The l3pdfutils package
pdf-utilities

The LaTeX3 Project*

Released XXXX-XX-XX

1 l3pdfutils documentation

This module contains a number of commands to create xforms.

`\pdf_xform_new:nnn` `\pdf_xform_new:nnn {⟨name⟩} {⟨attributes⟩} {⟨content⟩}`

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 {⟨name⟩}`

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 {⟨name⟩}`

New: 2019-08-05

Inserts the appropriate information to reference the xform ⟨*name*⟩ in for example appearance dictionaries.

`\pdf_xform_wd:n` ⋆ `\pdf_xform_wd:n {⟨name⟩}`
`\pdf_xform_ht:n` ⋆
`\pdf_xform_dp:n` ⋆

These command give back the sizes of the XObject. The values are stored in tl-variables with the unit pt and not in dimensions!

New: 2019-08-05

`\pdf_xform_if_exist_p:n` ⋆ `\pdf_xform_if_exist_p:n {⟨name⟩}`
`\pdf_xform_if_exist:nTF` ⋆ `\pdf_xform_if_exist:NTF ⟨name⟩ {⟨true code⟩} {⟨false code⟩}`

New: 2020-04-29

These command tests if an xform with name `{⟨name⟩}` has been already defined.

*E-mail: latex-team@latex-project.org

2 l3pdfutils implementation

```
⟨*package⟩
⟨@@=pdf⟩
\ProvidesExplPackage {l3pdfutils} {2020-12-04} {0.2}
  {command to create xforms}
```

2.1 Form XObject (pdfxform)

2.1.1 Form XObject / management

```
⟨*package⟩
\cs_new_protected:Npn  \pdf_xform_new:nnn #1 #2 #3
  {
    \__pdf_backend_xform_new:nnnn { #1 } { #2 } {  } { #3 }
  }

\cs_new_protected:Npn \pdf_xform_use:n #1
  {
    \__pdf_backend_xform_use:n { #1 }
  }
% expansion?
\cs_new:Npn \pdf_xform_ref:n #1
  {
    \__pdf_backend_xform_ref:n { #1 }
  }

\cs_generate_variant:Nn \pdf_xform_ref:n {o}

\cs_new:Npn \pdf_xform_wd:n #1
  {
    \tl_use:c { c__pdf_backend_xform_wd_ \tl_to_str:n { #1 } _tl }
  }

\cs_new:Npn \pdf_xform_ht:n #1
  {
    \tl_use:c { c__pdf_backend_xform_ht_ \tl_to_str:n { #1 } _tl }
  }

\cs_new:Npn \pdf_xform_dp:n #1
  {
    \tl_use:c { c__pdf_backend_xform_dp_ \tl_to_str:n { #1 } _tl }
  }
⟨/package⟩
```

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