

# Package ‘APSIMBatch’

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**Title** Analysis the output of Apsim software

**Type** Package

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**Description** Run APSIM in Batch mode

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findElement *Find a row for element name...*

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**Description**

Find a row for element name

**Usage**

```
findElement(name, xml)
```

**Arguments**

name	name
xml	xml

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generateSim *Generate simulations according several factors...*

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**Description**

Generate simulations according several factors

**Usage**

```
generateSim(template, factors)
```

**Arguments**

template	File path to template sim files
factors	A data frame which contained all combinations of factors. The column names of data frame are parameter names in the sim file.

**Value**

A list which contain all simulations. Row names of factors are used for simulation names.

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<code>getElementVlaue</code>	<i>Replace a row for element name...</i>
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**Description**

Replace a row for element name

**Usage**

```
getElementVlaue(xml)
```

**Arguments**

<code>xml</code>	<code>xml</code>
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<code>left</code>	<i>Get the several characters of a string from left...</i>
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**Description**

Get the several characters of a string from left

**Usage**

```
left(str, num=1)
```

**Arguments**

<code>str</code>	Input string
<code>num</code>	The number of character will be returned from left

**Value**

the character vector of the string from left

len *Get the length of a string...*

---

**Description**

Get the length of a string

**Usage**

```
len(str)
```

**Arguments**

str            Input string

**Value**

The character number of the string

---

omitBlank *Omit the blank of a string...*

---

**Description**

Omit the blank of a string

**Usage**

```
omitBlank(str)
```

**Arguments**

str            Input string

**Value**

the character vector except the blank

---

omitBlankSE	<i>Omit the start and end blank charcter..</i>
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---

**Description**

Omit the start and end blank charcter

**Usage**

```
omitBlankSE(str)
```

**Arguments**

str	Input string
-----	--------------

**Value**

the character vector except the blank at the start and end

---

removeAttribure	<i>Remove all attribure of a vector..</i>
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**Description**

Remove all attribure of a vector

**Usage**

```
removeAttribure(x)
```

**Arguments**

x	x
---	---

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`replaceElementVlaue`    *Replace a row for element name...*

---

**Description**

Replace a row for element name

**Usage**

```
replaceElementVlaue(value, xml)
```

**Arguments**

<code>value</code>	<code>value</code>
<code>xml</code>	<code>xml</code>

---

`right`    *Get the several characters of a string from right...*

---

**Description**

Get the several characters of a string from right

**Usage**

```
right(str, num=1)
```

**Arguments**

<code>str</code>	Input string
<code>num</code>	The number of character will be returned from right

**Value**

the character vector of the string from right

---

runAPSIM	<i>Run APSIM with HPC...</i>
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**Description**

Run APSIM with HPC

**Usage**

```
runAPSIM(..., extra, apsim="../Apsim71/Model/apsim.exe")
```

**Arguments**

...	A list contain several simulations, or a list contain sim or RData files, See example for more detailed arguments.
apsim	The relative and absolute path to apsim.exe
extra	A data frame of extra identification for all simulation. Row number must be the same as simulation number

**Value**

A list contain all simulation results.

**Examples**

```
# NO RUN
# Run all sim files
## Not run: files <- list.files( "./simtest", pattern = "(.*)\\.sim$", full.names = TRUE )
## Not run: runAPSIM( files = files )
# Run Rdata file
## Not run: runAPSIM( files = "test.RData" )
# Set apsim path
## Not run: apsim <- "\"C:/Program Files/Apsim71/Model/apsim.exe\""
## Not run: runAPSIM( files = "test.RData", apsim = apsim )
```

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searchChar	<i>Search a character from a string...</i>
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**Description**

Search a character from a string

**Usage**

```
searchChar(str, search, start=1)
```

**Arguments**

str	Input string
search	The character will be searched
start	The start position to search

**Value**

The position where character firstly appear

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splitEqual	<i>Split a string contained a equal mark...</i>
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**Description**

Split a string contained a equal mark

**Usage**

```
splitEqual(vector)
```

**Arguments**

vector	The input vector to convert
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**Value**

the variable name and value

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vector2string	<i>Convert vector to string...</i>
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**Description**

Convert vector to string

**Usage**

```
vector2string(vector, sep=", ")
```

**Arguments**

vector	The input vector to convert
sep	The separator with default value ", "



*vector2string*

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**Details**

Convert vector to string with a separator

**Value**

The string which connected all members of vector

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