The pkginfograb 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

\pkginfograb_set:nn   `\pkginfograb_set:nn` {⟨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⟩ or ⟨date⟩ (for version checking) and ⟨name⟩, ⟨version⟩, ⟨date⟩ and ⟨description⟩ (for `\pkginfograb_description:n`).

>   *Note:* An error will be raised if calling it twice for the same ⟨pack-name⟩.

For Example:

```
\pkginfograb_set:nn {pkginfograb}
  {
    name        = {pkginfograb} ,
    prefix      = {pkginfograb} ,
    date        = {2025/10/21},
    version     = {1.0} ,
    description = {Collecting~ package's~ info~ in~ a~ regular~ way}
  }
```

\pkginfograb_req_version:nnn   `\pkginfograb_req_version:nnn` {⟨your-pack⟩}{⟨pack-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.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 ⟨min-version⟩ of ⟨pack-name⟩.

\pkginfograb_req_date:nnn   `\pkginfograb_req_date:nnn` {⟨your-pack⟩}{⟨pack-name⟩}{⟨min-date⟩}

This will verify if ⟨pack-name⟩'s ⟨date⟩ (as stored with `\pkginfograb_set:nn`) is at least ⟨min-date⟩. It expects ⟨date⟩ 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 ⟨min-version⟩ isn't satisfied, in which case the error will note that `your-pack` needs version ⟨min-date⟩ of ⟨pack-name⟩.

\pkginfograb_set_aliases: `\pkginfograb_set_aliases:`

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 `\PkgInfoSetAliases` which is an alias for this command.

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*https://github.com/alceu-frigeri/pkginfograb

`\pkginfograb_get:nn` ★ `\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.

`\pkginfograb_get:nnN` `\pkginfograb_get:nnN` {⟨pack-name⟩}{⟨key⟩}{⟨tl-var⟩}

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

`\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:

`\ExplSyntaxOn`
`\pkginfograb_description:n{pkginfograb}`
`\ExplSyntaxOff`
	Package **pkginfograb** Version: 1.0 - 2025/10/21
	Collecting package's info in a regular way

2 LaTeX2e Commands' Aliases

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} ,
    date        = {2025/10/21},
    version     = {1.0} ,
    description = {Collecting~ package's~ info~ in~ a~ regular~ way}
  }
```

`\PkgInfoReqVersion` `\PkgInfoReqVersion` {⟨your-pack⟩}{⟨pack-name⟩}{⟨min-version⟩}

This will verify if ⟨pack-name⟩'s ⟨version⟩ (as stored with `\PkgInfoSet`) 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 ⟨min-version⟩ of ⟨pack-name⟩.

`\PkgInfoReqDate` `\PkgInfoReqDate` {⟨your-pack⟩}{⟨pack-name⟩}{⟨min-date⟩}

This will verify if ⟨pack-name⟩'s ⟨date⟩ (as stored with `\PkgInfoSet`) is at least ⟨min-date⟩. It expects ⟨date⟩ 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 ⟨min-version⟩ isn't satisfied, in which case the error will note that `your-pack` needs version ⟨min-date⟩ of ⟨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.

<u>`\PkgInfo`</u> ★   `\PkgInfo` {⟨pack-name⟩} {⟨key⟩}

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

<u>`\PkgInfoGet`</u>   `\PkgInfoGet` {⟨pack-name⟩} {⟨key⟩} {⟨macro⟩}

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

<u>`\PkgInfoDescription`</u>   `\PkgInfoDescription` {⟨pack-name⟩}

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

For example:

`\PkgInfoDescription{pkginfograb}`

Package **pkginfograb** Version: 1.0 - 2025/10/21
Collecting package's info in a regular way