

spoolLogic

Operational Whitepaper

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INTRODUCTION

spoolLogic is a stand-alone print spooler with ISO Banner and Watermark stamping capabilities.

Typically, **spoolLogic** runs on a dedicated Windows Server (although dedication is not required) and processes print job requests using a FIFO (first-in first-out) order.

spoolLogic uses Informative Graphics' Myriad Server Edition as print engine. This allows **spoolLogic** to print any file type which can be opened by Myriad. Currently, there are over 250 file types which can be processed by **spoolLogic** including CAD, MS Office and PDF.

STRUCTURE

Job Processing

spoolLogic is installed on a network server which can be dedicated to the task of printing. In addition to spoolLogic, the latest release of Myriad Server Edition is also installed. When processing jobs, **spoolLogic** starts, communicates with, and shuts down Myriad as necessary.

For example, after startup **spoolLogic** scans the selected watch folder for print jobs. When a job is found, **spoolLogic** starts Myriad and communicates with it to process and print the job. If there are no errors, Myriad is commanded to close the current file(s) and is left running for the next job. **spoolLogic** then "cleans up" the job by deleting the job file and the corresponding printable file(s).

If an error is encountered, Myriad is commanded to close the current file(s). **spoolLogic** then "cleans up" the requested job by moving it into an "error" directory and logging the failure. Depending on the nature of the error and if the option is set, email is also sent to selected individuals. Under some circumstances, it may be necessary to shutdown Myriad (and any related processes) and restart it in order to provide a clean environment in which to continue processing other jobs.

Job Files

spoolLogic works based on the concept of a control or "job" file. Within the job file is all of the necessary information required to process a print request (see the Sample Job File at the end of this document).

Job files are text based and can be created using any available means. In addition to the job file, **spoolLogic** expects a corresponding folder containing the files to be printed. Typically, the job file and folder share the same base name, e.g. "print123.job" and "print123". Within the job file is a descriptor pointing to the location of the files to print within the "print123" folder. Since multiple requests may be made simultaneously, it is critical that each job and corresponding folder use a unique name. In many cases, the server clock ticks can be used.

spoolLogic builds on the "Document Stack" concept within Myriad and allows for multiple files (and Markups) to be printed within the same request. This creates a "packetization" ability, allowing the user to print several documents within the same print job. As well, **spoolLogic** manipulates Myriad so that page numbering occurs over all of the documents as though they were one. For example, Document A may contain

3 pages and Document B may contain 4 pages. When processed together via **spoolLogic**, page numbering can read “Page 1 of 7”, “Page 2 of 7”, etc.

Database Direct Jobs

In most cases job files will always have a companion folder containing the file(s) to be printed, as described above. However, when Myriad is integrated with a database application, such as Documentum, only the job file is required. **spoolLogic** leverages the integration and communicates through Myriad to retrieve the desired file for printing directly from the database.

ISO BANNER / WATERMARK STAMPING CAPABILITIES

spoolLogic provides the capability to stamp information onto documents at print time. Text and commands used for stamping reside in the job file, under the “<ISO>” section. These capabilities are mostly available directly through Myriad. See the Sample Job File at the end of this document.

Zones

spoolLogic can add text to a printed document in 13 distinct areas on the page, or “zones”. There are 12 zones around the page borders:

Top Left, Top Center, and Top Right
Bottom Left, Bottom Center, and Bottom Right
Left Bottom, Left Center, and Left Top
Right Bottom, Right Center, and Right Top

The remaining zone is the Watermark which is printed diagonally (lower left to upper right) across the face of the document. The text for the watermark is automatically scaled to fit the entire length of the diagonal.

Font

The font used for printing the Banners/Watermark can be set within the ISO section, using a comma delimited Font string, such as:

Font=12,Arial

A more detailed font string can be used if it is the complete LOGFONT structure:

Font=10,Arial,0,0,400,0,0,0,0,3,2,1,34

Overlay

The placement of the Banners in relation to the document edges is handled with the OVERLAY option. Banners can be made to overlap the existing image around the borders, or can be made to reside outside the border by scaling the document slightly to allow a clear margin in which to put the Banner text.

Content

The content of the Banners/Watermark can be any text placed within the ISO section of the job file. Additionally, **spoolLogic** and Myriad provide “wildcard” options which are interpreted at print time, the resulting value being placed onto the document.

The following wildcards are available:

%Date	The current system date at print time
%SysDatePlusDays	The current system date plus the specified number of days at print time
%Time.....	The current system time in 12 hour format
%MilTime	The current system time in Military (24 hour) format
%Title	The Title as indicated within the job file
%Page	The current page
%TotalPages.....	The total pages being printed (modified in spoolLogic to count across all documents in the print job)
%Login	The Login as indicated within the job file
%User	The User as indicated within the job file
%Blank.....	A single blank line

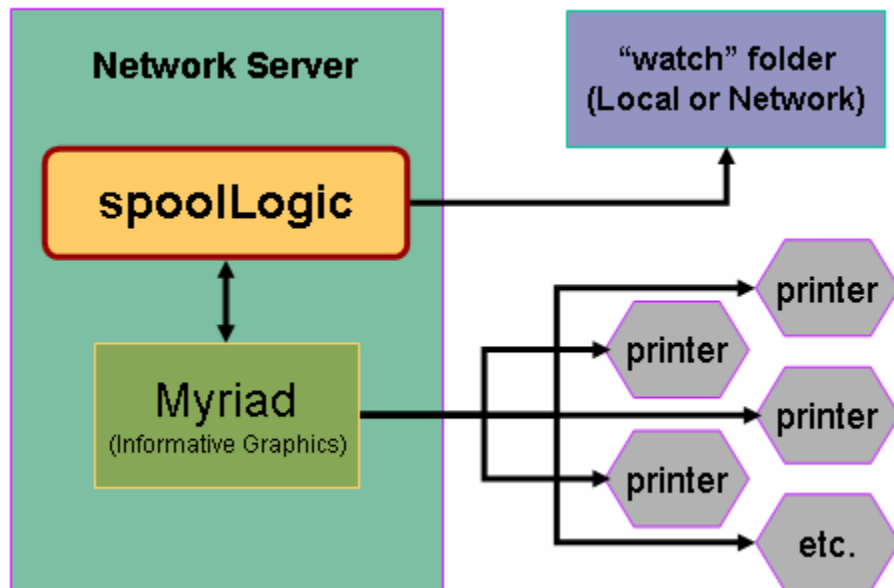
In addition, options for the Watermark include “color” and “darkness” (halftone).

SAMPLE USAGE SETUP

In the diagram below, **spoolLogic** is installed on a Network Server along with Myriad Server Edition. The printers which are to be used for batch printing are also installed on the same network Server.

A “watch” folder is indicated, and can exist anywhere on the network, although it is typical to have the folder reside on the same Server as **spoolLogic**.

spoolLogic monitors the watch folder and as jobs are dropped off, they are processed in FIFO order. **spoolLogic** initiates and connects to Myriad and prints each job. Should a critical error occur, **spoolLogic** has the ability to shut down Myriad, clean up the offending job, and re-start the process beginning with the next job in the queue.



spoolLogic FUNCTIONALITY

- ❑ Server based print spooler
- ❑ Runs as an NT Service – automatically restarts without administrator interaction
- ❑ Built-in fault monitoring and clean up
- ❑ Automatic UNC path conversion and Network capability
- ❑ 12 Zones (10 lines each) for ISO banners plus Watermark
- ❑ Automatically scaled-to-fit watermark
- ❑ Page numbering across multiple documents
- ❑ Maintains FIFO order of submitted jobs
- ❑ Point-n-click administrator interface – no programming required
- ❑ Enhanced File Processing allowing multiple files to be printed at once
- ❑ Email notification of critical errors (with file attachment)
- ❑ Enhanced visual interface, including log file viewer
- ❑ Process logging – 3 levels
- ❑ Continuous or daily log files
- ❑ Timing control for watched folder
- ❑ Timing control for print status
- ❑ Autorun at startup option
- ❑ Reposition jobs within the print queue
- ❑ Delete jobs within the print queue
- ❑ Suspend jobs within the print queue
- ❑ Resubmit or delete error causing jobs
- ❑ Auto-save of window parameters and basic settings
- ❑ Supports over 250 file formats (via Myriad Server Edition)
- ❑ Runs on Windows 2000, Windows XP and Window Server 2003
- ❑ Database direct printing, such as Documentum (with Myriad integration)
- ❑ Drop-in replacement for Informative Graphics' MPS

SAMPLE JOB FILE

```
<PRINTJOB>
InternalPrinterName= Adobe PDF,winspool,Ne03:
PaperSize= tabloid
Orientation= Landscape
Scale= 100 page
Title= a_size_drawing.dxf
User= wayne
Pages= ALL
Count= 1
Copies= 1
GenBitmap= 1
OutlineFills= 0
BlackAndWhite= 1
</PRINTJOB>
<STACK>
DOCUMENT "\\CARTMAN\PrintJobsJax\0\a_size_drawing.dxf"
PAGE
 "\\CARTMAN\PrintJobsJax\0\a_size_drawing.dxf" -Tdx
ENDPAGE
ENDDOC
</STACK>
<ISO>
OverlayISOBanner=FALSE
Font=12,Arial
WaterMark= THIS IS CONFIDENTIAL darkness:1 color:red
TopLeft1= User is:%user Login is:%login
TopCenter1= Title is:%Title MilTime is:%Miltime
TopRight1= Today:%Date Add 3 days:%SysDatePlusDays(3)
BottomLeft1= a_size_drawing.dxf
BottomCenter1= Date is:%date Time is:%TIME
BottomRight1= Page %page of %TotalPages
</ISO>
```