BSCAN iLL with BookEdge
Interlibrary Loan & Digital Document Delivery

Better Image Quality, Fewer Errors, Greater Efficiency, Easier Operation
... all while substantially improving overall performance

In the early days of digital interlibrary loan and digital document delivery, available software was simple and image quality expectations of requestors were low. Times have changed. The demand for faster workflow and perfect, printer-ready images have made the current software environment complex, creating significant challenges in training new employees. BSCAN ILL simplifies existing processes and produces perfect, printer-ready images.

BSCAN ILL starts by eliminating the need to manually enter requestor information. BSCAN ILL automatically reads the information that is required by interlibrary loan document delivery software from scanned pull slips, not only saving time but also eliminating human error.

Powerful image treatment capabilities within the software automatically eliminate skew and remove unwanted fan and gutter. BSCAN ILL is compatible with most types of high production scanners. When used with 11x17 inch or larger flatbed scanners and planetary scanners, BSCAN ILL scans two pages at a time, automatically splits the pages and corrects for book fold as well.

Finally, BSCAN ILL automatically sends requests through ILLiad/Odyssey, Ariel, RAPID, Clio, Article Exchange, FTP, and e-mail and notifies ILLiad/Odyssey in each case, all without any need for further human intervention.

BSCAN ILL Capture Workflow
Improves Quality & Performance, Reduces Errors and Simplifies

STEP 1

Identify Article & Requestor

BSCAN ILL automatically captures data directly from pull slips – less keying means fewer keying errors.

BSCAN ILL reads the requestor's name, the delivery method, and IP address from the pull slip and uses this information to automatically route the electronic document to the appropriate document delivery software. After the article is sent, BSCAN ILL updates your document delivery software automatically. No extra keystrokes are necessary.
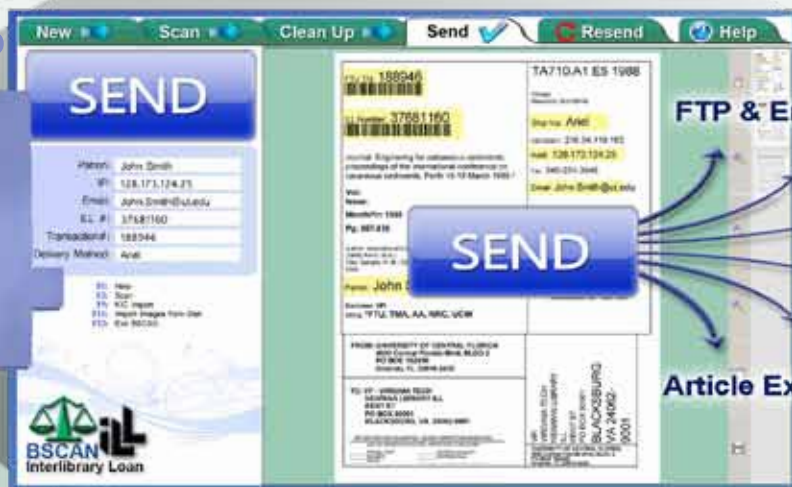
STEP 2

Scan Article

Scan two pages at a time, using the keyboard to delete unwanted pages. An optional foot pedal is available for even faster scanning. Once scanned, the article is passed to the automatic image treatment stage.

STEP 4

Send & Route

Each article is automatically sent via the delivery method specified. If an ILL department is using ILLiad and Odyssey to track completion and perform billing-related operations, BSCAN ILL can be configured to notify Odyssey that the article was sent even if it wasn't sent by Odyssey.

Resend

BSCAN ILL is capable of storing articles for a configurable number of days after they're sent. If an article must be resent, it can be reopened and sent right away or be edited first, for example by inserting or deleting pages.

STEP 3

Automatic Image Treatment

BSCAN ILL automatically locates the content on each page, clips the content, creates a preset margin for consistency, deskews and corrects curvature when necessary. When completed, the treated article images are passed on to the manual review stage.

Manual Review & Correction

This stage can be run after each article is scanned, or for greater efficiency, several articles can be scanned in sequence, automatically treated, queued up in this stage and reviewed at one time.
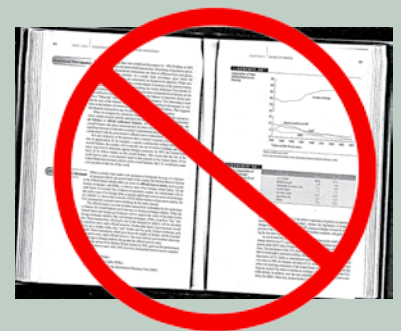
BSCAN ILL automatically locates the content and sets consistent margins, removes fan, gutter and black edges – and even deskews the image.

Avoid the poor results that photocopiers too often produce.

Scanners Make Digitization Possible
BSCAN ILL Makes Digitization Fast and Easy

BookEdge flatbed scanners combine seamlessly with BSCAN ILL. BookEdge scanners can capture one 11.8x17 inch book page or flat object at a time at resolutions from 150 to 600dpi in 24 bit color. With BSCAN ILL's turbo mode, which splits pages and eliminates book fold, the BookEdge can scan two images at a time to avoid the confusion of which page has been scanned and which page has not. BSCAN ILL with BookEdge has the lowest initial cost of any true production book scanning system for ILL departments and the best choice for ILL departments that don't have a large amount of scanning work.

BookEdge

For busier ILL departments Click and Bookeye 4 offer the fastest and easiest book scanning, resulting in the lowest total operating costs when scanning volumes are high. Once scanning has begun, the book is not handled. The scan operator simply turns the page, presses the scan button or foot pedal and repeats. No time is wasted turning the book over to flip pages and no pages are missed due to confusion while flipping.

Bookeye 4 scans up to 24x17 inch books and flat material in full 24 bit color at 150 to 300dpi resolution for standard units and up to 600dpi for preservation quality units. In addition, Bookeye 4 is the most durable scanner available today and as such, is the best choice for very busy ILL departments.

Click

Click digitizes up to 22x16 inch books in full 24 bit color at resolutions from 150 to 300dpi. Click is the lowest priced face up scanner that is capable of serving ILL and digital document delivery departments and is the best choice for moderately busy ILL departments.
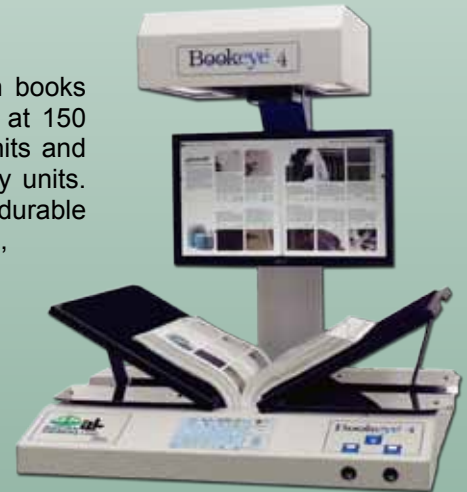
Bookeye 4

Resource Sharing

Bookeye 3

WideTEK 25

Increasingly, scanners once built specifically for digital preservation are being shared between ILL and Preservation departments. The Bookeye 3 pictured here is the most versatile preservation quality scanner on the market. Pages can be scanned two at a time in 5 seconds. The Bookeye 3 R2 scans large 17x24 materials at a true 600dpi in 10 seconds. The Bookeye 3 R1 scans very large 24x35.5 inch materials at 400 dpi, also in 10 seconds.

WideTEK 25 flatbed scanners capture up to 17x25 inches at a native resolution of 600dpi for preservation quality images. With BSCAN ILL, WideTEK 25s scan two 11x17 inch pages at once in full color in just over two seconds. Its high scanning speed compensates substantially for the need to flip the book over to turn pages. BSCAN ILL splits pages, locates content and provides high clarity 'printer-ready' images.

Capturing Content Deep into the Book Fold
The Three Best Methods

Bound journals often have content deep into the book fold. It is quite difficult and sometimes impossible to capture this content with a typical flatbed scanner or photocopier.

There are three affordable methods for effectively capturing this content:

- Using a flatbed scanner with a book-edge feature — BookEdge

- Capturing the left and right pages with separate cameras positioned at ideal angles — Click

- Scanning in the direction of the book curve and reducing the scanning speed at the book fold — Bookeye 4

When used in its native mode, the BookEdge scanner employs the 1st method to capture content deep into the book fold without damaging the spine. Regular flatbed scanners have no special facility for scanning books.

The glass plate capture area of a typical flatbed scanner has a large opaque plastic or metal border that makes it impossible to capture deep into the book fold without pressing hard on the spine to flatten the book. On a BookEdge scanner, the front edge of the glass plate extends to within 1/8 inch of the edge of the scanner, and the angle between the glass and the front side of the scanner is less than 120°, which provides room for the optics and CCD electronics while minimizing stress on the book spine.

In addition, with an optoelectronic system that is capable of producing preservation quality 600dpi images, even the 300 dpi images from BookEdge scanners are clear enough for BSCAN ILL to stretch the text in the book fold back to proper proportions while maintaining readability. This allows BSCAN ILL to support a turbo mode which scans two pages at a time, splits them and corrects for book fold with high readability.

METHOD 1:
BSCAN ILL uses a flatbed scanner with a book-edge feature

BSCAN ILL with BookEdge scanner easily captures content into the book fold without damaging the spine.

Text is undistorted and clear. BSCAN ILL automatically adjusts margins for print-ready quality.
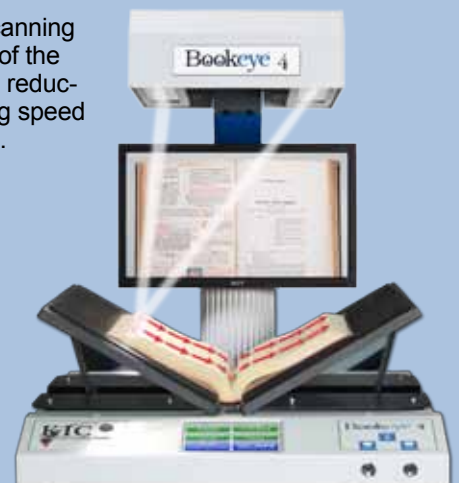

Books with deteriorating spines need not be opened wide.

METHOD 2: BSCAN ILL with Click captures the left and right pages with two separate cameras positioned at ideal angles.

METHOD 3: Scanning in the direction of the book curve and reducing the scanning speed at the book fold.

Dramatically Improves ILL Digitization

"BSCAN ILL supports scanners made specifically for library digitization, improves image quality, reduces keying and keying errors and fully integrates with Ariel, ILLiad/Odyssey, RAPID, Clio, FTP and e-mail."

A fundamental tenet that has always bound the academic research community together is open sharing of newfound knowledge. Today, this open sharing is going on at a feverish pace and digital interlibrary loan services are the main vehicle. While many interlibrary loan departments regularly seek to acquire books and even DVDs for entertainment, scholars from all fields are becoming increasingly dependent on their ability to acquire journal articles in just one day.

The pioneers of interlibrary loan digitization had no choice but to adapt commercial scanning equipment to meet their needs. Ariel was the only available document delivery software and there were no scanners made specifically for scanning books, journals and maps. Over time, that slowly changed. Planetary scanners became available in the late 1990s. The first release of BSCAN ILL automatically read (using OCR) the requestor information from pull slips without manual keying, supported rapid scanning and image cleanup, and automatically posted to Ariel with the press of a single button. Since then, ILLiad, Odyssey, Ariel, RAPID and Clio have been integrated with the same hands-off automation. Today, BSCAN ILL has a host of valuable features, many of which are not available anywhere else.

BSCAN ILL Product Features

♦ Allows for export of original uncompressed images
♦ Supports RAPID and Clio - *a BSCAN ILL exclusive*
♦ Allows for review and rescan of images prior to delivery
♦ Controls nearly all scanners used for interlibrary loan and document delivery
♦ Automatically selects the desired document delivery method - *a BSCAN ILL exclusive*
♦ Automatically reads requestor information from pull slips - *a BSCAN ILL exclusive*
♦ Automatically sends the document without intervention by a scan operator - *a BSCAN ILL exclusive*
♦ Provides a single, simple document delivery interface for ILL scanning staff - *a BSCAN ILL exclusive*
♦ Captures original "raw" uncompressed images and saves them to a database on the scanner workstation
♦ Automatically archives documents for fast and easy retrieval if a document must be resent - *a BSCAN ILL exclusive*
♦ Automatically updates ILLiad/Odyssey, even if the request is delivered by Ariel, FTP or e-mail - *a BSCAN ILL exclusive*
♦ Automatically produces 'printer-ready' images (deskews, removes fan, gutter, book curve, etc.) - *a BSCAN ILL exclusive*

Performance - Measured Using Various Scanners

Compatible Scanners 300 DPI B&W (1 bit/pixel)	Scan Area	Scan time two book pages [1]	Total time to scan, cleanup & send a 10 page article [2]
Bookeye 4 (B&W/GS)	16.9 x 24.4"	4.2 seconds	106 - 120 seconds [3]
Bookeye 2 [4] (B&W/GS)	16.9 x 24.4"	4.6 seconds	137 - 160 seconds [3]
WideTEK 25 (B&W/GS)	17 x 25"	2.0 seconds	110 - 130 seconds
Bookeye 3 R2 (B&W/GS)	20.5 x 25.2"	6.1 seconds	151 - 180 seconds [3]
Click	15.7 x 22"	4.2 seconds	106 - 120 seconds
BookEdge	11.8 x 17"	2.3 seconds	142 - 183 seconds

(1) Sweeping time only, does not include preview or transfer time.
(2) Time required to scan a ten page article, clean it up (e.g. deskew, remove fan & gutter), send the article and update the system.
(3) Turning pages is much faster with a planetary scanner than with a flatbed
(4) Included for comparison purposes only. This model has been discontinued.

Connect Main Libraries
with Smaller or Specialty Libraries

Evolving Interlibrary Loan

BSCAN iLL
Interlibrary Loan

- Small "satellite" library scanning
- One interface for ILLiad, Ariel,...
- Send log / resend on command
- Compatible with RAPID
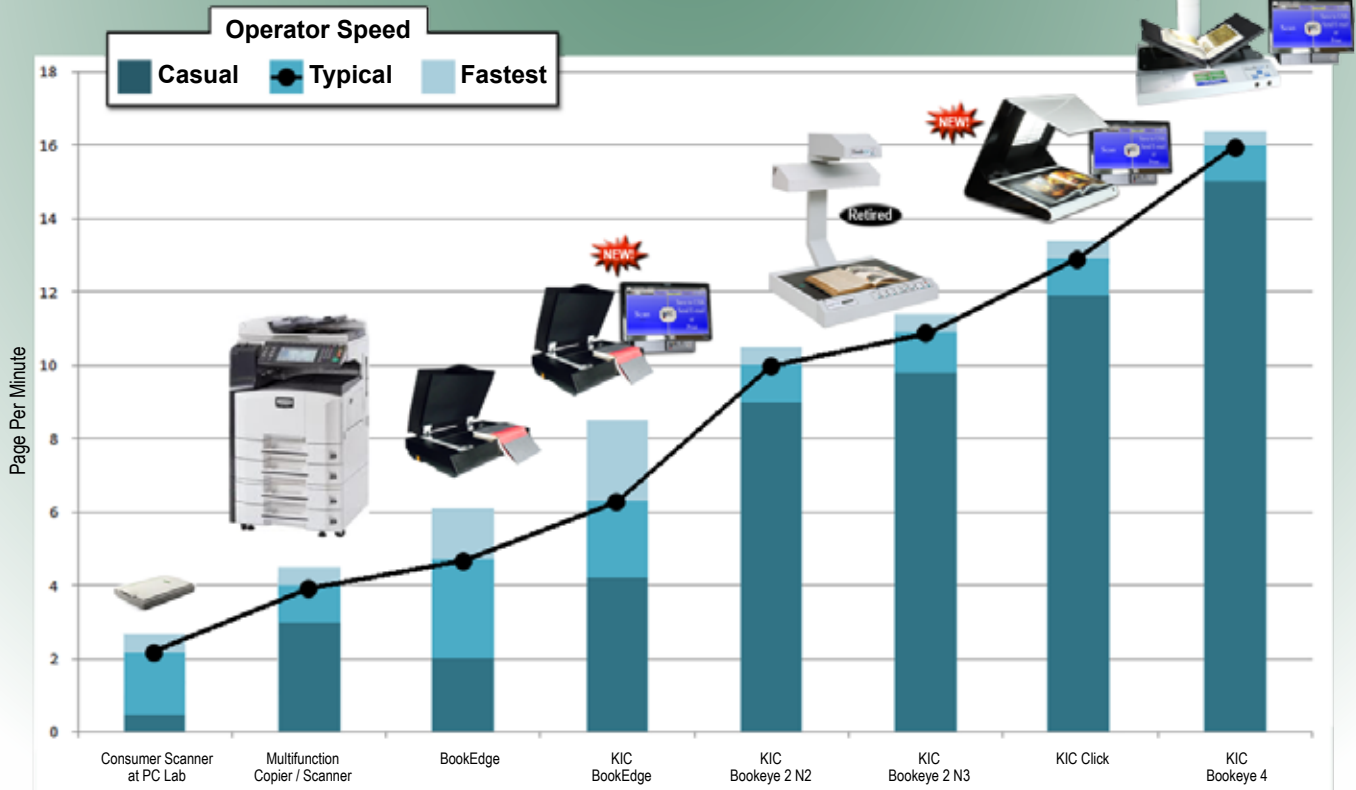- Resource sharing
- Utility scanning

BSCAN ILL's satellite scanning solution extends its interoperability (i.e. between Ariel, ILLiad, Odyssey, RAPID, and others, FTP, email, and digital document delivery) to small, remote sites and allows central control and distribution of ILL requests to scanning stations in small libraries.

Choices of satellite solutions include low cost, light duty book scanners, larger heavy duty Bookeye & Wide-TEK scanners and a portable, battery-operated, mobile scanning cart.

Battery-Operated Mobile ILL Cart

Small & Large Stationary Scanning Stations

Main Library

Small Satellite Libraries

Scanning Speed & Cost

Operator Speed
- **Casual**
- **Typical**
- **Fastest**

Page Per Minute

	Consumer Scanner at PC Lab	Multifunction Copier / Scanner	BookEdge	KIC BookEdge	KIC Bookeye 2 N2	KIC Bookeye 2 N3	KIC Click	KIC Bookeye 4

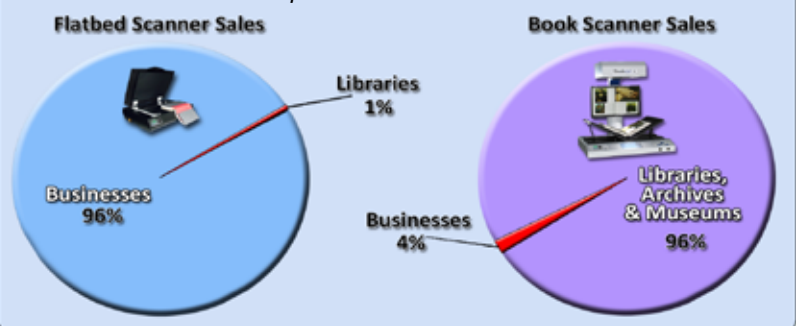**DLSG** Digital Library Systems Group at **Image Access**

The Digital Library Systems Group
A Division of Image Access Since 2004

The Digital Library Systems Group at Image Access exclusively serves libraries, archives, museums, and government records keepers. This undiluted focus allows DLSG staff to hone its skills in service, support, design and engineering of the best hybrid library digitization products possible.

And because DLSG is able to efficiently serve these communities directly throughout the Americas, its prices are affordable for virtually any library, archive, museum or government records keeping organization.

Most vendors sell to many markets with one-size-fits-all solutions. DLSG's singular focus on the common needs of libraries, archives and museums allows us to deliver a complete family of peerless products and services at affordable prices.

Flatbed Scanner Sales
- Libraries 1%
- Businesses 96%

Book Scanner Sales
- Libraries, Archives & Museums 96%
- Businesses 4%

Company History

Library Conventions   Europe   United States

Image Access

Since 1993, Image Access has been providing digitization workflow solutions to commercial markets. Having developed its own OCR, barcode reading and image treatment algorithms, Image Access is capable of meeting virtually any and all specialized digitization needs.

Motivated by a great lineup of hybrid library products under development, Image Access created the Digital Library Systems Group (DLSG) in 2004. And just as Bookeye became the leading book scanner, the DLSG quickly became the leading supplier of hybrid library products in America.

Over the years, the Image Access factory in Europe has produced a variety of high performance production scanners, including 600dpi book scanners with cool white LED lighting and built-in motorized cradle, large flatbed scanners that can scan 18x25 inches in full color in 3 seconds, and feedthrough scanners capable of scanning large drawings and both sides of full broadsheet newspapers simultaneously. All scanners are equipped with the revolutionary Scan2Net® Ethernet/HTML interface. In addition, the Image Access factory provides its state-of-the-art scanner electronics to several major commercial scanner makers.

Image Access U.S. remains focused on scanning workflow systems and on enhancing its hybrid library products, while Image Access Europe continues to develop new and better scanners. Together, we're committed to providing ideal digitization solutions for large and bound materials.

BSCAN 1997
Bookeye 1
Bookeye 2   2002
OPUS   2003
BSCAN Interlibrary Loan
KIC   2004
KIC
WideTEK 48   2005
Bookeye3 A1   2006
WideTEK Super B
Bookeye3 R1
Bookeye3 R2   2007
WideTEK 25
WideTEK 36
Bookeye 4   2008
Click
KIC BookEdge
OPUS FreeFlow   2009
KIC   2010
OPUS SI   2011
KIC SI
BSCAN Interlibrary Loan SI   2012
2013

DLSG
Digital Library Systems Group
at Image Access