Summary
QuickDraw™ 3D is software for the Apple® Macintosh® computer that lets programs create and display workstation-quality 3D graphics. It lets personal computer users treat 3D images like any other type of graphic, even cutting and pasting them between programs. Nothing like it comes with Windows 95.

This is part of a series of short reports on the contrasts between a Macintosh computer and a PC with Windows 95. To see previous entries in the series, visit us on the Internet at http://www.apple.com/whymac/

The Macintosh Advantage
QuickDraw 3D isn’t an application itself, but it can be used to put 3D into existing or new software programs. It includes a human interface that makes it easy and intuitive to draw and edit 3D graphics, and software tools for drawing 3D objects (including high-end features like shading, texture-mapping, and lighting effects). QuickDraw 3D also includes a cross-platform file format, so users can share 3D drawings, and has an open architecture that lets Apple and others accelerate its performance.

Each element of QuickDraw 3D can be extended, making QuickDraw 3D one of the most open graphics architectures in the industry. Features including the file format, user interface, modeling tool kit, and shading and rendering architectures are all designed to allow developers—and ultimately customers—to add new capabilities to the system.

Windows 95 does not include integrated 3D.

Although QuickDraw 3D will be available in a version for the Windows platform, it takes advantage of the extra performance of the PowerPC™ chips used in Apple’s Macintosh computers, and speed will be increased even further by hardware accelerators for the Macintosh. Apple believes this makes Macintosh the premier platform for doing 3D graphics on a personal computer.

QuickDraw 3D is available now, bundled with Apple’s new Power Macintosh® 7500 and 8500 models. It will be included in the next update to the Mac™ OS operating system, and is available on electronic services, including the World Wide Web. Many compatible applications also ship QuickDraw 3D with their product.

What It Means For Users
The addition of 3D graphics makes the Macintosh an even more attractive computer for people doing publishing, multimedia authoring, education, and technical work. But Apple believes that eventually 3D graphics will benefit everyone. Just as desktop publishing features became mainstream because they were a better way to communicate information, 3D is meaningful for everyone because it enhances everything from business graphs to educational titles to games. That’s why making 3D usable by everyone is a major emphasis for Apple.

Software companies supporting QuickDraw 3D include 3DLabs (acceleration), auto•des•sys (Form•Z modeler), Adobe Systems, Canto Software (Cumulus multimedia database), Electric Image, Fractal Design, Graphisoft (ArchiCAD 3D CAD), Graphisoft (MiniCAD), HSC (Bryce 2.0), MacPlay (Descent 1.1), Matrox (PC-based acceleration vendor with PCI 3D accelerator), Microspot, Ray Dream (Designer), Reality Bytes (HaOc), Spatial Technology (advanced 3D geometric modeling development environment), Specular International (Infini-d 3.1), Strata (Studio Pro, Vision 3D), Vertigo Technology (Vertigo II and SGI-based application), Viewpoint Datalabs (3D models and clip art), Virtus Corporation (Walkthrough Pro 3.0).

What About the Future?
In the next year, Apple expects that QuickDraw 3D will be released in a Windows version, there will be an update with more features, and there will be a scaled version for use in games and multimedia titles. Apple also intends to integrate
QuickDraw 3D with animation, and link it more tightly with Apple's QuickTime™ video technology and QuickTime VR virtual reality software.

Questions or Comments?
You can send e-mail to the Macintosh Platform Marketing team at competition@applelink.apple.com

For more information on topics mentioned in this note, use the Internet:

MacWeek article from February:

QuickDraw 3D home page: