



Gaining eNTry

Dale Strickland-Clark shows how to get onto the net using the built-in features in Windows NT.

In spite of its booming popularity, getting online to the internet isn't as simple as it could be and many Internet Service Providers (ISPs) haven't helped by offering old or limited software when you sign up. The position is more complicated now that there are 16-bit and 32-bit IP stacks trying to work with 16-bit and 32-bit internet applications.

NT doesn't need additional software to talk to the internet. You just need to install the client software, such as a web browser or a mail client, to talk to the services you

want to use. And with NT 4, even these are included. I've received several emails on this subject so I'll attempt to clarify a few points and show how to get online using the features built in to NT.

The IP stacks, such as Trumpet, sometimes distributed by ISPs, are unnecessary on NT and may not work (I've never felt the urge to try). If they do work, they can only hope to provide a limited function. Also, those about which I know anything are 16-bit stacks so will only support 16-bit applications.

NT's own stack is, of course, 32-bit properly supporting 32-bit applications. Sixteen-bit applications will also work thanks to a special layer that translates the API calls but no such reverse translation exists, so running 32-bit applications with a 16-bit stack is a non-starter.

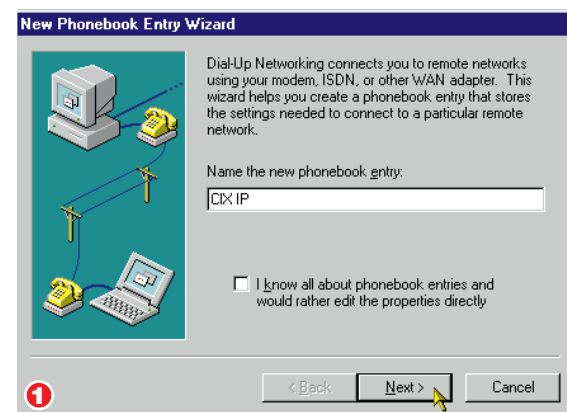
You need to install two key components before NT will talk to the internet through a modem link: the TCP/IP

network protocol and Remote Access Services (RAS). In NT 4, RAS has superficially been renamed Dial-Up Networking (DUN) for consistency with Windows 95 but the old term is still common throughout the system.

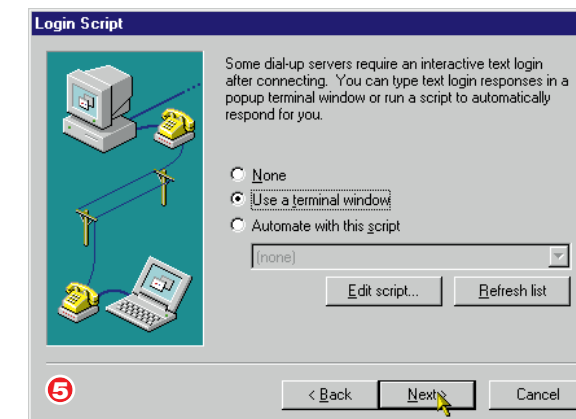
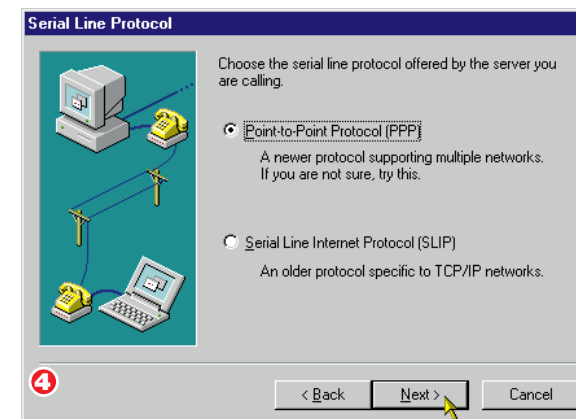
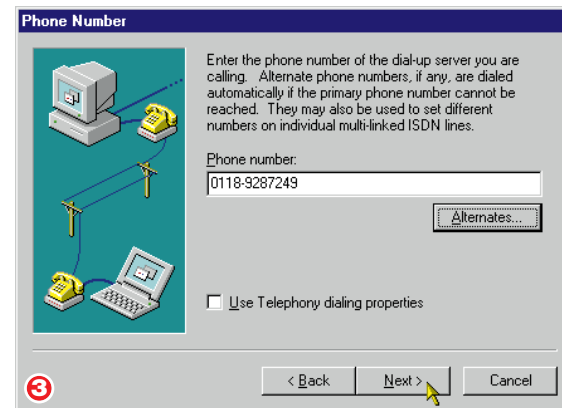
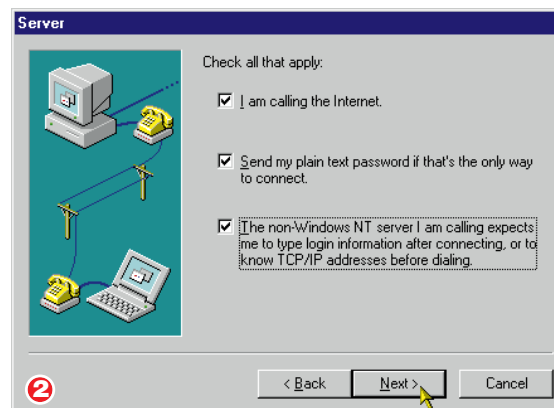
These instructions apply to NT 4 (earlier releases differ slightly) and you'll be required to restart your system a couple of times before you're through. It's a good idea to have a modem installed and verified working before you begin.

We'll start with the TCP/IP protocol which, if not already loaded, is installed from the Networks applet in Control Panel. Select the Protocols tab and, if TCP/IP isn't already listed, click on the Add button. Select the TCP/IP Protocol and click OK. NT will install TCP/IP from the installation disks or CD-ROM.

The questions the system then asks are related to your use of the protocol on a local network and you should safely be able to use the values offered. To install Dial-Up Networking, open My Computer from the desktop and double-click on the Dial-Up Networking icon. If it is not installed, the



Figs 1-7 Creating a new Dial-Up Networking entry: the New Phonebook Entry Wizard is the simplest way to get the details of your account with your ISP into Dial-Up Networking



The sequence shown on this and the previous page (Figs 1-7) is an example for Cix IP

system will offer to install it on your behalf.

When you are asked to select and configure the port, click the Configure button and make sure that one of the dial-out options is checked. Some of the questions which will follow concern configuring your system as a Remote Access server: we're not interested in that here, so simply pick the default values. Then, finish the installation and restart the system if necessary.

With these steps complete, you are now ready to enter some internet service providers' details into your phone book. You'll need the logon information supplied by your ISP which may simply be a user ID and password but might also include a set of IP addresses.

Double-click on the Dial-Up Networking icon in My Computer and you should be greeted by the New Phonebook Entry wizard. Most of the options you choose

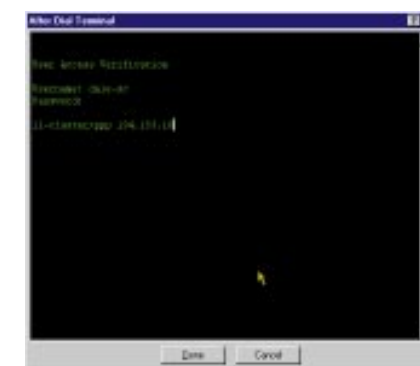


Fig 8 (above) Terminal mode allows you to complete a login sequence without knowing, in advance, the steps involved

now will depend on data from your information service provider. The sequence shown (Figs 1-7) is an example for Cix IP.

When you get to the point where it asks about the login script, select "Use a terminal window". This allows you to complete the login procedure by keying your details directly into the

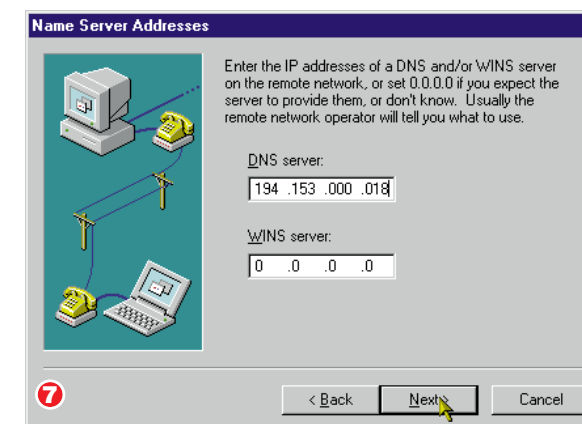
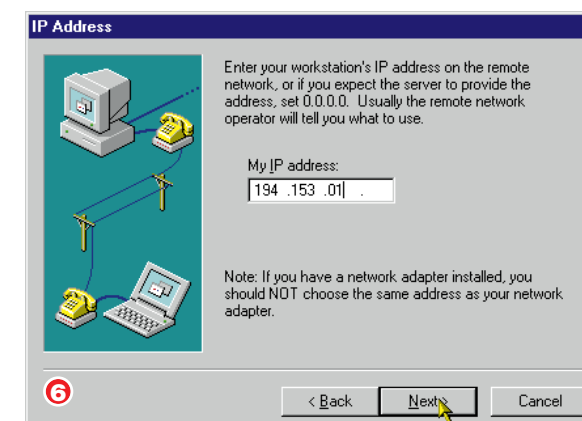


Fig 9 — Dial-up scripts

[Demon]

```
COMMAND=<cr>
OK=<match>"ogin:"
COMMAND=userid-here<cr>
OK=<match>"word:"
COMMAND=password-here<cr>
OK=<match>"ocol:"
COMMAND=PPP<cr>
OK=<ignore>
```

[CIX IP]

```
COMMAND=
OK=<match>"name:"
LOOP=<ignore>
COMMAND=userid-here<cr>
OK=<match>"rd:"
LOOP=<ignore>
COMMAND=password-here<cr>
OK=<match>"col:"
```

LOOP=<ignore>

```
COMMAND=password-here<cr>
OK=<match>"ster"
LOOP=<ignore>
COMMAND=ppp your-IP-
address-here<cr>
```

[Pipex Dial]

```
COMMAND=<cr>
OK=<match>"in:"
LOOP=<ignore>
COMMAND=userid-here<cr>
OK=<match>"rd:"
LOOP=<ignore>
COMMAND=password-here<cr>
OK=<match>"col:"
```

LOOP=<ignore>

```
COMMAND=ppp<cr>
```

[MSN]

```
COMMAND=
OK=<match>"gin:"
LOOP=<ignore>
COMMAND=MSN/userid-
here<cr>
OK=<match>"word:"
LOOP=<ignore>
COMMAND=password-here<cr>
```

[CompuServe]

```
COMMAND=<cr>
OK=<match>"."
```

```
COMMAND=CIS<cr>
OK=<match>"."
COMMAND=user-number-here
/GO:PPPCONNECT<cr>
OK=<match>"."
COMMAND=password-here<cr>
OK=<ignore>
```

■ Note:

1. The IP address required by CIX IP is entered in the usual xxx.xxx.xxx.xxx format.
2. Some systems are case-sensitive. For example, the MSN/ prefix to the MSN userid must be upper case.

host system. Once you are familiar with this last sequence, you can automate it with a script. I know of only one ISP that doesn't require a logon script: UK Online. If you use them, select None for this option.

When the entry is complete, you can attempt to connect by clicking the Dial button. The terminal window will appear once the initial connection has been made. It's worth noting the exact sequence of input and responses used to login for entry into a script.

You need to make sure you can reach a site on the net to confirm that all the details have been correctly entered. Start your browser and pick a URL at random, say www.pcw.vnu.co.uk. If you can't reach the site by name, try entering the IP address

instead: 194.72.64.28. If this works, you have not set up your domain name service (DNS) entries correctly. The parameters for this can be found by clicking on the More button and selecting "Edit entry and modem properties". Select the Server tab and click on TCP/IP settings. Confirm that all the values here match those from your ISP.

Scripting

You won't have to logon many times before you begin to think about writing a script to speed up the process. In the case of NT 4, the original scripting facility has been joined by a second, more flexible version which, I believe, is the same as that currently available for Windows 95. You should be able to find a document called script.doc in

the \system32\ras directory, off the system root directory, which describes it in sufficient detail. My scripts all pre-date the new language and, as they still work, I've not found a good reason to change them. The old scripts all live in the switch.inf file in the \system32\ras, while the new ones occupy a file each, with an .scp extension.

The table, *Dial-up scripts* (Fig 9), is an extract from my switch.inf file and shows the scripts I use to connect to various services. Although these work for me, I can't guarantee that you'll have any success with them. If you look through the \system32\ras directory, you will find a file called cis.scp. This is a CompuServe script using the new scripting language and which is (more or less) equivalent to mine.

On the bookshelf

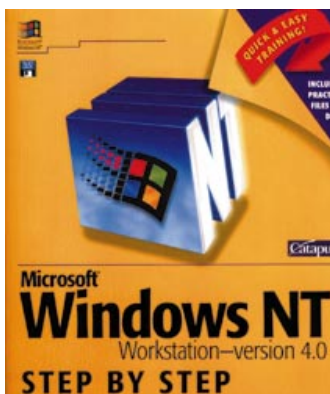
Windows NT Workstation V4.0 — Step By Step

Apart from winning the prize for the most ridiculous title, this book takes the absolute beginner through the basic steps of getting to know their new NT 4 system. It assumes just two things: one is the ability to hit what you're aiming at on the screen with the mouse; the other is that you can find a handy system administrator when you need one if your PC isn't set up in the way the book expects.

There are illustrations and screen-shots wherever they might help the text and the screen-shots are all clearly labelled (especially early on in the book) to help identify the various parts of a window.

It is ideal for anyone new to, or nervous about, using NT 4 although it seems to be aimed at those with very little computer experience — certainly in a GUI environment. Users with some experience, say with Windows 3.1, can avoid some of the elementary material and dip into the book as they wish.

■ Microsoft Press £27.99 (incl. VAT).



Visual J++

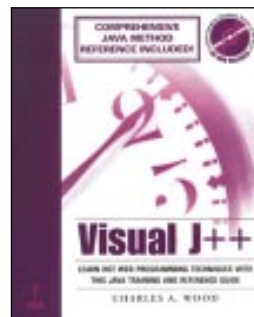
By stating the obvious: "Comments in Visual J++... are easy to implement" and nannying "CAUTION: I really wouldn't disable ToolTips. There pretty useful..." (sic), Charles Wood simply succeeds in irritating the reader who has to skip over his tendency to write whatever comes into his head whether or not it's relevant to the reader. In a book labelled intermediate/advanced you don't expect to read about how to customise your toolbars. That's basic stuff.

There's also a strong impression that this book was made to a size rather than sized to its content. Chapter 13, which lists hundreds of Java methods and accounts for nearly half the book, uses a huge, extravagant and ugly font whereas a much smaller font would have served equally well.

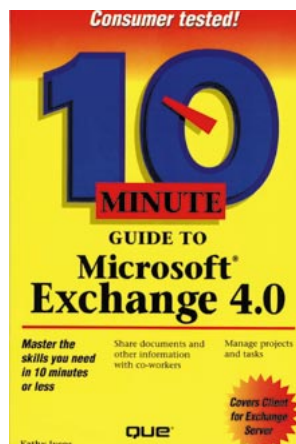
It's a shame because hidden amongst it all is a clear Visual J++ reference book that describes the language and development

environment well enough for a reasonably experienced programmer to pick it up fairly quickly. There's a good book here but it's only half the size of the one you actually buy.

■ Prima £32.99 (incl. VAT)



10-Minute Guide to Microsoft Exchange 4.0



There are 24 ten-minute lessons in this book, covering all aspects of using Exchange 4.0 from the client's point of view (as opposed to the server's). It starts logically with understanding how the address lists work before going on to using distribution lists and then creating and sending messages. The more adventurous will enter into the realms of creating public folders, scheduling meetings and managing time with Schedule Plus.

It's all clearly laid out with plenty of examples and screen-shots. Each is described in fine detail, down to the last comment field where, curiously enough, you can enter notes to yourself.

Had the information been presented in a rather less verbose manner, the lessons might have been trimmed by the odd minute, here and there. Nonetheless, a handy reference for the Exchange newcomer.

■ Que £13.99 (incl. VAT)

PCW Contacts

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