Edoctus Document Center

## Introducing Edoctus™

Looking for documents is often like searching the ocean for a message in a bottle… the message is safe and sound but lost in a sea of information. It may be a speck on the horizon or washed ashore in the waves.

Edoctus can help. Edoctus can be your radar… providing you with an unprecedented ability to find and retrieve documents in safe, secure, and easy to use environment. It can also be your looking glass… giving you finely detailed information on a specific document or entry.

Edoctus provides powerful features for categorizing and indexing information, and powerful search tools to find information stored within its repositories… all from a convenient, web based portal.

Edoctus is a powerful, document management system that provides document storage, routing and retrieval, scanning, workflows, and full text search in a elegant, straightforward, scalable, and flexible and affordable package. Edoctus is unique in the imaging and document management market: a resolution to organizational document and information management requirements that provides ease of use, high end document management functionality, robust security, and extensibility without an unapproachable level of expense of acquisition, training and server upgrades required to support it.
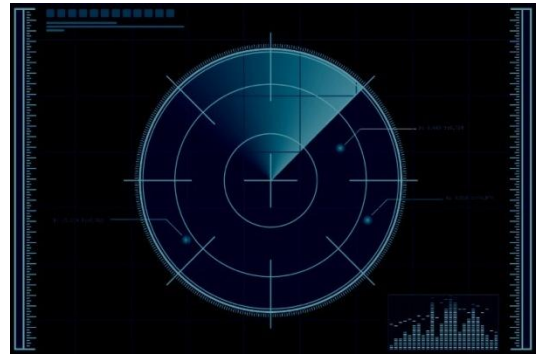
Where Did Edoctus Come From?

Edoctus was designed by former government and industry CIOs and software industry executives. They considered their own experience, and took notice of the common complaints about Imaging, Document Management, and Workflow Systems: The upfront costs were too high, learning curves too long, changes were very difficult or impossible after the initial configuration, and once the volume of documents increased, system performance and responsiveness degrades to an unacceptable level.

Premirus and its team set out to resolve these issues… and the result is Edoctus Document Center. It addresses each of these issues, providing an elegant solution to electronic document management and development of workflows in a highly scalable, robust, and secure framework.

Edoctus Key Concepts

Edoctus provides a powerful infrastructure for the storage and retrieval of documents. An Explorer-like file cabinet and folder system can be used to organize documents, and documents of related types are stored in easy to navigate document libraries. Using Edoctus as a document management solution is as simple as using a file room... most of the same concepts apply. When you use a file room, you organize it in a logical way so that you can easily find documents. Edoctus works exactly the same way.

When you organize a file room, you place related documents in folders, and then you organize those folders in a file cabinet. For instance, in an accounting office, you might have an accounts payable file cabinet with one folder for each vendor containing contracts and invoices from that vendor. In Edoctus, the system administrator creates file cabinets and folder types to go in those file cabinets. Each file cabinet contains a single folder type. This is similar to the way you would organize in an office... you would not mix accounts payable files with client files or accounts receivable files, instead you would group them by type in separate cabinets (or separate drawers in a small office).

When you enter Edoctus, you will see a welcome screen with a functionality menu on the left and statistical information and helpful tips on the right. The tips shown explain various ways the system allows you to search for specific information and is displayed in the main body of the screen. Edoctus provides complete access to all functionality from this screen. All of your organization's records are at your fingertips... and accessing that information is quick and easy once you have a basic understanding of how the system operates.

On the left hand side of your Edoctus window there is a menu bar that provides access to the functionality provided by the Edoctus system. Many of the items are expandable, and if you click on the different items, such as "Favorites," "Edit Functions," or "File Cabinets" you will see that additional items appear. Depending on your level of access to the Edoctus system, as set by your organization's Edoctus administrator, you will see different choices on the Edoctus menu. Items that you do not have access to will not appear in your menu.

Indexing and Properties

The secret to effective document management is indexing. Edoctus provides powerful tools to index your documents, allowing the administrator of each Edoctus system to fully define the index fields. For each document and folder type, the administrator can create a set of index fields and define the data types of those fields (dates, numbers, text data, etc.). Pre-defined lists of values can also be created, allowing users to select the values for an entry from a drop down.

Full Text indexing of documents within the Edoctus repository is also available. Using full text indexing, the user can locate documents in the system that contain words or phrases anywhere within those documents. Unlike simple full text indexing engines, the Edoctus system provides complete context and location sensitive search capabilities, including synonyms, phonics, proximity, fuzzy logic, and other advanced search functions.

Users searching for folders or documents are provided intuitive, easy to read search results that make sense. Edoctus makes it easy to tell what you have found, whether it is a folder or document, by using file room motifs and logical arrangement of information.

Scanning and Document Processing

Edoctus provides complete scanning capabilities out of the box, including compatibility with most off the shelf scanners from a wide variety of manufacturers. Several powerful image processing functions are also provided, including deskew, despeckle, edge detection, border cropping, blank page detection, rotation, conversion from color to black and white or grayscale, and many others.

Barcoding and Advanced Routing

Edoctus supports the use of barcoding for document classification, routing, and in-depth workflows. Barcodes can be used to define documents, automate batch scanning processes, enable pre-indexing solutions, and populate fields.

File Format Support

Edoctus provides support for any file type that can be stored in the Windows operating system. This includes not just images, but word processing documents, spreadsheets, emails, or any other information that needs to be retained and managed. Edoctus provides full text search capability on a wide array of document types as well. The supported document types for full text are listed in the Feature Matrix.

Workflow

Workflow is the movement of a document or task through a work process. A simple example of this concept is the receipt of mail at most organizations. Mail is brought by the mailman, and then someone opens the mail, stamps it with a received stamp, and then forwards the item to the correct person or department. This is a workflow… a document is received, processed, and forwarded for further processing. In most organizations, however, this would just be the beginning of the workflow, as each document or document type would have a different process associated with it. Checks would be routed to accounts receivable, credited to invoices, and deposited. Bills would be routed to accounts payable and queued for payment after verification of validity.

Support for workflow is an integral part of document management and imaging software. Edoctus supports two types of integrated workflow, automated and manual. Manual workflows are workflows in which a user interacts with the system and creates tasks for themselves or other users and routes documents to users for processing. Edoctus directly supports manual workflows from within the user environment, allowing workflow enabled users to interact with documents and each other with simple, intuitive actions.

Automated workflows are those that have been integrated into the system and cause documents to be routed and tasks to be created in an automated fashion. Edoctus supports automated workflows through the Praecipia™ Rules Engine, a component that provides administrators with the ability to define automated routing and task patterns.

In most organizations, workflow is comprised of a combination of manual and automated flows. Specific automated flows may be defined for standardized flows, with interaction and discussion occurring on documents as part of the standardized flow or as part of a specialized activity or group of activities that are defined ad hoc as the document progresses through the organization.

Application Integration

Edoctus is both a powerful repository of documents accessible by both individuals and other applications and a powerful workflow and information asset management tool that can be utilized as a point of connection and hub of activity, integrating multiple applications, individuals, and organizations from a single point.

Edoctus provides an open Application Programming Interface (API) for use in integration with other applications. All functionality of Edoctus may be accessed from standards based web services, and Edoctus' workflow engine can be used to provide complete, event-driven interfaces and interaction between Edoctus and other applications.

Ease of Deployment and Management for Information Technology Staff

Edoctus is based on a scalable, high performance web based application architecture. This infrastructure is designed to provide a high level of performance and scalability with minimal complexity. Edoctus may be deployed on a single server, clusters of servers, or in multi-tiered deployments with functions distributed across multiple clusters of servers.

Client interface components are distributed entirely from the web server, and zero touch deployments are fully supported. Edoctus peacefully coexists with other applications in your environment, and will utilize standard scanner drivers from a wide variety of manufacturers. Upgrades to client components are simple... installation of the client upgrade on the server will distribute that client to all user workstations with no further intervention from the IT organization.

Edoctus will become an integral part of your users' daily routine, but it will not become a source of pain for your IT management organization. Zero touch deployment, automated management, server scalability, standards compliance, and use of industry standard infrastructure such as Windows 2003

Server and Microsoft SQL Server 2005 keep the level of effort from IT staff at a minimum while providing the user community with a powerful and intuitive service.
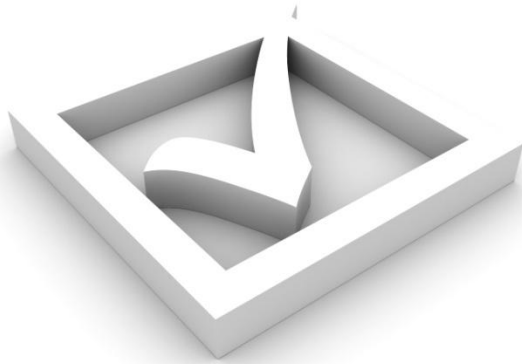
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Feature Matrix

Capture

- Integrated scanning and image processing
- Images may be scanned individually or in bulk processes
- Documents may be scanned on loaded from file system
- Multiple processes may be applied during scanning
  - Deskew
  - Despeckle
  - Blank page removal
  - Black box detection and removal
  - Crop
  - Rotate
  - Noise removal
  - Bit Depth/ type conversion (grayscale to black and white, color to grayscale, etc.)
  - other processes added by API extension
- Barcode recognition for bulk document processing
- Barcode cover sheets and labels may be defined and generated from within the system
- Efficient architecture allows for concurrent indexing and scanning or separated (both by time and by location) indexing and scanning
- Support for multiple document acquisition methodologies
  - Pre-indexing- entering indexing information and bulk processing documents
  - Concurrent indexing- entering index information at the time of scan
  - Post-indexing- indexing documents after they have been scanned
- Split indexing-partial indexing and routing with barcodes with additional information entered after scan or later in the workflow process
- Drag and drop zonal OCR recognition
- Automatic upload and storage of file system objects
- Broad based support for a wide variety of scanners
- Support for any image acquisition device with industry standard TWAIN driver support
- Automatic indexing, classification, and routing of documents in bulk acquisition scenarios, with either barcode or file system support
- Append or insert additional pages into existing documents

Document Type Support

- Can accept and manage any document type, including but not limited to
  - Adobe Acrobat (*.pdf)
  - Ami Pro (*.sam)
  - Ansi Text (*.txt)
  - ASCII Text (See note 3)
  - ASF media files (metadata only) (*.asf)
  - CSV (Comma-separated values) (*.csv)
  - DBF (*.dbf)
  - EBCDIC
  - EML files (emails saved by Outlook Express) (*.eml)
  - Eudora MBX message files (*.mbx)
  - GZIP (*.gz)
  - HTML (*.htm, *.html)
  - MBOX email archives (including Thunderbird) (*.mbx)
  - MHT archives (HTML archives saved by Internet Explorer) (*.mht)
  - MIME messages

  - MSG files (emails saved by Outlook) (*.msg)
  - Microsoft Access MDB files (*.mdb)
  - Microsoft Excel (*.xls)
  - Microsoft Excel 2003 XML (*.xml)
  - Microsoft Outlook/Exchange
  - Microsoft Outlook Express 5 and 6 (*.dbx) message stores
  - Microsoft Rich Text Format (*.rtf)
  - Microsoft Word for DOS (*.doc)
  - Microsoft Word for Windows (*.doc)
  - Microsoft Word 2003 XML (*.xml)
  - Microsoft Works (*.wks)
  - MP3 (metadata only) (*.mp3)
  - Multimate Advantage II (*.dox)
  - Multimate version 4 (*.doc)
  - OpenOffice 2.x and 1.x documents, spreadsheets, and presentations (*.sxc, *.sxd, *.sxi, *.sxw, *.sxg, *.stc, *.sti, *.stw, *.stm, *.odt, *.ott, *.odg, *.otg, *.odp, *.otp, *.ods, *.ots, *.odf) (includes OASIS Open Document Format for Office Applications)
  - TAR (*.tar)
  - Treepad HJT files (*.hjt)
  - Unicode (UCS16, Mac or Windows byte order, or UTF-8)
  - WMA media files (metadata only) (*.wma)
  - WMV video files (metadata only) (*.wmv)
  - WordPerfect 4.2 (See note 3) (*.wpd, *.wpf)
  - WordPerfect (5.0 and later) (*.wpd, *.wpf)
  - WordStar version 1, 2, 3 (*.ws)
  - WordStar versions 4, 5, 6 (*.ws)
  - WordStar 2000
  - Write (*.wri)
  - XBase (including FoxPro, dBase, and other XBase-compatible formats) (*.dbf)
  - XML (*.xml)
  - XSL
  - XyWrite
  - ZIP (*.zip)
  - Excel
  - WordPerfect
  - Images
  - Powerpoint
  - Text
  - AutoCAD
  - Sound and Video Files

- Money
- Percentage
- Integer
- Number
- Hyperlink
- Boolean (yes/no)
- Drop-down list
- Folders may be indexed by any combination of index fields
- Documents may be indexed by any combination of index fields
- Index fields may be repeated on individual documents or folders (for instance, two last names)
- Integrated field validation
- Required fields, field validation, and required value ranges may be specified by rule

- Most document types supported for OCR and full text indexing. All document types listed above may be full text indexed.
- Documents may be converted from tif to pdf, limited to a specific page or group of pages, or otherwise processed at time of download

Document Management

- Integrates imaging and records management into the document management infrastructure
- Automated OCR (Optical Character Recognition) of documents
- Manage any type of file, including native application formats, images, text, and multimedia.
- Intelligent OCR engine maximizes effectiveness of OCR
- Fuzzy search specification for retrieving results, even with OCR errors
- Automated full text indexing of documents
- Document Retention and destruction requirements may be enforced by rule
- Detailed definition for archivability or destructability supported
- Non-proprietary storage formats
- Searching and custom reports for limiting cost of misfiling or incorrect indexing limit the cost of document loss
- Document repositories may be located on any network volume
- Maximum capacity, rollover, and usage prioritization of document repositories may be specified
- Support for offline volumes and archive volumes
- Complete support for lossless (low compression) or lossy (High Compression) document storage
- Email documents stored in a highly compressed format using industry standard zip technology

Reporting

- Integrated reporting infrastructure
- A wide array of pre-defined reports are provided
- Automatic formatting of user defined reports using style sheets and transformations
- User defined style sheets for report formatting are supported
- Direct reporting on the database using Business Objects, SQL Server Reporting Services, or other reporting engines
- Indexing and Repository Structure
- Structure of repository completely user definable
- Index fields are user defined
- Multiple data types for fields supported
  - Text
  - Dates

Workflow, Collaboration and Business Process Management

- Integrate document centric organizational workflows into the document management system
- Documents and folders may be included in workflows
- Shared markup sessions, versioning, and routing provide easy and effective methods for collaboration, workflows, and shared document use.
- Document Check-in and Check-out is fully supported
- Tasks may be assigned to individual users
- User Comments on documents may be added and displayed with the document
- History of a workflow is available with each document or folder
- Workflows can include any type of document, or even information before documents are created.
- Can reduce or eliminate the cost of developing specific line of business applications
- Powerful and extensible rules engine integrated into design
- Routing to Inboxes
- Routing to Folders
- Routing to Document Libraries
- Routing to File Cabinets
- Alerting, Notification and Email support
- Modification of data by rule
- Validation of data by rule
- Set Required Fields by rule
- Messaging and routing to other applications by rule
- Integration with web services by rule
- Event driven rules can be defined and processed at virtually any interaction point with the system
- Web service portal for processing of inbound XML data
- Scheduling engine for processing of rules
- Archiving managed by rule
- Digital signatures may be applied, read, validated, and managed by rule

Integration and Interoperability

- Complete API
- Code samples for direct integration provided in both C# and Visual Basic.net
- Web service interfaces provide access to all system functions and the rules engine
- Extension of rules engine is simple, straightforward and elegant
- Image processing engine may be extended through API

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- XML-based integration with other systems fully supported
- Microsoft Exchange Server integration for archiving and search of email messages and attachments
- Automatic extraction and indexing of email metadata
- Full text indexing support of email messages and all attachments with intuitive search results

Litigation Support

- Provides full text search ability across virtually all document types for discovery compliance
- Provides bulk download of search results or folder contents
- Scalability and Performance
- Efficient, high performance distributable architecture
- Scalable to thousands of users, hundreds of millions of documents and hundreds of databases
- 32 node non-affinity cluster support for application servers
- Microsoft Cluster Server support for database servers, in Active-Active or Active-Passive mode
- System functions, such as OCR, document processing, and indexing may be spread out over multiple clusters or application servers

Security

- Active Directory integrated security management, no separate accounts to manage
- Access rights may be independently specified at the document, document type, folder, folder type, or database level
- Documents and folders inherit the Access control lists of their document type or folder type
- All individual system functions, including delete, edit, upload, and other functions can be independently configured for access
- Support for digital signatures

Auditability

- Comprehensive audit trails for all activities
- All changes to documents and folders are recorded
- Additional auditing of each access may be separately enabled on folder or document types
- Full audit history of each folder and document provided in an intuitive format
- All documents are versioned, with previous versions of the documents available to individuals with audit access
- Deleted or replaced documents remain available to those with audit access

Disaster Recovery

- Can integrate with all major disaster recovery products for backup and retention of critical data

Client Component Architecture

- Web based client
- Browser-only client for view only
- Browser with integrated .net framework plug-ins for editing and complete viewing experience
- Zero-touch deployment
- Single sign-on with workstation

Searchability

- Precise, detailed search capabilities
- Meta Data and full text search capability
- Search supported across any combination of fields and full text
- Search for Folders or Documents
- Search documents regardless of their folder location
- Search within individual file cabinets or within folders and subfolders

Usability

- Intuitive File-room motif
- File cabinet, folder, and document structure
- Bulk download interface for retrieval of folder contents and/or search results
- Explorer-style navigation of folders provided
- Designed for efficiency and productivity in a secure environment
- Powerful, full function application within the browser
- Hotkeys and Context Menus
- Drag and drop support within the browser
- Sticky notes, notes, and general markup and annotation of images by users
- Multiple markup sets per image document supported
- Markup information may be public, private, or shared
- Wide range zoom
- Zoom to highlighted area
- Panning and rotation
- Post-acquisition editing and processing of documents
  - Deskew
  - Despeckle
  - Blank page removal
  - Black box detection and removal
  - Crop
  - Rotate
  - Noise removal
  - Type conversion (grayscale to black and white, color to grayscale, etc.)
- Export as PDF or tiff in high compression or low compression modes
- Email as PDF or tiff in high compression or low compression modes
- Export page range
- Email page range
- Display and convert between black and white, color, and grayscale images

PREMIRUS™