

What is Allgeier DocTrinity?

Don't work harder – work smarter!

Many businesses lose expensive man hours on document classification, sorting incoming mail and assigning them to those that they are meant for. Allgeier DocTrinity is the next evolution of triple powerful document Processing software.

It provides virtually unlimited productivity and power to free your business from the most challenging document processing tasks.

It is the right solution for any document, any industry and any volume.

Any type of document!

Allgeier DocTrinity is intended for high-volume automated processing of any kind of documents including **fixed forms** (questionnaires, surveys, tests, tax returns, and application forms); **semi-structured documents** (invoices, purchase orders, explanations of benefits, and receipts); **unstructured documents** (contracts, letters, and articles).

The documents are classified, recognized, verified and transferred into reliable, accurate, searchable and highly structured electronic data critical to business processes.

Features and Benefits

Why people choose DocTrinity

Allgeier DocTrinity provides comprehensive and versatile document processing solutions available today delivering automated documents classification, indexing and data extraction from any kind of documents. Speed up your business processes by automating them and eliminating time-consuming manual data entry.

Renowned accuracy

Allgeier DocTrinity is a supremely intelligent, accurate and scalable data capture and document processing system. It automatically transforms the stream of different forms and documents of any structure and complexity to usable and accessible data ready to be exported into your business applications and databases. DocTrinity's recognition and classification technologies and built-in validation rules ensure exceptional accuracy of data.

1 Document Definition

Allgeier DocTrinity provides powerful set-up tools and flexible processing workflow to accomplish document processing tasks of any complexity.

Layout Studio

If you are planning to extract data from the document, tell DocTrinity what type of data to look for on a document. This data may not be on the same place on subsequent documents; furthermore can some information not be mentioned on all documents. With the iLayout Studio tool, it is possible to create alternative layouts for one document type. All the alternative layouts share the common set of export blocks but have independent set of search elements with individual logic. This feature radically simplifies creation, adjustment and maintenance of FlexiLayouts for documents with extremely variable location of fields, such as invoices.

DocDefinition Editor

If you plan to classify your documents, tell DocTrinity what type of information and/or which keywords to look for on a document. The longer you work with DocTrinity, the less documents you will have to define!

PDF forms creation and distribution

With FormDesigner a user can create electronic PDF forms, distribute them and receive the completed forms via e-mail or HTTP combining paper-based forms processing with electronic form collection.

2 Scanning to DocTrinity

DocTrinity is compatible with a wide range of scanning devices supporting TWAIN, ISIS and WIA scanning protocols.

Remote document capture ideally suits the needs of enterprises with distributed locations or remote business processes that prefer scanning documents at the point of their entry and importing them directly into the application for further centralized processing.

3 Optical Recognition

Allgeier DocTrinity interprets machine-print (OCR), isolated handprint (ICR), including alpha and numeric, mark sense (OMR) and barcodes from paper forms gathered from a scanner or a fax machine.

5 Data and Text Extraction

In the course of our lives we fill out hundreds of forms - application forms, questionnaires, insurance claims, etc. At the same time computers have become indispensable for collecting and managing information, making the task of extracting data from printed documents even more pressing.

Forms processing is a process whereby information entered into data fields is converted into electronic form:

- entered data are "captured" from their respective fields;
- forms themselves are digitized and saved as images.

In most cases forms processing is considered complete when the data from all the forms have been captured, verified and saved into a database. There are only two approaches to data collection from

6 Automated Validation of Data

DocTrinity provides a set of predefined validation rules to ensure data correctness. By applying these rules data can be automatically checked against a database, checked to satisfy the format, brought to a standard (normalized) and more. Any custom rule can be added using scripting language.

7 Manual verification

Ergonomic verification interfaces are intended for manual check of the correctness of the recognized data; additional verification of sensitive and questionable data as well as for manual data entry of some information, e.g. unrecognizable text.

To speed up and simplify the verification process, DocTrinity offers several easy-to-use and effective verification modes. Verification is an optional step that can be skipped if it is not required, in which case data is automatically exported after recognition.

8 Export

Extracted data and document images can be exported to various destinations: files, external databases (via ODBC); Microsoft SharePoint 2003/2007; Allgeier ScanView ECM; other business application, ERP or ECM/DMS systems. Documents can be also saved as searchable PDF/PDF-A files for archiving purposes.

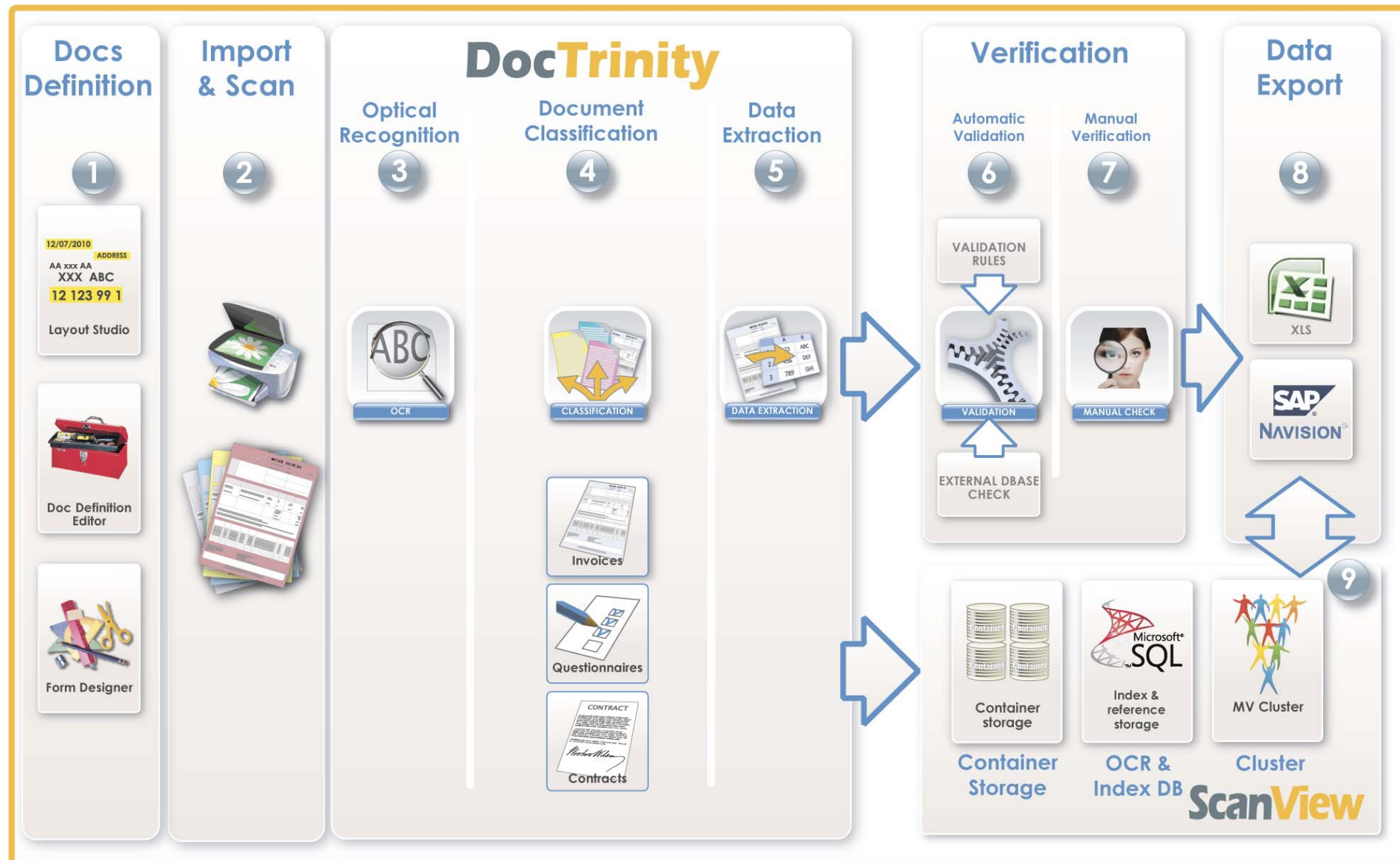
DocTrinity supports document export with **multiple destinations**. This enables export of both data and document images with different export settings and formats to several destinations simultaneously.

Fields mapping, data reformatting and advanced naming scheme for destination files add to flexibility when defining export settings. These features enable customization of files naming and structure according to established business requirements and storage of data in a standardized format.

By-document processing enables automated export of documents that do not require verification, by separating them from the rest of the batch.

The **redaction tool** allows removing certain data fields from the image before the export, securing confidential or sensitive data. For each export destination, different sets of fields can be specified for redaction.

Scriptable Export: provides ability to create custom export modules that deliver data and images directly to any external application: ECM, CRM, ERP etc.



4 Automatic Documents Classification

DocTrinity identifies the document type and assembles one- and multi-page documents out of the mix of pages using advanced Allgeier technologies, which allow automatic classification of documents with variable layouts of any complexity including:

- Multi-page documents;
- Documents with variable number of pages;
- Documents containing multi-page tables;
- Documents with image or text attachments.

An intelligent **Multi-Level Classifier** optimizes the identification of document types in batches with a variety of different documents. With the Classifier, it is possible to assign a Classification tree with unlimited number of logical levels (classes): to separate invoices from contracts, classify invoices by supplier, pick out invoices from a particular supplier by date, etc.

paper forms: to involve many people in manual data keying in, or to start using automatic form input system. DocTrinity accurately extracts data and text from the fields specific for each document type using multi-language recognition technologies. It offers:

- OCR for more than 180 languages including Chinese, Japanese, Korean, Vietnamese and Hebrew;
- ICR for hand-printed text for over 110 languages;
- Checkmark recognition for a wide spectrum of checkboxes;
- Barcode recognition for a variety of 1-d and 2-d barcodes.

Applications

Invoice Processing

Manually processing invoices is a time consuming function for any organization. With Allgeier DocTrinity, organizations can process invoices automatically, reducing accounts payable costs while improving both the accuracy and speed of invoices being entered. Being able to process paper-based invoices quickly and accurately is an important element for the success of any organization. As invoice processing costs escalate, organizations can realize financial benefits faster and yield a real, tangible ROI.

Forms Processing

Organizations encounter countless forms and paper documents every day. Many organizations continue to manually process these documents. This process requires employees to manually enter data into a database, which can be time consuming, expensive, and error-prone. With a proper automated forms processing system in place, organizations can realize a measurable ROI through reduced data entry processing costs, while also improving processing speed and accuracy.

Productivity

Minimal human assistance

Allgeier DocTrinity interprets data from paper forms many times faster and immensely more accurately than any professional operator, enabling you to collect data in efficient and secure way. It is noteworthy that the entire process requires only one human operator since all of the stages, except verification, are fully automated.

Neither manual sorting nor checking for missing pages is required, since DocTrinity can identify forms and select the matching template.

Expected productivity

With Allgeier DocTrinity Standalone, one operator will be able to process from 1,000 to 3,000 forms per day depending on the complexity of their layout. With a flexible distributed architecture that utilizes multiple workstations to streamline processing, Allgeier DocTrinity can process from 10,000 forms a day and can be easily expanded as a company's processing needs increase.

Faster and more reliable results

Finally the extracted data looks exactly like the data you get from your current manual system. But you get it faster, and the captured content is more accurate and reliably correct that is undoubtedly critical for your business. The department involved in data input is now well controlled, perfectly compact, and scalable to be able to process any bulk of forms.

Remote data verification

Leverage remote Data Verification Stations of DocTrinity to distribute verification tasks among operators working at home or any other remote location. Remote verification provides more flexible workflow and facilitates cost effective document processing. The performance of both remote and on-site data verification can be monitored using the same tools.

Administration and Monitoring

For managing user's rights and monitoring the performance of the system, DocTrinity offers a web-based Administration and Monitoring Console which enables 24/7 supervision from any location. Rights and roles may be assigned to users, status of batches and event logs may be viewed and reports can be generated.

Flexible Customization and Integration Tools

Scriptable Rules: provide ability to apply any actions to document fields: apply validation rules, fill in with some data, normalize etc.

The Custom Action script allows defining an action that is triggered by the user during verification.

For managing users' rights and monitoring the performance of the system, DocTrinity offers a **web-based Administration and Monitoring Console** which enables round-the-clock supervision from any location.

Configuration Setup

Depending on the project's needs DocTrinity can be installed in two configurations - Standalone and Distributed.

DocTrinity Standalone

Ideally suited for Small and mid-sized businesses
1-3K pages per day productivity at one workplace depending on the document typ, with 1 user involved in processing

Specific features

- Simple installation and deployment
- All setup and processing operations are executed on one machine
- Simple security and rights management
- Simple workflow including fully automated one
- Simple processing statistics

Advanced scalability

DocTrinity offers two installations in one and provides the full compatibility between them. This allows an easy and reasonable start for small and medium businesses and an option to easily expand your data and document capture environment as your company's needs grow.

Flexible number of local or remote workstations can accommodate any processing volume.

Flexible workflow

Take advantage of the flexible workflow that can be easily adjusted to your specific business processes. The workflow also allows document processing in a fully unattended mode.

Technical Specifications

Optimized performance

The advanced server-based architecture allows effective every-day processing of unlimited document volumes. The core of the system is the powerful Processing server which undertakes all resource-intensive operations and performs automated tasks distribution among the processing stations and load balancing.

ALLGEIER DMS Solutions

ALLGEIER GROUP

Leuvensesteenweg 633C, 1930 Zaventem, Belgium +32 2 70 90 100
Biezenbeemd 1, 4907 EE Oosterhout, The Netherlands +31 162 421 021
www.allgeier-dms.net info@allgeier.be

Advanced server-based architecture

New version delivers a powerful, highly scalable Processing Server, which performs automatic distribution of processing tasks between CPUs, and dedicated user-attended stations to ensure high-volume documents processing. It automatically balances the workload between server cores to ensure the best processing performance. The system can be easily expanded by adding supplementary processing cores and/or stations.

Web Service API

DocTrinity Web Service API provides SOAP access to DocTrinity Processing Server from an external application allowing smooth integration with various business applications and workflows. By leveraging Web Service API, DocTrinity can be used as an automated document classification and data capture service.

DocTrinity can be integrated into various business applications and workflows as an automated document classification and data capture service. The Web Service API allows loading images from a folder into a pre-configured project and receiving the recognition results in advanced XML format.

System Requirements

For the proper work of our applications we recommend computers with the following characteristics:

1. Intel® Core™2/2 Quad/Pentium®/Celeron®/Xeon™, AMD 6/Turion™/ Athlon™/ Duron™/ Sempron™ processor or compatible: 2 GHz

2. Operating system:

For stations (Standalone or Distributed): Windows XP SP2, Windows Vista SP2, Windows 7

For servers (Distributed): Windows Server 2003 SP2, Windows Server 2008 SP2

For the program to run with a localized interface, the operating system must provide the required language support.

3. RAM: 512 Mb for every CPU core: but not less 1 Gb total

4. Free hard-disk space:

Standalone: 1 Gb (including 700 Mb for installation)

Distributed (Stations): 1 Gb (including 800 Mb for installation)

Distributed (Servers): 50 Mb for installation + 2 Gb for the Database of SQL server

5. Scanner supporting TWAIN, ISIS or WIA.

6. Internet connection to activate the serial number when using a software protection key or a USB port for a hardware protection key (dongle).

7. Video card and display with a minimum resolution of 1024×768.

8. Keyboard, mouse or other pointing device.

Supported Scanning Devices

DocTrinity supports a wide range of TWAIN-, ISIS- and WIA-enabled scanners.

Input Formats

PDF	Including PDF/A
BMP	black-and-white, gray, color
PCX	black-and-white, gray
PNG	black-and-white, gray, color
JPEG	gray, color
JPEG 2000	gray, color
TIFF	black-and-white - not compressed, CCITT3, CCITT4, Packbits, ZIP; gray - not compressed, Packbits, JPEG, ZIP; color - not compressed, JPEG, ZIP.
DjVu	black-and-white, gray, color
DCX	black-and-white, gray

Recognition Languages

Allgeier DocTrinity provides OCR (recognition of machine-printed characters) for more than 180 languages, ICR (recognition of hand-printed characters) for more than 100 languages and dictionary support for more than 40 languages.

The new version supports OCR of Chinese (both traditional and simplified), Japanese, Korean, Vietnamese and Hebrew documents and allows fast and accurate processing and verification of documents in the total of 187 OCR languages. With DocTrinity, you can also process multilingual documents with mixed ideographic and alphabetical languages (e.g. Chinese and English in one document). For such fields as Name, Number, Date/Time, Currency and Address DocTrinity provides a set of pre-defined regional formats and dictionaries.

Barcode Types

1D Barcodes: Code 39 ; Check Code 39; Interleaved 25; Check Interleaved 25; EAN 13; EAN 8; Code 128; Codabar; Code 93; IATA 25; UCC-128; UPC-A; UPC-E; Matrix 2 of 5; Industrial 2 of 5; PostNet ; Patch code (1, 2, 3, 4, T/Transfer, 6) ; **2D Barcodes:** PDF 417 ; Aztec; Datamatrix

Text Types

Typographic Handprinted Typewriter Matrix printer Index OCR-A OCR-B MICR (E13B) MICR (CMC7)

Export Types and Formats

DocTrinity provides export to:

SharePoint 2003/2007

ODBC-compatible databases

any external application by using custom script-modules

DocTrinity supports export to following file formats:

Data Output Formats: XML, TXT, XLS, DBF, CSV.

Image Output Formats: PDF (Image only, text under image), PDF/A (Image only, text under image), TIFF, JPEG, JPEG2000, PCX, BMP, PNG.

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Document Classification & Data Extraction

