The pkginfograb Package
Version 1.2

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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 systematic 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 (if it 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⟩, ⟨date⟩, ⟨version⟩ 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         = {2025/11/16},
    version      = {1.2} ,
    description  = {Collecting~ package's~ info~ in~ a~ regular~ way}
  }
```

`\pkginfograbProvidesExplPackage`
`\pkginfograbProvidesExplClass`

`\pkginfograbProvidesExplPackage {⟨pack-name⟩}{⟨keyval-list⟩}`
`\pkginfograbProvidesExplClass {⟨pack-name⟩}{⟨keyval-list⟩}`

Same as `\pkginfograb_set:nn`, but calling `\ProvidesExplPackage` or `\ProvidesExplClass` right after, with the information just set. It assumes the following properties to be present: *`name`*, *`date`*, *`version`* and *`description`*. This is meant to de-duplicate information (and reduce the chances of inconsistencies). This doesn't follow *`expl3`* convention, since *`expl3`* code régime will starts only after `\ProvidesExplPackage` or `\ProvidesExplClass`.

For Example:

```
\pkginfograbProvidesExplPackage {newpackage}
  {
    name         = {newpackage} ,
    prefix       = {newpack} ,
    date         = {2025/11/16},
    version      = {1.0a} ,
    description  = {some~ lazy~ pack}
  }
```

This will be equivalent to call `\ProvidesExplPackage {newpackage} {2025/11/16} {1.0a} {some~ lazy~ pack}` after `\pkginfograb_set:nn`.

Note: *`expl3`* code régime will be en force after them.

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

`\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 2$_\varepsilon$ 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.

`\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: 1.2 - 2025/11/16
Collecting package's info in a regular way

`\pkginfograb_if_set_p:n` ★ `\pkginfograb_if_set_p:n {⟨pack-name⟩}`
`\pkginfograb_if_set:nTF` ★ `\pkginfograb_if_set:nTF {⟨pack-name⟩} {⟨if-true⟩} {⟨if-false⟩}`

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 {⟨inline-code⟩}`

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.

```
\ExplSyntaxOn
\pkginfograb_map_inline:n
  {
   \pkginfograb_description:n{#1}
  }
\ExplSyntaxOff
```

Package **pkginfograb** Version: 1.2 - 2025/11/16
Collecting package's info in a regular way
Package **codedescribe** Version: 1.16b - 2025/10/30
LaTeX Code Description/Documentation
Package **xpeekahead** Version: 1.3a - 2025/11/01
A simple peek ahead set up
Package **codelisting** Version: 1.16b - 2025/10/30
LaTeX Code Listing

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         = {2025/11/16},
    version      = {1.2} ,
    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.

`\PkgInfo ★` `\PkgInfo {⟨pack-name⟩}{⟨key⟩}`

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

`\PkgInfoGet` `\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.

`\PkgInfoDescription` `\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: 1.2 - 2025/11/16
Collecting package's info in a regular way

\PkgInfoIfSet

new: 2025/11/01

\PkgInfoIfSet {⟨pack-name⟩}{⟨if-true⟩}{⟨if-false⟩}

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

\PkgInfoMapOver

new: 2025/11/01

\PkgInfoMapOver {⟨inline-code⟩}

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

```
\PkgInfoMapOver
  {
   \PkgInfoDescription{#1}
  }
```

Package **pkginfograb** Version: 1.2 - 2025/11/16
Collecting package's info in a regular way
Package **codedescribe** Version: 1.16b - 2025/10/30
LaTeX Code Description/Documentation
Package **xpeekahead** Version: 1.3a - 2025/11/01
A simple peek ahead set up
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LaTeX Code Listing