

PostScript Fax

A Newsletter Article - Draft

Today's fax machines have changed the way we do business. By providing a convenient means of communicating documents to distant places, fax machines have become valuable labor and cost savings tools for us. Yet, they haven't been perfect solutions. While transmitting documents quickly, fax machines tend to degrade a document's quality, and as a result we often follow up by sending a printed copy of the document by overnight courier.

The process of creating and sending a fax usually involves printing a document then feeding it into the fax machine. This is labor-intensive, especially if we have to wait while someone else takes a turn at the fax machine or printer, making the faxing process inefficient. If we use a thermal paper fax machine to receive the document, our first action is to copy the newly received document onto plain paper. Transmitting or receiving faxes, we end up spending additional money and time to overcome the quality and efficiency problems encountered when communicating documents by fax.

Computer-based fax systems avoid some the drawbacks of standard fax machines, yet they have shortcomings of their own. Single user fax systems can be unreliable and fail during the process of sending or receiving faxes. Often the failure can be attributed to an erroneous installation or an incompatibility with another application. Since reliability is a fundamental requirement for faxing, frequent failure of fax transmission or reception often causes users to resort to more reliable equipment, namely plain old fax machines.

Network-based fax servers can provide fax capability to a group of users, but are generally expensive as they require dedicated computers and support personnel. If we install a single user system and the need to fax grows, we either have to replicate the single user system for each new user or resort to a fax server. Either way, the expense of installing a computer fax system can grow unexpectedly as our need to fax grows.

The Role of PostScript Fax

PostScript Fax was developed by Adobe Systems, Inc. to address the shortcomings of traditional fax machines and computer-based fax systems. PostScript fax printers improve upon two key aspects of traditional fax machines, efficiency and document quality. PostScript Fax improves on the efficiency of using a fax machine by reducing the number of steps required to send a fax. Instead of printing a fax and then feeding it into a fax machine, users can send faxes directly from within an application on their computer. PostScript Fax is designed to work using the print commands found in Windows and on the Macintosh, so, to fax, the user simply selects the fax option in the print dialog. A fax job is then started just like a print job. And since just about everyone familiar with computers knows how to print, learning how to use PostScript Fax is simple.

Once the fax job is underway, the user's computer and PostScript Fax printer work together to create the fax and send it to its destination. First a PostScript file containing the document is sent from the user's computer to the fax printer. Then the fax printer converts the file into the bitmapped image format understood by fax machines. Finally, the printer places a call to the destination fax machine and sends the image. All PostScript Fax printers support Group 3 fax standards, so they're compatible with the over 40 million fax devices installed world-wide.

The quality of faxed documents sent from PostScript Fax printers is notably better than those sent from traditional fax machines. Quality is improved because the step of reading or scanning the fax into the fax machine is omitted. Scanning reduces document quality because fax machine scanners lack the sensitivity to accurately read documents printed on laser printers. Instead of scanning, PostScript Fax

creates the document's fax image directly from the computer file using the PostScript software on the printer. The creation is done in a manner similar to when a document is printed, resulting in faxes which look almost identical to the printed document.

To further improve document quality, PostScript Fax printers have the unique capability of sending faxes as PostScript files when communicating with each other. By sending the fax as a PostScript file and not a fax image, PostScript Fax printers dramatically increase the resolution at which the received document is printed. The best resolution supported by Group 3 fax machines and systems today is 206 dpi by 196 dpi. If a fax is sent as a PostScript file, it will be printed at the receiving printer's best resolution which may be as high as 800 dpi.

Not only do PostScript Fax printers improve the quality of faxes they send, they improve the quality of faxes they receive. PostScript Fax printers use their ability to print documents on plain paper to print incoming faxes. For users with thermal paper fax machines, upgrading to a PostScript Fax printer means doing away with thermal paper and its tendency to curl, smudge, and wrinkle.

PostScript Fax printers are generally simpler and more reliable than computer-based fax systems because they rely very little on a computer to operate. Incoming faxes are received directly by the printer because it's attached directly to the telephone line. A PostScript Fax printer can continue to receive faxes even if the network or computer to which it's attached isn't operating. Sending a fax with a PostScript fax printer can be more reliable as well, since most of the process of sending a fax occurs in the printer and not on the computer where compatibility issues with other applications could cause a fax failure.

PostScript Fax is an inexpensive, low-maintenance means of providing a network fax resource to a user workgroup. A PostScript Fax printer can be as easily installed and used on a network as a standard printer. This means that no dedicated network hardware or software is required, substantially reducing the cost of providing electronic fax capability to a workgroup. PostScript Fax printers will work with a wide variety of computers and operating systems. To support the most popular computers, PostScript Fax printers are bundled with software for DOS, Macintosh and Windows.

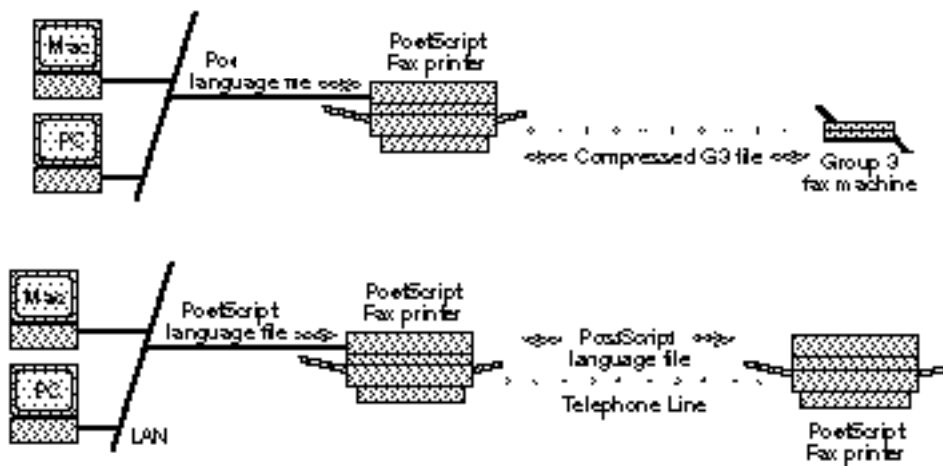
Room for Improvement

While PostScript Fax does provide users with higher quality and more reliable faxing, it still has room for improvement. Adobe is currently exploring its adaptation to sending color faxes and to multi-function devices. By leveraging PostScript's color capability, users will be able to send and receive color faxes as easily as black and white faxes. Multi-function devices combine several functions such as print, copy fax, and scan into one piece of hardware. Overall cost to the user can be reduced by having all of the functions share common hardware. By adding PostScript Fax to one of these devices, users will have the ability to send either an electronic file or a pre-printed document as a fax, thereby providing a user with a very broad set of fax capabilities.

PostScript Fax Availability

PostScript Fax is available as an option to a broad range of PostScript printers. Apple, Compaq, Dataproducts, NEC, Panasonic, and Xerox offer PostScript Fax-capable printers ranging in price from less than \$1000 to over \$10,000. Prices for the PostScript Fax options available from these vendors range from about \$300 to \$500.

Diagrams



Printer: "Marketing fax printer" 8.1fc2

Copies: Pages: ☒ All ☐ From: To:

Paper Source: ☒ All ☐ First from: Remaining from:

Destination: ☐ Printer ☐ File ☒ Fax

Fax Cancel Options Help

Fax Destinations

Fax Number:

Mike Brown	Mom's Motherboards
Frank Jones	Media Experts & Associates
John Smith	XYZ Computers

Broadcast using ☐ Send at 1 : 00 AM

Fax... Cancel Phone Book... ☒ Cover Page ☐ Local Copy ☒ Caption

Sort By: ☐ Company ☒ Name