

Self Publishing System Overview

Medea's Self Publishing System (SPS) is a sophisticated tool that allows the creation and distribution of high-quality communication materials in a variety of file formats using only a web browser.

The system was architected and designed to be an extremely easy-to-use, simple to install application that provides robust capabilities that can scale to support thousands of users. Implementations can be sized according to the extent of the user base and system interconnectivity, allowing deployment as a small pilot or rolled out on an enterprise wide basis.

System Highlights

- Combines high-quality document generation and distribution into one system
- Generates multiple document types - a true "horizontal" digital publishing system
- Easy to use, eliminating the need for help desk support
- Accessible from Mac, PC or Unix with a 4.0 Web Browser, 28.8 Modem with no proprietary software installed on the desktop
- Integrates seamlessly into existing IT enterprise infrastructures
- Customization available to suit any technology environment
- Reduces IT resource strain - marketing administers their own system
- Underlying Technologies:
 - HTTP, HTTPS
 - HTML, CSS, JavaScript, MIME
 - XML
 - PDF, MS WORD
 - ODBC, CSV
 - POP, SMTP, ESMTP, FTP
 - JPEG, GIF
- Supported Operating Systems:
 - AIX, Windows 2000,
 - Windows NT, Windows XP,
 - Windows 2003, Linux, FreeBSD,
 - WIN32, UNIX

SPS is a proven technology that encompasses sophisticated generation and layout algorithms utilizing dynamic XML-based Templates to simplify and standardize the creation of documents. The system integrates seamlessly into existing IT infrastructures and can be as customized as required. Cross-platform and very portable, the system does not require large or expensive servers to run the application.

The product is a result of over 5 years of extensive research and development focusing on simplifying the tasks involved in building and distributing documents while ensuring consistent document characteristics such as design, layout, fonts, images, graphics and printing quality.

The web-based system works with two basic stages: creating a document, and then distributing it. The creation stage involves filling out an online form, editing an existing version, or building a document from an automated data stream. SPS uses this information to dynamically generate multiple document formats such as PDF, Microsoft Word or HTML.

Once these documents are created, they can be edited and published through a variety of distribution channels such as e-mail, fax, desktop printing or through an external printing supplier. The system can publish the same document to many different channels, allowing some users to receive documents by fax while permitting others to receive the same documents via e-mail. SPS also enables the same documents to be instantly printed on demand or placed on a public or internal web site for general viewing.

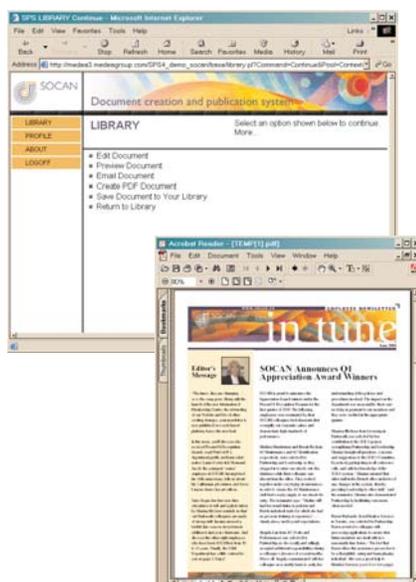
Self Publishing System Features

The SPS system is a Web-based, complete solution comprised of over 30 underlying technologies including XML, PDF, HTTPS, ODBC and CSS. It was developed based on years of R&D in areas including Pagination Algorithms, Composite Documents Manipulation, Authorization and Image Manipulation. It has the ability to generate communications materials in multiple file formats (HTML, MS-Word, PDF) for real-time page generation of complex files. Pre-determined XML-based Templates allow marketing departments direct control over the quality of their materials in the most flexible way possible for end users.



Document Generation

The SPS generation engine is highly abstracted, using underlying document-drivers for actual generation, improving on existing algorithms and technologies. The engine architecture and design employ advanced layout algorithms for features such as type justification and hyphenation, precisely controlling the dynamic nature of the documents being generated. For instance, text, graphics and tables can be pinned to a specific location that cannot move or they can be allowed to grow dynamically as necessary while spacing shifts appropriately within the document. Drivers can also be easily added for any other file-type generation.



The system supports many versions of Adobe Acrobat (3-6) providing direct distribution to printers, newspapers and mail merge facilities. True Type font support, import/export, auditing capabilities and multilingual support in both its user interface and generated documents are built into the system with the ability to expand into all major typesetting and layout algorithms.

The engine first performs variable expansions followed by laying out each page and finally if required adding a post-processing stage to modify the document to make it print-ready.

SPS also offers extensive Web browser support, working with any HTML 3.0 compliant Web browser that offers basic JavaScript™ support. This means that SPS supports Internet Explorer 4.0+, Netscape 4.0+, Mozilla and even some lesser known browsers like Opera and Konquer.

SPS Application Features

- Simple Installation
- Low system maintenance
- Multi-lingual capabilities
- XML-based Templates
- Dynamic user forms
- Advanced content management
- Custom database
- 2-pass document generation
- Custom schema
- Regular Expression Searching
- Import/Export Facilities
- High degree of configuration
- Component-based system
- Web-server/platform independent
- Group based permissions
- Web-site generation
- Simplified, direct communication with any digital, print or other service provider
- Pricing calculations and credit card payments
- Batch processing
- User Template uploads
- Easy Template duplication
- HTML Previews

SPS Engine Features

- XML-based Templates
- Adobe type 1 & TrueType Fonts
- Text, Images, Tables Libraries
- In-stream HTML tags
- Special character handling
- Arbitrary layout and positioning
- Dynamic layouts
- Lines, boxes, background images
- Advanced Pagination Algorithm
- Dynamic Flow Control
- Hanging Indents, Leading, Bullets, Resizing, Superscripts, Bold, etc.
- Post-processing Imposition, and printer marks
- Justified text & full paragraph hyphenation.
- Floating borders
- Image manipulation and conversions

System Integration

SPS is a cross platform solution that can integrate into any legacy infrastructure, existing system, Web portal or stand as an extension to that portal. The system can dynamically synchronize with existing user databases and automatically log them into the system, retrieving user data from existing sources not solely from master databases.

The system can work within any existing infrastructure not requiring significant additional expenditures on large or expensive servers to operate, supporting thousands of users on medium sized equipment. SPS also offers extensive data and interface management capabilities.

SPS sets up and installs quickly utilizing standard installers for each OS to ensure maximum flexibility on different platforms. The system is able to utilize any CGI compliant Web server for communication including Internet Information Services (IIS) and Apache, is highly configurable in visual appearance and how it connects to other systems. SPS is extremely portable as it abstracts all of the OS specific issues away from the main body of the code, allowing it to be highly portable across Web servers and operating systems.

Installations and upgrades are simple to perform and once up and running SPS doesn't require any special monitoring or devoted resources in general. The system was designed to require minimal system management and administration.