## The pkginfo Package Version 1.0

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## Abstract

This package is aimed at package writers and offers a way to collect/document LATEX package's info (name, version, description, etc.) in a systemized way, including a mechanism to check package's version. Just a few functions are defined, to document/set package's info, retrieve them and to verify package's version (for instance, to verify if a loaded package is newer than a given reference).

## 1 Expl3 Commands

\pkginfo\_set:nn

```
\propty \pro
```

This will create a property list associated with  $\langle pack-name \rangle$ .  $\langle keyval-list \rangle$  might contain any set of keys, though, the functions below expect at least  $\langle version \rangle$  (for version checking) and  $\langle name \rangle$ ,  $\langle version \rangle$ ,  $\langle date \rangle$  and  $\langle description \rangle$  (for  $\langle PkgDescription \rangle$ ).

**Note:** An error will be raised if calling it twice for the same \( \pack-name \).

For Example:

\pkginfo\_get:nn \*

```
\project:nn {\langle pack-name \rangle} {\langle key \rangle}
```

This will retrieve (key)'s value. If (pack-name) or (key) doesn't exist, this will expands to nothing.

\pkginfo\_get:nnN

```
\label{lem:pkginfo_get:nnN} $$ \left( \operatorname{pack-name} \right) \left( \left\langle \operatorname{key} \right\rangle \right) \left( \left\langle \operatorname{tl-var} \right\rangle \right) $$
```

This will store  $\langle \texttt{key} \rangle$ 's value at  $\langle \texttt{tl-var} \rangle$ . If  $\langle \texttt{pack-name} \rangle$  or  $\langle \texttt{key} \rangle$  doesn't exist,  $\langle \texttt{tl-var} \rangle$  will be cleared.

These will verify if  $\langle pack-name \rangle$ 's  $\langle version \rangle$  (as stored with  $\langle pkginfo_set:nn \rangle$ ) is at least  $\langle min-version \rangle$ . It expects  $\langle version \rangle$  in one of three formats [v] digits [letters], [v] digits [letters] or [v] digits [letters] (the [v], if present, is ignored).

**Note:** An error will be raised if pack-name's info isn't defined, incorrect version format or \( \sqrt{min-version} \) isn't satisfied, in which case the error will note that your-pack needs version \( \sqrt{min-version} \) of \( \sqrt{pack-name} \).

<sup>\*</sup>https://github.com/alceu-frigeri/pkginfo

## 2 LaTeX2e Commands

```
\label{local_pkgSet} $$ \Pr{Set {\langle pack-name \rangle} } {\langle keyval-list \rangle}$
```

This will create a property list associated with \( \pack-name \). \( \keyval-list \) might contain any set of keys, though, the functions below expect at least (version) (for version checking) and (name), (version), (date) and (description) (for \PkgDescription).

**Note:** An error will be raised if calling it twice for the same \( \pack-name \).

For Example:

```
\PkgSet {pkginfo}
   name
                 = {pkginfo} ,
   prefix
                 = {pkginfo}
    date
                 = \{2025/10/19\},
                 = \{1.0\},
   version
    description = {Collecting~ package's~ info~ in~ a~ regular~ way}
```

```
\PkgInfo \PkgInfo {\langle pack-name \rangle} {\langle key \rangle}
```

This will retrieve (key)'s value. If (pack-name) or (key) doesn't exist, this will expands to nothing.

\PkgDescription

```
\PkgDescription \{\langle pack-name \rangle\}
```

These will typeset a small paragraph (for data validation) with following (pack-name)'s info: (name),  $\langle \mathtt{version} \rangle$ ,  $\langle \mathtt{date} \rangle$  and  $\langle \mathtt{description} \rangle$ 

For example:

```
Package pkginfo Version: 1.0 - 2025/10/19
\PkgDescription{pkginfo}
                                                    Collecting package's info in a regular way
```

\PkgRequired

```
\label{eq:pack-name} $$ \Pr{\text{Qour-pack}} {\langle pack-name \rangle} {\langle min-version \rangle} $$
```

These will verify if \pack-name's \version (as stored with \PkgSet) is at least \min-version. It expects (version) in one of three formats [v]digits[letters], [v]digits.digits[letters] or [v]digits.digits.digits[letters] (the [v], if present, is ignored).

> Note: An error will be raised if pack-name's info isn't defined, incorrect version format or \( min-version \) isn't satisfied, in which case the error will note that your-pack needs version \( \text{min-version} \) of \( \text{pack-name} \).