

newsletter archives
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Internet Print Server

History repeats itself! Black Ice Software, Inc. delivered the first working Internet Fax Server in 1996 and now the first Internet Print Server in the year 2000! After countless long discussions within Fortune 500 companies, and several promises to deliver Remote Printing, nothing ever happened. Microsoft used their old strategy to scare away and kill competition by announcing non-existent plans. Just in case remote printing became popular, Win2000 has some unusable kluged remote printing capability. This way, Microsoft can justify killing off the competition. However, Black Ice now delivers a Remote Print Server allowing printing capability never before available!

Understanding Internet Printing

This new patent pending technology allows anyone to print a document on **any** printer on the Internet with the same ease as printing on a printer attached to the PC! The first Internet Print Server will change printing the same way as local area printing first appeared and allowed users to share printers in the office. It will drastically change the way documents are managed on the Internet. Internet Printing is just like e-mail, Internet Faxing, Internet Telephone and Video. It is new data streaming through the Internet, which will further open up the Internet for new applications.

Business benefits of using Internet printing:

- Print directly to your local copy shop printer. No more ftp transfers and waiting for days to get your document proof!
- **Single installation!** Time and money saving automatic configuration for any connected printer!
- Check your print job status online.
- Print on any printer in your company. (Same office or worldwide!)
- Print a document as it is formatted on your own printer, with no reformatting or quality loss!
- Print to your office printer when you're at home.
- Print digital photos through the Internet.

- Credit Card processing integration available for Copy or Print shops
- If color faxing is too slow or poor quality, use Internet Printing
- Countless other opportunities when new technology is born.

Internet Printing Architecture

The Internet Print Server is based on Black Ice Software's patent pending printer driver technology. With the Internet Print Server, documents can be printed through the Internet without any quality loss. Other products can accomplish this only with noticeable differences between the document on the screen and the printed image.

If you examine the corresponding figure you can see dotted and solid double arrows. The dotted arrow stands for a connection that can be interrupted (e.g.: modem dial-up), and the solid arrow stands for a connection that is continuous (e.g.: cable connection). The double arrow points to a two-way (full duplex) connection.

There are two main components to the Internet Print Server Technology. Printer drivers, which are the client software, and the Print Server to manage the printers.

Black Ice Software, Inc created a generic printer driver that is compatible with any printer if the printer has a Microsoft Win95/98, NT, or W2K compatible printer driver.

For simplicity, the newsletter will use the terminology of "client" to refer to the printer driver. The term "client" will more clearly define and distinguish the Print Server from who is doing the printing.

Printing through the Web or Internet should be as simple as printing through a local printer. The engineers made a major effort to make the product as user friendly as possible and to comply with the Microsoft printer user interface.

Installing the Printer Driver

for Internet Printing is easier than installing a printer driver for a locally attached printer or a LAN printer. Since there is only one printer driver for every printer in the world, there is no need to worry about manufacturer model and driver support. One size fits all!

Overview of Internet Print Server

Internet Print Server is designed to print from any application to any printer in the world if the printer is connected to a PC and the PC is connected to the Internet or a TCP/IP network. Therefore, you only have to use a Print Server attached to the Internet or a local TCP/IP based network and a client program on your local computer. You can print from any application (Word, Excel, Acrobat reader, etc.) as you do with local printers. The client printer name (the client printer driver) can be seen in the printer selection dialog box as any other network printer. The Print Server computer can be attached directly to printers (right part of the figure) or it can be attached to a Local Area Network (LAN) that contains computers with printers (bottom part of the figure). You will see the client on your machine as any other network printer. For example, if an **HP LaserJet 1100** is attached to the print server and the server's domain name is **Blackice.com**, you will see your printer as **HP LaserJet 1100 on Blackice.com**.

This naming convention assumes that the Print Server side must be installed *first*. After installation you must configure the Print Server through a web browser and share a printer on the Print Server to be available through the Internet. Next, when you install the client side, the client software will communicate with the Print Server and will display the printer(s) being shared on the Print Server.

The Print Server administrator can create groups and users who will use the Print Server. Users must be arranged into groups and they inherit their parent group's features. There are some features that are available at the group level, but most of them are available at the user level. A user can only be in one group at a time. The "group and user" architecture is necessary for easy administration and for implementing printing restrictions (e.g.: page limits, printer accessibility, etc...).

Print Job Verification

There are two ways to check the print job status:

- Use the printer driver Property window to check status

Use the Web Browser to log into the server, which displays the status of the user's most recent print jobs.