Electronic printing solutions for creating powerful, high-quality documents.

IBM

IBM Advanced Function Printing and the S/390

Printed documents play an important role in building and maintaining customer satisfaction. Therefore, it's critical that your documents project a professional appearance while conveying concise, meaningful information. IBM® Advanced Function Printing™ (AFP™), a suite of electronic printing solutions, turns your invoices, letters, policies, statements and reports into high-quality, cost-effective documents.

Competitive Advantage

With feature-rich AFP applications, you can create a competitive advantage by providing your customers with sharp, easy-to-read, informative documents. Because AFP facilitates cost-effective electronic printing, you can also reduce your company's capital spending for print resources.

Electronic forms allow you to replace expensive preprinted forms. This reduces costs and minimizes forms management problems, while increasing flexibility and improving quality.

Two-up, four-up and duplex printing increases printer throughput and reduces paper costs by letting you print multiple logical pages on both sides of the page.

Bar codes enable quick and accurate data input, which facilitates business process automation. Use of the U.S. Postnet bar code can provide significant postage savings.

High-quality images, graphics and fonts enhance the overall effectiveness of a printed page. For instance, you can create, manage and print company logos; convey information quickly with charts and graphs; and use a variety of fonts to produce professional-looking documents in more than 45 languages.

System-managed printing provides resource downloading and error recovery to ensure that the output you need is printed accurately and completely.

The AFP solution features comprehensive print server support and includes highly functional products for the S/390 environment.

Reliable Print Server Support

Print Services Facility™ (PSF™) is at the core of the AFP solution, driving printers and print servers in the MVS®, VM™, VSE™, AIX®, OS/400® and OS/2® environments. PSF provides resource management (fonts, electronic overlays, page formats, images and graphics), superior error recovery, system-managed printing,
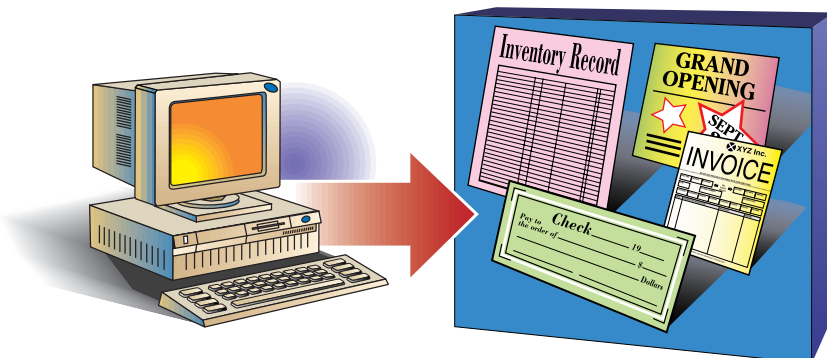
support for advanced all-points-addressable applications and support for production and distributed printers.

Superior S/390 Print Drivers

The S/390-based PSFs — PSF/MVS, PSF/VM and PSF/VSE — provide print driver functionality for both production and distributed intelligent Printer Data Stream™ (IPDS™) printers. Channel, Coax and LAN-attachment support is available.

Robust Network Printing Solutions

PSF/MVS is the strategic AFP print driver for the OS/390 environment. The following are additional features of PSF/MVS.

- *PSF Direct* enables the printing of IPDS data from PSF/MVS via PSF for AIX, PSF/2 or OS/2 Warp Server in an SNA environment. PSF/MVS maintains control of the print job while "passing through" the server.

- *Distributed Print Facility* facilitates the distribution of IPDS data from PSF/MVS to the PSF/2 spool via SNA, where PSF/2 will manage the print job.

Full Suite of Options
PSF/MVS is continually enhanced through a number of optional features, which enable the distribution of print jobs to and from secondary PSF print servers as well as to non-IPDS printers.

- *MVS Download* distributes large amounts of AFP or line data to the PSF for AIX print server or the OnDemand for AIX archive system via TCP/IP.

- *Upload and Print* ships print data from PSF for AIX to PSF/MVS via TCP/IP for printing on S/390-managed Advanced Function Printers.

- *IP PrintWay*™ provides automatic distribution of JES print to TCP/IP attached printers and print servers. It supports printing from the JES spool to non-IPDS printers such as IBM's family of Network Printers.

- *NetSpool*™ automatically places VTAM output (CICS or IMS) on the JES spool with no application changes required. It provides an integrated solution for S/390 printing when installed with PSF/MVS or IP PrintWay.

Extended Functionality
The AFP solution features several complementary products that broaden the world of electronic printing in the S/390 environment.

- *Overlay Generation Language/370* (OGL/370) is an excellent tool for creating electronic forms. It is supported in the MVS, VM and VSE operating environments. OGL/370 enables form changes quickly and easily, while reducing the overall cost of preprinted forms.

- *Page Printer Formatting Aid* (PPFA) provides simplified application development through the use of externally defined page formats. PPFA easily enables functions such as duplex printing, printer bin selection, page and line spacing and electronic forms merging with application data.

- *AFP Toolbox for MVS* provides access to sophisticated Advanced Function formatting capability. Programmers use this C and C++ Application Programming Interface (API) to update print applications without any knowledge of the AFP data stream.

- *Document Composition Facility* (DCF) furnishes a high-function text formatter for production environments. DCF is excellent for in-house publishing applications through its tag-based markup language. The complete separation of appearance (format) from data (content) provides maximum flexibility in printing and viewing.

- *AFP Font Collection* is a single collection of AFP fonts in all formats that can be used by AFP products. It also ensures simultaneous platform support.

- *AFP Workbench* enables the viewing of print, fax and image data electronically. This product also provides enhanced navigation through individual documents, client print and fax capabilities and allows the annotation and creation of documents.

A Complete Solution
The S/390 Enterprise Server maintains the world-class reliability and flexibility that make it a leader in the emerging worlds of network computing and server integration. Advanced Function Printing, together with S/390, continues to provide leading-edge technology and functionality in document creation and publishing.

Summary
The following AFP solution benefits bring the world of electronic printing to S/390:

- Creation of cost-effective, high-quality documents
- Reduced forms, paper and personnel costs
- Business process automation through use of bar codes
- Professional-looking graphics, images and fonts
- System-managed printing for complete accuracy
- Comprehensive print server and printer support
- Full suite of optional and complementary electronic printing tools
- High reliability and flexibility

AFP for S/390 at a glance

Capabilities		
	—Electronic forms	—Wide variety of type
	—Multi-up printing	—Multiple languages
	—Bar codes	—System management
	—Compressed images	—Distributed printing
	—Vector graphics	—Advanced error recovery
	—Flexible data formatting	—Print/View/Fax/Archive
Software Solutions	—PSF/MVS Version 2	Product number 5695-040
	—PSF/VM Version 2	Product number 5684-141
	—PSF/VSE Version 2	Product number 5686-040
	—OGL/370	Product number 5688-191
	—PPFA/370	Product number 5688-190
	—AFP Toolbox for MVS	Product number 5655-A25
	—DCF	Product number 5748-XX9
	—AFP Font Collection	Product number 5648-113
	—AFP Workbench	Product number 5622-416

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