AcroTeX.Net

AeB Pro eEnvelope System

AeB Pro Family

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1. Introduction

The AeB Pro eEnvelope System (or APES :-) is a package (the aeb_envelope package) for creating electronic envelopes, eEnvelopes, for mailing over the Internet.

An eEnvelope is an attractive PDF that typically looks like an envelope, it is addressed and contains embedded files intended for the recipient. Use an eEnvelope to sent correspondence, pictures, document of all types. We here at AcroTEX.Net use them to send updated versions for developing packages or files.

Four eEnvelopes are distributed with this package, with an option for a document author to create a custom envelope for use.

AeB Pro is essential for attaching documents to the envelope.[1] After attaching files, a mail dialog box opens and the document author is asked to send the eEnvelope to the recipients; there it goes!

Normally, the attachments are not secured; since Acrobat Pro is required for this system, a document author can encrypt the attachments with a password, know only to the recipients. See Section 7, 'Securing your Attachments' on page 8.

2. Requirements

As mentioned earlier, the AeB Pro is essential, this means that the document author must use Acrobat Pro 7.0 or later (possibly only version 6 is necessary) as the PDF viewer and must use Acrobat Distiller to create the PDF document.

A minimal preamble would look like this

```
\documentclass{article}
\usepackage[
    driver=dvips,              % or dvipsone
    web={pro,usetemplates},
    attachsource={<attachments>},
    attachments={<attachments>},
]{aeb_pro}
\usepackage{aeb_envelope}
```

The Web package is used to set the page size for the envelope, the pro and usetemplates options are typically used (though the pro option is not required). The attachsource and attachments options of aeb_pro allow you to attach whatever files are desired to the envelope. See the aebpro_man.pdf for details of these options.

3. Options

The package has several useful options for the document author to use.

[1] In fact, this package just is a simple application of AeB Pro.

1. `donotmail`: If this option is used, the mail dialog does not appear. This gives the author the opportunity to modify the envelope with its attachments; for example, the author might want to add some comment notes to the envelope; or more importantly, might want to add security, which encrypts the attachments and adds a password to open the attachments. There are other security measures that can be taken as well. See 'Securing your Attachments' on page 8.

   Upon completion, open the JavaScript Debugging Window, formerly known as the console, using `Ctrl+J`, where the JavaScript function `mailItNow()` appears. Move the cursor to this line and press `Ctrl+Enter` to execute this JavaScript, this will start the mail dialog box.[2]

   When this option is not taken, the default is to bring up the mail dialog box after the eEnvelope is assembled.

2. `path2folder`: The path to the location of the folder holding the eEnvelope template to be used. This option is typically not needed if all envelope templates reside in the same folder. The easiest way to specify the location of this folder is to use the envelope.cfg file
   After installing the AeB Pro eEnvelope distribution, open the file envelope.cfg, contained therein. It should read:

   ```
   \ExecuteOptionsX{path2folder=/C/acrotex/aebpro/AcroEnvelope/envelopes}
   ```

   Edit this file to reflect the path to the envelopes folder on your system. This is necessary for Acrobat to find the envelope files. The path is expressed in *device independent path* scheme.

3. `envelope`: Specify the envelope to use. Recognized values are `aeb1`, `aeb2`, `adobe1` and `adobe2`. See Figure 1 on page 5.

   ```
   \usepackage[envelope=aeb1]{aeb_envelope}
   ```

   If one of these four values is not used, it is assumed that a custom template is being used. For example,

   ```
   \usepackage[envelope=myCustomEnv.pdf]{aeb_envelope}
   ```

   In this case, `aeb_envelope` will use `myCustomEnv.pdf`, and will combine this file with the path specified in the `path2folder` or in `envelope.cfg`.

4. The Control Document

The eEnvelope is created using what will be called a control document. Below is a typical control document.

[2] The parameters for the mail dialog box are held as a global variable that will be remembered as long as Acrobat is open. The values of the parameters are lost when Acrobat closes.

Figure 1: eEnvelopes: aeb1, aeb2, adobe1 and adobe2

```
\documentclass{article}
\usepackage[
    web={pro,usetemplates},
    attachsource={<attachments>},
    attachments={<attachments>}
]{aeb_pro}
\usepackage[envelope=aeb1]{aeb_envelope}

\mailTo
{
    UI=true,
    ToName=All AeB Pro Users,
    From={D. P. Story at \href{http://www.acrotex.net}{AcroTeX.Net}},
    To=dpstory@acrotex.net,
    CC=dpstory@acrotex.net,
    BCC=dpstory@acrotex.net;gilg@acrotex.net,
    Subject=Testing the AeB eEnvelope Delivery System,
    MessageEnvelope=Attached to this PDF are the documents you ordered.,
    MessageBody={%
        This is the latest communication from AcroTeX.Net.\n
        Open the PDF attachment, the documents you ordered are attached
        to it.\n\n
        dps, dpstory@acrotex.net
    }
}
\assembleEnvelope
```

4.1. The Components Explained

Preamble. Lines 1–7: The `aeb_pro` package is first introduced with some suggested options. It is here the files are specified that are to be attached to the eEnvelope. The `usetemplates` of Web is required. In line 7, the `aeb1` eEnvelope is selected.

Specifing eMail Parameters. Lines 9–25: The `\mailTo` command with many key-values is used to populate the eEnvelope and the mail dialog box. These are:

1. `UI`: A Boolean switch, if true, the default, the user interface for the dialog box will appear. The document can be edited before the mail is sent. If false, an alert box appears requesting the document author to sent the mail, the author has the option of not sending it. (If the default mail client is something other than a version of Microsoft Outlook, `UI=false` may not work, or may crash Acrobat.)
2. `ToName`: The name (not an email address) of the recipient(s). This name will be typeset by TEX.
3. `From`: The name (not an email address) of the sender. This name will be typeset by TEX.
4. `To`: The email address(es) of the recipient(s). This will appear in the mail dialog box. Multiple recipients are separated by semi-colons.
5. `CC`: The email addesss(es) of any recipient(s) who should receive a (carbon) copy. Multiple recipients are separated by semi-colons.
6. `BCC`: The email addesss(es) of any recipient(s) who should receive a blind (carbon) copy. Multiple recipients are separated by semi-colons.
7. `Subject`: The subject of the email message, this will appear in the subject field of the mail dialog box.
8. `MessageEnvelope`: A short message that appears on the eEnvelope. This message will be typeset by TEX.
9. `MessageBody`: A message to appear in the body of the email (dialog box).

Final Assembly. Line 26: The last command in the file is `\assembleEnvelope`. Note that there is no `\begin{document}/\end{document}` pair; in fact, `\assembleEnvelope` contains this required environment. The definition of `\assembleEnvelope` is

```
\newcommand{\assembleEnvelope}
{%
    \aebenvDimensions
    \setlength{\unitlength}{1pt}%
    \AddToTemplate{addressEnv}
    \inputEnvExecJS
    \par\begin{document}\strut\end{document}
}
```

The first command \aebenvDimensions sets the page size and margins using Web package syntax. The command \AddToTemplate sets the page template (also from Web), which positions the address data corresponding to the eEnvelope selected; \addressEnv expands to the template. If you as a document author want to create a custom eEnvelope, these two commands can more conveniently be accessed through the user-friendly commands \setEnvDimensions and \setAddressEnv. See the section 6, page 8, for additional details.

4.2. How it works

The control document basically is a blank document with the dimensions specified by the \aebenvDimensions command. The template then places the address information that is to appear on the envelope; it uses a picture environment (created by the usetemplates option) and text blocks are \put on the page. Finally, after the document is distilled, docassembly JS is executed, among the tasks performed is the JavaScript retrieves the eEnvelope and uses the eEnvelope PDF file as a background to the blank page. Cool, right?

4.3. Other Commands

There are several other commands that may be of use.

```
\setEnvDimensions{<width>}{<height>}
```

Command Description: Used when author has created a custom eEnvelope template, the dimensions of the source file for the eEnvelope must match those of the eEnvelope template. Use this command in the source file of the eEnvelope. <width> is the width of the eEnvelope and <height> of the eEnvelope. See the example aebEnv_demo.tex for an example of usage.

```
\setAddressEnv{<\put commands>}
```

Command Description: Used when author has created a custom eEnvelope template. Use this command to put the eEnvelope address elements on the custom envelope. The argument is a series of \put commands. See the example aebEnv_demo.tex for an example of usage.

When creating a custom eEnvelope, use \setAddressEnv to place the address elements on the envelope. The address data is entered through the \mailTo command. These populate internal text macros, which in turn, are used to place the address elements on the enveloped. The Table 1 on page 8, shows the relationship between the keys of \mailTo and the text macros they populate.

```
\cs{toggleAttachmentsPanel}{<color>}{<text>}
```

Command Description: Toggles the Acrobat/Adobe Reader attachments panel. The first argument is the named color the text is to appear in, and the second parameter is the text to appear. For example, \toggleAttachmentsPanel{red}{Click to view attachments}.

Key	Text Macro
ToName	\mailtoName
From	\mailtoFrom
MessageEnvelope	\mailtoMessageEnvelope

Table 1: Text Macros of \mailTo

5. Examples

This distribution comes with several examples, located in the examples folder:

1. ape1.tex: A general file for sending an eEnvelope.
2. ape2.tex: A general file for sending an eEnvelope, it uses \toggleAttachmentsPanel so the recipient can view the attachments panel.
3. ape3.tex: A letter that illustrates linking to an attachment. The recipient "opens the envelope" by clicking on the link, and the PDF attachment appears. In this case, the attachment is a short letter.
4. ape4.tex: Demonstrates how you can modify one of the standard envelopes, in this case, form fields are introduced.

In the custom folder, you will find the following files:

1. aebMyEnv.pdf: A "custom" eEnvelope template.
2. aebMyEnv.tex: The source file for the aebMyEnv.pdf. The source has a short tutorial on how the eEnvelope was developed. The source file uses aebMyEnv.eps, airmail_bg.eps and AeST_Logo.eps
3. myEnv_demo.tex: A source file that uses the custom eEnvelope aebMyEnv.pdf as a template. The source file contains details instructions on how to use a custom template.

6. Creating your own eEnvelope

Should you wish to create your own eEnvelope and integrate it into the AeB Pro eEnvelope System (APES), see the file aebMyEnv.tex. This file, which creates the eEnvelope aebMyEnv.pdf, contains detailed instructions of the steps taken to create aebMyEnv.pdf.

The file myEnv_demo.tex contains detailed instructions on how to use the custom eEnvelope aebMyEnv.pdf

7. Securing your Attachments

In this section we discuss one method of securing your attachments, Password Encryption, should the value of the document be such that security is needed. Another method, Certificate Encryption, can also be used, and will be only briefly described.

- To use **Password Encryption** to secure your attachments

1. Access the "Password Security - Settings" dialog in any of two ways:
   (a) Select Advanced > Security > Password Encryption from the menu system of Acrobat Pro.
   (b) Press `Ctrl+D` to obtain the Document Properties dialog box. Select the Security tab. Choose Password Security from Security Methods list.
2. In the "Password Security - Settings" dialog box, do the following:
   (a) Select Compatibility list Acrobat 7.0 and later, recommended
   (b) Select Document Components to Encrypt. (These is a choice of three, there is no point in encrypting the eEnvelope itself, so I recommend just encrypting the file attachments only.)
      - Encrypt all document contents
      - Encrypt all document contents except metadata
      - Encrypt only file attachments (Acrobat 7 or later compatible)
   (c) File Attachment Open Password: xxxxxxx (enter a password)
   (d) Verify xxxxxxx (the password)
3. Finally, save the document, perhaps a SaveAs is best.

Needless to say, write down the password, and pass it to the recipients, by phone, or a separate email.

Certificate Encryption is much more convenient. The author requests the certificates of the recipients, these can be saved in a database maintained by Acrobat. Through the Advanced > Security > Password Encryption menu system you can set the encryption of the attachments, and can specify the certificates of the recipients. Now when the recipients receive the eEnvelope, they can just open the attachments without the need for a password. If another party receives the eEnvelope and that party does not have one of the certificats listed, the attachments cannot be opened. Perfect for a business workflow where sensitive information and documents are passed around by email.

8. In Conclusion

If you create an interesting eEnvelope suitable for the general LaTeX public, send it to me and I'll put it in the distribution.

Hope you find this package useful, and…

now, I simply must get back to my retirement. 𝔒𝔖