



5. Running PC software on a Mac

Macintosh users sometimes need to run PC applications to exchange data with a client, or simply because that particular application does not exist on the Mac. Rather than purchasing a real PC, it is now possible to run applications designed for Windows on a Macintosh.

To do this, you need to use a special kind of software called an emulator. These simulate the presence of essential components of a PC-compatible microcomputer on a Macintosh. The most advanced PC emulators for Macintosh will run virtually all operating systems and applications designed for PCs. However, to achieve this successfully, they require plenty of power and resources. Consequently, even on the fastest Macintosh, a PC emulator will at best provide limited performance, though this is usually sufficient to meet most needs.

5.1 Emulators

The best-known emulator is Virtual PC 5 by Connectix. A number of versions exist; the simplest, Virtual PC Dos, is only supplied with PC-Dos but it is very affordably priced. Users will then need to install the operating system of their choice (Linux, Windows 98, Windows Me, etc.). Novice users may prefer ready to use versions with an operating system already installed (Virtual PC 98, 2000 or XP).

5.1.1 Demanding applications

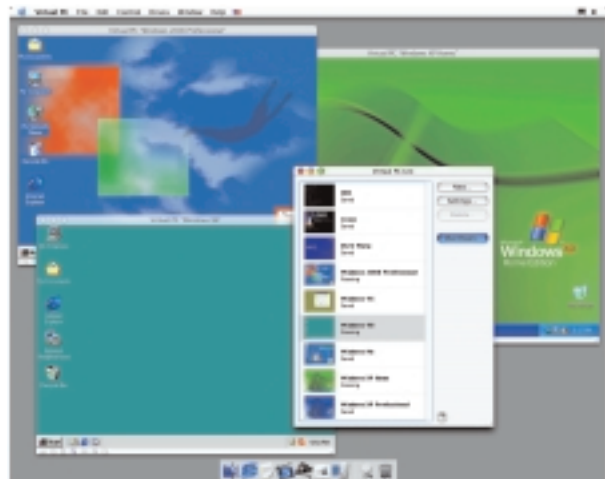
To work correctly, Virtual PC require a powerful Macintosh. Connectix, for example (for the Windows XP version of Virtual PC), recommends at least a PowerMac G3 or G4 running at 400 MHz, 256 Mbytes of memory and 2 GB of available hard disk space.



5.1.2 A real PC

When you start Virtual PC Windows, the characteristic Windows screen appears in a Mac window that you can resize, hide or move. Within the window, everything works just like on a real PC. Compatibility is seamless: standard office suites (IBM Lotus Smartsuite, Microsoft Office 2000) for example, run flawlessly as do most major financial packages and a large number of Internet utilities.

On the other hand, multimedia applications lack punch. The performance offered by emulators is limited to running audio or video creation applications, an area where the Mac typically excels in any case. The same applies to the latest 3D games, which are slow; it is however possible to run older 2D games without difficulty.



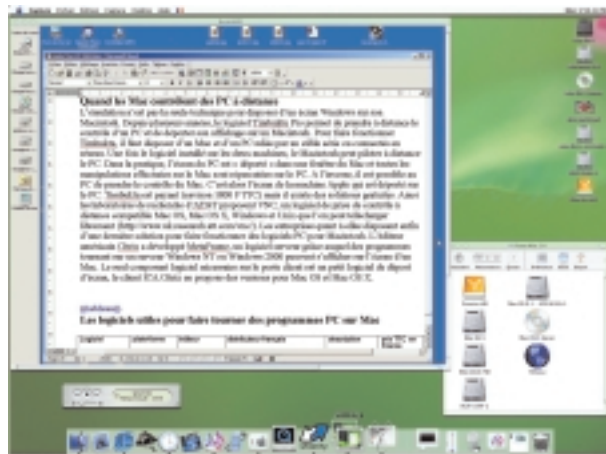
Virtual PC 5 running Windows 95, Me and XP

Using Virtual PC 5, it is possible to run PC applications simultaneously, or even to run more than one version of Windows on the same Macintosh, all with Mac OS applications running simultaneously.



5.2 Remote display

Emulation is not the only way to display a Windows screen on your Macintosh. The Timbuktu Pro software from Netopia lets you take remote control of a PC and display its screen on a Macintosh. To run Timbuktu you need a Mac (running Mac OS X) and a PC connected together on a network. Once the software is installed on both machines, the Macintosh can remotely control the PC. In practice, the PC screen is “moved” to a window on the Mac’s screen and all of the actions performed on the Mac are reflected on the PC. The reverse is also possible, allowing a PC to take control of a Mac. In this case the Apple computer’s screen is displayed on the PC screen. Timbuktu is a commercial application but other solutions are available for free. AT&T’s research labs offer VNC, a remote control application that is compatible with Mac OS X, Windows and Unix and which can be downloaded free (www.uk.research.att.com/vnc/).



A Windows PC remotely controlled by VNCThing

VNCThing, a free utility, lets a Mac remotely control a Windows PC running VNC software, which is also free. More comprehensive and functionally richer is Timbuktu Pro which fulfils the same function, but this application from Netopia must be purchased.



5.2.2 Citrix applications

American software vendor Citrix has developed MetaFrame, a server application that allows programs running on a Windows NT or on a Windows 2000 Server to be displayed on a Mac's screen. The only software component required on the client station is a small remote screen application.

Citrix has released an ICA client for their Citrix MetaFrame server. It is called Citrix Connection Manager and is available in version 1.0b20.

Darren Montjar's "Mystery Machine" is a Java Citrix client for Mac OS X, equivalent to the Citrix Client. It connects directly to a Windows Terminal Server, which means that a Citrix server is not needed.

For more information on Citrix ICQ client 6.30.304nt and Citrix Connection Manager, please go to www.citrix.com.

For more information on Darren Montjar's Mystery Machine, please go to www.the-fallen.net.

5.3 Useful applications

Application	Platform	Vendor	UK distributor	Description
Virtual PC 5.0	Mac OS X	Connectix	www.connectix.com	Runs PC applications on a Mac
Timbuktu Pro 2000	Mac OS X, Windows 9x, Me, NT, 2000	Netopia	www.netopia.com	Lets a Mac take remote control of a PC and vice versa
VNCThing 2.2	Mac OS X	Purple Shark Software	www.webthing.net	Lets a Mac take remote control of a PC and vice versa
Share my Desktop 1.1	Mac OS X	Mike Bombich	http://mactips.bombich.com	Lets a Mac take remote control of a PC and vice versa
Citrix ICA Client X 6.30.304nt	Mac OS X	Citrix	www.citrix.com	Allows access to a Windows application hosted on a MetaFrame server
Citrix Connection Manager 1.06b20	Mac OS X	Citrix	www.citrix.com	Allows access to a Windows application hosted on a MetaFrame server
Mystery Machine	Mac OS X	Litasoft	www.the-fallen.net	Allows access to a Windows application hosted on a Windows PC running Terminal Server (2000 and XP only)



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