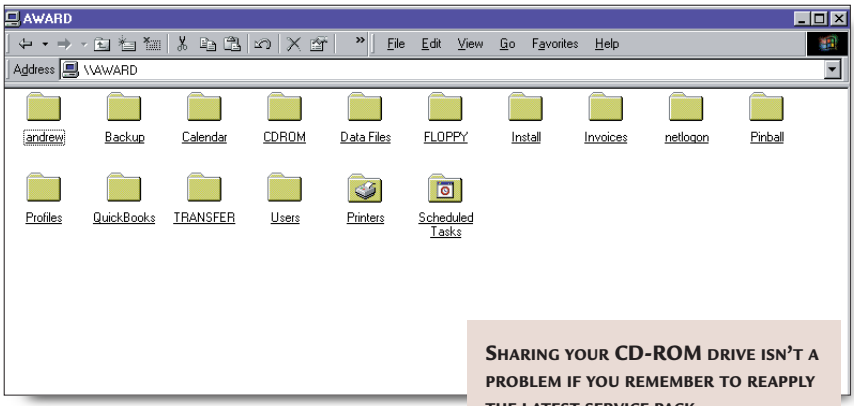
YOU CAN CHANGE THE CD-ROM DRIVE LETTER FROM THIS VIEW... IF YOU REMEMBER TO SCROLL DOWN THE WINDOW TO FIND IT

change the administrator password to admin12345. Unfortunately, this has never worked for me in practice, since systems that I have tried it on either don't allow non-administrator write access to the \winnt\system32 directory where spoolss.exe is stored, or I've run into the problem that spoolss.exe is already in use and can't be renamed. There is a foolproof way around this for FAT partitions, which is to boot with DOS and carry out the replacement. For NTFS partitions, you have a bit more of a problem.

The first way to solve it is free, but requires quite a bit of hard-disk space. What you do is install a second copy of NT on the system, boot into that, and make the changes from there. It's actually not as horrendous as it sounds. Installing NT is mainly a hands-off process – you spend most of the time waiting for it to copy stuff around. And it clearly isn't necessary to get anything complicated working, such as the network, the right video settings or the sound card – you only need access to the disk. In theory, you needn't even apply the latest service pack. A basic NT installation doesn't take very long. Another way to copy ResetPassword.exe to spoolss.exe on NTFS partitions is to use NTFSDOS. This is a version of DOS that includes NTFS drivers, so you effectively have a boot floppy that enables you to read and write NTFS volumes. The latest version is NTFSDOS Professional, which is available at www.sysinternals.com. This actually takes the files ntfs.sys and ntoskrnl.exe from an existing Windows NT installation and uses these to access the file system within a DOS environment – guaranteeing full compatibility, regardless of which version and service pack you are using.

The drawback to NTFSDOS is that you need to provide a copy of MS-DOS. The best DOS to use is MS-DOS 7, the one that comes with Windows 95/98, because this is the one that has support for long filenames.

Otherwise, you're restricted to using names in 8.3 DOS format. You'll also need a Windows NT licence in order to provide the ntfs.sys and ntoskrnl.exe files. So don't expect a ready-to-go solution, and it's not much use if NT is your only operating system.



SHARING YOUR CD-ROM DRIVE ISN'T A PROBLEM IF YOU REMEMBER TO REAPPLY THE LATEST SERVICE PACK

There are many other techniques and utilities designed to overcome the lost password problem, because it is so common. By and large, the other techniques are much more complex and long-winded than the ResetPassword method, even if you have to install a second copy of NT. Take a look at www.busprod.com/taggarjm/Computer/if_you_have_lost_the_administrat.htm for a very convoluted method.

NTRecover, Remote Recover and Locksmith – all available at www.sysinternals.com – will also work, but require fairly fiddly and extensive setup procedures. In particular, you will have to make boot floppies and you may have to find drivers for your network card if they're not on the supported list. NTRecover and Remote Recover have much wider uses than just retrieving forgotten passwords, however.

The result of this omission by Microsoft is considerable amounts of system downtime

Server storage

Martin Goose wrote in about an all too common problem. He is attempting to share his CD-ROM drive around the network, but can't get it to work. In fact, he's suffered this problem for months. Remote Windows 95 systems that attempt to access the shared drive receive the message 'Access to the specified device, path, or file is denied.'

This puzzled me somewhat, because I frequently share CD-ROM drives – it's a very useful facility. The clue comes in the next error message – if he looks in the network neighbourhood on the NT machine itself, he sees '\\machinename\CD-ROM is not available. Not enough server storage is available to process this command'.

Those magic words 'not enough server storage' are the key to the problem. In general, if you ever get this message – whether at boot time, or during any network-related activity, or indeed at any other time – it's almost certainly due to the same cause.

Someone, at some time, has made a modification to the system – and in particular the networking configuration – that required some files to be copied from the original Windows NT CD-ROM, and they haven't subsequently re-applied the latest service pack. I'm betting that's the cause of the problem in this case (and I'm sure Martin will let me know if it doesn't do the trick!).

I find it extraordinary that Microsoft programmers haven't written something that pops up a dialog box which says 'Now please re-apply the latest service pack, which in this case is Service Pack 3, or your system will be unstable.'

The result of this omission is considerable amounts of system downtime, since this problem quite often means the network won't start at all, and people can spend hours or even days trying to identify the problem. But since Microsoft hasn't provided us with this reminder, it's our task to find some other way to remember. The best way to remind yourself is to stick a note on the case of your original Windows NT CD-ROM and write on it 'REMEMBER LATEST SERVICE PACK'.

PCW CONTACTS

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