

AcroTeX.Net

The fldigital Package

Creating Flash Digital Galleries

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End of Life of Software: After **December 2020**, Adobe no longer supports Flash Player (SWF, FLV files). This package uses custom SWF files (fdg_ht1.swf, fdg_nt1.swf, and fd_vt1.swf); as a result this package will no longer function in Adobe Acrobat Reader DC (dated Dec. 2020 or later). The package will continue to produce PDFs as designed, *but only if built using Acrobat XI (or a version Acrobat DC prior to December 2020) and viewed in Adobe Acrobat Reader XI (or a version of Reader DC prior to December 2020).* 

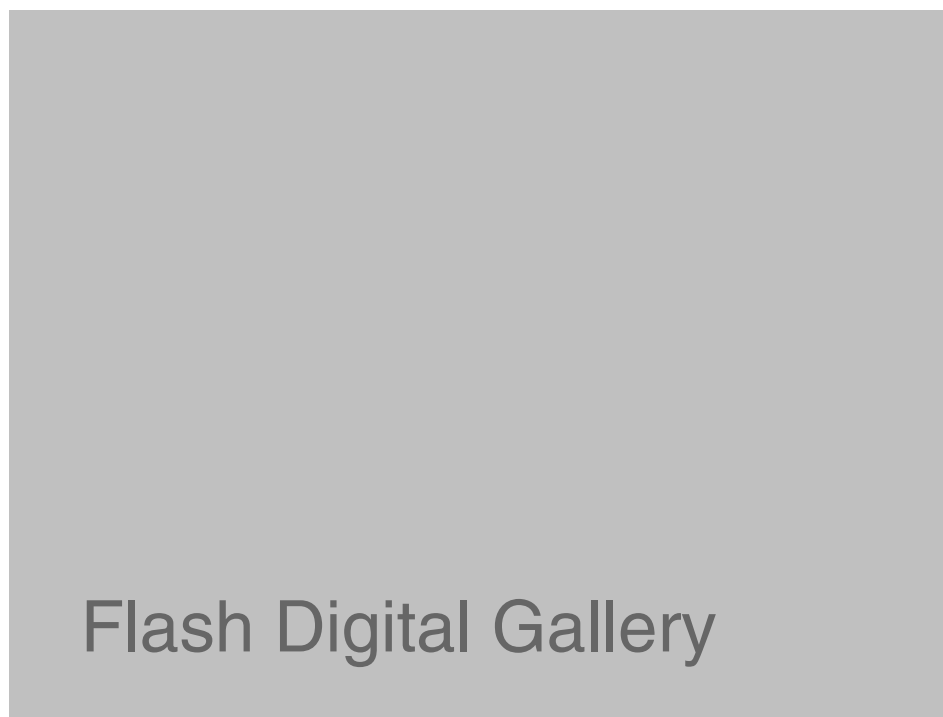
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1. Introduction

The `fldigial` package is the third application of `rmannot`; the others are the `AcroTeX` and `yt4pdf` packages.¹

The *Flash Digital Gallery* distribution consists of a `TeX` package, `fldigial`, several SWF files, a small collection of digital photos, and sample files. The purpose of this distribution is to provide a convenient way to create a Flash slide show. The distribution offers several design layouts of the slide show, called *galleries*. Below is an example of a slide show created by `fldigial` using source code from this document.



The photos themselves may be embedded in the PDF file (increasing the file size), or may be referenced with an URL. The gallery can be manually operated, or set to change photos at a regular interval.

There are steps for creating a flash digital gallery:

1. In the preamble of your document, specify the digitals (PNG, JPG, GIF) you want displayed in you gallery. This is entered by using the `\fdgXm1List` command. See the section '[In the Preamble: Populating the \fdgXm1List Command](#)' on page 4 for details.
2. In the body of the document, create a Rich Media Annotation (RMA) using the command `\fgRmAnnot`, defined in `fldigial`. For details of this command, see the section '[In the Body: Create a Gallery with \fgRmAnnot](#)' on page 7.

¹All packages mentioned here use SWF files; they all become obsolete after Dec. 2020.

2. Requirements

This package is part of AeB Pro, which means Acrobat Distiller is used to create the PDF; the package requires rmannot, which creates rich media annotations. Therefore, we require

Adobe Acrobat, version 9.0 or later

To use this package, the document author must have AeB and AeB Pro installed, as well as rmannot. The manual for rmannot needs to be read closely to install it properly and for it to function correctly.

3. Configuring your installation

In addition to configuring the rmannot package correctly, the fldigial package needs configuring as well. The fldigial comes with a configuration file fldigial.cfg. Open this file in your favorite editor to see

```
% fldigial config file. Delete the \endinput below and replace the path
% provided with the path to the swf folder of your fldigial installation.
% This path is used to locate the fldigial SWF files.
\endinput
\renewcommand{\fdgFolder}{C:/Users/Public/Documents/My TeX Files/
tex/latex/aeb/aebpro/fldigial/swf}
```

Edit this file so that \fdgFolder points to the swf folder on your computer.

4. In the Preamble: Populating the \fdgXMLList Command

The AcroTeX Flash Gallery SWF files take several arguments that are passed to it using FlashVars; one such variable is a reference to an XML file that contains the paths and captions to the digital files. When I began developing the package, the XML file was just hand-written in an editor; when I started to write the package, I included the \fdgXMLList command which writes the XML file as the source file is compiled.

At the bare minimum, the preamble must include a definition for \pathToSource and the \fdgXMLList command.

The definition of \pathToSource should be made using the \definePath command, defined in the eforms package. Here is one such definition to a sample file in this distribution.

```
\definePath{\pathToSource}{%
C:/Users/Public/Documents/My TeX Files/tex/
latex/aeb/aebpro/fldigial/doc}
```

The fldigial uses the Adobe Distiller to create the PDF file. Distiller only works with absolute file references; so, Distiller needs to know the location of XML file that is to be written by the \fdgXMLList command. *This definition is required.*

Another (optional, but recommended) definition is the path to the digital files. The photos may reside on your local hard drive, or on the Internet. In the example that follows, we illustrate the method of defining the paths; one for a local hard drive, the other for photos found online.

```
\definePath{\digisOnline}{%
  http://www.math.uakron.edu/~dpstory/photos/pa_demo}
\definePath{\digisLocal}{\pathToSource/digis}
```

These paths may then be conveniently included in the `path` key of the `\image` command, see below.

```
\fdgXmList[<kv-pairs>]{<name>}{%
  \image{...}
  \image{...}
  ...
  \image{...}
}
```

Command Description: When the source document compiles, this command writes an XML file to the source file's folder. The XML is later embedded in the PDF file when the file is distilled.

Parameter Description: The command has three arguments, the first is optional.

[#1] The optional argument labeled above as [`<kv-pairs>`] may include only two (Boolean) key-value pairs: `showcounts` and `nowrite`.

- `showcounts` When this key appears as `showcount` or as `showcount=true`, a count and a total count of the number of photos appearing in the gallery is displayed in the title bar. The count appears as (1 of 8), for example, but this can be redefined by the command `\fdgcntOf`. The default definition is

```
\newcommand{\fdgcntOf}[1]{\space(#1 of \fdg@numDigis)}
```

The default is that no count is written to the title bar of the gallery.

- `nowrite` You optionally include this key in the list if the XML has already been written to your source folder; however, if you change options, or change the key-value pairs of the `\image` commands, you will need to re-write the XML by removing the `nowrite` option.

#2 The second parameter, `<name>`, is a unique name for the gallery being created with the photos; for example `myVacation2010`. The name should follow the rules of a JavaScript variable.

#3 The third argument consists of a series of `\image` commands, each command takes three key-value pairs.

- `path`: The path to the digital file, the path may be that to a digital file on your hard drive, or on the Internet. A digital file may be a JPG, PNG, or GIF file. *This key is required.*

- `caption`: The (short) descriptive string to be displayed along with the associated photo. This key is optional, if not present, the filename of the digital file is displayed. See the optional key-values `nocaptions` and `nocaptionstext` of `\fgRmAnnot`.
- `online`: Use this key to indicate that the path key is an URL, and refers to a resource on the Internet. If this key is not present, it is assumed that path points to a file on the local hard drive, and Distiller will get that file and embed it in the PDF. If Distiller does not find the file, distillation is aborted and a message is written to the distiller log which suggests that it cannot find the file.

Below is an example of the `\fdgXmLlist` used for this document, I've modified the first two entries by removing the `online` key, and replacing `\digiOnline` with `\digiLocal` to demonstrate how you reference each type. (The definitions of `\digiOnline` and `\digiLocal` appeared earlier.) For this definition below, two files will be embedded (the first two), all others are online and the gallery will get them from the Internet.

```

1 \fdgXmLlist{myDigis}
2 {%
3   \image{path=\digiLocal/Chrysanthemum.jpg,
4     caption=Jürgen's Chrysanthemum}
5   \image{path=\digiLocal/Desert.jpg,caption=Desert}
6   \image{path=\digiOnline/Hydrangeas.jpg,caption=Hydrangeas,online}
7   \image{path=\digiOnline/Jellyfish.jpg,caption=Jellyfish,online}
8   \image{path=\digiOnline/Koala.jpg,caption=Koala,online}
9   \image{path=\digiOnline/Lighthouse.jpg,caption=Lighthouse,online}
10  \image{path=\digiOnline/Penguins.jpg,caption=Penguins,online}
11  \image{path=\digiOnline/Tulips.jpg,caption=Tulips,online}
12 }
```

One comment is needed, refer to line (3). I've included my friend, Jürgen, name value of the `caption` key to demonstrate how to use special latin-1 characters. The u-umlaut (ü) may be entered by your keyboard, as I have, or by special command `\iso{252}`, which expands to `'ü`'. The interested user is referred to these two online documents.

http://en.wikipedia.org/wiki/List_of_XML_and_HTML_character_entity_references
<http://www.html-entities.com/>

The `\iso{<dec>}` command expands to `&#<dec>`; see above URLs to determine the correct value of the `<dec>` to get the desired glyph.

The second comment concerns the single apostrophe ('). The captions are enclosed in single quotes, so if you want an apostrophe, you must use the the character entity `''`', or you can use `'`, as I did above. This special command, redefined within a group, expands to `''`'. Thus, we can write `Jürgen\'s`, or `Jürgen's`, or `J\iso{252}rgen's`, etc. If you want to use an ampersand, use `'&`'.

OK, that's it for the preamble; on to `\fgRmAnnot`!

5. In the Body: Create a Gallery with `\fgRmAnnot`

To create a flash gallery of photos, use the command `\fgRmAnnot`, its definition uses the command `\rmAnnot`, which is defined in the `rmannot` package.

```
\fgRmAnnot[<kv-pairs>]{<name>}
```

Parameter Description:

1. The first (optional) parameter is used to pass the key-value pairs of the `\rmAnnot` command. Additionally, the `galleryopts` key is recognized by the `\fgRmAnnot` command. The value of the `galleryopts` key consists of key-value pairs that customize the gallery.
 - `gallery`: The value of this key determines the layout of the gallery. Permissible choices are `vthumbs1` (vertical thumbnails on the left), `hthumbs1` (horizontal thumbnails below digital), and `nothumbs1` (no thumbnails, the caption bar is a multiline text field so longer captions may be displayed). More designs are possible, as my skill in Flash Professional Pro CS5 increases. The default is `vthumbs1`.
 - `trans`: This key determines the transition effects. Possible values are `Blinds`, `Fade`, `Fly`, `Iris`, `Photo`, `PixelDissolve`, `Rotate`, `Squeeze`, `Wipe`, `Zoom`, `Random`. The default is `Random`.
 - `transOn`: A Boolean switch, which if `true` (the default), transition effects are used to display the digital images. If `transOn=false`, no transitions are used.
 - `auto`: If `true`, the gallery will automatically display the list of photos at a regular interval. The user can stop the automatic display by pressing the pause button. The default is `auto=true`.
 - `delay`: The delay, in seconds, between the automatic display of photos. The default is 6 (seconds).
 - `captionalign`: The alignment of the text in the caption bar. Possible choices are `left` (the default), `right`, and `center`. This key-value pair is ignored for `gallery=nothumbs1`.
 - `nocaptions`: A Boolean key, which if `true`, the caption strings are not displayed in the caption bar.
 - `nocaptionstext`: If the `nocaptions` key is passed, you can populate the caption bar with a static string. Thus, `nocaptionstext=Hi Mom!` displays the string 'Hi Mom' in the caption bar for each and every photo.

See the manual for the `rmannot` package for more details on the key-value pairs that can be passed through the optional first parameter.
2. The `<name>` argument matches the `<name>` argument of a `\fdgXm1List` declared in the preamble.

The example that appeared earlier in this manual has code

```

1 \resizebox{.9\linewidth}{!}
2 {%
3   \fgRmAnnot[%
4     galleryopts={gallery=vthumbs1,auto=false,captionalign=center},
5     posternote={Flash Digital Gallery},enabled=pageopen
6   ]{myDigis}
7 }
```

Line (1) shows how the gallery may be resized used using `\resizebox` (or by using `\scalebox`). In line (3) we have the `\fgRmAnnot` command that creates the digital gallery. In line (4), we specify some of the `galleryopts` key-value pairs. The other key-value pairs (outside the scope of `galleryopts` are `\rmAnnot` key-value pairs. The second argument, the `<name>` argument is shown in line (6). This name matches the name declared earlier in the preamble in an `\fdgXmList` command.

6. Sample files

The following are the sample files shipped with `fldigial`:

- `fdg_demo.tex` lays out the basic structure for creating a *AcroTeX Flash Digital Gallery*. You can experiment with this file by changing the options.
- `fdg_demo_fit.tex` demonstrates how to have a one-page gallery whose size matches the size of the page.
- `fdg_min.tex` uses the minimum set of packages to generate an *AcroTeX Flash Digital Gallery*.

Advanced examples may appear, in time, at the [AeB Blog site](#).

That's all for now, I simply must get back to my retirement. 