# Citrix fruit

Terence Green finds a novel solution to running Win32 apps on OS/2, explaining how Citrix WinFrame turns NT into a multi-user applications server. Plus, Warp 5 and the Domino effect.

**S**everal readers have enquired about running Win32 applications designed for Windows 95 and NT. The fact is that for Win32 applications, you have to run Windows NT or Windows 95.

There are some exceptions, but if you absolutely must run Office 97 or Office 95, you have no choice. However, it is not all gloom because there are some alternative paths. Applications written to Win32s up to version 1.25 will run on Warp. If you do a little digging around you may even find that some supposedly Windows 95 applications are actually Win32s. And remember that you only have to run Windows NT or Windows 95 if you cannot find a suitable OS/2 application.

All the news seems to be about Windows, but this doesn't mean that OS/2 applications don't exist. It's only that they're not likely to be reviewed or written about in the popular press. Blame IBM's past folly for that. At least now, if you've upgraded to Warp 4 and seen the Application Sampler, you know there are loads of OS/2 applications out there. You'd be amazed at what you can find by searching the internet.

Another course of action is to select applications that do not mandate Windows: Lotus SmartSuite 97, for example. SmartSuite runs on Windows and Warp, which gives you more flexibility — especially if you are supporting a mix of users. The Windows version is shipping in the United States as I write and an OS/2 version will soon be ready. Non-US versions will take a little longer and OS/2 versions a while longer still, but the Warp version of SmartSuite 97 should pitch up by about mid-1997.

## Just add Citrix

A more novel solution for running Win32 applications on OS/2 is Citrix WinFrame 1.6 or later. WinFrame turns Windows NT into a multi-user Windows applications server and supports clients running a variety of operating systems including OS/2 version 2.11 or better (Fig 1).
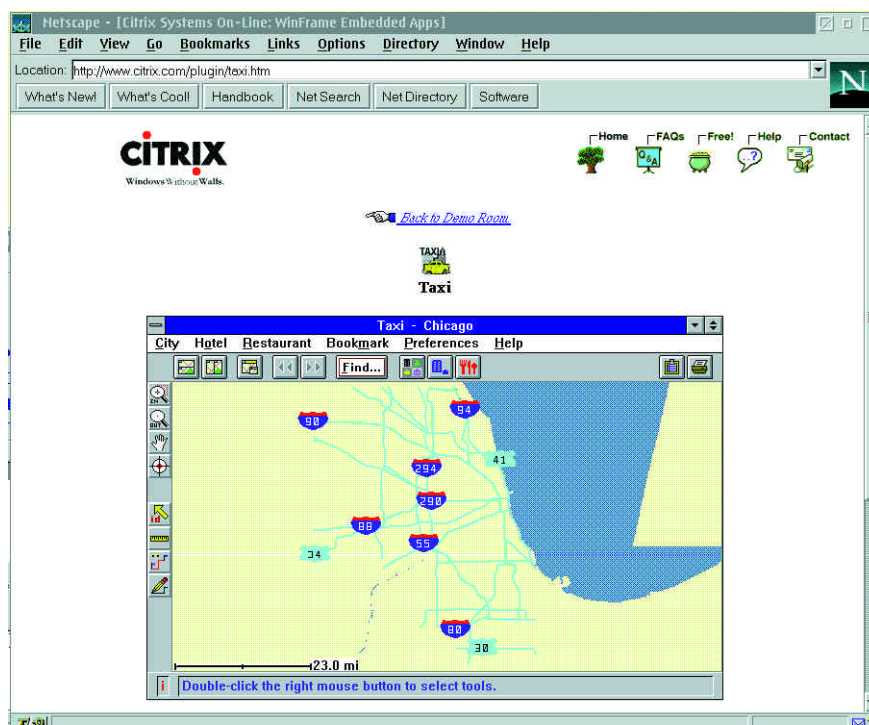
Win32 applications run on the Windows NT WinFrame server and OS/2 clients view the display in a Warp Win-OS/2 session. Wyse and Insignia offer similar solutions for Windows clients using technology licensed from Citrix (www.citrix.com) but only Citrix WinFrame ports OS/2 clients.

Citrix WinFrame is a specialised solution that won't suit everyone and isn't cheap, but it's very much in tune with the idea of OS/2 as a networked client in a network computing environment.

For the right applications and processes, the WinFrame model enables large companies to manage multi-platform networks more easily and to have more choice over the client hardware. Instead of equipping everyone with fast Pentiums with multi-gigabyte drives and 32Mb RAM, you can make better use of older hardware by serving up remote applications.

The WinFrame model is pretty similar to network computing with Java except that it delivers existing Win32 applications while



Fig 1 With the Citrix WinFrame Plug-In for Netscape, it is even possible to work over the internet with Windows applications that are running on a remote server

## Points of support

■ **OS/2 Central on CompuServe**
GO:OS2CENTRAL has been started to provide discussion and support for all areas of OS/2 Warp. One of the founder companies, Creative Systems, produces the CompuServe OS/2 offline reader, Golden CommPass, and has acquired rights to the CompuServe Information Manager for OS/2 (OS/2-CIM).

■ **Drivers**
• Epson Germany is developing drivers for several printers in Epson's Stylus range. The drivers aren't free. Send mail to novasta@ibm.net for details.
• If you have a WinTV card take a look at the WarpTV page at www.wdi.co.uk/os2tv/download.htm for the driver situation.

we're waiting for Java to get real. Of course, when there are Java applications, they will be just one more ingredient which can be added to the mix available to network computing clients alongside WinFrame.

### Warp 5.0
Java is coming along nicely. Java 1.02 is now GA (or generally available — IBM's way of saying "shrinkwrap") along with the Java 1.02 Just in Time (JIT) 2.0 compiler for Warp 4. Java 1.02 for Warp 3 and for Warp Server is pencilled in for this summer and Java 1.1 for OS/2 should be ready by the autumn.

Shrinkwrap, as a physical entity, is set to shrink as software companies begin to explore alternative software delivery methods. With network computing in mind, software is bound to reduce in size and more packages will become available electronically. In particular, IBM and Lotus are experimenting with software delivery via the internet and one of the plans is to offer Warp upgrades online (as hinted at by me in my previous column).

IBM will deliver well over a dozen different updates to Warp 4 this year. The sum of the updates, which includes SMP support, TCP/IP 5.0 and Java 1.1,

will take Warp 4 to its next major version. Warp 5 is pencilled in for a 1998 release, about 18 months after Warp 4 shipped.

Users can choose which updates to receive. An OS/2 user in a traditional network might concentrate on the client/server enhancements to NetWare, Windows and Unix connectivity. By contrast, a network computing OS/2 user might be more interested in the TCP/IP, Java and network security modules.

With effect from next month the service will be chargeable, available to any Warp 4 user with a modem and internet access. It is like buying Warp 5 on an instalment plan.

### Warp updates
All the discussion of how few applications there are for Warp, and how much choice there is in the world of Windows, can make for depressing reading, but more often than not this ignores the fact that Warp is often the first platform to have real leading-edge capabilities. Put another way, Flash now seems more popular but Jif was the first.

I was reminded of the way in which OS/2's advanced capabilities often go unsung when I read the header of some email I received from a former *PCW* columnist, now working for a rival publisher.

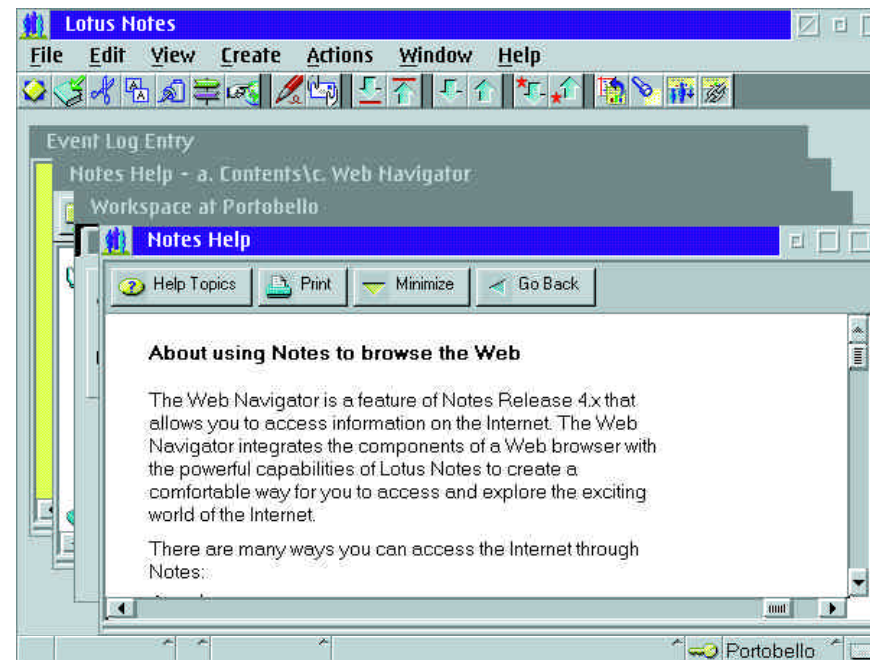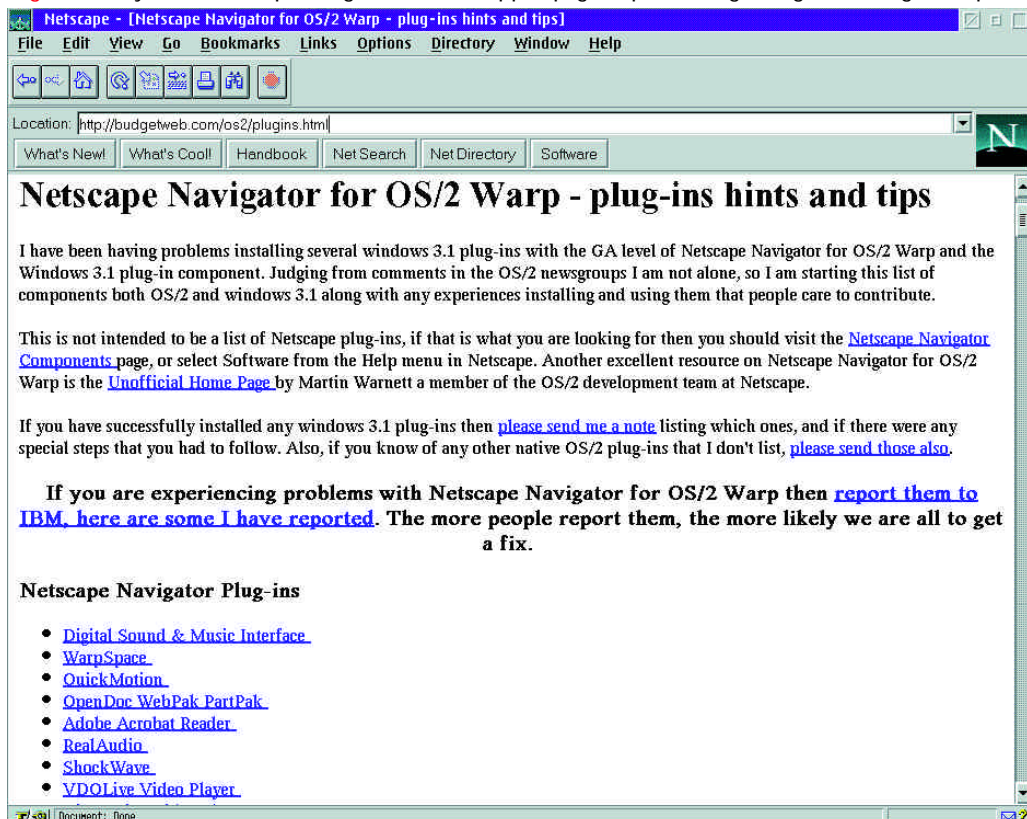In the header of his message I noticed

that his organisation was using an OS/2 SMTP mail gateway. As it happens, Lotus now has a gateway that runs on Windows NT, too, but it made me think of all those years during which OS/2 provided the backbone of that organisation's email system. I suppose in some ways, OS/2 is doomed to be first!

Interestingly, IBM, through its Lotus subsidiary, is now cashing in on the widely held perception that Windows NT is the one and only future direction of server computing, although it irritates OS/2 fan-club members no end. Because OS/2 used to be the preferred platform for Lotus Notes, it is now Windows NT that leads out new Lotus releases. Naturally, Lotus continues to ship multiple-platform versions including OS/2 Warp thereafter, so there is always a choice of platforms.

There are sound business reasons for this change. A lot of marketing money is being thrown at Windows NT and, as it is free, it therefore makes sense for Lotus to utilise it. Additionally, it makes it easier for Lotus to compete directly against Microsoft's groupware and office suite, and for users to compare the two.

Somehow, as much as I like Warp's stability and user interface, I do not think that facing-off SmartSuite for OS/2 against

Fig 2 This very useful Netscape Navigator for OS/2 support page helped me to get Plug-Ins running in Warp





Fig 3 Lotus Domino 4.5 runs on OS/2, all versions of Windows, the Mac and Unix systems

Office 97 would have been a successful business decision.

### Domino spotted
The Plug-Ins Hints and Tips page for Netscape Navigator for OS/2 Warp at budgetweb.com/os2/plugins.html is a mine of information and useful even if you don't think you'll be using Plug-Ins (Fig 2).

The latest downloadable version of the Lotus Domino web server, version 1.5a for OS/2 (and several other platforms), is on the Lotus web site. There is a lot said and written about the difficulty of making money on the web but not much about saving money on the web by delivering timely and effective support, let alone saving money by using web-based support.

The "a" in the Lotus Domino Web Server version 1.5a refers to a security update which corrects a problem in version 1.5 where a web browser coming in from the internet (not on a LAN) could impersonate a user. Lotus was informed via the web and used the same medium to deliver a fix and notify users. It was a web problem, but as with Netscape and Microsoft when they discovered security holes in their products, the web helped Lotus and its customers in a timely manner.

The other point of note about Lotus Domino 4.5 (Fig 3) is that it is the add-on which devoured its host. Originally (less than twelve months ago) Domino merely added web protocols to the Lotus Notes server. Now, Lotus has changed the name

of its flagship multi-platform groupware application development environment from Lotus Notes to Lotus Domino. From Release 4.5, the Notes name is only retained by the Notes desktop clients. As the pace of web development hots up, it is only a matter of time before newer developments like the IBM/Netscape link-up and consequent Netscape Communicator groupware web client, reduce the importance of Notes clients.

■ *I have received some Warp Server tools from a reader with a very large network, and have been given a pointer to a couple of Java games, all of which I hope to be able to bring you next month, plus some network-specific advice for Warp and Warp 4 users.*

### On the CD-ROM

Having burnt my fingers on beta timeouts I am now wary, so the follow-up to last month's cover-mounted CD is an OS/2 Dialer in version 1.0, a totally pointless Simpsons guide and a pair of Novell updates, the OS/2 Utilities for NetWare 3.12 and 4.10, plus the latest NetWare OS/2 Client V2.12.
The self-extracting ZIP (run it to expand onto a drive from which it can be installed) requires in excess of 6Mb of free space.

### PCW Contact

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