

## IBM Infoprint Server and Transforms for zSeries

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### Highlights

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- ***Can help reduce total cost of ownership of print operations***
- ***Provides a reliable, security-rich infrastructure that can scale to business needs***
- ***Enables flexible output options for enterprise-wide information delivery***
- ***Helps improve productivity with simplified print operations and management***
- ***Leverages the value of AFP™ printers and applications***
- ***Protects investment in VTAM® printers and applications***

### Enabling the output of e-business

In the e-business age, enterprises need reliable, “anytime, anywhere” print solutions that can accept print submissions from throughout the network or over the Internet, enable multiple output options, and centralize and simplify the management of complex, distributed print networks. With networked computing, PC clients and the Internet becoming an integral part of computing environments, print output that was once delivered only over internal networks must now be distributed to mobile employees, partners, suppliers and clients throughout the network and over the Internet. This requires a print solution that can provide flexible connectivity for TCP/IP and the Internet, and that can support multiple datastreams, datastream conversions and multiple transmission protocols, including Internet Printing Protocol (IPP).

IBM® Infoprint® Server and Transforms for @server zSeries provides an end-to-end print solution designed specifically for the demands of e-business.

As part of an integrated solution, elements are designed, developed, tested and delivered together, facilitating implementation. Infoprint Server can significantly reduce the total cost of ownership of print operations by consolidating print workloads, improving availability and productivity, and protecting your current investment in distributed printers and print applications with the ability to easily scale to your growing business needs. Additionally, Infoprint Server and Transforms for zSeries supports standard datastreams and protocols, enabling the centralized, streamlined and flexible output of e-business.

### Implementing an integrated print solution to help significantly reduce costs

Simply put, enterprises cannot afford the cost that comes with maintaining complex environments of incompatible and inconsistent print servers and printers. zSeries is one of the most cost-effective computing platforms in the industry because of its scalability

and integration, and because of its ability to consolidate multiple workloads onto a single parallel system, which reduces the complexity of managing numerous application servers. By consolidating your distributed print onto z/OS™ using Infoprint Server, you can eliminate expensive hardware, software and maintenance costs associated with distributed print servers, helping to lower your operations and administration overhead.

**Improving availability with a security-rich, scalable infrastructure**

High availability is imperative for business applications, because downtime equals lost productivity and revenue. Infoprint Server inherits high availability from the zSeries platform. IBM designed Infoprint Server components to provide a reliable, distributed enterprise print infrastructure

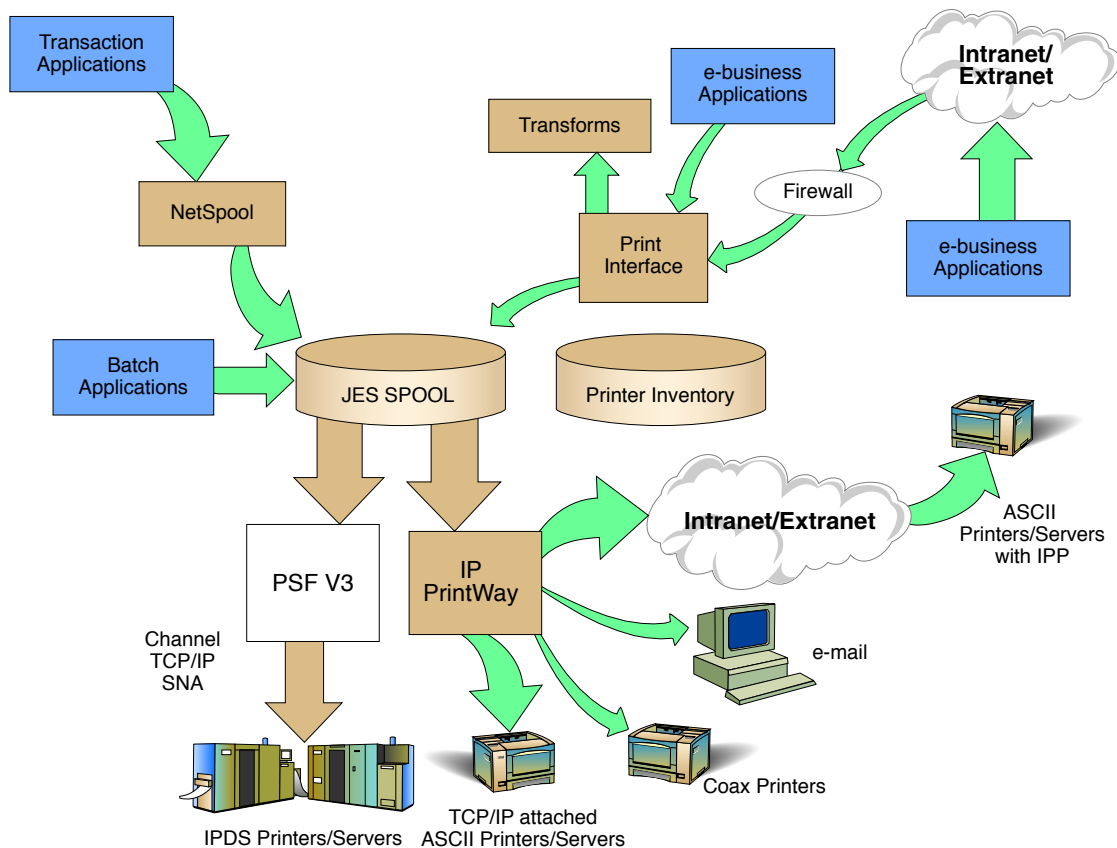
in which printers can be added or modified at any time without disrupting print operations. A failure at one or more printers doesn't affect other printers in the system. Infoprint Server provides a scalable enterprise printing solution for customers ranging from those with relatively small print requirements to customers running thousands of distributed printers on their networks.

**Providing comprehensive, flexible output options for e-business**

Businesses need to deliver information to workers throughout the enterprise, and to suppliers, partners and customers around the globe, in a variety of formats including via Web browsers, e-mail and many forms of hard copy. Infoprint Server and Transforms provides a comprehensive array of output options for e-business:

- *Print over the Web using IPP*
- *Manage end-to-end output capabilities for SAP applications so that SAP application output can be printed on reliable, high-speed Advanced Function Presentation™ (AFP) production printers*
- *Enable the conversion of AFP applications and documents into Portable Document Format (PDF) for Web-based presentation*
- *Distribute output as e-mail instead of, or in addition to, print*
- *Convert AFP output into Printer Control Language (PCL) or PostScript emulation for printing on PCL and PostScript compatible printers.*
- *Convert PCL and PostScript jobs into AFP for printing on AFP printers*

**Flexibility for the output of e-business**



The NetSpool™ component of the Infoprint Server lets you migrate traditional online application output to PCL printers attached over TCP/IP, or to printers controlled by Print Services Facility (PSF), without changes to the application program. NetSpool can convert original application output into line data. It can then be formatted using AFP resources for printing with PSF. AFP page and form definitions and electronic forms can be used to enhance the appearance of the output. NetSpool can also convert the original application output directly to PCL, substituting PCL commands for formatting controls in the original application.

The IP PrintWay™ component of Infoprint Server supports printing over TCP/IP to PCL and PostScript printers anywhere on the network, or over the Internet via IPP. It can even access transforms when necessary to help ensure that a print job matches the datastream capabilities of the target printer.

**Streamlining operations for consolidated printer management**

Infoprint Server includes a print interface that connects applications running in UNIX® System Services to the robust print-serving capabilities of the Job Entry Subsystem (JES) spool. It also accepts print requests over the network from local area network (LAN) users or applications running on another server. Infoprint

Server's printer inventory provides a single, consolidated repository for defining all of the printers in your enterprise. Infoprint Server automatically validates print jobs against printer capabilities, transforms jobs if necessary and balances print workloads across available printers—helping to eliminate misprints, reprints and under-utilized printers. It also centralizes accounting and creates accounting records for all printers driven by Infoprint Server, so you can keep track of your total cost of printing and make complete and accurate charge-backs to your print users.

Printers defined to Infoprint Server, including printers driven by PSF, are all defined in one place using the same set

**IBM Infoprint Server and Transforms at a glance**

For expanded specifications, visit [ibm.com/printers/ipserver](http://ibm.com/printers/ipserver)

<b>IP PrintWay</b>	Routes print data on the JES spool from z/OS to a printer in the TCP/IP network or over the internet, or to another system's spool. It uses standard LPR/LPD protocol, direct-socket printing, or IPP. It can also send output as e-mail.						
<b>NetSpool</b>	Automatically re-routes VTAM application output, such as from CICS and IMS applications, to the JES spool without requiring application program changes. From there print files can be sent to any ASCII printer using IP PrintWay, or to AFP printers using Print Services Facility (PSF).						
<b>Coax Printer Support</b>	Drive printers that are defined to VTAM as LU0, LU1 or LU3 to support Datastream Compatibility/Datastream Extended (DSC/DSE) and SNA Character String (SCS) print output						
<b>Print Interface</b>	Extends robust JES print serving capabilities to users and applications in the LAN and z/OS UNIX System Services environments. It includes a Server Message Block (SMB) print file server to receive and process print submissions from Windows clients. Print Interface validates print jobs and invokes datastream transforms if required.						
<b>Infoprint Server Transforms</b>	<p><b>Supports the following datastream conversions</b></p> <table border="0"> <tr> <td>SAP R/3 ABAP and OTF to AFP</td> <td>PCL to AFP</td> </tr> <tr> <td>PostScript and PDF to AFP</td> <td>AFP to PCL</td> </tr> <tr> <td>AFP to PostScript and PDF</td> <td></td> </tr> </table> <p>In addition, a documented Application Programming Interface lets customers and Business Partners write their own transforms and plug them into Infoprint Server.</p>	SAP R/3 ABAP and OTF to AFP	PCL to AFP	PostScript and PDF to AFP	AFP to PCL	AFP to PostScript and PDF	
SAP R/3 ABAP and OTF to AFP	PCL to AFP						
PostScript and PDF to AFP	AFP to PCL						
AFP to PostScript and PDF							
<b>Printer Inventory</b>	Infoprint Server uses a single printer inventory to define all of its supported printers. The inventory is shared with PSF, so you can define AFP printers, ASCII printers and VTAM-controlled (coax) printers all in one place.						
<b>Port Monitor</b>	Supplements the native Windows SMB print submission with a client that runs on the Windows workstation. It supports more robust printer selection and print submission capabilities than are available through SMB.						
<b>Infoprint Server Hardware and Software Requirements</b>							
<b>Hardware</b>	IBM zSeries processors capable of supporting OS/390 Version 2 Release 8 or higher releases, or z/OS.						
<b>Software</b>	The operating system must be OS/390 at Version 2 Release 8 or higher releases, or z/OS.						

of easy-to-use tools. When PSF printers are defined in the printer inventory, you can dynamically set and change printer processing options from the Interactive System Productivity Facility (ISPF) menu panels without stopping PSF. IP PrintWay includes intuitive menu panels that let you monitor job status, reroute print data sets and change transmission options. Program exits let you customize output formats or add header and trailer pages. Sophisticated logic in NetSpool processing can even detect whether each page should be formatted for landscape or portrait presentation and can correctly adjust page orientation.

### **Optimizing your current investment in AFP printers and applications**

IBM Printing Systems understands the value of your current investment in AFP printers and AFP print applications. Infoprint Server Transforms for PCL, PostScript and PDF to AFP are available at no additional cost and let you print LAN application output on your fast, reliable AFP printers. Optional transforms from AFP to PCL, PostScript and PDF let you distribute output from AFP applications to non-AFP printers.

### **Protect your investment in VTAM printers while you migrate to TCP/IP**

The optional Coax Printer Support feature of Infoprint Server Transforms lets you drive VTAM-controlled printers. Since these printers are defined and managed from the same inventory and menu panels used to define and manage your TCP/IP print, you can extend the life of your coax printer inventory while making the transition to a complete TCP/IP printing network.

### **Leveraging our knowledge to deliver comprehensive solutions**

By combining our technology with our printing services leadership, IBM Printing Systems provides comprehensive, strategic printing solutions to help you achieve all your e-business output objectives. Building on the foundation of the powerful, innovative IBM zSeries servers, our professionals can help design a cost-effective, scalable and reliable end-to-end printing solution, regardless of industry, environment or geography.

### **For more information**

To learn more about IBM Printing Systems and the IBM Infoprint Server and Transforms, contact your IBM sales representative, or visit:

**ibm.com/printers**



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