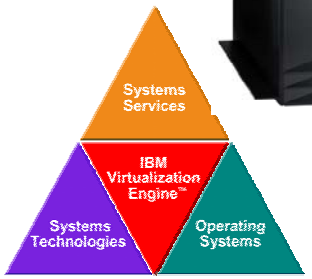
iSeries. mySeries.

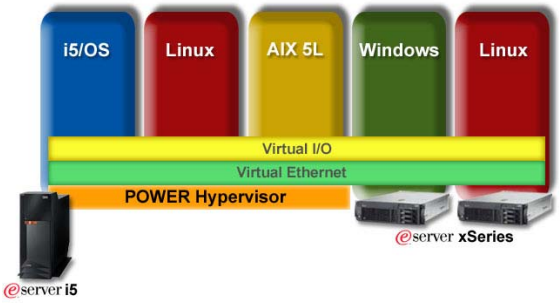
IBM eServer® i5 & i5/OS™
August 19, 2004
Announcement Overview

IBM eServer i5 Announcements 8/17

- **New eServer i5 550** (GA 9/10)
  - **Delivers flexible, on demand midrange server**



- **New targeted 550 editions** (GA 9/10)
  - **Solution Edition**
    - **Aggressive offering together with select ISV solutions**
  - **Domino Edition**
    - **Competitively priced offering for collaborative applications**



- **Complete delivery of products previewed in May**
  - **Virtualization Engine enhancements** (GA 8/27)
  - **IXA & Linux support** (GA 8/31)

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Introducing the IBM eServer i5 550

Deskside

- Flexible on demand pricing in a midrange server
- Exceptional flexibility for consolidating servers and applications
- Supports up to 40 partitions
- Lower priced, 4-way capable server

- 1/4-way server
- 1 license of i5/OS
- Similar capability to i5 570 2/4-way
- Multiple Editions – Standard, Enterprise, Solution, Domino

Rack mount

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IBM eServer i5

Large

16-way

1-way

570

Fast growing, Large Clients

Midrange

★ Solution Edition

★ Domino Edition

4-way

1-way

550

Mid-sized Clients

Entry/Small

2-way

1-way

Express

520

Small Clients

i5/OS

AIX L

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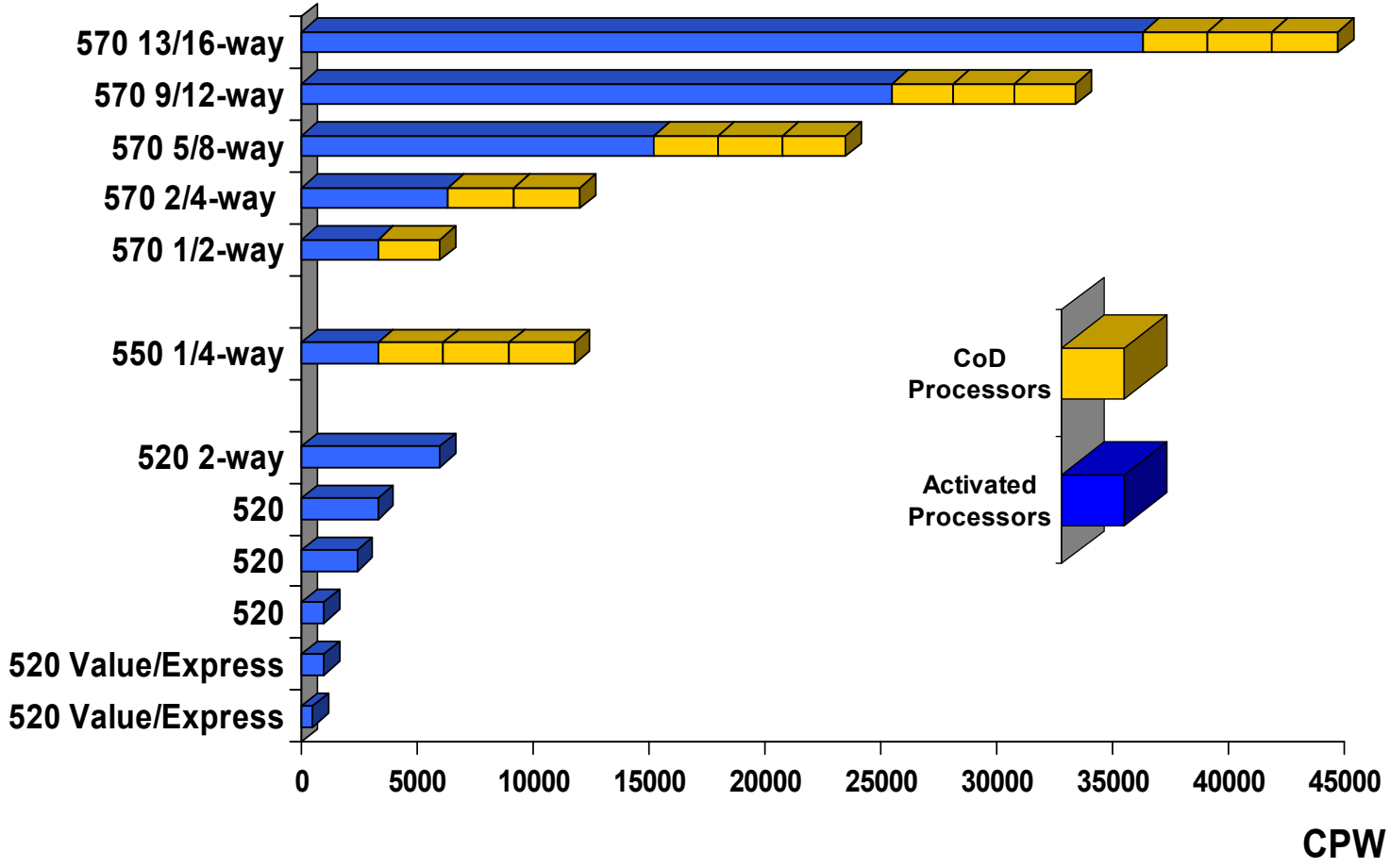
iSeries. mySeries.

IBM eServer i5 - Hardware



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IBM eServer i5 550

- Configuration options
  - Desk side or rack mount
  - 1/4-way 1.65 GHz POWER5 processor
- Flexible on demand pricing
  - 1 license i5/OS
  - 3 processors available for growth/consolidation
  - Choice to deploy i5/OS, AIX 5L, Linux
- Growth options
  - Starts at 3,300 CPW, up to 12,000 CPW
  - Up to 64 GB memory
  - Up to 38 TB disk storage
- Features Standard, Enterprise, Solution and Domino Editions
  - Second processor activation included on all editions

Rack mount

Desk side

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Comparing eServer i5 520, 550, 570

	520 Value, Express	520	550	570
N-way	1-way	1-way & 2-way	1/4-way	1/2-way, 2/4-way, 5/8-way, 9/12-way, 13/16-way (2/16-way CBU)
Processor CPW	500 - 1000	1000 - 6000	3300 - 12000	3300 - 44700
Edition	Value, Express	Std, Ent, HA	Std, Ent, Sol. Dom	Std, Ent, HA, CBU
POWER5 Processor	1.5 GHz	1.5 & 1.65GHz	1.65 GHz	1.65 GHz
Memory (Max)	32 GB	32 GB	64 GB	512 GB
CoD processors	No	No	Yes	Yes
CoD memory	No	No	No	Yes
HSL-2 Loops (Max)	1	1	2	8
I/O Towers/drawers (Max)	6	6	12	30
Disk Drives (Max)	278	278	548	1374
Disk (Max)	19 TB	19 TB	38 TB	96 TB
IXS / IXA (Max)	18 / 8	18 / 8	36 / 16	48 / 60
Software Tier	P05 – P10	P10 – P30	P20	P30 – P40
Upgrade into model	No	Yes	Yes	Yes
Upgrade out of model	No	No	No	Not announced

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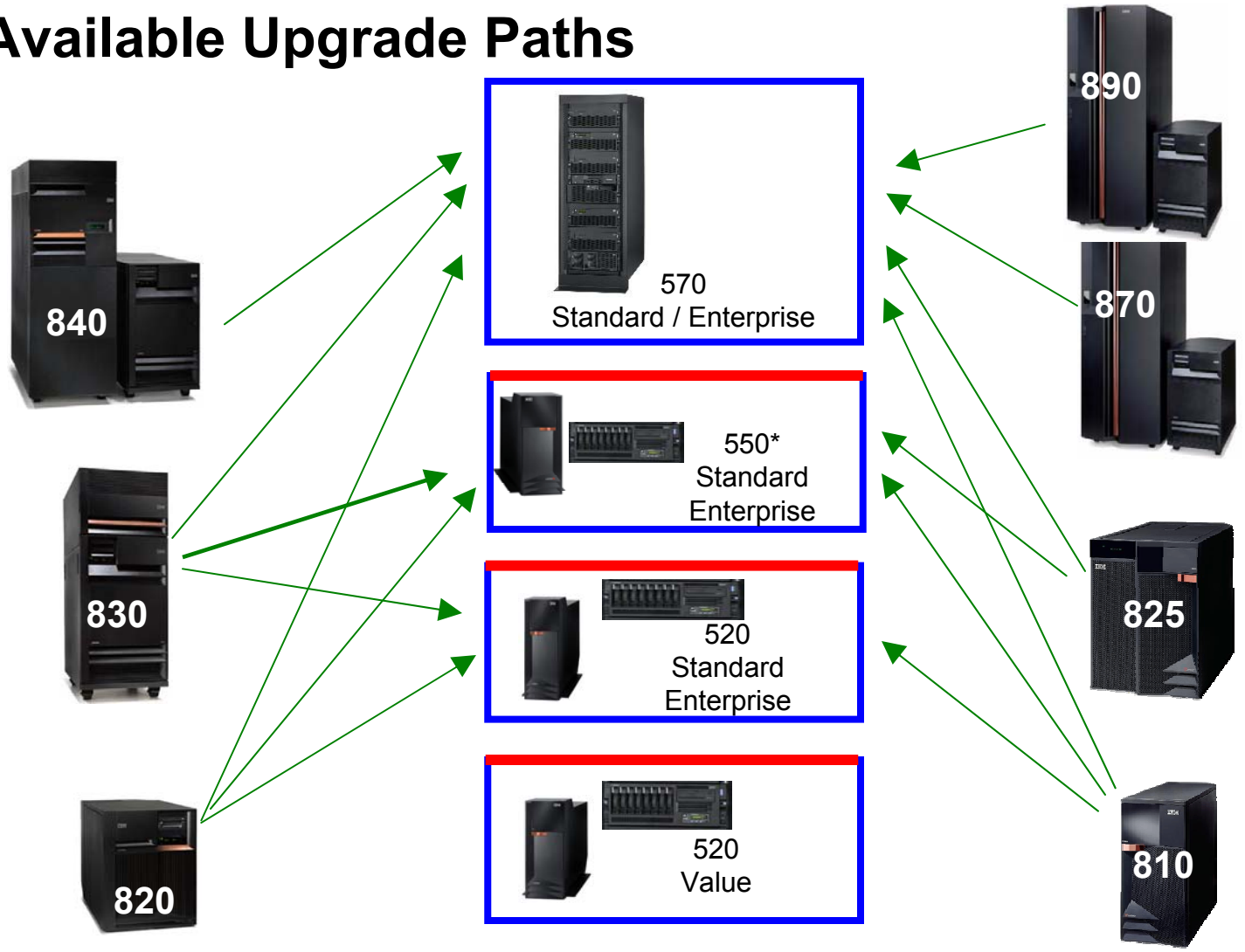
Available Upgrade Paths



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*Notes:
- No upgrades into 550 Solution Edition or Domino Edition

eServer i5 Solution Edition

- Provide incentive for customers to update their solutions (both server & application)
- Excite top ISVs to work together with IBM
- Provide superior value and competitive pricing for customers
- Deliver flexible, scalable server for adding new applications

- Available on eServer i5 550
- Integrated middleware optimized for ISV solutions
- Lower priced variant of Enterprise Edition
- Requires purchase with ISV

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Participating ISVs

ISV	Description	Industries
Clear Technologies, Inc.	C2 CRM Application	Cross Industry
IBS	Enterprise Applications	Cross Industry
Integrated Distribution Solutions, LLC.	Enterprise Applications: Power Enterprise (ERP for Food Distribution)	Food Distribution
Intentia	Enterprise Applications	Cross Industry
Lawson®	Enterprise Applications for: Financials, HR, Procurement, Healthcare SCM, Distribution, Retail, and Service Process Optimization	Cross Industry
Manhattan Associates	SCM: Warehouse Management and Transportation Execution Solutions	Retail, Consumer Goods, CPG, High Tech, Government, Life Sciences, Industrial, Wholesale
MAPICS	Enterprise Applications	Industrial
PeopleSoft	Enterprise Applications	Cross Industry
SSA Global™	Enterprise Software Solutions	Cross Industry

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eServer i5 Domino Edition

- Available on eServer i5 550
- Solution for deploying Domino and collaborative applications
- Lower priced variant of Standard Edition
- Requires Domino licenses

- Leverages Power5 processors to deliver competitive price/perfomance
- Next generation of collaborative offering
- Solution for customers who need to upgrade to Domino 6.x or MS Exchange 2003
- Deliver flexible, scalable server for collaborative applications and additional workload

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IBM eServer i5 Domino Edition

- eServer i5 550 feature code #7530
  - 2 active processors and 2 i5/OS licenses
  - P20 software tier
  - No Enterprise Enablement feature
  - No additional software
  - 14,100 MCU rating for 2-way
- Priced below Standard Edition
  - Domino Edition is approximately 48% less for processor + 1 year SWMA
  - Domino Edition is approximately 42% less for processor + 3 years SWMA
- Requires proof of license:
  - 2 Domino® server licenses
  - 1500 Lotus® client licenses (Notes®, Sametime®, QuickPlace®)

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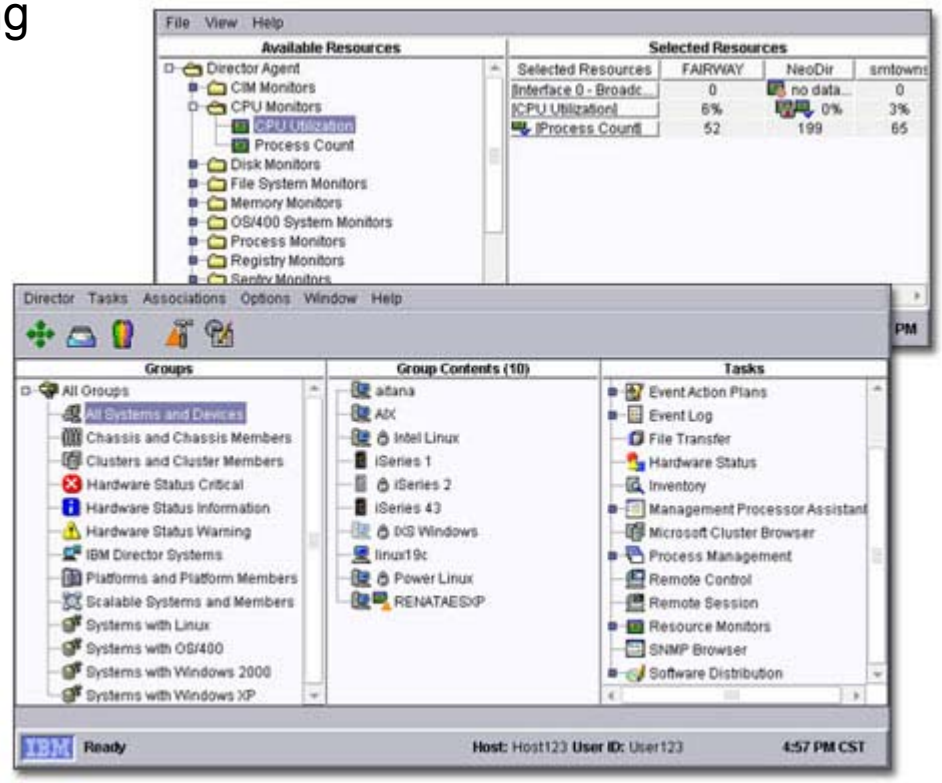
IBM Director Multiplatform

- Centralize management and monitoring for multiple operating environments
  - i5/OS, AIX 5L, Linux, and Windows operating systems
- Open standards-based heterogeneous management tool
- Complements iSeries Navigator
- Integrated with PM iSeries for collecting and reporting multi-OS CPU utilization and capacity planning
- *An IBM Virtualization Engine systems service*



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iSeries. mySeries.

AIX 5L Service Voucher

Included in 550 Enterprise and Solution Edition and 570 Enterprise Edition

Service includes:

- 2 day IBM service engagement
- One license of AIX 5L
- One year SWMA
- Setup and configuration of AIX 5L in a partition
- Skills transfer on use of HMC to set up partitions, manage resources and configuration of AIX 5L

Requires web registration of edition for redemption of service voucher

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New Integrated xSeries Adapter (1519-200)

- **Extends IXA support to new IBM eServer x346 with** Xtended Design Architecture
  - Rack-optimized 2U footprint
  - Up to 3.6 GHz Xeon, 1-2 way
  - x346 Planned Availability : Sept 27th *
- **Will also support new x236**
  - Tower, Up to 3.6 GHz Xeon 1-2 way
  - x236 Planned Availability : October 13th *
- **Does not replace 1519-100 for other xSeries**
- **Supported on eServer i5 and iSeries****
  - OS/400 V5R2 or later
  - Windows 2000 Server & Windows Server 2003 Support***
- **General Availability : August 31st**
- **Configurator Support : August 24th**
- See *ibm.com/eserver/iseries/windowsintegration/xseriesmodels* for more details

New!

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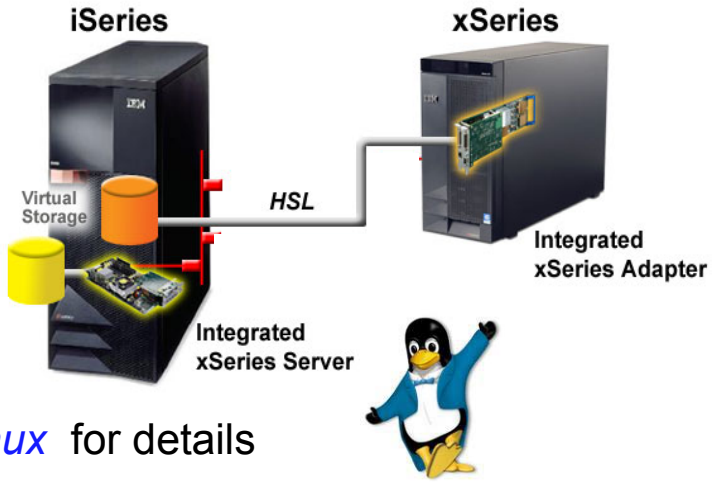
* This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

** iSeries Models 270, 8xx, 5xx; Not Supported on iSeries Model 250

*** See www.ibm.com/eserver/iseries/windowsintegration//os_support.html for details

Linux on Integrated xSeries Solutions

- **Linux enabled on Integrated xSeries Solutions**
  - Red Hat Enterprise Linux 3 AS or ES on Xeon Integrated xSeries Servers (IXS) and Xeon xSeries attached via Integrated xSeries Adapter (IXA)
  - SUSE LINUX Enterprise Server 8 on Xeon xSeries attached via Integrated xSeries Adapter (IXA)
  - OS/400 V5R2 or i5/OS V5R3 PTF's required
    - See *www.ibm.com/eserver/iseries/integratedxseries/linux* for details
- **Deliver support for Intel-based Linux applications**
  - Leverage iSeries virtual storage
  - Share iSeries tape, CD, DVD
  - Consolidate Windows & Linux backup
  - Note: Virtual Ethernet is not enabled at this time
- **Provide a path to Linux on POWER**
- **General Availability**
  - Starting August 31st
  - See *www.ibm.com/eserver/iseries/integratedxseries/linux* for details



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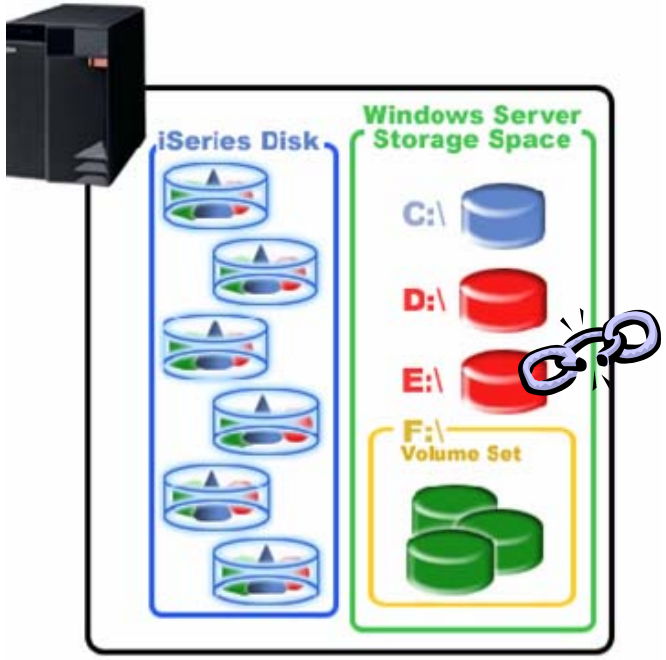
*Planned availability 3Q, 2004 This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

i5/OS V5R3 Dynamic Storage Space Unlink

- **Integrated xSeries storage spaces may be unlinked from a server without shutting down**
  - Unlinking enables Storage Space to be safely removed
  - Drive must obviously not be in use
  - Storage Space must have been Dynamically Linked
  - Not supported to remove Storage Space from a spanned volume set
- Great for removing storage added to a server temporarily and also very useful for duplicating files and doing backup to disk
  - Storage Spaces can be relinked (even to another xSeries)
- Delivered via PTF's for i5/OS V5R3
  - Enabled for Windows 2000 Server, Windows Server 2003 and will be available for Linux on IXS/IXA
- See *www.ibm.com/integratedxseries/dunlink.html* for more details



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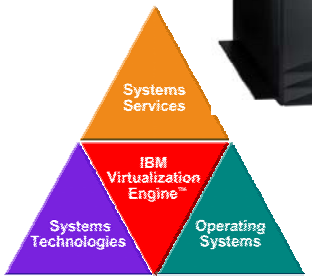

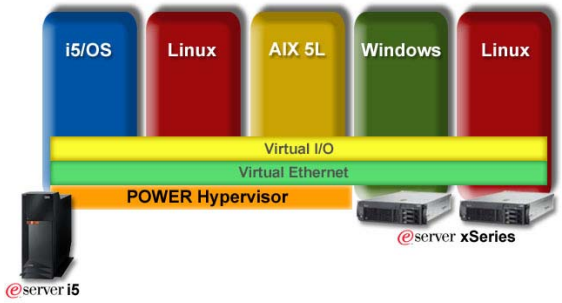

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iSeries. mySeries.

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AIX/L	DB2 OLAP Server	Enterprise Storage Server	MQSeries	Power Everywhere	S/390	zSeries
AIX 5L	DataPropagator	Hipersockets	Notes	POWER Hypervisor	ThinkPad	400
AIX 5L (logo)	Domino	IBM	OS/400	POWER6	Tivoli	i5/OS
AS/400	e business(logo)	IBM Virtualization Engine	POWER	pSeries	TotalStorage	
AS/400e	e(logo)business	IBM(logo)	POWER4	Quickplace	WebSphere	
DB2	e(logo)server	iSeries	POWER5	Rational	xSeries	

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End Of First Presentation

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eserver

iSeries. mySeries.

iSeries Nation – Citizens' Chat

iSeries Print, e-delivery trends and directions

Agenda

- Define e-business communications application segment
- Typical applications
- Infoprint Server
- CA/400 Integration
- Web Access Integration
- V5R3 Enhancements
- Intro to Infoprint Designer
- Discussion, net steps

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e-output, business communications

- E-business is changing face of business communications
  - Traditional information methodology has been "print and distribute"
  - Internets and intranets provide the opportunity to change this
  - Electronic documents provide the means
  - With electronic documents:
    - Tie to preprinted form is broken
    - Flexibility in content
    - Flexibility in delivery
- Transformation to profiled delivery of business output
  - E-business communications
  - E-output
  - Intelligent Routing
  - E-delivery
  - Multi-channel distribution

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Application Examples

- Re-engineer documents and reports to fully electronic
- Printing consolidation
- Advanced document requirements – i.e.. Bar coding
- Electronic report distribution via e-mail or Web
- Electronic burst and bind (segmentation)
- Publish or archive iSeries output to database for Web access
- Ad hoc electronic report delivery with iSeries Access
- Profiled delivery of iSeries output – “Intelligent Routing”

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Design your business output

- **Scenario:** Your current output - statements, invoices, reports -- is inadequate.
- **Requirement** - You need to improve the content, appearance, and effectiveness of your communications and accomplish this in a productive manner without disruption.
- **Solution**: Infoprint Designer, with additional options that include DDS, DesignPro, DOC/1, and others

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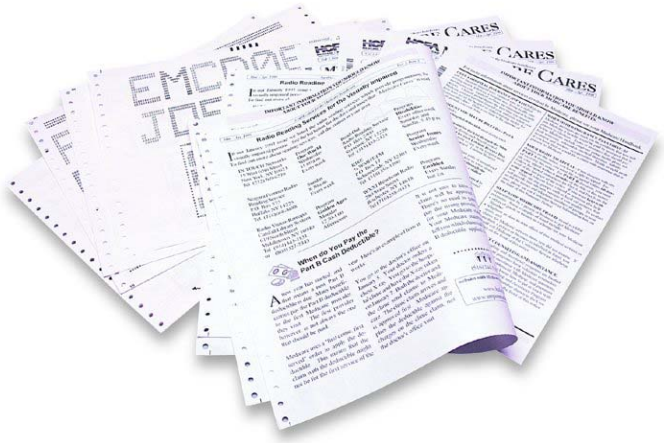
Ad Hoc Report Request

- **Scenario:** Month just closed. Finance manager has just called and needs to look at the month-end report.
- **Requirement:** Get the information to finance quickly and painlessly.
- **Solution**: iSeries Access and Infoprint Server.



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Electronic burst and bind (segmentation)

- **Scenario:** Order entry has been re-engineered to the Web. However, the back end of the order process -- the order confirmation -- is still printed and mailed in hardcopy.
- **Requirement:** Customer would like to automatically segment order confirmations, retrieve e-mail data, and send immediately to customer. .
- **Solution**: DDS or Infoprint Server (Create AFP Data command)

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Electronic Report Distribution

- **Scenario:** monthly sales reports are printed, manually separated and mailed to regional office managers.
- **Requirement:** Customer would like to automatically distribute and send the relevant reports to specific managers via e-mail.
- **Solution**: Use segmentation in conjunction with PDF and e-mail services in Infoprint Server.

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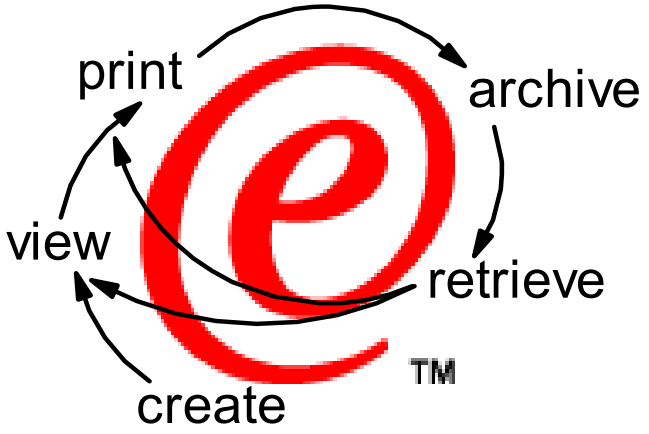
Intelligent Routing

- **Scenario:** Order entry has been re-engineered to the Web. However, the back end of the order process -- the order confirmation -- is still printed and mailed in hardcopy.
- **Requirement:** Customer would like to automatically segment order confirmations, retrieve e-mail data, and send immediately to customer.
- **Advanced Requirement:** need to define/profile users/recipients and provide multi-channel (Web, print, fax, e-mail) delivery options based on that profile.
- **Solution**: New Intelligent Routing capabilities of Infoprint Server.



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Consolidate enterprise printing

- **Scenario**: You have an ERP or network application which generates output in PCL format. You are presently printing on the network with a growing proliferation of network and personal printers. Both users and IT are dissatisfied.
- **Requirement** – You would like to consolidate this network printing, taking advantage of the speed, power and throughput of their higher-speed iSeries integrated printers -- plus AFP system management and IPDS error recovery.
- **Solution**: IBM iSeries printers, PSF, IPDS, Infoprint Server transforms

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ROI for Output Reengineering

- Forms (if re-engineering)
  - Forms design expense
  - Forms costs
  - Inventory costs
  - Obsolescence costs
  - Preprinted form limitations
- Printing
  - Printing hardware, acquisition, operating
  - Labor costs
  - Incremental costs with forms
- Distribution
  - Labor costs @ $xx/hour
  - Postage
  - Handling
  - Fax, if used

- Soft or Indirect Costs
  - Timeliness
  - Customer, end user satisfaction
  - Business flexibility, business processes
  - Competitive edge
  - Quality of business communications

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Workflow Worksheet

	Time		Cost	
Manual Handling	52	week/yr	25	per hour
Print and Postage	1	min/doc	0.5	per item
Print and Fax	5	min/doc	0.1	per transaction
Print and Archiving	2	min/doc	0.1	per transaction
Fax using StreamServe	0	min/doc	0.1	per transaction
StreamServe e-distribution	0.2	min/doc	0.05	per transaction

Summary			
Distribution		Manual Handling	
Today	Future	Today	Future
520,000	286,000	433,333	260,000
Degree of automation			
40%			
Yearly cost saving			
407,333			

		Transactions/Pages per week									Cost / Year	Cost / Year
		Print & Postage		Print & Fax		Print & Archiving		StreamServe				
		Today	Future	Today	Future	Today	Future	Fax	Archive	e	Today	Future
	DOCUMENT											
x	WORKSHEETS	20,000	10,000							10,000	953,333	546,000
	PRODUCTION ORDER										0	0
	GOODS LABEL										0	0
	QUALITY CONTROL										0	0
											0	0
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											0	0
	Total	20,000	10,000	0	0	0	0	0	0	10,000	953,333	546,000

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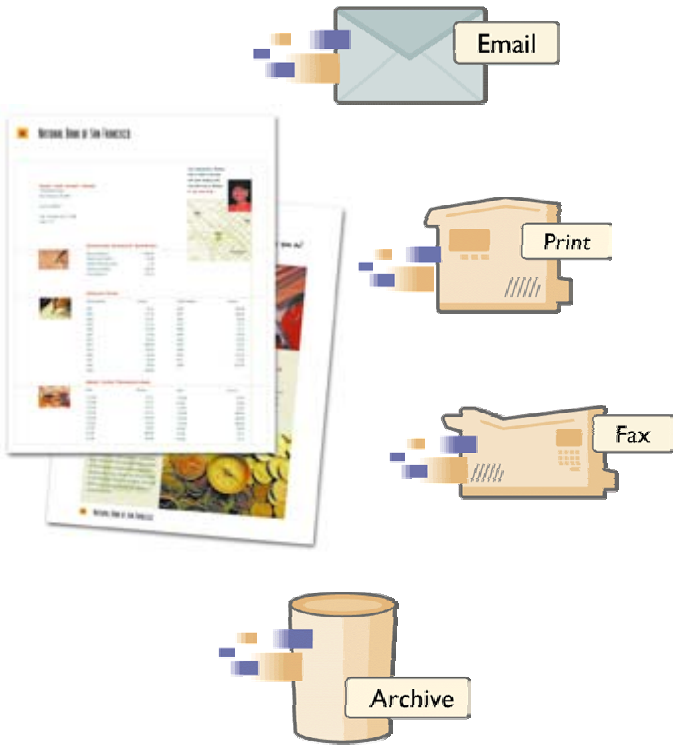
V5R3 Enhancements

- Infoprint Server intelligent routing
  - Profiled “e-distribution” of documents and reports
  - PDF enhancements include full color, encryption
- Significant i5/OS V5R3 output architecture enhancements
  - Unicode for worldwide document support
  - TrueType and OpenType for choice and compatibility
  - Full process color in i5/OS documents
  - Direct import of Web images (TIFF, JPEG)
- Print Services Facility (PSF/400)
  - Support for new iSeries output architecture elements
  - Support of new IBM iSeries printers
- Infoprint Designer
  - Support for complex documents, full color
- Refreshed and extended iSeries printer line
  - Color, workgroup, and midrange cutsheet 20-105 PPM



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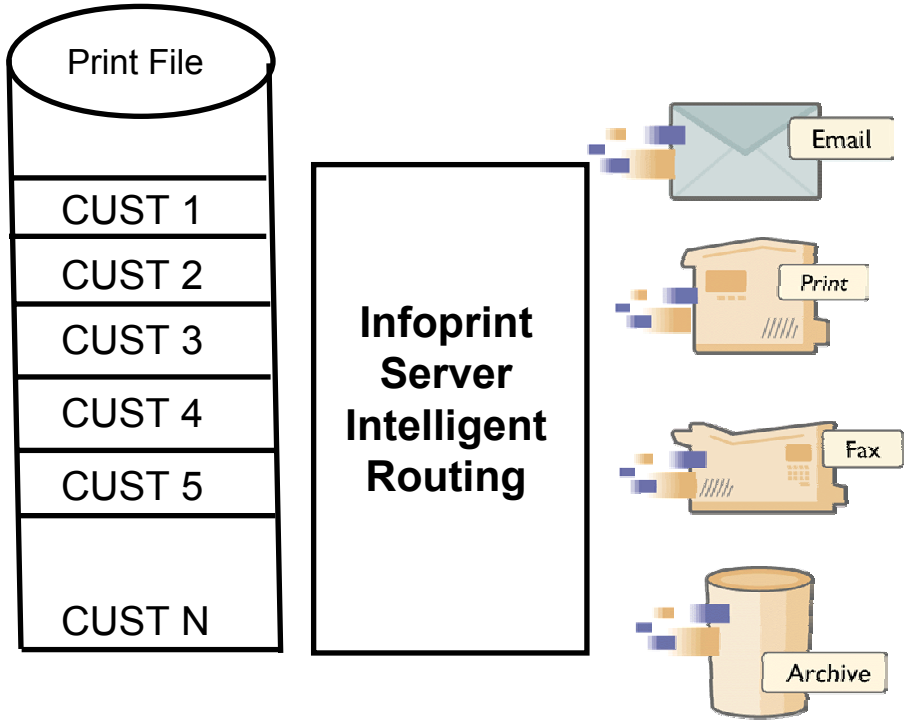
Intelligent Routing

- Profiled multi-channel delivery of iSeries business output
- Uses V5 electronic document segmentation
- Enables document action by segment, including Web, e-mail, print, fax, and re-queue
- Multiple actions per segment
- Deployment via new simple user interface (in addition to programmed and iSeries Access interfaces)



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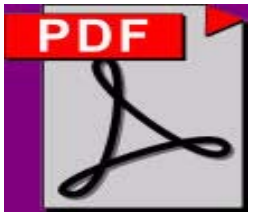
PDF Enhancements

- Access to PDF functions via new end user interface (in addition to programmed and iSeries Access interfaces)
- PDF encryption
  - Data protection with password
  - Revision protection
- PDF color
  - Conversion of new iSeries color image format (IOCA FS45)
  - Conversion of new “direct import” image (GIF, TIFF, JPEG, IOCA, GOCA, BCOCA)
- Enhanced PDF presentation and control
  - Control over PDF file name and IFS location
  - Control over orientation – i.e.. Landscape reports still “present” right-side up
- Reduction of PDF files sizes
- Support for 2D, Planet barcodes



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Intelligent Routing, PDF Interfaces

- New non-programmed end user access to Infoprint Server PDF functions
  - Commands for output delivery definition
  - Data tables (PDF mapping object) defines input "target" and action operations
  - Reduces need for user exit (programming) to set up electronic distribution functions
- Now 5 interfaces to PDF, e-delivery functions
  - Printer File
  - PDF mapping object
  - User exit program
  - iSeries Access
  - API

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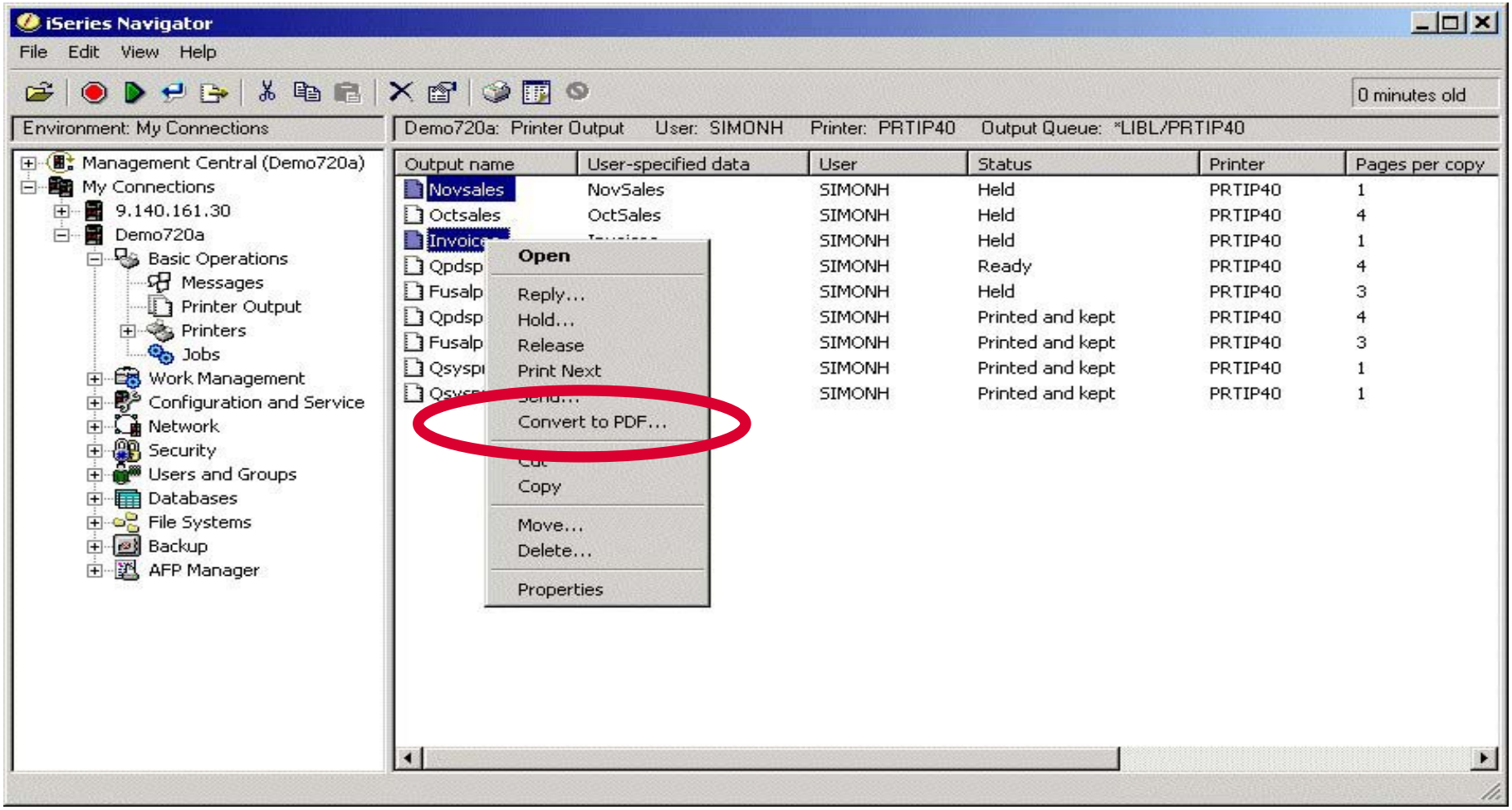

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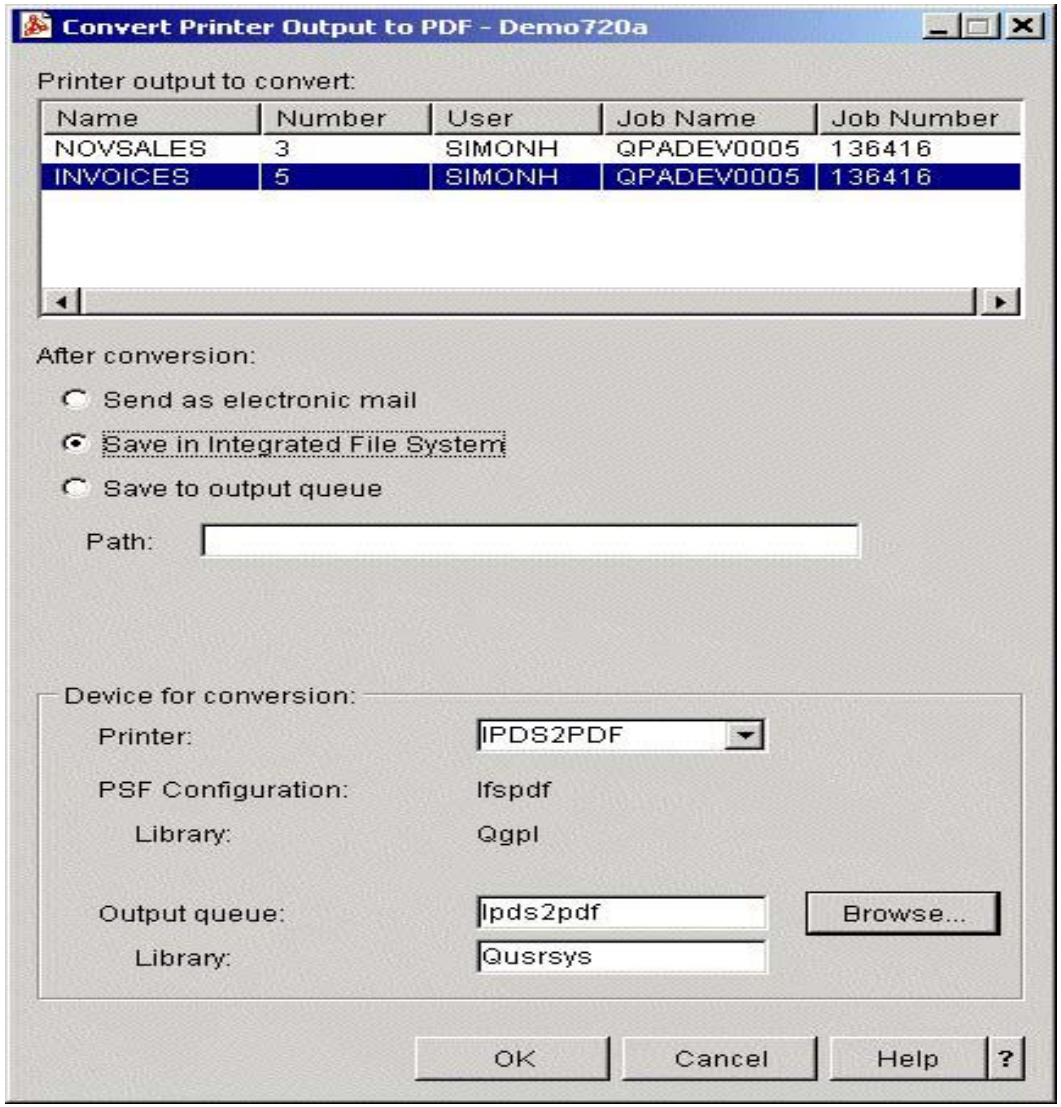

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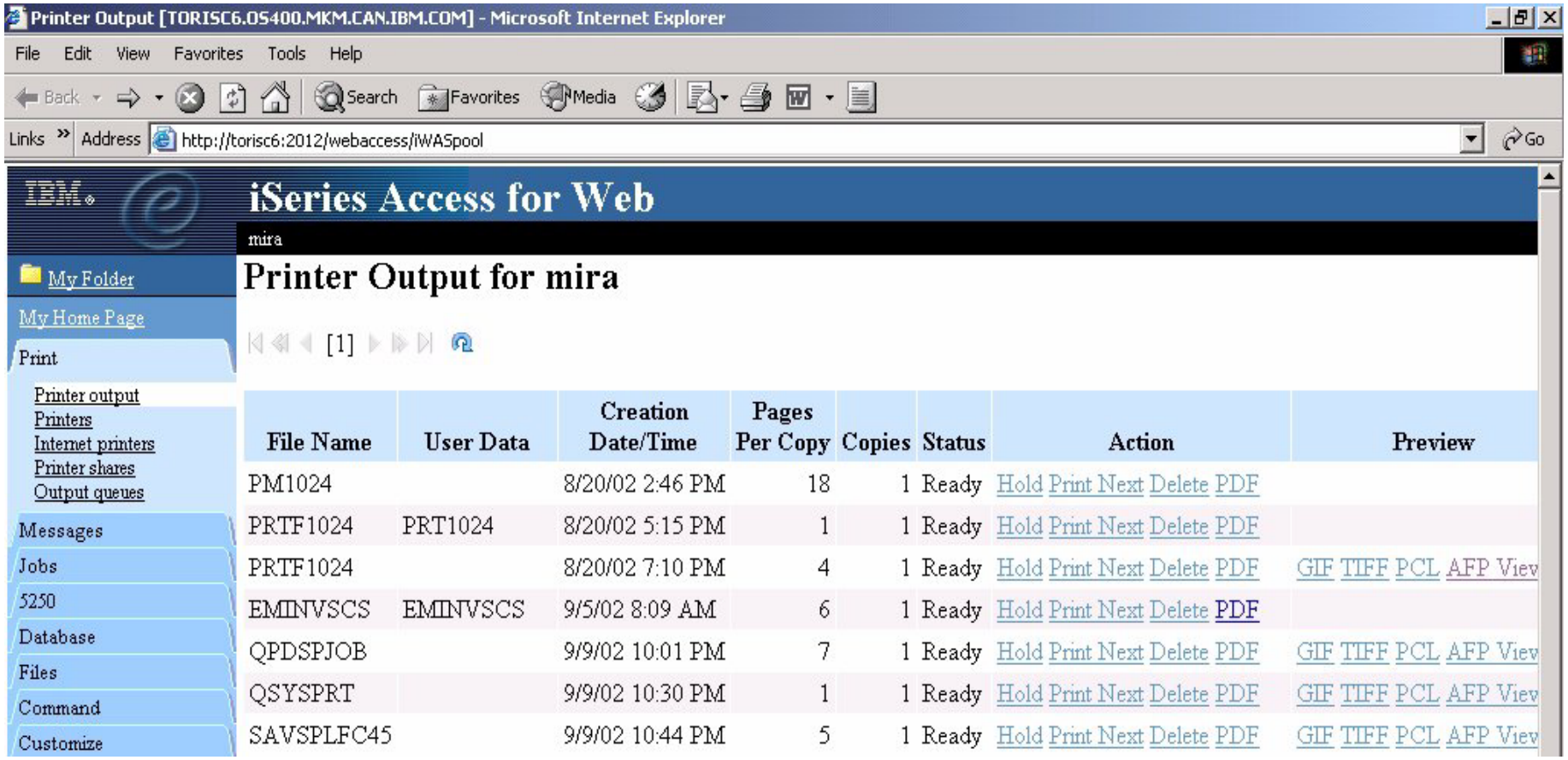
iSeries Access for WEB - PDF support



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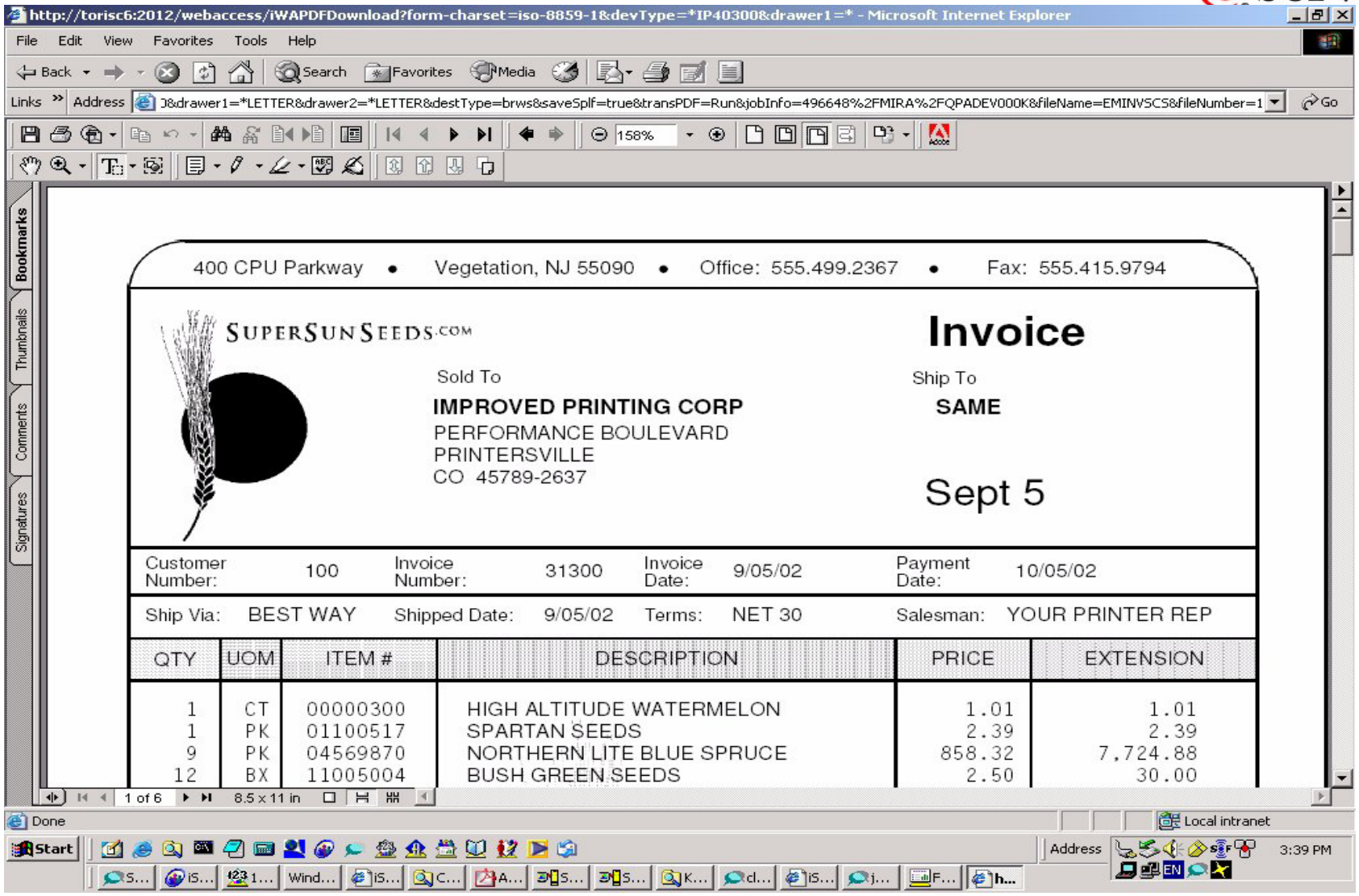
iSeries. mySeries.

iSeries Access for WEB - view PDF



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iSeries. mySeries.

iSeries Output Architecture Extensions

- Unicode
  - Worldwide document encoding standard – “ultimate code page”
- TrueType, OpenType
  - Direct import and use of TTF and OpenType fonts in iSeries output
  - Fonts reside in ASCII on Integrated File System (IFS)
  - Font installer (feature of Infoprint Fonts, 5648-E77) for installation
- Color
  - iSeries color image – IOCA FS 45
    - Base support in V5R2, extended in V5R3
  - Direct import of ASCII image – monochrome and color
    - JPEG, EPS, PDF, PCL, TIFF, IOCA, GOCA files

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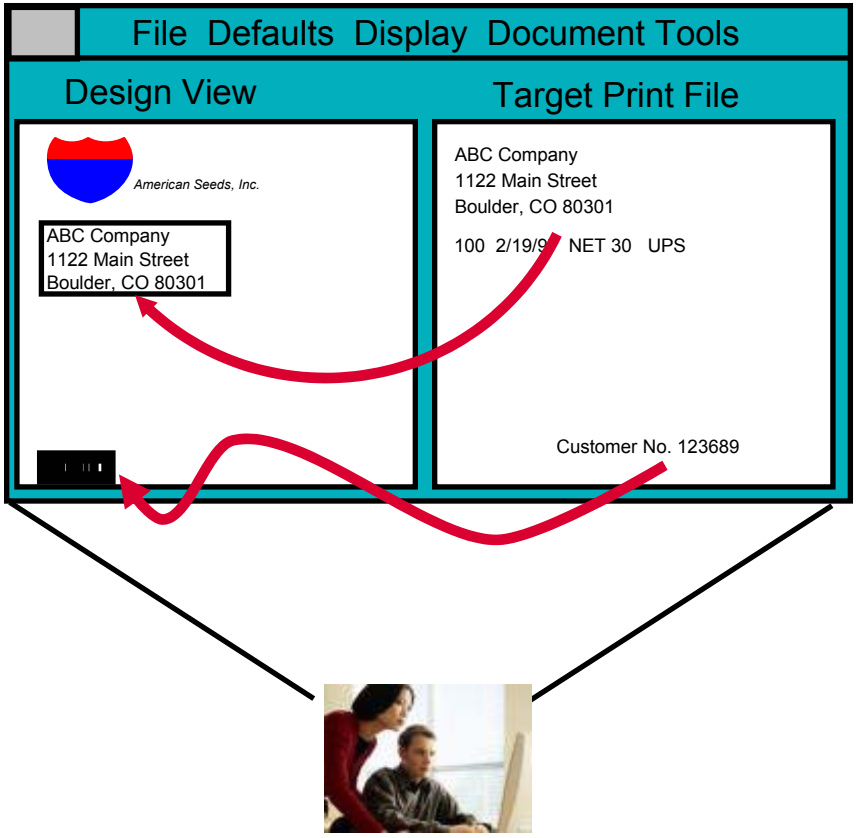
Infoprint Designer



Product Summary

State of the art design front-end to the robust, integrated AFP/IPDS print/presentation subsystem on iSeries-AS/400, geared for the non-technical user

Key Features

- **Overlay Design** editor for designing electronic forms
- **Image Design** editor for designing images
- **Layout Design** editor for designing the entire print application
- Creates standard OS/400 print resources
- Integrated for design
- Integrated for production
- Professional, high-precision system geared to the demands of business
- Output redesign without application changes
- AFP Font Collection fonts built in
- Product ID 5733-ID1
- OS/400 V4R5 required

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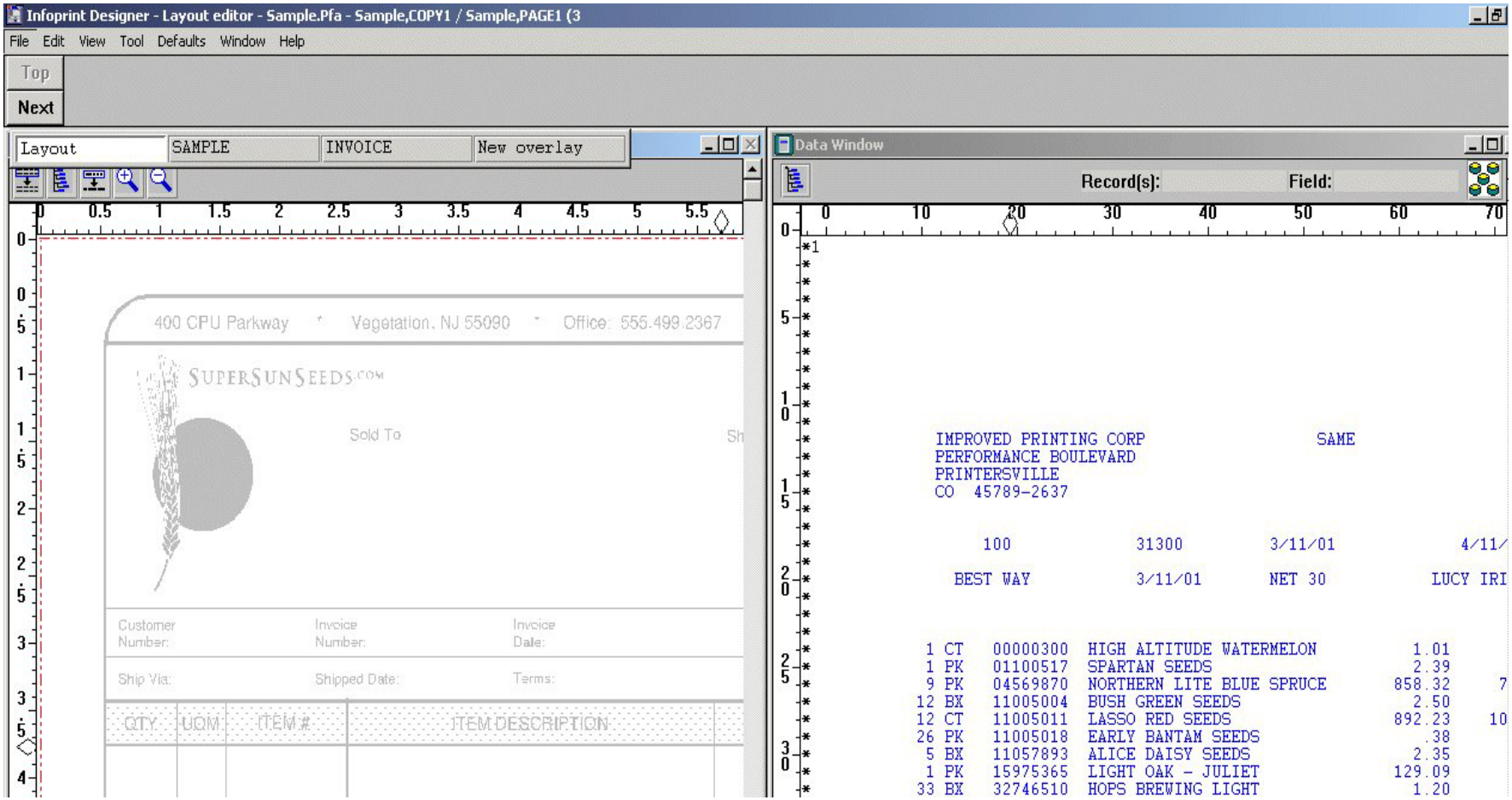
Design Interface



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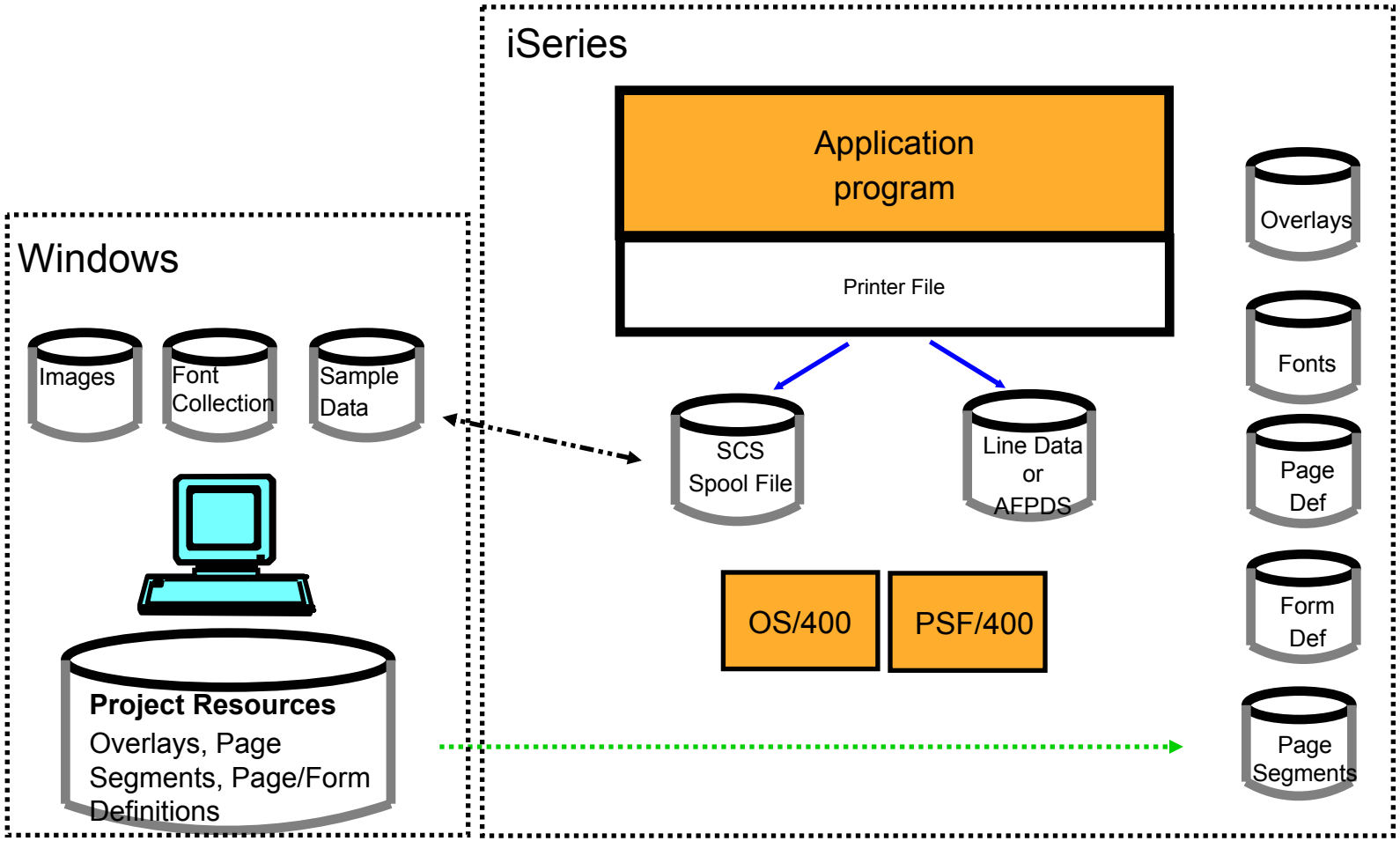
Infoprint Designer Schematic



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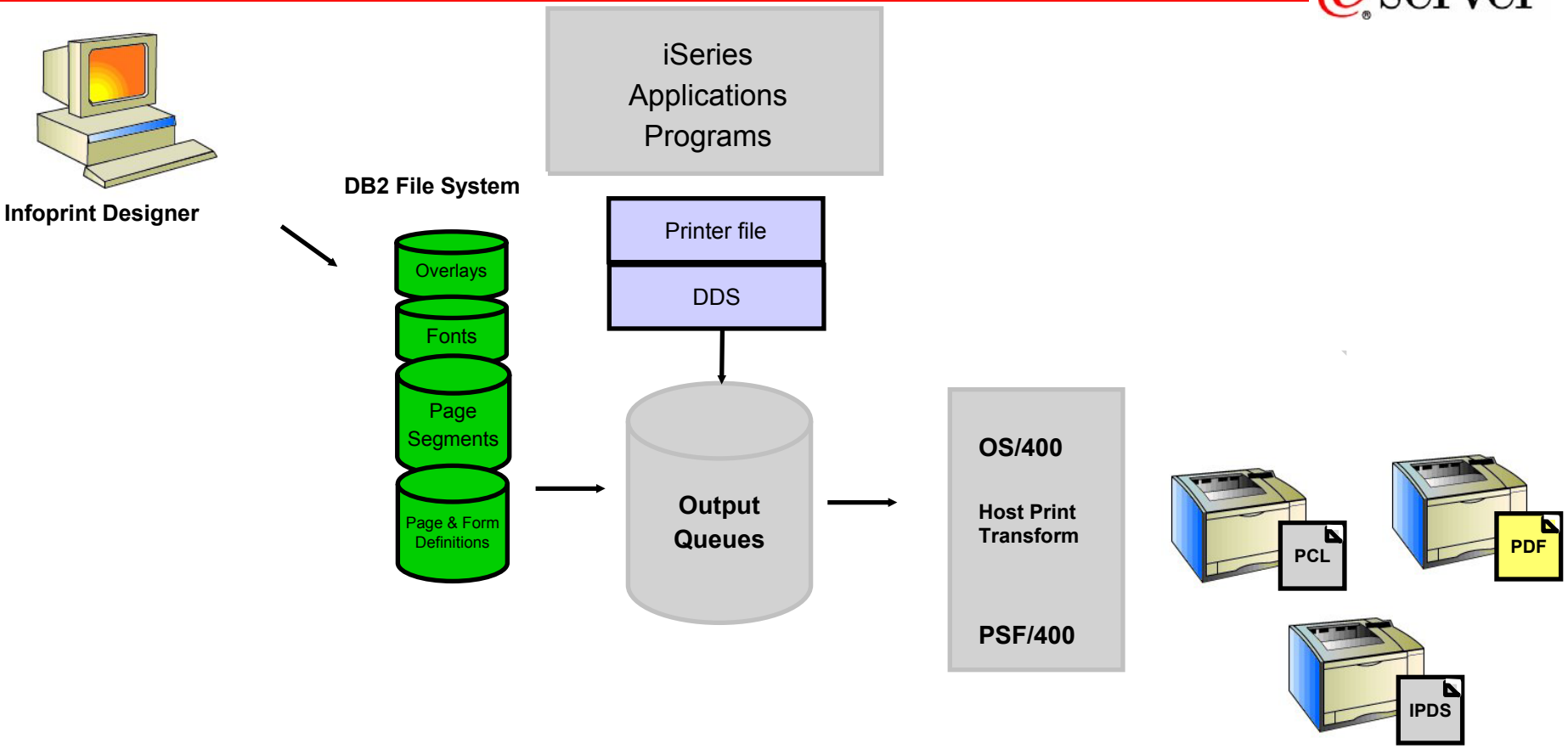
iSeries. mySeries.



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Additional Slides

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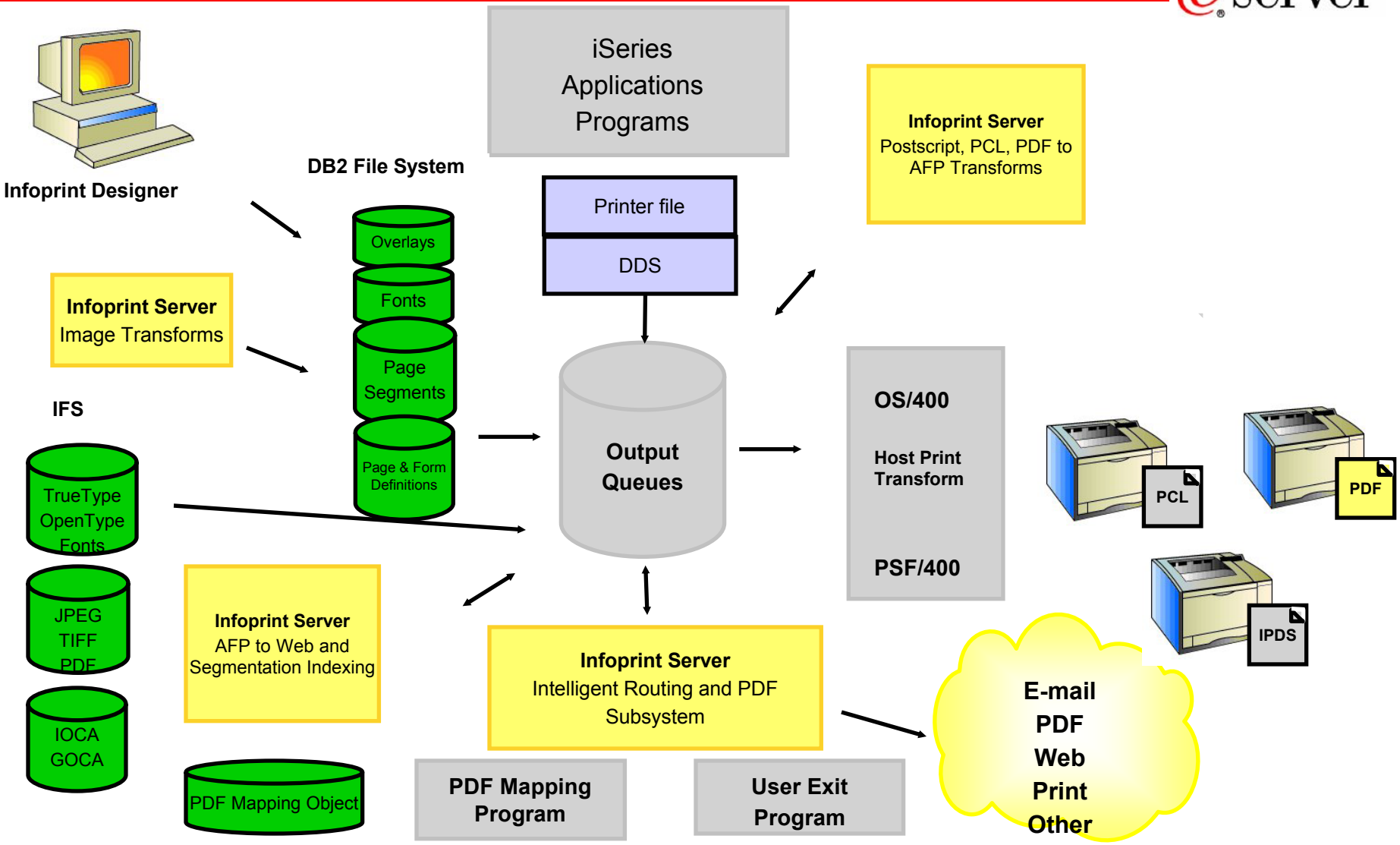

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Infoprint Server for iSeries

iSeries support for PDF

- Transform services for any iSeries standard output (AFP, IPDS, SCS, even OV/400)
- PDF output to e-mail, IFS, or PDF printer
- High-function PDF Server
- Segmentation - "Electronic Burst and Bind"

Intelligent Routing, Electronic Delivery

- PDF output can be automatically e-mailed, archived, printed
- Multiple actions per file or file segment
- Implementation via PDF mapping or user exit

iSeries as a network print server

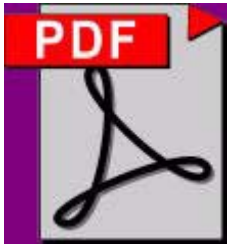
- PCL, Postscript, and PDF to AFP
- Postscript and PDF transform is IBM-Adobe full-function Level 3

Portable, web-ready AFP

- Add external resources to AFP data for portability and browser view
- Add indexing for navigation and report segmentation

Image transforms

- GIF, TIFF, and JPEG transforms to IOCA
- Windows-based



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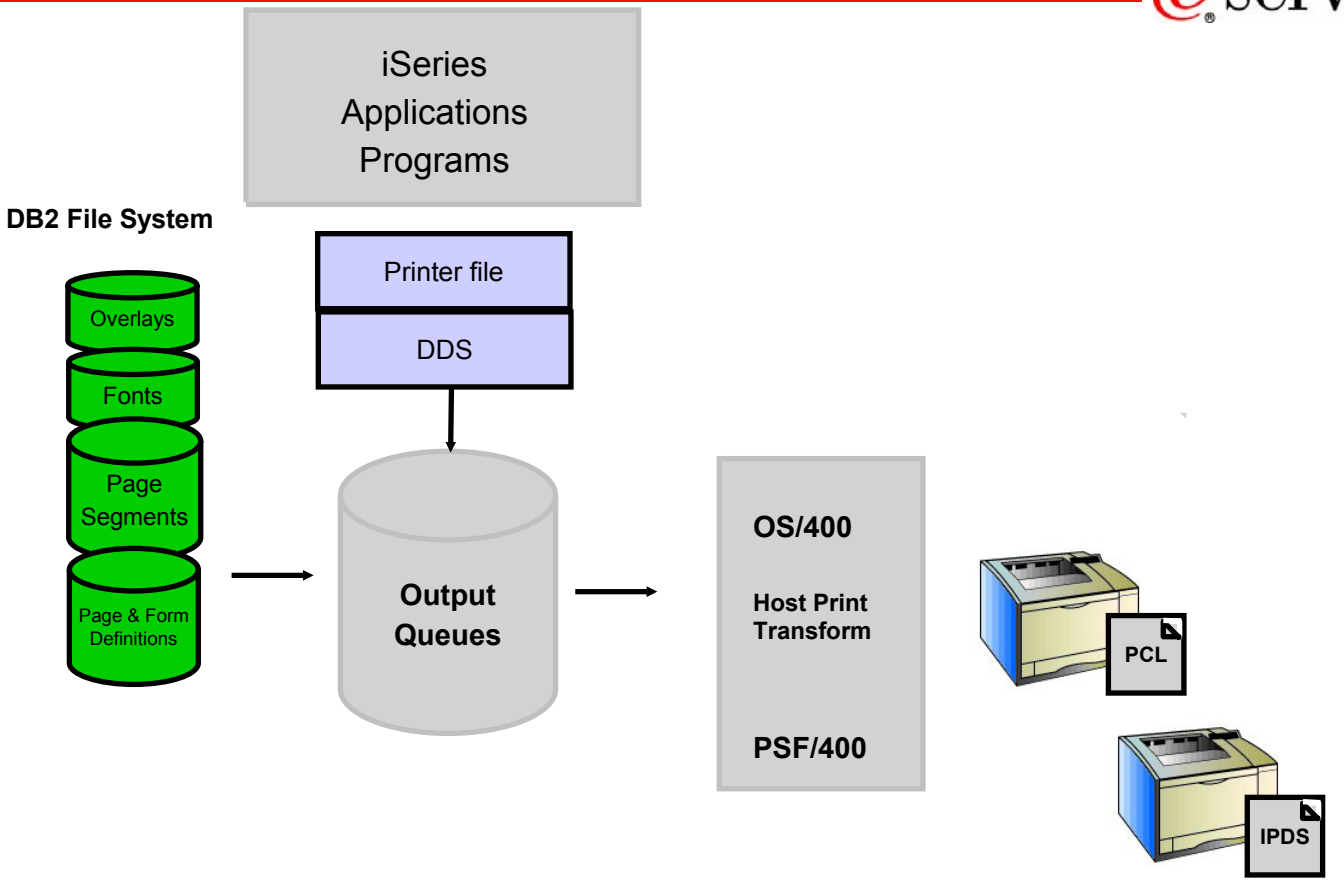

iSeries Printing Flow

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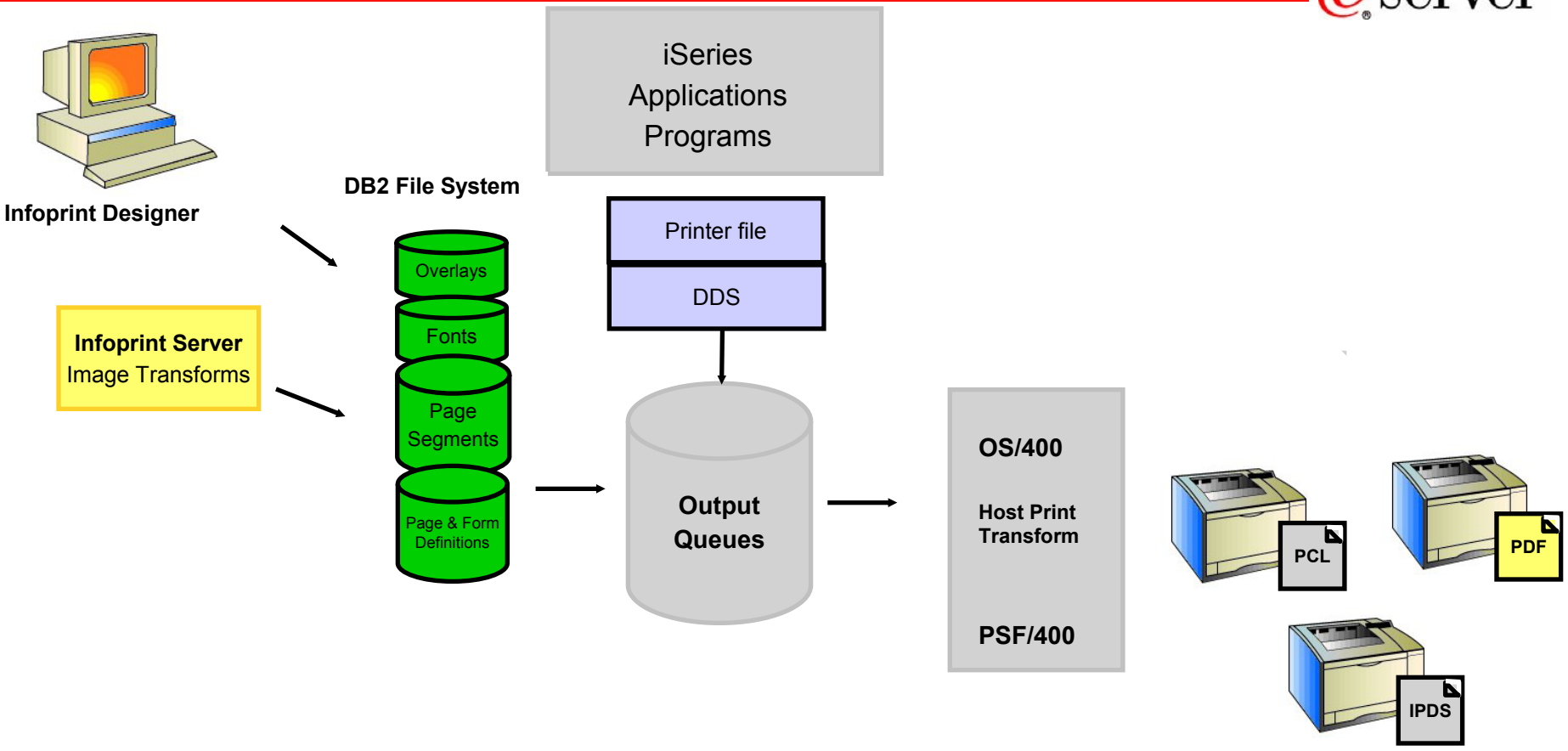

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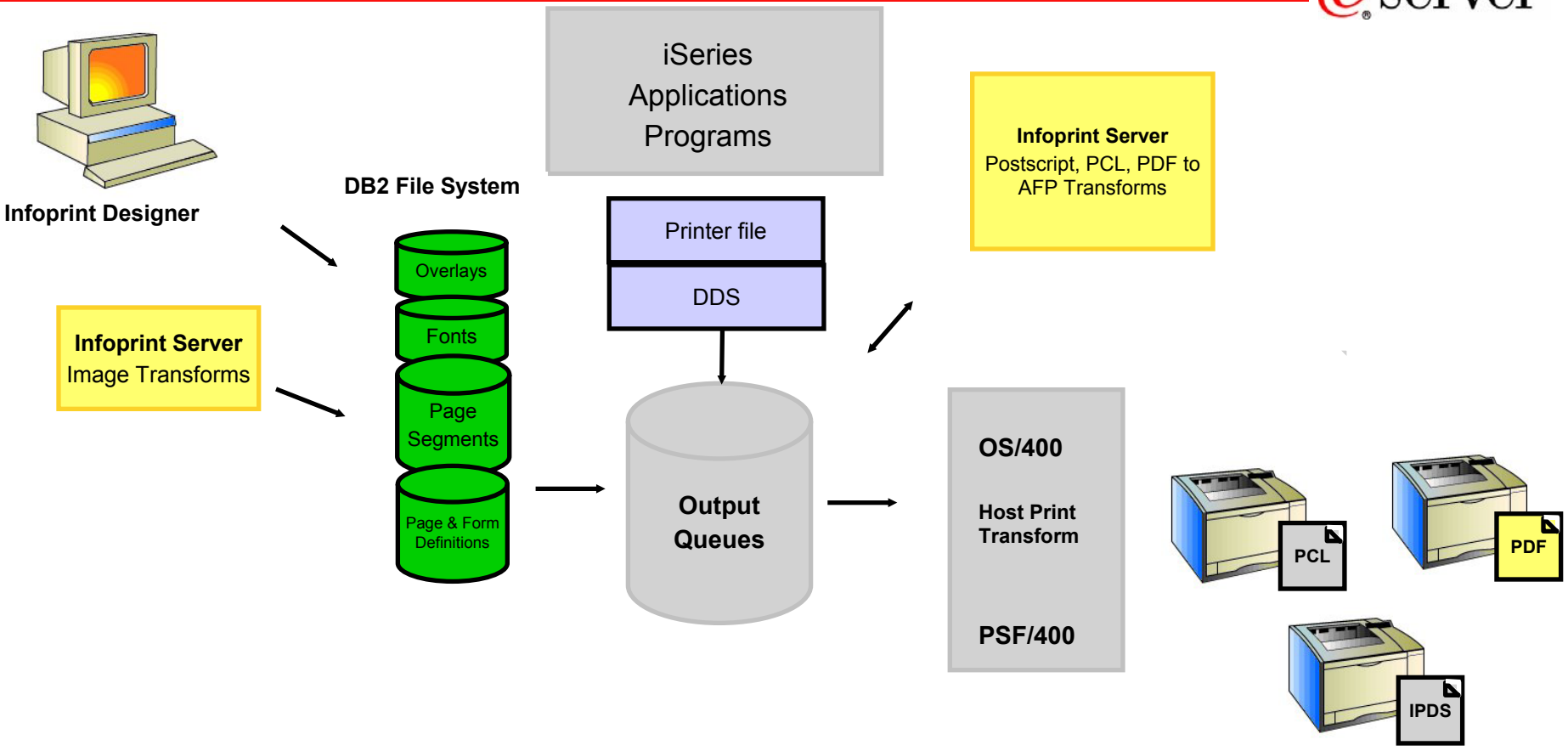

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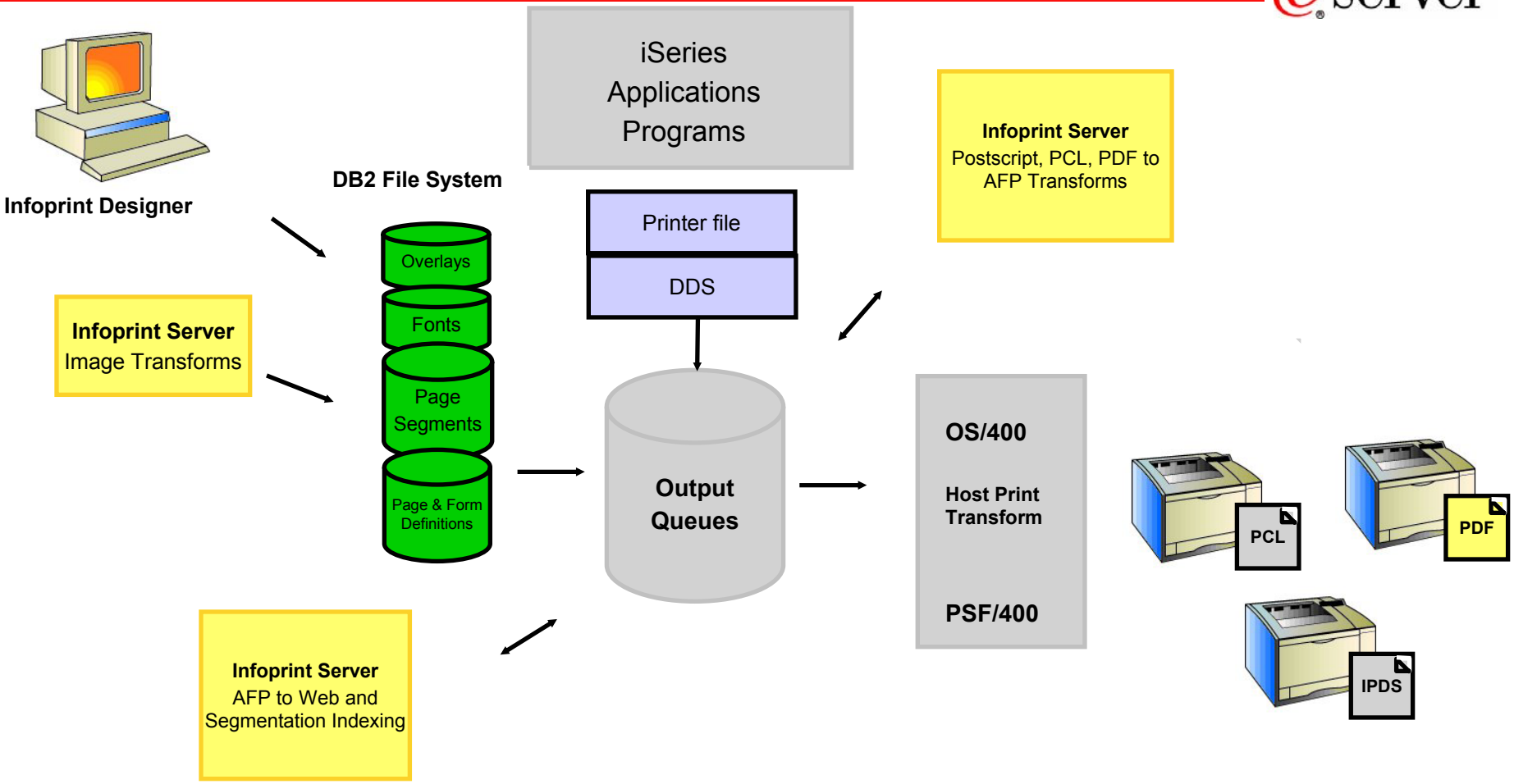

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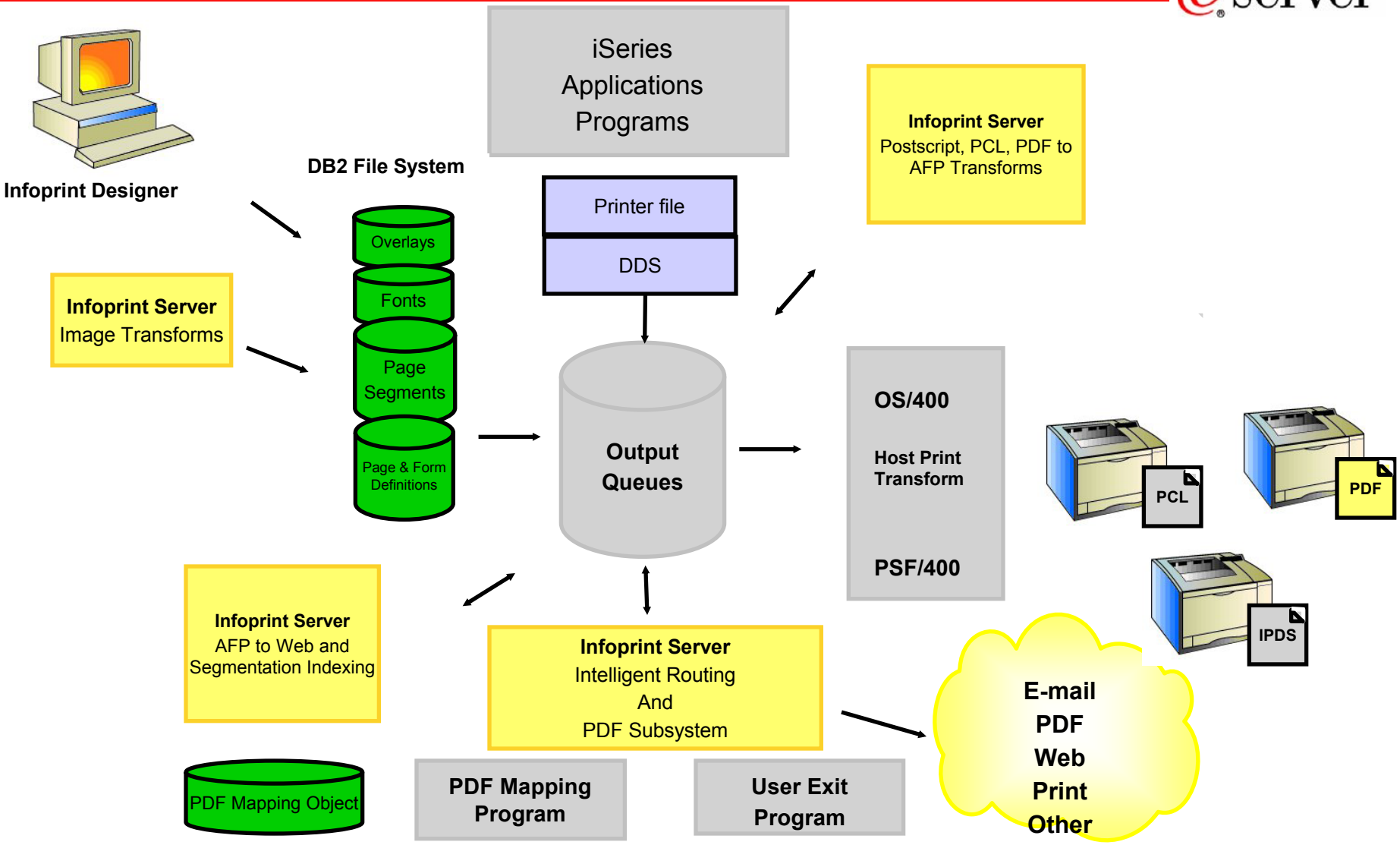

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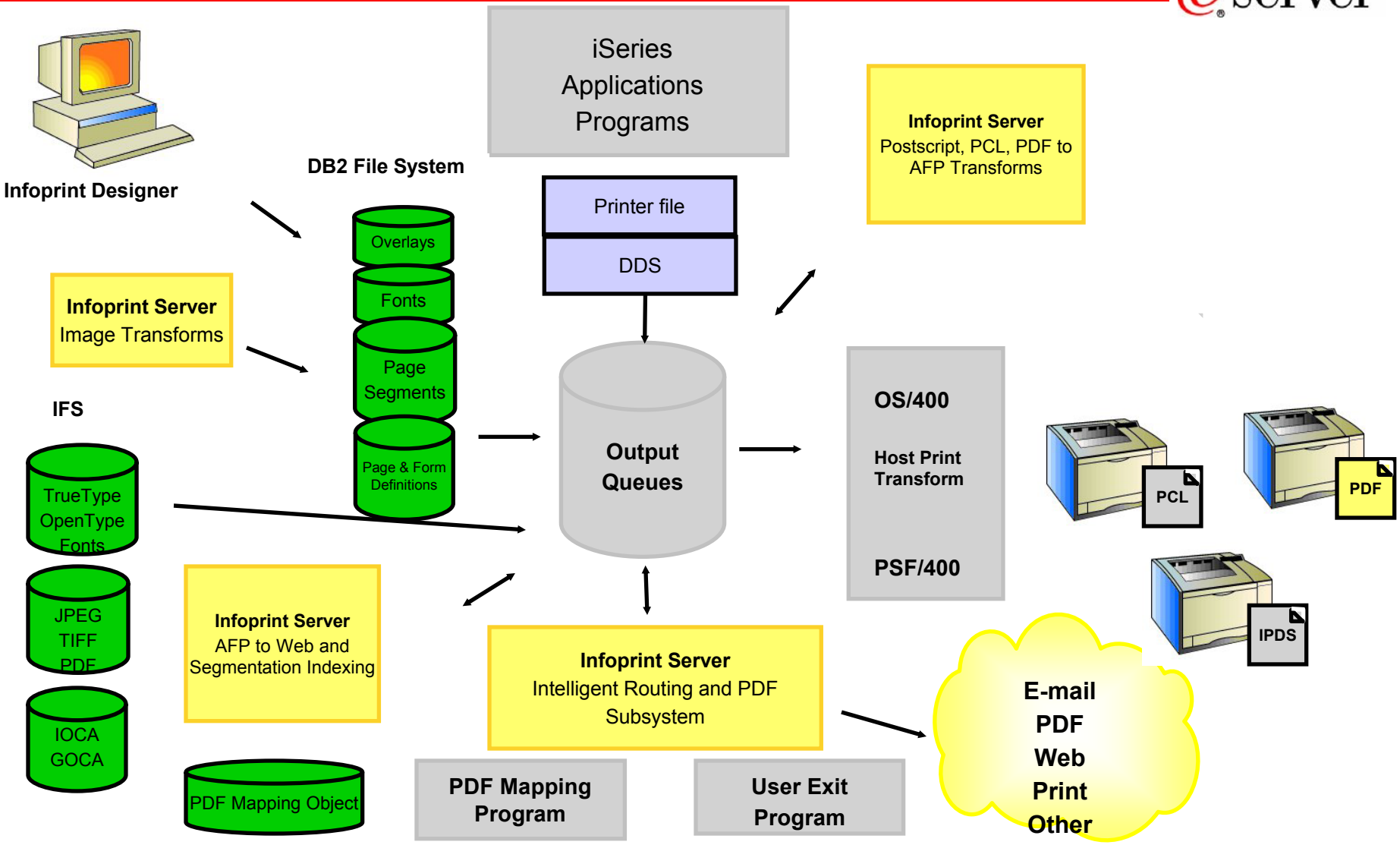

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