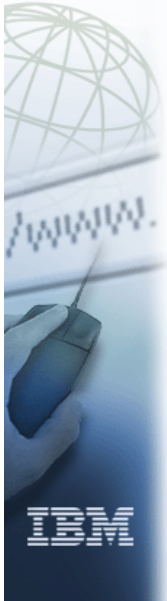


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Infoprint Server



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International Technical Support Organization

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Trademarks



eNetwork	DFSMS/MVS	IMS	RMF
geoManager	DFSMSdfp	IMS/ESA	RS/6000
AD/Cycle	DFSMSdss	IP PrintWay	S/390
ADSTAR	DFSMSshsm	IPDS	S/390 Parallel Enterprise Server
AFP	DFSMSrmm	Language Environment	SecureWay
APL2	DFSORT	Multiprise	StorWatch
APPN	Enterprise System 3090	MQSeries	Sysplex Timer
BookManger	Enterprise System 4381	MVS/ESA	System/390
BookMaster	Enterprise System 9000	Network Station	System REXX
C/370	ES/3090	NetSpool	SystemView
CallPath	ES/4381	OfficeVision/MVS	SOM
CICS	ES/9000	Open Class	SOMobjects
CICS/ESA	ESA/390	OpenEdition	SP
CICS/MVS	ESCON	OS/2	VisualAge
CICSPlex	First Failure Support Technology	OS/390	VisualGen
COBOL/370	FLowMark	Parallel Sysplex	VisualLift
DataPropagator	FFST	Print Services Facility	VTAM
DisplayWrite	GDDM	PrintWay	WebSphere
DB2	ImagePlus	ProductPac	3090
DB2 Universal Database	Intelligent Miner	PR/SM	3890/XP
DFSMS	IBM	QMFr	z/OS
	IBM System z	RACF	z/OS.e

Domino (Lotus Development Corporation)
 DFS (Transarc Corporation)
 Java (Sun Microsystems, Inc.)
 Lotus (Lotus Development Corporation)

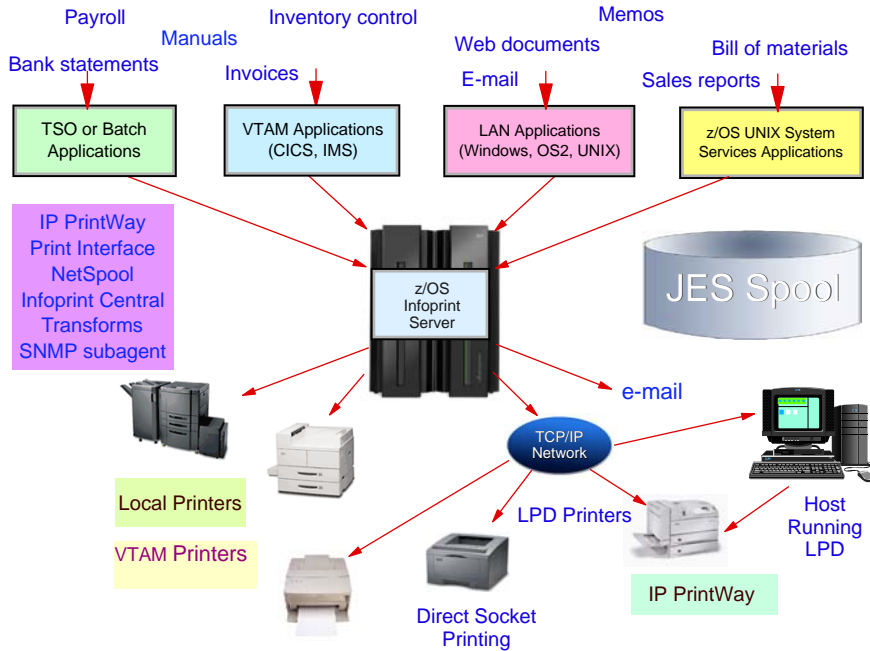
Tivoli (Tivoli Systems Inc.)
 Tivoli Management Framework
 (Tivoli Systems Inc.)
 Tivoli Manger (Tivoli Systems Inc.)

UNIX (X/Open Company Limited)
 Windows (Microsoft Corporation)
 Windows NT (Microsoft Corporation)



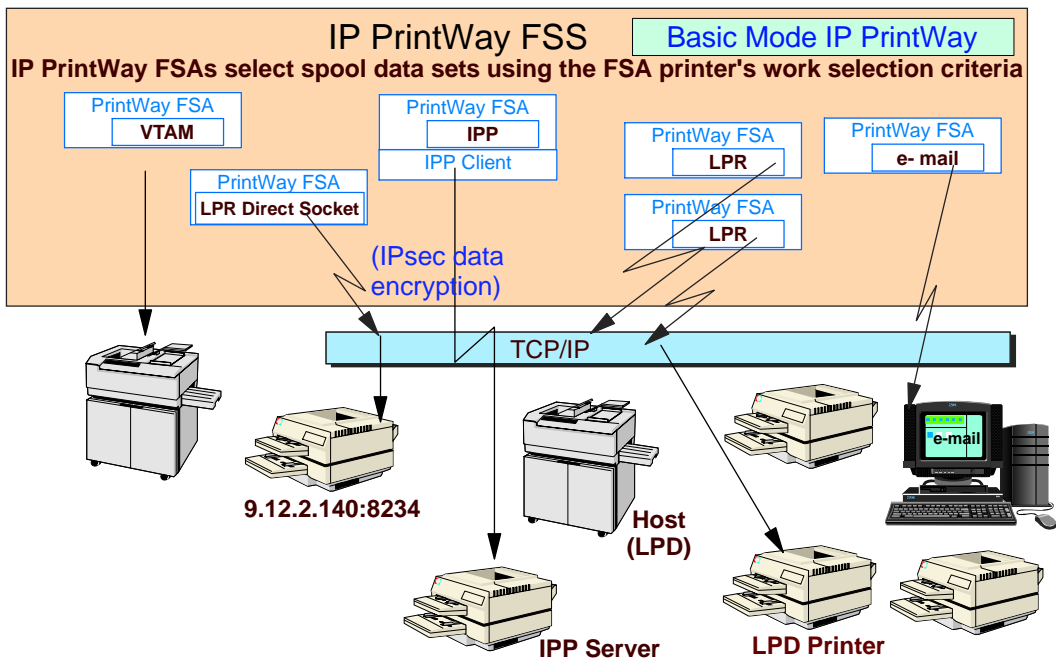
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z/OS Infoprint Server



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IP PrintWay Basic Mode Support

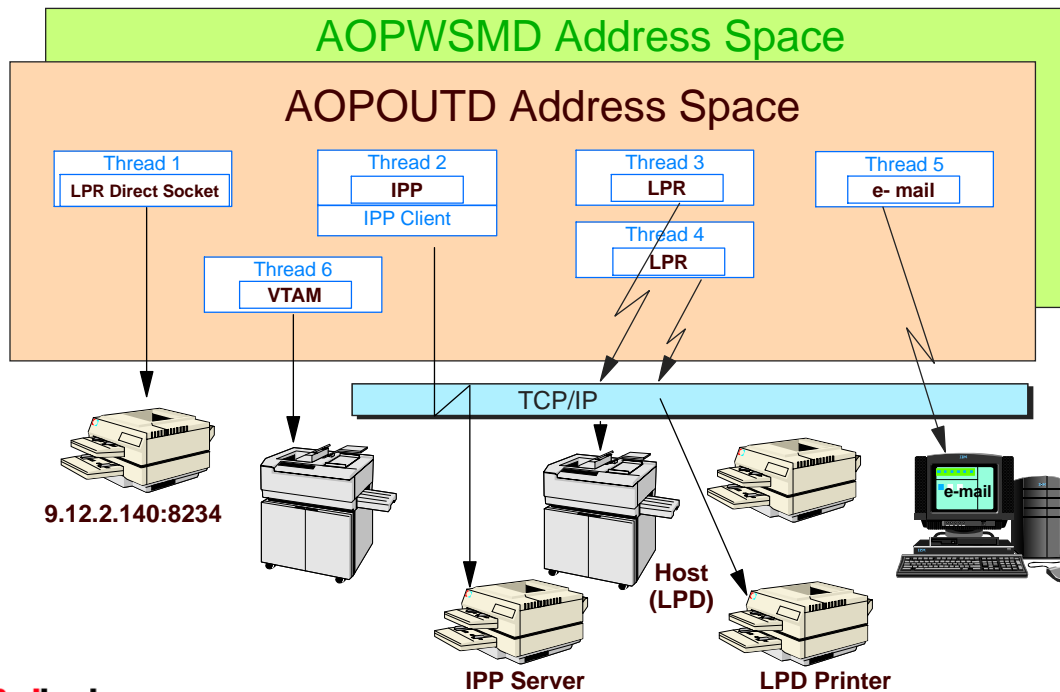


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Extended Mode Processing



IP PrintWay extended mode



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Infoprint Server Enhancements



- ❑ IP PrintWay extended mode component
 - Server can now print a greater number of data sets in the same print job (JES output group)
- ❑ Infoprint Server now supports a greater number of jobs active in the system at one time
 - Up to the maximum that JES currently allows
- ❑ Line Printer Daemon (LPD) can now receive files larger than 2 GB
- ❑ Infoprint Server now gives higher priority to processing existing print jobs
- ❑ Infoprint Central now lets authorized users see information about all the documents
- ❑ In addition, Infoprint Port Monitor V3 for Windows runs on additional Windows platforms and new function

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Processing Output Groups



- ❑ With automatic data set grouping with extended mode
 - Select how you want IP PrintWay to transmit data sets that are in the same JES output group
 - Select the automatic data set grouping (extended mode) field
 - Automatic data set grouping is a more efficient method of transmitting data sets to the printer andt makes sure that data sets in the same output group print together

This support for processing of output groups only works in IP Printway extended mode and not in basic mode



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Processing Output Groups



- ❑ Many installation have experienced bottlenecks when processing large numbers of documents during a short batch window
 - Printers are not busy but waiting print data to be spooled
 - Infoprint Server is busy de-spooling work from JES rather than keeping the printers at maximum throughput
- ❑ With z/OS V1R12, IP Printway raises the priority of the task is spooling data to the output device
 - Reduces the priority of the task that is de-spooling data from JES
 - Improves printer throughput and overall processing time - submit batch jobs that create a large number of output data sets on the JES spool, up to the limit that JES allows



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ANFUXRSP User Exit



- ❑ ANFUXRSP response notification exit was only supported by Infoprint Server IP PrintWay basic mode
- ❑ With z/OS V1R12, IP Printway extended mode is the recommended choice and is now supported
 - With this exit you can take actions based on the status of the current processing of the document
 - Exit is with other sample user exits in SYS1.SAMPLIB
- ❑ Use the exit to write user customized processing at the completion of document processing
 - Exit can send a message to either the operator's console or IP PrintWay message-log data set, or both
 - IP PrintWay calls the same response exit for all data set transmissions - can install different response exits for different IP PrintWay FSSs



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LPD and API Support for Large Files



- ❑ In z/OS V1R12, the Infoprint Server LPD can receive files larger than 2 GB
 - Support uses the Infoprint Server API to return a document size value greater than 2 GB
- ❑ DocumentInfo data structure - new field `high_size` to contain the high-order word of the document size
- ❑ Existing `GetJobInfo` and `EnumJobs` API functions store the size of a document in two fields in the DocumentInfo data structure: `size` and `high_size`
- ❑ A new `GetAPIVersionNumber` function returns the API version number
 - In z/OS V1R12, the API version number is "1"



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Installation Considerations for API



- ❑ **Modify the program that uses the API:**
 - If the program runs only on V1R12 and later, get document size from fields in DocumentInfo: **size and high_size**
 - If program runs on V1R12 and earlier, code these steps:
 - Use the dlsym() function to determine if the GetAPIVersionNumber function is in aopapi.dl - See z/OS XL C/C++ Run-Time Library Reference, SA22-7821
 - If not found, the DocumentInfo structure is at API Version 0 - Get the size of the document from this field in DocumentInfo: **size**
 - If the GetAPIVersionNumber function is found, the DocumentInfo structure is at API Version 1 or later - Get size of the document from both of these fields in DocumentInfo: **size and high_size**



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Printer Inventory Enhancements

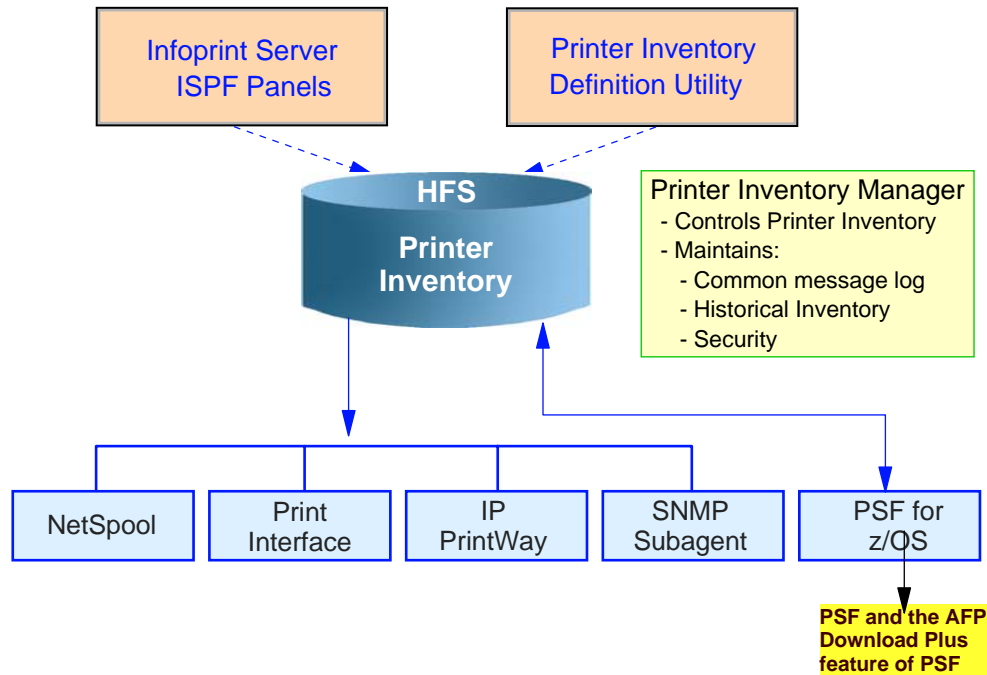


- ❑ **New PSF printer attributes in Printer Inventory, you create or modify a PSF FSA definition for AFP Download Plus:**
- ❑ **An FSA definition identifies how the printer is attached to the z/OS system - An AFP Download Plus sender is a separate type - These are the valid types:**
 - **Channel:** Printer is channel-attached to the z/OS system
 - **SNA:** Printer is SNA-attached to the z/OS system
 - **TCP/IP:** Printer is TCP/IP-attached to the z/OS system.
 - **AFP Download Plus:** AFP Download Plus sender on the z/OS system sends documents to a receiver running on a TCP/IP-attached system
 - **The receiver can print, fax, or e-mail the documents**



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Printer Inventory Manager



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ISPF panel for a PSF FSA definition for the AFP Download Plus feature of PSF



```

PSF FSA, AFP Download Plus
FSA Name. . . _____
Description . _____ (extend)
Location. . . _____ (extend)
Operator security profile
. . . _____
Processing Information:
_ Blank compression
_ Consolidate IM1 images
_ Close libraries when idle
_ Release data set when repositioning
_ Page accounting supported
Default process mode. . . _____
Resolution. . . . . (240, 300)
Image output format . . . . . 1 1. IOCA 2. Unchanged
Map Coded Font (MCF) Format 2 name . . 1 1. Code page and character set
2. Coded font
Working directory . . /var/psf (extend)
Printer Supported Functions:
_ GOCA Box orders
_ GOCA Set Fractional Line Width orders
_ GOCA Set Process Color orders
_ IOCA replicate and trim function
_ Object identifier (OID) format
    
```



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Beginning with z/OS V1R11 Users



- ❑ **Infoprint Server PTFs:**
 - PTF UA30006: Adds support for line-termination controls in IP PrintWay extended mode
 - PTF UA31145: Adds support for the AFP to PDF transform that InfoPrint Transform Manager for Linux provides
 - PTF UA37619: Adds support for AFP Download Plus and for the Printer Inventory for PSF - Also provides sample job AOPLOGUS in SYS1.SAMPLIB.
- ❑ **Infoprint Central now lets you work with AFP Download Plus senders**
- ❑ **Infoprint Server provides a AOPLOGUS job in SAMPLIB to run the aoplogu command as a batch job**



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ISPF panel for a PSF FSA definition for the AFP Download Plus feature of PSF

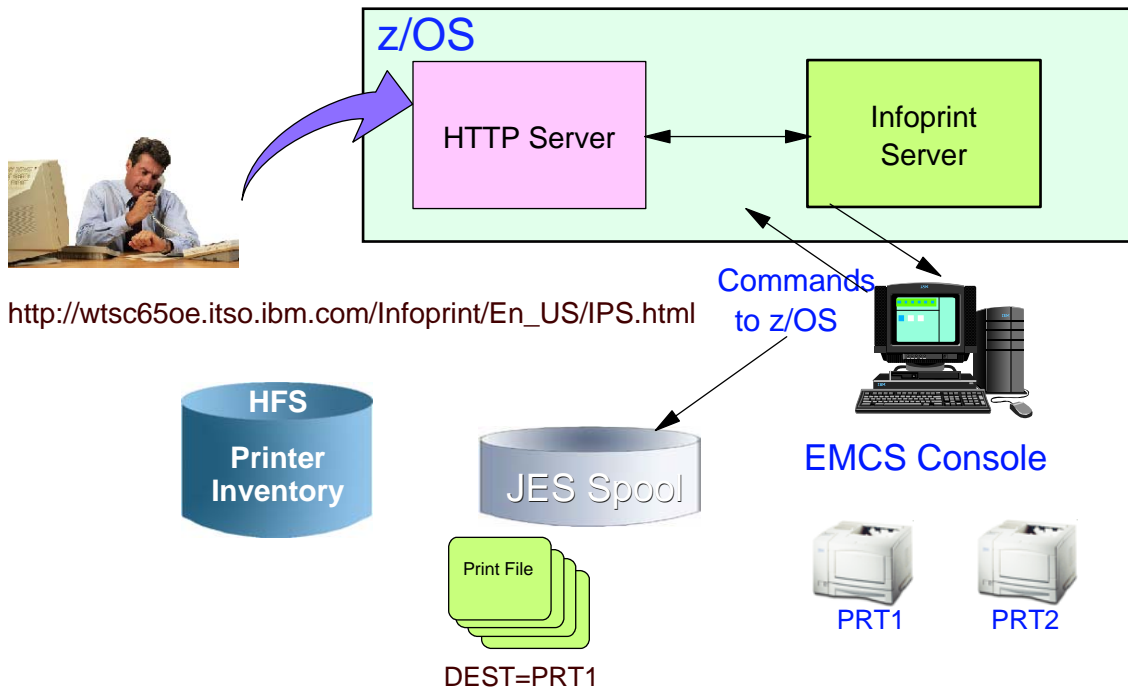


```
Resources:
Form definition. . . _____
Page definition. . . _____
Character sets . . . _____
Color map. . . . . _____
Com setup member . . . _____
_ Map to outline fonts
_ Recover from font not found
Resources Included Inline:
/ Bar code objects (BCOCA)
/ Font objects (FOCA)
/ Form definitions
/ Graphics objects (GOCA)
/ Image objects (IOCA)
/ Object containers
/ Overlays
/ Page segments
/ TrueType fonts
Color management resources. . 3 1. None 2. All 3. Generic
Error Reporting Values:
_ Error disposition supported
_ Send msgs to SYSOUT
Print error messages . . . 2 1. No 2. Yes
Maximum messages. . . 16 (0-999)
Print error reporting. . . 1 1. None 2. All 3. Character 4. Position
Send messages on failure . 1 1. All 2. Generic only
Connection:
Connect Interval . . 600 (0-86400 seconds)
IP address . . . . . _____
Port number . . . . . 5001
```



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Infoprint Central



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Infoprint Central Enhancements



- ❑ With z/OS V1R12, Infoprint Central now lets authorized users do these functions:
 - Display information about all documents in a print job - you can see the name and size of each document
 - Limit how many print jobs and documents are displayed
 - The AOPLIMIT environment variable limits how many objects Infoprint Central displays
 - Useful if you want to avoid timeouts when Infoprint Central displays a large number of objects
 - Specifically limit the number of print jobs and documents that Infoprint Central displays in the AOPLIMIT_JOBS and AOPLIMIT_DOCS environment variables



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Infoprint Central



Work with Print Jobs

Work with Print Jobs

Select whether you want to work with Infoprint Server or JES print jobs. Then enter one or more values to limit the number of jobs displayed.

Infoprint Server Print Jobs JES Print Jobs Show only exact matches

Job name	Job ID	Owner	Submitted to:	Submitted within
	ps			Hours
DEST	CLASS	FORMS	WRITER	

Job ID = ps

Hit Find button



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Migration Considerations



- ❑ **Z/OS V1R12 changes require a reformatting of the internal inventory data base files**
 - After migrating to z/OS V1R12, when you start Infoprint Server, Infoprint Server automatically reformats the Printer Inventory to the Version 2 format
 - This version supports jobs with a large number of documents
 - It requires at least two times more for the available space required to complete the step
- ❑ **If the Version 2 Printer Inventory files exist on a fallback V1R11 or V1R10**
 - Remove them from the Infoprint Server base directory, be careful not to remove any Version 2 files while running z/OS V1R12 because Infoprint Server on V1R12 requires Version 2 Printer Inventory files



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Migration Considerations



- ❑ Sufficient space in the Infoprint Server base directory (default is /var/Printsrv) for the new reformatted database files initially created after migration to z/OS V1R12
 - The default configuration file is in /etc/Printsrv/aopd.conf
 - It contains the name of the base directory
- ❑ In z/OS V1R12, the format of the Inventory files has changed from Version 1 to Version 2 format
 - When you start Infoprint Server on z/OS V1R12 for the first time, Infoprint Server reformats the Version 1 Printer Inventory files and creates Version 2 Printer Inventory files
 - Both Version 1 and Version 2 Printer Inventory files exist in the Infoprint Server base directory



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Migration Considerations



- ❑ New and previous release data bases files will coexist in the same directory
 - A coexistence PTF is provided with APAR OA32093 includes a new migration health check to ensure sufficient space for the data base copy and conversion
- ❑ APAR OA32093
 - Run this health check, INFOPRINT_V2DB_CHECK, Infoprint Server must be started - and provides information for customers who have migrated to V1R12
 - Health check INFOPRINT_V2DB_CHECK checks whether the base directory has sufficient available space for the new Inventory files that Infoprint Server creates when it starts on V1R12



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