

# Package ‘rjwsacruncher’

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**Title** Interface to the 'JWSACruncher' of 'JDemetra+'

**Version** 0.1.0

**Description** 'JDemetra+' (<<https://github.com/jdemetra/jdemetra-app>>) is the seasonal adjustment software officially recommended to the members of the European Statistical System and the European System of Central Banks. Seasonal adjustment models performed with 'JDemetra+' can be stored into workspaces. 'JWSACruncher' (<<https://github.com/jdemetra/jwsacruncher/releases>>) is a console tool that re-estimates all the multi-processing defined in a workspace and to export the result. 'rjwsacruncher' allows to launch easily the 'JWSACruncher'.

**URL** <https://github.com/AQLT/rjwsacruncher>

**BugReports** <https://github.com/AQLT/rjwsacruncher/issues>

**Imports** XML

**Suggests** knitr, rmarkdown

**License** GPL-3

**VignetteBuilder** knitr

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 6.1.1

**NeedsCompilation** no

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configure\_jwsacruncher

*Configure the 'JWSACruncher' with a portable version of 'Java'*

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## Description

Function configure the 'JWSACruncher' with a portable version of 'Java'.

## Usage

```
configure_jwsacruncher(jwsacruncher_path, java_path)
```

## Arguments

jwsacruncher\_path  
 path to the file jwsacruncher.bat of the 'JWSACruncher' (see details).

java\_path  
 path to the file java.exe of the portable version of 'Java' (see details).

## Details

Since the version 2.2.0, the 'JWSACruncher' needs 'Java' 8 or higher to run. If you cannot install it (for example for security reasons) you can install a portable version of 'Java' (that does not require administrator rights) and configure the 'JWSACruncher' to use this portable version. To do it you have to:

1. Unzip the downloaded file of the 'JWSACruncher';
2. Open, with a Text Editor, the file jwsacruncher.bat that is in the sub-folder \bin\ of the 'JWSACruncher';
3. Edit the line 71 that contains `if "%JAVACMD%"==" " set JAVACMD=java` and replace `java` by the path to the file `java.exe` of the portable version. For example, if the portable version of 'Java' is installed under `D:\Software\Java8`, the path to `java.exe` should be at `D:\Software\Java\bin\java.exe` and the new line 71 would be `if "%JAVACMD%"==" " set JAVACMD="D:\Software`

The function `configure_jwsacruncher()` does the steps 2 and 3.

## See Also

[download\\_cruncher](#).

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create\_param\_file      *Create parameter file for the 'JWSACruncher'*

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### Description

To run the 'JWSACruncher' needs a parameter file and create\_param\_file allows to create it.

### Usage

```
create_param_file(dir_file_param, bundle = 10000, csv_layout = "list",
  csv_separator = ";", ndecs = 6, policy = "parameters",
  output = NULL, matrix_item = getOption("default_matrix_item"),
  tsmatrix_series = getOption("default_tsmatrix_series"),
  paths_path = NULL)
```

### Arguments

dir_file_param	Path to the directory that will contains the parameter file "parameters.param".
bundle	Maximum size for a group of series (in output). By default bundle = 10000.
csv_layout	Layout of the CSV files (series only). By default csv_layout = "list". Other options: csv_layout = "vtable" (vertical table) or csv_layout = "htable" (horizontal table).
csv_separator	the field separator string used in the CSV file. By default csv_separator = ";".
ndecs	Number of decimals used in the output. By default ndec = 6.
policy	refreshing policy of the processing. Par défaut policy = "parameters" (re-estimation of the coefficients of the reg-ARIMA model, see details).
output	Full path of the output folder. By default (output = NULL) a folder is create in the path to the workspace ([workspace]/Output).
matrix_item	character containing the items of the matrix output (see the 'JDemetra+' manual for more information). By default, the items defined in the option getOption("default_matrix_item") are used (option initialized by the default output of the 'JWSACruncher' 2.2.2).
tsmatrix_series	character containing the names of the times series to export (see the 'JDemetra+' manual for more information). By default, the items defined in the option getOption("default_tsmatrix_series") are used (option initialized by the default output of the 'JWSACruncher' 2.2.2).
paths_path	The paths used for relative addresses (see the "Demetra Paths" of the graphical interface of 'JDemetra+').

### Details

When the 'JWSACruncher' is launched, the data is refreshed with a specific policy that is defined by the parameter policy. The available options are:

- policy = "current": all the estimations are fixed;

- `policy = "fixedparameters"` or `policy = "fixed"`: re-estimation of the coefficients of the regression variables (but not the ARIMA coefficients);
- `policy = "parameters"` (the default): `policy = "fixedparameters"` + re-estimation of ARIMA coefficients;
- `policy = "lastoutliers"`: `policy = "parameters"` + re-identification of last outliers (on the last year);
- `policy = "outliers"`: `policy = "lastoutliers"` + re-identification of all outliers;
- `policy = "stochastic"`: `policy = "outliers"` + re-identification of ARIMA orders;
- `policy = "complete"` or `policy = "concurrent"`: the model is completely re-identified and re-estimated.

### Value

Path to the parameter file.

### See Also

[cruncher\\_and\\_param](#).

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cruncher

*Run the 'JWSACruncher'*

---

### Description

Function to run the 'JWSACruncher' on a workspace from a parameter file.

### Usage

```
cruncher(workspace,
  cruncher_bin_directory = getOption("cruncher_bin_directory"),
  param_file_path, log_file)
```

### Arguments

`workspace` path to the workspace. By default a dialog box opens to choose the workspace.

`cruncher_bin_directory` path to the "bin" directory of the 'JWSACruncher'. By default default the value of the option "cruncher\_bin\_directory" is used.

`param_file_path` path to the parameter file of the 'JWSACruncher' By default a .params file is search in the save directory of the workspace.

`log_file` name of the log file of 'JWSACruncher'. By default the log isn't exported.

### Value

The path to the workspace.

**See Also**

[cruncher\\_and\\_param](#), [update\\_workspace](#).

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cruncher\_and\_param     *Run quickly the 'JWSACruncher'*

---

**Description**

Function to run the 'JWSACruncher' on a workspace while creating the parameter file.

**Usage**

```
cruncher_and_param(workspace = NULL, output = NULL,
  rename_multi_documents = FALSE, delete_existing_file = FALSE,
  log_file = NULL,
  cruncher_bin_directory = getOption("cruncher_bin_directory"), ...)
```

**Arguments**

workspace	path to the workspace. By default a dialog box opens to choose the workspace.
output	Full path of the output folder. By default (output = NULL) a folder is create in the path to the workspace ([workspace]/Output).
rename_multi_documents	Boolean indicating whether to rename the folders containing the outputs according to the names of the multi-documents of the workspace. By default rename_multi_documents = FALSE: the names of the XML files of the multi-documents are used.
delete_existing_file	only used if rename_multi_documents = TRUE. Boolean indicating whether to delete existing folders when renaming them. By default (delete_existing_file = FALSE) they are not deleted.
log_file	name of the log file of 'JWSACruncher'. By default the log isn't exported.
cruncher_bin_directory	path to the "bin" directory of the 'JWSACruncher'. By default default the value of the option "cruncher_bin_directory" is used.
...	other parameters of <a href="#">create_param_file</a> .

**Value**

Path to the workspace.

**See Also**

[cruncher](#), [update\\_workspace](#), [create\\_param\\_file](#), [multiprocessing\\_names](#).

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download\_cruncher      *Download the 'JWSACruncher'*

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## Description

Function to download the ZIP file of the 'JWSACruncher'

## Usage

```
download_cruncher(directory, cruncher_version)
```

## Arguments

directory      directory where to save the 'JWSACruncher'. In Windows, a dialog box opens by default to select the directory.

cruncher\_version      character of the version of the 'JWSACruncher' to download ("X.Y.Z" format). By default the last version is downloaded.

## Details

The 'JWSACruncher' is downloaded from <https://github.com/jdemetra/jwsacruncher/releases>. To use it, it has to be unzip.

## See Also

[configure\\_jwsacruncher](#).

## Examples

```
## Not run:
# On Windows opens a dialog box to choose the directory where to
# download the last version of the 'JWSACruncher'
download_cruncher()

dir <- tempdir()
# To download the last release:
download_cruncher(dir)

# To download the release of the version 2.2.2:
download_cruncher(dir, "2.2.2")

## End(Not run)
```

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`multiprocessing_names` *Get the names of the multiprocessings of a workspace*

---

### Description

Function to get the name of the multiprocessings that appears on 'JDemetra+' and the name of the corresponding XML file.

### Usage

```
multiprocessing_names(workspace)
```

### Arguments

`workspace` path to the workspace. By default a dialog box opens to choose the workspace.

### Value

A data.frame containing the name of the multiprocessings that appears on 'JDemetra+' (column name) and the name of the associated XML files (column file).

### See Also

[cruncher\\_and\\_param](#).

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`update_workspace` *Update a workspace*

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### Description

Function to update a workspace without exporting the results.

### Usage

```
update_workspace(workspace = NULL, policy = "parameters",
  cruncher_bin_directory = getOption("cruncher_bin_directory"),
  log_file = NULL)
```

### Arguments

`workspace` path to the workspace. By default a dialog box opens to choose the workspace.

`policy` refreshing policy of the processing. Par défaut `policy = "parameters"` (re-estimation of the coefficients of the reg-ARIMA model, see details).

`cruncher_bin_directory` path to the "bin" directory of the 'JWSACruncher'. By default default the value of the option "cruncher\_bin\_directory" is used.

`log_file` name of the log file of 'JWSACruncher'. By default the log isn't exported.

**Value**

Path to the workspace.

**See Also**

[cruncher](#), [cruncher\\_and\\_param](#).



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