Summary
QuickDraw™ GX is a drawing environment that extends the Apple® Macintosh® computer’s lead in advanced graphics and text. It’s a richer drawing environment than the one in Windows 95, and handles type fonts, especially international languages, much more flexibly. Application developers are starting to use QuickDraw GX to create powerful drawing programs that literally do things you can’t do on any other personal computer. For many customers, especially those in international markets and graphics users anywhere, QuickDraw GX represents an important difference between a Macintosh and a PC 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 GX is an integrated imaging technology providing advanced printing, graphics, type, and document portability features. Users can take immediate advantage of many QuickDraw GX printing features with their existing software. Developers can build on QuickDraw GX to provide graphics, color, and type formatting capabilities unmatched in applications today.

- Printing in QuickDraw GX is fully extensible. You can run “printing extensions” that modify a print job beyond what the application does. For example, a printing extension can add a custom “watermark” to each page. (A watermark is text or graphics, such as the word “Confidential” or “draft,” that is printed in light gray in the background of each page. Most programs can’t create watermarks, but QuickDraw GX can add them automatically without modification of the program.)

- A printing extension can also be a custom solution that integrates printing into a business environment by providing password protection, consumable and processing time billing, and customer tracking features.

- QuickDraw GX provides advanced drawing functions like scale, skew, and perspective, which are not included in Windows 95. Additionally, QuickDraw GX can mix colors in real time. In other drawing environments today, moving a yellow circle over a blue square does not automatically give you a green intersection—you have to run a “filter” or macro that calculates the intersection and creates a separate intersected object filled with the appropriate color. QuickDraw GX mixes colors in real time—just drag one shape over the other and the colors can mix automatically. Just like in the real world.

- Type in QuickDraw GX is automatically formatted (to produce advanced features such as ligatures), and automatically supports international script systems and reading directions (right to left, left to right, vertical, above and below a baseline, etc.). Windows 95 does not have equivalent functionality. Microsoft’s closest answer is a font format called TrueType® Open. It allows the creation of fonts with ligatures and other advanced characters, but it’s just a spec for a font format—developers have to write their own display technology in order to use the fonts. In Apple’s view, that’s the programming equivalent of selling someone a sack of flour instead of a chocolate cake.
What It Means For Users
Although QuickDraw GX is valuable for almost all users (because everyone can benefit from better-looking printing and graphics), it has the greatest immediate impact on graphic artists and users outside the U.S.

QuickDraw GX applications make it easier for users to create complex graphics and documents. Internationally, QuickDraw GX enables developers to create products that, for the first time, allow many computer users to write the way that they were taught in school—with no awkward formatting or grammatical compromises imposed by the computer.

Some key applications that use QuickDraw GX include Lari Software's LightningDraw GX, Ready,Set,Go!GX from Manhattan Graphics, and UniQorn from SoftPress.

What About the Future?
To be frank, early developer adoption of QuickDraw GX was slow, and some users had technical problems with the first version of it. There has been a warmer response to the new version of QuickDraw GX, which comes bundled with Apple's Macintosh 7.5 operating system (for an example of the coverage, see MacWeek, February 27, 1995, p. 1). Apple believes that the functionality of QuickDraw GX is the future of personal computer graphics, and is committed to make it a compelling benefit for every user.

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

For more information on companies and products mentioned in this document, use the Internet:

SoftPress Systems:
http://www.macfaq.com/vendor/software/996.html

Lari Software:
http://www.macfaq.com/vendor/software/580.html

Manhattan Graphics:
http://www.macfaq.com/vendor/software/655.html

QuickDraw GX:
http://www.info.apple.com/gx/gx.html
http://www2.waikato.ac.nz/ldo/gx/intro.html

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