

# utils

October 11, 2023

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**AUTO-GENERATE PDFs ON PUSH TO BRANCH** 1. PDFs are autogenerated every time you push to a BRANCH 1. After pushing to a branch, go to branch: output-[BRANCH-YOU-PUSHED-TO] 1. Then go to the folder called output

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## COMMAND TO CONVERT NOTEBOOK TO PDF

```
[1]: # RUN THIS CELL TO CONVERT THIS NOTEBOOK TO PDF
!jupyter nbconvert --to pdf example.ipynb
```

```
[NbConvertApp] WARNING | pattern 'example.ipynb' matched no files
This application is used to convert notebook files (*.ipynb)
to various other formats.
```

WARNING: THE COMMANDLINE INTERFACE MAY CHANGE IN FUTURE RELEASES.

### Options

=====

The options below are convenience aliases to configurable class-options, as listed in the "Equivalent to" description-line of the aliases.

To see all configurable class-options for some <cmd>, use:

<cmd> --help-all

### --debug

set log level to logging.DEBUG (maximize logging output)

Equivalent to: [--Application.log\_level=10]

### --show-config

Show the application's configuration (human-readable format)

Equivalent to: [--Application.show\_config=True]

### --show-config-json

Show the application's configuration (json format)

Equivalent to: [--Application.show\_config\_json=True]

### --generate-config

generate default config file

Equivalent to: [--JupyterApp.generate\_config=True]

### -y

Answer yes to any questions instead of prompting.

Equivalent to: [--JupyterApp.answer\_yes=True]

--execute  
Execute the notebook prior to export.  
Equivalent to: [--ExecutePreprocessor.enabled=True]

--allow-errors  
Continue notebook execution even if one of the cells throws an error and include the error message in the cell output (the default behaviour is to abort conversion). This flag is only relevant if '--execute' was specified, too.  
Equivalent to: [--ExecutePreprocessor.allow\_errors=True]

--stdin  
read a single notebook file from stdin. Write the resulting notebook with default basename 'notebook.\*'  
Equivalent to: [--NbConvertApp.from\_stdin=True]

--stdout  
Write notebook output to stdout instead of files.  
Equivalent to: [--NbConvertApp.writer\_class=StdoutWriter]

--inplace  
Run nbconvert in place, overwriting the existing notebook (only relevant when converting to notebook format)  
Equivalent to: [--NbConvertApp.use\_output\_suffix=False]

--NbConvertApp.export\_format=notebook --FilesWriter.build\_directory=]

--clear-output  
Clear output of current file and save in place, overwriting the existing notebook.  
Equivalent to: [--NbConvertApp.use\_output\_suffix=False]

--NbConvertApp.export\_format=notebook --FilesWriter.build\_directory=

--ClearOutputPreprocessor.enabled=True]

--no-prompt  
Exclude input and output prompts from converted document.  
Equivalent to: [--TemplateExporter.exclude\_input\_prompt=True]

--TemplateExporter.exclude\_output\_prompt=True]

--no-input  
Exclude input cells and output prompts from converted document.  
This mode is ideal for generating code-free reports.  
Equivalent to: [--TemplateExporter.exclude\_output\_prompt=True]

--TemplateExporter.exclude\_input=True

--TemplateExporter.exclude\_input\_prompt=True]

--allow-chromium-download  
Whether to allow downloading chromium if no suitable version is found on the system.  
Equivalent to: [--WebPDFExporter.allow\_chromium\_download=True]

--disable-chromium-sandbox  
Disable chromium security sandbox when converting to PDF..  
Equivalent to: [--WebPDFExporter.disable\_sandbox=True]

--show-input  
Shows code input. This flag is only useful for dejavu users.  
Equivalent to: [--TemplateExporter.exclude\_input=False]

--embed-images

Embed the images as base64 dataurls in the output. This flag is only useful for the HTML/WebPDF/Slides exports.

Equivalent to: [--HTMLExporter.embed\_images=True]

--sanitize-html

Whether the HTML in Markdown cells and cell outputs should be sanitized..

Equivalent to: [--HTMLExporter.sanitize\_html=True]

--log-level=<Enum>

Set the log level by value or name.

Choices: any of [0, 10, 20, 30, 40, 50, 'DEBUG', 'INFO', 'WARN', 'ERROR', 'CRITICAL']

Default: 30

Equivalent to: [--Application.log\_level]

--config=<Unicode>

Full path of a config file.

Default: ''

Equivalent to: [--JupyterApp.config\_file]

--to=<Unicode>

The export format to be used, either one of the built-in formats

['asciidoc', 'custom', 'html', 'latex', 'markdown', 'notebook', 'pdf', 'python', 'qtpdf', 'qtpng', 'rst', 'script', 'slides', 'webpdf']

or a dotted object name that represents the import path for an

``Exporter`` class

Default: ''

Equivalent to: [--NbConvertApp.export\_format]

--template=<Unicode>

Name of the template to use

Default: ''

Equivalent to: [--TemplateExporter.template\_name]

--template-file=<Unicode>

Name of the template file to use

Default: None

Equivalent to: [--TemplateExporter.template\_file]

--theme=<Unicode>

Template specific theme(e.g. the name of a JupyterLab CSS theme distributed as prebuilt extension for the lab template)

Default: 'light'

Equivalent to: [--HTMLExporter.theme]

--sanitize\_html=<Bool>

Whether the HTML in Markdown cells and cell outputs should be sanitized.This should be set to True by nbviewer or similar tools.

Default: False

Equivalent to: [--HTMLExporter.sanitize\_html]

--writer=<DottedObjectName>

Writer class used to write the

results of the conversion

Default: 'FilesWriter'

Equivalent to: [--NbConvertApp.writer\_class]

--post=<DottedOrNone>



```
'notebook', 'pdf', 'python', 'qtpdf', 'qtpng', 'rst', 'script', 'slides',  
'webpdf'].
```

```
> jupyter nbconvert --to latex mynotebook.ipynb
```

Both HTML and LaTeX support multiple output templates. LaTeX includes

'base', 'article' and 'report'. HTML includes 'basic', 'lab' and 'classic'. You can specify the flavor of the format used.

```
> jupyter nbconvert --to html --template lab mynotebook.ipynb
```

You can also pipe the output to stdout, rather than a file

```
> jupyter nbconvert mynotebook.ipynb --stdout
```

PDF is generated via latex

```
> jupyter nbconvert mynotebook.ipynb --to pdf
```

You can get (and serve) a Reveal.js-powered slideshow

```
> jupyter nbconvert myslides.ipynb --to slides --post serve
```

Multiple notebooks can be given at the command line in a couple of different ways:

```
> jupyter nbconvert notebook*.ipynb
```

```
> jupyter nbconvert notebook1.ipynb notebook2.ipynb
```

or you can specify the notebooks list in a config file, containing::

```
c.NbConvertApp.notebooks = ["my_notebook.ipynb"]
```

```
> jupyter nbconvert --config mycfg.py
```

To see all available configurables, use `--help-all`.

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## AUTOFORMAT ALL PYTHON FILES

```
[2]: try:  
      import black  
except ImportError:  
    %pip install black[jupyter]  
    import black
```

```
%autosave 0
!black .
```

Defaulting to user installation because normal site-packages is not writeable

Collecting black[jupyter]

Obtaining dependency information for black[jupyter] from <https://files.pythonhosted.org/packages/21/24/b6ee7df9690e5d6eb6c6bad1e36aa030002c14c921324fad265e89799273/black-23.9.1-cp310-cp310->

manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl.metadata

Downloading

black-23.9.1-cp310-cp310-manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl.metadata  
(65 kB)

65.1/65.1 kB

2.0 MB/s eta 0:00:00

Requirement already satisfied: click>=8.0.0 in /usr/lib/python3/dist-packages (from black[jupyter]) (8.0.3)

Collecting mypy-extensions>=0.4.3 (from black[jupyter])

Downloading mypy\_extensions-1.0.0-py3-none-any.whl (4.7 kB)

Requirement already satisfied: packaging>=22.0 in

/usr/local/lib/python3.10/dist-packages (from black[jupyter]) (23.2)

Collecting pathspec>=0.9.0 (from black[jupyter])

Obtaining dependency information for pathspec>=0.9.0 from <https://files.pythonhosted.org/packages/b4/2a/9b1be29146139ef459188f5e420a66e835dda921208db600b7037093891f/pathspec-0.11.2-py3-none-any.whl.metadata>

Downloading pathspec-0.11.2-py3-none-any.whl.metadata (19 kB)

Requirement already satisfied: platformdirs>=2 in

/home/runner/.local/lib/python3.10/site-packages (from black[jupyter]) (3.11.0)

Collecting tomli>=1.1.0 (from black[jupyter])

Downloading tomli-2.0.1-py3-none-any.whl (12 kB)

Collecting typing-extensions>=4.0.1 (from black[jupyter])

Obtaining dependency information for typing-extensions>=4.0.1 from [https://files.pythonhosted.org/packages/24/21/7d397a4b7934ff4028987914ac1044d3b7d52712f30e2ac7a2ae5bc86dd0/typing\\_extensions-4.8.0-py3-none-any.whl.metadata](https://files.pythonhosted.org/packages/24/21/7d397a4b7934ff4028987914ac1044d3b7d52712f30e2ac7a2ae5bc86dd0/typing_extensions-4.8.0-py3-none-any.whl.metadata)

Downloading typing\_extensions-4.8.0-py3-none-any.whl.metadata (3.0 kB)

Requirement already satisfied: ipython>=7.8.0 in

/home/runner/.local/lib/python3.10/site-packages (from black[jupyter]) (8.16.1)

Collecting tokenize-rt>=3.2.0 (from black[jupyter])

Obtaining dependency information for tokenize-rt>=3.2.0 from [https://files.pythonhosted.org/packages/8d/35/78f03aa48cfdbd13646707f64477bc7eacf1081edcdcd1b4d57cb1b5d0a8/tokenize\\_rt-5.2.0-py2.py3-none-any.whl.metadata](https://files.pythonhosted.org/packages/8d/35/78f03aa48cfdbd13646707f64477bc7eacf1081edcdcd1b4d57cb1b5d0a8/tokenize_rt-5.2.0-py2.py3-none-any.whl.metadata)

Downloading tokenize\_rt-5.2.0-py2.py3-none-any.whl.metadata (4.1 kB)

Requirement already satisfied: backcall in

/home/runner/.local/lib/python3.10/site-packages (from ipython>=7.8.0->black[jupyter]) (0.2.0)

Requirement already satisfied: decorator in

/home/runner/.local/lib/python3.10/site-packages (from ipython>=7.8.0->black[jupyter]) (5.1.1)

Requirement already satisfied: jedi>=0.16 in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (0.19.1)

Requirement already satisfied: matplotlib-inline in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (0.1.6)

Requirement already satisfied: pickleshare in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (0.7.5)

Requirement already satisfied: prompt-toolkit!=3.0.37,<3.1.0,>=3.0.30 in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (3.0.39)

Requirement already satisfied: pygments>=2.4.0 in /usr/lib/python3/dist-packages  
(from ipython>=7.8.0->black[jupyter]) (2.11.2)

Requirement already satisfied: stack-data in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (0.6.3)

Requirement already satisfied: traitlets>=5 in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (5.11.2)

Requirement already satisfied: exceptiongroup in  
/home/runner/.local/lib/python3.10/site-packages (from  
ipython>=7.8.0->black[jupyter]) (1.1.3)

Requirement already satisfied: pexpect>4.3 in /usr/lib/python3/dist-packages  
(from ipython>=7.8.0->black[jupyter]) (4.8.0)

Requirement already satisfied: parso<0.9.0,>=0.8.3 in  
/home/runner/.local/lib/python3.10/site-packages (from  
jedi>=0.16->ipython>=7.8.0->black[jupyter]) (0.8.3)

Requirement already satisfied: wcwidth in  
/home/runner/.local/lib/python3.10/site-packages (from prompt-  
toolkit!=3.0.37,<3.1.0,>=3.0.30->ipython>=7.8.0->black[jupyter]) (0.2.8)

Requirement already satisfied: executing>=1.2.0 in  
/home/runner/.local/lib/python3.10/site-packages (from stack-  
data->ipython>=7.8.0->black[jupyter]) (2.0.0)

Requirement already satisfied: asttokens>=2.1.0 in  
/home/runner/.local/lib/python3.10/site-packages (from stack-  
data->ipython>=7.8.0->black[jupyter]) (2.4.0)

Requirement already satisfied: pure-eval in  
/home/runner/.local/lib/python3.10/site-packages (from stack-  
data->ipython>=7.8.0->black[jupyter]) (0.2.2)

Requirement already satisfied: six>=1.12.0 in /usr/lib/python3/dist-packages  
(from asttokens>=2.1.0->stack-data->ipython>=7.8.0->black[jupyter]) (1.16.0)

Downloading pathspec-0.11.2-py3-none-any.whl (29 kB)

Downloading tokenize\_rt-5.2.0-py2.py3-none-any.whl (5.8 kB)

Downloading typing\_extensions-4.8.0-py3-none-any.whl (31 kB)

Downloading  
black-23.9.1-cp310-cp310-manylinux\_2\_17\_x86\_64.manylinux2014\_x86\_64.whl (1.6 MB)

1.6/1.6 MB

33.5 MB/s eta 0:00:00

Installing collected packages: typing-extensions, tomli, tokenize-rt,  
pathspec, mypy-extensions, black

Successfully installed black-23.9.1 mypy-extensions-1.0.0 pathspec-0.11.2  
tokenize-rt-5.2.0 tomli-2.0.1 typing-extensions-4.8.0

Note: you may need to restart the kernel to use updated packages.

Autosave disabled

All done!

2 files left unchanged.