

# The ltdocinit module

The L<sup>A</sup>T<sub>E</sub>X Project\*

Version 0.96m, released 2024-09-29

## 1 ltdocinit documentation

This small module defined `\DocumentMetadata` but the definition has been moved to latex-lab. The documentation can be found in `documentmetadata-support-doc-.pdf`

`\DocumentMetadata` is also used to activate the new PDF management code and it loads a number of required files for the PDF management code. As this forces the loading of the backend files, a backend which can't be detected automatically like `dvipdfmx`, must be set in the first `\DocumentMetadata`.

Here only a few newer keys are defined and the older `\DeclareDocumentMetadata` is provided.

The module also defines commands to store document properties in a global container.

This module will slowly disappear.

### 1.1 `\DocumentMetadata/\DeclareDocumentMetadata`

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`\DeclareDocumentMetadata` `\DeclareDocumentMetadata{<key-value list>}` (deprecated)

This is an older alias for `\DocumentMetadata`

Additionally to the keys described in `documentmetadata-support-doc-.pdf` the following keys/values are implemented

**pdfstandard** Choice key to set the pdf standard.

Starting with version 0.95s it is also possible to use the values `X-4`, `X-4p`, `X-5g`, `X-5n`, `X-5pg`, `X-6`, `X-6n`, `X-6p`, `UA-1`, for a PDF/X and PDF/UA standard. These keys set *only* the relevant XMP-metadata. In version 0.95z support for `UA-2` has been added but note that `UA-2` hasn't been released yet. It should be used only together with pdf version 2.0.

Beside this `A-1b`, `A-2a`, `A-2b`, `A-2u`, `A-3a`, `A-3b`, `A-3u` and `A-4` are accepted as values for A-standards. The casing is irrelevant, `a-1b` works too. Note that using these key doesn't mean that the document actually follows the standard. L<sup>A</sup>T<sub>E</sub>X can neither ensure nor check all requirements of a standard, and not everything it can do theoretically has already been implemented. For A-standard a color profile is included and the `/OutputIntent` is set and javascript action in hyperref are suppressed. The u variants do not force unicode, but they will pass the information

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to hyperref. The **a** variants do *not* enforce (or even test) a tagged pdf yet. More information can be found in the documentation of `l3pdfmeta`.

`pdfstandard` can be used more than once to set overlapping standards, e.g:  
`pdfstandard=A-2b, pdfstandard=X-4, pdfstandard=UA-1`

**xmp** A boolean, if set to false no XMP metadata are added to the PDF. The default is true. Details are described in the documentation of `l3pdfmeta`.

**testphase** This key is used to load testphase code. The values it accepts and their effect will change over time, when testphase packages are added or removed or when the code is moved into the kernel. New value here are

**new-or-1** This patches a few commands related to the output routing. They are needed for the tagging of paragraphs, for the tagging of header and footer and to allow the PDF management to insert code which avoids that links happening at page breaks spills into the header and footer. This code is also loaded by the following values.

**new-or** This loads more changes to the output routine required for the tagging. It is not compatible with every class! The code is also loaded by the **phase-II** value.

The **testphase** key can only be used in the first `\DocumentMetadata`.

**debug** This key activates some debug options. It takes a list of key-values as value. Currently the following keys are known:

**para** with the default and only value **show**. It will activate the `paratagging-show` option of `tagpdf`,

**log** with the values as described in the documentation `tagpdf`,

**uncompress** which does the same as `uncompress` as main key

**pdfmanagement** a boolean which allows to deactivate the pdfmanagement. This should only be done for debugging!

**firstaidoff** This accepts a comma lists of keywords and disables the patches related to them. More information can be found in the documentation of `pdfmanagement-firstaid`.

**xmp-export** This will export the XMP-metadata to a file `\jobname.xmpi`. with `debug={xmp-export=filename}` the file name can be changed. More information can be found in the documentation of `l3pdfmeta`.

## 1.2 Container for document properties

The module provides a container where classes, packages and users can store properties of the document which are perhaps of interest or use for other packages or the author.

The properties are stored with a key `label/property`. The values can be retrieved expandably.

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`\AddToDocumentProperties` `\AddToDocumentProperties[⟨label⟩]{⟨property⟩}{⟨value⟩}`

This stores `⟨value⟩` under the key `⟨label⟩/⟨property⟩`. By default `⟨label⟩` is the current package name `\@currname`. If another label is chosen, it should be one which avoids clashes with other packages using the container. The label `document` is reserved.

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<code>\GetDocumentProperties</code>	<code>\GetDocumentProperties{&lt;label/property&gt;}</code>
<code>\pdfmanagement_get_documentproperties:n</code>	<code>\pdfmanagement_get_documentproperties:n{&lt;label/property&gt;}</code>

---

Updated: 2022-10-09

Expands to the `<value>` corresponding to `<label/property>` in the container. If `<label/property>` is missing, this has an empty expansion. The result is returned within `\exp_not:n`, which means that the `<value>` does not expand further when appearing in an x-type argument expansion.

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<code>\pdfmanagement_get_documentproperties:nNTF</code>	<code>\pdfmanagement_get_documentproperties:nNTF{&lt;label/property&gt;}</code>
New: 2022-10-09	<code>&lt;token list variable&gt;</code> <code>{&lt;true code&gt;} {&lt;false code&gt;}</code>

---

If the `<label/property>` is not present in the document properties container, leaves the `<false code>` in the input stream. The value of the `<token list variable>` is not defined in this case and should not be relied upon. If the `<label/property>` is present in the container, stores the corresponding `<value>` in the `<token list variable>` without removing it from the container, then leaves the `<true code>` in the input stream. The `<token list variable>` is assigned locally.

---

<code>\ShowDocumentProperties</code>	<code>\ShowDocumentProperties</code>
<code>\LogDocumentProperties</code>	<code>\LogDocumentProperties</code>

---

This shows/logs the current content of the container.

## References

- [1] Frank Mittelbach and Chris Rowley: *L<sup>A</sup>T<sub>E</sub>X Tagged PDF — A blueprint for a large project*. <https://latex-project.org/publications/indexbyyear/2020/>

## 2 ltdocinit implementation

```

1 <@@=pdfmanagement>
2 <*header>
3 \ProvidesExplPackage{ltdocinit}{2024-09-29}{0.96m}
4   {Initialize document metadata}
5 </header>
6 <*package>

```

### 2.1 Variables

This variable definitions can be remove once latex-lab has been updated to provide them too.

<code>\g__pdfmanagement_firstaidoff_clist</code>	A list to store the firstaid code which should be disabled
7	<code>\clist_if_exist:NF \g__pdfmanagement_firstaidoff_clist</code>
8	<code>{ \clist_new:N \g__pdfmanagement_firstaidoff_clist }</code>
	<i>(End of definition for \g__pdfmanagement_firstaidoff_clist.)</i>

`\g_pdfmanagement_testphase_tl` a tl to store the testphase loading code so that we can load them at the end of the command.

```
9 \tl_if_exist:NF \g_pdfmanagement_testphase_tl
10 { \tl_new:N \g_pdfmanagement_testphase_tl }
```

*(End of definition for \g\_pdfmanagement\_testphase\_tl.)*

## 2.2 \DeclareDocumentMetadata

`\DocumentMetadata` is defined by the kernel. We only define the older alias `\DeclareDocumentMetadata`

### `\DeclareDocumentMetadata`

```
11 \NewCommandCopy\DeclareDocumentMetadata\DocumentMetadata
```

*(End of definition for \DeclareDocumentMetadata. This function is documented on page 1.)*

## 2.3 Container for document Properties

The container for the document properties is a prop

`\g_pdfmanagement_documentproperties_prop`

```
12 \prop_new:N \g_pdfmanagement_documentproperties_prop %
```

*(End of definition for \g\_pdfmanagement\_documentproperties\_prop.)*

### `\AddToDocumentProperties`

```
13 \NewDocumentCommand\AddToDocumentProperties{0{\@currname}mm}
14 {
15   \exp_args:NNe
16     \prop_gput:Nnn \g_pdfmanagement_documentproperties_prop
17     {
18       \tl_if_blank:eTF {#1}{top-level/}{#1/} #2
19     }
20     { #3}
21 }
```

*(End of definition for \AddToDocumentProperties. This function is documented on page 2.)*

### `\GetDocumentProperties`

```
22 \NewExpandableDocumentCommand\GetDocumentProperties{m}
23 {
24   \prop_item:Nn \g_pdfmanagement_documentproperties_prop {#1}
25 }
```

*(End of definition for \GetDocumentProperties. This function is documented on page 3.)*

For uses in modules (e.g. `l3pdfmeta`) we provide an `expl3` version without the `xparse` overhead:

`\pdfmanagement_get_documentproperties:n`

```
26 \cs_new:Npn\pdfmanagement_get_documentproperties:n #1
27 {
28   \prop_item:Nn \g_pdfmanagement_documentproperties_prop {#1}
29 }
```

(End of definition for `\pdfmanagement_get_documentproperties:n`. This function is documented on page 3.)

The following allows to retrieve the values with branching.

`\pdfmanagement_get_documentproperties:nNTF`

```

30 \prg_new_protected_conditional:Npnn
31   \pdfmanagement_get_documentproperties:nN #1#2 { T , F , TF }
32   {
33     \prop_get:NnNTF \g__pdfmanagement_documentproperties_prop {#1} #2
34     {
35       \prg_return_true:
36     }
37     {
38       \prg_return_false:
39     }
40   }

```

(End of definition for `\pdfmanagement_get_documentproperties:nNTF`. This function is documented on page 3.)

`\ShowDocumentProperties`

```

41 \msg_new:nnn { pdfmanagement } { show-properties }
42   {
43     The~following~document~properties~have~been~stored:
44     #1
45   }
46 \NewDocumentCommand\ShowDocumentProperties {}
47   {
48     \msg_show:nne {pdfmanagement}{show-properties}
49     {
50       \prop_map_function:NN \g__pdfmanagement_documentproperties_prop \msg_show_item:nn
51     }
52   }
53 \NewDocumentCommand\LogDocumentProperties {}
54   {
55     \msg_log:nne {pdfmanagement}{show-properties}
56     {
57       \prop_map_function:NN \g__pdfmanagement_documentproperties_prop \msg_show_item:nn
58     }
59   }

```

(End of definition for `\ShowDocumentProperties`. This function is documented on page 3.)

60 `\package`

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