Powerful managed printing for LAN environments.



# Distributed Print with OS/2 Servers

Your company's information needs are expanding. To keep costs down, you may be considering a LAN for presentation and printing. As you move to a LAN, you face some challenges.

How do you distribute information from other systems to a LAN? How do you manage LAN printing with the same data security and print quality available on mainframe systems? How can output from LAN applications be printed from the centralized host?

#### **The Solutions**

The solutions are Print Services Facility\* for OS/2\* (referred to as PSF\* for OS/2) or Warp Server, both LAN print servers from the IBM Printing Systems Company. Both servers let you print PostScript\*\* and PCL\*\* data streams on high-performance Advanced Function Printing\* (AFP\*) printers or on PCL printers.

There are additional functions available for both servers, which also allow printing from host systems.

### Printing from the Host with PSF for OS/2

PSF for OS/2 handles printing from host systems either directly, using PSF Direct\*, or through its Distributed Print Function\* (DPF). Both PSF Direct and DPF use the SNA protocol to accept data from Application System/ 400\* (AS/400\*) computers or from a PSF installed on MVS\*, VM\* or VSE\* host systems.

DPF lets you submit print jobs from the host spool to the PSF for OS/2 spool. This lets the PSF for OS/2 print administrator control when jobs will print and manage them locally. The necessary resources, such as electronic forms and images, are cached and managed by PSF for OS/2.

PSF Direct lets the PSF host operator control the remote IPDS\* printers. For example, the host operator can restart and reposition jobs for the remote IPDS printers. Also, the operator is notified when the print file has successfully printed.

## Software Solutions

#### Highlights

 Cross-system, enterprise-wide printing solutions

• Distributed shared printing with S/390, AS/400, RISC System/6000 and LAN users

Managed printing on the LAN

 Current printer investments maximized

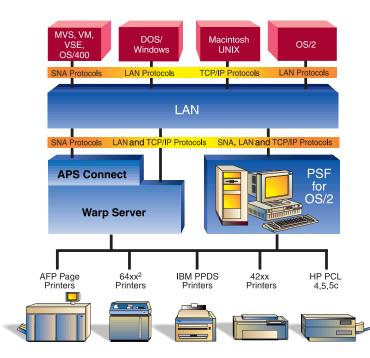
PSF Direct, in combination with the appropriate printers, allows the use of printer-resident fonts, downloaded outline fonts, and Page Positioning capabilities when supported by the host. PSF Direct also allows print jobs to be directed to IBM

#### Printing from the Host with APS Connect for Warp Server

42xx and 64xx Impact Printers.

APS Connect for Warp Server functions much like PSF Direct. It sends print data streams from S/370\*, S/390\* or AS/400 systems across SNA networks to Warp Server systems for remote printing.

It supports the same printers as PSF Direct. And, like PSF Direct, it does not spool at the server. Rather, control and error recovery is from the host system.



#### **Printing from LAN Applications**

Both PSF for OS/2 and Warp Server use a high-powered Personal System/2\* workstation with IBM's Operating System/2\* as a network print server. From that base, you can branch out into many LAN environments and applications.

For example, you can attach to a Novell\*\* network, run under the Windows\*\* or DOS operating system, and use familiar graphics and text applications to generate and print application data. You can also send output from those LAN applications through PSF for OS/2 back to the host for printing.

#### **Printing PostScript**

With both servers, you can send PostScript Level 1 and 2 applications to a high-speed AFP printer. This can give you a substantial performance advantage and cost savings for multiple copies of PostScript documents.

#### **Managed Solutions**

Both servers do more than just send jobs to a printer. They help you manage printing on a LAN. For example, they provide:

- Status for any print job, whether it's still in a queue, printing or completed
- Automatic error recovery with IPDS printers to restart printing from the page where the printing stopped
- Accounting information so you can monitor the number of jobs and copies printed
- Resource management for items such as logos, forms, images, and fonts

#### **Maximizing Your Printer** Investment

Using PSF for OS/2 or Warp Server, you can attach the printers you need to do the job, whether you need letter-quality, desktop printing or high-speed production printing. These print servers support a wide range of printers, from the Hewlett-Packard LaserJet\*\* and the IBM 4019 printers to the IBM InfoPrint 4000 Advanced Function Duplex Printing System that can print over 700 impressions per minute duplexed on continuous-form paper.

#### Summary

PSF for OS/2 and Warp Server provide the following features and benefits:

- Support for high-performance IBM **IPDS** printers
- Support for HP PCL\*\*4, 5, and 5C and PPDS\* printers
- · PostScript applications print on either AFP or HP PCL printer

- Distributed shared printing from AS/400\*, S/370\* and S/390\* systems as well as DOS, Windows, OS/2, Macintosh\*\* (on Novell LANs), UNIX\*\*, and AIX\* systems
- Control of spool, printers and resources
- Support for ASCII and PostScript applications on a LAN
- Print electronic forms with LAN data
- HP PCL and PGL\*\* applications passed through to HP PCL printers

<b>PSF for OS/2 and APS</b>	<b>Connect Warp</b>	Server at a	alance
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Input D	ata Streams	— AFP (MO:DCA*) — PostScript Level 2 — HP PCL and PGL1 — ASCII <sup>1</sup> Pass through to HP PCL printer
Printers	Supported	<ul> <li>IBM InfoPrint 4000 Advanced Function Duplex and Simplex Printing Systems</li> <li>IBM 3900-0W1, 3900-0W3, 3900 Wide Duplex, 3900 Duplex, 3935, 3130, 3160</li> <li>IBM 3112, 3116, 3912, 3916, 3930</li> <li>IBM 3825, 3827, 3828, 3829, 3835, 3900</li> <li>IBM 3812, 3816</li> <li>IBM 4028 Models AS1 and NS1</li> <li>IBM 42302 Models 201, 202, 513, 64xx2</li> <li>PCL and PPDS Compatible</li> <li><sup>2</sup>Only through PSF Direct or APS Connect</li> </ul>
Printer	Communication	PSF for OS/2 — Ethernet (TCP/IP) or Token-Ring (TCP/IP) — SNA Token-RingI — SDLC — Coaxial Attachment — Parallel, Token-Ring or Ethernet for PCL Printers — Channel Attachment (PSF for OS/2 only) APS Connect for Warp Server — Token-Ring (TCP/IP) or Ethernet

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