

EMC CAPTIVA ISIS PIXTOOLS .NET

Quickly Create Custom Scan-enabled Applications

ESSENTIALS

EMC® Captiva® ISIS® PixTools® for .NET is an imaging toolkit that enables software developers to get imaging solutions up and running in as little as one week, ultimately driving a faster time to market. The toolkit enables applications to communicate with more than 400 scanners without the need for any additional software or hardware dongles (keys).

ISIS PixTools for .NET has the following capabilities:

- Sample code for common tasks
- Document capture scanning
- Pre-built controls for viewing and annotating
- Built-in image processing
- Barcode recognition
- Job separation
- Indexing

ISIS is the industry-standard, enterprise-level interface that unites scanners with software applications. ISIS allows scanners to run at their rated speeds or higher and is the only imaging solution that enables users to take full advantage of the power inherent in scanners and other imaging machines. ISIS drivers are available for more than 400 document, book, check, and large format scanners from more than 50 scanner hardware manufacturers worldwide.

EMC® Captiva® ISIS® PixTools® for .NET is a comprehensive Software Developer Kit (SDK) for .NET environments comprised of scanning, viewing, and image processing modules. EMC Captiva PixTools is ideal for developers who want to create custom document capture applications or embed powerful document imaging functionality into existing applications. This is all done within the ISIS (Image and Scanner Interface Specification) architecture—the industry-standard interface by EMC Captiva that unites document scanners with software applications. Because EMC Captiva PixTools leverages ISIS, developers are assured that any application written with the SDK will accommodate virtually any existing or future scanner that is paired with their EMC Captiva PixTools-based applications.

EMC Captiva PixTools SDKs have a flexible licensing model for OEM and corporate deployments. EMC Captiva maintains long-term relationships with leading scanner manufacturers and utilizes hundreds of document scanners for development, testing, and troubleshooting, enabling EMC Captiva imaging specialists to provide unparalleled support.

Utilizing EMC Captiva PixTools, experienced programmers can create a working document capture application in as little as one week. As a result, time to market is shortened; and development, testing, and support costs are greatly reduced, increasing ROI and the ability to compete in an increasingly competitive market.



SCANNING

PixTools/Scan gives developers programmatic control of the entire scanning process and every scanner feature. The PixTools/Scan features include:

- Support for 400+ scanners—ISIS drivers allow an application program to work with more than 400 different scanners made by more than 100 different manufacturers. Support for lower-speed TWAIN scanners is available through the PixTWAIN utility.
- Maximizes scanner performance—PixTools/Scan provides access to every major scanner feature, and drives them at their rated speeds or faster.
- Interface independent—ISIS drivers are available for scanners with SCSI, USB, parallel port, FireWire, and many proprietary interfaces. The PixTools/Scan with ISIS support allows applications to seamlessly add additional scanners without having to recompile the module.

REDEFINE

DATA SHEET

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- Adapting to the needs of the enterprise—PixTools/Scan provides access to a full range of available scanner features. Image data can be black and white (binary), gray, or 24-bit color. Automatic feeder, printer/endorsers, barcode recognition, page separation features, and filters are also available.
- Optional GUI—Each ISIS driver provides a completely optional graphical user interface (GUI). An application can provide the interface with every GUI provided by the ISIS drivers to share a consistent look and feel.
- Flexible and modular structure—PixTools/Scan provides an elegant method for connecting modular “building blocks” to complete specific imaging tasks. This modularity enables the creation of unique, enterprise-specific imaging solutions.
- Cross platform functionality with localization support—PixTools/Scan is available for Windows 2000, NT, XP, Windows 7, and Citrix. It is also compatible for Windows 8, Windows Server 2012, Microsoft Visual Studio 2012, and .NET Framework 4.5. Localization support is currently available for Italian, French, German, Spanish, and Japanese.

VIEWING AND ANNOTATING

Applications developed with the EMC Captiva PixTools SDK enable users to efficiently manage hundreds of documents and utilize the following features.

- Image annotation—The image enhancement feature within PixTools/View is supported with a multitude of annotations to include some of the following: multi-colored highlighting, freehand line drawing, polyline drawing, and redaction (opaque overlays).
- HTTP/FTP file support—PixTools/View is Web-enabled and allows users to view image files on the Internet as if they were on the local disk drive.
- Color, grayscale, and binary support—PixTools/View supports 24-bit color images, grayscale, and black and white (binary) images. The color support includes palette conversion and dithering to display full 24-bit images on 8-bit displays and/or conversion to gray or binary data.
- Image processing and cleanup—PixTools/View supports image compression and decompression, JPEG2000 compression for 8 bit gray images, LZW compression, arbitrary rectangle clipping, scaling, image rotation, and image file handling.
- Image caching and prefetching—Page images handled within PixTools/View are automatically cached and prefetched in the background, which maximizes performance while minimizing memory requirements.
- Enhanced support for Web-optimized image and text PDF files—PDF document handling within PixTools/View is optimized for users that are viewing and downloading these types of files.

IMAGE PROCESSING

Applications using the EMC Captiva PixTools SDK can use image processing features to reduce file size, improve image clarity, and improve downstream data recognition and extraction functions. These features include:

- Powerful filters for both binary and color images—PixTools/IP provides many different filters to enhance the scanned image. These tools provide improved productivity in managing images being processed and faster processing times related to image enhancements.
- Binary filters—Enhance black and white images with deskew, border removal, black overscan removal, margin cropping, halftone removal, noise removal, line and hole removal, smoothing, and more.

- Color filters—Enhance color images with deskew, color dropout, color detection, automatic color crop, color rotate, smooth zooming of color images, and more.
- Optimized for rapid analysis and modification of images—Image enhancement and barcode recognition on binary images can be added to applications for real-time processing at speeds of up to 400 pages per minute.
- Complete documentation and online support—PixTools/IP comes with complete documentation, online help, numerous code samples in C, C++, Visual Basic, and Visual Studio .NET, and the full backing of EMC Corporation's renowned developer support department.
- Ease of integration—The toolkit's components use ISIS drivers, which utilize the ISIS Pipes methodology for interconnecting imaging components with minimal coding effort.
- Ease of configuration—Each filter in PixTools/IP offers a choice of implementing through configuration dialogs, or using an API, which offers complete programmatic control. The developer is free to choose how the capabilities are presented to the user.

BARCODE RECOGNITION

PixTools/IP also includes additional data recognition capabilities. These features provide for quicker and more accurate capture of codes related to document capture, preparation, and processing. These additional features are:

- Recognition capabilities for 1D and 2D barcodes support—PixTools/IP includes barcode data recognition capabilities in support of 3 of 9, codabar, UPC-A, UPC-E, PDF 417 (2D) barcodes, and many more.
- Enhanced barcode recognition support—PixTools/IP has been further enhanced to support barcodes for intelligent mail, the Royal Post, and the Australian Post. These enhanced barcode detection features improve productivity in managing mail document processing.
- Additional recognition filter support—PixTools/IP supports patch code recognition (patchcode II, III, or T), blank page recognition, and color detection.

CONTACT US

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