

 **SmartSearch Product Overview**



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## Introduction

Designed as a new direction in document management, SmartSearch has quickly become the definition of Document Intelligence for today's business. SmartSearch offers businesses of all sizes a powerful, comprehensive and value driven solution built on the strength of Service Oriented Architecture and the Microsoft .NET platform.

Offered as a workgroup or enterprise product, SmartSearch utilizes the power of Microsoft SQL Server™ to drive the rapid retrieval of documents archived on the network. Through stored searches or content based queries, users can now locate any record in only a matter of seconds.

Once retrieved a document can be annotated, redacted or launched prior to its distribution to other users or outside parties. Easily emailed or faxed, information stored in SmartSearch is now available for others to use in their daily decision making processes. The integrity of annotated documents is always maintained as annotations are stored outside of the image file. This approach has an added benefit of allowing documents written to WORM media to be annotated.

Committed to its adherence of industry standards and open architecture, SmartSearch offers network administrators no restrictions to where records are archived. SmartSearch requires only local, mapped, or UNC drive access from the SmartSearch server for the secure storage of records to your network. Archived documents are now immediately available to users via LAN or WAN or VPN access.

SmartSearch offers options for extending the value of your investment through strategic partnerships with some of the most powerful products on the market including Kofax Capture for image and data capture, eCopy and NSi Autostore for MFP Panel Integration, Biscorn and Castelle for fax management, and Objectif Lune for variable data and conditional print management archival.

## SmartSearch System Design

**Easy to capture, easy to retrieve, easy to share.** This is the philosophy that has driven the development of the SmartSearch solution. While incredibly intuitive, SmartSearch is extremely powerful with a rich feature set that delivers a new level of empowerment to businesses of all sizes.

**SmartSearch Inboxes** – Like the inbox on most desks, SmartSearch Inboxes provide a temporary and secure repository for documents prior to being indexed into the database. Users may create a shortcut on their desktop to easily drag and drop records into SmartSearch or scan images directly for future archival.

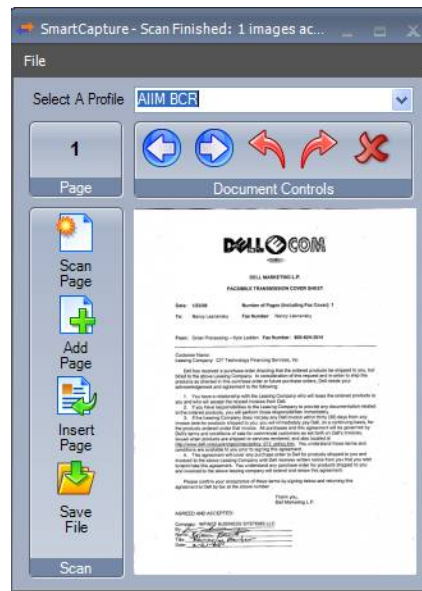
**Archives** – Easily created for the individual needs, these secure repositories provide the structure of a standardized naming convention. As the personalized filing system is being built, SmartSearch provides users with a catalog of common data fields such as Invoice Number, Invoice Date and Invoice Amount for a standard payables application. In addition, custom fields can be easily created to meet the unique filing requirements of any organization. Each archive becomes a secure residence for records with its own index structure designed by the system administrator.

## Capturing Documents

**Scanning** - The world of scanning continues to evolve and SmartSearch has evolved with it. The days of dedicated scanners being the only means to capture images have passed in the modern office. SmartSearch gives business owners the flexibility to utilize their network connected copier, multifunctional product (MFP) or any other device that can send an image to a network directory. Simply scan documents directly into the SmartSearch Inbox from any device where they can be viewed, forwarded to another user, or indexed into an archive,

The SmartSearch ScanCapture module provides integrated Twain based scanning for direct capture into an Inbox or Archive. ScanCapture provides powerful tools for capture automation through Capture Profiles. The Capture Profiles allow

users to script and automate their scanning jobs through Image Enhancement, Barcode or Blank Page Separation, Zonal OCR, and Bar Code Recognition.

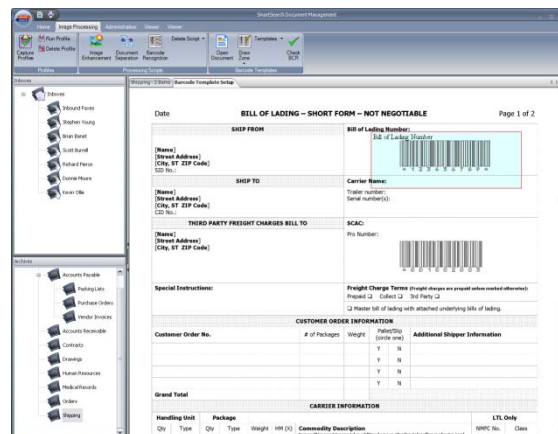


**Image Enhancement** -Delivers the ability to De-speckle, Auto Crop and De-skew captured documents for better image quality.

**Document Separation** - Provides the ability to separate documents based on the presence of either a barcode or a blank page. With Document Separation you can also automatically rotate documents choose to delete the separation page and choose a blank page percentage.

**Barcode Recognition** – Allows administrators to create zones where bar codes are read and the data is used to index documents automatically to a specific field. This can be specifically useful if automating the indexing process.

**Zonal OCR** – Create easy to use OCR based templates to extract data from images with consistent data structures and further automate your indexing processes.



**Drag, Drop and Describe** – The easiest way to introduce records into SmartSearch. Simply drag a file into SmartSearch from any file source including emails and/or their attachments. Drag to an Archive and SmartSearch immediately prompts you with the fields you need to file away your secured record.

**Import Documents** – SmartSearch provides an easy to use import utility to import bulk records into an Inbox or an Archive. When importing to an Archive, users can pre-index documents with descriptors at the group level.

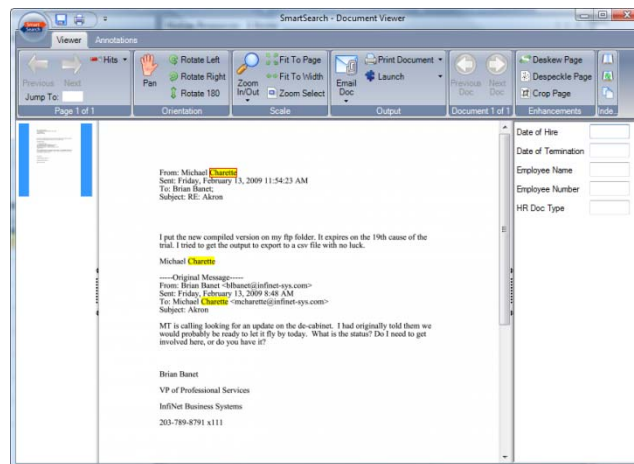
## Retrieving Documents

**Stored Searches** – The strength of SmartSearch lies with in creating document intelligence. Once a document has been archived, Stored Searches allows users to unleash the power of Microsoft SQL Server 2005 to put them at their fingertips in seconds. SmartSearch Stored Searches are easily accessible by simply right clicking the document archive.

Creating a stored search requires no special level of training. Simply choose the field to search on, choose the operator (contains, equals, etc) and a prompt for the user. SmartSearch empowers users with the ability to combine several search criteria in a single search allowing for the precise delivery of exactly the document they are looking for.

**SmartSearch Content Search** - Document retrieval can be further enhanced through the addition of the SmartSearch Content Search module. Content Search provides powerful capabilities for searching for key words within any text based document including Text Based PDF, Word, Excel and Outlook to name a few.

Users can create simple word searches or more complex queries using tools for Boolean, phrase based, and proximity searching. SmartSearch Content Search supports stemming, phonics, wild card and fuzzy based searching with the ability to combine the use of several features within a single search.



## Working with Documents

Once a search has been performed, users can sort the results simply by selecting a field and clicking on it. The resulting field layout can also be re-structured by dragging a column of data to a new position or order.

The results of an executed query can also be copied and pasted into Excel or any other spreadsheet product for further analysis or distribution.

**Viewing** – Users simply select the document or documents they wish to see and open them for viewing. Users can tab between multiple documents by clicking to the next record in the viewer. Several other options are available to customize document viewing.



- Multi-page documents are viewable with thumbnail viewing
- Documents can be viewed to fit the page or to fit the width of the document
- Documents can be viewed with the image only or along with their related index data

**Launching Documents** – SmartSearch supports the storage of virtually any document type with the ability to launch it back into its native application for editing (with the proper permissions). Users may choose to launch the original for editing or launch a copy which preserves the original version.

**Reordering Pages** – Reordering pages is a simple process through SmartSearch’s drag and drop functionality. Simply click on a thumbnail and drag it to the correct position. Reordering pages is only available to users with the rights to modify a document.

**Deleting and Inserting Pages** – With the proper permissions, users can cut or delete pages from a document from within the viewer. Pages can also be pasted into a record or dragged into a document from an Inbox, email attachment, or from a directory within the file system.

**Annotations** – The ability to work with electronic documents the same way paper documents are worked with is critical to the adoption of document management technology. Upon review of a document, users may add a post it note, highlight a body of text or embed an image file (such as a signature).

**Redaction** - In addition, users can add another level of security by redacting document content the same way they do now with their trusted felt tipped marker. Instead of copying a record, blacking out sections and faxing it, users can now securely redact it and then email the record as a PDF or directly fax it right from the desktop.

**Stamps** – Add stamps to documents marking them as Approved, Cancelled, Confidential, Paid, Personal, Urgent or your choice of more than a dozen different labels. With the Received On selection, the document is automatically flagged with the Date and Time embedded directly within the stamp.

**Embedded Signatures** – A unique feature of SmartSearch lies within its ability to embed a scanned signature into a stored record. During setup, the SmartSearch administrator assigns a scanned image of the user’s signature to their account profile. This image now becomes a secured asset which may only be accessed by that user.


Documents residing within either a SmartSearch Inbox or Archive may now be signed by the user with ease by simply selecting Embed Signature. The user then simply draws the area where the signature will reside and the image file is automatically embedded. As an added security feature, users with the appropriate permissions may “burn” the embedded image into the document making it a permanent part of the record.

## Document Distribution

**Print** – Select a single document or multiple records from the query results screen and print them through any network or local printer. Documents open in the viewer can also be printed with ease with or without their annotations.

**Email** – SmartSearch supports the Microsoft Outlook client for standard email distribution. Select a group of documents from a query result or a single document from the viewer and email them with a single click. SmartSearch automatically renders the documents to PDF format for email delivery on the fly. There is no need to have Adobe Acrobat installed to utilize this functionality.

**Fax** – Retrieved documents may be faxed directly from the desktop with any standard Windows fax driver. For light fax usage, the resident fax driver in a copier or multifunctional product can be utilized to send and receive faxes. For heavier fax demands, SmartSearch can be used with most standard fax servers including Castelle and RightFax.



SmartSearch receives faxes from virtually any fax server which supports dropping inbound faxes to a network directory. This allows you to deliver faxes to a single Inbound Fax destination or to the Inbox of an individual user if you are using multiple lines or PBX integration.

**Export** - The open architecture of SmartSearch means that stored data and documents are always available. Should the need ever arise to export the data or documents, SmartSearch's export utility provides the option for both. Data is exported to a standard CSV format for easy import and images will be provided in their native format. When selecting the option to export both data and documents, a pointer from the data to the image is provided to allow for import into third party applications.

## Integration

**Image XChange** - Image XChange enables SmartSearch users to seamlessly integrate their SmartSearch Archives with most any line of business system. Using GDI hooking technology, users can search the SmartSearch Archives using one or more values right from any window they are viewing. Any text based value contained within the header, body or caption of the application can be used to run a search against the SmartSearch Archives, effectively image enabling your line of business application without the complexity or expense of standard integration.



To leverage the power of Image XChange:

Simply click Image XChange system tray icon and select a desired search from the list which has been pre-defined within SmartSearch.

Place the cursor over any text value, select the CTRL + right click, and the document search results set are displayed. (Or the content can be automatically loaded into the document viewer.)

No Programming Required – Image XChange achieves integration without the need for time-consuming programming, scripting or any modification to your line of business application. This allows organizations to integrate multiple applications at a fraction of the traditional integration costs.

Full SmartSearch Functionality – Documents accessed through Image XChange have the full functionality of the SmartSearch client including the ability to launch, print, email, enhance, annotate, redact, and edit documents.

**XML Transform** - The SmartSearch XML Transform is an XML formatting utility designed to facilitate automated import and indexing of data and documents into SmartSearch ECM. The power of XML Transform is its ability to format virtually any XML data into a format that may be imported both easily and automatically into SmartSearch. With this ability, any document capture device or software solution that can generate images with a corresponding XML file can integrate directly into SmartSearch with very little effort.

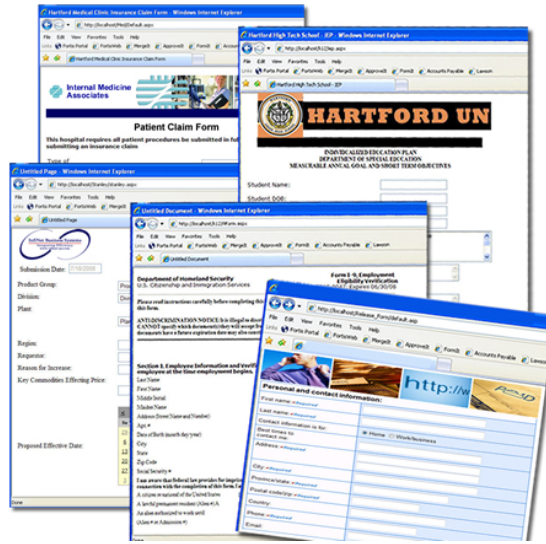
The power of XML Transform is in the use of external XSL (Extensible Stylesheet Language) files that can quickly be tuned and customized to work with any XML output. This allows SmartSearch to integrate with most digital on-ramp connectors like ScanFlowStore, DigiDocFlow, Simplify Scan, eCopy, NSI AutoStore and ScanTag.

Remember that XML Transform is not limited to just these sources. Anything with the ability to generate images with XML data can be managed. Simply create a new XSL file to handle the conversion, or contact Square 9 Softworks for support on developing additional XSL transforms.

## FreeForm

FreeForm adds eform capabilities to the SmartSearch document management system. Now a simple web or PDF form can populate transactional PDF documents on the fly, provide validation, dynamic form creation based on variable data, feed other line-of-business systems and import into the SmartSearch document repository via XML.

Freeform ends the practice of entering the same data into multiple forms while it eliminates the processing of manual forms all together. Data entered within a browser based form or PDF can be seamlessly imported into SmartSearch document management as well as generate custom email notifications for ad-hoc workflow. Data entered into the form is validated, error checked and automatically rendered to a physical electronic document and then disseminated to decision makers, knowledge workers and/or customers with no manual intervention.



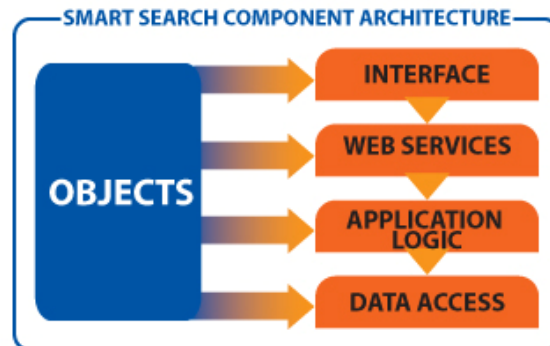
The FreeForm interface can be deployed and configured in multiple ways – either as an ASP.Net web form or PDF form exposed via the web. Depending on the requirements, the Square 9 Professional Services team will recommend the best solution. Included in the FreeForm package are the following components;

- Web Form Development - based on an existing PDF, Word Document, Excel Spreadsheet or custom created form
- FreeForm Engine- component to accept the form data, rips it into a PDF and Initiates the following add-on capabilities:
- The ability to automatically or manually save the PDF generated form to a network location accessible to SmartSearch or any other DMS (document management system) for import.
- The ability to send an email alert to multiple recipients notifying them of a document's arrival.
- The ability to send a copy of the PDF to email recipients as an attachment.
- The ability to add a bar code to the output PDF file.
- Use our custom web or PDF forms or create your own and dynamically merge form data with electronic based document overlays.

## SmartSearch System Architecture

**SmartSearch is SOA** – SmartSearch is based on Service Oriented Architecture (SOA) built on Microsoft's .NET 3.5 Framework. SOA is quickly becoming the defacto-standard for building distributed, scalable applications that mesh seamlessly with other business processes. SOA is a fundamental shift in application development, separating interfaces from business logic, allowing for cross application access to your critical business data.

SmartSearch's core infrastructure is Web Services. This approach allows SmartSearch to be extremely scalable, accessible, and secure. The following diagram illustrates the SmartSearch application architecture.



**SmartSearch is Smart Client** – The nature of SmartSearch's SOA based architecture allows for a vast array of client interfaces. While developers may choose to use the SmartSearch foundation as a platform to integrate Document Management functions into core business applications, great effort has been put into the SmartSearch interface which is delivered in the form of a Smart Client.


Unlike web browser applications which simply cannot deliver the robust experience users demand from a document management application, the Smart client delivers a full featured interface. Web applications are easy to develop, but offer limited functionality, can be difficult to navigate and are harder to maintain. It is frequently argued that a browser approach outweighs the complications seen when using a traditional desktop application with its various deployment issues and a heavy client footprint. We agree; but there is a better way.

*SmartSearch is a Smart Client.* The power of the Smart Client is clearly visible by combining an extremely rich user experience into an easily deployable and responsive application interface. In this manner SmartSearch delivers unmatched ease of use and support; both critical factors to small, medium and enterprise markets.

## Security

The SmartSearch security model, like all other components, is designed with simplicity and ease of use in mind while optimizing system performance. Because of SmartSearch's service based architecture, access to both data and documents is restricted and controlled by SmartSearch itself. No user ever needs direct access to the database or to any SmartSearch document store.

When a SmartSearch client authenticates to the SmartSearch server, all access is internally controlled by the permissions granted through the SmartSearch administrator interface. The server retrieves both data and documents on behalf of the user without the user ever directly touching this information from a network share or other network access protocol. When document and data objects are access on behalf of the user, Audit Log entries are made in SmartSearch's Document



History tables providing for a full account of all user actions taken within the system. SmartSearch requires no mapped drives, no file sharing ports opened, and administrators can implement transport layer encryption via SSL if desired.

### **Active Directory Integration**

SmartSearch is tightly integrated with Microsoft Active Directory. Permissions in SmartSearch are based on what Active Directory groups a user is a member of. Since not all customers take advantage of Active Directory, SmartSearch can also be bound to the local groups of a Windows 2003/2008 Server, or a Windows XP Professional workstation. Prior to setting up security in SmartSearch users should have domain or local user accounts and should be members of user groups in the Active Directory, or on the SmartSearch server, that have been created to logically organize the permissions in SmartSearch.

### **Administrative Functions**

When SmartSearch is installed, it will attempt to create a domain user called ssAdministrator. The domain ssAdministrator user will be added to a group, also created at installation time, called SSAdmin. SSAdmin and the ssAdministrator will be created in the Users organizational unit if there is an Active Directory. If there is no active directory, or the installation was performed by a non-administrator user, SmartSearch will be setup to use a local ssAdministrator user and SSAdmin group.

To perform any administrative functions, your user account must be a member of the SSAdmin group. Either create a user for this purpose and log into Windows as that user, or ensure the user you are logged into Windows with is in the SSAdmin group

### **Client Access**

When a SmartSearch client authenticates to the SmartSearch server, all access is internally controlled by the permissions granted through the SmartSearch administrator interface. The server retrieves both data and documents on behalf of the user without the user ever directly touching this information from a network share or other network access protocol.

When document and data objects are accessed on behalf of the user, Audit Log entries are made in SmartSearch's Document History tables providing for a full account of all user actions taken within the system. SmartSearch requires no mapped drives, no file sharing ports opened, and administrators can implement transport layer encryption via SSL if desired.

### **Security Levels**

Within SmartSearch, both Inboxes and Archives can be individually secured.

**Inboxes** – Each Inbox in SmartSearch can be secured with Modify, Delete, and View access rights. “Add rights” to a SmartSearch Inbox are not controlled since Inboxes were intentionally designed to support adding files outside of the application.

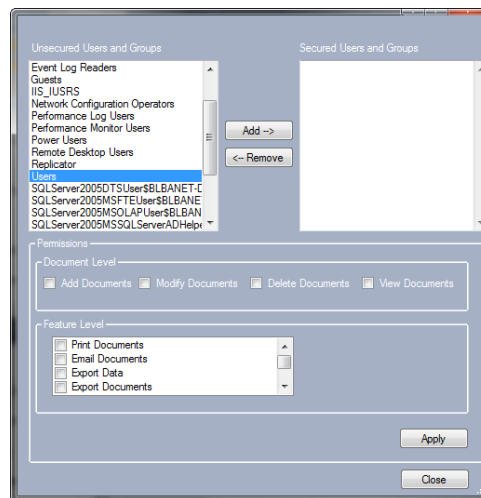
**Archives** – Like Inboxes, each separate Archive can be individually secured including child or “nested” archives. Add, Modify, Delete, and View permissions are available at the archive level. Users can not add documents to a SmartSearch archive outside of the application. Exceptions to this rule are made when using third party capture applications.

**Feature Level Security** – The SmartSearch administrator may grant or remove feature level securities for users at the archive level. This allows the user to have access to a record while limiting what actions can be performed with it. Examples of feature level securities include the ability to Print, Email, Export Data and/or Documents and Launch records.

**Document History** – SmartSearch provides full Audit Trail functionality in its core product offering through the Document History feature. With this feature it is possible to view the history of a record including views, prints, emails, launches and exports to name a few. Document History can be run against a single record, the results of a query or at the Archive level.

## Permissions Window

After clicking the security button to access permissions for either Inboxes or Archives, the Permissions Window will be displayed. All permissions for an Archive or an Inbox are configured here.



Use the Add or Remove buttons to add or remove groups from the secured list of users. Only groups in the Secured Users and Groups section will be allowed to access a SmartSearch resource. With a group selected, set the desired Document Level and Feature Level permissions desired for that group.

## Document Level Permissions

SmartSearch allows documents in an Archive to be secured at 4 different levels:

- **Add** - A user can add documents, but once added, no changes may be made. Add permissions imply view permissions as well.
- **View** - A user may only view documents. No changes to data or documents are allowed.
- **Delete** - A user may delete documents from an Archive. Delete permissions imply view permissions as well.
- **Modify** - A user can modify data and/or the document itself. Modify permissions imply view permissions as well.

## Feature Level Permissions

In addition to Add/Modify/Delete/View rights, SmartSearch can also control what functions a user can perform on a document they do have some level of permissions on. Note that all permissions are off (the most restrictive) by default.

- **Print Documents** - Allows a user to use the Print functions from the Document Viewer or Results Grid.
- **Email Documents** - Allows a user to email documents from the Document Viewer or Results Grid.
- **Export Data** - Allows a user to use the [Export Data to Excel](#) function.
- **Export Documents** - Allows a user to use the Export Docs function.
- **View in Acrobat** - Allows a user view any document in SmartSearch within the native PDF file viewer on a workstation.
- **View Document History** - Allows a user to view the Audit Trail of a document or an Archive.
- **Run Scripts** - Allows a user to manually run any scripts defined for [Image Processing](#).
- **Administrate Scripts** - Allows a user to add/modify/delete any Image Processing Scripts that have been created.
- **Launch Document** - Allows a user to use the Launch Document feature.
- **Launch New Version** - Allows a user to use the Launch New Version feature.



## Partner Products

With its ease of integration with third party products through the XML Transformer, SmartSearch can easily be used to create advanced solutions with industry leading components for image capture and data extraction.



### Kofax Capture

Kofax is the world's leading provider of information capture solutions. No other company has the same global reach, depth of experience, or breadth of technology devoted to capturing vital business information -- from VRS (Virtual Rescan®) and Adrenaline® for maximizing scanning productivity and quality, to the powerful Ascent® platform for automatically transforming documents and forms into retrievable information.

Together, Kofax products form the Operating System of Capture -- an open platform that accelerates your business processes by:

#### **Transforming data and documents into information.**

Kofax provides an open, customizable platform for extracting, authenticating, classifying, indexing and validating information so you can find it again when you need it. Through the use of Forms Recognition, Optical Character, Intelligent Character and Mark Sense Recognition, Kofax takes capture into SmartSearch to a whole new level.

#### **Delivering information into your business systems.**

Kofax products connect seamlessly to the SmartSearch database or other information repositories, simplifying the delivery of information into your important business applications.

Most information capture needs can be met right out of the box, dramatically increasing the productivity of the SmartSearch solution and maximizing the quality of the captured information. For more-demanding environments, you can extend our applications with custom modules tailored to meet your exact requirements.



### PlanetPress - Variable data printing made easy

PlanetPress eliminates the need for pre-printed forms and impact printers by allowing you to move your printing to more efficient laser printers. It also allows you to "image" these documents while they are being output and have them automatically indexed into the SmartSearch database.

The PlanetPress Suite is a complete integrated software suite that allows for easy creation of variable content documents with the added benefits of offering advanced automated workflow and output management features. Through its direct integration with the SmartSearch Document Management suite, PlanetPress enables you to re-structure your print output to your specific needs, render it to TIF or PDF and deposit the resulting image into SmartSearch fully indexed based on data you select from within the document. Without human intervention PlanetPress will distribute and file thousands of business records such as invoices, statements or packing slips to name a few.



With the addition of eCopy to the high-speed scanning capability of an office copier or scanner, any organization can transform paper documents into information that is easily integrated into all business applications. eCopy provides simple, easy-to-use solutions for extending the use of the office copier, while enabling customers to leverage their investment in their corporate network infrastructure.

eCopy ShareScan OP connects the copier to an organization's e-mail, desktop, and other networked enterprise applications for low-cost, easy, instantaneous distribution and management of paper-based information. The superior Administration Tools are preferred by Information Technology (IT) managers and Management Information Systems (MIS) professionals in companies of all sizes.

Bundled with eCopy ShareScan OP, eCopy Desktop is an easy-to-use PDF creation and image editing solution offering a comprehensive set of tools including annotation, stamps, an optical character recognition (OCR), to allow business users to work with and distribute scanned documents as part of their existing electronic workflows.

**NSI AutoStore** - AutoStore Workflow is a full-service document capture software for companies that want to better manage their paper and electronic documents while improving productivity, security and compliance. Capture print or electronic documents, process them into various digitized formats, and then route them to virtually any destination.

- AutoStore works with any device capable of scanning documents regardless of type or manufacturer.
- AutoStore is designed to capture both print and electronic documents.
- AutoStore workflows can be set up from a central location and then accessed from multiple locations on multiple devices.
- No other document capture product is as intuitive, easy-to-use and as powerful as AutoStore.

## Contact Us

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