WdBibTeX

Release 0.2.3

Haruki Ejiri

Jul 01, 2022

Contents

1 Getting started

1.1 Installation

Binary installers for the latest released version are available at the Python Package Index (PyPI): https://pypi.org/project/wdbibtex

You can install wdbibtex package via pip command.

```
pip install -U wdbibtex
```

1.2 Dependencies

- Windows OS, for pywin32
- pywin32>=302, for operating MS Word
- TeX Live 2021, for building LaTeX file.

1.3 Usage

Let target Word file name be `file.docx`.

0. Confirm you can build LaTeX project with basic `latex->bibtex->latex->latex` scheme. (This is out of scope of this project.)
1. Copy your `.bib` and `.bst` to same directory with `file.docx`.
2. Write your docx file with LaTeX citations keys of `\cite{key}` and `\thebibliography` label.
3. On the shell, change directory to the `file.docx` 's directory.
4. Execute:

```
$ python -m wdbibtex file.docx
```

5. If wdbibtex works correctly, you can see `file_bib.docx`. LaTeX citation keys of `\cite{key}` and `\thebibliography` will be converted to `[1]` and `[1] A. Name, "Title", Journal, vol...` (for example).

1.4 Command line options

Module exexution of WdBibTeX accepts one positional argument and four optional arguments as follows.

```
usage: fancytool [-h] [--bst BST] [--bib BIB] [--keeptexdir] [--exportpdf] file
```

Positional Arguments

file	File to BibTeX format.

Named Arguments

--bst	BibTeX style file. Default: .bst in target file directory
--bib	Bibliography file. Default: all .bib in target file directory
--keeptexdir	Keep LaTeX files and directory after run. Default: False(= clean LaTeX files/directory) Default: False

--exportpdf Export compiled docx to pdf. Default: False

Default: False

2 Examples

Examples are placed in the `examples` directory of WdBibTeX project. Target MS Word file is generated by executing `docxgen.py` in each examples directory.

2.1 One citation in ieeetr style

Simple example is in `examples/first` directory. Firstly, execute `docxgen.py` to generate `sample.docx`. (This is because adding docx in download page is not preferred way to deliver.) If `docxgen.py` fails to generate `sample.docx`, copy&paste following text to the word file nad save as `sample.docx`.

```
This sample document is generated by WdBibTeX.

Some text with dummy citation \cite{enArticle1} will be converted to [1] by␣
↪executing wdbibtex.
The list of bibliography is placed to the thebibliography command as follows:

\thebibliography
```

The generated `sample.docx` contains one citation key of \cite{enArticle1}. At the bottom of documents, another latex command of \thebibliography is placed. In `examples/first`, you can see bibliography file named `library.bib`. The BibTeX entry of `enArticle1` is in `library.bib`.

Then, excecute following command with `--bst ieeetr` option (as no .bst file is placed in `examples/first` directory).

```
$ python -m wdbibtex sample.docx --bst ieeetr
```

You can see `sample_bib.docx` with the following BibTeX-converted contents:

```
This sample document is generated by WdBibTeX.

Some text with dummy citation[1] will be converted to [1].
The list of bibliography is placed to the thebibliography command as follows:

[1] I. Yamada, J. Yamada, S. Yamada, and S. Yamada, “Title1,” Japanese Journal,␣
↪vol. 15, pp. 20-30, march 2019.
```

2.2 Citation style customization

WdBibTeX support documentclass and cite package customization via preamble written in word file. The example is found in `examples/custom`. The following contents are automatically written in sample.docx by executing docxgen.py.

```
This sample document is generated by WdBibTeX.

WdBibTeX can (partially) parse preamble contents written between
"\+begin{preamble}" and "\+end{preamble}".
The preamble contents are removed in the latex-processed docx artifacts.
For citation package, some options are available to control citation style.
In this example, citation package is added with "superscript" option.
The "citeleft" and "citeright" is also modified.

Sample citation customization \cite{enArticle1}.
Multiple citations example \cite{enArticle2,enArticle3,enArticle4}.
The list of bibliography is placed to the thebibliography command as follows:

\begin{preamble}
\documentclass[10pt]{article}
\usepackage[superscript]{cite}
\renewcommand\citeleft{(}
\renewcommand\citeright{)}
\bibliographystyle{IEEEtran}
\end{preamble}
\thebibliography
```

After excecuting following command in `examples/custom` directory, you can see the superscripted citations in the `sample_bib.docx`. Note that the second citation is converted to (2-4) as the citation package is called in the preamble.

```
$ python -m wdbibtex sample.docx
```

2.3 Citation in IEEJtran style

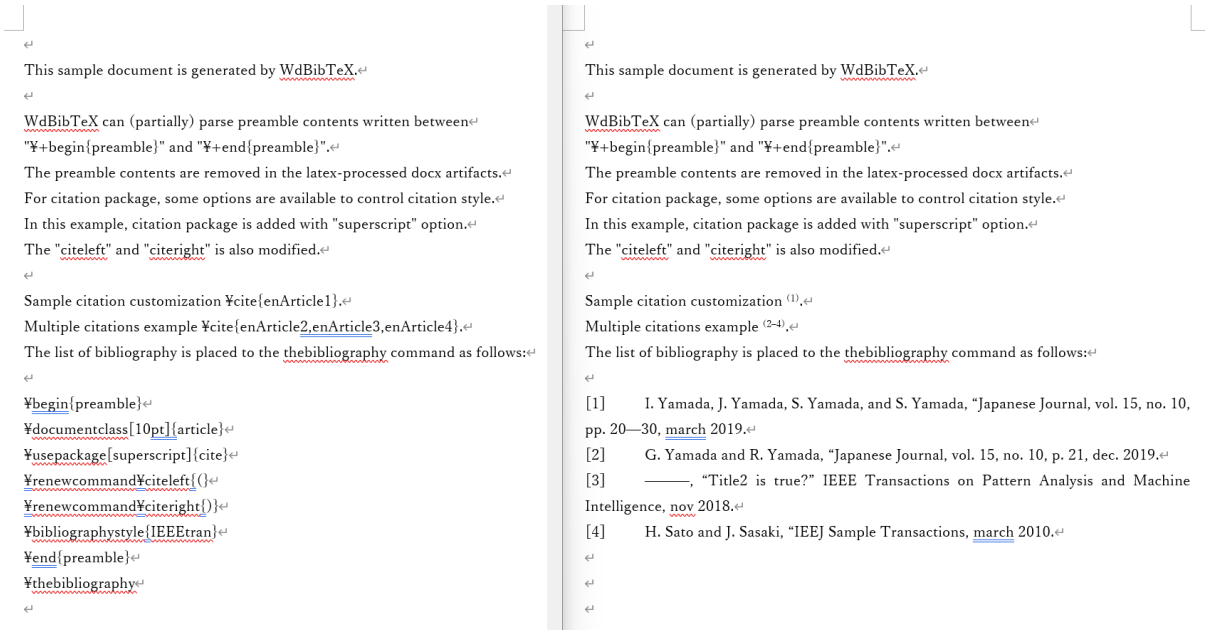
As the author also maintains IEEJtran.bst(https://github.com/ehki/jIEEEtran), which is BibTeX style files for Japanese Electrical Engineers, one example for Japanese bibliography is stated here. Although the point is LaTeX and BibTeX command selection, WdBibTeX automatically select proper command based on system locale.

One example for Japanese reference is located in `examples/ieejtran`. Note that IEEJtran.bst is already place in the sample directory and WdBibTeX uses the existing .bst file automatically. The following contents are automatically written in `sample.docx` by executing `docxgen.py`.

```
This sample document is generated by WdBibTeX.

```

(continues on next page)



This sample document is generated by WdBibTeX.

WdBibTeX can (partially) parse preamble contents written between
"¥+begin{preamble}" and "¥+end{preamble}".
The preamble contents are removed in the latex-processed docx artifacts.
For citation package, some options are available to control citation style.
In this example, citation package is added with "superscript" option.
The "citeleft" and "citeright" is also modified.

Sample citation customization ¥cite{enArticle1}.
Multiple citations example ¥cite{enArticle2,enArticle3,enArticle4}.
The list of bibliography is placed to the thebibliography command as follows:

¥begin{preamble}
¥documentclass[10pt]{article}
¥usepackage[superscript]{cite}
¥renewcommand¥citeleft{(}
¥renewcommand¥citeright{)}
¥bibliographystyle{IEEEtran}
¥end{preamble}
¥thebibliography

(continued from previous page)

```
Sample citation\cite{enArticle1}.
英語文献の引用例\cite{enArticle1}。
Multiple citations example\cite{enArticle2,enArticle3,enArticle4}.
複数文献の引用例\cite{enArticle2,enArticle3,enArticle4}。
Examples of Japanese reference\cite{jpArticle2,jpArticle3,jpArticle4}.
日本語文献の引用例\cite{jpArticle2,jpArticle3,jpArticle4}。
The list of bibliography is placed to the thebibliography command as follows:
文献リストは以下の通りとなる。

\thebibliography
```

Then, let's excecute following command in `examples/ieejtran` directory.

```
$ python -m wdbibtex sample.docx
```

You can see `sample_bib.docx` with the following BibTeX-converted contents:

```
This sample document is generated by WdBibTeX.

Sample citation[1].
英語文献の引用例 [1]。
Multiple citations example[2,3,4].
複数文献の引用例 [2,3,4]。
Examples of Japanese reference[5,6].
日本語文献の引用例 [5,6]。
The list of bibliography is placed to the thebibliography command as follows:
文献リストは以下の通りとなる。
```

(continues on next page)

(continued from previous page)

```
[1] I. Yamada, J. Yamada, S. Yamada, S. Yamada: “Title1”, Japanese Journal, Vol.
↪15, No.10, pp.20—30 (2019-3) (in Japanese)
[2] G. Yamada, R. Yamada: “Title2”, Japanese Journal, Vol.15, No.10, p.21 (2019-
↪12) (in Japanese)
[3] G. Yamada, R. Yamada: “Title2 is true?”, IEEE Transactions on Pattern␣
↪Analysis and Machine Intelligence (2018-11)
[4] H. Sato, J. Sasaki: “Article with language field”, IEEJ Sample Transactions␣
↪(2010-3) (in Japanese)
[5] 山田 五郎・山田 六郎：「文献 2」, 日本語学会, Vol.15, No.10, p.21（2019-12）
[6] 山田 八郎・山田 六郎：「手法 1 と手法 2, どちらが正しいのか?」, 日本語の学会名, Vol.5,
No.1, p.15（2010）
```

Some readers noticed that the inserted citation numbers and thebibliography texts did not overwrite the text style. So by setting the style of thebibliography and cite keys before WdBibTeX process, you can set indentation, text-size, font, superscript, etc. of the converted bibliography texts.

3 API reference

3.1 WdBibTeX

Constructor

WdBibTeX(file[, copy_suffix, workdir])	BibTeX toolkit for MS Word.

wdbibtex.WdBibTeX

class wdbibtex.**WdBibTeX**(*file*, *copy_suffix='_bib'*, *workdir='.tmp'*)

BibTeX toolkit for MS Word.

WdBibTeX is a MS Word wrapper for BibTeX citation conversion. WdBibTeX extracts LaTeX and BibTeX commands from a Word file, and copies them to dummy .tex file in working directory. By building LaTeX project with old-style LaTeX+BibTeX process, WdBibTeX obtain BibTeX-processed bibliography texts and citation numbers. Finally, WdBibTeX replaces original LaTeX and BibTeX commands in Word file with BibTeX-processed bibliography textx and citation numbers.

Parameters

file

[str or path object] Target word file with .docx extension.

copy_suffix
: [str, default '_bib'] Appended text to a copied word file. WdBibTeX operates the copied file for safety.

workdir
: [str or path object, default '.tmp'] Working directory of latex process. The working directory will be removed by WdBibTeX.clear().

Examples

```
>>> from wdbibtex import WdBibTeX
>>> wd = WdBibTeX('sample.docx')
>>> wd.build()
>>> wd.close()
```

Attributes

original_file	[Read only] Returns original word file.
target_file	[Read only] Returns operating word file.
workdir	[Read only] Returns LaTeX working directory.

Methods

build([bib, bst])	Build word file with latex citations.
clear()	Clear auxiliary files on working directory.
close([clear])	Close word file and word application.
exportpdf()	Export current docx file to pdf.
find_all(key)	Find all keys from word file.
open()	Open copied word document.
read_preamble()	Read preamble contents if exists.
replace_all(key, val)	Replace all keys in document with value.

Attributes

WdBibTeX.target_file	[Read only] Returns operating word file.
WdBibTeX.original_file	[Read only] Returns original word file.
WdBibTeX.workdir	[Read only] Returns LaTeX working directory.

wdbibtex.WdBibTeX.target_file

property WdBibTeX.**target_file**

[Read only] Returns operating word file.

wdbibtex.WdBibTeX.original_file

property WdBibTeX.**original_file**

[Read only] Returns original word file.

wdbibtex.WdBibTeX.workdir

property WdBibTeX.**workdir**

[Read only] Returns LaTeX working directory.

Methods

WdBibTeX.build([bib, bst])	Build word file with latex citations.
WdBibTeX.clear()	Clear auxiliary files on working directory.
WdBibTeX.close([clear])	Close word file and word application.
WdBibTeX.find_all(key)	Find all keys from word file.
WdBibTeX.open()	Open copied word document.
WdBibTeX.read_preamble()	Read preamble contents if exists.
WdBibTeX.replace_all(key, val)	Replace all keys in document with value.

wdbibtex.WdBibTeX.build

WdBibTeX.**build**(*bib=None*, *bst=None*)

Build word file with latex citations.

Build word file with latex citation key of \cite{} and \thebibliography. This is realized by the following five steps:

1. Find latex citations and thebibliography key.
2. Generate dummy LaTeX file.
3. Build LaTeX project.
4. Parse LaTeX artifacts of aux and bbl.
5. Replace LaTeX keys in word file.

Parameters

bib
: [str or None, default None] Bibliography file to be used. If None, all .bib files placed in the same directory of target .docx file will be used.

bst
: [str or None, default None] Bibliography style. If None, .bst file placed in the same directory of target .docx file is used.

wdbibtex.WdBibTeX.clear

`WdBibTeX.clear()`

Clear auxiliary files on working directory.

wdbibtex.WdBibTeX.close

`WdBibTeX.close(clear=False)`

Close word file and word application.

Close word file after saving. If no other file opened, quit Word application too.

Parameters

clear
: [bool, default False] If True, remove working directory of latex process.

See also:

open
: Open word file.

wdbibtex.WdBibTeX.find_all

`WdBibTeX.find_all(key)`

Find all keys from word file.

Find all keys in word document. Searching starts from current selection and wrapped if reach document end. MatchFuzzy search is disabled.

Parameters

key
: [str] A text to search in word document.

Returns

list
: A list of list. Each list element is [found text in str, start place in int, end place in int]. The list is sorted by second key (i.e. start place).

See also:

replace_all
Replace found keys.

wdbibtex.WdBibTeX.open

WdBibTeX.**open**()

Open copied word document.

Firstly copy word file with appending suffix. Then open the file.

See also:

close
Close document and application.

wdbibtex.WdBibTeX.read_preamble

WdBibTeX.**read_preamble**()

Read preamble contents if exists.

WdBibTeX detects special command of begin{preamble} and end{preamble} commands from target .docx file. Contents written in the two commands will be copied to the preamble of .tex file. If these commands did not be found, the following default preamble is used.

```
\documentclass[latex]{article}
\usepackage{cite}
```

Returns

None or str
None if no preamble texts exists, str if preamble exists.

Raises

ValueError
If only one of begin{preamble} or end{preamble} found in file. Or, if two or more begin{preamble} or end{preamble} found.

wdbibtex.WdBibTeX.replace_all

WdBibTeX.**replace_all**(*key*, *val*)

Replace all keys in document with value.

Replace all keys in word document with value. Searching starts from current selection and wrapped if reach document end. MatchFuzzy search is disabled.

Parameters

key
[str] Original text.

val
[str] Replacing text.

See also:

find_all
Find all keys in the document.

3.2 LaTeX

Constructor

LaTeX([bibtexcmd, bibtexopts, preamble, ...])	LaTeX related contents and commands.

wdbibtex.LaTeX

class wdbibtex.**LaTeX**(*bibtexcmd=None*, *bibtexopts=None*, *preamble=None*, *targetbasename='wdbib'*, *texcmd=None*, *texopts=None*, *workdir='.tmp'*)

LaTeX related contents and commands.

Run LaTeX and BibTeX commands. Write .tex files. Read and parse .aux and .bbl files. Prepare conversion LaTeX keys in Word file into BibTeX processed texts.

Parameters

bibtexcmd
[str or None, default None] BibTeX command. If None, automatically selected accorting to system locale.

bibtexopts
[str or None, default None] BibTeX command options. If None, automatically selected according to system locale.

preamble
[str or None, default None] Preamble of .tex file. If None, automatically selected.

targetbasename
[str, default ‘ wdbib ’] Base name of LaTeX related files.

texcmd
[str or None, default None] LaTeX command. If None, automatically selected according to system locale.

texopts
[str or None, default None] LaTeX command options. If None, automatically selected accorgin to system locale.

workdir
: [str or path object, default ‘.tmp’] Temporal working directory to store LaTeX contents.

Attributes

bibliographystyle	Bibliographystyle string.
citation_labels	Key to number map of citations.
citeleft	Left delimiter of list.
citeright	Right delimiter of list.
documentclass	LaTeX documentclass string.
formatted_bibliographystyle	[Read only] Formatted bibliographystyle, e.g.
locale	Returns system locale
packages	Returns used LaTeX packages.
preamble	Returns latex preamble text.
thebibliography	Plain text to replace \thebibliography in word file.

Methods

add_package(package, *options)	Add a package to the package list
build()	Build LaTeX related files.
cite(s)	Do cite command formatting.
is_package_used(p)	Returns if the package is used.
read_aux()	Read .aux file.
read_bbl()	Read .bbl file.
set_bibliographystyle(bst)	Bibliographystyle setter.
set_documentclass(documentclass, *options)	Documentclass setter.
write(c[, bib])	Write .tex file.

Attributes

LaTeX.bibliographystyle	Bibliographystyle string.
LaTeX.citation_labels	Key to number map of citations.
LaTeX.citeleft	Left delimiter of list.
LaTeX.citeright	Right delimiter of list.
LaTeX.documentclass	LaTeX documentclass string.
LaTeX.formatted_bibliographystyle	[Read only] Formatted bibliographystyle, e.g.
LaTeX.locale	Returns system locale
LaTeX.packages	Returns used LaTeX packages.
LaTeX.preamble	Returns latex preamble text.
LaTeX.thebibliography	Plain text to replace \thebibliography in word file.

wdbibtex.LaTeX.bibliographystyle

property LaTeX.**bibliographystyle**

Bibliographystyle string.

Bibliography string. If None is set, a .bst is automatically selected. The `bibliography` string is, for example, `SomeBST` of `\bibliographystyle{SomeBST}`. While the `formatted_bibliographystyle` is `\bibliographystyle{SomeBST}`.

Raises

ValueError
If bst is None and there is no or multiple .bst files in cwd.

See also:

formatted_bibliographystyle
formatted line to be written in preamble

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.bibliographystyle = 'IEEEtran'
>>> tx.bibliographystyle
'IEEEtran'
>>> tx.formatted_bibliographystyle
'\\bibliographystyle{IEEEtran}'
```

In the case of None and no .bst file is found, raise ValueError.

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.bibliographystyle = None
Traceback (most recent call last):
...
ValueError: No .bst files found in working directory.
```

In the case of None and some .bst file is in the working directory, the .bst file is automatically selected.

```
>>> import wdbibtex
>>> import pathlib
>>> import shutil
>>> shutil.rmtree('.tmp', ignore_errors=True)
>>> tx = wdbibtex.LaTeX(workdir='.tmp')
>>> pathlib.Path('.tmp/testbst.bst').touch()
>>> tx.bibliographystyle = None
>>> tx.bibliographystyle
'testbst'
>>> tx.formatted_bibliographystyle
'\\bibliographystyle{testbst}'
```

wdbibtex.LaTeX.citation_labels

property LaTeX.**citation_labels**

Key to number map of citations.

Returns

dict

Citation key to citation number map.

wdbibtex.LaTeX.citeleft

property LaTeX.**citeleft**

Left delimiter of list. Default ‘ [‘ .

Returns

str

Left delimiter of list.

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.citation_labels = {'key1': 1, 'key2': 2, 'key3': 3}
>>> tx.citeleft
'['
>>> tx.cite('\\cite{key1}')
'[1]'
>>> tx.cite('\\cite{key2,key3}')
'[2,3]'
>>> tx.cite('\\cite{key3,key2,key1}')
'[3,2,1]'
>>> tx.citeleft = '('
>>> tx.citeleft
'('
>>> tx.cite('\\cite{key1}')
'(1]'
>>> tx.cite('\\cite{key2,key3}')
'(2,3]'
>>> tx.cite('\\cite{key3,key2,key1}')
'(3,2,1]'
```

wdbibtex.LaTeX.citeright

property LaTeX.**citeright**

Right delimiter of list. Default ‘] ’ .

Returns

str
Right delimiter of list.

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.citation_labels = {'key1': 1, 'key2': 2, 'key3': 3}
>>> tx.citeright
']'
>>> tx.cite('\\cite{key1}')
'[1]'
>>> tx.cite('\\cite{key2,key3}')
'[2,3]'
>>> tx.cite('\\cite{key3,key2,key1}')
```

(continues on next page)

(continued from previous page)

```
'[3,2,1]'
>>> tx.citeright = ')'
>>> tx.citeright
')'
>>> tx.cite('\\cite{key1}')
'[1)'
>>> tx.cite('\\cite{key2,key3}')
'[2,3)'
>>> tx.cite('\\cite{key3,key2,key1}')
'[3,2,1)'
```

wdbibtex.LaTeX.documentclass

property LaTeX.**documentclass**

LaTeX documentclass string.

wdbibtex.LaTeX.formatted_bibliographystyle

property LaTeX.**formatted_bibliographystyle**

[Read only] Formatted bibliographystyle, e.g. bibliographystyle{IEEEtran}

Formatted bibliography string to be written in preamble. In the case `bibliographystyle` is `SomeBST`, `formatted_bibliographystyle` is `\bibliographystyle{SomeBST}`.

See also:

bibliographystyle
bare bibliographystyle to be used

wdbibtex.LaTeX.locale

property LaTeX.**locale**

Returns system locale

Locale string to decide which latex commands used. Currently english(en) and japanese(ja) are supported. If locale is manually set, returns the local as is. Else, determined using locale.getlocale().

Returns

str
Locale text in two characters for example ‘en’ or ‘ja’.

wdbibtex.LaTeX.packages

property LaTeX.**packages**

Returns used LaTeX packages.

Returns

str

Multi-line LaTeX \usepackage[options]{package} string.

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.add_package('cite')
>>> print(tx.packages)
\usepackage{cite}
>>> tx.add_package('graphicx', 'dvipdfmx')
>>> print(tx.packages)
\usepackage{cite}
\usepackage[dvipdfmx]{graphicx}
```

wdbibtex.LaTeX.preamble

property LaTeX.**preamble**

Returns latex preamble text.

A text to be used as LaTeX preamble. Note that not all latex-compatible preamble is used in WdBibTeX package. LaTeX class accepts None for preamble attribute. In this case, the following default preamble text is used according to system locale. Note BST is replaced a bibliography style file placed in the project directory.

```
\documentclass[latex]{article}
\bibliographystyle{BST}
```

```
\documentclass[uplatex]{jsarticle}
\bibliographystyle{BST}
```

Returns

str

Preamble text.

wdbibtex.LaTeX.thebibliography

property LaTeX.**thebibliography**

Plain text to replace \thebibliography in word file.

A plain text of LaTeX-processed bibliography list. An tab string is inserted between each citenum and citation string. Example in IEEE format follows:

```
[1]\\tF. Author, S. Author, "Paper Title," Journal Name, vol. 1, no. 1, p. 1,
 march 2022.
[2]\\tG. Name, F. Name, "Title," Journal, vol. 2, no. 2, pp. 1-10, 2020.
```

Returns

str
Plain text of the thebibliography.

Raises

ValueError
If thebibliography text is not set.

Methods

LaTeX.add_package(package, *options)	Add a package to the package list
LaTeX.build()	Build LaTeX related files.
LaTeX.cite(s)	Do cite command formatting.
LaTeX.is_package_used(p)	Returns if the package is used.
LaTeX.read_aux()	Read .aux file.
LaTeX.read_bbl()	Read .bbl file.
LaTeX.set_bibliographystyle(bst)	Bibliographystyle setter.
LaTeX.set_documentclass(documentclass, *options)	Documentclass setter.
LaTeX.write(c[, bib])	Write .tex file.

wdbibtex.LaTeX.add_package

LaTeX.**add_package**(*package*, **options*)

Add a package to the package list

Add a package to the package list of package_list. The package can have option. The package will used in the preamble attribute.

Parameters

package
[str] Package name.

***options**
Options of the package.

wdbibtex.LaTeX.build

LaTeX.**build**()

Build LaTeX related files.

Build LaTeX files in old-style four steps (without PDF generation).

1. latex: to generate .aux from .tex
2. bibtex: to generate .bbl and update .aux from .aux and .bst.
3. latex: to update .aux.
4. latex: to complete .aux.

Firstly the current directory is switched to the working directory. Secondly the above four steps are invoked. Thirdly read .bbl and .aux files are parsed. Finally, the current directory is switched to the original working directory.

wdbibtex.LaTeX.cite

LaTeX.**cite**(*s*)

Do cite command formatting.

Returns formated text from citation commands such as cite{key1} and cite{key1,key2,key3}, etc. By default, if there are three or more consecutive numbers, they are compressed into a range using an en-dash. Citation numbers are also sorted in the default condition.

Parameters

s
[str] Raw string to be formatted. For example, \cite{key1} or \cite{key2,key3}.

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.citation_labels = {'key1': 1, 'key2': 2, 'key3': 3}
>>> tx.cite('\\cite{key1}')
'[1]'
>>> tx.cite('\\cite{key2,key3}')
'[2,3]'
>>> tx.cite('\\cite{key3,key2,key1}')
'[3,2,1]'
```

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.add_package('cite')
>>> tx.citation_labels = {'key1': 1, 'key2': 2, 'key3': 3}
>>> tx.cite('\\cite{key1}')
'[1]'
>>> tx.cite('\\cite{key2,key3}')
'[2,3]'
>>> tx.cite('\\cite{key3,key2,key1}')
'[1\u20133]'
```

Note \u2013 is en-dash.

wdbibtex.LaTeX.is_package_used

LaTeX.**is_package_used**(*p*)

Returns if the package is used.

Returns False if the package is not used while True if the package is used without option. If the package is used with option(s), returns List of option(s).

Parameters

p
[str] Package name to find.

Returns

bool or list
False if the package is not used. True if the package is used without option. List of option(s) if the package is used with option(s).

Examples

```
>>> import wdbibtex
>>> tx = wdbibtex.LaTeX()
>>> tx.add_package('cite')
>>> tx.is_package_used('cite')
True
>>> tx.add_package('graphicx', 'dvipdfmx')
>>> tx.is_package_used('graphicx')
['dvipdfmx']
>>> tx.is_package_used('xcolor')
False
>>> print(tx.packages)
\usepackage{cite}
\usepackage[dvipdfmx]{graphicx}
```

wdbibtex.LaTeX.read_aux

LaTeX.**read_aux**()

Read .aux file.

Aux file will be read line-by-line. Following four types of the line will be interpreted and stored to the LaTeX attributes.

- **\citation{keys}**
  Appended to the citation attribute (list object) key as string.
- **\bibstyle{s}**
  Stored as bibstyle string attribute.
- **\bibdata{d}**
  Stored as bibdata string attribute.
- **\bibcite{k}{n}**
  Added to bibcite attribute (dictionary) as {k: n}.

wdbibtex.LaTeX.read_bbl

LaTeX.**read_bbl**()

Read .bbl file.

Read .bbl file to extract formatted thebibliography text.

Examples

```
>>> import wdbibtex
>>> bb = wdbibtex.Bibliography()
>>> bb.read_bbl()
```

wdbibtex.LaTeX.set_bibliographystyle

LaTeX.**set_bibliographystyle**(*bst*)

Bibliographystyle setter.

Parameters

bst
[str] Bibliography style such as IEEEtran or ieeetr.

wdbibtex.LaTeX.set_documentclass

LaTeX.**set_documentclass**(*documentclass*, **options*)

Documentclass setter.

Parameters

documentclass
Documentclass

***options**
Documentclass options.

wdbibtex.LaTeX.write

LaTeX.**write**(*c*, *bib=None*)

Write .tex file.

Write minimal .tex file into workdir. TeX file contains only citation contents, pre-defined (at constructor of LaTeX object) preamble, \bibliography, and \bibliographystyle.

Parameters

c
[str] String data to be written in .tex file.

bib
[str or None, default None] Bibliography library file(s). If None, use all .bib files in cwd.