The pkginfograb Package Version 1.1

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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

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 $\langle version \rangle$ or $\langle date \rangle$ (for version checking) and $\langle name \rangle$, $\langle version \rangle$, $\langle date \rangle$ and $\langle description \rangle$ (for $\langle pkginfograb_description:n \rangle$).

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

For Example:

\pkginfograb_req_version:nnn \pkginfograb_req_version:nnn {\gammayour-pack\} {\gammapack-name\} {\min-version\}

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

This will verify if $\langle pack-name \rangle$'s $\langle date \rangle$ (as stored with $pkginfograb_set:nn$) is at least $\langle min-date \rangle$. It expects $\langle date \rangle$ in one of three formats YYYY/MM/DD, YYYY-MM-DD or YYYY.MM.DD.

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 $\langle min-date \rangle$ of $\langle pack-name \rangle$.

\pkginfograb_set_aliases: \pkginfograb_set_aliases:

This will set LATEX 2_{ε} aliases for the expl3 in this package. Note that none of the commands in 2 are defined by default, except \PkgInfoSetAliases which is an alias for this command.

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

```
\propty \pkginfograb_get:nn \star \pkginfograb_get:nn {\pack-name\} {\key\}
```

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

This will store (key)'s value at (tl-var). If (pack-name) or (key) doesn't exist, (tl-var) will be cleared.

```
\propty \pkginfograb_description:n \pkginfograb_description:n {\pack-name\}
```

This will typeset a small paragraph (for data validation) with following (pack-name)'s info: (name), (version), (date) and (description)

For example:

```
\ExplSyntax0n
                                                 Package pkginfograb Version: 1.1 - 2025/11/01
\pkginfograb_description:n{pkginfograb}
                                                    Collecting package's info in a regular way
\ExplSyntaxOff
```

```
\pkginfograb_if_set_p:n *
                                    \pkginfograb_if_set_p:n {\pack-name\}
                                    \propto for ab_if_set:n_{TF} \{\langle pack-name \rangle\} \{\langle if-true \rangle\} \{\langle if-false \rangle\}
\pkginfograb_if_set:nTF *
new: 2025/11/01
```

This will test if the given (pack-name) was set with \pkginfograb_set:nn and (if-true) or (if-false) will be properly executed.

```
\pkginfograb_map_inline:n \pkginfograb_map_inline:n {\langle inline-code \rangle}
new: 2025/11/01
```

(inline-code) will receive (as (#1)) the name of each package set with \pkginfograb_set:nn in the order they were set.

```
Package pkginfograb Version: 1.1 - 2025/11/01
                                                   Collecting package's info in a regular way
\ExplSyntax0n
                                               Package codedescribe Version: 1.16b - 2025/10/30
\pkginfograb_map_inline:n
                                                   LATEXCode Description/Documentation
   \pkginfograb_description:n{#1}
                                               Package xpeekahead Version: 1.3 - 2025/10/23
                                                   A simplistic peek ahead set up
\ExplSyntaxOff
                                               Package codelisting Version: 1.16b - 2025/10/30
                                                   PATEXCode Listing
```

LaTeX2e Commands' Aliases 2

All commands below are aliases to their expl3 counterparts. Aside from \PkgInfoSetAliases all other LATEX2e aliases aren't defined by default. Call either \pkginfograb_set_aliases: or \PkgInfoSetAliases before using them.

```
\PkgInfoSet PkgInfoSet {\pack-name\} {\keyval-list\}
```

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 \PkgInfoDescription).

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

For Example:

```
\PkgInfoSet {pkginfograb}
 {
    name
                 = {pkginfograb} ,
   prefix
                 = {pkginfograb},
                 = \{2025/11/01\},\
    date
    version
                 = \{1.1\},
    description = {Collecting~ package's~ info~ in~ a~ regular~ way}
```

\PkgInfoReqVersion

This will verify if \(\text{pack-name} \) is \(\text{version} \) (as stored with \(\text{PkgInfoSet} \) is at least \(\text{min-version} \). 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 \(\mathre{m} in-version \) isn't satisfied, in which case the error will note that your-pack needs version \(\text{min-version} \) of \(\text{pack-name} \).

\PkgInfoReqDate

This will verify if (pack-name)'s (date) (as stored with \PkgInfoSet) is at least (min-date). It expects $\langle \mathtt{date} \rangle$ in one of three formats YYYY/MM/DD, YYYY-MM-DD or YYYY.MM.DD .

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

\PkgInfoSetAliases \PkgInfoSetAliases

This will set LATEX 2ε aliases for the expl3 in this package. Note that none of the commands in 2 are defined by default, except this.

\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.

\PkgInfoGet

 $\label{eq:pack-name} $$ \Pr{\inf Get {\langle pack-name \rangle} {\langle key \rangle} {\langle macro \rangle}}$$

This will store (key)'s value in (macro). If (pack-name) or (key) doesn't exist, (macro) will be cleared.

\PkgInfoDescription \PkgInfoDescription {\pack-name\}}

This will typeset a small paragraph (for data validation) with following \(\text{pack-name} \) info: \(\text{name} \), (version), (date) and (description)

For example:

\PkgInfoDescription{pkginfograb}

Package **pkginfograb** Version: 1.1 - 2025/11/01 Collecting package's info in a regular way

\PkgInfoIfSet

 $\label{local_problem} $$ \Pr{\inf \{\langle pack-name \rangle\} \{\langle if-true \rangle\} \{\langle if-false \rangle\} }$$

2025/11/01 new:

This will test if the given (pack-name) was set with \PkgInfoSet and (if-true) or (if-false) will be properly executed.

\PkgInfoMapOver

\PkgInfoMapOver {\langle inline-code \rangle}

new: 2025/11/01

(inline-code) will receive (as (#1)) the name of each package set with \PkgInfoSet in the order they were set.

<pre>\PkgInfoMapOver { \PkgInfoDescription{#1} }</pre>	Package pkginfograb Version: 1.1 - 2025/11/01
	Collecting package's info in a regular way
	Package codedescribe Version: $1.16b - 2025/10/30$
	Package xpeekahead Version: 1.3 - 2025/10/23
	A simplistic peek ahead set up
	Package codelisting Version: $1.16b - 2025/10/30$
	$ L\!$