Heavenly host

Dale Strickland-Clark shows LAN users how to arrange global email via a software package by setting up an SMTP host to talk to their ISP. NT books and a CD are reviewed, too.

Last month I looked at the provision of a cheap internet service to users on a local area network. Rather than adopt the traditional approach and use a router, I chose a software alternative and used a proxy server to channel and direct internet traffic. I finished by abandoning the modem because it was running slower than a one-legged man with a bad leg, and switched to a Pace Ultralink ISDN terminal adaptor. I shall conclude this month by outlining the steps needed to bring global email to these same users.

As I mentioned in the first part, you need an internet service provider (ISP) which offers mail forwarding and an intelligent SMTP (simple mail transfer protocol) host. Your job is to set up an SMTP host at your end to talk to it.

There are several ways to go about this. One inexpensive option is a package called NTMAIL which is available from www.net-shopper.co.uk. I haven't tried it myself but I've heard good reports. NTMAIL will, as far as I understand, drag mail from your ISP's SMTP host and hold it on your server until someone with a POP3 (post office protocol) mail client connects to inspect their mailbox. POP3 is the protocol most often used by ISPs for general subscriber access so there is an abundance of cheap client software about, including the free bits of Exchange that come with Windows these days.

However, I'm partial to Microsoft Exchange for email because it's flexible, easy to manage and is excellent if you like to keep synchronised copies of your mailbox on several PCs. The price of flexibility is complexity, and Exchange does its best to muddle you with a skip-load of options that you can safely ignore in a simple case like this.

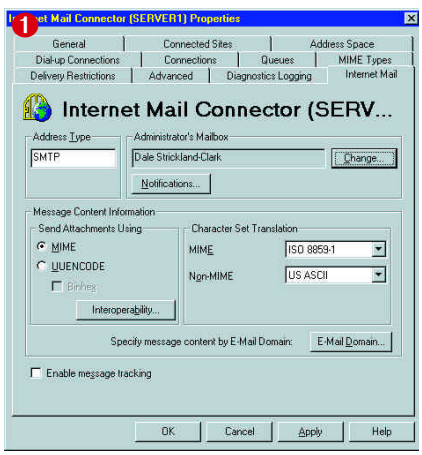
I'm going to assume Exchange is already installed and operating correctly for internal email, and that you have a working Dial-Up Networking connection defined for your ISP. You need to add and configure an internet mail connector (IMC): the IMC comes as part of Exchange Server Enterprise edition or you can add it to Standard Edition with the Exchange Server Connector Series.

Log on to the server as Administrator, start the Exchange Administrator program and select New Other from the File menu. From the fly-out menu, select MTA Transport Stack. It will display a list of available transports. Select RAS MTA Transport Stack (if this isn't in the list, run Exchange Setup again and make sure you've installed it).

A multi-tabbed dialog box will appear (Fig 1) and you will first need to insert the mailbox of the person who is to play Post Master in the administrator's mailbox field. They are told of problems with mail passing through this connection and you can set the level of reporting with the Notifications button.

On the Address Space tab, click the New Internet button and enter an asterisk in the email domain field (Fig 2). This routes all SMTP traffic through the IMC.

Click the Dial-Up Connections tab and select the dial-up networking entry that connects to your ISP from the list. Set the scheduling information to suit the connection frequency you feel appropriate. The example in Fig 3 exchanges internet



Books & CDs

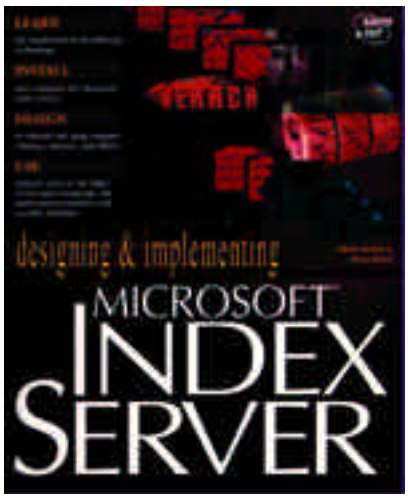
■ Microsoft Windows NT Workstation 4.0 Starts Here *(CD Only)*
Publisher Microsoft Press
Price £27.99

This multimedia CD assumes the basic level of user interface knowledge you need to find your way around but then, half way through, teaches you those same concepts. How the authors expect you to manage up to that point *without* this essential knowledge escapes me.

You are guided through most of the tasks essential to file management, launching applications, sharing information and using dial-up networking. It uses your own desktop as the starting point for each lesson and assumes a standard configuration. The course makes no attempt to detect whether the student is sticking to the prescribed route or has gone hopelessly astray. However, as the course window stays on top and has a demo button for a video run-through, the student should be able to figure it out eventually.

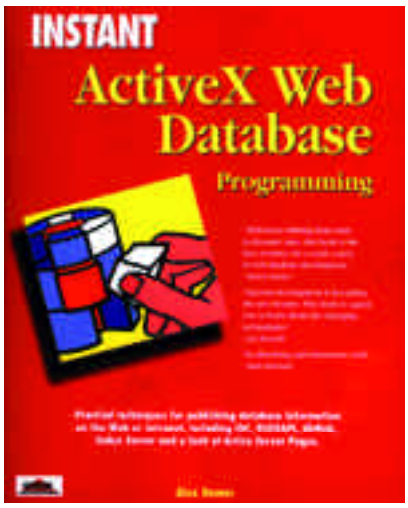
Each lesson is introduced by a short, typically American video which may not impart much information but will probably help retain the student's interest. The course will probably do its job but lacks the background information that may help the student understand just why the steps they have taken actually work and what the alternatives might be.

■ Designing & Implementing Microsoft Index Server
Author Mark Swank & Drew Kittel
Publisher Sams.net Publishing
Price £36.50



The Index Server is an extension to IIS that adds a search capability to your web server. It's a free download and lacks full support from Microsoft, so this book offering installation and configuration guidance could prove useful. It's a bit slow to get started and wastes most of a chapter describing how to download the software from Microsoft and install it; instructions which you can reduce to fetch the installation material from ftp2.microsoft.com/msdownload/indexsrv11 and run it. But from chapter six it all becomes worth the effort. From here the book contains much useful information on configuring the Index Server and setting up a web site packed with information which is still easy to find. There are lots of examples, and if you're planning to use the Index Server, this book will make your life easier.

■ Instant ActiveX Web Database Programming
Author Alex Homer
Publisher Wrox Press
Price £27.49



The level to which ActiveX plays any role in shaping the contents of this book is minimal. But drop "ActiveX" from the title and this leaves the real meat of the book. Sadly, though, it's another of those books which are padded with screenshots of a magnification that is doubtless helpful to the short of sight but unnecessary for others. However, there is some worthwhile reading on IIS and ISAPI, the IDC, dbWeb and Active Server Pages. The author shows how to put applications together using these tools with a bit of VB, where it helps. It's a useful book for comparing various approaches, but it should be smaller.

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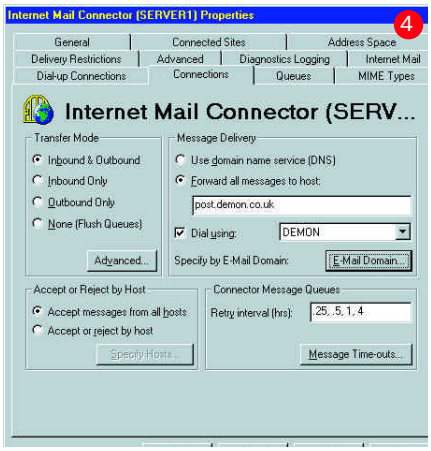


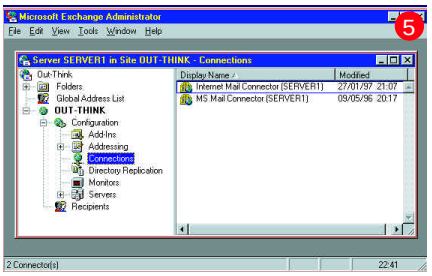
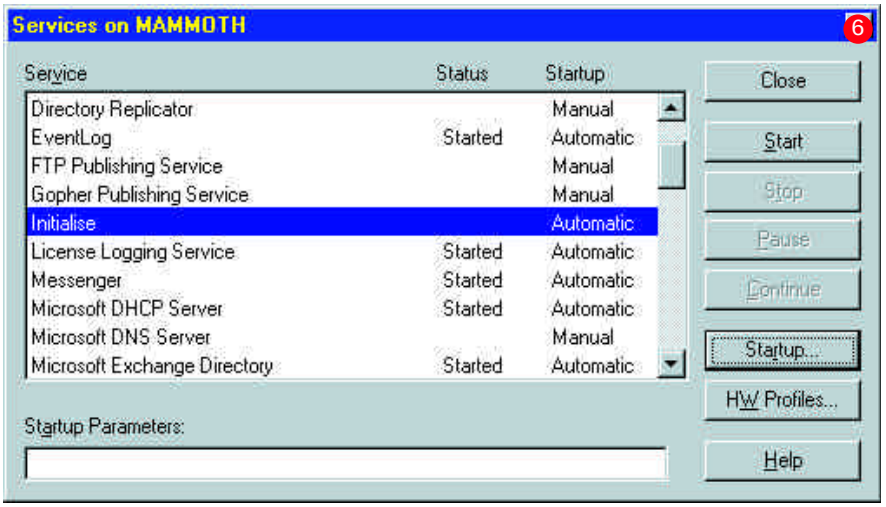


Fig 6 (below) Using a service to run a batch file allows you to have it start when the system is restarted



email just once a day at 18:30.

Finally, select the Connections tab (Fig 4). Assuming your ISP has an intelligent SMTP host, you can avoid messing about with DNS servers and simply forward all email to them to distribute. Select "Forward all messages to host" and enter the domain name of your ISP's mail server. Click on "Dial using" and select the dial-up networking entry from the list. This simply means that mail to all destinations goes via that connection. And that's it (Fig 5). You shouldn't need to worry about the other configuration settings.

Once it's all set up, you will probably want to test it. You need to start the IMC service (called MSExchangeIMC) before it can do anything but you can queue messages as soon as it's properly created. If you send yourself a message using a fully qualified internet email address, it should go out to your service provider and come straight back, once you get the link started. (If it takes a longer route, you might like to have a quiet word with your ISP about its mail routing.)

Because we've chosen to forward all outbound mail to the ISP's mail server, starting the IMC isn't quite as simple as it could be. During start-up, it likes to be able to talk to this important host at the other end of the link, and if it can't, the IMC refuses to start. That means you need to dial the Dial-Up Networking connection before you start the IMC; a sequence that won't happen automatically. I found this a chore each time I restarted the server or reconfigured the IMC, so I wrote a small batch file to simplify the procedure. The routine is shown in Listing 1 and uses the sleep command from the Resource Kit to introduce a couple of delays: The first waits for ten minutes, giving Exchange enough time to get its act together so that the routine can be run immediately after a restart. The second is used in the dial retry loop, which you will notice has no limit on the number of retries: it will keep trying until a connection is made. You might like to modify this to report the difficulty if the connection continues to fail.

This batch routine is all very well, but you still need to start it. It's no use putting it in the Start-Up group on Administrator because it will only get run when Administrator logs on, which may be a long time after a restart or several times during the day. The best place to run this is from a system service where it will start automatically during a restart (Fig 6).

To run a batch file as a system service needs the help of two more Resource Kit tools: SRVANY and INSTSRV. The first runs the batch file as a service and the second is used to set it all up properly. I won't list the steps involved to put this together because it's well documented in the SRVANY.EXE section of the Resource Kit Tools Overview help file.

SRVANY doesn't (or can't) stop the service when the batch file has finished so I added a line at the end of the routine to stop itself and free the resources it's using. If you don't call your service "Initialise", you will need to change that last line. I was a bit dubious about a service stopping itself in this way, but it seems to work.

If you progress to installing the DNS service on your NT server, you can perform your own mail routing rather than forward it all to your ISP. You should then be able to start the IMC without the link being up beforehand and thus do away with the Initialise service.

Listing 1: A sleepy batch file

```
REM Wait for Exchange to pull itself together
Sleep 600

:Dial
Rasdial "Demon ISDN" && goto StartMail
sleep 60
Goto Dial

:StartMail
net start MSExchangeIMC

net stop Initialise
```

PCW Contacts

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