# **ArcMate Capture Technical Specifications**

ArcMate Capture, the multi lingual (English/French/Arabic) data capturing solution with on-the-fly switching between interface languages.

### **Scanning**

- Batch scanning support with many types of separators:
  - Barcode
  - o OCR
  - Blank page
  - o Form
  - o Page count
- Scan job management increases scanning productivity by performing CPU intensive recognition tasks in background threads on the local scanning work station or other dedicated processing station.
- Scan errors recovery features.
- Multiple scanner and document saved profiles
- TWAIN and ISIS protocols support.
- Scanner Sharing
  - o Route scanned documents to any indexing workstation.
  - Scanner operators can select to route documents to a certain user or all users for metadata entry.
  - Auto naming of scanned documents with prefix letters and numeric counters.
- The ability to optionally scan from the original scanner interface or from ArcMate Capture unified interface.

# Form Recognition

- Automatic form registration to compensate page misalignment and shifts.
- Apply pre and post recognition image editing and enhancement templates.
- Zone OCR/ICR/OMR or barcode templates for each type of recognized forms.
- Mark unrecognized forms for human review and processing.
- Route recognized forms to special folders for human review based on the recognition confidence level.

#### **Electronic documents capture**

- ArcMate Capture accepts any type of electronic documents.
- Drag and Drop archiving for electronic documents.
- Monitor folders for automatic acquisition of files.

### **Document formats**

- ArcMate Capture uses industry standard file formats for image documents and metadata files.
- Support of two sided, multi page documents and multi documents records, documents and pages can be arranged at will.

### Indexing

- Users can freely define metadata entry forms with no limits on number of fields. Field types can be (among others): text, numeric, date, logical, lists, combo ...
- Default values and validation rules can be defined for metadata fields.
- Batch designers can construct substitution lists for text fields where any word or group of words can be substituted by a number or a keyword to accelerate entry.
- Documents are grouped in folders in a multi level tree structure.
- Indexing fields auto fill
  - The ability to build complex indexing data processing applications to service the customer's specific needs.
  - This module could be sold separately for the customer to build his custom processing application or bundled with the required functionality.
- Multiple Application Support
  - o Multiple sets of indexing fields (applications) for each individual batch
  - Index each type of document with its custom design application profile.
- Double data entry to ensure accurate index information.
- Head up digitizing to facilitate index information entry for non 'OCR' able documents (For example: hand written Arabic documents)
- The system saves searchable metadata includes creator / date of creation and record identification number.

# **Document Viewing**

Supported raster image formats:

JPG (JPEG File Interchange Format).

TIF (Tagged Image File Format).

Gif (CompuServe Gif).

BMP (Windows Bitmap).

ICO (Windows Icon File).

CUR (Windows Cursor File).

FPX (FlashPix)

PCX (ZSoft PCX).

XPM (XPicmap File).

PGM (Portable Greymap).

PPM (Portable Pixelmap).

CUT (Dr. Halo).

PSD (Adobe Photoshop).

PNG (Portable Network Graphics).

TGA (TARGA).

EPS (Encapsulated PostScript).

WPG (Word Perfect Graphics).

CLP (Windows Clipboard).

SGI (Silicon Graphics Image).

SCT (Scitex Continuous Tone format).

PDF (Raster PDF Format).

WFX (Winfax file Format).

ICA (IOCA file Format).

CAL (CALS File Format).

AWD (Microsoft FAX format).

MAC (MaxPaint file Format).

MSP (Microsoft Paint).

PBM (Portable Bitmap).

IMG (GEM Image).

SMP (Xionics format).

- Free zoom / Magnifying lens and scale to gray for B/W documents.
- Thumbnail views of image documents for capture stations.
- OCR capability for Latin text with control of OCR areas and interactive correction, output text could be saved either as plain text or as DOC, PDF, RTF or HTML and other formats files.

### **Image Editing**

• Image editing functions:

Pen / Eraser / Free Text / Color chooser

An extensive set of image manipulation functions, some of which are:

Flip Horizontal / Vertical

Mirror

Any Angle Rotation

Deskew

Despeckle

Shear

Resample

Change Color Depth

Crop

Smooth

Brightness / Contrast

Hue / Saturation

Histogram Equalize

Stretch Intensity

**Gamma Correction** 

Intensity Detection

- Group editing functions in stored templates to apply to document batches.
- Productivity reports for data entry operators, the system counts documents, files and pages entered by each user and provides administrators with detailed reports.
- Advanced editing functions:

Line Removal

Reverse Text

Border Removal

**Punch Holes Removal** 

Color Reverse

• Image filters:

Posterize / Mosaic / Average / Median / Sharpen / Enhance Edge / Oilify / Gradient / Laplacian / Sobel / Prewitt / Shift and Difference / Line Segment / Erosion / Dilation

- Color Separation: RGB / CMY / CYMK / HSV / HLS
- Count unique colors
- Support for the following vector formats:

DXF (Drawing Interchange Format).

DRW (DRaWing - Micrografx Designer).

CGM (Computer Graphics Metafile).

PCT (Macintosh QuickDraw)

PLT (HPGL – Hewlett-Packard).

WMF (Windows Meta File).

EMF (Windows Enhanced Meta File).

BGR (Gerber).

PCL (Printer Command Language - Hewlett-Packard).

SHP (ESRI Shape – Environmental System Research Institute).

SVG (Scalable Vector Graphics Format).

• Page insert / delete / reorder

# EMail and fax archiving module

- Capture email messages directly. ArcMate Capture connects to any POP3, IMAP and SMTP servers to capture emails messages.
- Extracts and map email attributes (From, to, subject ...) to metadata fields.

### **Full text OCR**

- Support for a wide set of languages with high accuracy.
- Support of Arabic OCR. (requires Sakhr OCR engine sold separately).
- Assign resource consuming OCR processing to background threads to achieve maximum scanner performance.

#### **Zone OCR**

- Metadata entry fields can be filled automatically from text areas located on defined parts of the page.
- Text areas can be saved in templates for different kinds of documents.
- Multiple templates could be defined for each document batch.

#### **Zone barcode**

- Same functionality of Zone OCR with support for the following OCR types:
- Linear barcodes (1D): EAN 13, EAN 8, UPC A, Code 3 of 9, Code 128, Interleaved 2 of 5, CODABAR, UCCEAN 128
- PDF barcode: PDF417 (2D)
- Data Matrix (2D): DM\_DEF, DM\_10x10, DM\_12x12, DM\_14x14, DM\_16x16, DM\_18x18, DM\_20x20, DM\_22x22, DM\_24x24, DM\_26x26, DM\_32x32, DM\_36x36, DM\_40x40, DM\_44x44, DM\_48x48, DM\_52x52, DM\_64x64, DM\_72x72, DM\_80x80, DM\_88x88, DM\_96x96, DM\_104x104, DM\_120x120, DM\_132x132, DM\_144x144, DM\_8x18, DM\_8x32, DM\_12x26, DM\_12x36, DM\_16x36, DM\_16x48, DM\_WRITE\_RECTANGLE

#### Staging and document QC process

- Scanned and imported documents can be routed among users in an unlimited number of user definable stages for quality control and verification.
- Administrators can watch and control document movement among stages and get detailed reports on work progress.

### Image printer

- The ability to store electronic documents in their original formats or as standard images.
- Automatic generation of image thumbnails and snapshots for electronic documents for easy preview of their contents.
- Export any electronic document (Word processor, spread sheet,...) to a standard image and distribute it without needing the original application.

### **Productivity reports**

- Assess data entry operators' productivity to streamline work process for any time interval with detailed reports on:
  - o Batches
  - Stages
  - Documents
  - o Files
  - o pages

# **Scripting and customization**

- Extend the system capabilities with user programmable event handlers like: On edit Documents, On Edit File, Pre Edit Field ......
- Handler scripts can do just about anything, like querying a remote database for indexing information, applying special editing on images etc....

# **Document release to DMS systems**

- Release image documents, electronic files, index information, OCR results and document hierarchy data.
- Sample delimited text output release scripts with source code included in both Visual Basic and Visual Basic .Net