Content Conversion Specialists
Digital Library Software
Digital Press Review Software
Information is the basis of purposeful action and therefore a basic need of society. The goal at CCS is to provide our customers and business partners with the best conversion technology and service available to make printed knowledge digitally accessible, searchable, and usable. In the case of libraries, we also help to preserve cultural knowledge for the future.

For over 35 years, CCS has been developing integrated and intelligent software and service solutions for digitization projects and media monitoring. Our customers include the most renowned worldwide libraries, large publishers, global companies, content providers, federal ministries, and media monitoring agencies. CCS employs more than 90 people worldwide, with 30 employees at its headquarters in Hamburg, Germany.
Dear Customer / Dear Business Partner,

The history of CCS begins more than 35 years ago. It is 1975 when Raymond Kurzweil invents a machine that for the first time enables the blind and visually impaired to read normal text. Its centerpiece is a newly developed OCR program. To make this system a meaningful benefit to society, Kurzweil also develops the world’s first flat-bed scanner and an innovative text-to-speech output. The blind are now able to put any book or newspaper on the scanner and the machine reads it aloud.

To this day, the Kurzweil Reading Machine is the biggest milestone, apart from Braille, in the social integration of blind people. The first distributor of the Kurzweil Reading Machine in Europe is CCS. The idea of making knowledge accessible to all is still an integral part of our corporate philosophy.

Today, CCS provides software solutions to digitize and convert valuable library and archival material for long-term preservation, easy access, and better searchability (docWorks).

Multimillion-page digitization projects are very challenging in technological and logistical ways. Based on its technical know-how and long-time expertise, CCS also offers a customized service to ensure a smooth and economical scanning and conversion process (digitizationServices).

Our clients’ confidence in the quality of our products and services is very important to us. We are therefore very pleased to work with such prestigious clients as the Library of Congress; the national libraries of Britain, Finland, Australia, Luxembourg, Singapore, and Norway; the universities of Princeton and Harvard; and the publishers of the Frankfurter Allgemeine Zeitung and Axel Springer.

In addition to the digitization and conversion of printed works, CCS specializes in software solutions for digital press clipping and digital press review (newsWorks). Here again, the goal is to filter out the relevant news and to make it instantly and easily accessible. Our clients are international companies, public-relations firms, and market-research agencies as well as most federal German ministries.

In the following pages, we want to give you some insight into our products and services. Our goal is to offer the best technology Made in Germany, yet also be human by listening, learning, and supporting you. We make your wishes and requirements our business and seek (and find) the best solution.

Sincerely,
Daniel Lanz
Managing Director
Why a Digital Library or Archive?
• Easy access to a worldwide audience
• Much better, faster, and more comprehensive search
• Foundation for long-term preservation
• Holdings available for second-cycle exploitation

What is docWorks?
docWorks is a software program used by the most renowned libraries, publishing houses, and companies worldwide to digitize and convert their valuable library holdings and archives for easy access, searchability, and long-term preservation. The term “Digital Library” falls a little short of comprehensive in describing the actual result. “Digital” means the transformation of printed documents to digital images—i.e., by scanning pages and receiving JPGs, TIFFs, or PDFs. However, to create a truly searchable digital library, these images need to be “converted” into intelligent units using OCR (text recognition) and zoning (e.g., the identification of different articles on a newspaper page).
docWorks is the only software that bundles all necessary conversion steps in a single, smooth workflow. Small or midsize digitization projects use our docWorks[e] software, while mass-digitization projects opt for our professional solution, docWorks Pro.

Why docWorks?
• Single, smooth workflow with central control center
• Time savings due to streamlined and automated process
• No expensive errors from false copying or lost data shipments
• Consistent, standardized output
• Easily upscalable, from thousands to millions of pages

How does docWorks work?
docWorks “converts” scanned images. More specifically, docWorks identifies the information contained in scanned pages (such as text and layout), saves this information in an XML file, and adds this file to the image. The two essential conversion steps are OCR and segmentation of the document by logical units (articles, chapters, etc.). Only through OCR can a scanned page be searchable, and zoning and structure recognition ensure that only relevant search results are displayed. For instance, if no zoning/structure is applied, a multiple-word search within newspapers might display thousands of results because the single search words are being found throughout an entire newspaper page. Segmentation of the page by its different articles will ensure that the search words are found in the same article.

The conversion process runs through different steps: Following import, the scanned images are “cropped,” meaning they are cut to a consistent size. This step is followed by zoning (segmentation of the page by classified blocks and columns) and the editing of structure (paragraph, chapter, article), text correction, and metadata. Next comes a standardized export of the data in METS/ALTO files, which are stored in the archive and fed into the presentation system. Every workflow step consists of an automatic analysis executed by docWorks and, if wanted, a manual correction. This correction can be done by the docWorks user, or it can be outsourced to specialized service partners. Important: If the correction is outsourced, the service partner receives a special online access that allows to process the data from anywhere in the world. The actual data always remains with the docWorks client. Please read our info regarding digitizationServices.
Example of a newspaper with "zoned" articles, illustrations, headlines and advertisements

Digitization and conversion workflow with docWorks

Select  |  Capture  |  Convert  |  Preserve  |  Access
Import  |  Cropping  |  Zoning  |  Metadata  |  Structure  |  OCR  |  Export

Control of work flow and quality

Workflow with other conversion softwares  Workflow with docWorks
A masterpiece of logistics.

What are digitizationServices?
Implementation of the entire digitization process — scanning the documents, monitoring the conversion steps, and the final filing — can be done directly by the docWorks user, or it can be outsourced to a qualified, CCS-affiliated service partner. Besides being technically challenging, multimillion-page projects are also very ambitious in terms of logistics. To meet these special demands, CCS has developed its customized digitizationServices for project and process management, to ensure a smooth, careful, and economical conversion of your valuable materials and to convey all the benefits of renowned docWorks technology.

itemTracking
A very helpful tool to keep track of all documents during the digitization and conversion process is the browser-based tracking and monitoring module called itemTracking. Each document is labeled with a barcode that allows you to follow the conversion status of the item. Access to itemTracking is possible from any Internet-connected computer — so you can manage, monitor, and analyze your digitization projects at any time, from anywhere.

Presentation systems and app
We work with a selection of systems that help you to best present your Digital Library online. Besides the standard website solution, we have developed a special app that provides a whole new way to experience digital publications. The app offers thumbnail preview, automatically created table of contents, and text search. Table of contents and search results link directly to their respective sources, highlighted in color.

Thanks to the gesture control of tablets, you can leaf through digital publications as you would an actual book. This allows you to present valuable content in a simple, modern, and excitingly graphical way to an interested audience — or you can use the app as an internal communications tool to inform colleagues and stakeholders about the advantages and progress of your digitization efforts.
THE SINKING OF THE TITANIC

ONE WEEK OF ORIGINAL PRESS COVERAGE FROM THE TITANIC’S INTENDED DESTINATION: NEW YORK HARBOR
What is newsWorks?
newsWorks is a software program used to create professional digital press and media reviews. Our clients include global companies, federal ministries and institutions, as well as media monitoring agencies. A newsWorks digital press review is multimedia-based and can be forwarded as a download, email, RSS, or app to any number of recipients. No matter where you are or when, all devices such as computers, smartphones, and tablets are served with the highest standard of press review. By using newsWorks, you can easily create top-level digital press reviews that are sleek, well-arranged, and user-friendly — the foundation for the right strategic decisions and a successful business.

Why newsWorks?
A press review is the daily calling card of the company’s press department to the board of directors and other press-review recipients. This is why we focus strongly on the best technology, an appealing design, and customized solutions to provide you with the best software for your press work. Flexible modules ensure that you get the product that matches your needs. Selected configurations offer the possibility to efficiently correct and adapt article contents, delete unnecessary duplications (e.g., identical press bulletins), and arrange the clippings in fitting rubrics. An additional highlight is the option to evaluate articles and have a graphical analysis of your media response.

How does newsWorks work?
Thanks to its flexible, modular system, newsWorks adapts perfectly to your needs and demands.

newsClip
newsClip is the module for clipping selected articles from newspapers, magazines, and websites. It is equipped with an integrated OCR for titles and subtitles. newsClip also provides you with a scan of the original page from which the article was clipped. This allows the press-review reader to include neighboring material in his/her evaluation.

newsPress
newsPress is the standard module for selecting, assembling, and arranging press articles in a digital press review.

newsFlow
If more than one newsClip is in use, a workflow module called newsFlow ensures smooth control of the machining sequence and distribution process. Additional modules, such as newsRead and newsCorr Server, contribute to a significant increase in the efficiency of the operations process.

Mobile solutions
Because a large number of our clients read their press reviews on mobile devices, we developed mobile solutions to match. Our flagship development is the newsWorks app for iPad, which comes in a minimalistic, sleek, and intuitive design that perfectly uses all advantages provided by tablet technology (multitouch and gesture control, simple zooming, and page swipe). These features are combined with everything you expect in a classic press review: clearly arranged running text; articles sorted by date, category, and subject; compelling original-scan views; pin-sharp image galleries.
### The seeker

*Being the son of a billionaire, there was no actual need to work himself. But he took the challenge to reorganise Leica. Now the entry of a financial investor crowns his work.*

**Financial Times Germany** | Oct 20 2011
---
It turned gray during his time at Leica - his beard and his hair he used to style like Jimi Hendrix when he was younger. Andreas Kaufmann could have gone bankrupt with camera manufacturer Leica, at least that was what many expected when Kaufmann took...

---

### Leica plans to soar with new investor

**Die Presse** | Oct 19 2011
---
With the commitment of US-company Blackstone, German camera manufacturer Leica wants to double its revenue to 500 million Euros until 2016. After once dominating the world of photography, the change to digital maneuvered Leica near bankruptcy. But by now people of the company headquartered in Solms think big again. Blackstone acquired a 44 procent share of Andreas Kaufmann, the one who...

---

### Leica continues to grow

**Focus** | August 12 2011
---
After some years of crisis, Leica catches up with newly introduced professional and digital cameras. Thanks to strong demand, Leica started dynamically in the new business year 2011/2012. The company increased its Ebit by 36,7 procent to 16.5 millions Euros in the first quarter, order books are completely full. „Despite doubling our production capacities for objective lenses, we still are not able to catch up with demand“, states Leica-CEO Alfred Schopf. The executive board decided on several tasks to ...

---

### Made in Germany - Leica is back in the profit zone

**Deutsche Welle** | March 21 2008
---
When optical company Leitz introduced its first 35mm camera in 1924, it immediately revolutionised the field of photography. The new camera was compact, handy and enabled unobtrusive and fast photographing. Soon it went into high volume production.
These clients alone have processed more than 100 million book pages and more than 5 million newspaper pages.

For these clients alone, we have processed more than 25 million book pages and more than 15 million newspaper pages.

*customer of local docWorks[e] distributor
### TRANSPORT
- ADAC
- Dutch Airlines
- Fraport AG
- Renault

### MEDIA
- Australian Associated Press
- Bayerischer Rundfunk
- BBC
- Deutsche Welle
- Deutschlandradio
- Dumont
- France Télécom
- Gruner+Jahr
- Hessischer Rundfunk
- Mitteldeutscher Rundfunk
- Radio France
- RTL Group
- WDR mediagroup digital
- ZDF

### INDUSTRY
- AkzoNobel
- Association of the Chemical Industry (VCI)
- Hoffmann-La Roche
- Fujitsu
- Henkel
- Philips
- Robert Bosch
- Stihl

### FINANCE/INSURANCE
- Allianz
- BayernLB
- DekaBank
- Deutsche Bank
- Deutsche Postbank
- Dresdner Bank
- German Investment Trust
- HypoVereinsbank
- ING Netherlands
- Nürnberger Versicherungsgruppe
- Verband der Privaten Bausparkassen

### PUBLIC AND GOVERNMENT INSTITUTIONS
- German Federal Ministry of Education and Research
- German Federal Ministry of Finance
- German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
- German Federal Ministry of the Interior
- German Federal Constitutional Court
- Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)
- Bundesverband Investment und Asset Management (BVI)
- Cologne Institute for Economic Research
- Office of Lower Saxony Prime Minister
- Office of Hessian Prime Minister
- Hessian Ministry of Economics
- Lower Saxony Ministry for Culture
- Parliament of Mecklenburg-Western Pomerania
- Bavarian Ministry for the Environment and Public Health
- Social Democratic Party of Germany (SPD)
- Library of the Federal State Tyrol and of the university of Innsbruck
- Federal Chancellery of the Republic of Austria
- Junta de Andalucía Spain
- Konrad-Adenauer-Stiftung
- Bibliothèque de l’Assemblée nationale du Quebec

### MEDIA MONITORING AGENCIES
- A.R.C.U.S., Germany
- Argus, Switzerland
- Ausschnitt Medienbeobachtung, Germany
- BurrellesLuce, USA
- Business World, Ireland
- Cision, Germany
- Fjölmidlavaktin, Iceland
- Kliping, Slovenia
- Knipsel, Netherlands
- Management Tools, Switzerland
- Meedius Eesti, Estonia
- Newsaccess, Ireland
- Universal Information Services USA

*customer of local newsWorks distributor or media monitoring service partner

1978  Sales and maintenance of Kurzweil Reading Machines, the first omnifont-enabled text recognition system on the market

1985  Development and market launch of electronic typesetting system Textline

1994  Development and market launch of newsWorks

1995  Development and market launch of docWorks

2000  Establishment of CCS Romania, Bucharest

2001  The Austrian foundation Socrates becomes sole shareholder of CCS

2003  Development and market launch of digitizationServices

2005  CCS changes its name from Compact Computer Systems to Content Conversion Specialists

2009  Development and market launch of docWorks[e]

2011  Development and market launch of ItemTracking

2012  Development and market launch of the newsWorks App and the docWorks App

Today CCS is one of the world leaders in the provision of information through digitization and conversion. The international company is headquartered in Hamburg, Germany.