# The l3pdfutils package pdf-utilities

The LATEX3 Project\*

Released XXXX-XX-XX

#### 1 **13pdfutils** documentation

This module contains a number of commands to create pdf structures with meaningful contents, currently xform, annotations and destinations.

#### 2 **I3pdfutils** implementation

```
(*package)
\langle 00=pdf \rangle
\ProvidesExplPackage {13pdfutils} {2020-12-04} {0.2}
  {PDF-utils}
```

#### Form XObject (pdfxform) 2.1

#### Form XObject / management 2.1.1

 $\pdf_xform_new:nnn \pdf_xform_new:nnn {\langle name \rangle} {\langle attributes \rangle} {\langle content \rangle}$ 

New: 2019-08-05 This command create a new form XObject that can be used as appearance or directly later. If the content contains BDC-marks it should not be given as a previously typeset box, but directly so that the names of the BDC-marks can be added to the resources of the xform. The xform will automatically include the resources of the current page. The content will be typeset in a hbox. With pdflatex and luatex the surrounding color is not stored in the XObject but should be if wanted added e.g. with \color\_select:n{.}. This keeps the option of color injection open.

 $\pdf_xform_use:n \pdf_xform_use:n {\langle name \rangle}$ 

New: 2019-08-05 This command uses (typesets) a previously created form XObject. If the surrounding color is different, it is injected in the XObject with the engines pdftex or luatex.

 $\pdf_xform_ref:n * \pdf_xform_ref:n {\langle name \rangle}$ 

New: 2019-08-05 Inserts the appropriate information to reference the xform  $\langle name \rangle$  in for example appearance dictionaries.

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```
\pdf_xform_wd:n \times \pdf_xform_wd:n \{\name\}\}
\pdf_xform_ht:n \times \pdf_xform_dp:n \times \ti
```

New: 2020-04-29 These command tests if an xform with name  $\{\langle name \rangle\}$  has been already defined.

```
_{5} \langle *package \rangle
6 \cs_new_protected:Npn \pdf_xform_new:nnn #1 #2 #3
       \__pdf_backend_xform_new:nnnn { #1 } { #2 } { } { #3 }
11 \cs_new_protected:Npn \pdf_xform_use:n #1
13
       \__pdf_backend_xform_use:n { #1 }
15 % expansion?
16 \cs_new:Npn \pdf_xform_ref:n #1
       \__pdf_backend_xform_ref:n { #1 }
18
19
20
  \cs_generate_variant:Nn \pdf_xform_ref:n {o}
  \cs_new:Npn \pdf_xform_wd:n #1
       \label{local_to_str:n} $$ \t_use:c { c_pdf_backend_xform_wd_ \t_to_str:n { #1 } _tl } $$
28 \cs_new:Npn \pdf_xform_ht:n #1
       \tl_use:c { c__pdf_backend_xform_ht_ \tl_to_str:n { #1 } _tl }
31
32
33 \cs_new:Npn \pdf_xform_dp:n #1
34
       \label{localization} $$ tl\_use:c { c\_pdf\_backend\_xform\_dp\_ \tl\_to\_str:n { #1 } _tl } $$
37 (/package)
```

### 3 Drop?

### 3.0.1 Doc View/Openaction

Dropped for now. Is probably not needed

```
\pdf_docview:nn \pdf_docview:nn {\langle page \rangle} {\langle view \rangle}
```

New: 2019-08-18 This command allows to set the OpenAction array. The  $\langle page \rangle$  is an absolute page number.  $\{\langle view \rangle\}$  a string for the destination without the leading slash. Examples are e.g. XYZ left top zoom or Fit. The OpenAction uses (and could also be set directly with) \pdfmanagement\_add:nnn{Catalog}.

```
38 ⟨*package⟩
39 %\cs_new_protected:Npn \pdf_docview:nn #1 #2
40 %
41 %
       \pdfmanagement_add:nnx {Catalog }{ OpenAction }{[\pdf_object_pageref:n {#1}~/#2]}
42 %
     }
43 (/package)
```

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\mathbf{C}
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                                     \tl_use:N ..... 25, 30, 35
```