

# Package ‘KoNLP’

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**Title** Korean NLP Package

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**Description** Korean language processing package. Morphological analyzer, POS tagger, Keystroke converter, Hangul automata...

**SystemRequirements** Java (>= 1.6)

**URL** <https://github.com/haven-jeon/KoNLP>

**Version** 0.76.5

**Repository** CRAN

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**Encoding** UTF-8

**Depends** R (>= 2.14.0), rJava (>= 0.9-0), bitops (>= 1.0), utils (>= 2.14.0), Sejong (>= 0.01)

**Collate** 'onLoad.R' 'manageDic.R' 'hangulUtils.R' 'koAnalyzerRun.R' 'tagdata.R'

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backupUsrDic	<i>use for backup current dic_user.txt</i>
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**Description**

Utility function for backup dic\_user.txt file to backup directory.

**Usage**

```
backupUsrDic(ask = TRUE)
```

**Arguments**

ask                      ask to confirm backup

**Examples**

```
## Not run:
## This codes can not be run if you don't have encoding system which can en/decode Hangul(ex) CP949, EUC-KR, U
dicpath <- file.path(system.file(package="Sejong"), "dics", "handic.zip")
conn <- unz(dicpath, file.path("data","kE","dic_user2.txt"))
newdic <- read.table(conn, sep="\t", header=FALSE, fileEncoding="UTF-8", stringsAsFactors=FALSE)
mergeUserDic(newdic)
## backup merged new dictionary
backupUsrDic(ask=FALSE)
## restore from backup directory
restoreUsrDic(ask=FALSE)
## reloading new dictionary
reloadAllDic()
## End(Not run)
```

---

`convertHangulStringToJamos`*conversion function Hangul string to Jamos*

---

**Description**

convert Hangul sentence to Jamos. Example will be shown in [github wiki](#).

**Usage**

```
convertHangulStringToJamos(hangul)
```

**Arguments**

hangul	Hangul string
--------	---------------

**Value**

Jamo sequences

---

`convertHangulStringToKeyStrokes`*conversion function Hangul string to keyStrokes*

---

**Description**

Function can convert Hangul string to Keystrokes. Example will be shown in [github wiki](#).

**Usage**

```
convertHangulStringToKeyStrokes(hangul,  
    isFullwidth = TRUE)
```

**Arguments**

hangul	Hangul sentence
isFullwidth	specify returned character will be Fullwidth ASCII or Halfwidth ASCII

**Value**

Keystroke sequence

---

convertTag	<i>tag name converter</i>
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---

### Description

only support tag conversion between KAIST and Sejong tag set.

### Usage

```
convertTag(fromTag, toTag, tag)
```

### Arguments

fromTag	tag set name to convert from
toTag	desired tag set name
tag	tag name to search

---

doKoMorph	<i>morphological analysis function for Hangul</i>
-----------	---

---

### Description

morphological analyze the sentence uses lucene korean analyzer. Example will be shown in [github wiki](#).

### Usage

```
doKoMorph(sentence)
```

### Arguments

sentence	input
----------	-------

### Value

stem of sentence

---

editweights	<i>Keystroke misspell cost table</i>
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---

### Description

Keystroke misspell cost table

### Author(s)

Heewon Jeon <madjakarta@gmail..com>

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extractNoun	<i>Noun extractor for Hangul</i>
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**Description**

extract Nouns from Korean sentence uses Hannanum analyzer. see detail in [Hannanum](#). Example will be shown in [github wiki](#).

**Usage**

```
extractNoun(sentence)
```

**Arguments**

sentence	input
----------	-------

**Value**

Noun of sentence

---

HangulAutomata	<i>do Hangul automata</i>
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---

**Description**

function to be used for converting to complete Hangul syllables from Jamo or Keystrokes. Example will be shown in [github wiki](#).

**Usage**

```
HangulAutomata(input, isKeystroke = F, isForceConv = F)
```

**Arguments**

input	to be processed mostly Jamo sequences
isKeystroke	boolean parameter to check input is keystroke or Jamo sequences
isForceConv	boolean parameter to force converting if input is not valid Jamo or keystroke sequences.

**Value**

complete Hangul syllable

---

is.ascii	<i>check if sentence is all ASCII</i>
----------	---------------------------------------

---

**Description**

Function checks with each character is ASCII

**Usage**

```
is.ascii(sentence)
```

**Arguments**

sentence	input characters
----------	------------------

**Value**

TRUE or FALSE

---

is.hangul	<i>check if sentence is all Hangul</i>
-----------	--

---

**Description**

Function checks if each character is Hangul or Jamo. Example will be shown in [github wiki](#).

**Usage**

```
is.hangul(sentence)
```

**Arguments**

sentence	input characters
----------	------------------

**Value**

TRUE or FALSE

---

is.jaeum	<i>check if sentence is all Jaeum</i>
----------	---------------------------------------

---

**Description**

Function checks with each character is Jaeum

**Usage**

```
is.jaeum(sentence)
```

**Arguments**

sentence	input characters
----------	------------------

**Value**

TRUE or FALSE

---

is.jamo	<i>check if sentence is all Jamo</i>
---------	--------------------------------------

---

**Description**

Function checks with each character is Jamo. Example will be shown in [github wiki](#).

**Usage**

```
is.jamo(sentence)
```

**Arguments**

sentence	input characters
----------	------------------

**Value**

TRUE or FALSE

---

is.moeum	<i>check if sentence is all Moeum</i>
----------	---------------------------------------

---

### Description

Function checks with each charactor is Moeum

### Usage

```
is.moeum(sentence)
```

### Arguments

sentence	input charactors
----------	------------------

### Value

TRUE or FALSE

---

KtoS	<i>KAIST tag to Sejong tag</i>
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### Description

KAIST tag to Sejong tag

### Author(s)

Heewon Jeon <madjakarta@gmail..com>

---

mergeUserDic	<i>appending or replacing with new data.frame</i>
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---

### Description

appending new dictionary to current dictionary. replaceing current dictionary with new dictionary.

### Usage

```
mergeUserDic(newUserDic, append = TRUE, verbose = FALSE,
  ask = FALSE)
```



**Arguments**

newUserDic	new user dictionary as data.frame
append	append or replacing
verbose	see detail error logs
ask	ask to backup

**Examples**

```
## Not run:
## This codes can not be run if you don't have encoding system which can en/decode Hangul(ex) CP949, EUC-KR, U
dicpath <- file.path(system.file(package="Sejong"), "dics", "handic.zip")
conn <- unz(dicpath, file.path("data","kE","dic_user2.txt"))
newdic <- read.table(conn, sep="\t", header=FALSE, fileEncoding="UTF-8", stringsAsFactors=FALSE)
mergeUserDic(newdic)
## backup merged new dictionary
backupUsrDic(ask=FALSE)
## restore from backup directory
restoreUsrDic(ask=FALSE)
## reloading new dictionary
reloadAllDic()
## End(Not run)
```

---

MorphAnalyzer

*Hannanum morphological analyzer interface function*


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**Description**

Do the morphological analysis, not doing pos tagging uses Hannanum analyzer. see details in [Hannanum](#). Example will be shown in [github wiki](#).

**Usage**

```
MorphAnalyzer(sentence)
```

**Arguments**

sentence	input
----------	-------

**Value**

result of analysis

---

reloadAllDic	<i>reload all Hannanum analyzer dictionary</i>
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---

### Description

Mainly, user dictionary reloading for Hannanum Analyzer. If you want to update user dictionary on KoNLP\_dic/current/dic\_user.txt, need to execute this function after editing dictionary.

### Usage

```
reloadAllDic()
```

### Examples

```
## Not run:
## This codes can not be run if you don't have encoding system which can en/decode Hangul(ex) CP949, EUC-KR, U
dicpath <- file.path(system.file(package="Sejong"), "dics", "handic.zip")
conn <- unz(dicpath, file.path("data", "kE", "dic_user2.txt"))
newdic <- read.table(conn, sep="\t", header=FALSE, fileEncoding="UTF-8", stringsAsFactors=FALSE)
mergeUserDic(newdic)
## backup merged new dictionary
backupUsrDic(ask=FALSE)
## restore from backup directory
restoreUsrDic(ask=FALSE)
## reloading new dictionary
reloadAllDic()
## End(Not run)
```

---

restoreUsrDic	<i>use for restoring backupd dic_user.txt</i>
---------------	---

---

### Description

Utility function for restoring dic\_user.txt file to dictionary directory.

### Usage

```
restoreUsrDic(ask = TRUE)
```

### Arguments

ask	ask to confirm backup
-----	-----------------------

**Examples**

```
## Not run:
## This codes can not be run if you don't have encoding system which can en/decode Hangul(ex) CP949, EUC-KR, U
dicpath <- file.path(system.file(package="Sejong"), "dics", "handic.zip")
conn <- unz(dicpath, file.path("data","kE","dic_user2.txt"))
newdic <- read.table(conn, sep="\t", header=FALSE, fileEncoding="UTF-8", stringsAsFactors=FALSE)
mergeUserDic(newdic)
## backup merged new dictionary
backupUsrDic(ask=FALSE)
## restore from backup directory
restoreUsrDic(ask=FALSE)
## reloading new dictionary
reloadAllDic()
## End(Not run)
```

SimplePos09

*POS tagging by using 9 KAIST tags***Description**

Do pos tagging using 9 tags uses Hannanum analyzer. see details in [Hannanum](#). Example will be shown in [github wiki](#).

**Usage**

```
SimplePos09(sentence)
```

**Arguments**

sentence          input

**Value**

results of tagged analysis

SimplePos22

*POS tagging by using 22 KAIST tags***Description**

Do POS tagging using 22 tags uses Hannanum analyzer. see details in [Hannanum](#). Example will be shown in [github wiki](#).

**Usage**

```
SimplePos22(sentence)
```

**Arguments**

sentence            input

**Value**

results of tagged analysis

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StoK	<i>Sejong tag to KAIST tag</i>
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**Description**

Sejong tag to KAIST tag

**Author(s)**

Heewon Jeon <madjakarta@gmail..com>

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tags	<i>tag names</i>
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**Description**

tag names

**Author(s)**

Heewon Jeon <madjakarta@gmail..com>

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useSejongDic	<i>use Sejong noun dictionary</i>
--------------	-----------------------------------

---

**Description**

Retrive Sejong dictionary to use in KoNLP

**Usage**

```
useSejongDic(backup = T)
```

**Arguments**

backup            will backup current dictionary?

---

useSystemDic	<i>use system default dictionary</i>
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---

**Description**

Retrive system default dictionary to use in KoNLP

**Usage**

```
useSystemDic(backup = T)
```

**Arguments**

backup	will backup current dictionary?
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