The pkginfo Package Version 1.0

Alceu Frigeri*

October 2025

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

```
\pkginfo_set:nn {\pack-name\} {\keyval-list\}
```

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

```
\pkginfo_get:nnN {\langle pack-name \rangle} {\langle key \rangle} {\langle t1-var \rangle}
```

This will store $\langle \text{key} \rangle$'s value at $\langle \text{tl-var} \rangle$. If $\langle \text{pack-name} \rangle$ or $\langle \text{key} \rangle$ doesn't exist, $\langle \text{tl-var} \rangle$ 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 $\langle pack-name \rangle$'s info isn't defined, incorrect version format or $\langle min-version \rangle$ isn't satisfied, in which case the error will note that your-pack needs version $\langle min-version \rangle$ of $\langle pack-name \rangle$.

^{*}https://github.com/alceu-frigeri/pkginfo

$\mathbf{2}$ 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), $\langle version \rangle$, $\langle date \rangle$ and $\langle description \rangle$

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 \(\text{pack-name} \).