Platform-Independent, Client-Server



For UNIX, Linux and Windows



Efficiency Opportunities with a Document Management Solution

| | PAGE |
|--|------|
| Position statement: Efficiency opportunities with a document management solution | 2 |
| Technology Statement | 4 |
| UnForm Product Overview | 5 |
| BASE UnForm with Production, Delivery, and Integration | 6 |
| BASE UnForm How it Works / Technical Overview | 7 |
| Document Management Components | 9 |
| Document Management How it Works | 10 |
| For Integrators and Developers, the Graphical Design Tool | 11 |
| Continuing Evolution UnForm 8.0 New Features | 12 |
| Product availability and contact information | 13 |

Efficiency opportunities with a document management solution

SDSI

Document management systems open up the opportunity for organizations of all sizes to increase efficiency. Paper-intensive organizations face what are often hidden costs associated with the time it takes to work with paper files.

The particular ways in which efficiency can be increased, and to what extent, can depend upon a number of factors, some or perhaps many of which are unique to the individual organization or industry the organization operates in.

Finding ways
to reduce or
eliminate the
handling of
paper
introduces
efficiency and
helps streamline
processes,
resulting in lower
costs

If the organization is growing, then it can become difficult to leverage the economic benefits of growth when staffing costs are variable or directly proportional to size, rather than fixed or growing on a gentler sloping curve. Finding ways to reduce or eliminate the handling of paper introduces efficiency and helps streamline processes, resulting in lower costs.

The addition of several other factors can begin to make the argument very compelling for including a document management solution on the short-list of strategic I.T. initiatives for your organization: the potential cost savings from freeing up additional office or warehouse space, the enhanced security possible with encrypted electronic files and password protection, and the benefits that electronic archives present in a disaster recovery scenario.

The evolution of a software package like SDSI's UnForm®, from a laser forms enhancement tool to a comprehensive document production, delivery and management solution, closely parallels the evolution of technology over the last decade. This evolution saw the growth in the availability of low-cost laser printers, the advent and subsequent popularity of electronic faxing tools, and then the pervasiveness of the portable document format (PDF) for the internet-fueled electronic mail revolution.



In the efficiency equation which governs most economic activity, either the relative reduction of a cost input or the relative increase of a productivity output, or some optimal combination of both, results in increased efficiency. Besides quantifying the specific operational benefits to be gained from moving to an electronic document management solution, the investment and maintenance cost of the enabling-solution itself is an integral part of the equation.

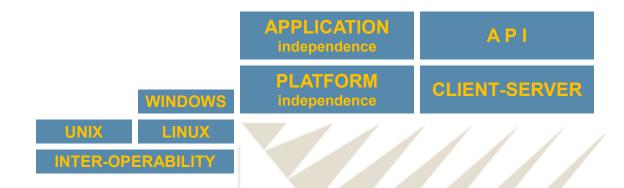
SDSI's **UnForm** document management solution, with it's low price-to-features ratio and its new full-document-cycle functionality, can efficiently integrate with your mainstream application to capture, enhance, deliver, and archive documents in a single operation. It is a solution worth considering if your organization can benefit from incorporating new operational efficiencies into its document-oriented processes. It is a software tool that has, and will continue, to evolve with technology and with the needs of its users.

... Technology Statement

Technology mushrooms. **Platform independence** ensures choices, options, flexibility. Distinct operating systems may do different things better or worse than others. Servers. Workstations. Peripherals. Devices. Drivers. Configuration settings. To the extent components can remain unbound from other components and, at the same time, be tightly and flawlessly configured to communicate with them, is the extent to which independent systems reach that highest form of efficiency known as "**synergy**".



Integrators and developers configure independent software components to work together seamlessly to achieve desired results



Client-Server is a software architecture model. It's the paradigm of separating all operating components of a system into two major logical processes. The process of building and issuing requests (the client), and the process of fulfilling them (the server). The client, being the requestor, often receives back the server output and acts on it. It is a model that is a logical outgrowth of the desire for platform-independence, in the sense that platform inter-operability then becomes achievable within a single network. API stands for Application Program Interface, and it is the language provided by a software component by which other components can interface with it. Application Independence, the quality by which a software component can function with another application without being an embedded part of it, is enabled by the use of API's which allow components to communicate with each other.

Basic technology choices are the focus and foundation for long-term I.T. strategies, just as they drive the technology offerings of software providers. Basing software procurement decisions in large part on underlying technology foundations is how savvy organizations plan for the long-term future and maximize the useful life of technology investments.

Platform-Independent, Client-Server

Document Management Solution

For UNIX, Linux and Windows





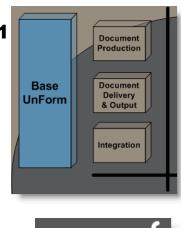
UnForm® is feature-rich software which gives **developers** and **integrators** the tools to transparently and seamlessly integrate **document management** capabilities with existing enterprise applications.

- Enhance forms and reports from any application.
- Print them on compatible network laser printers,
- Display them in PDF format on the desktop,
- Deliver them electronically via email or fax
- Archive them securely in a compressed and encrypted format
- Capture scanned image versions of related documents
- Retrieve archived documents securely and easily using various methods

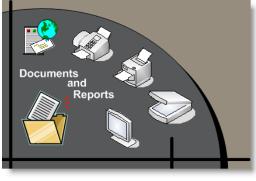
... usually without modifications needed to applications

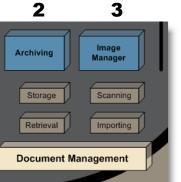
- Eliminate pre-printed forms, and generate professional-looking output, including reports, adding images, logos, signatures, and other graphical elements.
- If desired, eliminate paper-based printing altogether, and consider electronic delivery.
- Optionally, implement an integrated electronic document archiving and retrieval system
 using documents already captured and processed by UnForm, and capture and upload
 images which can be matched with existing archival documents, if needed.

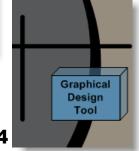
UnForm's four main components, shown numbered at right, provide a structured document management solution designed for both integrated and independent functionality, a high level of flexibility, and higher cost-benefit ratios compared with competing products





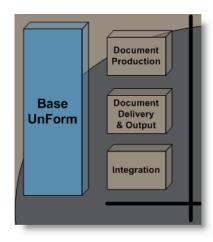






Page 5





At a Glance...

... Base UnForm

UnForm's base features are grouped into three categories: **Production, Delivery, and Integration**.

The functionality represented by grouping it's many base features into these three groups underlines UnForm's **activity-based approach** to document management. It also serves as an outline for understanding, designing and configuring logical, functional and, above all, **efficient** document management systems.

Every UnForm site installs this **advanced technology core** which features a **per-concurrent-print-job licensing model**, ensuring the most economical price for an organization's particular volume of output processing.

With over fifteen years of evolving technology sophistication since its initial release in 1994, **UnForm** is a proven leader in Laser and E-Doc systems when it comes to price-to-features ratio.

With the addition of the functionality provided by the new archiving and imaging components, it is a proven, solid foundation for a complete document management solution.













Document Production

- "Smart" Laser Forms and Reports
- The most extensive and comprehensive graphic enhancement control available
- Logos, Images, Signatures, Watermarks
 - Static Overlay AND Dynamic Content-based features
- BARCODE, MICR
- Dynamic Image Conversion
- Tiled Image Attachments



Document Delivery and Output

- LASER PCL5, POSTSCRIPT | PDF | TIF | GIF | others | ZEBRA
- EMAIL, integrated | MSFAX, integrated | 3rd Party FAX gateway integration
- **DESKTOP** PDF Preview
- Multi-Copy / Multi-Device Control
- Multi-document batch processing control



Document System Integration

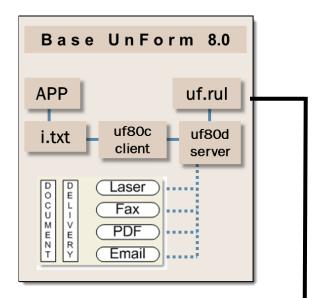
- API for Transparent, Seamless Integration with Applications
- Integrated programming language
- Extensive document-oriented command, internal function and object libraries
- Windows support server software for image conversion, and other auxiliary functions

How it Works ...

TECHNICAL OVERVIEW

Simple For Integrators and Developers to Understand, Configure and Implement

Powerful Control Features



A simple depiction of the Base UnForm flow of processing

Base UnForm

Your application produces text streams for documents and reports, normally routing them straight to a printer. The UnForm client component is configured to intercept the text streams and route them to the UnForm server component. The UnForm server is listening for requests and when it receives jobs, it processes each against a rule file containing the "rules" for how to enhance and process a particular type of job. Text streams not defined in the rule file pass through as text without any enhancement or processing. Defined form or report text streams in the rule file are processed according to "the rules". When the job is complete, the server sends the output to the appropriate destination which is either specified by the client or determined by instructions in the rule file.

Rule File structure and contents

// Rule File //

[Rule Set]

UnForm Commands

{ "Smart Form" Code-Blocks }

Programming Syntax and Constructs Custom Expressions Internal variables Internal Functions A forms configuration text file containing rule-set sections with commands to apply against incoming text streams. Created and easily maintained using the graphical design tool, or using a simple text editor.

For each document or report, or generic report format, a rule-set can be detected or specified.

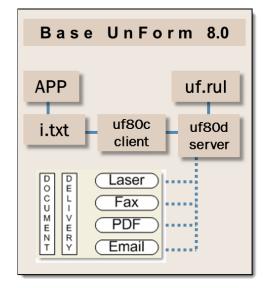
Specific commands and instructions for what enhancements to apply to the incoming text stream, including global or local constant assignments, and expressions.

Code executed before or after a trigger event (Pre- and Post- | Device, Job, Page, Copy)

A rich, easy to program environment with a full library of internal variables and functions for building custom expressions and code constructs to produce documents and reports and deliver them digitally via industry standard vehicles.



- ► UnForm is compatible with most versions of UNIX, Linux, AIX, HP-UX, SUN Solaris, Windows 2000, 2003 and XP.
- ► UnForm easily integrates with BBx, ProvideX, Informix, Progress, Oracle, C, Cobol, UniBasic, Pick, and other development languages.



How it Works ...

TECHNICAL OVERVIEW

- ▶ UnForm uses a form of intelligent document recognition to detect forms and reports from a text print-stream, determining output that needs to be enhanced versus output which passes through UnForm unmodified.
 - This results in a minimum number of system configuration changes to implement UnForm.
 - There is no need to define new printers, or to specify a printer name for each new form.
 - UnForm assumes that your application already prints data in the correct positions on a form, and can add enhancements around the printed text, and also can move or erase application data as needed.
- ▶ UnForm normally is operated in one of two different ways:
 - Via it's client-server API, UnForm uses a rich command line syntax, interfacing with application printer interfaces via the uf80c (UNIX, Linux) or uf80c.exe (Windows) client executables.

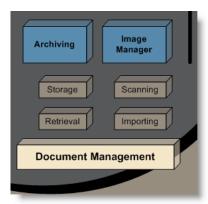
Under UNIX or Linux the executable can be interfaced via **PIPE** or redirection. For example, if an application currently prints to the spooler as:

it can print through UnForm to produce enhanced documents simply by changing the above pipe reference to:

- Via the included TCP/IP port monitor: primarily for Windows Networks, submitting jobs to the UnForm server can be via direct TCP/IP printing, and allows UnForm to be configured as one or more virtual TCP/IP printers.
- ▶ Developers, integrators, and administrators can create rules files using the optional GUI form-design tool, or any text editor, and typical laser forms can be developed in just a few hours.
- ► Smart-form code-block features allow developers and integrators to build cost-effective processing logic into documents. ► Documents can be structured to perform pre-specified tasks such as calculations or data retrieval within the document, before printing or delivery.
- ▶ While most laser forms products offer **static overlay capability** only, UnForm offers that ability, *PLUS* dynamic content-based features. For example, signature images can be added to individual purchase orders based on a buyer code. Words or patterns, such as "TOTAL", can become the anchor points for graphical elements such as boxes, font changes, or shade regions.
- ▶ Any or all copies of a document can be routed to single or multiple recipients or output devices in the same processing cycle.

With its full programming capability added to its many other layout and graphic enhancement features, UnForm is easily the most flexible and powerful document management tool available





Trade documents are the life-blood of an organization's economic activity

Match-up signed or related document images with previously archived source documents

At a Glance...

... the **Document Management** Components

Close the loop on the document life-cycle by using UnForm's new document management components to archive, retrieve, and purge electronic versions of mission-critical trade documents.

Trade documents are the life-blood of an organization's economic activity, so finding ways to more efficiently store, retrieve, and deliver them within the organization's business process and work-flow environment can contribute to the bottom-line in ways that other operational and administrative initiatives cannot.

The Document Archiving & Management, and Image Manager components are both **optional**, but integrate very closely with base UnForm, leaving it up to the integrator to choose a level of integration and customization that makes sense for each unique installation.

This allows the developer or integrator to configure an end-user system profile based on direct need. Organizations do not pay for unneeded, unused functionality. This helps ensure an economical price, maximizing the efficiency equation for individual organizations.



Document Archiving & Management

- Document Archival Storage, Retrieval, and Management
- Rules-based document archive property and index assignment, concurrent with document production and delivery processing
- Fast browser-based or application-based archive document retrieval and presentation
- Multi-segment category indexing, browse function drill-down, and document linking
- Enterprise-Scalable, with a theoretical capacity of over 4 billion documents per library
- Access to archive store, retrieve, delete and list functions from the API, for further integration with existing applications
- Customizable Web form interaction with Rule-sets for WORKFLOW applications



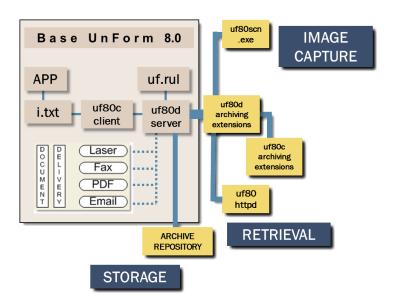
Document Image Manager

Image Capture and Uploading, with batch Scanning & Importing tools

- A Windows application
- Integrated Work Environment for capturing and uploading images or files
- TWAIN-compliant scanning interface
- Multiple property assignment modes for maximum identification flexibility
- Barcode and OCR zone detection and property value assignment
- Match or group images with parent or related archive documents
- Extensibility via VB-Script
- Full-text OCR features
- Customizable operator prompting

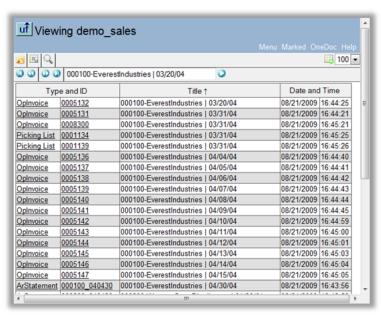
Simple For Integrators and Developers to Understand, Configure and Implement

Powerful Document Indexing and Linking Features For Fast Browse and Retrieval



Document Management added to the system flow

Server and client command extensions enable archiving of jobs already coming through the UnForm data stream.



A "universal" HTML web browser client provides a rich archive retrieval system via CGI, providing secure access from virtually anywhere to compressed and encrypted archive documents, without need for individual client workstation configuration.

How it Works ...

Document Management Components

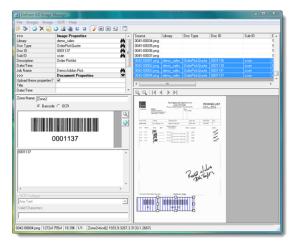
Can be minimally configured with a single interface command to archive all rulefile-defined documents to a single archive library,

OR ...

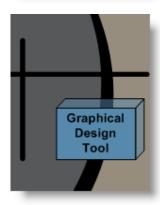
Can be configured for multi-library storage via the simple new rule-file archive command which has full access to the underlying document text, providing powerful customized indexing and meta-data property assignment capability.

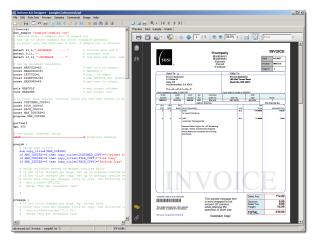
In addition to the rich browser archive retrieval, management, and administration interface provided, both **CGI-URL** methods and client-server **API** methods are available to retrieve archived documents from within an existing application.

The Image Manager component, a Windows client application, is a scanning and importing tool for capture and proper retrieval-indexing of documents external to the UnForm processing environment. For maximum flexibility, images uploaded to the archive can be independently indexed, or can append to a parent document as a sub-image, or can be grouped via custom category assignments. Parent document properties can be updated based on image manager activities for work-flow control.

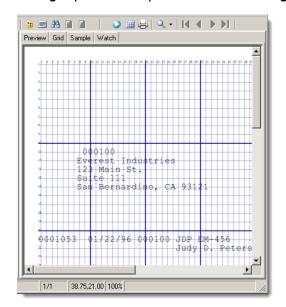








Left-pane: rule-set and command editor; Right-pane: PDF preview of form design



Text-grid preview toggle

For the Integrator ...

Graphical Design Tool

Design and customize the appearance of forms and reports right from your Windows Desktop.

The UnForm Form Design Tool is a Windows-based tool used to design and individualize the appearance of documents from any application. Forms can be created quickly and efficiently right from your desktop, shortening the time to meet your unique requirements.

The Design Tool allows you to customize documents as well as specify the routing process to a variety of digital destinations, including archives. The designer is a tool that's easy to learn and use, and lets you simply point and click and see your results instantly. Editing a logo, address, telephone number, watermark, or even producing a completely new document, can be just a few minutes work with the graphical forms designer.

UnForm and the Design Tool offer a unique **Integrated Design Environment** that uses sample data from your application, UnForm's print server software, and the Design Tool collectively during the form development process. Forms previously created for UnForm can also be edited with the UnForm Design Tool.

Key Features:

- Integrated design environment, with syntax checking and pop-up command editors
- Create rules-driven formats to automate the forms output process
- Deliver documents customized to your requirements via print, e-mail, and fax
- Easy to design and maintain, high-level "smart-forms" processing logic for complex forms
- Drawing for graphical elements for your form based output
- Document preview to review document formatting prior to installation
- Text grid preview for detailed placement analysis
- Easy layout for logos, images, watermarks, graphics and text



UnForm 8.0's new features are shown sideby-side with major capabilities introduced in prior releases.

Existing users and integrators can upgrade to obtain enhancements contained in UnForm 8.0, the latest release of the software.

Customers of SDSI and it's resellers can look forward to frequent updates which expand and refine the functionality of the software.

Continuing Evolution ...

ENVIRONMENT Platform-independent: UNIX, LINUX, WINDOWS Client-server architecture Windows-based SUPPORT SERVER, providing image conversion, ODBC connectivity, access to MSFAX WEW In VERSION 8.0 AFO input - "Application Formatted Output" now supported in addition to traditional raw text file input Support server enhancements for barcodes, improved image handling and zlib compression

OPTIONAL COMPONENTS

- Design Tool: Windows-based IDE providing a Graphical environment for forms development
- Document Archive Storage & Retrieval
- Document Image Manager, including scanning / importing
- sdOffice Integration for Office automation
- Archive Browser Enhancements:
 - Improved navigational interface
 - Faster access to documents
 - Better document delivery options
 - Smarter saved searches
 - Easier mass updates with the library object
 - Web Forms for workflow Apps
- Image Manager Enhancements:
 - Full-text OCR
 - Auto-processing from scripts
 - Dialogue form design tool
 - Server-based job definitions
 - Server upload logging

DELIVERY & OUTPUT

- Laser Forms
 Presentation-quality reports
- PCL-5 and POSTSCRIPT compatible
- Color printer support Adobe PDF, EMAIL PDF
- FAX gateway interface, MSFAX
- BARCODE MICR ZEBRA
- HTML reports Tiled-Images attachment
- Desktop Delivery
 Desktop User forms dialogue
- Streamlined DELIVER functions
- ADDRESS BOOKS
- COVER PAGE generation
- BARCODES: more 2D, ROTATION, and human readable text
- MICR in PDF

CONTROL

- Duplex, Tray, and Bin control
- Multiple unique copies control
- Dynamic output device changes
- Integrated programming language
- Rich function / expression library
- Sub-Job support for simultaneous multiple copy routing
- ODBC connectivity functions
- Multiple types of text file data retrieval
- Multi-page array handling
- Page-insertion

- Library of built-in OBJECTS:
 - library and document management
 - XML reader
 - INIFILE reader
 - HTTP client for web services
 - Address books
 - System command access
- Server-based Database functions
- PDF copy order control

DOCUMENT AND TEXT ENHANCEMENT

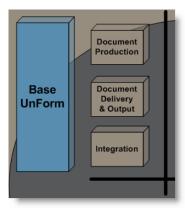
- Font and other attribute changes Erase or move any input stream text - Boxes and lines of any dimension, optional shading and edge-width control
- Angled lines Circle draw Rounded box corners
- Grid options in box drawing Graphical shading
- Case conversion Text additions in any device font/color/size/position Shade regions in any device shade-grade/color Multi-line text handling
- TRUE TYPE FONTS
- UNICODE support for foreign language characters
- Other PDF enhancements:
 - Transparency
 - Linearized/Optimized support in overlay attachments

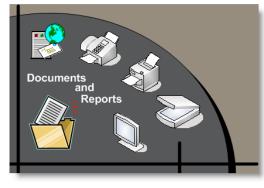
Platform-Independent, Client-Server

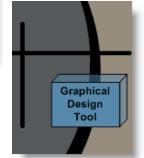
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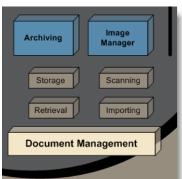


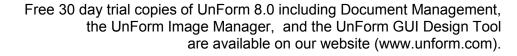












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Synergetic Data Systems, Inc. (SDSI) is a developer of unique horizontal software products for the Unix and Windows marketplace, and specializes in creating productivity-enhancing products for developers and end-users.

Since 1988, SDSI software has been implemented in over 9,000 installations at business organizations worldwide.

For more information or to download demonstration versions visit <u>www.synergetic-data.com</u>

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