



User Guide

Version 4.5

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Introduction

Accelerate your workflow using Express, a high performance application that automates the conversion of your business content to Portable Document Format (PDF), Plain (ASCII) Text, Image files and more. Express converts an extensive list of file types including standard business documents, images, graphics, web and legacy files. In addition, it offers a comprehensive set of features such as OCR, Watermarking, PDF Security, PDF Optimization, PDF Form fill-in, PDF Merging, Splitting and Stitching into a single application. Express allows you to integrate document conversion into your workflow simply and affordably.

Express functionality is available in several, tightly integrated server packages:

- Adlib **ExpressConversion** Server
 - Rendering of multiple formats to PDF and other formats
- Adlib **ExpressRecognition** Server
 - OCR image files and PDF to searchable PDF
- Adlib **ExpressPublishing** Server
 - Merge, apply header/footer/overlay, page content scaling
- Extended Outputs Option (available for all Servers)
 - Adds HTML, DOC, RTF, XPS, JPG, PNG, TIFF output formats
- Adlib **ExpressEnterprise** Server
 - Combines Conversion, Recognition, Publishing and Extended Outputs in one package
 - Includes XSL-FO file type support
 - Options available for the **ExpressEnterprise** package include:
 - Optical Mark Recognition support via Recognition
 - Barcode support via Recognition
 - Digital Signatures support

You can also choose to add Conversion, Recognition or Publishing functionality to any single server. For example you can add the Publishing Engine to Adlib ExpressConversion Server for a powerful, integrated solution offering both conversion and publishing features.

Integration Options

Express offers a range of options for integrating high performance document conversion, recognition and publishing into your workflow.

- Monitor Input Folders for documents and place the rendered documents (PDF, Text and Image) in a corresponding Output Folder.
- Monitor Input Folders for custom XML Job Tickets that define the specific conversion, recognition and publishing requirements for a particular document.
- Use Express Web Services to provide cross-platform, scalable access to *Express Server's* conversion functionality via standard SOAP calls – leveraging Adlib's XML Job Ticket functionality. Refer to the separate Express Web Services User Guide for more detail.
- Perform multiple document processes using Multiple Options Configurations to enhance workflows. The feature accommodates the needs of different workgroups or projects sharing a single instance of Express.
- Use VBScript and JavaScript to customize your conversion requirements.
- Use DPI/XML Job Tickets to meet your specific document requirements.
- Integrate Express into your workflow using Command Line.
- Produce PDF files within Windows Explorer simply by right clicking on the document.

- Optimize your computer utilization using the Integrated Scheduler to convert documents during off-peak hours.

Adlib Express Web Services

Express Web Services is a modular suite of components that provide cross-platform accessibility, seamless scalability and high availability to provide enterprise scale solutions for document conversion, recognition and publishing. It offers a flexible, modular architecture that can be configured to meet 24/7 and mission critical requirements.

The Express Web Service interface uses Open standards and XML to provide access from any computing platform anywhere.

Express Connectors and *Express Servers* can be added seamlessly to provide scalability and near real-time document processing by distributing the processing over multiple *Express Servers*.

This single, transparent, unified document processing resource results in organizations making better use of existing computing resources.

Refer to the separate Express Web Services User Guide for details.

Adlib Conversion Engine

The Adlib Conversion Engine is a high performance engine supporting the rendering of hundreds of file types including business documents, graphics, email, web content and an extensive list of legacy files. This Engine is part of the Adlib ExpressConversion Server and can be added as an option to Adlib ExpressRecognition Server or Adlib ExpressPublishing Server.

- Convert over 300 File Formats without requiring the Native Application.
 - Microsoft Office, Corel WordPerfect Office, Lotus SmartSuite
 - Web Formats (html, xml, wml ...)
 - Graphics (Corel Draw, Micrografx Designer, Visio ...)
 - Images (tiff, jpg, bmp, gif ...)
 - CAD (hppl ...)
 - Text (ANSI, ASCII, Unicode ...)
 - Rich Text (RTF)
 - Legacy file formats (WordStar, Lotus Symphony ...)
 - Macintosh files (Microsoft Word, WordPerfect ...)
 - PostScript (ps, eps)
 - Archives (WinZip)
- Produce high fidelity PDFs using the Native Application.
 - Microsoft Office, Corel WordPerfect Office, Lotus SmartSuite
 - Web Formats (Internet Explorer ...)
 - Graphics (Corel Draw, Microsoft Publisher, Visio ...)
 - AutoVue, Myriad (AutoCAD, Microstation, ProEngineer ...)
 - Reports (Crystal Reports ...)
 - Images (tiff, jpg, bmp, gif ...)
 - Text (ANSI, ASCII, Unicode ...)
 - Rich Text (RTF)

Extended File Type Support (EFTS)

The Extended File Type Support is part of the Adlib ExpressConversion Server. It enables *Express Server* to render over 300 file types without requiring additional software on the computer performing the conversion. The EFTS feature renders simple documents accurately but may not render complex documents as well as the native application used to create the document. We recommend customers to process a number of documents using the both, EFTS and NAS, methods to identify the method which is most suitable.

Tip: *Using native applications provides the highest quality document conversion.*

Adlib Publishing Engine

Express provides a wide array of PDF processing options to customize your PDF files. The Publishing Engine is available as part of the Adlib ExpressPublishing Server. It can also be added as an option to Adlib ExpressConversion Server or Adlib ExpressRecognition Server.

- Add PDF Security to protect your content from unauthorized viewing, printing, copying or modification.
- Enhance your PDF files by adding Watermark, Header and Footer information.
- Add a Table of Contents (TOC) to documents using XML
- Superimpose an Overlay on selected pages of the PDF. Overlay PDF files may contain text, graphics, text fields and JavaScript. This enables the creation of PDF files using your company letterhead or the insertion of data onto a standard form.
- Optimize PDF files for fast web viewing.
- Merge multiple documents including PDF files into a single PDF. All bookmarks in the PDF files are maintained and new bookmarks are created for each document.
- Split a multi-page PDF into multiple single page PDF files.
- Adjust PDF resolution to improve PDF quality or reduce file size.
- Automatically add metadata information (Title, Subject, Author, Keywords) from the original document to the PDF.

Advanced Publishing

(Available through XML and DPI Job Tickets only)

The Advanced Publishing functionality is part of the Adlib ExpressPublishing Server. It enables numerous features associated with creating advanced compound PDF documents using Job Tickets. These features are part of the Adlib ExpressPublishing Server and include:

Table of Contents Creation

A Table of Contents (TOC) is a list of the headings in a document. You can use a Table of Contents to get an overview of the topics discussed in a document. The Table of Contents is created using the Bookmarks contained in the PDF document. In addition, completely customized TOC may be created from Job Tickets.

Index Creation

An Index lists the terms in a document, along with the pages they appear on. Express extracts all words and the corresponding page numbers from a document and then excludes the terms that are contained in a Stop Word list. The resulting Index terms are sorted alphabetically and formatted in one or more columns. Each term is followed by a list of page numbers where the term is located. Each page number is hyperlinked to the location of the term on the specified page.

Link Management

When merging PDF files that have external links between the individual documents, the links will be changed into internal links between pages of the merged PDF.

Enhanced PDF Splitting

PDF files can be split into multiple documents based on the following criteria:

- Number of Files
- Maximum Size of Files
- Maximum Number of Pages

When PDF files are split, existing bookmarks will also be managed so that the appropriate bookmarks for the resulting documents are located appropriately.

Bookmark Creation

The following methods of creating Bookmarks are supported by Express without requiring the Publishing Engine

- Creating bookmarks from Native Applications such as MS Word or MS Excel

Defining custom Bookmarks in Job Tickets is a feature available which augments the standard bookmark creation methods.

Digital Signatures (optional)

(Available through XML Job Tickets only)

Digital Signatures is an optional component for Express that is used to authenticate the identity of a user and the validity of a document's content. The signature stores information about the user that signs the document and the state of the document while being signed.

There are two main modes in Adlib Express to sign a digital signature, Certificate mode, and SAFE (Secure Access For Everyone) mode. Certificate mode uses a security certificate file which is the standard in signing digital signatures. This certificate file must be local to the system and have a unique password to gain access. Express supports PKCS#7, PKCS#12, and DER certificates. In the two-phase SAFE mode, phase 1 calculates a hash value of the PDF whereas phase 2 inserts the Digital Signature Content Stream into the PDF. Optionally, the CVR (Certificate Validation Report) Stream can also be inserted into the null CVR Object created in the previous phase. For more information about Digital Signatures please see the **Express XML Job Ticket Guide**.

Adlib Recognition Engine

The Express Recognition Engine allows Express to convert images and non-searchable PDF files into searchable PDF files through a process known as Optical Character Recognition (OCR). The process recognizes the pixels of the image as text characters and adds them as a text layer, behind the image layer, in the PDF. This ensures the PDF document is displayed and printed the same as the original document.

The recognized text can also be extracted using Express and used for a variety of purposes including import into full-text databases for search and retrieval. This high performance engine supports 114 languages and is part of the Adlib ExpressRecognition Server and can be added as an option to Adlib ExpressConversion Server or Adlib ExpressPublishing Server.

- High quality OCR to generate accurate output.
- Support for 114 languages.
- Dictionary support including user-definable dictionaries.
- Zonal OCR option to target recognition for a specified page region.
- Available barcode and Optical Mark Recognition (OMR) options.

Windows Explorer Context Menu Document Conversion

Express users can convert documents to PDF format directly from Windows Explorer by selecting one or more files, clicking the right button on the mouse and selecting the **Create PDF from Express** menu item. The files are converted to PDF and placed in the same folder as the original documents. None of the Option Settings defined in Express, such as file naming, PDF Security and PDF Stamping, will be used when creating the PDF documents.

Express Server running as a Windows Service

Express can run as a Windows Service. Please Refer to **Appendix B** – Express Server Service for details.

Express Companion Products

The Adlib product suite is designed to allow customers to easily aggregate multiple products in order to provide specific document transformation solutions. Adlib continually enhances and expands its product line based on customer and market demand in order to better meet their needs.

The products described below are complementary to the Express product. Please visit the Adlib web site at www.adlibsoftware.com or email us at sales@adlibsoftware.com for additional information.

Relay

Relay provides a browser-based interface that enables the submission of documents to Express for conversion. The resulting documents are emailed to one or more email addresses as specified by the user. Relay enables an entire enterprise to access the PDF conversion utility without installing any client software.

Insight

Insight automates the extraction of email messages, attachments and metadata from email data files (e.g. MS Outlook *.PST files). Insight creates XML reports that contain the message metadata (e.g. From, To, CC, Sent Date, etc ...) that can be easily searched or loaded in databases for future use. Insight can also be integrated into workflows using the embedded scripting and Job Ticket functionality.

Please visit <http://www.adlibsoftware.com> for additional information.

Express User Interface

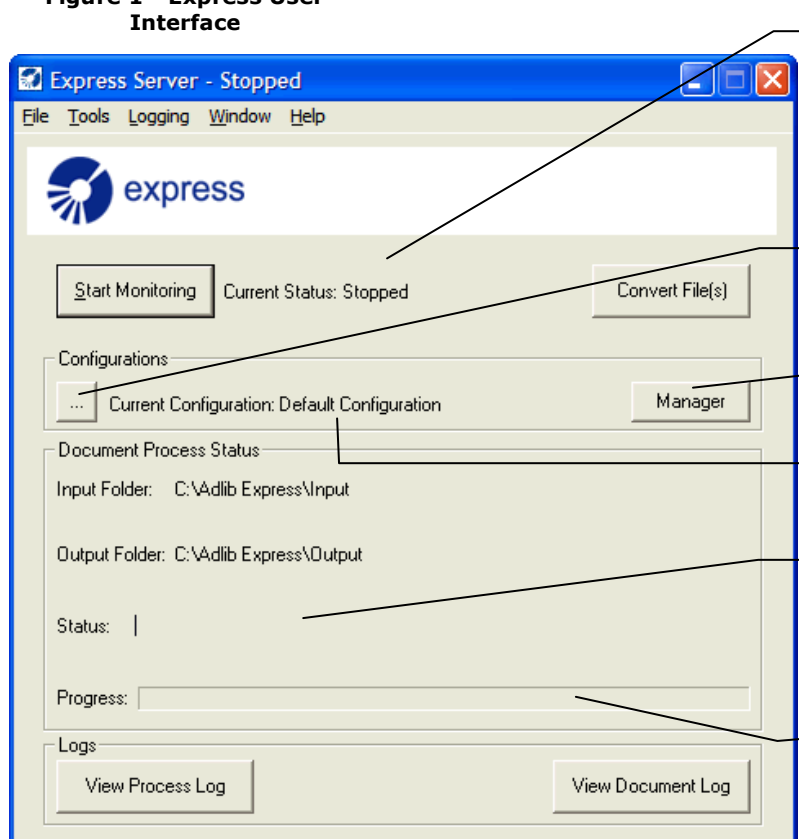
The Express User Interface (See **Figure 1 - Express User Interface**) allows users to convert documents manually or automatically. To process documents manually, select the **Batch Process Documents** item from the **Tools** menu. The documents (PDF, Text, Image) created are placed in the same folder as the files selected.

To use Express in Automatic mode, several folders must be defined. The Input folder contains the files to be processed and the Output folder contains the documents resulting from the conversion. The Error folder is used to store any files that are not processed successfully.

Express is started in Automatic mode by pressing the **Start Monitoring** button. The button label will change to **Stop Monitoring** when it is running. Please note that the **Start Monitoring** button label will only change to **Stop Monitoring** once Express completes the task in progress.

The Express User Interface screen provides Document Processing Status information (See **Figure 1 - Express User Interface**) and provides access to the Options and Multiple Option Configuration screens. It also includes some of the option settings, such as the Input and Output folders, as well as providing feedback on its activity such as the name of the file being processed.

Figure 1 - Express User Interface



Express Status Indication

- Stopped
- Processing Input Files
- Waiting for Next Scheduled Period
- Waiting for Input Files

Displays the Options for the selected Configuration

Multiple Option Configurations

Current Option Configuration Selected

Document Status Indication

- Document and DPI File being Processed
- No Files to be processed

Document Progress Bar Indication

Percent Indication of Processed Document/Total Documents for scan

Express Menu

The Express Menu allows users to perform document conversion manually as well as set some of the Express settings. The menu items are described below.

File Menu

The **Save Express Settings** allows users to save all Express settings to a file (e.g. ExpressSettings.reg). All Express settings are stored in the Windows registry and can be loaded by double clicking of the registry file or using the **Load Express Settings** Menu Item. This allows users to backup and load the Express settings on other computers.

Tools Menu

The Express Tool Menu contains several functions that can be executed in Manual mode. It also provides access to the Express Options, Option Configurations, Scheduler and Application Settings.

Batch Process Documents (Ctrl+B)

This function enables the conversion of documents directly from the Express application. Select one or more documents, using the Control (**Ctrl**) or **Shift** keys, from the file selection dialog screen and click the **Open** button. These files will be converted and placed in the same folder as the original documents. All Option Settings defined in Express, such as file naming, PDF Security and PDF Stamping, will be used when creating the PDF documents.

Note: File names that contain Unicode characters are not supported through batch mode.

Tip: *Windows Shortcuts cannot be processed using the Batch Process Documents function.*

Print PDF Documents (Ctrl+P)

This function will print one or more selected PDF documents to the default printer configured on your computer.

Split PDF Documents

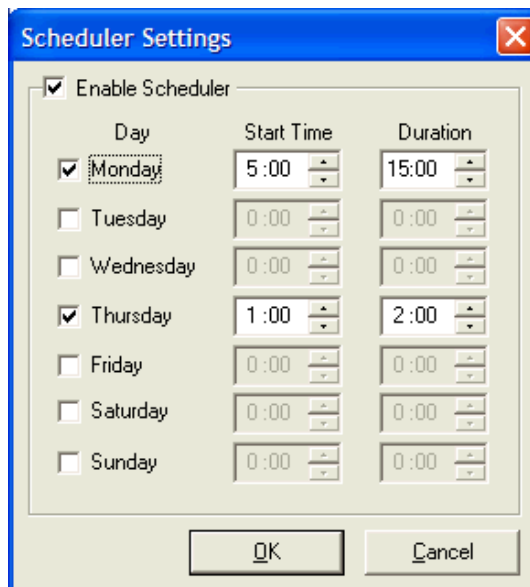
This function will split a multi-page PDF document into multiple single page PDF documents. The resulting PDF files will be placed in a subfolder with the same name as the original PDF document. The PDF files are named the same as the original file, with the page number added. For example, a PDF file with five pages named MyDoc.PDF will be split into a subfolder called MyDoc. The individual PDF files will be named MyDoc_1.PDF, MyDoc_2.PDF ... MyDoc_5.PDF.

A DPI (Document Processing Information) Job Ticket file containing all of the individual PDF documents is automatically created during the splitting process. This file can be used to reassemble the individual PDF pages into a single PDF if desired. Refer to the **Express DPI Job Ticket User Guide** for more details.

Scheduler

The user has the ability to schedule (see **Figure 2 - Scheduler Settings Screen**) each Express Configuration to run once a day for a specified duration. If the Scheduler is not enabled, Express will run continually. The user must set the Start Time and Duration for each day enabled. Please note that a 24-Hour clock is used. The user can enter the hour and minutes or use the up and down arrows to set the time. When Express is monitoring, it will process documents for the specific Option Configuration only if the time is within the scheduled time and duration for the Option Configuration. If not, Express will switch to the next Option Configuration.

Figure 2 - Scheduler Settings Screen



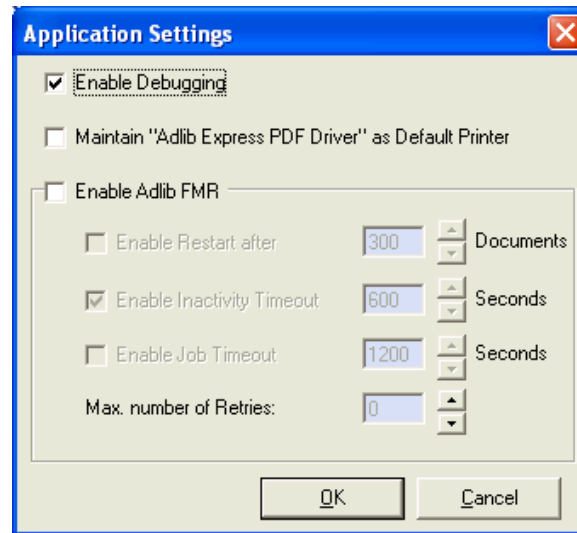
The dialog box titled "Scheduler Settings" contains a checkbox for "Enable Scheduler" which is checked. Below this is a table with three columns: "Day", "Start Time", and "Duration". The rows represent the days of the week. Monday and Thursday are checked, while Tuesday, Wednesday, Friday, Saturday, and Sunday are unchecked. The Start Time and Duration for Monday are 5:00 and 15:00 respectively, and for Thursday they are 1:00 and 2:00 respectively. All other days have a Start Time of 0:00 and a Duration of 0:00. At the bottom of the dialog are "OK" and "Cancel" buttons.

Day	Start Time	Duration
<input checked="" type="checkbox"/> Monday	5:00	15:00
<input type="checkbox"/> Tuesday	0:00	0:00
<input type="checkbox"/> Wednesday	0:00	0:00
<input checked="" type="checkbox"/> Thursday	1:00	2:00
<input type="checkbox"/> Friday	0:00	0:00
<input type="checkbox"/> Saturday	0:00	0:00
<input type="checkbox"/> Sunday	0:00	0:00

Application Settings

The Application Settings item displays a screen that allows users to enable Express to run in a Debug logging mode (see **Figure 3 - Application Settings Screen**). In Debug mode, Express will write all of its processes to the Process Log (Express Process Log.txt) and Document Log (Express Document Log.txt) stored in the folder defined for each log. In addition, a conversion log (AdConvLog???.txt) is created in the folder defined for the Process Log. These logs provide additional information to Adlib technical personnel in order to solve document processing problems. The log file size increases significantly when Express is running in debug mode.

Enabling **Maintain "Express PDF Driver" as Default Printer** will suppress Express from changing the Default Printer for each document conversion. This may improve performance on some systems.

Figure 3 - Application Settings Screen

Enabling the Adlib Fault Monitoring and Recovery (FMR) activates the AdlibFMR Service that monitors the Express conversion processes for faults and crashes. Faults are monitored by the exchange of messages between Express and the Adlib FMR.

Enabling Restart causes Express to automatically shut down and restart after processing the specified number of documents. This function was implemented to maximize Express's reliability and to recover memory consumed by the Windows Operating System and application software (e.g. MS Word, WordPerfect ...).

The Inactivity Timeout occurs when absolutely no messages are returned by Express within the specified timeout period. The document conversion is terminated.

The Job Timeout occurs when any Job (Job Ticket or single file) takes longer to process than the specified timeout period. Regardless of whether or not Express is still sending messages to FMR, if the Job takes longer than the timeout specified then the Job is terminated. This timeout is disabled by default.

When a Job is terminated the user has the option to retry the Job. This is controlled by the "Max. number of Retries" option. The default retry count is zero, if you wish to retry Jobs that eclipse one of the Timeout values then you should increase the retry count.

Logging Menu

The Express Logging Menu provides easy access to all the log files that are created by Express. This includes Express logs (See **Log**), ExpressRecognition logs and the Page ID log.

Windows Menu

The Express icon can be set to display in the Windows System Tray and/or Taskbar by selecting **Minimize to System Tray** and/or **Minimize to Taskbar** item from the **Windows** menu.

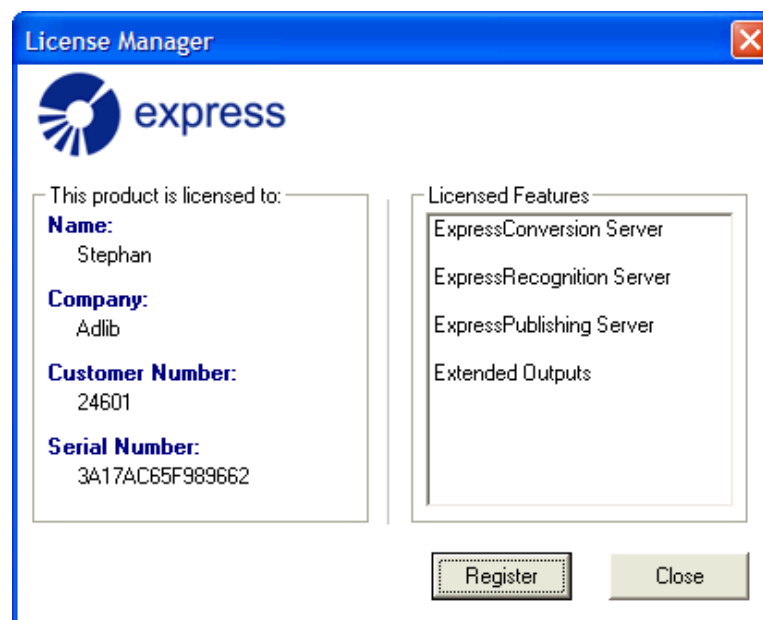
Help Menu

The Express Help Menu provides easy access to the **Express User Guide** and the **Express XML Job Ticket User Guide**. In addition, users can find the License Manager, important web links and the automated problem reporting process. Please refer to **Appendix H – Submit a Problem to Adlib** for details.

License Manager

The License manager displays either the Evaluation time remaining or the current license information installed (customer name, company, number and serial number). The Licensed Features list displays all the features that are available with the current license.

Figure 4 – License Manager



Quick Start Wizard

From the Quick Start Wizard welcome screen the user can select the Quick Start Wizard which shows the basics on how to begin monitoring a watched folder and converting documents to PDF. It also allows for quick conversion of a document to PDF. Convenient User Guide and Contact links are also provided. The user can choose to not have the Welcome screen automatically appear by de-selecting the *Show This Screen Next Time* checkbox.

Figure 5 – Quick Start Wizard Welcome Screen



Figure 6 – Quick Start Wizard



Express Tour

Starting in version 4.5.0, the Express Tour application will launch when Express is launched in standard user interface mode. If you do not wish Express Tour to launch when Express starts, uncheck the "Show this screen next time" checkbox in the bottom right corner of the Express Tour window.

The intention of Express Tour is to provide a structured walkthrough of the key features of *Express Server*: Conversion, Recognition, and Publishing. It also introduces the use of Job Tickets as a means of integrating *Express Server* with other systems.

Express Tour is a small standalone application that pulls content from Adlib's website. In order to view all the available content, the machine on which Express Tour is run must have internet access. Also, if you have enhanced internet security enabled on the machine running Express Tour, we recommend setting <http://www.adlibsoftware.com> as a permitted site so that the Express Tour is able to render its web pages. The system will advise you if it does not detect an internet connection.

Use the arrow buttons on each page to navigate through the Tour. You can also use the links in the menu bar on the left of the Express Tour window to navigate directly to a specific section. The application was developed to mimic simple web pages, and at the same time to permit opening of files and folders on the machine for your convenience.

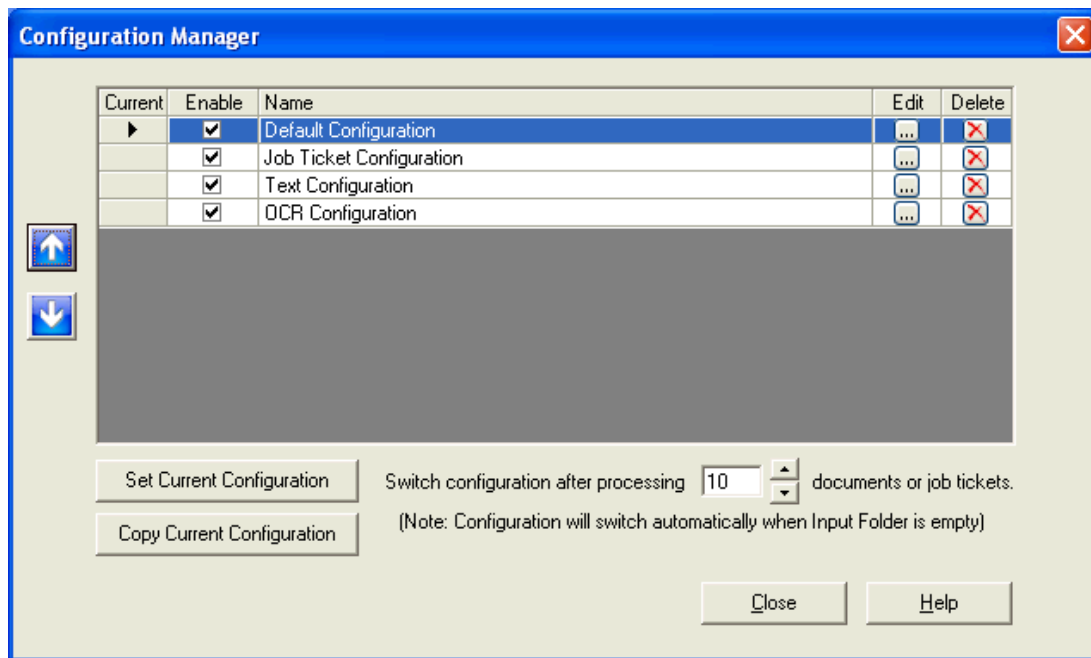
Nothing is sent to Adlib during the execution of Express Tour. You are free to follow-up with us using the contact information on the last page of the Tour if you require assistance or would like more information about Adlib or any of our products.

Enjoy the Tour!

Configuration Manager

Using the Configuration Manager, Express allows you to setup multiple Configurations for document conversion. Each Configuration is stored as a different profile, each with its own set of Folders, Processing, Scheduler, PDF Options, Print Options and Stamping Options. This feature allows users to easily change from one configuration to another without having to change the *Express Server* options. In addition, Express can be setup to continually process documents for all Configurations. There is no limit to the number of Configurations.

Figure 7 – Configuration Manager Screen



Creating a New Configuration

- 1- Click the **Manager** button from the Express main screen.
- 2- Select the configuration you wish to copy or the **Default Configuration** by clicking on it in the Configuration List.
- 3- Press the **Copy Current Configuration** button and define the name for the new configuration by clicking within the **Configuration Name** column. This copies all of the settings in the currently selected configuration to the new Configuration.
- 4- Select the new configuration from the Configuration List by highlighting the target configuration and clicking the **Set Current Configuration** button. A message box will appear asking to: "**Set '<Configuration Name>' as the current configuration?**". Clicking "Yes" sets the new Configuration as the **Current Configuration**.
- 5- To edit the *Express Server* options for the new configuration, click the ellipsis (...) button of the target configuration under the **Edit** column.
- 6- Click **OK** to commit the *Express Server* options for the new configuration.
- 7- Select the configurations that are to be processed by clicking the **Enable** checkbox. Each enabled Configuration in the Configuration List is continually processed from top to bottom starting at the Current Configuration.

- 8- Set the number of documents to be processed for each Configuration prior to changing to the next one. If the number of documents is set to 20, the Option Configuration will change to the next one once 20 documents are processed or if no documents are left to be processed.
- 9- Set the Configuration processing order by selecting one Configuration and using the Up and Down arrow buttons.
- 10-Exit the **Configuration Manager** screen by pressing the **OK** button to save the settings.

Tip: *Express will immediately switch to the next Option Configuration if no documents are found for processing for the Option Configuration.*

Command Line Support

Command line can be used to process documents using Express. The documents are processed according to the Express options defined in the user interface. Various parameters can be defined to control the operation of Express without interacting with the user interface. For example the user can set the mode of Express as well as enabling automatic shutdown when the document processing is completed. The following describes the command line parameters supported:

/start Express starts in Automatic Mode and starts scanning based on the Express Options which have been set. If Scheduling is enabled then Express waits for the next scheduled time to start processing the Input Folder files. If Scheduling is disabled then Express immediately begins monitoring the Input Folder.

/autostop Express shuts down automatically after it has finished processing all Input Folder files.

/process src_file dst_file Express processes the specified **src_file** and creates the resulting **dst_file**. This feature operates similar to Batch Processing. However, it operates from the command line rather than in an interactive mode. The **src_file** and **dst_file** must be enclosed in quotations.

/dpi_enable When the **/start** parameter is specified, Express starts in Automatic Mode and enables scanning for DPI files only. This setting overrides the currently configured Options.

/dpi_disable When the **/start** parameter is specified, Express starts in Automatic Mode and excludes scanning for DPI files. This setting overrides the currently configured Options.

/ui_disable Express suppresses the user interface.

/zip_disable Express support for Zip File processing is suppressed.

/config cfg_name Express uses the specified Option Configuration.

The following are command line examples using *Express Server*. Please note that you must specify the path to the *Express Server* executable (adexps.exe):

```
"C:\Program Files\Adlib\Express\adexps.exe" /start /autostop
```

or

```
"C:\Program Files\Adlib\Express\adexps.exe" /process "\\net\g\My Doc.doc" "c:\mypdf.pdf"
```

Express Server Options

Express contains a comprehensive set of option screens that allows the user to setup the application to meet specific needs. The Options screen is accessible from the ellipsis (...) button in the Configurations area on the main screen or by selecting **Express Options** item from the **Tools** menu or by pressing the F2 function key. Each of the Options screens is described in detail below.

General

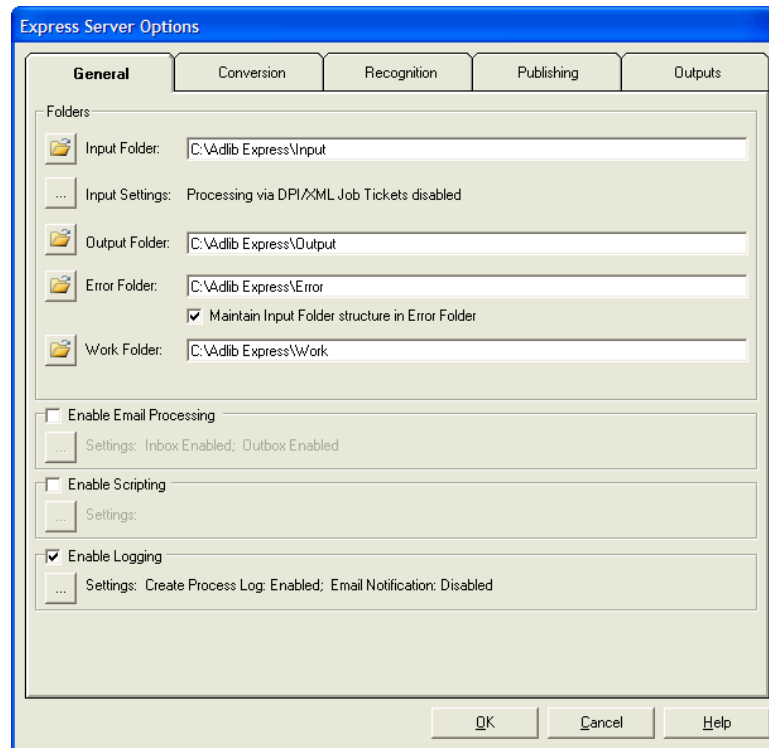
This following section describes the integration options available for the Express product suite. Note that information / instructions regarding Express Web Services are excluded from this document. Information / instructions regarding web service integration are available in a separate Express Web Services User Guide.

This section allows you to configure a variety of integration options for Watched Folders (includes sub-folder support), Job Ticket Processing (via Input Settings), Email Processing, Scripting.

Using the information contained in this section will tightly integrate your *Express Server* into multiple workflows.

Folders

When Express is installed, several folders are created automatically: Input, Output, Error and Work (see **Figure 8 - General Tab Screen**). You can change the folder definitions as required to meet your needs. **All folders must be unique and cannot be a subfolder of any other folders defined** (For example, the Output Folder may not be a subfolder of the Input Folder.) Folders may use Universal Naming Conventions (UNC) paths. The following describes the settings of the Folders section of the General tab in detail.

Figure 8 - General Tab Screen

Tip: The path to a hidden shared folder must be keyed in since they are not selectable from the Browse for Folder screen.

Tip: When using Windows 2000 it is recommended that you define the Express Folders using UNC paths.

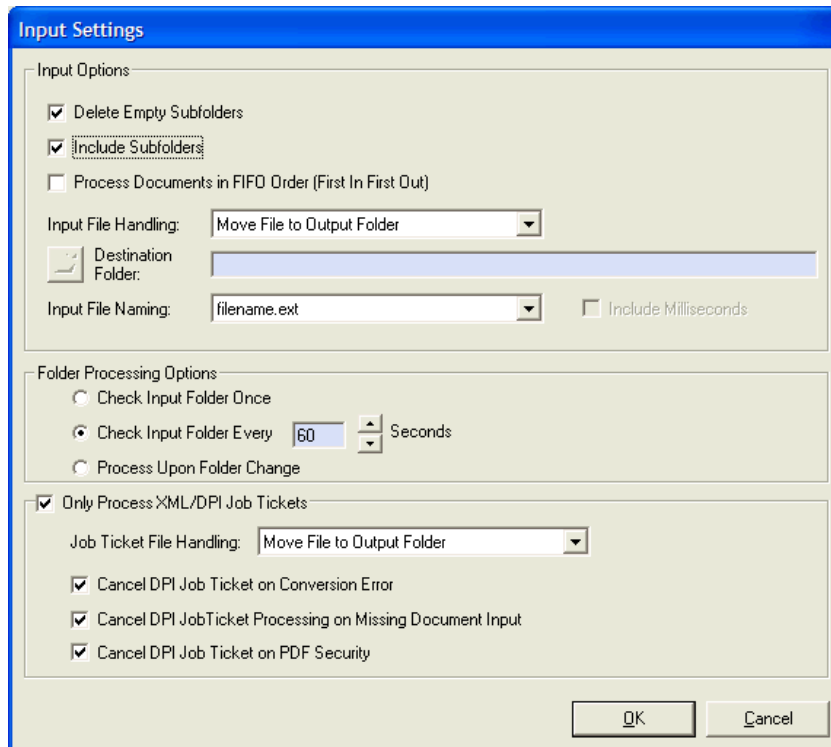
Input Folder

The Input Folder is the folder that Express will check for files to be converted. Express will create a PDF, Text, Image file for every file in the input folder.

Input Settings

The Input Settings screen (See **Figure 9 – Input Settings Screen**) allows users to define how Input files are processed. The following describes these settings in detail.

Figure 9 – Input Settings Screen



Input Options

The Input Options section defines how the Input folder and input files are handled / processed.

Delete Empty Subfolders

Subfolders in the Input Folder will be automatically removed when empty if the **Delete Empty Subfolders** option is selected.

Include Subfolders

The **Include Subfolders** check box allows Express to process files in all subfolders of the Input folder.

Tip: Files that have the file properties attribute Hidden selected are not processed.

Tip: PDF Files that have security cannot be processed by Express and will be placed in the Error Folder.

Process Documents in FIFO Order

The **Process Documents in FIFO Order (First In First Out)** check box allows the user to enable processing of documents in the order that they arrive in the Input Folder.

Tip: Do not select **Process Documents in FIFO Order (First In First Out)** if you are processing a large number (500 +) of documents at the same time, otherwise Express may exhibit a delay starting processing.

Input File Handling

The **Input File Handling** list box allows the user to select how the files in the Input folder are handled after the PDF file is created. Refer to **Table 1 - Input File Handling Options** for a description of each of these selections.

Table 1 - Input File Handling Options

Input File Handling	Description
Delete File from Input Folder	The Input folder files are deleted after the PDF file is created.
Move File to Output Folder	The Input folder files are moved to the Output folder after the PDF file is created.
Move File to Destination Folder	The Input folder files are moved to the Destination folder after the PDF file is created. The Destination folder allows the separation of the Input folder files and the PDF files. The user must define the Destination folder.
Process New and Updated Files Only	A PDF file is created each time an Input folder file is modified or a new file is added to the Input folder.

Destination Folder

The Destination Folder is the folder where Express will move the files from the Input Folder after processing is completed if **Input File Handling** is configured to **Move File to Destination Folder**.

Input File Naming

The Input File Naming provides three naming conventions for the Input Folder files. The date and time can be added to the filename when it is moved out of the Input Folder. In addition, Milliseconds is added to the Input File Name if the **Include Milliseconds** check box and one of the Date and Time Input File Naming Conventions is selected. This ensures that none of the Input folder files are overwritten. Please note that the Date and Time inserted in the File name will be the same as the one used in the PDF File name. Refer to **Table 2 - Input File Naming Options** for a description of each of these selections.

Table 2 - Input File Naming Options

Input File Naming Convention	Description
filename.YYYYMMDDThhmmss.ext	<p>The Input File in the Output or the Destination Folder is named the same as the Input File but has the ISO date and time format added to the filename.</p> <p>My Doc.doc -> My Doc.20011124T234956.doc</p> <p>Please note that a T is used to indicate the beginning of the time. Adding this date format to the Input File allows the files to be sorted chronologically.</p> <p>Please see Table 3 - Date and Time Code Descriptions</p>
filename.MMDDYYYYThhmmss.ext	<p>The Input File in the Output or the Destination Folder is named the same as the Input File name but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.doc -> My Doc.11242001T234956.doc</p>
filename.DDMMYYYYThhmmss.ext	<p>The Input File in the Output or the Destination Folder is named the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.doc -> My Doc.24112001T234956.doc</p>

Table 3 - Date and Time Code Descriptions

Code	Description
YYYY	Year (four digits)
MM	Month (two digits; padded with a leading zero if necessary)
DD	Day (two digits; padded with a leading zero if necessary)
T	Time symbol; used to indicate the beginning of the time text
hh	Hour (two digits; padded with a leading zero if necessary)
mm	Minute (two digits; padded with a leading zero if necessary)
ss	Second (two digits; padded with a leading zero if necessary)
sss	Millisecond (three digits; padded with leading zeros if necessary)

Folder Processing Options

The user has the ability to have Express check the input folder once, continually check the Input Folder at a set interval, or start processing files in the input folder once there are files to process have been placed inside. If the **Check Input Folder Once** option is selected, Express will stop monitoring after it has completed one scan of the Input folder and has processed all files found. The user can set the scan period between 0 to 60 seconds by using the up and down arrows if the **Check Input Folder Every** option is selected. If the **Process Upon Folder Change** option is selected, Express will only start processing files once files have been placed inside the Input folder.

Note: When **Enable Email Processing** is selected, the **Process Upon Folder Change** option cannot be used.

Note: When **Process Documents in FIFO Order** is selected, the **Process Upon Folder Change** option cannot be used.

Job Ticket Options

(XML Job Ticket is not available in the Express Desktop product)

A Job Ticket is an electronic file that contains all information for the production of a document processing job. The Job Ticket is a set of specific document processing options used by Express to process the job. Express supports a DPI and XML Job Ticket file format. The Document Processing Information (DPI) file format is a plain (ASCII) text file with a .DPI extension. The XML file format uses a plain (ASCII) text file with an .XML extension and uses Extensible Markup Language (XML) standards to store the job instructions. Please visit the World Wide Web Consortium (W3C) web site at www.w3c.org/XML for additional information on XML.

The DPI and XML Job Tickets support all of the features provided by the Express user interface, such as the following.

- Header and Footer
- Watermark
- Overlay
- PDF Bookmarks
- OCR
- PDF Splitting/Merging/Stitching
- PDF Page and Content Scaling
- PDF Settings and Print Settings
- PDF Document Information
- Document Open Options
- CAD, HTML, Text Page Setup

In addition to these features, DPI/XML Job Tickets extend the functionality of the Express User Interface, including the following advanced features:

- File Merging
- Table of Contents Report
- Bookmark Creation
- Printing processed documents
- Delivering processed documents via Email
- Delivering processed documents to a Web Server

- PDF Information Extraction

Multiple documents can be merged into a single file by listing all documents in the Job Ticket file. It is possible to disable the document merging process allowing all files listed in the Job Ticket to be processed with the settings defined. Users can define a Bookmark hierarchy in the Job Ticket to be added to the resulting PDF. If no Bookmarks are defined, the filename of the original document is used.

Job Tickets allow you to specify the following destinations for the processed documents:

- Network Folders/Paths
- Email Addresses
- Printers
- Web

XML Job Tickets enhance the PDF Bookmarking functionality by providing the ability to define the type of bookmark (Internal, File, Web, email and Null) and its destination (path, Page Number, Page Number with X, Y coordinates).

Some of the Express settings defined in the User Interface are used when processing DPI Job Ticket files. However, any settings specified in a DPI Job Ticket file will override the Express User Interface settings. For example, if the Express Options specify a watermark **Proof**, this can be overridden by specifying a watermark **Confidential** in a DPI Job Ticket file.

XML Job Ticket files do not use any of the Express settings defined in the User Interface because the Express document type definition (DTD) (AdlibExpress.dtd) referenced in the XML Job Ticket file defines the default settings. The AdlibExpress.dtd file resides in the DTD folder of the Express installation folder (e.g. C:\Program Files\Adlib\Express\DTD).

The DTD is used to validate the XML Job Ticket. The XML Job Ticket is **valid** if it complies with the constraints expressed in the DTD. Express validates the XML Job Ticket prior to processing it. Users can validate the XML Job Ticket by opening it with IE 5.0 or greater.

If you wish to modify the default settings in the Express DTD, you must copy the AdlibExpress.dtd and give it a new filename (e.g. MyAdlibExpress.dtd) and refer to this DTD inside your XML Job Ticket file (e.g. <!DOCTYPE JOBS SYSTEM "C:\Express\DTD\MyAdlibExpress.dtd">). Please visit the World Wide Web Consortium (W3C) web site at www.w3c.org/XML for additional information on XML and DTDs.

Express can send Job Information out via URI (http server) for easier error tracking. This XML file includes File Name, Job ID, Date, Time, Result Code, and Description. Express will send the XML file to a web service using the POST protocol or simply upload the file using the PUT protocol. A valid URI string should contain the port number, username and password if needed. Please see the **XML Job Ticket Guide** or the **DPI Job Ticket Guide** for more information.

Additional information about Job Tickets, along with sample files and sample XML Job Tickets, can be requested by sending an email to info@adlibsoftware.com

Note: When **DPI/XML Job Ticket Processing** is selected, then Express only processes files in the Input Folder that have a .DPI or .XML extension.

Job Ticket File Handling

The **Job Ticket File Handling** list box allows the user to select how the files in the Input folder are handled after the PDF file is created. Refer to **Table 4 - Job Ticket File Handling Options** for a description of each of these selections.

Table 4 - Job Ticket File Handling Options

Job Ticket File Handling	Description
Delete File from Input Folder	Deletes the DPI file and the files referenced inside the DPI files that are in the Input Folder after the PDF file is created.
Move File to Output Folder	Moves the DPI file and the files referenced inside the DPI file that are in the Input Folder after the PDF file is created.

Cancel DPI Job Ticket Processing on Conversion Error

The **Cancel DPI Job Ticket Processing on Conversion Error** allows the user to select how Express handles the processing of the DPI Job Ticket when an error is encountered. By default, Express will not create the merged PDF if any error is encountered during the processing of the individual documents defined in the DPI Job Ticket. If **Cancel DPI Job Ticket Processing on Conversion Error** is not selected, a PDF will be created containing only the documents that were successfully processed. The PDF will be missing all documents with errors that were contained in the DPI Job Ticket.

Cancel DPI Job Ticket Processing on Missing File Error

The **Cancel DPI Job Ticket Processing on Missing File Error** allows the user to select how Express handles the processing of the DPI Job Ticket when a missing file is encountered. By default, Express will not create the merged PDF if any missing files are detected in the DPI Job Ticket. If **Cancel DPI Job Ticket Processing on Missing File Error** is not selected, the document missing from the DPI Job Ticket will not be present in the resulting PDF.

Note: In order to Cancel XML Job Ticket Processing the user needs to specify the corresponding attribute in the XML Job Ticket itself.

Output Folder

The Output Folder is the folder where Express will place the processed files once created. If the **Include Subfolders** check box is selected, Express will recreate the Input Subfolder structure in the Output folder and will place the processed files created in the corresponding subfolder.

Error Folder

The Error folder is used to store the files that are not processed successfully. These include non-document files, such as executables (exe), Audio (wav, mp3 ...), Video (mpg,...), corrupted files, password protected files, documents with formatting problems (e.g. Margins are set outside the printable area of the page) and files that are not supported by Express (see **Appendix C – Supported File Types**). This provides feedback to the user on the unprocessed files and allows them to be reviewed in order to take appropriate action to correct the problem.

Work Folder

Express copies the Input folder files to the Work folder for processing and creating the PDF document. This eliminates the risk of corrupting the original files during the conversion process. HTML files are not copied to the Work folder but are processed in the Input Folder because they may reference additional files.

Tip: *All referenced files within HTML documents must be copied or found in the appropriate location in order for these to be included in the PDF.*

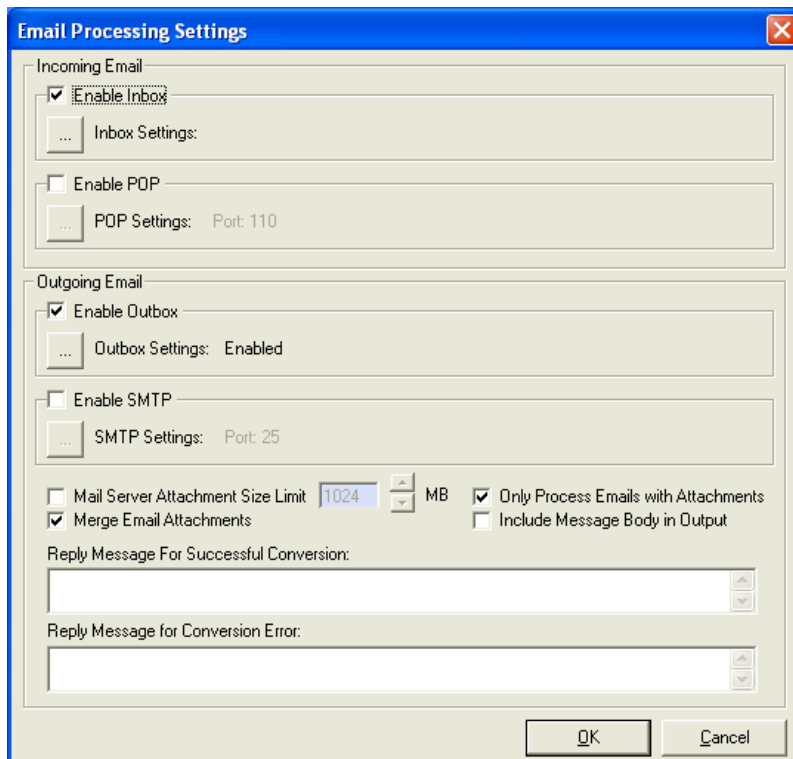
Email Processing Settings

Documents can be submitted to Express for conversion using email (see **Figure 10 - Email Processing Settings Screen**) by attaching the documents to the email message. Express can monitor incoming messages from Microsoft Outlook email client Inbox and/or a Post Office Protocol (POP) server. These are configured by pressing the associated ... button contained on the email Settings screen and defining the required information (User Name, Password...)

Express scans for email messages, extracts the attachments, creates a DPI Job Ticket and moves all required files into the Input Folder. Express processes the DPI Job Ticket and delivers the rendered documents as attachments by replying to the email message. Express does not require an email client if POP and SMTP is used.

Please note that Express can monitor both an Inbox and POP server at the same time but can only send from an Outbox or SMTP for an Option Configuration.

Figure 10 - Email Processing Settings Screen



Tip: You must use POP and SMTP if you are running Express as a service.

Tip: Disable the Merge Email Attachments checkbox in order to receive one rendered file for each document sent.

Tip: The Inbox Settings screen has a link to the MSG Settings options. These settings are only applied if **Include Message Body** is enabled, or the attachments to the email are MSG files. For information on these settings, refer to **MSG Settings**.

Users may customize the creation of their PDF Documents by including any DPI (Document Processing Information) instructions in the body of the email message. For example, the sender may add the following DPI instructions to the body of the email message to add a watermark to the PDF:

```
[Watermark]
Text=----- Preview -----
FontName=Arial
FontSize=48
Color=6447714
Orientation=307
Horizontal=3
Vertical=-7.5
```

Please refer to the **DPI Job Ticket Guide** for a detailed description of how to create and format DPI files.

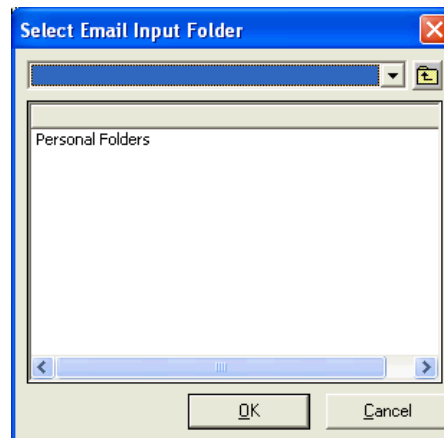
Follow these steps to configure email Processing:

1. Select the **Enable DPI File Processing** check box.
2. Select the **Enable Email Processing** check box.
3. Define an Incoming email Inbox and/or POP server. Please note that you can browse (see **Figure 11 - Select Email Inbox Folder**) and select the email Inbox Folder and email Destination Folder using the associated ... button if you are using Microsoft Outlook.
4. Define the Microsoft Outlook Outgoing email Outbox and/or SMTP server.
5. Select and set the **Mail Server Attachment Size Limit** if desired. Express will not send attachments if the **total** attachments size exceeds the specified limit. The following message will be sent to sender when the limit is exceeded.

Express did not return the Rendered Document because the Attachment size (13.5 MB) exceeds the Mail Server 10 MB limit.
6. Select and set the **Merge Email Attachments** option if desired. Express will return one merged output file if enabled. If disabled, Express will return an output file for each file that was attached to the original email.
7. Select and set the **Only Process Emails with Attachments** option if desired. If enabled, Express will not process emails that do not have attachments. It will also send an email notifying the sender of this. If Inbox Processing is enabled, the email will also be moved to the error folder specified.
8. Select and set the **Include Message Body** option if desired. This will add the message body of the email at the beginning of the output file, and any attachments will be appended following the body of the email.

9. Define the **Reply Message for Successful Conversion** if desired. This message is added to the body of the email message used to deliver the documents. The message from the incoming email is always preserved.
10. Define the **Reply Message for Conversion Error** if desired. This message is added to body of the email message delivered to the user if Express encounters an error during the document conversion. The message from the incoming email is always preserved.

Figure 11 - Select Email Inbox Folder Screen



Please note that in order to use the **Select Email Folder** screen with Microsoft Outlook, you must have CDO (Collaboration Data Objects) installed on your computer. To install CDO, refer to **Appendix E – Installing CDO (Collaboration Data Objects)**.

Scripting

Scripting provides great flexibility when used with DPI and Multiple Option Configuration features of Express.

Multiple folders defined in Express can be passed to scripts, as parameters, by positioning the cursor in the appropriate script text box and pressing the desired folder buttons. This will add the appropriate variable (e.g. &[OutputFolder]) to the text box.

Script Settings

Express allows the definition of scripts to be executed at specific stages during the document processing (see **Figure 12 - Script Settings Screen**). One script can be defined for each of the following four processing stages.

Pre Scan

This script is executed every time Express scans the Input Folder. Express scans the Input Folder when it is first started, and also when it has finished processing the documents found in the previous scan.

Pre Job

This script is executed before processing any job in the Input Folder.

Post Job

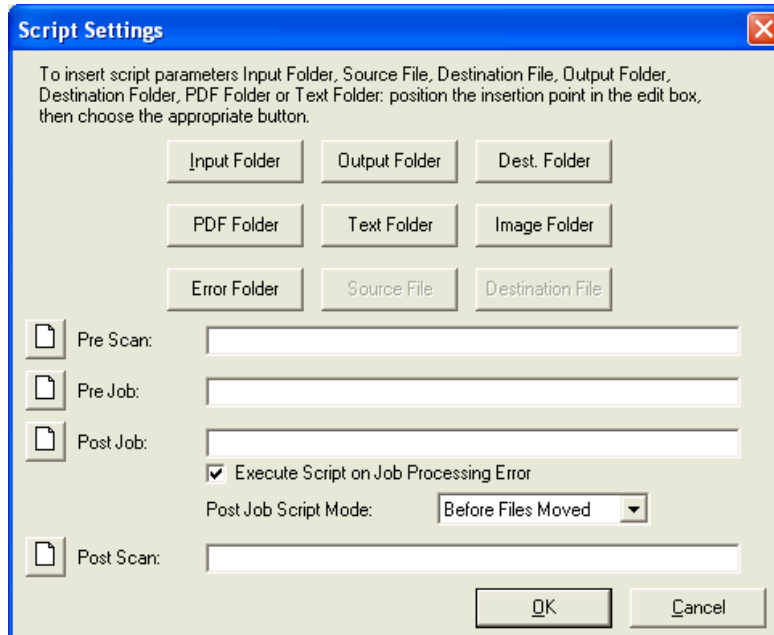
This script is executed after processing any job in the Input Folder.

The **Enable Script on Job Processing Error** provides control of the script execution when a document conversion error is encountered. If a conversion error is encountered, Express will execute the script only when this check box is selected.

The **Post Job Script Mode** provides control of when the Post Job Script is executed. This option controls whether the script is executed before or after the Input File Handling and Job Ticket File Handling are completed. (See **Input File Handling** and **Job Ticket File Handling** for more information)

Post Scan

This script is executed every time Express has completed the processing of the documents in the Input Folder found during the scan.

Figure 12 - Script Settings Screen


Script Settings

To insert script parameters Input Folder, Source File, Destination File, Output Folder, Destination Folder, PDF Folder or Text Folder: position the insertion point in the edit box, then choose the appropriate button.

Pre Scan:

Pre Job:

Post Job:

☒ Execute Script on Job Processing Error

Post Job Script Mode:

Post Scan:

Table 5 – Express Script Parameters

Name	Description
&[InputFolder]	The fully qualified path to the Input folder.
&[OutputFolder]	The fully qualified path to the Output folder.
&[DestinationFolder]	The fully qualified path to the Destination folder.
&[PDFFolder]	The fully qualified path to the PDF folder.
&[TextFolder]	The fully qualified path to the Text folder.
&[ImageFolder]	The fully qualified path to the Image folder.
&[ErrorFolder]	The fully qualified path to the Error folder.
&[SourceFile]	The fully qualified path to the source file. (the input file)
&[ProcessedFile]	The fully qualified path to the Processed file. (the output file)

Log Settings

Express creates a Process Log and Document Log (see **Figure 13 – Log Settings Screen**) to allow tracking of the document processing activities. The Logs track the files processed and can be text or XML format.

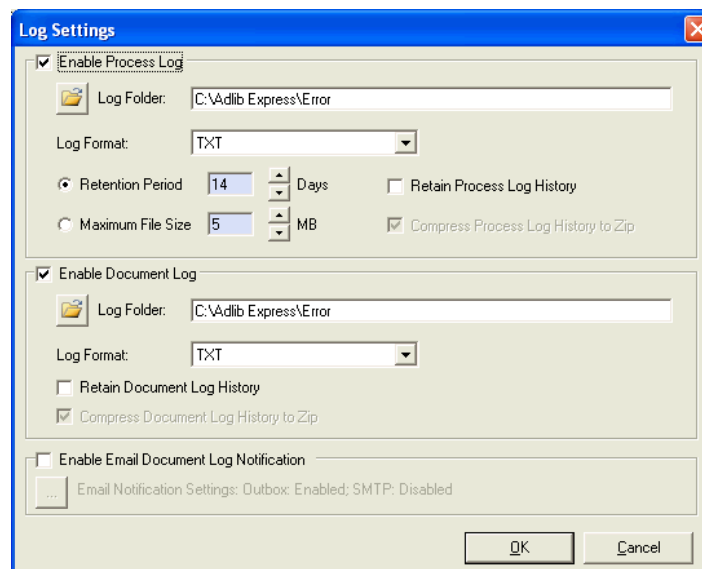
Process Log Options

The Process Log stores the Date and Time the file was processed. It also stores the status of the file Processing, such as Conversion Successful, as well as the Path of the file. The Process Log is stored in the Error folder by default.

The user can define the how the process log is retained, either by retention period (from 1 to 30 Days) or by maximum File size (from 5 to 100 MB). When **Retain Process Log History** is selected, the existing Process Log is archived whenever the selected retention mode is reached and a new log is created. The date and time is appended to the filename (e.g. Express Process Log.20041130T145635.txt) of the archived log at the archive time. In addition, the archived Process Log can be optionally compressed to ZIP to reduce the disk space required.

Note: When the log format is TXT, and Retain Process Log History is disabled, the Retention Period controls the period of days that are maintained in the text log. When the format is XML, the Retention Period will delete the current log and start a new one. When Retain History is enabled, the Retention Period controls the amount of days between the actual archive (backup/compress) of the log.

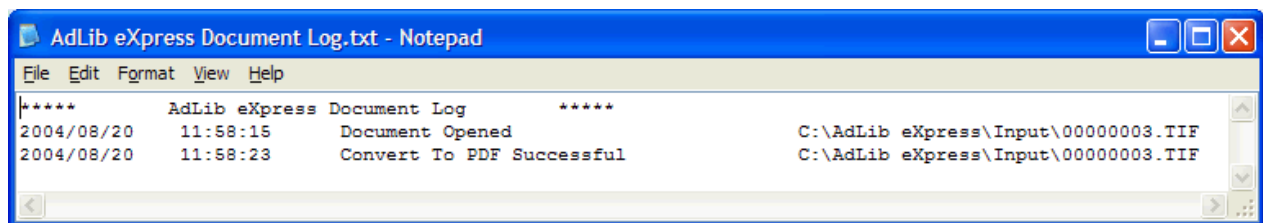
Figure 13 – Log Settings Screen



Document Log Options

The Document Log (see **Figure 14 - Sample Document Log File**) tracks the processing of one document and is overwritten every time unless **Retain Document Log History** is selected. The Document Log stores the Path for the file as well as the Date and Time the file was processed. It also stores the status of the file processing, such as Conversion Successful etc. The Document log file is stored in the Log folder unless otherwise specified. When **Retain Document Log History** is selected, the Document Log is archived for every document processed. The date and time is appended to the document filename and extension (e.g. MyDoc.doc.20041130T145635.txt) of the archived Document Log at the archive time. Please note that the Manual mode operations, such as Batch Document Processing, are not logged in the Document Log file.

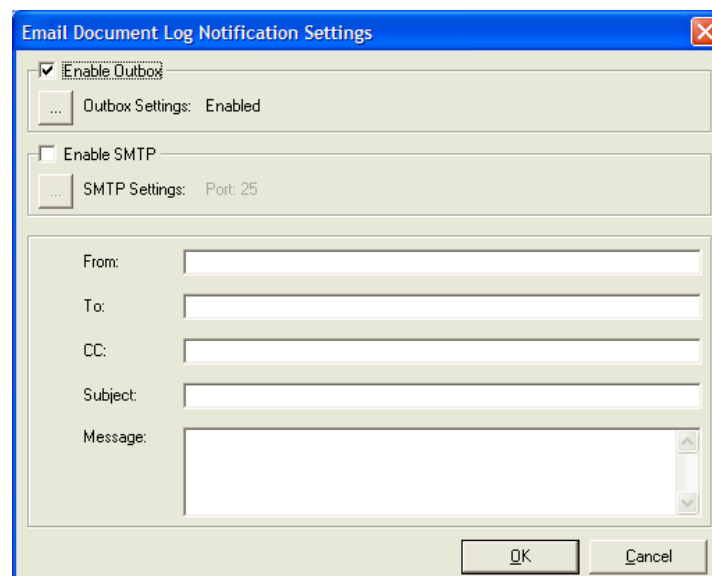
Figure 14 - Sample Document Log File



Email Document Log Notification Settings

Express can send an email when an error is encountered processing a document. The users have the ability to define how the email message is sent out (email Client Outbox or SMTP) and the message parameters such as From, To, CC, ... (see **Figure 15 - Email Document Log Notification Settings Screen**). The Document Log (e.g. Express Document Log.txt) relating to the error document is automatically attached to the email message to provide information regarding the error.

Figure 15 - Email Document Log Notification Settings Screen



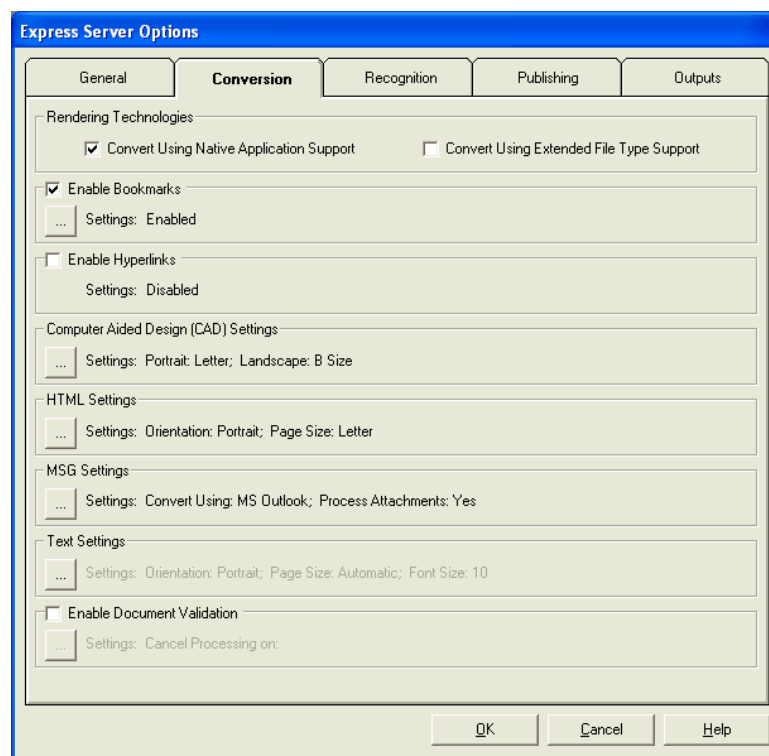
Conversion

This section describes the conversion functionality of the Express product suite. There are a variety of options available to you for rendering multiple input formats to multiple output formats – including PDF.

Using the information contained in this section you will be able to configure your server for optimized output quality and file size.

Conversion features are core to Adlib ExpressConversion Server and can be added as an option to Adlib ExpressRecognition Server or Adlib ExpressPublishing Server.

Figure 16 - Conversion Tab Screen



Rendering Technologies

Native Application Support

In general, document rendering is more accurate if the application used to create the document itself (e.g. Microsoft® Word®) is used to render the document. We refer to these applications as Native Applications. This is particularly important if the document is very complex. In order for Express to convert using Native Application, the native application must be supported by Express and be installed on the computer. Please see **Appendix D** – Native Applications Supported for a complete list. If the Native Application is not installed or the file type is not supported by the Native Applications supported by Express, an error (e.g. File Type not Supported) is logged in the Process Log and the document is moved to the Error folder. Please see **Appendix C** – Supported File Types for a description of the conversion methods and a complete list of the file types supported by the Native Applications Support method.

When documents are converted to PDF using Native Applications Support, the PDF Document Summary Information (Title, Subject, Author and Keywords) is updated with the original document properties. Refer to the list below for the Native Applications that support PDF Document Information. For all other documents, the Title field in the PDF Document is set to the original filename. The following Native Applications support extraction of document properties:

- Microsoft Office 2003 (Word, Excel, PowerPoint)
- Microsoft Office 2002 (Word, Excel, PowerPoint)
- Microsoft Office 2000 (Word, Excel, PowerPoint)
- Microsoft Office 97 (Word, Excel, PowerPoint)
- Microsoft Office 95 (Excel, PowerPoint)

Note: If MS Word 2003 is installed, it is recommended that Office 2003 Service Pack 2 be installed as well to aid in the accuracy of Document Validation and Hyperlinking features.

Extended File Type Support

When **Convert Using Extended File Type Support** (EFTS) is selected, Express will use the EFTS module to render the document. The EFTS is an Add-on for the Express products. When EFTS is selected, Native Applications are not required to be installed on the computer in order to render documents.

If both, **Convert Using Native Applications Support** and **Convert Using Extended File Type Support** are selected, Express will attempt to use the Native Application first. If the document is not converted successfully, Express will use the EFTS module to render the document. If the file type is not supported by the EFTS module, an error (e.g. File Type not Supported) is logged in the Process Log and the document is moved to the Error folder. Please see **Appendix C** – Supported File Types for a description of the conversion methods and a complete list of the file types supported.

Tip: *Express determines the file type by reading the file header information as opposed to using the file extension. The file extension is used in addition to the file header when it does not contain conclusive information to identify the file type. Currently, this method is used to identify Hewlett-Packard Graphic Language (HPGL) files as well as most CAD file types.*

Bookmarks

Express can create PDF Bookmarks when documents are converted to PDF using Native Applications Support (See **Figure 16 - Conversion Tab Screen**).

Document Bookmarks

The Bookmark Settings screen (See **Figure 17 – Bookmark Settings Screen**) allows the user to define the bookmarks to create. The **Create Document Bookmarks** adds a bookmark in the PDF for each file specified in the DPI/XML Job Ticket file. The filenames referenced in the DPI/XML Job Ticket file are used as the Bookmark name. The Bookmark destination is set to the first page of the document.

Expanded Bookmarks setting specifies how bookmarks are to appear in a PDF when it is first opened. The **Level Mode** setting may be set to All, Defined or None. The setting All will set all Bookmarks to be expanded. Defined enables the Level setting that will open all bookmarks to that value. None sets all Bookmarks to be closed.

Content Bookmarks

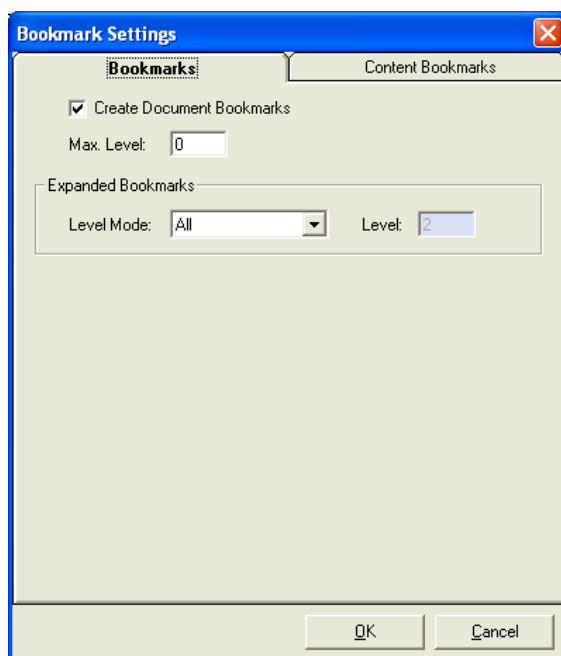
The **Content Bookmarks** screen (See **Figure 18 – Content Bookmark Settings Screen**) allows the user to define which content bookmarks will be created. Existing PDF bookmarks may be maintained or not. The Create Document Content Bookmarks automatically creates Bookmarks in the PDF for Microsoft Word and Excel. All styles defined in Microsoft Word can be bookmarked in the PDF. All Heading (Heading 1 to 9) Styles are automatically bookmarked by default. The user can select specific Heading Styles to be bookmarked by selecting the corresponding check box under the Bookmark column. Additional styles can be added by pressing the Add button and defining the style desired. The user may set the Bookmark level for each Style by defining the level (1, 2, 3, ...) desired on the Document Hyperlinks and Bookmarks screen.

Each Tab contained in a Microsoft Excel Worksheet is automatically bookmarked in the PDF.

This Bookmark feature is supported for the following Native Applications:

- Microsoft Office 2003 (Word, Excel)
- Microsoft Office 2002 (Word, Excel)
- Microsoft Office 2000 (Word, Excel)
- Microsoft Office 97 (Word, Excel)

Tip: *The associated Native Application must be installed and the **Convert Using Native Applications Support** must be selected in Express for the Hyperlinks to be maintained and Bookmarks to be added to the PDF.*

Figure 17 – Bookmark Settings Screen


Bookmark Settings

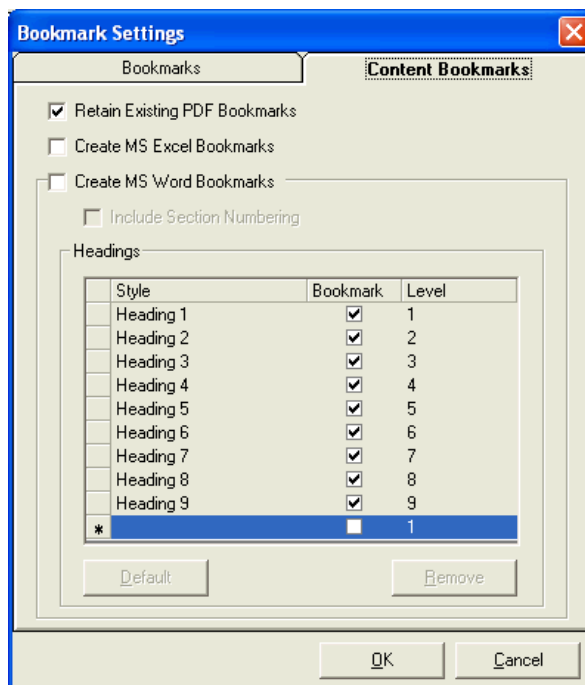
Bookmarks | Content Bookmarks

☒ Create Document Bookmarks

Max. Level:

Expanded Bookmarks

Level Mode: Level:

Figure 18 – Content Bookmark Settings Screen


Bookmark Settings

Bookmarks | **Content Bookmarks**

☒ Retain Existing PDF Bookmarks

☐ Create MS Excel Bookmarks

☐ Create MS Word Bookmarks

☐ Include Section Numbering

Headings

Style	Bookmark	Level
Heading 1	<input checked="" type="checkbox"/>	1
Heading 2	<input checked="" type="checkbox"/>	2
Heading 3	<input checked="" type="checkbox"/>	3
Heading 4	<input checked="" type="checkbox"/>	4
Heading 5	<input checked="" type="checkbox"/>	5
Heading 6	<input checked="" type="checkbox"/>	6
Heading 7	<input checked="" type="checkbox"/>	7
Heading 8	<input checked="" type="checkbox"/>	8
Heading 9	<input checked="" type="checkbox"/>	9
*	<input type="checkbox"/>	1

Hyperlinks

Express can preserve the Hyperlinks contained in PDF documents by selecting the **Enable Hyperlinks** check box. In addition, the Native Application (see below) must be resident on the computer and used to render the document. Hyperlinks are also preserved for Table of Contents, List of Figures, and List of Tables as well as for references contained in the documents.

This Hyperlink feature is supported for the following Native Applications:

- Microsoft Office 2003 (Word, Excel, PowerPoint)
- Microsoft Office 2002 (Word, Excel, PowerPoint)
- Microsoft Office 2000 (Word, Excel, PowerPoint)
- Microsoft Office 97 (Word, Excel)
- Microsoft Internet Explorer (5.0, 5.5, 6.0)
- Microsoft Visio (2000, 2002)
- Corel (WordPerfect Version 9.0 to 11.0)

Tip: The MS Word **Allow A4/Letter paper resizing** check box must be disabled in order for the Hyperlinks to be located at the correct location on the page.

Office 2007: The **Allow A4/Letter paper resizing** setting is located under: Office button -> Word Options -> Advanced -> Print Section.

Office 2003 and below: The **Allow A4/Letter paper resizing** setting is located under: Tools -> Options -> Print tab.

Tip: Preserving the Hyperlinks in the PDF increases the document processing time.

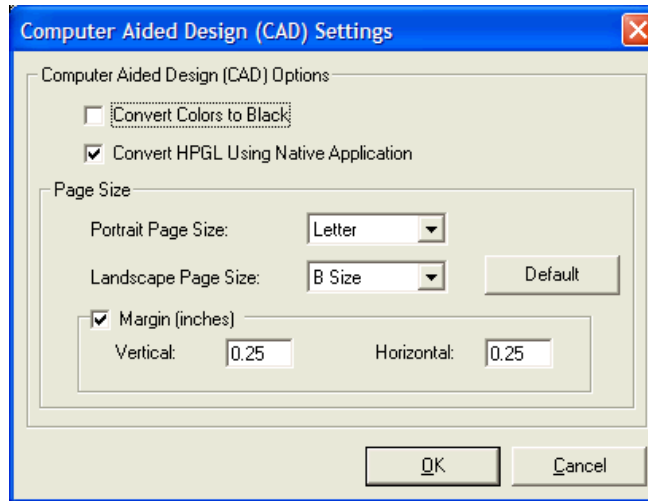
Tip: In MS Word documents, hyperlinks in nested tables are not supported.

CAD (Computer Aided Design) Settings

The Computer Aided Design screen allows users to define the page size and color for CAD files. All CAD files except HPGL files are converted to PDF using either AutoVue or Myriad. In addition, all Autodesk CAD files may be converted to PDF using Volo View or Volo View Express.

Tip: *Adjust the Pen Width in AutoVue or Myriad if the lines appear too thin or light in the PDF.*

Figure 19 - Computer Aided Design (CAD) Settings Screen



Convert Colors to Black

All colors in the CAD document are converted to black when selected. The files must be converted using Native Application (AutoVue or Myriad) for this selection to take effect.

Convert HPGL File Using Native Application

Express uses AutoVue or Myriad to convert HPGL files when the **Convert HPGL File Using Native Application** is selected. If the **Convert HPGL File Using Native Application** is not selected or an error is encountered processing the document using AutoVue or Myriad, the IFTS Rendering module is used to render the document.

Page Size

The page size for CAD drawings can be defined for Portrait and Landscape orientation. The Vertical and Horizontal margins can also be set from this screen.

Tip: *The setting for CAD Page Size is not applied to HPGL files.*

Margin

The page margins (Vertical/Horizontal) for CAD drawings can be defined. These margins will only be applied when the document is converted using Native Application (AutoVue or Myriad).

HTML Settings

HTML files do not contain format information such as Paper Size, Orientation or Margins settings. Users can specify these settings to control how HTML and XML files are processed.

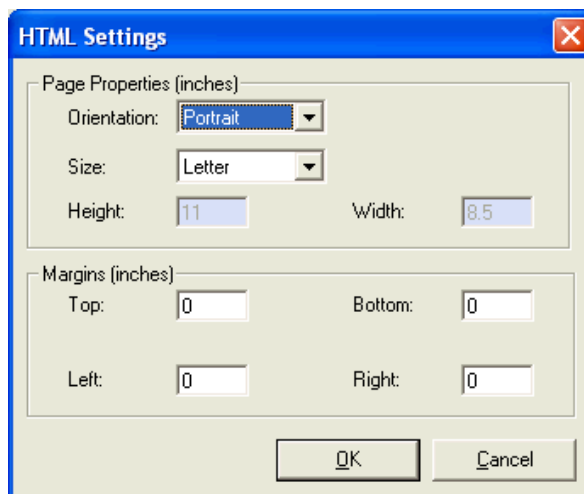
Page Properties

The orientation and page size can be defined here. Optionally, a custom page size can be used by selecting custom and then setting the page height and width.

Margins

The default margins are one inch. Custom margin sizes can be defined by entering top, bottom, left and right margins.

Figure 20 - HTML Settings Screen



The image shows a Windows-style dialog box titled "HTML Settings". It has a blue title bar with a close button (X) in the top right corner. The dialog is divided into two main sections: "Page Properties (inches)" and "Margins (inches)".

Page Properties (inches):

- Orientation:** A dropdown menu currently showing "Portrait".
- Size:** A dropdown menu currently showing "Letter".
- Height:** A text input field containing the value "11".
- Width:** A text input field containing the value "8.5".

Margins (inches):

- Top:** A text input field containing the value "0".
- Bottom:** A text input field containing the value "0".
- Left:** A text input field containing the value "0".
- Right:** A text input field containing the value "0".

At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

MSG Settings

When processing MSG files you have the option to convert using MS Outlook or Adlib's Integrated File Type Support (IFTS).

Note:

IFTS requires that Microsoft Outlook be installed.

Create XML Metadata Log

Creates an XML log file of all the metadata contained in the email message (To, From, Date, etc...).

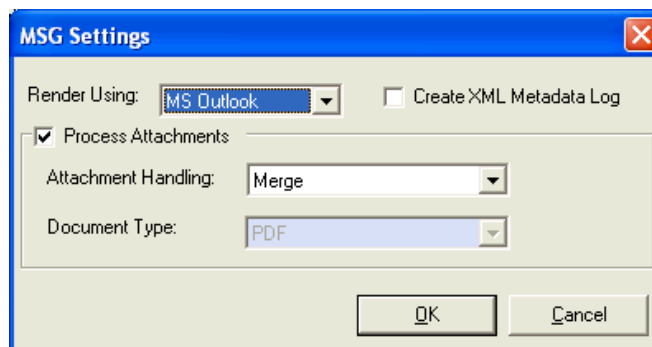
Attachment Handling

Specifies how MSG attachments are handled. If Merge is selected, all attachments are converted and appended after the message body. If Embed As PDF Attachment is selected, an attachment report is created and appended after the message body. This contains the name of the attachments and the actual attachments embedded as PDF Attachments.

Document Type

When Embed as PDF Attachment is selected for Attachment Handling, this option allows you to choose whether to embed the original attachment or a PDF copy of the original.

Figure 21 – MSG Settings Screen



Note:

If running Express as a service, IFTS must be used to convert MSG files.

Text Settings

Text files do not contain format information such as Font, Font Style, Paper Size, Page Orientation and Margins settings. Users can specify these settings to control how Text files are processed. Enabling the Page Layout Settings will process all text files as defined (See **Figure 22 - Text Settings Screen**).

When Page Layout Settings is not enabled, Express analyzes the text files to determine the optimal page settings (Page Size, Page Orientation, Margins, font size (8, 10 or 12 Point)). The Font and Font Style defined in the Text Settings screen will be used for processing the text document.

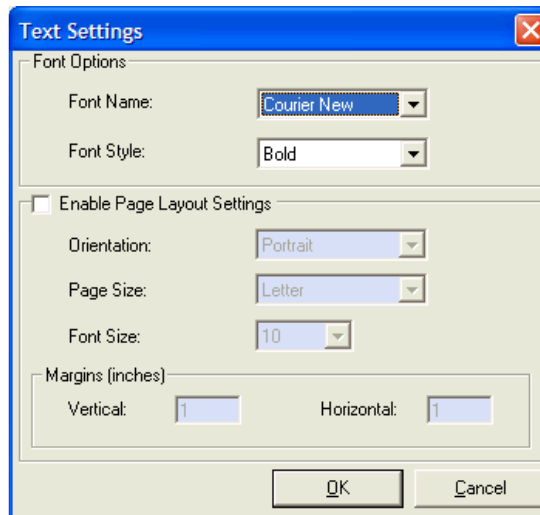
The Page Sizes used when Page Layout Settings are not enabled are Letter, Legal and Tabloid (B Size) for the U.S. Measurement System or A3 and A4 for the Metric Measurement System. The Measurement System is read from the Windows Regional Settings. You may modify this setting using **Regional Settings/Options** from the **Control Panel**. Select the **Numbers** tab and then choose the desired Measurement System (U.S. or Metric).

Tip: Express uses the same paper size, orientation, margins and font size for the complete report.

Tip: The font is not embedded in the PDF to minimize the PDF file size.

Tip: Use of the Courier font makes it easier to select the text contained in the PDF document.

Figure 22 - Text Settings Screen

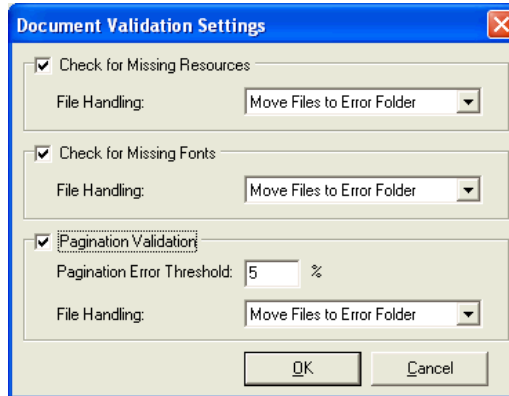


The image shows a Windows-style dialog box titled "Text Settings" with a close button (X) in the top right corner. The dialog is divided into several sections. The first section, "Font Options", contains two dropdown menus: "Font Name:" set to "Courier New" and "Font Style:" set to "Bold". Below this is a checkbox labeled "Enable Page Layout Settings" which is currently unchecked. If checked, it would reveal a section with three more dropdown menus: "Orientation:" set to "Portrait", "Page Size:" set to "Letter", and "Font Size:" set to "10". At the bottom of the dialog, there are two input fields for "Margins (inches)": "Vertical:" set to "1" and "Horizontal:" set to "1". At the very bottom are "OK" and "Cancel" buttons.

Document Validation

Express can validate the documents for Missing Resources (e.g. Images, Objects, etc ...) and Fonts, as well as Pagination when Native Application is used. The Document Validation Settings screen (see **Figure 23 - Document Validation Settings Screen**) allows the user to define what is validated and how to handle the files that fail validation. Please note that Document Validation only applies to Microsoft Word 97 to 2003.

Figure 23 - Document Validation Settings Screen



The Pagination Validation test checks if the last word on each page of the PDF and document match. The user can set the Pagination Error Threshold to set the percentage of mismatched pages for the complete document. A Pagination Error Threshold of 5% will error the document if 5 or more pages of a 100 page document do not match.

All documents are checked for each validation test selected when processing documents. Any validation test that fails is logged. All missing fonts in the document and all pages that fail validation, until the Threshold is reached, are logged. The PDF is always created even when some validation tests fail. The user has the ability to define the File Handling for each test. Please refer to **Table 6 - Document Validation File Handling Options** for details. If multiple tests are enabled which specify different File Handling and more than one test fails, the file handling is selected in the following order.

- Delete PDF File
- Move Files to Error Folder
- Move Files to Defined Folder

Table 6 - Document Validation File Handling Options

File Handling	Description
Delete PDF File	Deletes the PDF document and moves the input document to the Error Folder.
Move Files to Defined Folder	Moves the PDF as specified by the PDF File Handling. Moves the input document as specified by the Input File Handling.
Move Files to Error Folder	Moves the PDF and the input document to the Error Folder.

Tip: *Document Validation messages are logged as "Warning" when the selected File Handling is "Move Files to Defined Folder" and as "Error" when the selected File Handling is "Move Files to Error Folder".*

Recognition

The Express Recognition engine offers an Optical Character Recognition (OCR) process that allows you to create searchable PDF files from images. These PDF files can be indexed using Full Text Engines to allow retrieval based on their text content.

The Recognition Engine supports many languages (See **Table 11 - Supported Recognition Languages**). The recognition accuracy of characters and barcodes depends on several factors such as the scan resolution, image quality, scan quality, font type, font size etc.

ExpressRecognition supports the following file types for Monochrome, Grayscale and Color images.

- BMP, DCX, MAX, JPEG, PCX, PDF, PNG

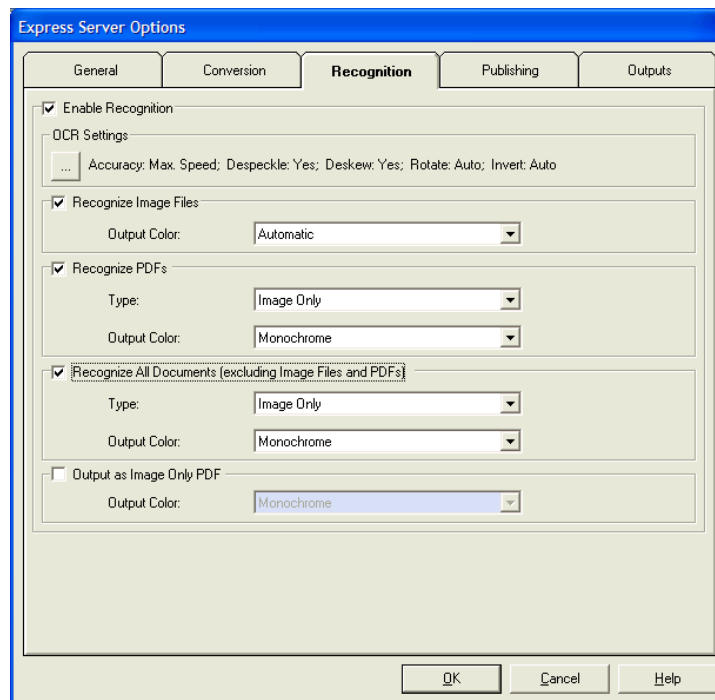
When combined with the Conversion Engine – other formats can also be processed. These document types are recognized by converting to PDF and performing the OCR on the PDF.

Tip: *The document processing throughput is higher when converting images (Bitmap, JPEG, TIFF, DCX, PNG, MAX) versus PDF.*

Note: The ability to recognize large page sizes is dependent on the scan resolution and memory on the computer. Generally, the page size is limited to 28" x 28" or 8400 pixels by 8400 pixels.

Note: The Recognition engine supports images with a resolution between 75-2400 DPI.

Figure 24 - Recognition Tab Screen



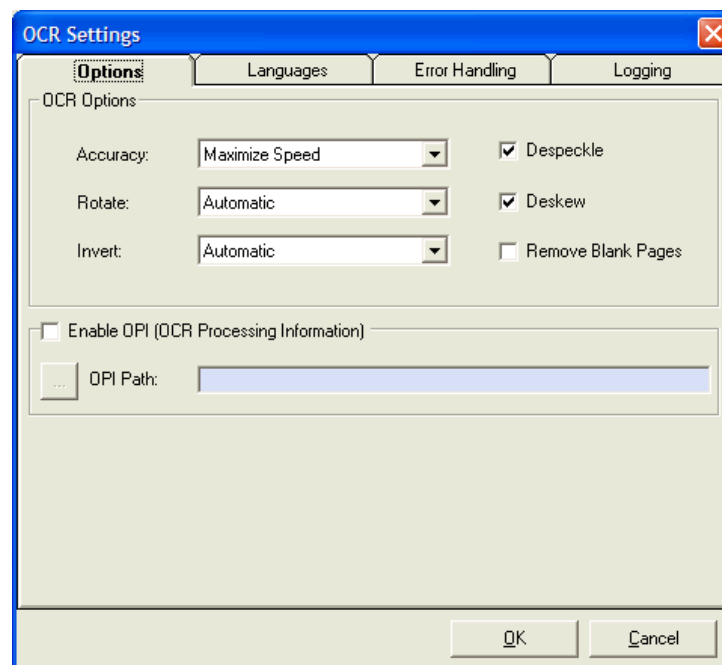
OCR Settings

The OCR Settings window allows you to define settings such as Options, Languages, Error Handling and Logging. The following sections define these settings in detail below.

Options

The Options Tab screen allows users to use the OCR to meet the specific requirements from recognition Accuracy to OCR Processing Information (See **Figure 25 - Options Tab Screen**). Each of these options are described in detail below.

Figure 25 - Options Tab Screen



Accuracy

This allows the user to select Maximize Accuracy, Maximize Speed or Balance Accuracy and Speed in order to satisfy your requirement. Accuracy is defined as the number of unrecognized characters per hundred characters of recognized text. The unrecognized characters do not include inaccurately recognized/substituted characters.

Rotate

An image containing characters must be presented in the upright position for the OCR process to be successful. The Rotate function rotates the image in multiples of 90 degrees. Please refer to **Table 7 - OCR Image Rotation Options** for a description of the Rotate options. Rotating images creates PDF files that have the characters in the upright position.

Table 7 - OCR Image Rotation Options

Rotation Setting	Description
Auto	Only rotates the image if required.
Right	Rotates all images to the right (clockwise) by 90 Degrees.
Down	Rotates all images by 180 Degrees.
Left	Rotates all images to the left(counter-clockwise) by 90 Degrees.
No	Rotation is not performed.

Invert

In order to OCR images successfully, images need black or dark characters on a white or pale background. Images that contain white or pale characters on a black or dark background must be inverted. Please refer to **Table 8 - OCR Image Inversion Options** for a description of the Invert settings. Images automatically inverted create PDF files that are easier to read and use less printer toner when printed.

Table 8 - OCR Image Inversion Options

Rotation Setting	Description
Auto	Only inverts the image if required.
Yes	Inversion is always performed.
No	Inversion is not performed.

Despeckle

The Despeckle operation is an automatic removal of unwanted dirt or noise from an image's background. This improves image pre-processing operations (such as: Deskew, Rotate, Invert), OCR accuracy and reduces the image file size. Please note that only Monochrome images can be despeckled.

Deskew

The Deskew operation straightens an image skewed due to an improper sheet position on the scanner. The automatic Deskew operation is limited to a maximum of 15 degrees. Images skewed more than 15 degrees cannot be automatically deskewed. Deskewing will improve the PDF orientation and recognition accuracy.

Remove Blank Pages

The **Remove Blank Pages** option removes any blank pages from the document loaded into the ExpressRecognition Engine.

OCR Processing Information (OPI)

The OCR Processing Information (OPI) is a plain ASCII text file with an .OPI extension. It is used to define specific recognition zones as well as the Recognition Module used for each zone. The zones are defined by specifying pixel coordinates for the Left, Top, Width and Height of the zone. Multiple zones can be defined for a single page. The "Text" ZoneType is assumed if no ZoneType is specified. The target pages that will be recognized can be specified by defining the Pages tag (See **Table 9 - OCR Processing Information (OPI) Options** and **Figure 26 - OCR Sample OPI File**).

OCRZoneData is a type of PDF Information that requires an OPI file to be defined. When you request PDF Information of type OCRZoneData you have the option of XML or CSV (comma delimited) output. The output file will contain information about all the zones that were defined in the OPI file. This information will include the zone name, coordinates, type and value (data from zone). Refer to **Figure 27 - OCRZoneData Sample XML Output** and **Figure 28 - OCRZoneData Sample CSV Output** for more detail.

Tip: *Only the Zones specified in the OPI file are recognized when OPI is enabled.*

Table 9 - OCR Processing Information (OPI) Options

Property	Values	Description
ZoneName	String	Specifies the name of the zone, this is useful when extracting PDF Information of type OCRZoneData.
ZoneLeft	Integer	The distance, in pixels, from the left side of the page to the left side of the zone.
ZoneTop	Integer	The distance, in pixels, from the top of the page to the top of the zone.
ZoneWidth	Integer	The width, in pixels, of the zone.
ZoneHeight	Integer	The height, in pixels, of the zone.
ZoneType	Text Barcode Barcode1D Barcode2D MICR OMR	Specifies the recognition type. Character recognition. One-dimensional Barcode recognition. Alternative 1D Barcode recognition. Two-dimensional barcode recognition. Magnetic ink character recognition. (checks) Optical mark recognition. (checkboxes)
Pages	Text 1, 3 5-7 10- First Even Odd Last All None	Specifies the pages to recognize. Individual pages Range of pages inclusive Range to the end of the document First page only Even pages Odd pages Last page All pages No pages
XResolution	Integer	Specifies the horizontal resolution at which the zone coordinates (ZoneLeft, ZoneTop, ZoneWidth, and ZoneHeight) were set. OCR will automatically adjust zone coordinates for any documents that do not match this resolution.
YResolution	Integer	Specifies the vertical resolution at which the zone coordinates (ZoneLeft, ZoneTop, ZoneWidth, and ZoneHeight) were set. OCR will automatically adjust zone coordinates for any documents that do not match this resolution.

Figure 26 - OCR Sample OPI File

```
[ZoneSettings]

ZoneName1 = Address
ZoneLeft1 = 0
ZoneTop1 = 0
ZoneWidth1 = 400
ZoneHeight1 = 400
ZoneType1 = Text

ZoneName2 = Filename
ZoneLeft2 = 400
ZoneTop2 = 400
ZoneWidth2 = 200
ZoneHeight2 = 200
ZoneType2 = Barcode

ZoneName3 = Email
ZoneLeft3 = 800
ZoneTop3 = 800
ZoneWidth3 = 200
ZoneHeight3 = 200
ZoneType3 = OMR

[PageSettings]
Pages = First, Even, Last, 3, 5-10, 15-

[ImageSettings]
XResolution = 300
YResolution = 300
```

Figure 27 - OCRZoneData Sample XML Output

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<PDFINFO>
  <OCRZONES>
    <OCRZONE NAME="Heading1" PAGE="10" LEFT="350" TOP="284"
    WIDTH="415" HEIGHT="85" TYPE="Text">Bug Collector Pro</OCRZONE>
    <OCRZONE NAME="Heading2" PAGE="10" LEFT="350" TOP="1000"
    WIDTH="471" HEIGHT="85" TYPE="Text">Buggy</OCRZONE>
    <OCRZONE NAME="Heading3" PAGE="10" LEFT="350" TOP="1500"
    WIDTH="415" HEIGHT="85" TYPE="Text">ItemAction</OCRZONE>
    <OCRZONE NAME="Heading4" PAGE="10" LEFT="350" TOP="2005"
    WIDTH="415" HEIGHT="85" TYPE="Text">Defect Manager</OCRZONE>
    <OCRZONE NAME="Heading5" PAGE="10" LEFT="350" TOP="2460"
    WIDTH="415" HEIGHT="85" TYPE="Text">ProblemTracker</OCRZONE>
  </OCRZONES>
</PDFINFO>
```

Figure 28 - OCRZoneData Sample CSV Output

```
ZoneName,ZonePage,ZoneLeft,ZoneTop,ZoneWidth,ZoneHeight,ZoneType,ZoneData
Heading1,1,350,284,415,85,Text,Bug Collector Pro
Heading2,1,350,1000,471,85,Text,Buggy
Heading3,1,350,1500,415,85,Text,ItemAction
Heading4,1,350,2005,415,85,Text,Defect Manager
Heading5,1,350,2460,415,85,Text,ProblemTracker
```

Barcode Recognition

(Option for the Recognition Engine)

It is possible to recognize Barcodes when the Adlib Barcode Recognition Add-on is installed. This module can recognize multiple Barcode types including Human readable barcodes. Please refer to **Table 10 - Supported OCR Barcode Types** for a complete list. Barcode Recognition must be used in conjunction with OPI by specifying the ZoneType (e.g. ZoneType=Barcode). Please contact Adlib for additional information on the Adlib Barcode Recognition Add-on.

Note:

A separate Barcode add-on module is required in order to recognize barcodes. Please email us at sales@adlibsoftware.com for additional information on the Barcode add-on module.

Table 10 - Supported OCR Barcode Types

Barcode Type
CODABAR
Code 39 (Code 3 of 9)
Code 128
Code 2 of 5
Interleaved 2 of 5 ITF
PostNet
UCC Code 128
UPC-A
UPC-E
EAN-13
PDF-417 (2D code)

Optical Mark Recognition

(Option for the Recognition Engine)

It is possible to recognize optical marks (checkboxes) when the Adlib Optical Mark Recognition Add-on is installed. This module can recognize different types of marks as "selected" (e.g. checkmark, cross, line). OMR must be used in conjunction with OPI by specifying OMR as the ZoneType (e.g. ZoneType=OMR). Please contact Adlib for additional information on the Adlib Optical Mark Recognition Add-on.

Note:

A separate OMR add-on module is required in order to recognize optical marks. Please email us at sales@adlibsoftware.com for additional information on the OMR add-on module.

Languages

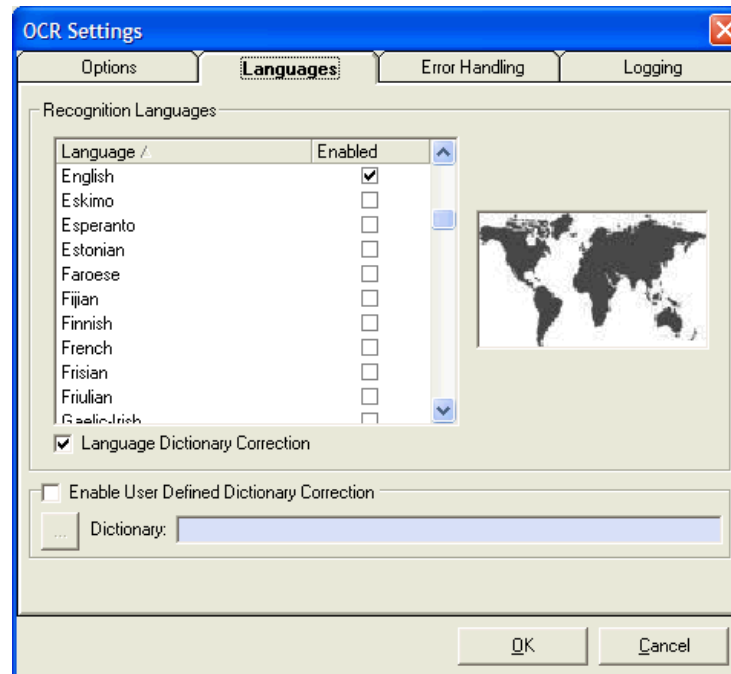
ExpressRecognition supports 114 languages which are listed below. When one or more languages are enabled, the characters used by the languages are incorporated into a set of validation characters used during the recognition (See **Table 11 - Supported Recognition Languages**).

Table 11 - Supported Recognition Languages

Afrikaans	Frisian	Macedonian	Sardinian
Albanian	Friulian	Malagasy	Serbian
Aymara	Gaelic-Irish	Malay	Shona
Basque	Gaelic-Scottish	Malinke	Sioux
Bemba	Ganda	Maltese	Slovakian
Blackfoot	German	Maori	Slovenian
Brazilian	Greek	Mayan	Somali
Breton	Guarani	Miao *	Sorbian
Bugotu	Hani *	Minankabaw	Sotho
Bulgarian	Hawaiian	Mohawk	Spanish
Byelorussian	Hungarian	Moldavian	Sundanese
Catalan	Icelandic	Nahuati	Swahili
Chamorro	Ido	Norwegian	Swazi
Chechen	Indonesian	Nyanja	Swedish
Chuana	Interlingua	Occidental	Tagalog
Cosician	Italian	Ojibway	Tahitian
Croatian	Kabardian	Papiamentu	Tinpo
Crow	Kasub	PiginEnglish	Tongan
Czech	Kawa	Polish	Tun *
Danish	Kikuyu	Portuguese	Turkish
Dutch	Klingon *	Provençal	Ukrainian
English	Kongo	Quechua	Visayan
Eskimo	Kpelle	Rhaetic	Welsh
Esperanto	Kurdish *	Romanian	Wolof
Estonian	Lappish	Romany	Xhosa
Faroese	Latin	Ruanda	Zapotec
Fijian	Latvian	Rundi	Zulu
Finnish	Lithuanian	Russian	
French	Luba	Samoan	
	Luxembourgian		

* Supported only if written in the Latin alphabet.

Figure 29 – Languages Tab Screen



Language Dictionary Correction

The **Language Dictionary Correction** enables the validation of words against a dictionary. ExpressRecognition includes 17 Language Dictionaries. Only one language dictionary can be used at one time (See **Table 12 - OCR Language Dictionaries**). You must only select one language in order to enable **Language Dictionary Correction**.

When **Language Dictionary Correction** is enabled, the OCR validates each word against the dictionary and corrects it when appropriate.

Table 12 - OCR Language Dictionaries

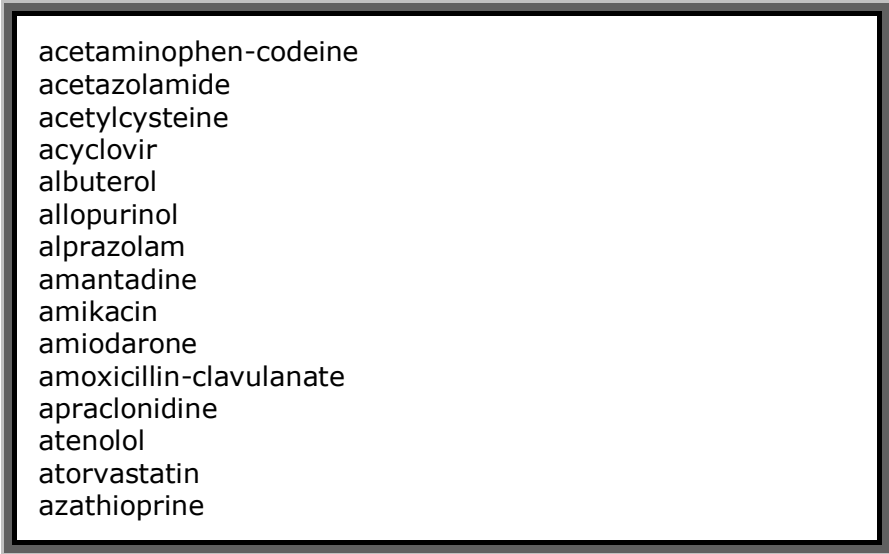
Catalan	Finnish	Italian	Spanish
Czech	French	Norwegian	Swedish
Danish	German	Polish	
Dutch	Greek	Portuguese	
English	Hungarian	Russian	

User Defined Dictionary Correction

The **User Defined Dictionary Correction** enables the validation of words against a dictionary defined by the user. This improves the correction process for documents that use specific/local terminology or vocabularies (e.g. Scientific Terms, Legal Profession, Medical Profession...). The **User Defined Dictionary Correction** can be used by itself or in conjunction with the **Language Dictionary Correction**.

The **User Defined Dictionary** is an ASCII text file with an "OUD" file extension that contains one word per line. (See **Figure 30 - OCR Sample User Dictionary**).

Figure 30 - OCR Sample User Dictionary



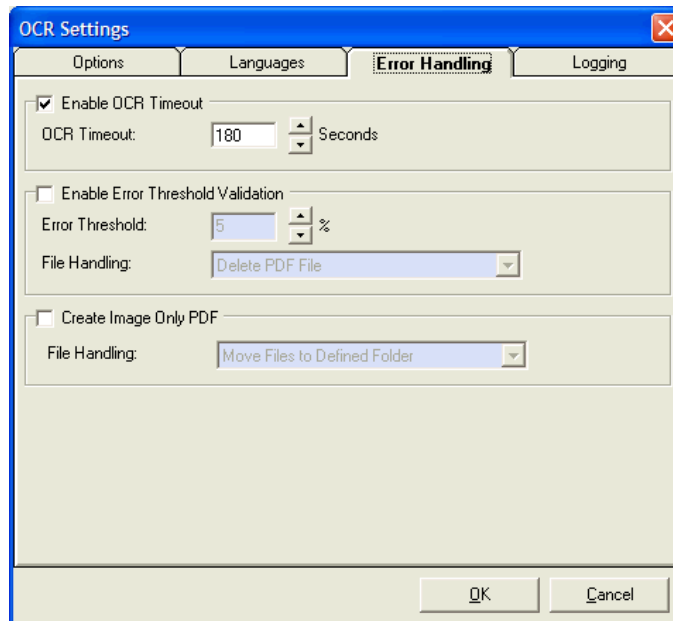
```
acetaminophen-codeine
acetazolamide
acetylcysteine
acyclovir
albuterol
allopurinol
alprazolam
amantadine
amikacin
amiodarone
amoxicillin-clavulanate
apraclonidine
atenolol
atorvastatin
azathioprine
```

Tip: *The maximum word length is 64 characters.*

Error Handling

ExpressRecognition allows users to define setting relating to the handling documents which generate a processing error (See **Figure 31 - Error Handling Tab Screen**). Each of these options is described in detail below.

Figure 31 - Error Handling Tab Screen



OCR Timeout

The **Timeout** feature allows you to specify a time, in seconds, per page that will cancel the OCR process for the document. There are three steps in recognizing a page: loading, zoning and recognition. The OCR process is canceled if any one of these processes exceeds the specified timeout for any page of the document. When the Timeout is disabled, ExpressRecognition uses an internal Timeout value of 10 minutes in order to eliminate dead-lock situations.

Error Threshold Validation

The **Error Threshold Validation** feature allows you to specify a value that reflects the percentage of recognized data versus the data that was not recognized. The OCR determines whether this percentage is over the Threshold value and performs the selected File Handling option. Please refer to **Figure 31 - Error Handling Tab Screen** for details.

Table 13 - OCR Error Threshold File Handling Options

Error Threshold File Handling	Description
Delete PDF File	Moves the source document to the error folder and deletes the PDF.
Move Files to Defined Folder	Moves the source and PDF document as specified by the Input File Handling option on the folders tab.
Move Files to Error Folder	Moves the source and PDF document to the error folder.

Create Image Only PDF

The **Create Image Only PDF** feature allows you to control whether Express is to create a non-searchable PDF when a document is not recognized successfully. The user has the ability to define the File Handling when this occurs. Please refer to **Table 14 - OCR Create Image Only PDF File Handling Options** for details.

Table 14 - OCR Create Image Only PDF File Handling Options

Image Only PDF File Handling	Description
Move Files to Defined Folder	Moves the source document as specified by the Input File Handling option on the folders tab.
Move Files to Error Folder	Moves the source document to the error folder.

Note: If a file fails due to an **OCR Error Threshold Validation** error, a searchable PDF is returned from the OCR engine. An error will be logged and the PDF will be handled based on the OCR Error Threshold File Handling Options. An Image Only PDF will not be created in this case. **Create Image Only PDF** will apply only to instances where the **OCR Error Threshold Validation** value is not exceeded.

Logging

ExpressRecognition can create a Process Log file (See **Figure 33 - OCR Process Log File**) that tracks the progress of files processed. In addition, it can create a Document Log (See **Figure 34 - OCR Document Log File**) that logs detailed information of the OCR process for the last document processed. This log is used to diagnose why a particular document does not OCR. The Document Log is overwritten with the information for the most recent document recognized. Both Logs stores the Date and Time the file was processed. They also store the status of the file Processing, such as Conversion Successful, as well as the Path of the file. The user has the ability to define the folder to store the log files. If the folder is not defined, the file is stored in the Error folder. The user can define the retention period for the OCR Process Log from 1 to 30 Days or the maximum file size allowable.

Figure 32 – Logging Tab Screen

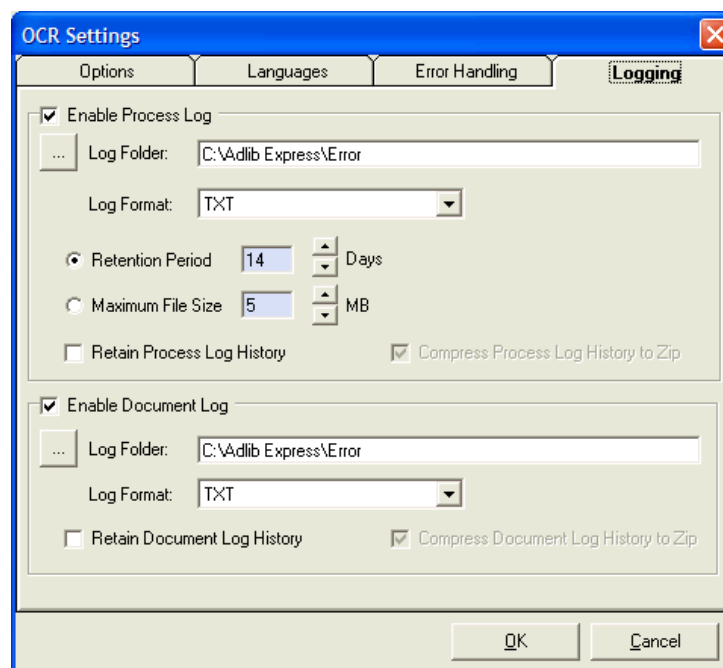
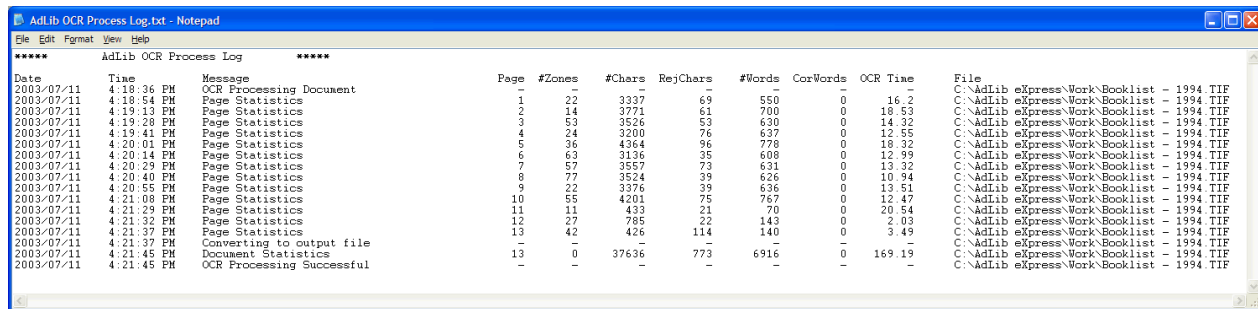


Table 15 - OCR Log Description

Column Name	Description
Date	The date the page is recognized.
Time	The Time the page is recognized.
Message	OCR process description.
Page	The page number of the document.
#Zones	The number of zones on the page identified for OCR.
#Chars	The number of characters recognized on the page.
RejChars	The number of recognized characters identified as invalid.
#Words	The number of words recognized on the page.
CorWords	The number of words corrected on the page when Language Dictionary Correction is enabled.
OCR Time	The time required to load, zone and recognize the page in seconds.
File	The path of the files recognized.

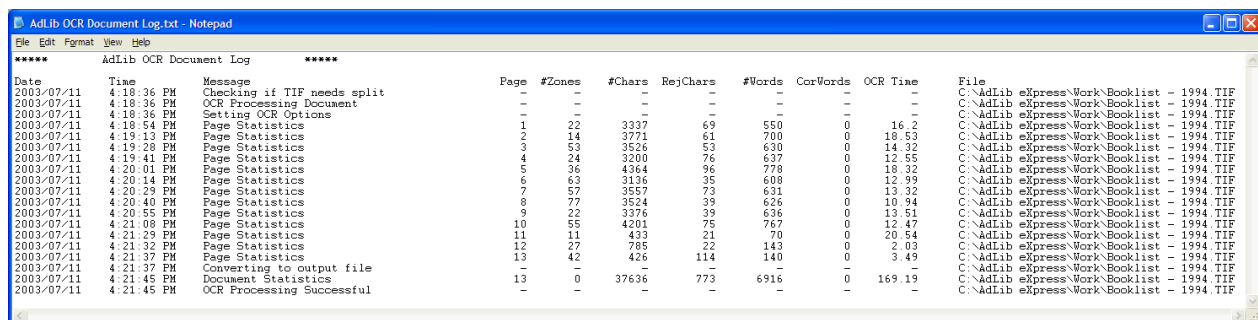
Figure 33 - OCR Process Log File



AdLib OCR Process Log

Date	Time	Message	Page	#Zones	#Chars	RejChars	#Words	CorWords	OCR Time	File
2003/07/11	4:18:36 PM	OCR Processing Document	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:18:54 PM	Page Statistics	1	22	3337	69	550	0	16.2	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:13 PM	Page Statistics	2	14	3771	61	700	0	18.53	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:28 PM	Page Statistics	3	53	3526	53	630	0	14.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:41 PM	Page Statistics	4	24	3200	76	637	0	12.55	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:01 PM	Page Statistics	5	36	4364	96	778	0	18.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:14 PM	Page Statistics	6	63	3136	35	608	0	12.99	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:29 PM	Page Statistics	7	57	3557	73	631	0	13.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:40 PM	Page Statistics	8	77	3524	39	626	0	10.94	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:55 PM	Page Statistics	9	22	3376	39	636	0	13.51	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:08 PM	Page Statistics	10	55	4201	75	767	0	12.47	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:29 PM	Page Statistics	11	11	433	21	70	0	20.54	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:32 PM	Page Statistics	12	27	785	22	143	0	2.03	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:37 PM	Page Statistics	13	42	426	114	140	0	3.49	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:37 PM	Converting to output file	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:45 PM	Document Statistics	13	0	37636	773	6916	0	169.19	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:45 PM	OCR Processing Successful	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF

Figure 34 - OCR Document Log File



AdLib OCR Document Log

Date	Time	Message	Page	#Zones	#Chars	RejChars	#Words	CorWords	OCR Time	File
2003/07/11	4:18:36 PM	Checking if TIF needs split	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:18:36 PM	OCR Processing Document	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:18:36 PM	Setting OCR Options	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:18:54 PM	Page Statistics	1	22	3337	69	550	0	16.2	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:13 PM	Page Statistics	2	14	3771	61	700	0	18.53	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:28 PM	Page Statistics	3	53	3526	53	630	0	14.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:19:41 PM	Page Statistics	4	24	3200	76	637	0	12.55	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:01 PM	Page Statistics	5	36	4364	96	778	0	18.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:14 PM	Page Statistics	6	63	3136	35	608	0	12.99	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:29 PM	Page Statistics	7	57	3557	73	631	0	13.32	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:40 PM	Page Statistics	8	77	3524	39	626	0	10.94	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:20:55 PM	Page Statistics	9	22	3376	39	636	0	13.51	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:08 PM	Page Statistics	10	55	4201	75	767	0	12.47	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:29 PM	Page Statistics	11	11	433	21	70	0	20.54	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:32 PM	Page Statistics	12	27	785	22	143	0	2.03	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:37 PM	Page Statistics	13	42	426	114	140	0	3.49	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:37 PM	Converting to output file	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:45 PM	Document Statistics	13	0	37636	773	6916	0	169.19	C:\AdLib\express\Work\Booklist - 1994.TIF
2003/07/11	4:21:45 PM	OCR Processing Successful	-	-	-	-	-	-	-	C:\AdLib\express\Work\Booklist - 1994.TIF

Image Recognition

Select **Recognize Image Files** (See **Figure 24 - Recognition Tab Screen**) in order to recognize the following image types:

- Bitmap
- JPEG
- TIFF
- DCX
- PNG
- MAX

You can convert color images to monochrome PDF files by selecting "Monochrome" or select Automatic for the PDF color to match the image.

Table 16 - Image Recognition Options - Output Color

Output Color Setting	Description
Monochrome	Creates all PDF files as black and white documents.
Automatic	Creates PDF files maintaining the color of the source documents.

PDF Recognition

Select **Recognize PDFs** (See **Figure 24 - Recognition Tab Screen**) in order to recognize PDF files. The user can select to recognize all PDF files by selecting **All** for **PDF Type** or to just recognize PDF files that are **Image Only** (non-searchable).

You can convert color PDF files to Monochrome PDF files by selecting **Monochrome** or select **Automatic** for the PDF color to match the original PDF.

Table 17 - PDF Recognition Options - Output Color

Output Color Setting	Description
Monochrome	Creates all PDF files as black and white documents.
Color	Creates all PDF files as color documents.

Document Recognition

Select **Recognize All Documents (excluding PDFs and Images)** (See **Figure 24 - Recognition Tab Screen**) in order to recognize file types other than the following (Note: requires the installation of the Conversion Engine).

- PDF
- Bitmap
- JPEG
- TIFF
- DCX
- PNG
- MAX

The user can elect to OCR all documents by selecting **All** for **Document Type** or to just recognize documents that are **Image Only** (non-searchable).

You can convert color documents to Monochrome PDF files by selecting **Monochrome** or select **Automatic** for the **PDF Color** to match the original document.

Table 18 - Document Recognition Options - Output Color

Output Color Setting	Description
Monochrome	Creates all PDF files as black and white documents.
Color	Creates all PDF files as color documents.

Output as Image Only PDF

Select **Output as Image Only PDF** to create non-searchable PDF files. This makes the PDF content more difficult to alter and may improve the rendering accuracy when viewed on different platforms.

You can convert color Documents to Monochrome Image Only PDF files by selecting Monochrome.

Table 19 - Output as Image Only PDF Options – Output Color

Output Color Setting	Description
Monochrome	Creates all PDF files as black and white documents.
Color	Creates all PDF files as color documents.

Publishing

This section describes the comprehensive publishing functionality available for the Express product suite. There are multiple operations that can be performed as part of an automated workflow including document merging, application of stamps (i.e. headers, footers, overlays, etc...), page and page content scaling and more.

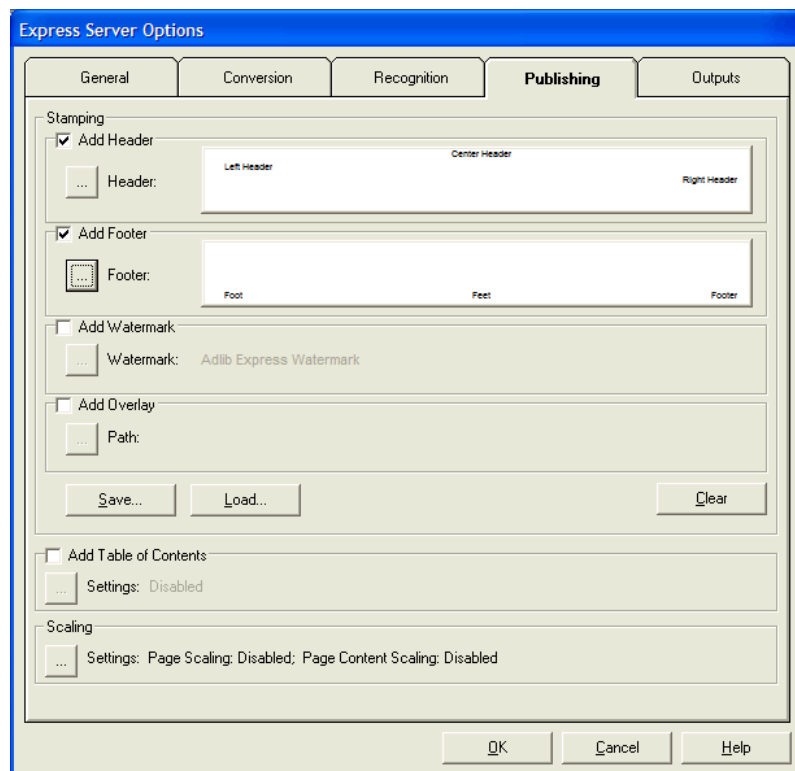
Using the information contained in this section you will be able to configure your *Express Server* for high quality, personalized PDF output.

Publishing features are core to Adlib ExpressPublishing Server and can be added as an option to Adlib ExpressConversion Server or Adlib ExpressRecognition Server.

Stamping

Express allows users to personalize their PDF files by adding user-defined text as well as overlays to the PDF files created (See **Figure 35 - Stamping Tab Screen**). The user-defined text can be added as a Header, Footer and/or Watermark. Stamping definitions can be saved to a (*.adb) file by clicking on the **Save** button located at the bottom of the tab. Click the **Load** button to load the Stamping definitions.

Figure 35 - Stamping Tab Screen



The screenshot shows the 'Express Server Options' dialog box with the 'Publishing' tab selected. The 'Stamping' section is active, showing options for adding headers, footers, watermarks, and overlays. The 'Add Header' checkbox is checked, and the 'Header' field is divided into 'Left Header', 'Center Header', and 'Right Header' sections. The 'Add Footer' checkbox is also checked, and the 'Footer' field is divided into 'Foot', 'Feet', and 'Footer' sections. The 'Add Watermark' checkbox is unchecked, and the 'Watermark' field contains the text 'Adlib Express Watermark'. The 'Add Overlay' checkbox is unchecked, and the 'Path' field is empty. Below these fields are 'Save...' and 'Load...' buttons, and a 'Clear' button. The 'Add Table of Contents' checkbox is unchecked, and the 'Settings' field shows 'Disabled'. The 'Scaling' section is also visible, with 'Settings' showing 'Page Scaling: Disabled; Page Content Scaling: Disabled'. At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

Table 20 - Header/Footer Settings - Pages Option

Property	Values	Description
Pages		Specifies the pages to add the text for Header or Footer.
	1, 3	Individual pages
	5-7	Range of pages inclusive
	10-	Range to the end of the document
	First	First page only
	Even	Even pages
	Odd	Odd pages
	Last	Last page
	All	All pages
	TOC	Applies Header/Footer to TOC Report.
	DOCN	Applies Header/Footer to the N th document.
	DOCN-	Applies Header/Footer from the N th document to the end of the final document.
	IDX	Applies Header/Footer to the index.

The following annotations may be added to Output files.

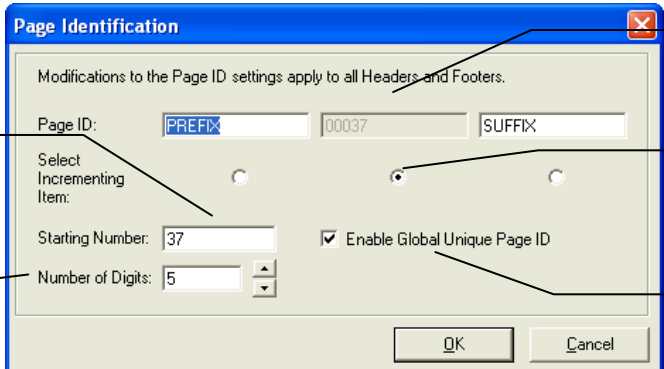
- Page Number - &[Page]
- Total Number of Pages - &[Pages]
- Date - &[Date]
- Time - &[Time]
- Document Path - &[Path]
- Document File Name - &[File]
- Page ID - &[PageID]
- Document Error - &[DocErr]
- Other user-defined text such as Project Name, Company Name, Confidential, etc.

Page Identification (Bates Numbering)

The Page Identification is a process that adds a unique identifier to each page of a document. Page Identification is referred to as Bates Numbering/Stamping in the legal profession and is often used to number pages as they are processed.

Express allows you to define the structure for Page Identification using the Page Identification screen (See **Figure 37 - Bates Numbering Page ID Screen**). Press the ... button on the Header/Footer definition screen to display this screen. The Page Identification screen allows you to define up to three items for the Page Identifier. Two of the three items do not change from page to page and can contain any characters, numbers and symbols (e.g. # \$ % ^ & [] { } * etc ...). The Incrementing Item can be any one part (Left, Center, Right) of the Page Identifier and is increased by one for every page processed. You may define the Starting Number and the number of digits for the Incrementing Item. The Incrementing Item can contain up to 16 digits. A number of zeros (e.g. 000013489) will appear in front of the number if the number of digits is greater than the Starting Number. Selecting the Enable Global Unique Page ID check box will make the Incrementing Item of the Page Identification unique for all Configurations.

Figure 37 - Bates Numbering Page ID Screen



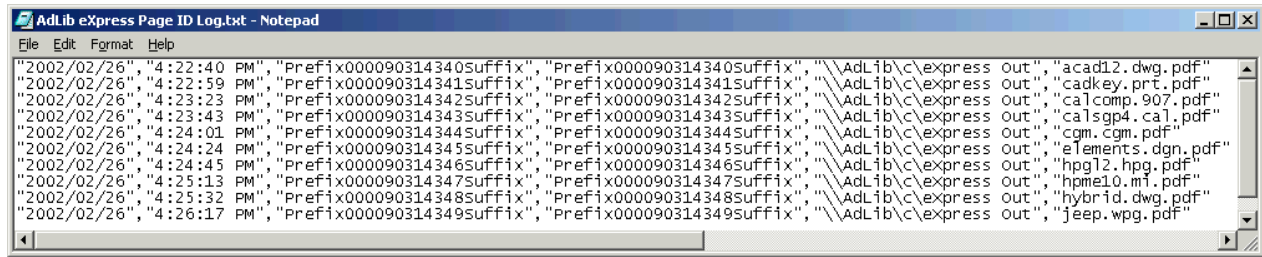
The screenshot shows the 'Page Identification' dialog box with the following fields and callouts:

- Page ID:** A text field containing 'PREFIX' followed by a numeric field containing '00037' and a text field containing 'SUFFIX'. A callout points to the numeric field with the text 'Define the starting Number for the Incrementing Item'.
- Select Incrementing Item:** Three radio buttons for 'Left', 'Center', and 'Right'. A callout points to the 'Center' radio button with the text 'Select the Incrementing Item'.
- Starting Number:** A numeric field containing '37'.
- Number of Digits:** A numeric field containing '5'.
- Enable Global Unique Page ID:** A checked checkbox.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Additional callouts on the right side of the dialog box include:

- Page Identifier Items:** Points to the 'PREFIX' and 'SUFFIX' text fields.
- Select for Global Unique Page ID:** Points to the 'Enable Global Unique Page ID' checkbox.

Once the Page Identification has been defined, the user can insert the Page Identifier in the Left, Center or Right part of the Header or Footer of the PDF. When Page Identification is used, a comma delimited log file called **Express Page ID Log.txt** is created containing the Date, Time, starting and ending Page Identifier, Folder and the PDF filename for each document (See **Figure 38 - Sample Express Page ID Log File**). This log file is stored in the same location as the Express Process Log. The location of this log file is defined from the Log Settings Screen which is accessed from the General Tab Screen (See **Figure 13 - Log Settings Screen**).

Figure 38 - Sample Express Page ID Log File

Table 21 – PageID Log Contents

Item Number	Item Description
1	Date
2	Time
3	Starting Page ID
4	Ending Page ID
5	Output Folder
6	Output File

Watermark

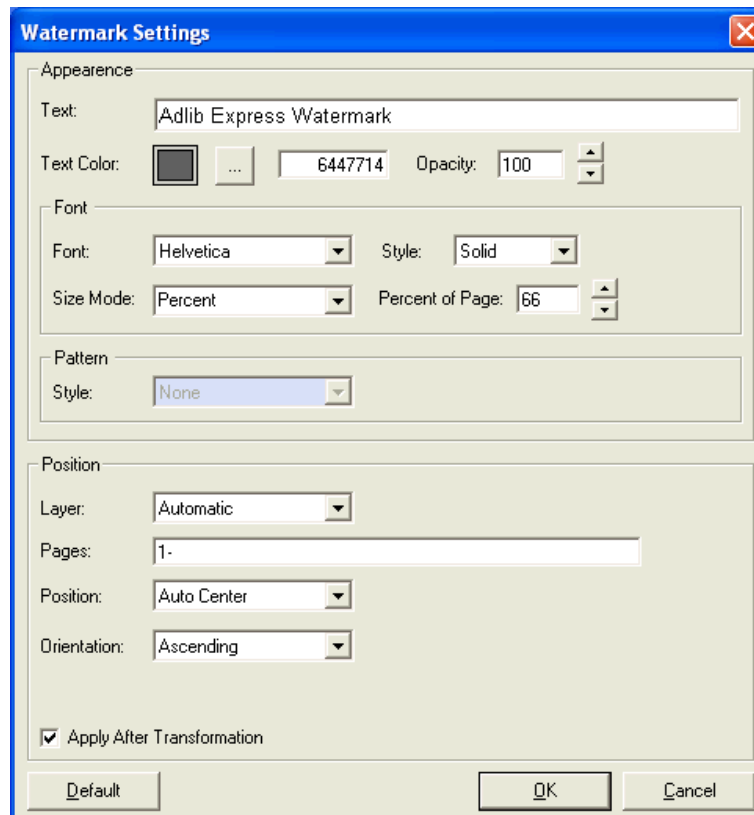
Watermarks are added to PDF files by defining the watermark text and defining the settings for its appearance (See **Figure 39 - Watermark Settings Screen**). Please refer to **Table 23 - Supported Watermark Fonts** for a list of the supported fonts for Watermarking. The **Font Style** can be None, Outline or Solid. The Pattern Style (Crosshatch, Dots, Horizontal Lines and Vertical Lines) is used to fill the Watermark text characters when a font style of None or Outline is selected. The Pattern Size and Density can be adjusted to increase the visibility of the watermark. It is possible to make the Watermark transparent by decreasing the Opacity from 100%. This is often used when it is important for the Watermark not to obscure any of the document information.

Tip: *Transparent Watermarking is supported in Adobe Acrobat PDF Versions 1.4 (Acrobat Reader 5.0) and above.*

The Watermark text color can also be defined. The number on the right of the Text Color represents the RGB value for the color selected. This is the number to use when defining the Watermark color in Express Job Ticket files.

The Watermark can be applied to specific pages (See **Table 22 - Watermark Pages Options**) of the document. The Watermark text can be inserted on the Foreground or Background Layer of the PDF. When Automatic is selected, Express inserts the Watermark on the layer (Foreground or Background) that will make it visible.

Tip: *Inserting the Watermark on the Foreground guarantees visibility for documents that contain solid backgrounds (e.g. Images, HTML, HPGL, etc...).*

Figure 39 - Watermark Settings Screen

The Watermark Settings dialog box is titled "Watermark Settings" and features a close button (X) in the top right corner. It is organized into three main sections: Appearance, Font, and Position. The Appearance section includes a "Text" field with "Adlib Express Watermark", a "Text Color" field with a color swatch, a numeric field for "6447714", and an "Opacity" field set to "100". The Font section includes a "Font" dropdown set to "Helvetica", a "Style" dropdown set to "Solid", a "Size Mode" dropdown set to "Percent", and a "Percent of Page" field set to "66". The Position section includes a "Layer" dropdown set to "Automatic", a "Pages" field set to "1", a "Position" dropdown set to "Auto Center", and an "Orientation" dropdown set to "Ascending". There is a checkbox labeled "Apply After Transformation" which is checked. At the bottom, there are three buttons: "Default", "OK", and "Cancel".

The Watermark Position can be specified using Absolute Coordinates or Auto Center. Selecting **Absolute Coordinates** allows the definition of the Orientation as well as insertion point position. It is possible to specify the insertion point with respect to the page upper or lower left corner. This provides flexibility when adding a watermark on documents that have different pages size and orientations. Express assumes the reference based on the value for the Vertical coordinate. When the Vertical coordinate value is negative, the upper left corner of the page is used as the reference and the orientation angle is clockwise from the horizontal axis on the right. When the Vertical coordinate value is positive, the lower left corner of the page is used as the reference and the orientation angle is counter clockwise from the horizontal axis on the right.

Selecting the Auto Center option will center the watermark text in the Orientation (Ascending, Descending, Horizontal, Vertical, Top, Bottom, Left, Right) defined. The Font Size can be explicitly set or you may choose to use specify a percent of the page that you wish the watermark text to span.

Table 22 - Watermark Pages Options

Property	Values	Description
Pages		Specifies the pages to Watermark.
	1, 3	Individual pages
	5-7	Range of pages inclusive
	10-	Range to the end of the document
	First	First page only
	Even	Even pages
	Odd	Odd pages
	Last	Last page
	All	All Pages
	TOC	Applies Header/Footer to TOC Report.
	DOCN	Applies Header/Footer to the N th document.
	DOCN-	Applies Header/Footer from the N th document to the end of the final document.
	IDX	Applies Header/Footer to the index.

The following annotations may be added to Output files.

- Page Number - &[Page]
- Total Number of Pages - &[Pages]
- Date - &[Date]
- Time - &[Time]
- Document Path - &[Path]
- Document File Name - &[File]
- Page ID - &[PageID]
- Document Error - &[DocErr]
- Other user-defined text such as Project Name, Company Name, Confidential, etc.

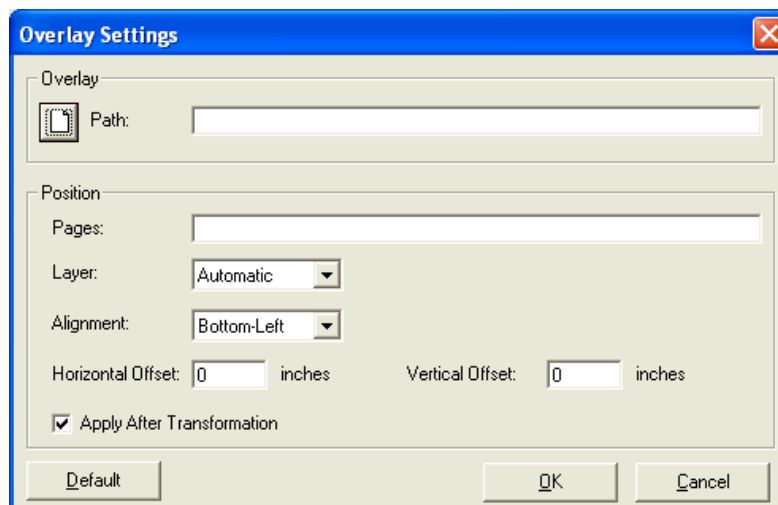
Table 23 - Supported Watermark Fonts

Supported Fonts
Helvetica
Helvetica-Bold
Helvetica-Oblique
Times-Roman
Times-Italic
Times-Bold
Courier
Courier-Oblique
Courier-Bold
Symbol
ZapfDingbats

Overlay

Express allows overlaying a PDF onto any documents processed (See **Figure 40 - Overlay Settings Screen**). The Overlay can be any document type that is supported by Express. The Overlay is converted to a PDF prior to being applied to the processed document. The Overlay PDF can contain images, text, form fields and JavaScript. The Overlay can be applied to specific pages of the document. (See **Table 24 - Overlay Settings - Pages Option**). The Overlay can be inserted on the Foreground or Background Layer of the PDF. When Automatic is selected, Express inserts the Overlay on the layer that will make it visible. This is determined by examining the document metadata of the PDF Overlay. The Overlay can be aligned to a specific reference on the page (Top-Left, Top-Center, etc...) when the Overlay page size or orientation differs from the page it is being applied to.

Figure 40 - Overlay Settings Screen



The Overlay PDF can contain a document JavaScript. The PDF form fields may also contain a custom JavaScript.

The following describes how to create a PDF file to be used as an Express Overlay. The Overlay PDF will contain the company Logo as well as display the current date when the PDF is viewed or printed.

- 1- Create a single page document using an application (e.g. MS Word) and insert the information (Text, Images, etc...) you desire in the appropriate location. Use Express to create the Overlay PDF from the document.
- 2- Open the Overlay PDF with Adobe Acrobat and add a Field using the Form Tool. Name the field (e.g. txtToday). Please note that the name is case sensitive.

- 3- Copy the following two lines of JavaScript to the PDF document. This JavaScript will update all the form fields in the document called **txtToday** to the current date when the PDF is opened.

```
var f = this.getField("txtToday");  
f.value = util.printd("mm/dd/yyyy", new Date());
```

a. Acrobat 6.0

- i. Use the Advanced -> JavaScript-> Document JavaScript... menu items to display the JavaScript Functions screen.
- ii. Define the Script Name (e.g. Date).
- iii. Press the Add button to display the JavaScript Edit screen.
- iv. Copy the above two lines of JavaScript into the box, replacing all existing code and press the OK button. Select the **Acrobat JavaScript Guide** from the Acrobat Help menu for additional information on JavaScript.
- v. Press the Close button on the JavaScript Functions screen.
- vi. Save the PDF.

b. Acrobat 5.0

- i. Use the Tools -> JavaScript-> Document JavaScript menu items to display the JavaScript Functions screen.
- ii. Define the Script Name (e.g. Date).
- iii. Press the Add button to display the JavaScript Edit screen.
- iv. Copy the above 2 lines of JavaScript into the box replacing all existing code and press the OK button. Select the **Acrobat JavaScript Guide** from the Acrobat Help menu for additional information on JavaScript.
- v. Press the Close button on the JavaScript Functions screen.
- vi. Save the PDF.

c. Acrobat 4.0

- i. Use the Tools -> Forms-> Document JavaScript menu items to display the JavaScript Functions screen.
- ii. Define the Script Name (e.g. Date).
- iii. Press the Add button to display the JavaScript Edit screen.
- iv. Copy the above 2 lines of JavaScript into the box replacing all existing code and press the OK button. Select the **Forms JavaScript Guide** from the Acrobat Help menu for additional information on JavaScript.
- v. Press the Close button on the JavaScript Functions screen.
- vi. Save the PDF.

- 4- Select the Enable Overlay on the Stamping tab of the Express Options screen.

- 5- Reference this PDF for the **Overlay** in the Overlay Settings Screen (Refer to **Figure 40 - Overlay Settings Screen**).

Tip: The Overlay PDF may contain multiple pages but only the first page is overlaid.

Note: See **Appendix I** – Advanced Registry Settings for restrictions when printing documents with an overlay that contains a JavaScript to a physical printer.

Table 24 - Overlay Settings - Pages Option

Property	Values	Description
Pages		Specifies the pages to add the defined Overlay.
	1, 3	Individual pages
	5-7	Range of pages inclusive
	10-	Range to the end of the document
	First	First page only
	Even	Even pages
	Odd	Odd pages
	Last	Last page
	All	All pages
	TOC	Applies Overlay to TOC Report.
	DOCN	Applies Overlay to the N th document.
	DOCN-	Applies Overlay from the N th document to the end of the final document.
	IDX	Applies Overlay to the index.

Note: *Overlay files identified as HTML documents that are specified in the Path option of the Overlay Settings Screen will now be handled differently from other overlay files. If the following replacement macros are found in the body of the HTML document, they will be replaced with their appropriate values:*

&[Page] – Current page number
 &[Pages] – Total number of pages
 &[Date] – Current date
 &[Time] – Current time
 &[Path] – Document folder path
 &[File] – Document file name
 &[FullPath] – Document folder path and file name
 &[PageID] – Page Id (Bates numbering)

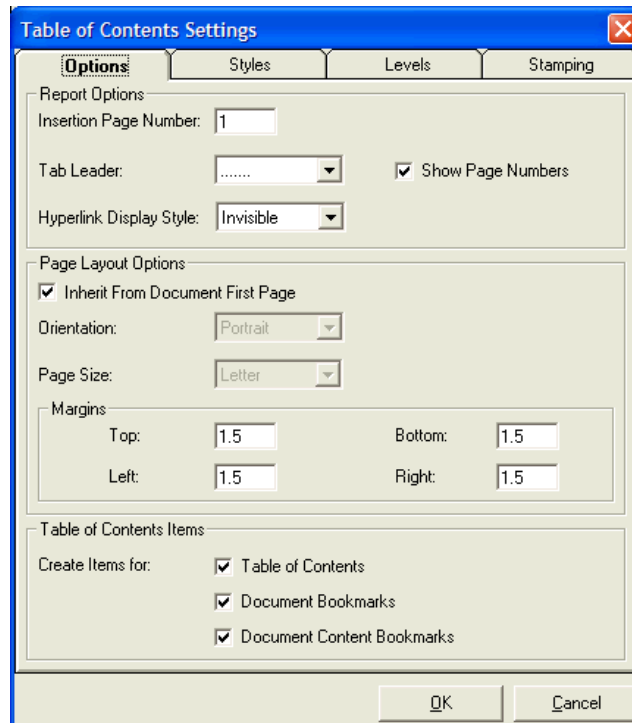
Please refer to the **Overlays** section of the **Express XML Job Ticket User Guide** for more information.

Table of Contents Settings

A Table of Contents is a list of the headings in a document. You can use a Table of Contents to get an overview of the topics discussed in a document. The Table of Contents is created using the Bookmarks contained in the PDF document. Therefore, you must enable the Bookmarks feature of Express in order to create the Table of Contents successfully. This is beneficial since any PDF can be augmented with a Table of Contents. The Table of Contents contains hyperlinks to the same destinations as the Bookmarks.

The **Table of Contents Settings Screen** (See **Figure 41 – Table of Contents Settings – Options Tab**) allows the user to define specific Table of Contents Options, Styles, Levels and Stamping features. Each of these options is described in the sections to follow.

Figure 41 – Table of Contents Settings – Options Tab



The screenshot shows the 'Table of Contents Settings' dialog box with the 'Options' tab selected. The dialog has four tabs: 'Options', 'Styles', 'Levels', and 'Stamping'. The 'Options' tab contains the following sections:

- Report Options:**
 - Insertion Page Number: 1
 - Tab Leader: (dropdown)
 - Hyperlink Display Style: Invisible (dropdown)
 - ☒ Show Page Numbers
- Page Layout Options:**
 - ☒ Inherit From Document First Page
 - Orientation: Portrait (dropdown)
 - Page Size: Letter (dropdown)
- Margins:**
 - Top: 1.5, Bottom: 1.5, Left: 1.5, Right: 1.5
- Table of Contents Items:**
 - Create Items for:
 - ☒ Table of Contents
 - ☒ Document Bookmarks
 - ☒ Document Content Bookmarks

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Options

Report Options

The **Insertion Page Number** allows the user to set the page number where the Table of Contents report is inserted. The **Tab Leader** is used to define the leader style used between the Table of Contents entry and page number; the following leader styles are available: None, Dotted, Dashed and Underline. The **Hyperlink Display Style** allows the user to select the appearance of the rectangular outline of the hyperlink area. The **Show Page Numbers** option is used to keep or omit page numbers from the resulting Table of Contents report.

Tip: *Omitting page numbers also omits the selected tab leader style used.*

Page Layout Options

The **Page Layout** contains the settings associated with the page setup for the Table of Contents report. The user can elect for the **Page Layout** to be inherited from the first page of the document or define custom page properties to be used for all Table of Contents reports generated.

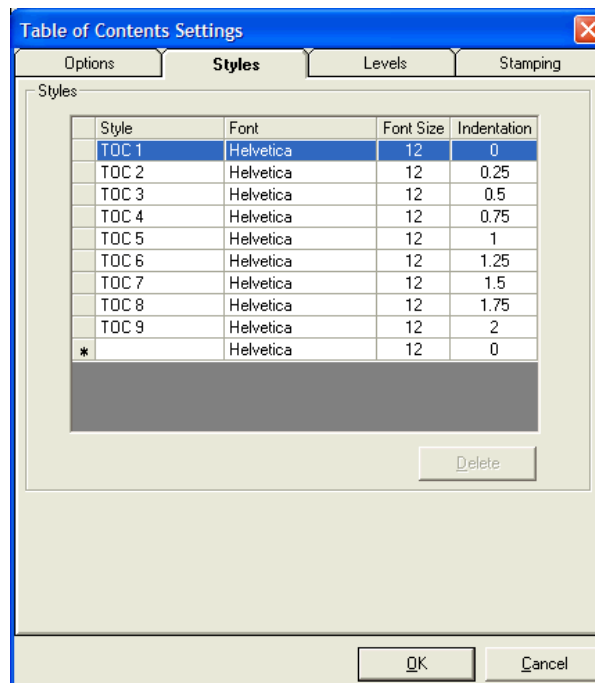
Table of Contents Items

The **Table of Contents Items** options allow the user to select certain bookmarking options which will be used to create the Table of Contents items in the resulting report. The **Document Bookmarks** refers to Bookmarks associated with the document/file. The **Document Content Bookmarks** refers to Bookmarks associated with the contents of the document (e.g. Heading Styles for MS Word, Worksheets for Excel, and Bookmarks for PDF). The **Table of Contents** allows the creation of a single Bookmark with text "Table of Contents" that has the TOC as the destination.

Styles

The **Styles** screen (See **Figure 42 – Table of Contents Settings - Styles Tab**) allows the user to create one or more styles for use by TOC items. Each style contains a Name, Font, Font Size and Indentation. Nine default styles (TOC 1 to TOC 9) are provided which can be edited as required. Styles are associated with Levels on the Levels screen tab described below.

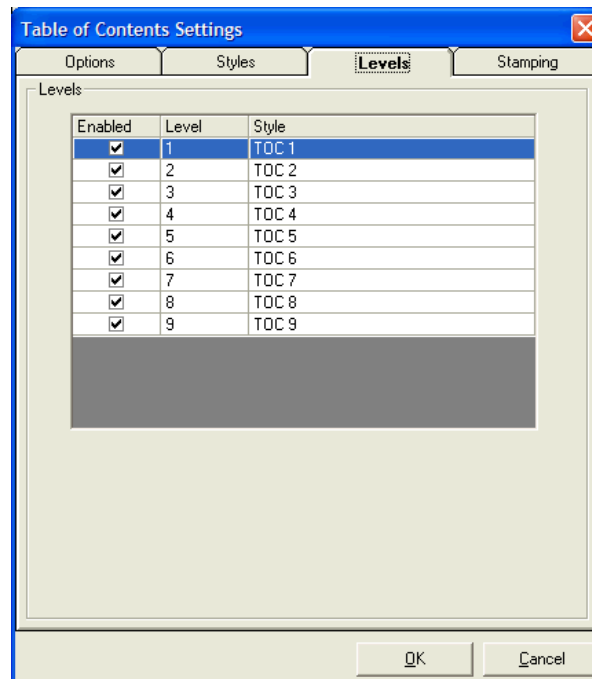
Figure 42 – Table of Contents Settings - Styles Tab



Levels

The **Levels** screen (See **Figure 43 – Table of Contents Settings - Levels Tab**) allows the user to associate PDF Bookmark Levels with styles. Only the first 9 levels can be added to the TOC. The user can select individual PDF Bookmark levels to be included with the TOC by selecting the **Enabled** check box.

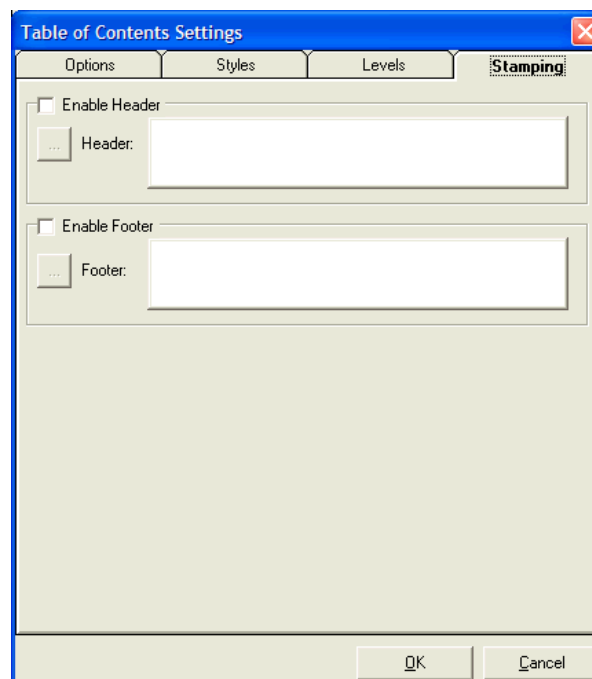
Figure 43 – Table of Contents Settings - Levels Tab



Stamping

The **Stamping** screen (See **Figure 44 – Table of Contents Settings - Stamping Tab**) allows users a simple way to personalize their TOC by adding user-defined text as a Header or Footer (See **Header and Footer Settings** for more information on Headers and Footers).

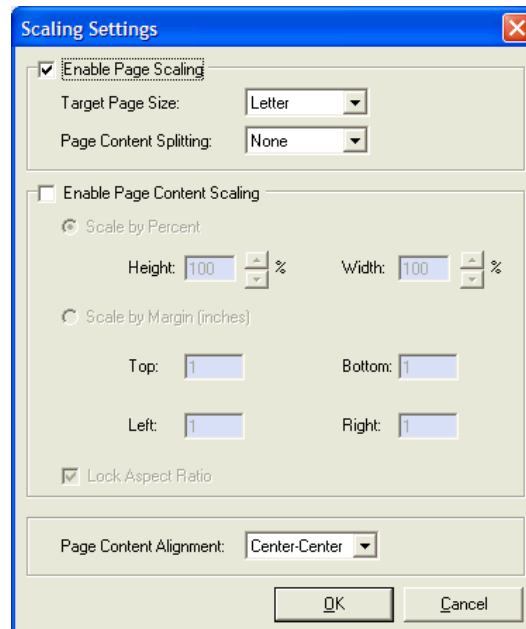
Figure 44 – Table of Contents Settings - Stamping Tab



Scaling

Express allows users to scale the Page and/or the Page Content of PDF documents (See **Figure 45 – Scaling Settings Screen**).

Figure 45 – Scaling Settings Screen



Page Scaling

It is possible to scale all pages in a document to a specific page size (Letter, Legal, Ledger, A3, A4, C Size, etc ...) by enabling Page Scaling and selecting the Target Page Size (See **Figure 45 – Scaling Settings Screen**). Please note that the page content is automatically centered on the page when increasing or decreasing the page size. By default, the center of the page is used as the reference when changing page size, but this can be altered by adjusting the **Page Content Alignment** option.

Page Content Scaling

Page Content Scaling decreases or increases the page content size as specified. Page Content Scaling is performed prior to adding Stamping information. Therefore Watermarks, Headers and Footers, and Overlays are not scaled. There is no quality degradation when content scaling is applied. Page Content Scaling is useful in order to allocate space to add a Header/Footer, Watermark and Overlay.

Page Content can be scaled by defining a scaling factor (%) or by specifying the margins for the page.

Scale by Percent

The **Scale by Percent** scales the Page Content by the defined scaling factors for both the Height and the Width. The page content can be scaled down to 1% and up to 200%. If **Lock Aspect Ratio** is selected, the setting for the Height and the Width will be identical in order to preserve the Height to Width ratio of the content. By default, the Page Content is always centered on the page, but this can be altered by adjusting the **Page Content Alignment** option.

Scale by Margin

The **Scale by Margin** scales the Page Content and decreases or increases the content to satisfy the (Top, Bottom, Left and Right) page margins defined. It is possible to increase the page content size by specifying negative values for the margins. If **Lock Aspect Ratio** is selected then the height to width ratio of the original document is preserved. If **Lock Aspect Ratio** is not selected then the page content will be scaled to fit the specified margins exactly. In this instance, the height and the width may be scaled differently.

Page Content Alignment

The **Page Content Alignment** specifies where the page content is anchored/aligned if a transformation operation changes the page size and/or the page content size.

Outputs

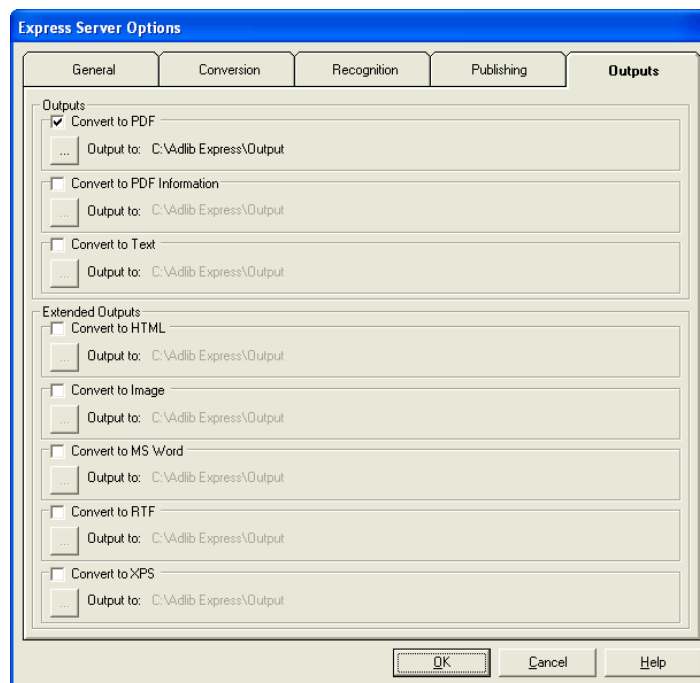
This section describes the various document format outputs available for the Express product suite. Output formats include PDF, PDF/A, PDF/X, PDF Info, Text, JPG/PNG/TIF, HTML, DOC/RTF and XPS.

Using the information contained in this section you will be able to configure your server to generate one or multiple output formats to suit your business requirements.

In addition to the core formats, there is a collection of Extended Outputs available for Adlib ExpressConversion Server, Adlib ExpressRecognition Server and Adlib ExpressPublishing Server.

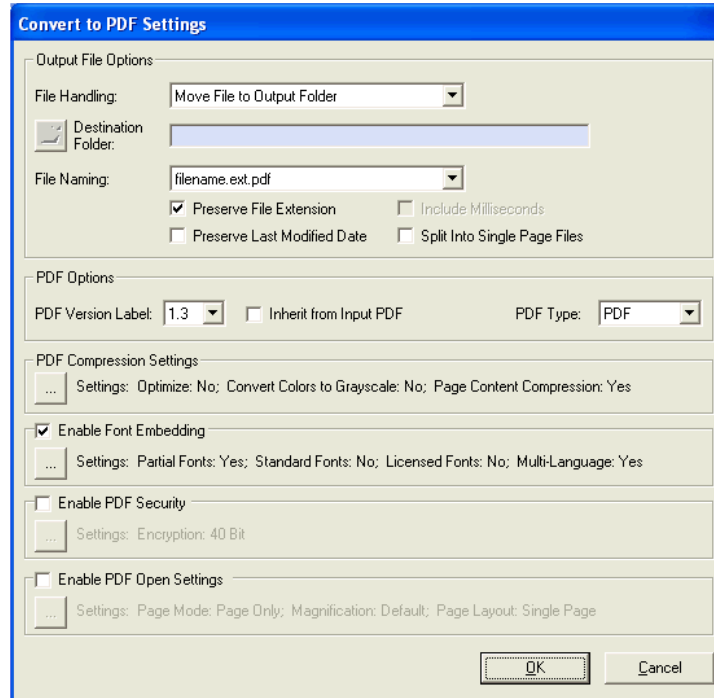
The Outputs screen (See **Figure 46 - Outputs Tab Screen**) allows users to select the output file types (PDF, Text, Image) to be created. The following describes these settings in detail.

Figure 46 - Outputs Tab Screen



Convert to PDF Settings

Express will create PDF files for every file processed when the **Convert to PDF** check box is selected. This selection enables the controls (See **Figure 47 – Convert to PDF Settings Screen**) that allow the file handling, naming of PDF files and provide additional settings associated with the creation of PDF files. Please refer to the corresponding section for a detailed description.

Figure 47 – Convert to PDF Settings Screen


Output File Options

The following sections describe file handling options for resulting PDF files created by Express.

File Handling

The **File Handling** drop down allows the user to select how the PDF files created are handled. Refer to **Table 25 - File Handling Options** for a description of these selections.

Table 25 - File Handling Options

File Handling	Description
Move File to Output Folder	The PDF files are moved to the Output folder after they are created.
Move File to PDF Folder	The PDF files are moved to the PDF folder after they are created. The PDF folder allows the separation of the Input folder files and the PDF files. The user must define the PDF folder.

Destination Folder

The Destination Folder is the folder where Express will move the resulting PDF files to after processing is completed if the **File Handling** is configured to **Move File to PDF Folder**.

File Naming

The **File Naming** provides four naming conventions for the PDF files. The date and time can be added to the PDF filename. Refer to **Table 26 - File Naming Options** for a description of each of these selections.

Table 26 - File Naming Options

File Naming Convention	Description
filename.pdf	<p>The PDF file name is the same as the native file but has a PDF extension.</p> <p>My Doc.doc -> My Doc.pdf</p>
filename.YYYYMMDDThhmmss.pdf	<p>The PDF file name is the same as the native file but has the ISO date and time format added to the filename.</p> <p>My Doc.doc -> My Doc.20011124T234956.pdf</p> <p>Please note that a T is used to indicate the beginning of the time. Adding this date format to the PDF file allows the files to be sorted chronologically.</p> <p>Please refer to Table 3 - Date and Time Code Descriptions.</p>
filename.MMDDYYYYThhmmss.pdf	<p>The PDF file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.doc -> My Doc.11242001T234956.pdf</p>
filename.DDMMYYYYThhmmss.pdf	<p>The PDF file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.doc -> My Doc.24112001T234956.pdf</p>

Preserve File Extension

Express allows users to preserve the native file extension as part of the PDF filename (e.g. My Doc.doc -> My Doc.doc.pdf). This is an important feature when files with the same name but a different extension are used (e.g. My Doc.doc and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the PDF file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add Milliseconds to the PDF file name when the PDF File Naming includes Date and Time. This is a useful way to guarantee unique PDF file names. The milliseconds are added to the file name after the Date and Time information, as follows:

filename.DDMMYYYYThhmmss.sss.pdf

Preserve Last Modified Date

Express will set the Last Modified Date of the PDF to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Split Into Single Page Files

The **Split Into Single Page Files** check box creates single page PDF files when processing multi-paged documents (e.g. My Doc.doc). All single page PDF files are created in subfolders of the defined (Output or PDF) folder (e.g. Output\My Doc) and are named the same as the processed document with the page number added as a suffix (e.g. My Doc_1.pdf, My Doc_2.pdf,...).

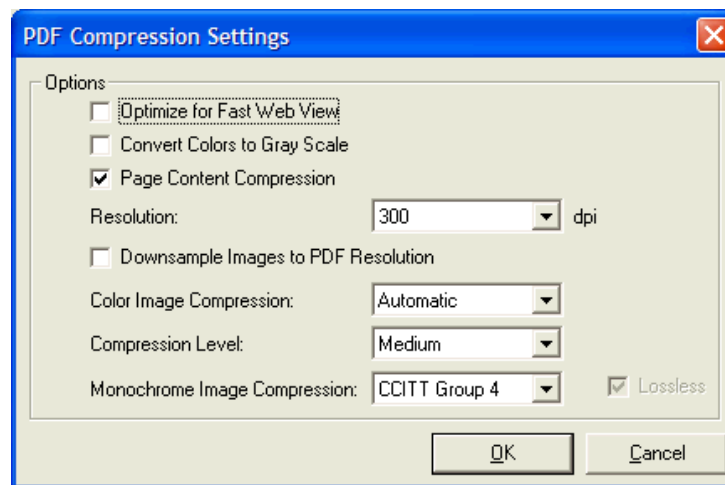
PDF Options

The **PDF Version Label** allows the user to specify the PDF Version for the resulting PDF created by Express. The setting includes the following for PDF Versions: 1.2, 1.3, 1.4, 1.5, 1.6 and 1.7. These version numbers correspond to the Acrobat versions 3, 4, 5, 6, 7 and 8 respectively. Selecting **Inherit From Input PDF** will produce a PDF that maintains the same PDF Version that was present in the original PDF. The **PDF Type** option allows the user to select either PDF or PDF/A-1b. Selecting PDF/A-1b specifies that Express will create PDF/A-1b compliant files.

PDF Compression Settings

The PDF Compression settings provide several parameters that affect the size of the PDF file. The PDF Compression and Resolution can be set to minimize the PDF file size while maintaining the visual quality desired.

Figure 48 - PDF Compression Settings Screen



Optimize for Fast Web View

This option is intended to make PDF files more suitable for online browsing / viewing by making the first page of the PDF document load as fast as possible. The PDF Document Summary screen indicates if a PDF is "Optimized for Fast Web View".

Convert Colors to Gray Scale

This option converts all colors to Grayscale in the resulting PDF.

Page Content Compression

This option executes a compression algorithm on the PDF to minimize its file size. Specifically, the page content streams are encoded using Flate encoding algorithm.

Note: Only the page content streams are compressed, not the entire PDF (images, fonts, etc).

Resolution

This option allows the user to set the PDF resolution from 75 to 1200 Dots per inch (dpi). Increasing the resolution improves the quality of images and text contained in the resulting PDF file.

Tip: *All Image files that are at a higher resolution than selected in Express are down sampled to the Express resolution prior to converting to PDF. All Image files that are at a lower resolution are not changed.*

Tip: *Please note that some applications (e.g. MS Excel) allow users to specify the printing resolution. In these cases, the application setting overwrites the Express resolution setting.*

Downsample Images to PDF Resolution

This option allows the user to down sample images to the specified PDF resolution. This decreases the number of pixels, in dots per inch (dpi), found in images. This reduces the PDF file size but also reduces image quality.

Color Image Compression

The **Color Image Compression** enables users to select between four compression algorithms that are optimized for image quality or file size (See **Figure 48 - PDF Compression Settings Screen** and **Table 27 - Color Image Compression Options**).

Table 27 - Color Image Compression Options

Color Image Compression	Description
Default	This selection creates the PDF with the same image quality as the original document. It uses a lossless* compression algorithm which is best suited when the number of colors is less than 256.
256 Color	This selection creates the PDF which limits the number of colors to 256. It uses the most common 256 colors in the image and changes the remaining color to the closest one of the 256 colors. This algorithm is only lossy* for images that contain more than 256 colors.
JPEG	<p>This selection creates the PDF using JPEG compression algorithm. This is a lossy* algorithm that works very well for true color images. It is not recommended for graphics other than real pictures.</p> <p>The image quality can be controlled by selecting the Compression Levels (Minimum, Low, Medium, High, and Maximum). The Maximum Compression Level will create the smallest file size with the lowest image quality.</p>
Automatic	<p>This selection creates the PDF using the most appropriate compression algorithm (Default, 256 Color, JPEG) for each image contained in the document. This selection is best suited when converting various types of images and documents which contain multiple images of different types.</p> <p>The image quality can be controlled by selecting the Compression Levels (Minimum, Low, Medium, High, and Maximum). The Maximum Compression Level will create the smallest file size with the lowest image quality.</p>

* Lossless is a term describing a data compression algorithm that retains all the information in the data, allowing it to be recovered perfectly by decompression.

* Lossy is a term describing a data compression algorithm which actually reduces the amount of information in the data, rather than just the number of bits used to represent that information.

Compression Level

The image quality can be controlled by selecting the Compression Levels (Minimum, Low, Medium, High and Maximum). The Maximum Compression Level will create the smallest file size with the lowest image quality.

Monochrome Image Compression

The **Monochrome Image Compression** enables users to select between two compression algorithms that reduce the PDF file size (See **Figure 48 - PDF Compression Settings Screen** and **Table 28 - Monochrome Image Compression Options**).

Table 28 - Monochrome Image Compression Options

Monochrome Image Compression	Description
Default	This selection creates the PDF with the same image quality as the original document. It uses a lossless* compression algorithm which is compatible with prior versions of Express. We recommend that CCITT Group 4 compression be used in order to further reduce the PDF file size.
CCITT Group 4	This selection creates the PDF with the same image quality as the original document. The CCITT Group 4 is a lossless * algorithm which provides better compression than the Default selection.
JBIG2	Applies JBIG2 compression to monochrome images.
JBIG2 Lossless	Applies JBIG2 compression to monochrome images. This selection creates the PDF with the same image quality as the original document.

* Lossless is a term describing a data compression algorithm that retains all the information in the data, allowing it to be recovered perfectly by decompression.

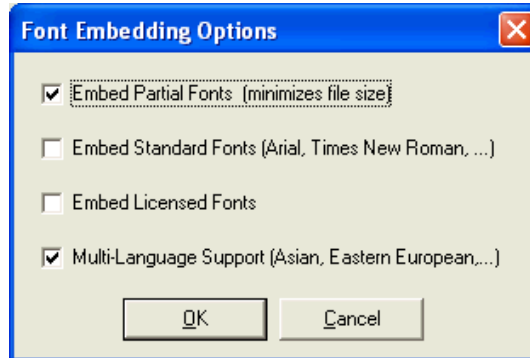
Note: JBIG2 compression is available as an Express Add-on.

Tip: *JBIG2 compression is compatible with Adobe Acrobat Version 5 and greater.*

Font Embedding Options

Fonts used in the original document may optionally be embedded in the PDF File. PDF files with fonts embedded allow the PDF to be displayed with the same fonts as the original document, even on computers that do not have those fonts installed. If fonts are not embedded, then the document font must be installed on the computer, otherwise the fonts in the PDF will be substituted with the closest font to the original which is resident on the computer.

Figure 49 - Font Embedding Options Screen



You can control the fonts that are embedded by pressing the ellipsis button in the **Enable Font Embedding** frame and selecting the desired embedding options (See **Figure 47 – Convert to PDF Settings Screen**). Refer to **Table 29 - Font Embedding Options** for a detailed description of each font embedding option.

Table 29 - Font Embedding Options

Embedding Options	Description
Embed Partial Fonts	Embeds only the characters used in the document for the particular font. Embed Partial Fonts is automatically enabled when Multi-Language support is enabled, and disabled if Multi-Language support is disabled.
Embed Standard Fonts	Embed the fonts provided with Acrobat® reader. Arial Black, Arial Narrow, Book Antique, Bookman Old Style, Century Gothic, Century Schoolbook, Letter Gothic MT, Times New Roman You must use this selection to embed special characters and Unicode characters.
Embed Licensed Fonts	Embeds fonts that require a license from the manufacturer. Use this selection only if you have a valid license for all licensed fonts.
Multi-Language Support	Embeds double-byte (Unicode) characters such as Asian, Eastern European, etc... Please note that Multi-Language is only supported for Windows 2000 and XP. If Multi-Language Support is selected, all fonts are partially embedded in the PDF.

Tip: *Fonts must reside on the computer where the PDF is created in order for these to be embedded in the PDF.*

Tip: *Font embedding increases the size of the PDF.*

Tip: *Confirm that the PDF created displays the fonts as required after setting the Font Embedding Options.*

Tip: *Converting documents that contain double-byte characters require more system resources.*

Tip: *Some printers and RIP engines require that all Characters for each font be embedded in PDF files.*

Tip: *Some Font Styles (e.g. Impact Italic) are simulated by applications (e.g. MS Word). These fonts will not display the correct Style in the PDF unless **Font Embedding** is disabled.*

Additional Notes on Multi-Language Support

Multi-Language Support enables the conversion of documents that contain double-byte (Unicode) characters such as Asian, Eastern European, ... Please note that Multi-Language is only supported for Windows 2000 and XP. Using this option increases the size of the PDF files. The fonts used in the document and the Languages must be installed on the computer. The Languages are installed using the Regional Options in the Control Panel for Windows 2000. You must have Administrator Rights in order to install Languages.

PDF Security Settings

Express allows users to add PDF Security to the PDF files created (See **Figure 50 - PDF Security Settings Screen - 40 Bit Encryption** and **Figure 51 - PDF Security Settings Screen - 128 Bit Encryption**). This allows you to restrict functions of PDF files by setting the desired security option (see **Table 30 - Security Options - 40 Bit Encryption** or **Table 31 - Security Options - 128 Bit Encryption**). When a PDF has security, any tools and menu items related to the security options are grayed out when they are not allowed. A PDF file can have an Open Document password and a Change Security Options password. If the file has both passwords, it can be opened with either password but the Change Security Options password must be used to change the Security Options settings. When the PDF is opened using the Open Document password, the security restrictions are active.

Tip: *If you set any Security Options in your PDF, you should specify different passwords for the Open Document and Change Security Options. If you don't, anyone who is able to open the PDF will also be able to remove any of the security options.*

Tip: *It is possible to add PDF Security without specifying an Open Document and Change Security Option password.*

Tip: *It is possible to remove PDF Security (without the security password) so that the PDF can be successfully processed by Express. Please contact support@adlibsoftware.com for more information about how to license this functionality. An agreement confirming ownership and/or authorization must be completed and signed before the feature can be purchased/licensed.*

40 Bit Encryption - Acrobat 3, 4

Figure 50 - PDF Security Settings Screen - 40 Bit Encryption

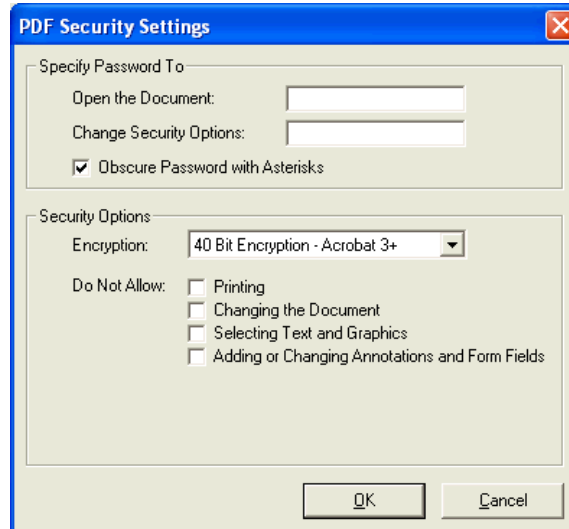


Table 30 - Security Options - 40 Bit Encryption

Security Options	Description
Printing	Prohibits the printing of the PDF file.
Changing the Document	Prohibits changes to the PDF file.
Selecting Text and Graphics	Prohibits the selection of elements in the PDF file.
Adding or Changing Annotation and Form Fields	Prohibits adding or changing these areas, but allow fill-in of Form fields.

128 Bit Encryption - Acrobat 5 and greater

Figure 51 - PDF Security Settings Screen - 128 Bit Encryption

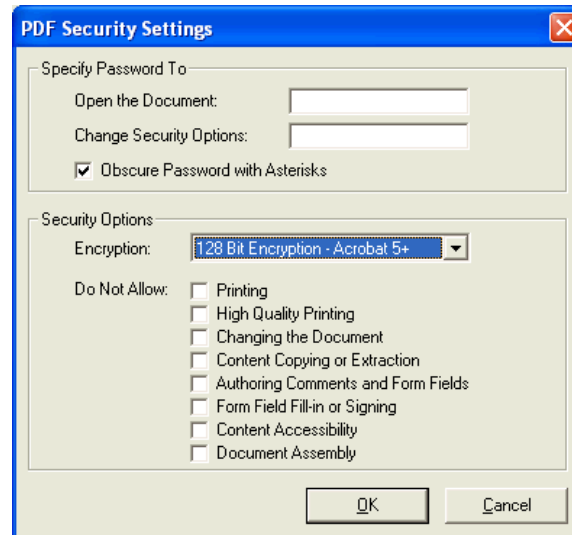


Table 31 - Security Options - 128 Bit Encryption

Security Options	Description
Printing	Prohibits the printing of the PDF file.
High Quality Printing	Prohibits printing the PDF file at a high resolution. Printing is still allowed but may be slower because each page will be printed as a bitmapped image.
Changing the Document	Prohibits changes to the PDF file.
Content Copying or Extraction	Prohibits the selection of elements in the PDF file.
Authoring Comments and Form Fields	Prohibits adding comments or fields, but does allow fill-in of Form fields.
Form Field Fill-in or Signing	Prohibits fill-in of Form fields or signing the PDF.
Content Accessibility	Prohibits Content Access for the Visually Impaired.
Document Assembly	Prohibits adding, deleting or rotating pages as well as changing bookmarks and thumbnails.

Note: Document Assembly requires Changing the Document to be selected.

Note: Form Field Fill-in or Signing requires Authoring Comments and Form Fields to be selected.

PDF Open Settings

Express allows you to define how the Adobe Acrobat work area appears when opening a PDF document (See **Figure 52 - PDF Open Settings Screen**).

Figure 52 - PDF Open Settings Screen

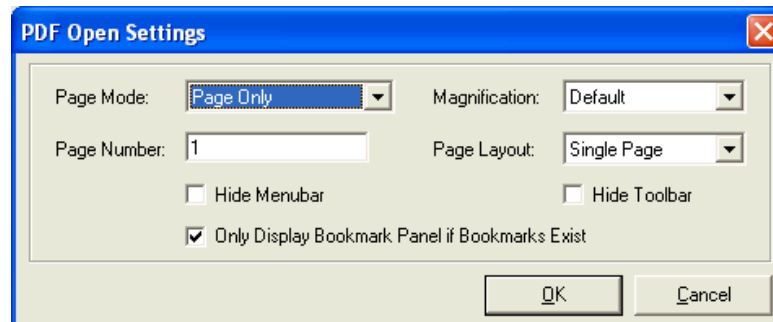


Table 32 - PDF Open Settings – Page Mode Options

Page Mode	Description
Page Only	Displays the document pane without Bookmarks and Thumbnails.
Bookmarks and Page	Displays the document pane as well as the navigation pane with Bookmarks. The Bookmark pane is only displayed if there are bookmarks defined in the PDF document.
Thumbnails and Page	Displays the document pane as well as the navigation pane with Thumbnails.

Magnification

You can set the magnification for the page by selecting one of the following magnification options in the table below.

Table 33 - PDF Open Settings - Magnification Options

Magnification	Description
Default	Uses the default Zoom magnification set in the user's General preferences.
Zoom Numbers	Represent a percentage of the actual page size.
Fit in Window	Sizes the page to fit entirely in the window.
Fit Width	Sizes the page width to fit the window.
Fit Visible	Sizes the page content (text and graphics) width to fit the window. The Vertical Margins are not displayed.

Page Number

You may set the page number to display when the PDF is open.

Page Layout

The page layout of the PDF document may be set by selecting one of the following page layout options in the table below.

Table 34 - PDF Open Settings - Page Layout Options

Page Layout	Description
Default	Uses the default Page Layout set in the user's General preferences.
Single Page	Displays one page in the document pane at a time.
Continuous	Arranges the pages in a continuous vertical column.
Continuous Facing	Arranges the pages in two columns side by side.

Hide Menubar

Selecting "Hide Menubar" option will hide the Acrobat or Acrobat Reader Menubar when the PDF is open.

Hide Toolbar

Selecting "Hide Toolbar" option will hide the Acrobat or Acrobat Reader Toolbar when the PDF is open.

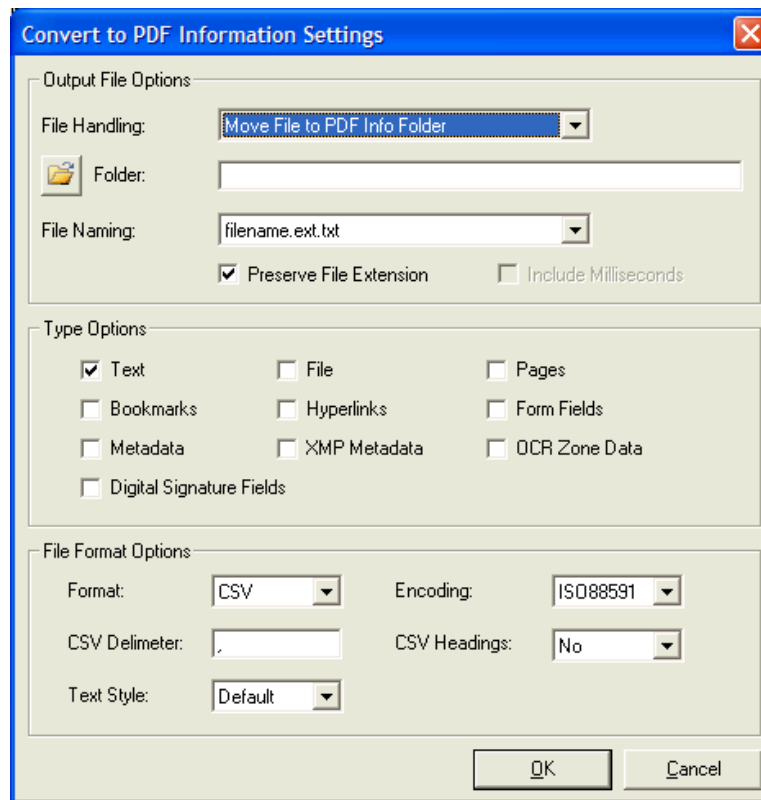
Only Display Bookmark Panel if Bookmarks Exist

Selecting the “Only Display Bookmark Panel if Bookmarks Exist” option will hide the Bookmark panel in Acrobat or Acrobat Reader if there are no bookmarks to display when the PDF is open.

Convert to PDF Information Settings

Express may be used to extract the certain PDF Information from a PDF into a text or XML file. Selecting the **Convert to PDF Information** (See **Figure 46 - Outputs Tab Screen**) check box and pressing the ellipsis (...) button provides access to the **PDF Information Settings** screen (See **Figure 53 - Convert to PDF Information Settings Screen**).

Figure 53 - Convert to PDF Information Settings Screen



The dialog box is titled "Convert to PDF Information Settings" and contains three main sections:

- Output File Options:**
 - File Handling:** A dropdown menu set to "Move File to PDF Info Folder".
 - Folder:** A text input field with a folder icon to its left.
 - File Naming:** A dropdown menu set to "filename.ext.txt".
 - ☒ **Preserve File Extension** and ☐ **Include Milliseconds** (disabled).
- Type Options:**
 - ☒ **Text**, ☐ **File**, ☐ **Pages**
 - ☐ **Bookmarks**, ☐ **Hyperlinks**, ☐ **Form Fields**
 - ☐ **Metadata**, ☐ **XMP Metadata**, ☐ **OCR Zone Data**
 - ☐ **Digital Signature Fields**
- File Format Options:**
 - Format:** A dropdown menu set to "CSV".
 - Encoding:** A dropdown menu set to "ISO88591".
 - CSV Delimiter:** A text input field containing a comma (,).
 - CSV Headings:** A dropdown menu set to "No".
 - Text Style:** A dropdown menu set to "Default".

At the bottom right are **OK** and **Cancel** buttons.

Output File Options

The following sections describe the file handling options available for PDF Information files created by Express.

File Handling

The **File Handling** drop down allows the user to select how the PDF Information files created are handled. Refer to **Table 35 – File Handling Options** for a description of these selections.

Table 35 – File Handling Options

File Handling	Description
Move File to Output Folder	The PDF Information files are moved to the Output folder after they are created.
Move File to PDF Info Folder	The PDF Information files are moved to the PDF Information folder after they are created. The PDF Information folder allows the separation of the Input folder files and the PDF Information files. The user must define the PDF Information folder.

File Naming

The **File Naming** option provides four naming conventions for the PDF Information files. The date and time can be added to the filename. Refer to **Table 36 – File Naming Options** for a description of each of these selections.

Table 36 – File Naming Options

File Naming Convention	Description
filename.tif	<p>The PDF Information file name is the same as the native file but has an .xml or .txt extension.</p> <p>My Doc.doc -> My Doc.xml My Doc.doc -> My Doc.txt</p>
filename.YYYYMMDDThmmss.tif	<p>The PDF Information file name is the same as the native file but has the ISO date and time format added to the filename.</p> <p>My Doc.doc -> My Doc.20011124T234956.xml</p> <p>Please note that a T is used to indicate the beginning of the time. Adding this date format to the PDF Information file allows the files to be sorted chronologically.</p> <p>Please refer to Table 3 - Date and Time Code Descriptions</p>

filename.MMDDYYYYThhmmss.tif	<p>The PDF Information file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.doc -> My Doc.11242001T234956.xml</p>
filename.DDMMYYYYThhmmss.tif	<p>The PDF Information file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.doc -> My Doc.24112001T234956.xml</p>

Preserve File Extension

Express allows users to preserve the native file extension as part of the PDF Information filename (e.g. My Doc.doc -> My Doc.doc.xml). This is an important feature when files with the same name but different extension are used (e.g. My Doc.doc and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the PDF Information file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add Milliseconds to the PDF Information file name when the PDF Information File Naming includes Date and Time. This is a useful way to guarantee unique PDF Information file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.tif

Type Options

Express allows the extraction of many different types of PDF Information. You can select multiple types at the same time.

Table 37 – PDF Information Type Options

PDF Information Type	Description
Bookmarks	Extracts all the PDF bookmarks to the file format specified.
File	Extracts the file size, date created, date modified, page count and PDF version to the file format specified.
Form Fields	Extracts all the form fields information to the file format specified.
Hyperlinks	Extracts all the hyperlinks to the file format specified.
Metadata	Extracts the PDF metadata to the file format specified.
XMP Metadata	Extracts the PDF XMP metadata to the file format specified.
Pages	Extracts the page number, width, height, and page margins to the file format specified.
Text	Extracts the token information (text) to the file format specified.
OCR Zone Data	Extracts the OCR zone information to the file format specified. (See OCR Processing Information (OPI) for more information on OCRZoneData)
Digital Signature Fields	Extracts all the Digital Signature Field information to the file format specified.

File Format Options

Format

Express supports the output of PDF Information to comma-separated text or XML format (See **Figure 53 - Convert to PDF Information Settings Screen**). You cannot output to both formats at the same time.

Encoding

Express supports three different encoding methods. You can select: ISO88591, UTF-8 or UTF-16.

CSV Delimiter

When the output format is comma-separated text, this option specifies the character that is used to separate the PDF Information.

CSV Headings

When the output format is comma-separated text, this option specifies whether or not a descriptive heading is placed at the top of the PDF Information file.

Text Style

This option allows the user to specify the extraction method type to use when extracting PDF Information of type: "Text".

Table 38 – Text Style Options

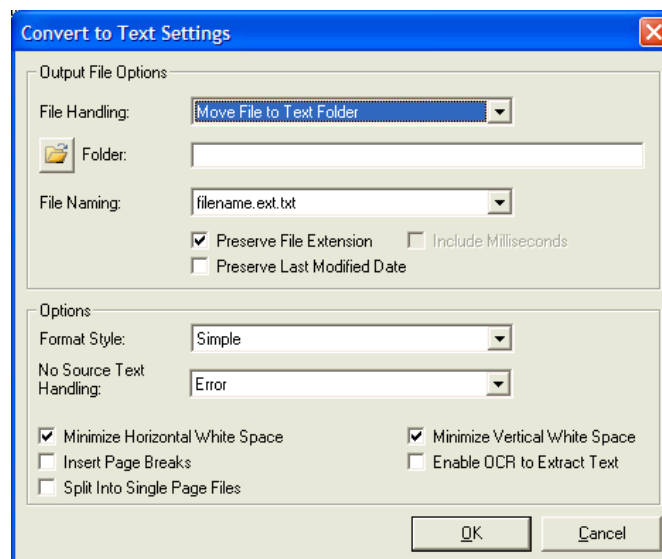
Text Style	Description
Adjacent	Merges Text tokens that are adjacent into a single token.
SingleSpace	Merges Text tokens that are separated by one space or less into a single token.
Line	Merges Text tokens that are on the same line using the token Y coordinate.
Word	Text tokens that are separated by at least one space become a single token.

Convert to Text Settings

Express will create a Text file for every file processed when the **Convert to Text** check box is selected (See **Figure 46 - Outputs Tab Screen**). Selecting this check box and pressing the ellipsis (...) button provides access to the **Convert to Text Settings** screen (See **Figure 54 - Convert to Text Settings Screen**). Text files are useful for delivering documents to wireless devices, indexing by Search Engines and analyzing document content.

Tip: *The Adlib ExpressRecognition Server is required to convert image files to text documents.*

Figure 54 - Convert to Text Settings Screen



Output File Options

The following sections describe the output file options available for Text files created by Express.

File Handling

The **File Handling** drop down allows the user to select how created Text files are handled. Refer to **Table 39 - File Handling Options** for a description of each of these selections.

Table 39 - File Handling Options

File Handling	Description
Move File to Output Folder	The Text files are moved to the Output folder after they are created.
Move File to Text Folder	The Text files are moved to the Text folder after they are created. The Text folder allows the separation of the Input folder files and the Text files. The user must define the Text folder.

File Naming

The **File Naming** provides four naming conventions for the Text files. The date and time can be added to the Text filename. Refer to **Table 40 - File Naming Options** for a description of each of these selections.

Table 40 - File Naming Options

Text File Naming	Description
filename.txt	The Text file name is the same as the native file but has a TXT extension. My Doc.doc -> My Doc.txt
filename.YYYYMMDDThhmmss.txt	The Text file name is the same as the native file but has the ISO date and time format added to the filename. My Doc.doc -> My Doc.20011124T234956.txt Please note that a T is used to indicate the beginning of the time. Adding this date format to the Text file allows the files to be sorted chronologically. Please see Table 3 - Date and Time Code Descriptions .
filename.MMDDYYYYThhmmss.txt	The Text file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year. My Doc.doc -> My Doc.11242001T234956.txt

filename.DDMMYYYYThhmmss.txt	<p>The Text file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.doc -> My Doc.24112001T234956.txt</p>
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Preserve File Extension

Express allows users to preserve the native file extension as part of the Text filename (e.g. My Doc.doc -> My Doc.doc.txt). This is an important feature when files with the same name but different extension are used (e.g. My Doc.doc and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the Text file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add Milliseconds to the Text file name when the Text File Naming includes Date and Time. This is a useful way to guarantee unique Text file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.txt

Preserve Last Modified Date

Express will set the Last Modified Date of the Text file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Rendering Options

The following sections describe the Rendering Options available for Text files created by Express.

Format Style

The **Format Style** list box allows the user to select how the Text files created are formatted. Refer to **Table 41 - Text Format Style Options** for a description of these selections.

Table 41 - Text Format Style Options

Format Style	Description
Simple	Condenses the text by removing spaces.
Spatial	Attempt to preserve the document layout by adding spaces between characters.

No Source Text Handling

The **No Source Text Handling** list box allows the user to select what Express does when it cannot find any text in a document.

Table 42 – No Source Text Handling Options

Format Style	Description
Error	Express will error out the source document when no text is found and log a warning message.
Create Empty File	Express will create an empty text file in the destination folder when no text is found.

Minimize Horizontal White Space

This selection excludes leading and trailing space characters used to produce the left and right margins.

Minimize Vertical White Space

This selection excludes Line Feeds/Carriage Return used to produce the top and bottom margins.

Insert Page Breaks

The **Insert Page Breaks** check box creates a page break in the text output for each page present in the PDF.

Enable OCR to Extract Text

Express will OCR the document if no text is found when the text extraction is performed. This feature requires Adlib ExpressRecognition Server to be registered.

Tip: *The Recognition Engine is required to convert image files, such as Tiff, BMP, etc... and non-searchable PDF files, which were originally created from image files, to text files.*

Split Into Single Page Files

The **Split Into Single Page Files** check box creates single page text files when processing multi-paged documents (e.g. My Doc.doc). All single page text files are created in subfolders of the defined (Output or Text) folder (e.g. Output\My Doc) and are named the same as the processed document with the page number added as a suffix (e.g. My Doc_1.txt, My Doc_2.txt, etc ...).

Extended Outputs

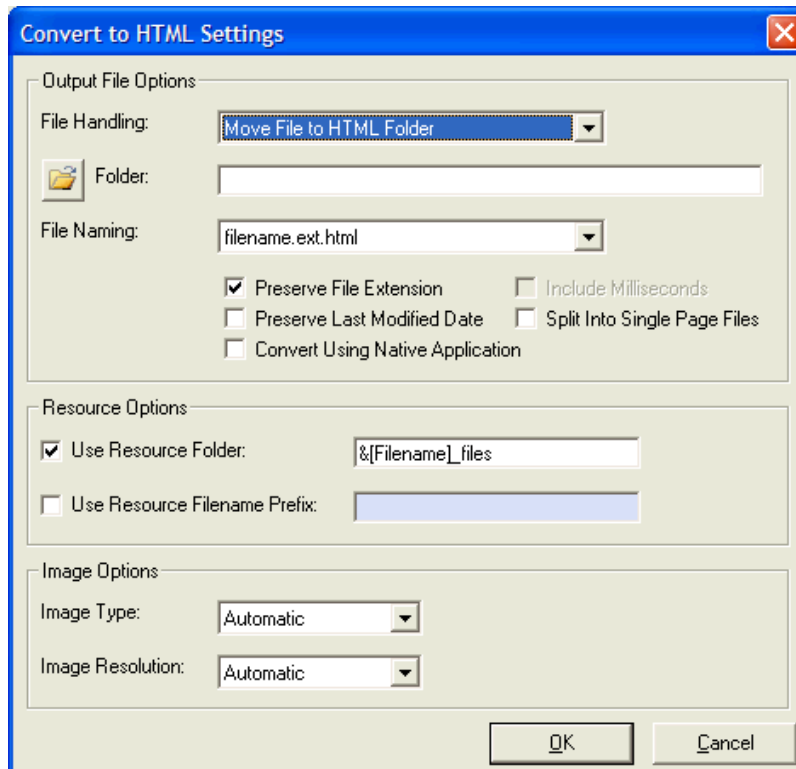
Extended Outputs allows users to automatically convert PDF documents into other reusable type documents such as DOC, RTF, HTML, JPEG, PNG, TIFF and XPS. This feature supports the conversion of multiple formats to multiple formats when combined with Adlib *ExpressConversion* Server.

Convert to HTML Settings

(Requires Extended Outputs)

Express will create HTML files for every file processed when the **Convert to HTML** check box is selected. Selecting this check box and pressing the ellipsis (...) button (See **Figure 46 - Outputs Tab Screen**) provides access to the Convert to HTML Settings screen (See **Figure 55 - Convert to HTML Settings Screen**).

Figure 55 – Convert to HTML Settings Screen



The dialog box is titled "Convert to HTML Settings" and contains three main sections: Output File Options, Resource Options, and Image Options.

- Output File Options:**
 - File Handling: Move File to HTML Folder (dropdown)
 - Folder: (empty text field)
 - File Naming: filename.ext.html (dropdown)
 - ☒ Preserve File Extension
 - ☐ Include Milliseconds
 - ☐ Preserve Last Modified Date
 - ☐ Split Into Single Page Files
 - ☐ Convert Using Native Application
- Resource Options:**
 - ☒ Use Resource Folder: &[Filename]_files (text field)
 - ☐ Use Resource Filename Prefix: (empty text field)
- Image Options:**
 - Image Type: Automatic (dropdown)
 - Image Resolution: Automatic (dropdown)

Buttons: OK, Cancel

Output File Options

The following sections describe the output file options available for HTML files created by Express.

File Handling

The **File Handling** drop down allows the user to select how the HTML files created are handled. Refer to **Table 43 - File Handling Options** for a description of these selections.

Table 43 - File Handling Options

File Handling	Description
Move File to Output Folder	The HTML files are moved to the Output folder after they are created.
Move File to HTML Folder	The HTML files are moved to the HTML folder after they are created. The HTML folder allows the separation of the Input folder files and the HTML files. The user must define the HTML folder.

File Naming

The **File Naming** provides four naming conventions for the HTML files. The date and time can be added to the HTML filename. Refer to **Table 44 - File Naming Options** for a description of each of these selections.

Table 44 - File Naming Options

Naming Convention	Description
filename.html	The HTML file name is the same as the native file but has an html extension. My Doc.doc -> My Doc.html
filename.YYYYMMDDThhmmss.html	The HTML file name is the same as the native file but has the ISO date and time format added to the filename. My Doc.doc -> My Doc.20011124T234956.html Please note that a T is used to indicate the beginning of the time. Adding this date format to the HTML file allows the files to be sorted chronologically. Please refer to Table 3 - Date and Time Code Descriptions .

filename.MMDDYYYYThhmmss.html	<p>The HTML file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.doc -> My Doc.11242001T234956.html</p>
filename.DDMMYYYYThhmmss.html	<p>The HTML file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.doc -> My Doc.24112001T234956.html</p>

Preserve File Extension

Express allows users to preserve the native file extension as part of the HTML filename (e.g. My Doc.doc -> My Doc.doc.html). This is an important feature when files with the same name but different extension are used (e.g. My Doc.doc and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the HTML file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add Milliseconds to the HTML file name when the File Naming includes Date and Time. This is a useful way to guarantee unique HTML file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.html

Preserve Last Modified Date

Express will set the Last Modified Date of the HTML file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Split Into Single Page Files

The **Split Into Single Page Files** check box creates single page HTML files when processing multi-paged documents (e.g. My Doc.doc). All single page HTML files are created in subfolders of the defined (Output or HTML) folder (e.g. Output\My Doc) and are named the same as the processed document with the page number added as a suffix (e.g. My Doc_1.html, My Doc_2.html,...).

Convert Using Native Application

This option allows the User to produce the HTML Output using Native Application support (as opposed to the PDF Print Driver). Currently this option supports creation of HTML output using MS Word, MS Excel and MS PowerPoint.

Resource Options

Resource Folder

This option allows the User to specify the name of the folder that will contain the HTML resource files (e.g. images). This folder will be located in the Output folder.

Note: The default folder name is [HTMLfilename]_files. If the folder name specified is a null string, then the resource files will be placed in the same location as the HTML file.

Resource Filename Prefix

This option allows the User to specify a prefix to add to all of the files that are located in the resource folder.

Image Options

Image Type

This option allows the User to specify what format embedded image files should be saved as. The User may select Automatic, JPEG or PNG formats. The Automatic selection will save the embedded image file in the most appropriate format.

Note: This option does not apply when the Convert Using Native Application option has been selected.

Image Resolution

This option allows the User to specify the maximum image resolution for the embedded images. The **Automatic** selection will save the embedded images in their original resolution.

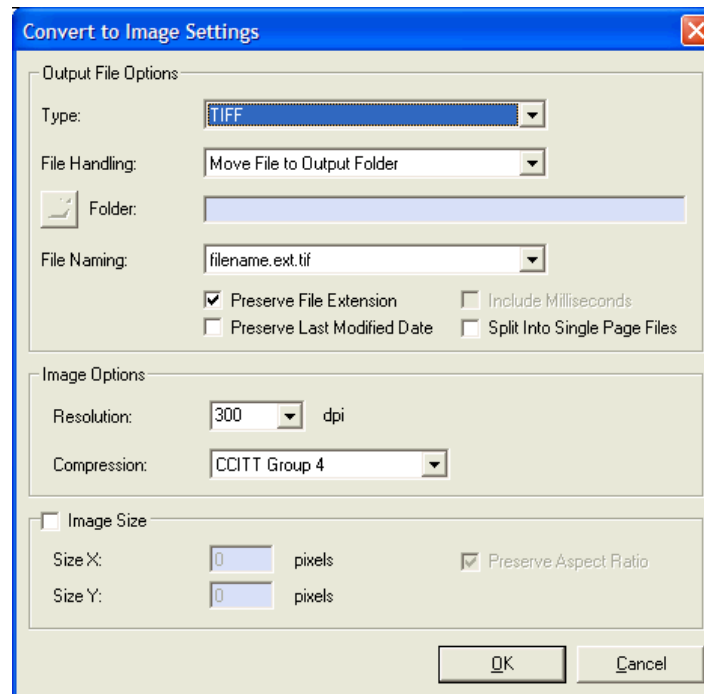
Note: This option does not apply when the **Convert Using Native Application** option has been selected.

Convert to Image Settings

(Requires Extended Outputs)

Express will create Image files for every file processed when the **Convert to Image** check box is selected (See **Figure 46 - Outputs Tab Screen**). Selecting this check box and pressing the ellipsis (...) button provides access to the Convert to Image Settings screen (see **Figure 56 - Convert to Image Settings Screen**). Image files are useful in deterring document modification since they are not easily changed. Images can also be scaled to a specified size. This feature is useful for creating thumbnail images of documents.

Figure 56 - Convert to Image Settings Screen



Output File Options

The following sections describe in detail the output file options available for Image files created by Express.

Type

The TIFF, JPEG and PNG image **Types** are supported.

File Handling

The **Image File Handling** list box allows the user to select how the Image files created are handled. Refer to **Table 45 - File Handling Options** for a description of these selections.

Table 45 - File Handling Options

File Handling	Description
Move File to Output Folder	The Image files are moved to the Output folder after they are created.
Move File to Image Folder	The Image files are moved to the Image folder after they are created. The Image folder allows the separation of the Input folder files and the Image files. The user must define the Image folder.

File Naming

The **File Naming** provides four naming conventions for the Image files. The date and time can be added to the Image filename. Refer to **Table 46 - File Naming Options** for a description of each of these selections.

Table 46 - File Naming Options

Naming Convention	Description
filename.tif	The Image file name is the same as the native file but has a TIF extension. My Doc.doc -> My Doc.tif
filename.YYYYMMDDThhmmss.tif	The Image file name is the same as the native file but has the ISO date and time format added to the filename. My Doc.doc -> My Doc.20011124T234956.tif Please note that a T is used to indicate the beginning of the time. Adding this date format to the Image file allows the files to be sorted chronologically. Please refer to Table 3 - Date and Time Code Descriptions .
filename.MMDDYYYYThhmmss.tif	The Image file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year. My Doc.doc -> My Doc.11242001T234956.tif
filename.DDMMYYYYThhmmss.tif	The Image file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year. My Doc.doc -> My Doc.24112001T234956.tif

Preserve File Extension

Express allows users to preserve the native file extension as part of the Image filename (e.g. My Doc.doc -> My Doc.doc.tif). This is an important feature when files with the same name but different extension are used (e.g. My Doc.doc and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the Image file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add Milliseconds to the Image file name when the Image File Naming includes Date and Time. This is a useful way to guarantee unique Image file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.tif

Preserve Last Modified Date

Express will set the Last Modified Date of the Image file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Split Into Single Page Files

The **Split Into Single Page Files** check box creates single page Image files when processing multi-paged documents (e.g. My Doc.doc). All single page Image files are created in subfolders of the defined (Output or Image) folder (e.g. Output\My Doc) and are named the same as the processed document with the page number added as a suffix (e.g. My Doc_1.tif, My Doc_2.tif, etc ...).

Note: The **Split Into Single Page Files** option only applies to TIFF type Image files (as they are multi-page Image files). The check box will be disabled when other Image types are selected (e.g. JPG or PNG).

Image Options

Compression

The **Compression** drop down allows the user to select the compression method used. These describe how the image files created are encoded. Refer to **Table 47 - Compression Options** for a description of these selections.

Table 47 - Compression Options

File Format	Compression	Description
TIFF	CCITT Group 3	Uses CCITT Group 3 encoding for TIFF Output
TIFF	CCITT Group 4	Uses CCITT Group 4 encoding for TIFF Output
TIFF	Pack Bits Color (LZW)	Uses Pack Bits Color (LZW) encoding for TIFF Output
TIFF	Pack Bits True Color	Uses Pack Bits True Color encoding for TIFF Output
TIFF	Uncompressed True Color	Uses Uncompressed True Color encoding for TIFF Output
JPEG	Color	Uses Color encoding for JPEG Output
JPEG	Grayscale	Uses Grayscale encoding for JPEG Output
PNG	Color	Uses Color encoding for PNG Output
PNG	Grayscale	Uses Grayscale encoding for PNG Output

* Lossless is a term describing a data compression algorithm that retains all the information in the data, allowing it to be recovered perfectly by decompression.

Resolution

The **Resolution** box allows the selection of the image resolution from 75 to 450 Dots per Inch (dpi). The resolution can also be set by entering the desired resolution (e.g. 98) between 75 and 450. Increasing the resolution improves the quality of the image document but also increases its file size. The default resolution is set to 300 dpi.

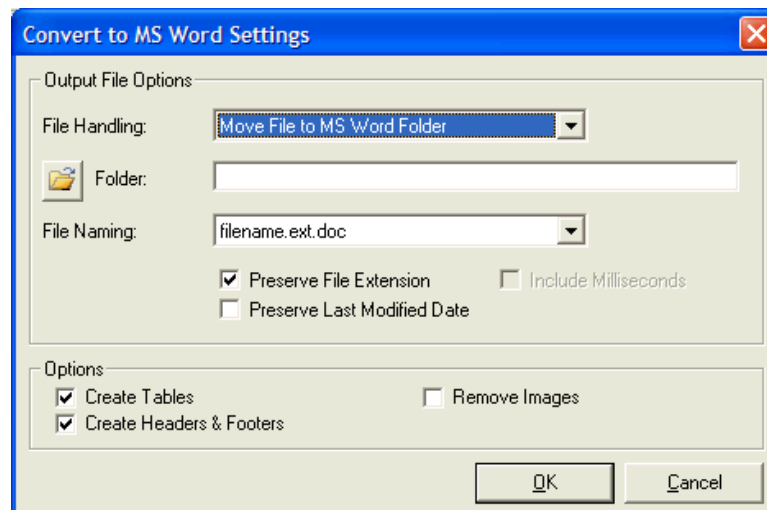
Image Size Options

The Image Size check box enables output Images to be scaled to a specific size. The **Size X**, and **Size Y** fields should be specified in pixels. The **Preserve Aspect Ratio** check box will ensure that the Height to Width ratio of the content is maintained when the image is scaled.

Convert to MS Word Settings

Express will create MS Word documents for every file processed when the **Convert to MS Word** check box is selected (See **Figure 46 - Outputs Tab Screen**). Selecting this check box and pressing the ... button provides access to the MS Word Settings screen (see **Figure 57 - Convert to MS Word Settings Screen**).

Figure 57 - Convert to MS Word Settings Screen



Output File Options

The following sections describe in detail the output file options available for MS Word files created by Express.

File Handling

The **File Handling** drop down allows the user to select how created MS Word files are handled. Refer to **Table 48 - File Handling Options** for a description of these selections.

Table 48 - File Handling Options

File Handling	Description
Move File to Output Folder	The MS Word files are moved to the Output folder after they are created.
Move File to MS Word Folder	The MS Word files are moved to the MS Word folder after they are created. The MS Word folder allows the separation of the Input folder files and the MS Word files. The user must define the MS Word folder.

File Naming

The **File Naming** option provides four naming conventions for the MS Word files. The date and time can be added to the MS Word filename. Refer to **Table 49 – File Naming Options** for a description of each of these selections.

Table 49 – File Naming Options

File Naming Convention	Description
filename.doc	<p>The MS Word file name is the same as the native file but has a doc extension.</p> <p>My Doc.tif → My Doc.doc</p>
filename.YYYYMMDDThhmmss.doc	<p>The MS Word file name is the same as the native file but has the ISO date and time format added to the filename.</p> <p>My Doc.tif → My Doc.20011124T234956.doc</p> <p>Please note that a T is used to indicate the beginning of the time. Adding this date format to the MS Word file allows the files to be sorted chronologically.</p> <p>Please refer to Table 3 - Date and Time Code Descriptions.</p>
filename.MMDDYYYYThhmmss.doc	<p>The MS Word file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.tif → My Doc.11242001T234956.doc</p>
filename.DDMMYYYYThhmmss.doc	<p>The MS Word file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.tif → My Doc.24112001T234956.doc</p>

Preserve File Extension

Express allows users to preserve the native file extension as part of the MS Word filename (e.g. My Doc.tif → My Doc.tif.doc). This is an important feature when files with the same name but different extension are used (e.g. My Doc.ppt and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the MS Word file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add milliseconds to the MS Word file name when the MS Word File Naming option includes Date and Time. This is a useful way to guarantee unique MS Word file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.doc

Preserve Last Modified Date

Express will set the Last Modified Date of the MS Word file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Reconstruction Options

The following options allow the user to specify how the resulting MS Word document is reconstructed from a PDF file.

Create Headers & Footers

This option allows the detection of headers and footers that are most appropriate for the processed document. Enabling this feature will detect and reconstruct headers and/or footers in the processed document as header and/or footer objects in the resulting document. Disabling this feature will place the candidate header and/or footer in the body of the document.

Create Tables

This option allows the detection of tables that are most appropriate for the processed document. Enabling this option recognizes and converts tables within the processed document to table objects in the resulting document during conversion. Disabling this option recognizes but does not convert tables within the processed document to table objects in the resulting document.

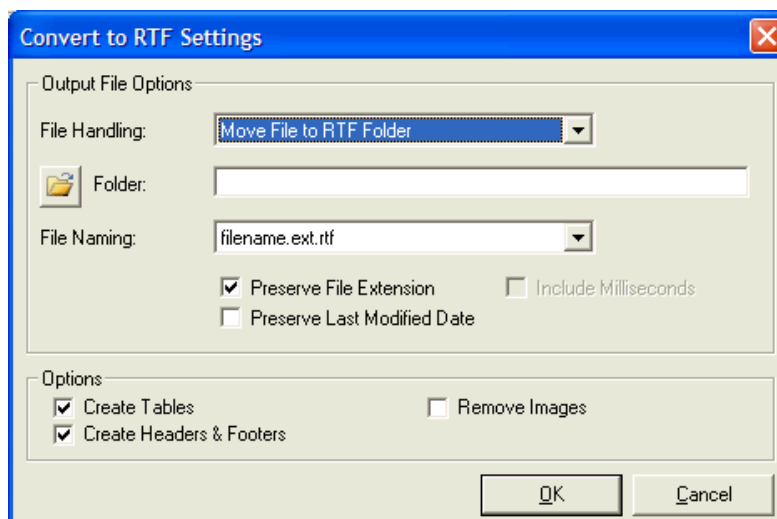
Remove Images

Express will always attempt to preserve the original document layout including all images that are inline with the document text. This option allows you to specify the inclusion or exclusion of images that are inline with the document text.

Convert to RTF Format

Express will create RTF documents for every file processed when the **Convert to RTF** check box is selected (See **Figure 46 - Outputs Tab Screen**). Selecting this check box and pressing the ellipsis (...) button provides access to the RTF screen (See **Figure 58 - Convert to RTF Settings Screen**).

Figure 58 - Convert to RTF Settings Screen



The dialog box is titled "Convert to RTF Settings". It contains two main sections: "Output File Options" and "Options".

Output File Options:

- File Handling:** A dropdown menu with "Move File to RTF Folder" selected.
- Folder:** A text input field with a folder icon to its left.
- File Naming:** A dropdown menu with "filename.ext.rtf" selected.
- Checkboxes:**
 - ☒ Preserve File Extension
 - ☐ Include Milliseconds
 - ☐ Preserve Last Modified Date

Options:

- ☒ Create Tables
- ☒ Create Headers & Footers
- ☐ Remove Images

At the bottom right are "OK" and "Cancel" buttons.

Output File Options

The following sections describe in detail the output file options available for RTF files created by Express.

File Handling

The **File Handling** drop down allows the user to select how created RTF files are handled. Refer to **Table 50 – File Handling Options** for a description of these selections.

Table 50 – File Handling Options

File Handling	Description
Move File to Output Folder	The RTF files are moved to the Output folder after they are created.
Move File to RTF Folder	The RTF files are moved to the RTF folder after they are created. The RTF folder allows the separation of the Input folder files and the RTF files. The user must define the RTF folder.

File Naming

The **File Naming** option provides four naming conventions for the RTF files. The date and time can be added to the RTF filename. Refer to **Table 51 – File Naming Options** for a description of each of these selections.

Table 51 – File Naming Options

File Naming Convention	Description
filename.rtf	<p>The RTF file name is the same as the native file but has an rtf extension.</p> <p>My Doc.tif → My Doc.rtf</p>
filename.YYYYMMDDThhmmss.rtf	<p>The RTF file name is the same as the native file but has the ISO date and time format added to the filename.</p> <p>My Doc.tif → My Doc.20011124T234956.rtf</p> <p>Please note that a T is used to indicate the beginning of the time. Adding this date format to the RTF file allows the files to be sorted chronologically.</p> <p>Please refer to Table 3 - Date and Time Code Descriptions.</p>
filename.MMDDYYYYThhmmss.rtf	<p>The RTF file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year.</p> <p>My Doc.tif → My Doc.11242001T234956.rtf</p>
filename.DDMMYYYYThhmmss.rtf	<p>The RTF file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year.</p> <p>My Doc.tif → My Doc.24112001T234956.rtf</p>

Preserve File Extension

Express allows users to preserve the native file extension as part of the RTF filename (e.g. My Doc.tif → My Doc.tif.rtf). This is an important feature when files with the same name but different extension are used (e.g. My Doc.ppt and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the RTF file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add milliseconds to the RTF file name when the RTF File Naming option includes Date and Time. This is a useful way to guarantee unique RTF file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.rtf

Preserve Last Modified Date

Express will set the Last Modified Date of the RTF file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Reconstruction Options

The following options allow the user to specify how the resulting RTF document is reconstructed from a PDF file.

Create Headers & Footers

This option allows the detection of headers and footers that are most appropriate for the processed document. Enabling this feature will detect and reconstruct headers and/or footers in the processed document as header and/or footer objects in the resulting document. Disabling this feature will place the candidate header and/or footer in the body of the document.

Create Tables

This option allows the detection of tables that are most appropriate for the processed document. Enabling this option recognizes and converts tables within the processed document to table objects in the resulting document during conversion. Disabling this option recognizes but does not convert tables within the processed document to table objects in the resulting document.

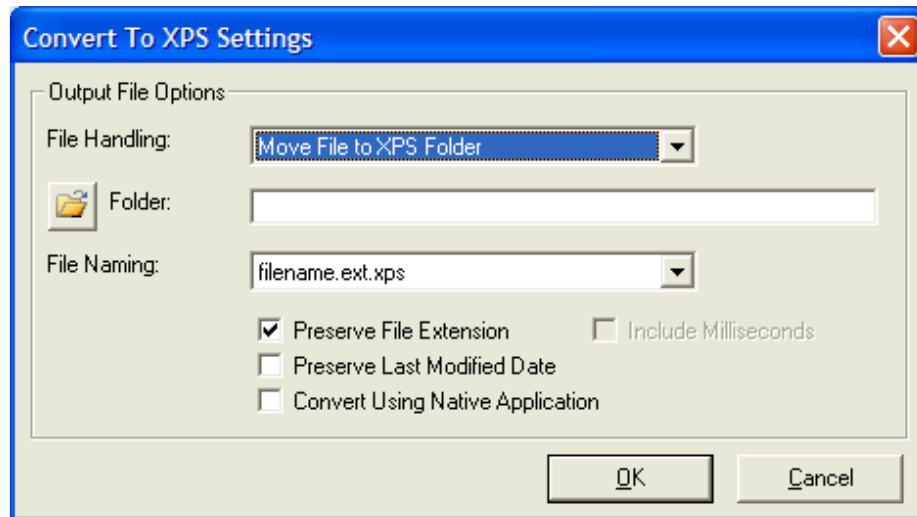
Remove Images

Express will always attempt to preserve the original document layout including all images that are inline with the document text. This option allows you to specify the inclusion or exclusion of images that are inline with the document text.

Convert to XPS Format

Express will create XPS documents for every file processed when the **Convert to XPS** check box is selected (See **Figure 46 - Outputs Tab Screen**). Selecting this check box and pressing the ellipsis (...) button provides access to the Convert to XPS Settings screen (See **Figure 59 - Convert to XPS Settings Screen**).

Figure 59 - Convert to XPS Settings Screen



Output File Options

The following sections describe in detail the output file options available for XPS files created by Express.

File Handling

The **File Handling** drop down allows the user to select how created XPS files are handled. Refer to **Table 52 - File Handling Options** for a description of these selections.

Table 52 - File Handling Options

File Handling	Description
Move File to Output Folder	The XPS files are moved to the Output folder after they are created.
Move File to RTF Folder	The XPS files are moved to the XPS folder after they are created. The XPS folder allows the separation of the Input folder files and the XPS files. The user must define the XPS folder.

File Naming

The **File Naming** option provides four naming conventions for the XPS files. The date and time can be added to the XPS filename. Refer to **Table 53 – File Naming Options** for a description of each of these selections.

Table 53 – File Naming Options

File Naming Convention	Description
filename.xps	The XPS file name is the same as the native file but has an xps extension. My Doc.tif → My Doc. xps
filename.YYYYMMDDThhmmss.xps	The XPS file name is the same as the native file but has the ISO date and time format added to the filename. My Doc.tif → My Doc.20011124T234956.xps Please note that a T is used to indicate the beginning of the time. Adding this date format to the XPS file allows the files to be sorted chronologically. Please refer to Table 3 - Date and Time Code Descriptions .
filename.MMDDYYYYThhmmss.xps	The XPS file name is the same as the native file but has the date and time format added to the filename. The date is formatted Month Day Year. My Doc.tif → My Doc.11242001T234956.xps
filename.DDMMYYYYThhmmss.xps	The XPS file name is the same as the native file but has the date and time format added to the filename. The date is formatted Day Month Year. My Doc.tif → My Doc.24112001T234956.xps

Preserve File Extension

Express allows users to preserve the native file extension as part of the XPS filename (e.g. My Doc.tif → My Doc.tif.xps). This is an important feature when files with the same name but different extension are used (e.g. My Doc.ppt and My Doc.xls) in the same Input folder. You must select **Preserve File Extension** in this case, otherwise the XPS file created last will overwrite the previous one.

Include Milliseconds

Express allows users to add milliseconds to the XPS file name when the XPS File Naming option includes Date and Time. This is a useful way to guarantee unique XPS file names. The milliseconds are added to the file name after the Date and Time information as follows:

filename.DDMMYYYYThhmmss.sss.xps

Preserve Last Modified Date

Express will set the Last Modified Date of the XPS file to be the same as the original document when this is selected. The Last Modified Date is the date displayed by Windows Explorer.

Convert Using Native Application

This option allows the user to produce the XPS Output using Native Application support. Currently this option supports creation of XPS output using MS Word, MS Excel and MS PowerPoint.

Note: Please refer to **Appendix K** – XPS Output for more information regarding XPS Output.

Appendix A – System Requirements

Hardware Requirements

Express Server		
Processor Type	Minimum:	Pentium 4 compatible processor
	Recommended:	Dual or Quad processors
Processor Speed	Minimum:	1 GHz
	Recommended:	2.8 GHz or higher
Memory (RAM)	Minimum:	512 MB
	Recommended:	2 GB or higher
	Note: <i>Additional RAM should be added if processing large files or running resource intensive applications in parallel with Express.</i>	
Hard Disk Space	Minimum:	250 MB available (Express application files only)

Software Requirements

Express Server	
Operating System	Microsoft Windows Server 2000 (with Service Pack 4) Microsoft Windows Server 2003 32-bit Microsoft Windows Server 2003 64-bit
.NET Framework	.NET Framework 2.0 (with latest Service Pack) (http://www.microsoft.com/downloads/details.aspx?familyid=0856EACB-4362-4B0D-8EDD-AAB15C5E04F5&displaylang=en)
Microsoft Internet Explorer	Microsoft Internet Explorer 6.0 (or greater)
Native Application rendering	For Native Application rendering support, the proper licenses must be obtained. These applications must be registered in compliance with the licensing guidelines specified for each product. Your organization is responsible to ensure that these Native Applications use complies with the rights and licenses obtained. Please see Appendix D – Native Applications Supported for a list of supported Native Applications.
Licensed Fonts	Proper licenses must be obtained in order for Express to embed licensed fonts within PDF output.

Appendix B – Express Server Service

Express Server can be set up to run as a Windows service from the Express installer or manually via command line. This service can be controlled from a local or remote computer. In addition, services can start automatically when the computer is started and can run without a user logged on.

Installing the Express Server Service

1. The following procedure must be followed to setup *Express Server* as a service.
2. Run *Express Server* from the Start Menu and configure all options (Folders, Input File Handling, Watermarking, PDF Security...) as desired
3. Confirm that the *Express Server* configuration works by processing some files.
4. Shutdown *Express Server* after confirming that it has successfully processed the files in the previous step.
5. Ensure that the Native Applications (e.g. MS Word, Excel, PowerPoint, etc.) that will be used are launched at least once under the account that will run the service.
6. Run *Express Server* with the following command line parameter: /INSTALL_SERVICE to create the *Express Server* service.
(ie. "C:\Program Files\Adlib\Express\adexps.exe" /INSTALL_SERVICE)
7. Open the Services menu from Administrative Tools and specify the account which will run the *Express Server* service. The Account must be a part of the Administrator or Power Users group. Please make sure that the all folders are accessible for the Log On Account selected. All folders must use local Drive letters or UNC paths. Mapped drives cannot be used since these are only available when the user who created the mapped drives is logged in.

Tip: *You cannot run the Express Server application when running Express Server as a service. You must stop the Express Server service prior to running the application.*

Tip: *The Express Server service is not supported under the Local System Account. The reason for this is that many of the Native Applications that may be used to process files cannot have the necessary initial configuration (ie. credentials dialog boxes acknowledged) performed under this type of account.*

Setting DCOM Permissions

Certain Windows settings may prevent the Express Server service from launching or properly processing documents (any file type). Please follow these steps to add Service User account to following Adlib components:

1. Install Adlib Express
2. Open the Windows Start menu, select Run and execute **dcomcnfg**
3. In the Component Services window, expand folder Console Root-> Component Service-> Computers -> My Computer -> DCOM Config -> Select AdConv.AdConvDS from the Applications list
4. Click Properties button or right click
5. Under the Security tab, select Customize under Launch Permissions
6. Click Edit for the custom launch permissions
7. Click Add and under Enter the Object names add users/groups that will be running Adlib Express as a service. Hit OK.
8. Select the Group/User name and check Allow Launch Permission. Click OK.

Follow above steps (6-8) while Customizing Access Permissions to allow Access Permission to the Group/User that will be running *Express Server* as a service.

NOTE: If running Windows Server 2000 and after following the above steps the service still does not work, then run **dcomcnfg**, select Default Security tab. Customize to Allow Launch, Access, and Configuration Permissions to the Group/User that will be running Express as a Service.

Enabling ASP .NET for Windows Server 2003

1. Go to Start->Administrative Tools->Internet Information Services (IIS) Manager
2. On the left hand pane, click on "Web Service Extensions"
3. On the right hand pane highlight ASP .NET
4. Click Allow

Uninstalling the Express Server Service

You may uninstall the *Express Server* service by running *Express Server* with the /UNINSTALL_SERVICE command line parameter

e.g. "C:\Program Files\Adlib\Express\adexps.exe" /UNINSTALL_SERVICE

Starting/Stopping the Express Server Service

You can manually Start and Stop the service by running **net start** "Express Server" or **net stop** "Express Server" respectively.

Alternatively, you may Start the service by running *Express Server* with the /START_SERVICE parameter

e.g. "C:\Program Files\Adlib\Express\adexps.exe" /START_SERVICE

Use the /STOP_SERVICE parameter to Stop the service

e.g. "C:\Program Files\Adlib\Express\adexps.exe" / STOP _SERVICE

Finally, *Express Server* service may be started or stopped directly from the Windows Services screen by selecting the service and then clicking the Start or Stop button.

Tip: *The service will not stop using the stop commands while documents are being converted. You may use the **kill adexps.exe** command if you must stop the service in this case.*

Administering Windows Services

1. To Open Services:
 - Click Start, point to Settings, and then click Control Panel. Double-click Administrative Tools, and the double-click Services
2. To configure how a service is started; right-click the service you want to configure, and then click Properties.
3. On the General tab, under Startup, select Automatic, Manual, or Disabled.
4. To specify the user account the service can use to log on, click the Log On tab, and then click **System Account** or **This Account**.

If you click **This Account**, click Choose User, specify a user account, and then type the password for the user account in Password and Confirm password.

Appendix C – Supported File Types

Express provides automated document conversion of over 300 file types to PDF, Text and Image. The conversion process requires Express to identify the file type being converted before rendering and outputting to the specified formats (PDF, Text and Image).

Express identifies each file type by reading the header information as well as the extension when the file header does not provide conclusive information. The file extension alone is used for file types that do not contain header information (e.g. Hewlett-Packard Graphic Language) and in cases where the file header is not recognized therefore allowing the processing of documents independent of file extensions. For example a Microsoft Word document with a .inv extension is processed as a Microsoft Word document.

Tip: *Most CAD file types are identified using the file extension.*

Once the file type has been identified, the document is rendered and outputted to the formats specified (PDF, Text and Image). Express has multiple file rendering modules to provide the flexibility needed for document conversion. File rendering is performed using one of the following three rendering modules described below:

Integrated File Type Support

The **Integrated File Type Support** (IFTS) rendering module is a core component of Express that is used to render Plain (ASCII) Text, Images, HPGL, MSG and PDF file types. This method ensures the highest rendering accuracy and efficiency for these document types.

The **IFTS** column of **Table 54 - Supported File Types** indicates the file types supported by the IFTS rendering method.

Native Application Support

The **Native Application Support** (NAS) rendering module is a component of Express that uses native applications (e.g. Microsoft® Excel) to render documents (e.g. xls). This method ensures the highest rendering accuracy and is recommended for complex documents such as word processing files that contain tables, graphics, etc. The native application (e.g. Microsoft® Excel) must be installed on the computer performing the conversion and be supported by Express. Refer to **Appendix D – Native Applications Supported** for a complete list of the supported Native Applications.

The **NAS** column of **Table 54 - Supported File Types** indicates the file types supported by the NAS rendering module. Please refer to the **Rendering Note** referenced by the superscript in the **NAS** column for additional details on specific file types.

Tip: *We recommend using Native Application Support to get high fidelity document rendering.*

Tip: *Some file types (e.g. Microsoft® Publisher) can only be rendered using Native Application Support. See **Table 54 - Supported File Types** for details.*

Tip: *We recommend using the AutoVue or Myriad product as the Native Application to render CAD documents.*

Extended File Type Support

The **Extended File Type Support** (EFTS) supports the rendering of hundreds of file types. This method ensures rendering efficiency without requiring additional software to be installed on the computer performing the conversion. The EFTS method renders simple documents accurately but may not render complex documents as well as the native application used to create the document. We recommend customers to process a number of documents using the both, EFTS and NAS, methods to identify the method which is most suitable.

The **EFTS** column of **Table 54 - Supported File Types** indicates the file types supported by the EFTS rendering method.

Rendering Module Priority

Express provides multiple rendering modules in order to meet specific document conversion requirements. These rendering modules are prioritized in order to best satisfy the document conversion process as follows:

1. Integrated File Type Support (IFTS)
2. Native Application Support (NAS)
3. Extended File Type Support (EFTS)

Express attempts to use the IFTS rendering module first to process the document. If the document is not processed successfully, the NAS module is attempted next and EFTS module is attempted last. Please note that the file type must be supported by the rendering module in order for it to be attempted in the priority sequence. If the document is not processed successfully using the EFTS rendering module, an error is logged and the file is moved to the error folder.

Express allows the user to disable the NAS or EFTS rendering modules so that they will not be used to render the document. Please note that the IFTS module is always attempted first to process the file types it supports.

The table below contains a complete list of the file types and versions/format supported by Express. It also indicates which Express rendering modules (IFTS, NAS and EFTS) support the file type. Please note that only the most common file extensions for each file type are listed. Other file extensions may be used.

Table 54 - Supported File Types

File Type	File Extensions	Versions/Formats	IFTS	NAS	EFTS
Adobe Acrobat	PDF	All	✓		
Adobe FrameMaker	MIF	6.0			✓
Adobe FrameMaker	FM	6.0		✓	
Adobe FrameMaker graphics	FMV	Vector/raster to 5.0			✓
Adobe Illustrator	AI	1.0 to 7.0, 9.0			✓
Adobe Illustrator	AI	11.0		✓	
Adobe Photoshop	PSD	4.0			✓
Ami Draw	SDW	Ami Draw			✓
ANSI Text	TXT	7 & 8 bit	✓		✓
ASCII Text	TXT	7 & 8 bit	✓		✓
AutoCAD Drawing Web Format	DWF	9 to 2004		✓ 4,12	
AutoCAD Interchange	DXF	9 to 2004		✓ 4,12	
AutoCAD Native Drawing	DWG	9 to 2004		✓ 4,12	
AutoDesk Inventor	IAM, IDV, IDW, IPT	1 to 5		✓ 9,12	
AutoShade Rendering	RND	2.0			✓
Binary Group 3 Fax		All			✓
Bitmap	BMP, RLE, ICO, CUR, DIB				✓
Bitmap	BMP, ICO, DIB		✓		
Bitmap OS/2	DIB, WARP				✓
CADKEY	PRT			✓ 4	
CalComp PCI 906/907 Plot	906, 907, PCI, PLT			✓ 4	
CALS Group IV	CAL, CG4, MIL, ODA, C4	Type I, Type II			✓
CALS Group IV	CAL, CG4, MIL, ODA, C4			✓ 4	
CATIA	MODEL			✓ 5,10	
CoCreate SolidDesigner	PKG, SDPC			✓ 9	
Computer Graphics Metafile	CGM	ANSI, CALS			✓
Corel Clipart format	CMX	5.0 to 6.0			✓
Corel Draw	CDR with TIFF header	2.0 to 9.0		✓	✓
Corel Draw	CDR	6.0 to 8.0		✓	✓
Corel/Novell Presentations		1.0 to 10			✓
Corel/Novell Quattro Pro		1.0 to 10		✓	✓
Corel/Novell WordPerfect	WPD, WP5	1.0 to 10		✓	✓
DataEase		4.x			✓
dBASE		1.0 to 5.0			✓
dBXL		1.3			✓
DEC WPS Plus	DX	1.0 to 4.0			✓
DEC WPS Plus	WPL	1.0 to 4.1			✓
DisplayWrite 2 & 3	TXT	All			✓
DisplayWrite 4 & 5		1.0 to 2.0			✓
DeltaView	WDF	2.90		✓	
Enable		3.0, 4.0, 4.5			✓
Encapsulated PostScript	EPS	TIFF header only			✓ 17
Executable	EXE, DLL				✓ 14

File Type	File Extensions	Versions/Formats	IFTS	NAS	EFTS
Executable for Windows NT					✓
Extensible Markup Language	XML, XSL	All		✓ ⁷	
First Choice		1.0 to 3.0			✓
FormTek Raster Image	IMG			✓ ⁴	
FoxBase		2.1			✓
Framework		3.0			✓
Freelance for OS/2		1.0 to 2.0			✓
Freelance for Windows		1.0 to 9.6			✓
GEM Paint	IMG				✓
Graphics Environment Manager	GEM	Bitmap & vector			✓
Graphics Interchange Format	GIF				✓
GZIP Compression Utility	GZ				✓
Harvard Graphics for DOS		2.x, 3.x			✓
Harvard Graphics for Windows	PRS	All			✓
Hewlett Packard Graphics Language	HP, HPGL, HGL, HPG, PLT, 000	2	✓	✓ ¹	✓
Hewlett Packard Graphics Language 2	HP, HPGL, HGL, HP2, HPG, PLT, 000	2	✓	✓ ¹	
Hewlett Packard ME10	MI			✓ ⁴	
Hypertext Markup Language	HTM, HTML	1.0 to 3.0		✓	✓
Hypertext Markup Language	HTM, HTML, CSS	All		✓ ⁶	
IBM FFT		All			✓
IBM Graphics Data Format	GDF	1.0			✓
IBM Picture Interchange Format	PIF	1.0			✓
IBM Revisable Form Text		All			✓
IBM Writing Assistant		1.01			✓
Initial Graphics Exchange Specification	IGES	5.1			✓
Initial Graphics Exchange Specification	IGES, IGS			✓ ¹⁰	
Intergraph MicroStation Drawing	DGN			✓ ¹⁰	
Intergraph MicroStation Plot	000			✓ ¹⁰	
Joint Photographic Experts Group	JPG, JPEG, JPE		✓		✓
JPG (Progressive)	JPG, JPEG, JPE	All	✓		✓
JPG File Interchange Format	JFIF	All			✓
JPG with EXIF	JPG, JPEG, JPE		✓		✓
JustSystems Ichitaro		5.0, 6.0, 8.0, 9.0			✓
JustWrite		1.0 to 3.0			✓
Kodak Flash Pix	FPX				✓
Kodak Photo CD	PCD	1.0			✓
Legacy	LEG	1.0 to 1.1			✓
Lotus 1-2-3 (DOS & Windows)	WK1, WK3, WK4, WKS	1.0 to 5.0		✓	✓
Lotus 1-2-3 (OS/2)		1.0 to 2.0			✓
Lotus 1-2-3 Charts (DOS & Windows)	WK1, WK3, WK4, WKS	1.0 to 5.0		✓	✓
Lotus 1-2-3 for SmartSuite	WK1, WK3, WK4, WKS	97 to 9.6		✓	✓
Lotus AMI/AMI Professional		1.0 to 3.1			✓
Lotus Manuscript		2.0			✓
Lotus Notes	NSF			✓ ¹⁵	
Lotus PIC					✓

File Type	File Extensions	Versions/Formats	IFTS	NAS	EFTS
Lotus Snapshot		All			✓
Lotus Symphony		1.0,1.1, 2.0			✓
Lotus Word Pro	LWP, MWP	96 to 9.8		✓	✓
LZA Self Extracting Compress					✓
LZW Compression					✓
Macintosh PICT1 & PICT2		Bitmap only			✓
MacPaint	PNTG				✓
MacWrite II		1.1			✓
MASS11	M11	1.0 to 8.0			✓
Micrografx Designer	DRW	1.0 to 3.1			✓
Micrografx Designer	DSF	6.0			✓
Micrografx Draw	DRW	1.0 to 4.0			✓
Microsoft Access		1.0 to 2.0			✓
Microsoft Binder	OBD	7.0 to 97			✓
Microsoft Excel Charts	XLS, XLC, XLT, XLW	2.x to 7.0		✓	✓
Microsoft Excel for Windows	XML	2003		✓ ¹¹	
Microsoft Excel for Windows		2.2 to 2007		✓	✓
Microsoft Excel Macintosh		3.0 to 4.0, 98, 2001			✓
Microsoft Multiplan		4.0			✓
Microsoft Outlook Message	MSG	Text only	✓	✓	✓
Microsoft Outlook Message	MSG	All	✓	✓	✓
Microsoft PowerPoint for Mac		4.0 to 2001			✓
Microsoft PowerPoint for Windows	PPT, PPS	3.0 to 2007		✓	✓
Microsoft PowerPoint for Windows	POT	3.0 to 2007		✓	
Microsoft Project		98 Text only			✓
Microsoft Project		2002		✓	
Microsoft Publisher	PUB	97 to 2003		✓	
Microsoft Rich Text Format	RTF	All		✓ ¹⁶	✓
Microsoft Snapshot Viewer	SNP	9.0 to 11		✓	
Microsoft Windows Write		1.0 to 3.0			✓
Microsoft Word for Mac	MCW	3.0 to 4.0, 98, 2001			✓
Microsoft Word for Windows	XML	2007		✓ ¹¹	
Microsoft Word for Windows	DOC	1.0 to 2007		✓	✓
Microsoft Word for Windows	DOT	1.0 to 2007		✓	
Microsoft WordPad	RTF	All		✓ ¹⁶	✓
Microsoft Works		1.0 to 2.0			✓
Microsoft Works (DOS)		1.0 to 2.0			✓
Microsoft Works (Mac)		1.0 to 2.0			✓
Microsoft Works for Mac		1.0 to 2.0			✓
Microsoft Works for Windows	WPS	1.0 to 4.0			✓
MIME Text Mail			✓		✓
Mosaic Twin		2.5			✓
MultiMate		1.0 to 4.0			✓
Navy DIF		All			✓
Nota Bene		3.0			✓
Novell Perfect Works		2.0			✓

File Type	File Extensions	Versions/Formats	IFTS	NAS	EFTS
Novell Perfect Works (Draw)		2.0			✓
Novell Quattro Pro for DOS	WB1	1.0 to 5.0			✓
Open Office	SXC, STC, SXM, SXG, SVW, STW, SXP, SXW	1.1		✓	
Office Writer		4.0 to 6.0			✓
OrCAD	DSN	7.0 to 9.2.3		✓ 8,10	
OS/2 PM Metafile	MET	3.0			✓
Paint Shop Pro 6 Win32 only	PSP	5.0 to 6.0			✓
Paperport (Scansoft)	MAX		✓ 18		
Paradox (DOS)		1.0 to 4.0			✓
Paradox (Windows)		1.0 to 1.0			✓
Parasolids Binary	X_B			✓ 9	
PC Paintbrush	PCX				✓
PC Paintbrush	DCX		✓		✓
PC-File Letter		1.0 to 5.0			✓
Personal R:BASE		1.0			✓
PFS:Professional Plan		1.0			✓
PFS:Write		A, B, C			✓
PKWARE Archive	ZIP	All	✓		
Portable Bitmap	PBM	All	✓		✓
Portable Graymap	PGM	All	✓		✓
Portable Network Graphics	PNG	1.0	✓		✓
Portable Pixmap	PPM	All	✓		✓
Postscript	PS	Level II			✓ 19
Postscript	PS	Level II, III		✓ 2	
Pro/Engineer	ASM, FRM, PRT	18 to 2001		✓ 10	
Pro/Engineer	DRW	18 to 2001		✓ 9	
Professional Write		1.0 to 2.1			✓
Professional Write Plus		1.0			✓
Q & A		1.0 to 2.0			✓
Q & A Write for Windows		3.0			✓
R:BASE 5000		1.0 to 3.1			✓
R:BASE System V		1.0			✓
Reflex		2.0			✓
Samna Word		1.0 to IV+			✓
Seagate Crystal Reports	RPT	4.6.1	✓	✓	
Seagate Crystal Reports	RPT	All		✓	
SmartWare II	DEF	1.02			✓
SolidWorks 2D/3D	SLDDRW, SLDPRT, SLDASM			✓ 9	
Sprint		1.0 to 1.0			✓
StarOffice Calc for Windows		5.2			✓
StarOffice Impress for Windows		5.2			✓
StarOffice Write for Windows		5.2			✓
Sun Raster	SRS	All			✓
SuperCalc 5		4.0			✓
Tagged Image File	TIF, SEP, TIFF, FAX	1.0 to 6	✓		✓

File Type	File Extensions	Versions/Formats	IFTS	NAS	EFTS
Tagged Image File	TIF, SEP, TIFF, FAX	All	✓		
Text Mail	MIME		✓		✓
Total Word		1.2			✓
Truevision Targa	TGA, VDA, VST	2	✓	✓	✓
Unicode Text	TXT	All		✓ ¹³	✓
Unigraphics	PRT			✓ ⁹	
Unigraphics SolidEdge 2D/3D	DFT, PAR			✓ ¹⁰	
UNIX Compress	GZ				✓
UNIX TAR					✓
UUEncode					✓
vCard	VCF	2.1			✓
Visio	VSD	5		✓	✓
Visio	VSD	All		✓	
Visio (preview)		4		✓	✓
Volkswriter 3 & 4		1.0 to 1.0			✓
VP Planner 3D		1.0			✓
Wang PC	IWP	1.0 to 2.6			✓
WBMP		All			✓
Windows Enhanced Metafile	EMF	All			✓
Windows Metafile	WMF	All			✓
WinFax	FXR	9.0, 10.0		✓	
Wireless Markup Language	WML	5.2			✓
WordMARC		1.0 to Composer			✓
WordPerfect Graphics	WPG, WPG2	1.0 to 2.0		✓ ³	✓
WordStar		1.0 to 7.0			✓
WordStar 2000	DOC	1.0 to 3.0			✓
WordStar for Windows	DOC	1.0			✓
X-Windows Bitmap	XBM	x10 compatible			✓
X-Windows Dump	XDM	x10 compatible			✓
X-Windows Pixmap	XPM	x10 compatible			✓
XSL Formatting Objects Form	FO, XML			✓ ²⁰	
XyWrite	XYP	1.0 to III Plus			✓

Rendering Notes:

- 1- AutoVue or Myriad is used if available.
- 2- Ghostscript is required.
- 3- Uses the Native Application available in the following order (AutoVue, Myriad, WordPerfect).
- 4- AutoVue or Myriad is required.
- 5- Catia support for Myriad is available from Informative Graphics as an optional component.
- 6- Supports Hypertext Markup Language (HTML) with Cascading Style Sheets (CSS).
- 7- Supports Extensible Markup Language (XML) with Extensible Style Sheet Language (XSL).
- 8- OrCAD Capture is required.
- 9- AutoVue SolidModel or AutoVue SolidModel Professional is required.
- 10- Myriad or AutoVue SolidModel or AutoVue SolidModel Professional is required.
- 11- Requires Microsoft Office 2003
- 12- Requires Autodesk Volo View or Volo View Express

- 13- Requires WordPad
- 14- The PDF will be a report of technical file information
- 15- Only NSF files with one email are supported
- 16- WordPad will be used to convert the document unless Microsoft Word is installed.
- 17- The Encapsulated PostScript (EPS) file specification allows a graphic file to be included for screen preview. The graphic file formats supported are: PICT (MAC), TIFF, Metafile and EPSI. Express only supports EPS files with TIFF graphic file format.
- 18- Requires Adlib ExpressRecognition Server
- 19- In some instances PostScript files have a loss in fidelity when rendering. Native Application (GhostScript) processing produces higher quality PDF files and is recommended.
- 20- Adlib deploys a custom module (AdlibFOP.dll) with Express to process this file type.

Additional file types are continually being added. If the file type you are looking for is not listed please email us at support@adlibsoftware.com.

General Notes:

- I. This list only contains the most common file extensions used for each file type. Other file extensions may exist.
- II. File extensions are not used to identify the file type except for CAD files and file that do not contain file information (e.g. HPGL).
- III. Please let us know if you need additional file Type support.
- IV. The AutoVue product is available from Cimmetry Systems, Inc. www.cimmetry.com.
- V. The Myriad product is available from Informative Graphics Corporation www.infograph.com.
- VI. The Ghostscript product is available from the following FTP site.
<http://umn.dl.sourceforge.net/sourceforge/ghostscript/gs800w32.exe>
- VII. The OrCAD Capture product is available from Cadence www.cadencepcb.com.

Appendix D – Native Applications Supported

This list contains the currently supported Native Applications by Adlib, additional applications are always being added. If the application you are looking for is not listed please email us at support@adlibsoftware.com.

Table 55 - Supported Native Applications

Manufacturer	Application	Version/Format
Adobe®	Framemaker	6.0, 7.0
Adobe®	Illustrator	11.0
AutoDesk®	Volo View Express	2.0
AutoDesk®	Volo View	3.0
Cadence®	OrCAD Capture	9.0
Cimmetry®	AutoVue® Professional and Solid Model Professional	15.0 to 19.3
Corel®	WordPerfect®	8.0 to 12.0
Corel®	Quattro Pro®	8.0 to 12.0
Corel®	CorelDRAW®	8.0, 12.0
Ghostscript	Ghostscript	7.04 to 8.15
IBM	Lotus Notes Domino	7.0
Informative Graphics	Myriad Engineering Viewer	4.2 to 7.0
Lotus®	SmartSuite® Millennium Edition (Word Pro™, Freelance Graphics®, Lotus 1-2-3®)	9.5 to 9.8
Microsoft®	InfoPath	2003 ¹ , 2007
Microsoft®	Internet Explorer	6.0, 7.0
Microsoft®	Microsoft Office™ (Excel, PowerPoint)	95
Microsoft®	Microsoft Office™ (Word, Excel, PowerPoint)	97 to 2007
Microsoft®	Microsoft Outlook™	2000 to 2007
Microsoft®	Microsoft Publisher	97 to 2007
Microsoft®	Microsoft Project	2002 to 2007

Manufacturer	Application	Version/Format
Microsoft®	Microsoft Visio	2000 to 2007
Microsoft®	Microsoft WordPad	5.0, 5.1
Microsoft®	Snapshot Viewer	9.0 to 11.0
Nico Mak Computing	WinZip	All
Open Office	Open Office	1.1.1
SDI	SDI Convert	6.5.3
Sun Microsystems®	Star Office™	Up to 7.0
Seagate®	Crystal Reports™	4.6.1, 7.0 to 8.5
Symantec	Winfax Viewer	9.0, 10.0
Workshare	DeltaView	2.90

Native Application Notes:

1- Microsoft Office 2003 Service Pack 1 (or greater) required.

Notes on Supported CAD Software

Express Server supports the following native applications for rendering CAD documents:

- Cimmetry AutoVue Professional and Solid Model Professional
- Informative Graphics Myriad Engineering Viewer

If these applications are installed after *Express Server* is installed in order to provide native application support for CAD documents; the following procedure needs to be performed:

1. Right click My Computer.
2. Select Properties.
3. Select the Advanced Tab.
4. Click on the Environment Variables button at the bottom of the screen.
5. In the System Variables window, scroll down to the "Path" variable, select it and click the "Edit" button.
6. Add the installation path of Myriad or AutoVue to the semicolon delimited list.
7. Click OK.
8. Click OK.
9. Click Apply.
10. Click OK.

Tip: The hive key DWORD value CADActualPageSize is supported in Cimmetry AutoVue Professional and Solid Model Professional 19 C2 and above. For Informative Graphics Myriad Engineering Viewer, it is for supported in versions 6.2 and 7.

Appendix E – Installing CDO (Collaboration Data Objects)

CDO is required in order to browse and select email folders.

1. Open up the Windows Control Panel applet (ie. **Start -> Control Panel**)
2. Open the **Add or Remove Programs/Program and Features** icon.
3. In the list, find **Microsoft Office** or **Microsoft Outlook**, and then click **Change**.
4. Select **Add or Remove Features**.
5. Expand the **Microsoft Outlook** section and select **Collaboration Data Objects**. Configure the setting to **Run from My Computer**.

Office 2007 Installation

Starting with Office 2007, CDO is distributed as a web download, separate from Outlook 2007 and Exchange 2007. To download, follow this link:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=2714320d-c997-4de1-986f-24f081725d36&displaylang=en>

Once downloaded, start the installation and follow the on screen instructions to install.

Appendix F – PDF/A

The PDF/A specification is a ratified [ISO](#) (International Standards Organization) standard for long term document archival based on PDF specification Version 1.4. It is applicable to documents containing combinations of character, raster and vector data. [ISO 19005-1:2005](#) defines PDF/A as, “(PDF/A) provides a mechanism for representing electronic documents in a manner that preserves their visual appearance over time, independent of the tools and systems used for creating, storing or rendering the files.” A key feature of PDF/A is that the document can be rendered the same way on any device, including different Operating systems and PDF viewers for a very long time. In order for this to occur, PDF/A compliant files must be self contained. This means that no fonts, hyperlinks, bookmarks or images can be retrieved from an external source (includes fonts used for annotations).

ISO 19005-1:2005 defines two types of PDF/A, PDF/A-1a and PDF/A-1b. Express supports the creation and validation of PDF/A-1b PDF files. PDF/A-1a refers to level A compliance which is very strict and unsupported by Express at this time.

Express will render most supported file types to PDF/A with the following notable exceptions: Crystal Reports, and PostScript files. In addition, Express can preflight (validate) PDF documents for PDF/A-1b compliance and report the deficiencies. This is done via XML Job Tickets and the PDFPREFLIGHT element (see **XML Job Ticket Guide** for more information).

The PDF/A-1b level of compliance, prevents any of the following being added to a PDF document.

- External hyperlinks
- External bookmarks
- External fonts (including fonts used for annotations).
- PDF security
- Embedded JavaScript
- Headers, Footer, Watermarks (if Opacity is less than 100%)
- Digital Signatures
- PDF Attachments

Note: PDF documents that are not already PDF/A compliant cannot be repaired and rendered to PDF/A.

Note: When rendering text files to PDF/A the Courier font is not supported.

Note: Crystal Reports and PostScript cannot be rendered to PDF/A. This limitation may be addressed in a future release.

Note: Express performs PDF/A-1b validation via PDFPREFLIGHT (see **XML Job Ticket Guide** for more information)

Note: Conversion using Myriad as the Native Application is not supported when using a CMYK color profile for PDF/A-1b.

Note: Conversion of image file types (e.g. TIFF and JPG) to a CMYK PDF/A-1b is not supported.

Appendix G – PDF/X

The PDF/X-1a:2001 and PDF/X-3:2002 level of compliance, prevents any of the following being added to a PDF document.

- PDF Version 1.3
- Hyperlinks
- Bookmarks
- PDF Open Settings
- Table of Contents
- Index
- Partial Font embedding
- PDF security
- Overlays
- Headers, Footer, Watermarks (if Opacity is less than 100%)
- Digital Signatures
- PDF Attachments

Note: PDF documents that are not already PDF/X compliant cannot be repaired and rendered to PDF/X.

Note: When rendering text files to PDF/X the Courier font is not supported.

Note: Crystal Reports and PostScript cannot be rendered to PDF/X. This limitation may be addressed in a future release.

Note: Conversion using Myriad as the Native Application is not supported when using a CMYK color profile for PDF/X.

Note: Conversion of image file types (e.g. TIFF and JPG) to a CMYK PDF/X is not supported.

Appendix H – Submit a Problem to Adlib

The **Express Problem Submission** application is installed under the Adlib Express Program Group (under the Start Menu) and is also available from within the Adlib Express application under the Help Menu (**Problem Submission**). This application simplifies the problem reporting process to Adlib by automating the assembly of information and packaging it for submission (see **Figure 60 – Express Problem Submission Screen**). The information gathered includes contact information, problem description, problem files, Express settings and process logs as well as system information. We recommend that you attach all files associated with the problem including the following if applicable:

- Source Document
- Rendered Documents (PDF, TIFF and Text)
- DPI/XML Job Ticket Files
- Script Files

When the OK button is pressed, the information is packaged into a single zip file that must be emailed to Adlib (express@adlibsoftware.com) for investigation. Instruction are provides once all information is packaged (see **Figure 61 - Problem Submission Instructions Screen**). We recommend that you review the files included in the zip file prior to submission. Please be assured that Adlib shall hold your submitted information and documents in strict confidence.

Figure 60 – Express Problem Submission Screen

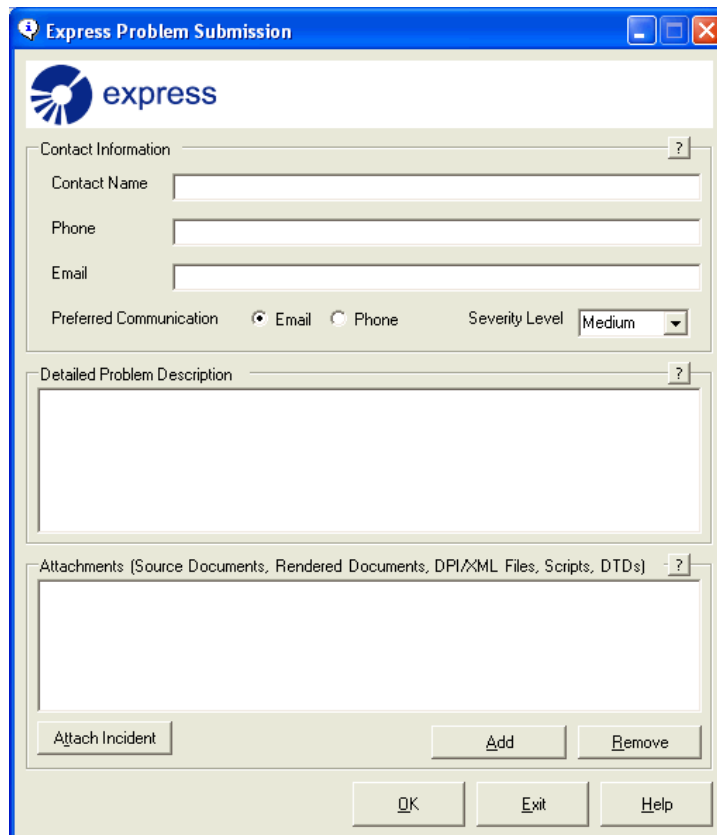


Figure 61 - Problem Submission Instructions Screen

Appendix I – Advanced Registry Settings

The registry key settings are high level settings that give additional control over Adlib Express and the native applications being used for rendering. These settings are not available through the user interface or Job Tickets and only need to be adjusted if you are encountering certain issues or want certain features disabled.

Express Settings

These registry settings allow for certain control over the internal functionality of the application.

Table 56 – Express Settings (Registry)

Value Name	Type	Value	Description
PrintInternal		0 – Disabled 1 – Enabled 2 – Automatic (Default)	Specifies how to print PDF files when printing to a physical printer. Use Adobe Acrobat. Use the internal printing engine. Use Adobe Acrobat if present, otherwise use the internal printing engine.
PrintDelay		5 (Default)	Specifies a value in seconds to wait prior to sending the print command to Adobe Acrobat after conversion.
DialogBoxTimeout		40000 (Default)	Specifies a value in milliseconds to wait before triggering searches for dialog boxes. (Corel Draw)

Note: Registry Location: HKLM\SOFTWARE\Adlib\Adlib Express\1.0.0\

Note: If the internal printing engine is used, and an overlay with an embedded JavaScript is being processed, the embedded JavaScript will not be applied to the output document. Printing with Adobe Acrobat supports this functionality.

Please refer to the **Overlay** section of for more information about overlays containing JavaScripts.

Document Rendering Settings

The Document Rendering Settings gives control over which rendering engine to use during the rendering phase of the source document.

Table 57 – Document Rendering Settings (Registry)

Value Name	Type	Value	Description
wmffile	String	Adlib Rendering Engine AutoVue Pegasus	Specifies which rendering engine is used to process Windows Meta Files.

Note: Registry Location: HKLM\SOFTWARE\Adlib\Adlib Express\1.0.0\

PDF Driver Settings

These registry settings allow for certain control over the printer driver and the internal viewer.

Table 58 – PDF Driver Settings (Registry)

Value Name	Type	Value	Description
CADActualPageSize	DWORD	0 – Disabled (Default) 1 – Enabled	Specifies that the PDF should be converted using the dimensions from the Extents of the source CAD drawing.
ExcelDocPageSettings	DWORD	0 – Disabled (Default) 1 – Enabled	Specifies that the document's page layout information is used when printing.
SimPostscript	DWORD	0 – Disabled 1 – Enabled 2 – Auto (Default)	This option is useful for printing Wordarts and semi-transparent backgrounds using Office XP.
PSConvert2TIFF	DWORD	0 – Disabled (Default) 1 – Enabled	Specifies that Postscript documents are to be converted to TIFF prior to being converted to PDF. (OCR)

Note: Registry Location: HKLM\SOFTWARE\Adlib\Adlib Express\1.0.0\PDF Driver Settings

Native Application Settings

A set of high level options to customize the control of certain features of native applications to adjust document layout issues or processing of message attachments, etc.

Table 59 – Native Application Settings (Registry)

Value Name	Type	Value	Description
PrintOutput (E-Transcript Viewer)	DWORD	0 – Transcript Only 1 – Index Only 2 – Both	What to output from E-Transcript Viewer.
EPSFitToPage (GhostScript)	DWORD	0 – Disabled (Default) 1 – Enabled	Specifies that Ghostscript will scale the EPS document to fit to page.
UseExtendedMediaBox (GhostScript)	DWORD	0 – Disabled (Default) 1 – Enabled	Enabling this value may correct page size issues when converting PostScript files to PDF.
LinkFilename (Lotus Notes)	String		Temporary filename to use for when creating a temporary link files to the Lotus Notes database.
RestartThreshold (Lotus Notes)	DWORD	(Default = 0)	Restart Lotus Notes after defined number of documents converted.
PrintFrom (Microsoft Excel)	DWORD		Specifies the starting point of the page range to be printed.
PrintTo (Microsoft Excel)	DWORD		Specifies the end point of the page range to be printed.
PrintWhat (Microsoft Excel)	DWORD	0 – Entire Workbook (Default) 1 – Active Sheets	Specifies whether to print the entire Excel Workbook or only the active sheets.
PrintOutExcelEx (Microsoft Excel)	DWORD	0 – Disabled (Default) 1 – Enabled	Enable the printing of all worksheets in one print job to correct the total pages in the header/footer of the Excel document (ie. Page 1 of 1 issue).
PrintOutExcelExMatchResolution (Microsoft Excel)	DWORD	0 – Disabled 1 – Enabled (Default)	Specifies to match the resolution of each sheet when printing.
UseExcelPageNumbering (Microsoft Excel)	DWORD	0 – Disabled (Default) 1 – Enabled	When PrintOutExcelEx is disabled correct the starting page number when converting the individual worksheets.

ProcessAttachments (Microsoft Outlook)	DWORD	0 – Disabled 1 – Enabled (Default)	Process Email message attachments.
Pages (Microsoft PowerPoint)	String		Specifies the page range to print. This value is identical to the value a User would configure within Microsoft PowerPoint when printing (ie. 1,3, 5-12)
PrintHiddenSlides (Microsoft PowerPoint)	DWORD	0 – Disabled 1 – Enabled (Default)	Include hidden slides from the PowerPoint presentation.
UseGhostscript (Microsoft PowerPoint)	DWORD	0 – Disabled 1 – Enabled (Default)	If installed, Ghostscript is used to convert Powerpoint documents.
AllowA4LetterPaperResize (Microsoft Word)	DWORD	0 – Disabled 1 – Enabled 2 – Automatic (Default)	Explicitly sets the A4/Letter resizing option in MS Word to be enabled or disabled when printing. The Automatic setting will use the option as it has been configured in MS Word.
PrintType (Microsoft Word)	DWORD	0 – Document with Content (Default) 1 – Properties 2 – Comments 3 – Styles 4 – Auto Text Entries 5 – Key Assignments 7 – Document with Markup	Specifies the document content to print.
RestartThreshold (Microsoft Word)	DWORD	(Default = 0)	Restart Microsoft Word after defined number of documents converted.
ShowHiddenText (Microsoft Word)	DWORD	0 – Disabled 1 – Enabled 2 – Automatic (Default)	Explicitly sets the <i>View Hidden Text</i> and <i>Print Hidden Text</i> options in MS Word to be enabled or disabled when printing. The Automatic setting will use these options as they have been configured in MS Word. NOTE: If these options are mismatched in MS Word, content bookmarks may be shifted from their proper location.
UsePrinterMetrics (Microsoft Word)	DWORD	0 – Disabled (Default) 1 – Enabled	MS Word 97 and later versions use a printer-independent layout scheme controlled by the <i>Use printer metrics to lay out document</i> compatibility option. This option is turned off by default.
PriorityLevel (Microsoft Internet Explorer)	String	NORMAL_PRIORITY_CLASS IDLE_PRIORITY_CLASS HIGH_PRIORITY_CLASS REALTIME_PRIORITY_CLASS	Sets the priority level of the Internet Explorer process. Warning: Realtime can cause system instability.
PageRange (Microsoft Visio)	DWORD	0 – All (Default) 1 – Current Page 2 – Current View	Specifies the range of pages that will be printed for Visio documents.
EnableWP5X (WordPerfect)	DWORD	0 – Disabled (Default) 1 – Enabled	Enable support for WordPerfect 5.x Note: A macro must be defined which specifies to print the document when opening.
WP5XMacroName (WordPerfect)	String		The macro name which is triggered after opening the WordPerfect document.
WP5XPath (WordPerfect)	String		The file path to where WordPerfect 5.x is installed.
XslFoSetStrictValidation (XSL-FO)	DWORD	0 – Disabled 1 – Enabled (Default)	When enabled, the FO Processor strictly enforces the formatting standards set by the W3C for XSL-FO, yielding the highest quality PDF output. When disabled, the FO Processor will ignore minor non-compliance issues like empty nodes, non-standard attributes, etc.

Note: Registry Location: HKLM\SOFTWARE\Adlib\Adlib Express\1.0.0\Native App Settings

Note: Each of these settings is located in a sub key of the registry path above. The sub key name is defined in the parentheses below each Value Name.

ie. HKLM\SOFTWARE\Adlib\Adlib Express\1.0.0\Native App Settings\Microsoft Word

Appendix J – DOC/RTF Output FAQ

What is MODI?

Microsoft Office Document Imaging (MODI) is a Microsoft software library that provides support for scanned documents in Microsoft Office. This library was first introduced in Microsoft Office XP. A programmable COM object model was made available in Microsoft Office 2003. Although still available in Office 2007, the MODI tool set and code dependencies have been removed from Office 2007 and have been replaced with XPS. MODI allows an Office user to:

- Scan single or multi-page documents.
- Produce editable text from a scanned document using OCR.
- Copy and export scanned text and images to Microsoft Word.
- View a scanned document.
- Search for text within scanned documents.
- Easily reorganize scanned document pages.
- Send scanned documents via e-mail or Internet Fax.
- Annotate scanned documents.
- MODI can read and write to MDI (Microsoft Document Imaging) and TIFF file formats.

Why do I need to install MODI?

When the Office Output module cannot determine the font encoding of a font used within a processed PDF document; MODI is used to retrieve the font encoding information. This feature is only available if the Office 2003 or Office 2007 suite is installed including the MODI component.

How do I install Microsoft Office Document Imaging?

1. Close all running applications (including *Express Server*). If you have any Office application running, the driver will not be installed properly.
2. Go to "Control Panel" and "Add or Remove Programs".
3. Click on "Microsoft Office 2003" or "Microsoft Office 2007" and then click on "Change".
4. Check "Add or Remove Features" and click "Next" or "Continue".
5. **Office 2003 Only:** On the bottom of the page check "Choose advanced customization of applications." and click "Next".
6. Under Microsoft Office click on the + sign in front of "Office Tools".
7. Locate the object "Microsoft Office Document Imaging", click the icon and select "Not Available".
8. Click on "Update" or "Continue". This will uninstall the MODI driver.
9. Repeat steps 1 to 6 to go back to the same location you were before.
10. Locate the object "Microsoft Office Document Imaging", click the icon and select "Run from My Computer".

11. Click **Update / Continue**.

Why do I only get 2 pages in the resulting document?

- When the Office Output module is in evaluation mode, only the first two pages are converted.
- Once purchased, the installation key will remove the two page restriction so that all pages can be rendered.

Why does the resulting document have no text and each page consists of a full page image of each page?

- If Adlib ExpressRecognition Server is not used, image files and image-only PDF documents will result in an Office document that contains full page image on a blank page for each page of the processed document.
- To generate editable content from an image, you must use Adlib ExpressRecognition Server.

Why does each page of the resulting document consist of a full page image (of the corresponding PDF page) and text?

- An "Image On Text PDF" (an image-only PDF or image file that has been processed using OCR) will create an Office document with a full page image (of the PDF page) in the background and the recognized text (while attempting to maintain character formatting and layout) in the foreground for every page of the PDF document.
- Selecting the "Remove Images" option will remove the full page image in the background.

Why is the conversion taking so long?

- Conversion of large PDF documents should be avoided. While anything under ~25MB will convert in a reasonable time frame, larger and more complex documents may take a long time to render. This is due to the complex process of recognizing and translating non-office content and formatting. If you are processing large documents please refer the subsection entitled **Application Settings** in the **Tools Menu** section of the Express User Guide so that the Adlib FMR settings can be adjusted accordingly.

Why do my documents keep failing to convert?

- **Password protection**
 - Failure to define the correct master security password will cause a failure in conversion if the input PDF document is secured.
- **Native application not present**
 - Attempting to create MS Word documents on a server with MS Word not installed will result in conversion failure. An examination of the process log will reveal if this occurrence is taking place.
- **MODI not installed**
 - Attempting to generate Office documents on a server with Office 2003 or Office 2007 installed and MODI not installed will result in conversion failure. An examination of the process log will reveal if this occurrence is taking place.

- **Express Server timeouts too short**
 - Adlib FMR Timeouts should be increased to accommodate for conversion times of large PDF documents. This can be done by accessing the 'Tools' menu item and selecting the 'Application Settings' from the main window of Express. Please, refer the subsection entitled **Application Settings** in the **Tools Menu** section of the Express User Guide so that the Adlib FMR settings can be adjusted accordingly.

Why does the text in the resulting document look different from the text in my original document?

- **Fonts not embedded in source PDF**
 - For proper conversion to the selected Office file format; it is recommended that all fonts be fully embedded (not subsets) into the processed PDF. Failure to do so will cause the conversion process to select the closest available system font on the machine where the conversion is taking place (if and only if that font does not exist on the server performing the conversion). Ensuring that all fonts are fully embedded, guarantees that the resulting Office document will use the same fonts found in the original document. *Express Server* cannot embed fonts if they do not exist on the server where the conversion is taking place, therefore, *Express Server* cannot resolve all issues related to font embedding.

Why does the resulting document appear and then disappear in Word?

- This happens because there is an active and visible Word session. Adlib Express automates with the native Office application. When the output type is a Word document, the Office Output Module uses the active Word session as part of the process. The active Word document is unaffected. This will affect Microsoft Outlook and Word. If you want this to stop occurring, shut down Word and / or Outlook.

Why does the resulting document have more pages than my original document?

- **Font substitution**
 - In some cases, when original fonts are not available, font substitution has occurred which may result in additional pages.
- **Document Reconstruction**
 - The Office Output Module reconstructs documents to either Word or RTF. This means that documents are interpreted / analyzed and a new document (either Word or RTF) is created.

Why do installation screens appear during conversion?

- Native applications (i.e. MS Word, MODI, third party application) that will be automated with by the Office Output Add-on must be launched at least once for any newly created Windows account. Successfully accomplishing this operation will suppress any installation windows.

How can I ensure high accuracy and quality in my resulting documents?

- Along with *Express Server* and ExpressRecognition, it is recommended that Office 2003 or Office 2007 and the MODI component should be installed in order to achieve highly accurate Office documents.
- It is recommended that all fonts within a processed PDF document are fully embedded.

Appendix K – XPS Output

Requirements for Native Application Conversion

- Microsoft® Office 2007 (Word, PowerPoint and Excel)
- 2007 Microsoft® Office Add-in: Microsoft® Save as PDF or XPS
<http://www.microsoft.com/downloads/details.aspx?FamilyId=4D951911-3E7E-4AE6-B059-A2E79ED87041&displaylang=en>

Requirements for Regular Conversion

- Microsoft® XML Paper Specification Essentials Pack
- <https://www.microsoft.com/downloads/details.aspx?FamilyId=B8DCFFDD-E3A5-44CC-8021-7649FD37FFEE&displaylang=en>

Current Limitations

- Native Application Conversion
 - Merging of multiple documents is not supported.
 - Post Processing is not available. (E.g. Watermarks, Headers & Footers)
- Regular Conversion
 - Documents with multiple page sizes; the page size of the first page will be applied to all pages within the document. Documents that have multiple orientations; the orientation of the first document will be used.
 - If a PDF has a rotate flag, so that when it is viewed in Adobe Acrobat, the file is rotated 90°, the XPS output will not be rotated as well. For example, a file that when viewed appears in landscape orientation, will not be printed in landscape orientation, but portrait when printing to XPS.

Appendix L – ExpressRecognition Supported File Types

Below is a list of all the image file types that are supported by the Adlib *ExpressRecognition* Server:

TIFF File Format(s)

Image Type:	Uncompressed TIFF
Color Depth:	1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type:	Uncompressed
Multi-page Supported:	Yes
Image Type:	Group 3 Modified TIFF
Color Depth:	1-BPP monochrome
Compression type:	1-Dimensional Modified Huffman RLE (CCITT 1D)
Multi-page Supported:	Yes
Image Type:	Standard G3 1D TIFF
Color Depth:	1-BPP monochrome
Compression Type:	Group 3 Fax (CCITT G3 1D)
Multi-page Supported:	Yes
Image Type:	Standard G3 2D TIFF
Color Depth:	1-BPP monochrome
Compression Type:	Group 3 Fax (CCITT G3 2D)
Multi-page Supported:	Yes
Image Type:	Standard G4 TIFF
Color Depth:	1-BPP monochrome
Compression Type:	Group 4 Fax (CCITT G4)
Multi-page Supported:	Yes
Image Type:	Packbits TIFF
Color Depth:	1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type:	PackBits
Multi-page Supported:	Yes
Image Type:	LZW-compressed TIFF
Color Depth:	1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type:	LZW
Multi-page Supported:	Yes

PCX / DCX File Format(s)

Image Type: Single Page PCX
Color Depth: 1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type: ZSoft-proprietary
Multi-page Supported: No

Image Type: Multiple Page PCX (DCX)
Color Depth: 1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type: ZSoft-proprietary
Multi-page Supported: Yes

BMP File Format(s)

Image Type: Microsoft Windows bitmap format (BMP)
Color Depth: 1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type: None
Multi-page Supported: No

JPEG File Format(s)

Image Type: JPEG Lossless
Color Depth: 8-BPP grayscale and 24-BPP true-color
Compression Type: JPEG (Joint Photographics Experts Group compression)
Multi-page Supported: No

Image Type: JPEG average information loss
Color Depth: 8-BPP grayscale and 24-BPP true-color
Compression Type: JPEG (Joint Photographics Experts Group compression)
Multi-page Supported: No

Image Type: JPEG optimized for minimum file size
Color Depth: 8-BPP grayscale and 24-BPP true-color
Compression Type: JPEG (Joint Photographics Experts Group compression)
Multi-page Supported: No

PNG (Portable image format for Network Graphics) Format(s)

Image Type: Portable Network Graphics (PNG)
Color Depth: 1-BPP monochrome, 4-BPP and 8-BPP grayscale, 24-BPP true-color, and 8-BPP palette-color
Compression Type: PNG proprietary
Multi-page Supported: No

PaperPort MAX File Format(s)

Image Type: MAX Lossless
Color Depth: 1-BPP monochrome, 8-BPP grayscale and 24-BPP true-color
Compression Type: **Monochrome:** RLE (Run Length Encoding)
Grayscale: Modified PNG
Color: JPEG
Multi-page Supported: Yes
Special Note: LZW-compressed MAX files are not supported.

Image Type: MAX average information loss
Color Depth: 1-BPP monochrome, 8-bit grayscale and 24-bit true-color
Compression Type: **Monochrome:** RLE (Run Length Encoding)
Grayscale: Modified PNG
Color: JPEG
Multi-page Supported: Yes
Special Note: LZW-compressed MAX files are not supported.

Image Type: MAX optimized for minimum file size
Color Depth: 1-BPP monochrome, 8-BPP grayscale and 24-BPP true-color
Compression Type: **Monochrome:** RLE (Run Length Encoding)
Grayscale: Modified PNG
Color: JPEG
Multi-page Supported: Yes
Special Note: LZW-compressed MAX files are not supported.

PDF File Format(s)

Image Type: Portable Document Format
Color Depth: During the "Loading Document" phase; either a 1-BPP monochrome, 8-BPP grayscale or 24-BPP true-color image is created
Compression Type: N/A
Multi-page Supported: Yes
Special Note: Supports PDF documents compliant with the PDF Version 1.5 specification.

Graphic Interchange Format (GIF) File Format(s)

Image Type: Graphic Interchange Format (GIF)
Color Depth: 8-BPP palette-color
Compression Type: LZW lossless compression
Multi-page Supported: Yes (First page [frame] only)
Special Note: Currently, only the first page (frame) is produced in the resulting PDF if the GIF is multi-frame.

Appendix M – Express Version History

Version 4.5

- Microsoft Windows Server 2003 64-bit support
 - Express is now supported in the 64-bit version Windows Server 2003
 - Please note that Express is a 32-bit application that will run under WOW64. WOW64 is a compatibility environment provided by the operating system that allows a 32-bit application to run on a Windows 64-bit operating system.
- Microsoft InfoPath Native Application support
 - Added support to process InfoPath files via Native Application (InfoPath)
 - NOTE: Currently, Extended File Type Support (EFTS) does not support InfoPath input files
- Express Tour
 - Added new evaluation dashboard application that provides insight into various features of the Express application in an easy-to-use, intuitive web interface
- Automated Incident Information Collection (AIIC)
 - Added a method to collect detailed debug logs automatically for rendering failure issues
 - Input files and related log files are stored under distinct AIIC folders if a rendering error occurs
 - This new feature is available under Tools -> Application Settings (within Express)
- User Defined Variables
 - Added the ability to define custom variables within an XML Job Ticket that are applied when the ticket is processed
 - User Defined Variables are limited to CDATA type attributes (please refer to the AdlibExpress.dtd)
- New requirement for Microsoft Windows Server 2000
 - Express now requires Windows Server 2000 Service Pack 4 to be installed (previous requirement was Service Pack 3)
- Updated Output to Text, PDF Info (Text) and Text Conversion engines
 - The Output to Text, PDF Info (Text) and Text Conversion (TXT -> PDF) engines have been updated (104578)
 - This update may produce slightly altered results from previous versions of Express
- Content Hyperlinks
 - The Content Hyperlinks default value setting has changed from Disabled to Enabled
- PDF Downsampling default
 - The PDF Downsampling default value setting has changed from Disabled to Enabled
- PDF Version default
 - The PDF Version label default value setting has changed from 1.3 to 1.4

Version 4.2

- Adlib License Manager:
 - New License Activation method
 - The Adlib License Manager is a Wizard that allows the User to:
 - Evaluate the software by activating a local 30-day trial period
 - Activate a license, transferring it from the Adlib license server to your computer
 - Rehost a license, temporarily returning it to the Adlib license server so that it may be re-activated on a different computer
 - Return a license, permanently returning it to the Adlib license server
 - The License Manager provides two different activation methods:
 - Both methods require an Activation ID to be entered to register the software

- with a non-Evaluation license
 - Adlib provides the Activation ID when the customer purchases a license for the software
 - Online: The computer the software is being installed to has internet access
 - An activation response will be sent automatically (via the internet) to the Adlib license server to activate the software
 - Offline: The computer the software being installed to does not have internet access
 - Once the Activation ID has been entered an activation request file will be generated
 - The activation request file must then be sent to Adlib
 - Adlib will return an activation response file that will activate the software
- Debug Mode:
 - When Express Debug Mode was enabled, the OCR Process Log and OCR Document Log did not reflect this change
- Lotus Notes Processing:
 - Enabling/Disabling the ProcessAttachments attribute in a Job Ticket was not consistently reflected in the output

Version 4.1

- Enhanced Script Functionality:
 - Added new element JOB:SCRIPTS which enables users to specify multiple pre and post job scripts
 - Script(s) can now be passed to Express for execution via a Base 64 encoded stream
 - Script(s) and resource documents must be contained in a ZIP file prior to encoding
 - Deprecated previous element JOB:SCRIPTSETTINGS from the DTD
 - Backward compatibility is available if a prior version of the DTD is used or if the DOCTYPE definition is omitted from XML job ticket
 - Error Settings:
 - New attribute, CANCELJOBON0BYTEFILE, added to DTD for the following element JOB:ERRORSETTINGS
 - Jobs can now be canceled or allowed to continue if one of the files specified in the DOCINPUTS collection are 0 bytes in length
 - A "document substitute" (via JOB:DOCREference) can be inserted at the point where the 0 byte file is defined
 - Express Recognition:
 - Enhanced PDF document support
 - Improved stability
 - Changed object model from an "in-process" to an "out-of-process" server
 - Upgraded Nuance recognition engine
 - PDF/A document creation with an output intent of sRGB is now supported
 - PDF/A document creation with an output intent of CMYK is not supported
- Content Hyperlinks:
- Word documents with internal/external hyperlinks within footnotes and endnotes are now preserved in the resulting PDF
- PDF/A Support:
 - According to Technical Corrigendum 1 of the ISO 19005-1:2005 specification:
 - The mapping of PDF Subject and Keywords metadata elements to XMP has now been changed to:
 - Subject => dc:description["x-default"]
 - Keywords => pdf:Keywords

- Previously the mapping of PDF Subject and Keywords metadata elements was:
 - Subject => dc:Subject
 - Keywords => pdf:Keywords
- PDF/A document creation with an output intent of CMYK is not supported via ExpressRecognition
- PDF Bookmarks:
 - PDF documents with a pre-existing bookmark hierarchy were shifted one level when merged together with other documents (issue introduced in 4.0.1)
- Importing Express Settings:
 - Consolidated Express and ExpressRecognition settings files into a single settings file
 - Enhanced validation for imported settings files
- Content Bookmarks/Hyperlinks
 - Bookmark and Hyperlink destinations are now formatted in platform independent path structures
- Installation:
 - Express could not be installed if Microsoft .NET Framework 3.5 was on the system
- MS Excel Processing:
 - Date fields were not maintained when processing on a System configured with the German (Germany) locale
- MS Word Processing:
 - Hyperlinks to PDF files that contain space characters in the filename were translating to %20 characters
 - Hyperlinks were being generated for Non-linked cross references
- Content Bookmarks:
 - Some Unicode characters were not properly represented in the bookmark text
 - Unicode characters that are supported in the PDF specification for bookmark text will now be properly represented
 - NOTE: This issue only occurred when processing *PDF input* files that contained bookmarks.
- HTML Output:
 - If an HTML support file name exceeds the Windows Filename limit, the support files are being truncated to Windows 8.3 file name format. Thus, when viewing the HTML file, images (for example) will be missing.
 - When 'Split Into Single Page Files' was enabled the navigation images were not appearing
- Text Output:
 - The 'Tabloid' selection of Page Size was not working ('B Size' was always working)
- Folder Processing Options:
 - The value for 'Check Input Folder Every N Seconds' was not being respected (was always defaulting to 1 second)
- Overlays:
 - Fixed an issue where HTML and MHT files were not being applied if 'Page Scaling' was enabled and 'Apply After Transformation' was set to 'Yes'
 - PDF Overlays that contain Text Fields were incorrectly oriented on landscape pages (if the Input file contained mixed orientations)
- Custom Bookmarks/Hyperlinks:
 - Bookmarks/Links that contain a destination page were not properly navigating to the specified page when opening the PDF in Acrobat within a Web Browser.
- MSG Processing:
 - The 'Sent On' date in the Output file was improperly reporting 'August 30, 2005' for MSG files that were not RFC 822 formatted (ARPA Internet Text Messages)

- Main form:
 - Added 'Convert File(s) button
 - Added 'View Process Log' and 'View Document Log' buttons
- Configurations:
 - Added 'Enabled' property for Configurations which allows the User to enable/disable specific Configurations
 - NOTE: Removed the 'Enable Multiple Option Configurations' checkbox from the Main form.
- Express Server Options form:
 - Changed the tab layout to reflect the new license schema
- Overlays:
 - HTML and MHT files now have extended functionality when specified as Overlays:
 - The Header/Footer/Watermark macros are now accessible (i.e. &[Page], &[Date], etc.)
 - Added the ability to match the Overlay page size to the specific page sizes in the source document. The Overlay can now conform to each page's dimensions for a better fit.
 - See XML Job Ticket User Guide for more details (OVERLAY element section)
- Folder Processing Options:
 - The default value is now "Process Upon Folder Change":
 - NOTE: Previously the default value was "Check Input Folder Every n Seconds"
- Email Processing and "Process Upon Folder Change":
 - Email Processing and the "Process Upon Folder Change" option cannot be enabled at the same time
 - The User is prevented from enabling these options at the same time
- Express Problem Submission:
 - The Express Problem Submission generator has been updated to gather information regarding the new licensing schema
 - Added "Original System Language" and "User Language" information for "OS Information" in the Problem Submission report.
- PDF Information Extraction:
 - Improved performance of Hyperlinks and Pages data extraction
- MS Word Processing:
 - Resolved an issue where certain MS Word documents were being misidentified as OLE BIFF documents and therefore not opened with the provided open password.
- Output to Printer:
 - Add a registry switch to allow the User to turn off the page scaling to printer options behaviour (PrintInternalShrinkToPrintable):
 - 0 = Shrink to Paper size
 - 1 = Reduce to Printer Margins
- MSG Processing:
 - Fixed an issue where the "Sent On" date value was being reported inconsistently (Local Time / GMT).
- PDF Processing:
 - Resolved an issue where some PDF documents were being misidentified as OLE BIFF documents when Express Server is registered without EFTS

- WordML Processing:
 - Resolved an issue where WordML documents would fail to convert
- Document Validation:
 - Resolved an issue with the pagination validation of blank Word documents. The MS Word document would fail pagination validation if the MS Word document contained no content.
- Office Output:
 - Resolved an issue where the page parsing algorithm would remove numbers that preceded a hyphen
- Page extraction:
 - Resolved an issue with page extraction where if the first page was extracted and contained two JavaScripts (one referencing page 1 and the other referencing page 2) both JavaScripts would still exist in the extracted page.
- PDF Version compatibility conversion:
 - Resolved an issue converting an extremely large PDFVersion 1.3 document to PDFVersion 1.4. The document would fail to process due to time out expiration.

Version 3.9

- New XPS Add-on
 - XPS Creation:
 - Support for creating Microsoft XPS documents
 - NOTE: See Appendix L for more details
- New PDF/X Add-On:
 - PDF/X Creation:
 - Support for creating PDF/X compliant PDFs (PDF/X-1a:2001 and PDF/X-3:2002)
 - This Add-on is currently only accessible through XML Job Tickets
 - NOTE: Creation of PDF/X output is currently supported for Microsoft Office 2003 and Microsoft Office 2007 documents (Word, Excel, PowerPoint, Visio and Project) under English language versions of Microsoft Windows.
- PDF Version Downgrading:
 - Added the ability to downgrade PDF source documents to PDFs that are compliant with the PDF Version 1.4 specification.
- MS Word Processing:
 - Added the ability to translate MS Word Comments into PDF Pop-up Note annotations when rendering to PDF
- MS Excel Processing:
 - Added the ability to only render 'Active' (selected) worksheets
- MS Visio Processing:
 - Added the ability to render a specific page range
- Added support for Microsoft Project 2007 as a Native Application
- Font embedding:
 - Added the ability to fully embed multi-language (Unicode) fonts
- PDF/A:
 - The PDF/A-1 Standard has been changed by ISO specific to the Namespace value in the RDF portion of PDF/A-1 documents. The proper namespace value is now:
<http://www.aiim.org/pdfa/ns/id/>
 - NOTE: This change effects both the creation of PDF/A PDFs as well as Preflighting (PDF/A validation)
 - Fixed an issue with multi-page TIFF images that resulted in invalid PDF/A output
- CAD Conversion:

- Page sizes for multi-page CAD files are now retained in the Output. Previously the page size of the first page was applied to each subsequent page in the Output.
- NOTE: This functionality applies when converting with Myriad or AutoVue as the Native Application
- Stamping Priority:
 - Added PRIORITY attribute to FOOTERS, HEADERS, OVERLAYS and WATERMARKS elements
 - This allows the selection of the order that the stamping features will be applied in.
- Overlays:
 - Fixed an issue where overlays were rotating if the document contained multiple orientations (ie. 1st page portrait, 2nd page landscape, etc.)
- Content Bookmarks:
 - Upon Document Validation failure content bookmarks were not being created
- Job Ticket ErrorHandling:
 - Added CANCELJOBONEXISTINGDOCOUTPUT attribute to ERRORSETTINGS element
 - This feature will chose to overwrite or leave the existing file, if the file already exists in the output location.

Version 3.8

- New Office Output Add-On:
 - Microsoft Word Document Creation:
 - Added support for creating Microsoft Word documents
 - RTF Document Creation:
 - Added support for creating RTF documents
- XML Logging:
 - Added a 'Result' attribute to the Process and Document logs.
 - NOTE: This 'Result' attribute will only be present if an error in processing occurs.
- Express now installs a stand-alone Submit a Problem application under the Adlib Express Program Group.
- MS Word Processing:
 - Added IGNORESAMEPAGEHYPERLINKS attribute under the MSWORDHYPERLINKS element
 - The 'AutomaticStylesAndLevels' value for CREATEBOOKMARKMODE was causing the Job Ticket to fail to process. This mode now processes successfully.
- Output to Image:
 - If PDF Security was selected the Output to Image conversion would fail
- DESTPRINTER:
 - Fixed an issue where Headers, Footers and Watermarks were always printing with 100% opacity regardless of the OPACITY value defined.
- DPI Job Ticket Processing:
 - Fixed an issue related to Document Bookmarks enabled and having more than 9 DocInputs defined in the Job Ticket. The Document Bookmark for all DocInputs beyond the initial 9 were navigating incorrectly.
 - The 'EmailMessage' attribute was not interpreting the || symbol for carriage returns
 - Added Adobe Illustrator 11 support
- Headers, Footers and Watermarks
 - Added support for PS Type 1 fonts (using the FONTNAMEEXTENDED)
- Headers, Footers, Overlays and Watermarks:
 - Layer: The 'Automatic' setting was always applying to the Foreground
- MSG Processing:
 - MSG files with digital signatures were failing to process
- RTFSETTINGS element:
 - Moved RTFSETTINGS element above the TEXTCONVERSION element (previously it was located after)

- Email Processing POP/SMTP:
 - The 'Preserve File Extension' option in the User Interface was not applying

Note: Express now requires Microsoft .NET Framework Version 2.0 (previously Express required .NET Framework Version 1.1)

Version 3.7

- MS Word Processing:
 - Added Native Application support for Microsoft Office 2007 (Word, Excel and Powerpoint)- Microsoft Office 2007:
 - Added support for Microsoft Open Office XML Formats (DOCX, DOTX, XLSX, XLTX, PPTX, PPSX, POTX)
 - NOTE: In order to process using Microsoft Powerpoint 2007 the 'Visual Basic for Applications' option must be installed via the Microsoft Office 2007 installer. This option is located under the 'Office Shared Features' drop-down.
 - KNOWN LIMITATION: There is an issue related to setting the DISPLAYCOLOR under the MSWORDHYPERLINKS element. The resulting hyperlink coordinates are not applying correctly when processing through Microsoft Office 2007.
- Cancel Job on PDF Security:
 - Added CANCELJOBONPDFSECURITY attribute under the ERRORSETTINGS element
- New Web Output Add-on:
 - Added support for creating HTML documents
- Added support for PDFs with Crop Boxes
- Added support for Header/Footer base filename macro
- Added support to maintain Overlay document actions (JavaScript) in the Output PDF
- New Feature Lock Add-on:
 - Added support to limit the available Express feature set allowable through the use of XML Job Tickets
- Added support for limiting the available Native Application, EFTS and IFTS file types to process through XML Job Tickets
- MS Word Processing:
 - Added bookmark grouping functionality
 - Added SEQ Field support for bookmark creation
 - Expanded Markup (Track Changes) functionality
 - Added support for MS Word TOC item line wrapping (the ability to wrap hyperlinks that span more than one line into a single link)
- Added PDF Version 1.7 (Acrobat 8.0)

Version 3.5

- PDF/A Creation:
 - Added support for creating PDF for Archival (ISO 19005-1:2005 - PDF/A-1b specification)
 - Added 'PDF Type' combo box to the User Interface ('PDF' or 'PDF/A-1b')
 - NOTE: HPGL, Crystal Reports, and PostScript files are not supported for PDF/A conversion
- PDF Preflight:
 - Support for reporting PDF/A-1b compliance
 - NOTE: This Add-on does not correct PDF DocInputs to make them PDF/A-1b compliant
 - NOTE: Does not verify annotation appearance information. (fonts associated with an annotation must be embedded)
- Added support for Unicode Job Tickets
- Added support to create log files in XML format
- Added .eml support (MS Outlook required)
- Added PDF Version 1.6
- Added 'DigitalSignatureFields' to PDF Info extraction

- Added 'XMP Metadata' to PDF Info extraction
- Added NoSourceTextHandling to Text Settings
- Added Actual Page Size to CAD Settings
- Added ability to Output to Zip file in Job Tickets.
- Added ability to specify OCR internal splitting options in Job Tickets.
- Added ability to specify Output to Text handling when no text is found.
- Added support for MSG processing when running as a service.
- Added support for SolidWorks 2006 documents
- Added support for Autovue 19
- Added support for eFax
- Added support for Myriad 7.0
- Added ability to add background color to PDF
- Added ability to archive output to zip file via Job Tickets
- Added ability to archive log files to zip
- Added ability to retain log files via Maximum file size
- Added URI support for Overlays and Associated Index
- Added ability to add import PDFInfo files into PDF documents (Bookmarks and Hyperlinks)
- Added support for defining the insertion position of the Table of Contents (TOC) using the PAGES attribute
- Added 'DisplayBookmarksPaneIfBookmarksExist' to the PDF Open Settings
- Added support for PDF Incremental Save (maintains the various iterations of the PDF throughout its life cycle)
- Modified User Interface including:
 - Updated PDF Options tab
 - Renamed PDF Print Options tab to "Document Options"
 - Added MSG Processing options to Document Options tab
 - Added PDF Information Output to Output tab

Version 3.2.0

- Added Print Publishing Add-On
 - Added Inserts Collection to XML Job Tickets
 - Added Printers collection to XML Job Tickets
 - Enables the ability to specify configuration settings and printer commands for Production Printers
- Added JobTicketTemplates to XML Job Tickets
- Added DocReferences to XML Job Tickets
 - Enables the ability to add support files to the Job Ticket that are required for rendering the DocInput correctly
- XML Job Tickets may be processed for TOC Creation or Insert Creation without specifying a DocInput
- Added ability to specify DocInputs for Page ranges (Header, Footer, Overlay, Watermark, OpenSettings, PDFSettings, PDFAttachment, Insert, SignatureField, Hyperlink) using the DocInput Name attribute for XML Job Tickets
- Added ability to define PDF Associated Index using DPI and XML Job Tickets
- Added MEASUREMENTSYSTEM (LocalMachine|Defined) "LocalMachine" and MEASUREMENTUNIT (Points|Micrometers|Millimeters|Centimeters|Inches) to XML Job Tickets
- Added ApplyAfterTransformation to: Header, Footer, Overlay and Watermark to specify the processing order

Version 3.0.0

- Added Advanced Publishing Add-On
 - Enables custom Bookmark creation

- Enables Table of Contents creation
- Enables Index creation
- Added Digital Signature Add-On
 - Added Support for Digital Signature signing (XML Job Tickets)
 - Added support to Signature Fields to be added to PDFs using DPI and XML Job Tickets
- Modified default folder for the Express installation from "C:\Program Files\Adlib\Adlib Express" to "C:\Program Files\Adlib\Express"
- Modified User Interface including:
 - Welcome Screen to provide quick instructions on how to use Express
 - Splash screen on load (new look and logo)
 - License Manager screen for registration
 - Added Custom Page Size to HTML Settings Form
- Expanded Watermark functionality:
 - Added Percent of Page property
 - Orientation (added more options based on Auto Center selection)
- Expanded Header/Footer functionality:
 - Added Opacity property
 - Added Orientation property
- Expanded Overlay functionality:
 - Added Alignment property
 - Added Horizontal and Vertical offset properties
- XML (class/element) structure changes include:
 - Moved all Bookmark related settings to its own class
 - Modified TOC to include TOCItems, TOCStyles and TOCLevels to allow for easier creation/manipulation of custom TOC settings
 - Moved Page Scaling and Page Content Scaling underneath a new Transformation section/element
- Added Welcome Screen that provides "quick start" instructions on how to process documents
- Added URINotification for XML Job Ticket processing
- Added Email Notification upon error
- Added ability to control the creation of Content Bookmarks for any combination of formats: MSExcel, MSWord, PDF
- Added PDF Information extraction to XML format
- Added OCR Zone Data extraction (PDF Information)
- Added support to specify to include Hidden Slides from PowerPoint documents
- Improved printing of dashed lines from MS Office applications
- Added support for embedding OpenType/CFF fonts
- Added support for PDF Attachments using DPI and XML Job Tickets
- Added support for inserted XMP Metadata into PDFs using DPI and XML Job Tickets
- Improved the Output as Image Only PDF setting so that annotations to the PDF such as Headers, Footers etc are preserved in the output PDF.
- Added support for Document Log settings using DPI and XML Job Tickets
- Added support for JPEG and PNG file formats for Image Output Add-On
- Added support for sizing Image Output files (Thumbnails) for Image Output Add-On
- Improved Image Conversion performance (TIFF to PDF) by 3x vs. 2.9.0
- Added support for URI (e.g. http, https, ftp, etc) as document output in DPI/XML Job Tickets
- Added the ability to specify the pages (e.g. TOC, DOC1, IDX) to apply Header/Footer, Watermark and Overlay
- Added support for MHT (Web Archive) Files
- Added support for MAX (ScanSoft Paperport File)
- Added Native Application Support for the following (see **Appendix**):
 - Open Office / Star Office

- Lotus Notes Database

Note: Contact Adlib for Version History prior to Express 3.0.0.

Appendix N – ExpressRecognition Version History

Version 2.8.0

- OPI Processing:
 - Fixed an issue where Zone statuses would not be written to the Adlib OCR Document or Process Log if a PDF Info file (for OCRZoneData) was not specified
- Envision OCR will no longer be offered as a standalone product and is now referred to as *Adlib ExpressRecognition Server*
- Added new properties/methods to facilitate complete integration with *Express Server*

Note: OMR (Optical Mark Recognition) is temporarily unavailable with this version

Version 2.7.1

- Barcode recognition now available with this version (was not available in 2.7.0)
- OPI now available with this version (was not available in 2.7.0)
- Enhanced logging, error reporting and error handling
 - Users of OPI will now have statuses associated with zones defined for documents, making it easier to diagnose issues
- Added support for PDF thumbnails
 - Including PDF thumbnails will increase file size
- Added support for internal splitting of all supported file types
 - Limited to PDF and TIFF in 2.5.0

Note: OMR (Optical Mark Recognition) is temporarily unavailable with this version

Version 2.7.0

- Initial Release
- Compatibility with *Express Server* and *Desktop* version 3.9.0
- Increased maximum supported image size to 28" x 28" or 8400 pixels by 8400 pixels
- Improved recognition quality
 - 28% fewer recognition errors than in 2.5.0
 - Enhanced accuracy and speed trade off options without affecting performance

Recognition Accuracy	Recognition Compatibility
2.7.0 Maximize Accuracy	21% Recognition enhancement over 2.5.0
2.7.0 Balance Speed And Accuracy	2.5.0 Maximize Accuracy
2.7.1 Maximize Speed	2.5.0 Balance Speed And Accuracy

- Support for grayscale and color barcodes with 20% accuracy improvement
- Added support for multiple recognition threads
 - Added Multiple CPU, Dual Core and Hyper Threading support
 - Increased overall performance by 20% - 35%
- Increased performance with multi-page document recognition
- Increased performance and precision for PDF output
- Added ability to embed PDF standard fonts
- Added MRC PDF Support
 - Multi-Raster Content technology segments PDF files into layers and applies different compression algorithms to each layer, optimizing both file size and quality
- Added 64 bit Intel and AMD CPU (running 32 bit Windows) support

- Inversion of PDF documents with a color output intent is no longer supported
 - Documents with a monochrome color output intent can be forcibly inverted
 - Inverted documents can still be inverted to black text on white background
- Increased file type support. Refer to **Appendix L – ExpressRecognition Supported File Types** for more detail.

Note: Barcode Recognition is temporarily unavailable with this version

Note: OMR (Optical Mark Recognition) is temporarily unavailable with this version

Note: OPI (Optical Processing Information) is temporarily unavailable with this version

Version 2.5.0

- Enhanced OCR Engine - improved stability, accuracy
- Updated Output to Image Engine
- Added support for JBIG2 compressed PDF files
- Added ability to create log files in XML format

Version 2.0.0

- Updated OCR Engine - improved stability, accuracy and barcode recognition
- Added XML, CSV output for Zone Information (OCRZoneData)
- Added Optical Mark Recognition (e.g. checkboxes)
- Added support for LZW compressed images
- Added JPEG Image Output
- Added PNG Image Output
- Added the preservation of annotations on PDF files
- Added log retention and compression
- Added splitting of large PDF files

Version 1.9.0

- 25% increase in recognition accuracy
- Improved performance when recognizing PDF documents
- Enhanced ability to recognize characters on pages with different text orientations
- Improved recognition reliability
- Support for Magnetic Ink Character Recognition (MICR) font, also called E-13B (typical on bank checks)
- Zonal OCR enhancements that normalize the location of the recognition zones for different document resolutions
- Improved accuracy when recognizing 1D barcode types

Version 1.8.0

- Added support for "User Dictionary"
- Added option to "Output as Image Only PDF"
- Added option to "Remove Blank Pages" when recognizing TIFF and PDF documents
- Added the ability to control the creation of an Image Only PDF when recognition fails
- Added the ability to define the pages to recognize when using OPI
- Added support for 2D barcode recognition. This requires the Barcode Add-on
- Enhanced the reliability when processing problem documents

Version 1.7.0

- Added selections to control the recognition of document types (Image, PDF, Document)
- Expanded language support to 114 Languages
- Added the selection of Languages
- Added a selection for Language Dictionary Correction
- Added Error Threshold settings
- Added Timeout period definition
- Added Process and Document log for OCR

Version 1.5.0

- Improved performance and Accuracy
- Optimized the processing of large TIFF (1000 Pages) files
- Added support for large page size
- Added optional Barcode recognition Add-on module
- Added ability to specify the zones and zone type using OPI

Version 1.0.0 (Initial Release)

- Added OCR supports for the PDF, Bitmap, JPEG, TIFF, DCX and PNG file types
- Added selections to separately control the recognition of Image and PDF document types
- Added support for 11 Languages
- Added controls for Accuracy, Despeckle, Deskew, Rotate, Invert and PDF color

Appendix O – Contact Adlib Software

Please contact Adlib Software if you have any questions or comments.

Web: www.adlibsoftware.com

Email: info@adlibsoftware.com for General Inquiries
sales@adlibsoftware.com for Sales Support
support@adlibsoftware.com for Technical Support

Phone: 905-631-2875

Fax: 905-639-3540

Toll Free: Sales: 1-866-991-1704
Support: 1-866-991-1705
(North America Only)

Mail: Adlib Software
215-3228 South Service Road,
Burlington, Ontario. L7N 3H8
Canada

Appendix P – Automated Incident Information Collection

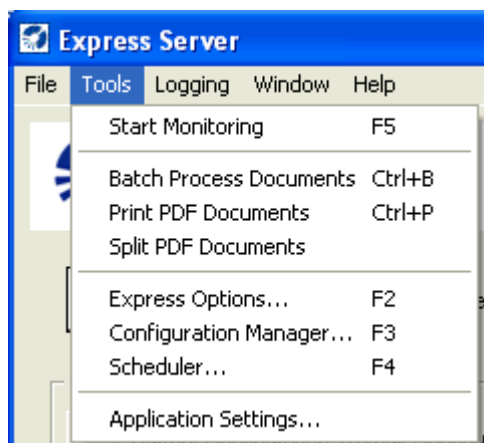
Overview

Express Server supports two modes of logging: normal and verbose. Most production deployments will run with the logs set to the normal mode for performance and log size management purposes. However, if an error occurs, collecting the detailed information supplied by verbose mode is often essential for troubleshooting and resolving the issue. In some cases it is simply not feasible to change the application configuration in a timely manner on the server to collect detailed logs by resubmitted failed jobs. For this reason, AIIC was added to automatically set verbose logging to “on” within the context of a problematic job, re-run the affected process, and collect the log information to a separate incident folder.

Using AIIC

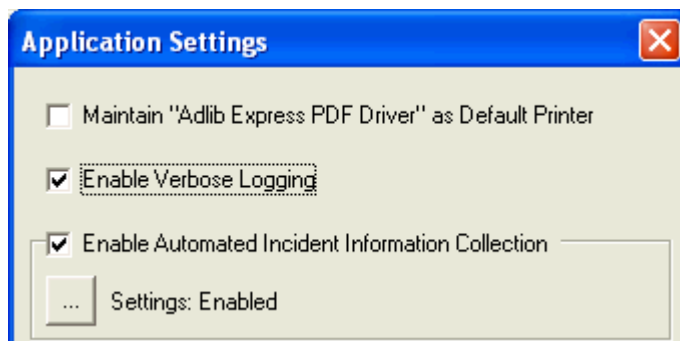
From the Express settings user interface, select Tools\Application Settings... to access the log settings screen.

Figure 62 – Tools Menu

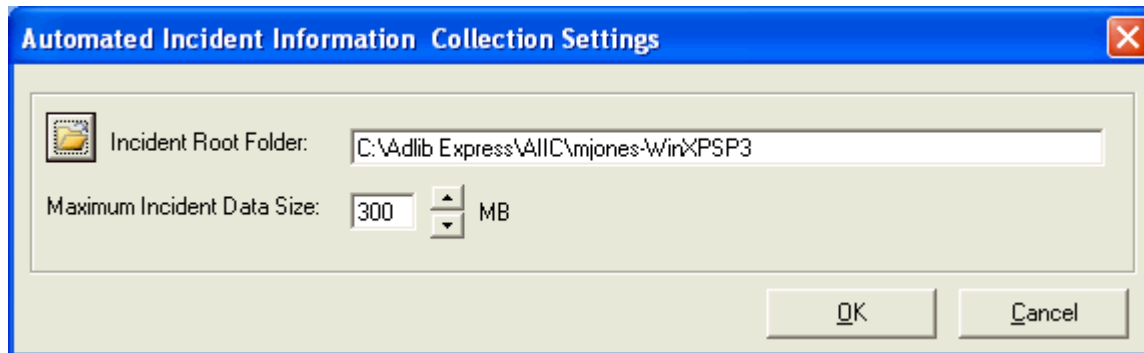


Notice the new check box “Enable Automated Incident Information Collection”, which is checked by default. “Enable Verbose Logging” can still be checked at the same time to always collect detailed logs regardless of whether an error occurs or not.

Figure 63 – Applications Settings form



Clicked the “...” beside the “Settings” caption to set AIIC settings.

Figure 64 – Automated Incident Information Collection Settings

Set the Root folder under which each incident folder will be created. As a best practice, we recommend setting a common root folder as a UNC path for ALL deployed *Express Servers*, then use this root plus the local server name as the root for each instance of Express. You can also specify the maximum total size of all incidents collected under the root. The system will automatically manage the collected incident by deleting oldest first to ensure the size remains at or below the set threshold. This defaults to 300MB of data.

Interpreting Logs Collected by AIIC

If AIIC is turned on, and an error occurs in the code during the processing of a job (currently AIIC only applies to job processing, start-up, shut-down, and other non-job-related processes will not be affected), a new incident folder will be created under the root you specify. The folder will have a unique name that looks something like this {9798CFA0-1187-4382-8432-39043D024EB9}. This system will retry the step that failed, and collect all logs in verbose mode, as well as supporting documents into this folder for the duration of the job being processed. You will find a reference to the incident folder logged into the file "Adlib Express Process Log.txt" in your configured Error folder, typically "C:\Adlib Express\Error". When assessing a potential problem, first look in "Adlib Express Process Log.txt" to locate the incident identifier in question, then find that folder under your incident root. In our example, the incident path would be: "C:\Adlib Express\AIIC\LOCALSVR\{9798CFA0-1187-4382-8432-39043D024EB9}\". You will find the detailed log files there as well as the input and output documents for the job, if applicable.

Including AIIC Data using "Express Problem Submission"

A new button, "Attach Incident" has been added to the Express Problem Submission Application. Click this button to browse for the desired AIIC incident folder, and select the folder (in our example above: "C:\Adlib Express\AIIC\LOCALSVR\{9798CFA0-1187-4382-8432-39043D024EB9}\") to include it and all of its contents in the problem submission. The folder will be included in the zip archive that is generated, and you will have an opportunity to view its contents and alter them if desired before following the existing process of manually sending the file to us, typically via email.

TIP: Use the technique in the above section "Interpreting Logs Collected by AIIC" to identify the correct incident folder before using the "Express Problem Submission" application.

Appendix Q – XSL Formatting Objects

Bookmarks

PDF bookmarks are supported as part of the XSL-FO specification. Adlib also supports user defined bookmarks as part of a Job Ticket. As a best practice, Adlib recommends that all bookmarks required to be in the final PDF be defined in the XSL-FO file submitted for processing or created by the XSL style sheet transformation of the source XML file. Since XSL-FO processing involves first creating a PDF from one of these two sources, there is no clear way for the user to define bookmark destinations for user defined bookmarks within a job ticket. For the bookmarks defined within the XSL-FO itself to be created in the final PDF for an XSL-FO job, ensure that the setting “Retain Existing PDF Bookmarks” is TRUE.

PDF Conversion Settings

Since this project results in a converter that generates a PDF outside of the typical Express PDF generation process, there are a few settings that Adlib supports for typical PDF conversion that are NOT supported in XML to PDF, these are noted below.

- On the PDF Compression dialog the following are NOT implemented:
 - Convert colors to gray scale
 - Page content compression
 - Downsample images to PDF resolution
 - Color Image Compression
 - Compression Level
- The Font Embedding Options have not been implemented as part of this phase, these options may be supported in a subsequent release. As a result of this, **PDF/A and PDF/X** output are **not supported** as they depend on font embedding. If PDF/A or PDF/X are sent as settings for the XSL-FO job, the job will fail.

If any of the non-supported settings are specified for a job being rendered via the XSL-FO conversion process, the settings will simply be ignored, and processing will continue.

XSL-FO User Configurable Settings

There is a single global setting that can be specified by the user as a registry value and is used to modify the validation behavior supported in the FO Processor. The value name is XslFoSetStrictValidation

and is defined under **Appendix I – Advanced Registry Settings**.

Help and Resources

When using the XML to PDF transformation via XSL-FO, it is important to note that the quality of the final output will be most significantly impacted by the style sheet that is used to transform the source XML document to an XML document that meets the XSL-FO specification requirements.

The Adlib component breaks the transformation up into two parts:

1. Transforming the XML to an XSL-FO structured document using a specified style sheet
2. Converting an XSL-FO structured document to PDF

Step one is optional, you can specify an XSL-FO structured document as the sole input. This breakdown allows for troubleshooting and resolution of issues at each step. When transforming the XML to XSL-FO (Step 1), if errors occur, the log can be used to troubleshoot any issues. Typically errors will be resolvable by modifying the style sheet that is used. Errors in Step 2 may also be due to the style sheet not producing "clean" XSL-FO. Again, use the log output to help troubleshoot.

Below is a list of resource that will help you understand the specification itself and also provide valuable information to enable you to create the highest quality style sheet possible.

For an overview of XSL-FO and an excellent tutorial see <http://www.w3schools.com/xslfo/default.asp>. Follow the links on that page to work your way through the introduction to XSL-FO and the tutorials.

There are also tools available that can help you generate style sheets, validate XML and XSL and help get your XML to PDF solution up and running quickly. Adlib does not endorse the use of any specific tool and provides this information for reference purposes only.

Style Sheet generators

These products provide visual designers that can be used with a source XML document to create a report layout, for example, and then save the defined layout in XSL-FO format as a style sheet that can then be applied to all XML documents with the same structure as the original.

<http://www.stylusstudio.com/videos/publisher1/publisher1.html>

http://www.stylusstudio.com/xsl_fo_processing.html

<http://www.ptc.com/products/arbortext/styler/>

<http://www.antennahouse.com/product/axfo40/axfo4top.htm>

<http://www.antennahouse.com/product/designer/>

http://www.altova.com/products/stylevision/xslt_stylesheet_designer.html

The team at Adlib hope you find the above resources helpful, and that our integration of XML to PDF via XSL-FO is a useful feature for you!