nbconvert Documentation

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Jupyter Development Team

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USER DOCUMENTATION

Using `nbconvert` enables:

- **presentation** of information in familiar formats, such as PDF.

- **publishing** of research using LaTeX and opens the door for embedding notebooks in papers.

- **collaboration** with others who may not use the notebook in their work.

- **sharing** contents with many people via the web using HTML.

Overall, notebook conversion and the `nbconvert` tool give scientists and researchers the flexibility to deliver information in a timely way across different formats.

Primarily, the `nbconvert` tool allows you to convert a Jupyter `.ipynb` notebook document file into another static format including HTML, LaTeX, PDF, Markdown, reStructuredText, and more. `nbconvert` can also add productivity to your workflow when used to execute notebooks programmatically.

If used as a Python library (`import nbconvert`), `nbconvert` adds notebook conversion within a project. For example, `nbconvert` is used to implement the "Download as" feature within the Jupyter Notebook web application. When used as a command line tool (invoked as `jupyter nbconvert ...`), users can conveniently convert just one or a batch of notebook files to another format.

Contents:

INSTALLATION

See also:

Installing Jupyter
> Nbconvert is part of the Jupyter ecosystem.

1.1 Supported Python versions

Currently Python 3.8-3.11 is supported and tested by nbconvert.

1.2 Installing nbconvert

Nbconvert is packaged for both pip and conda, so you can install it with:

```
pip install nbconvert

# OR

conda install nbconvert
```

The Miniconda and Miniforge distributions both provide a minimal conda installation.

Important: To unlock its full capabilities, nbconvert requires Pandoc, TeX (specifically, XeLaTeX) and playwright. These must be installed separately.

1.3 Installing Pandoc

For converting markdown to formats other than HTML, nbconvert uses Pandoc (1.12.1 or later).

To install pandoc on Linux, you can generally use your package manager:

```
sudo apt-get install pandoc
```

On other platforms, you can get pandoc from their website.

1.4 Installing TeX

For converting notebooks to PDF (with `--to pdf`), nbconvert makes use of LaTeX and the XeTeX as the rendering engine.

New in version 5.0: We use XeTeX as the rendering engine rather than pdfTeX (as in earlier versions). XeTeX can access fonts through native operating system libraries, it has better support for OpenType formatted fonts and Unicode characters.

To install a complete TeX environment (including XeLaTeX and the necessary supporting packages) by hand can be tricky. Fortunately, there are packages that make this much easier. These packages are specific to different operating systems:

- Linux: TeX Live

  - E.g. on Debian or Ubuntu:

    ```
    sudo apt-get install texlive-xetex texlive-fonts-recommended texlive-plain-
    →generic
    ```

- macOS (OS X): MacTeX.

- Windows: Latex Project.

Because nbconvert depends on packages and fonts included in standard TeX distributions, if you do not have a complete installation, you may not be able to use nbconvert's standard tooling to convert notebooks to PDF.

1.5 Installing Chromium

For converting notebooks to PDF with `--to webpdf`, nbconvert requires the playwright Chromium automation library.

Playwright makes use of a specific version of Chromium. If it does not find a suitable installation of the web browser, it can automatically download it if the `--allow-chromium-download` flag is passed to the command line.

To install a suitable version of playwright, you can pip install `nbconvert[webpdf]`.

1.5.1 PDF conversion on a limited TeX environment

If you are only able to install a limited TeX environment, there are two main routes you could take to convert to PDF:

1. **Using TeX by hand**

   a. You could convert to `.tex` directly; this requires Pandoc.

   b. edit the file to accord with your local environment

   c. run `xelatex` directly.

2. **Custom exporter**

   a. You could write a *custom exporter* that takes your system's limitations into account.

USING AS A COMMAND LINE TOOL

The command-line syntax to run the `nbconvert` script is:

```
$ jupyter nbconvert --to FORMAT notebook.ipynb
```

This will convert the Jupyter notebook file `notebook.ipynb` into the output format given by the `FORMAT` string.

2.1 Default output format

In 5.x versions of nbconvert the default output format was html. In 6.0 the default was removed, requiring CLI calls to explicitly set a `--to` argument in order to execute. To mimic original 5.x behavior one should add `--to=html` to the `jupyter nbconvert` command.

2.2 Supported output formats

The currently supported output formats are:

- *HTML*,
- *LaTeX*,
- *PDF*,
- *WebPDF*,
- *Reveal.js HTML slideshow*,
- *Markdown*,
- *Ascii*,
- *reStructuredText*,
- *executable script*,
- *notebook*.

Jupyter also provides a few templates for output formats. These can be specified via an additional `--template` argument and are listed in the sections below.

2.2.1 HTML

- `--to html`

  HTML Export. Note on backward compatibility: Be aware that if you were using custom copies of the old 5.x template files (i.e. `--template`), you will now need to use `--template-file path/to/old/file.tpl` in order to use that file in compatibility mode as opposed to other options.

  - `--template lab` (default)

    A full static HTML render of the notebook. This looks very similar to the JupyterLab interactive view.

    The lab template supports the extra `--theme` option, which defaults to `light`. This extra option not only allows you to use the default `light` or `dark` themes provided by JupyterLab, but it allows you to use custom themes. For example:

    `pip install jupyterlab-miami-nights` then `--theme jupyterlab_miami_nights`.

  - `--template classic`

    Simplified HTML, using the classic jupyter look and feel.

  - `--template basic`

    Base HTML, rendering with minimal structure and styles.

  - `--embed-images`

    If this option is provided, embed images as base64 urls in the resulting HTML file.

2.2.2 LaTeX

- `--to latex`

  Latex export. This generates `NOTEBOOK_NAME.tex` file, ready for export. Images are output as .png files in a folder.

  - `--template article` (default)

    Latex article, derived from Sphinx's howto template.

  - `--template report`

    Latex report, providing a table of contents and chapters.

  Optionally you can specify `authors`, `title` and `date` in the notebook's metadata. These will be used to render the header of the LaTeX document.

```
{
    "authors": [
        {
            "name": "Jane Doe"
        },
        {
            "name": "John Doe"
        }
    ],
    "date": "January 2023",
    "title": "Annual Data Report 2022",
    "kernelspec": { },
```

```
    "language_info": { }
}
```

If no date is specified, today's date will be used (i.e. the date when the document is re/compiled). Use an empty string to suppress the date.

The values in the notebook can be overridden by the command line arguments `--LatexPreprocessor.title`, `--LatexPreprocessor.date` and `--LatexPreprocessor.author_names` (specify this argument multiple times for each individual author name).

Note: nbconvert uses pandoc to convert between various markup languages, so pandoc is a dependency when converting to latex or reStructuredText.

2.2.3 PDF

- `--to pdf`

   Generates a PDF via latex. Supports the same templates as `--to latex`.

2.2.4 WebPDF

- `--to webpdf`

   Generates a PDF by first rendering to HTML, rendering the HTML Chromium headless, and exporting to PDF. This exporter supports the same templates as `--to html`.

   The webpdf exporter requires the `playwright` Chromium automation library, which can be installed via `nbconvert[webpdf]`.

2.2.5 Reveal.js HTML slideshow

Note: In order to designate a mapping from notebook cells to Reveal.js slides, from within the Jupyter notebook, select menu item View –> Cell Toolbar –> Slideshow. That will reveal a drop-down menu on the upper-right of each cell. From it, one may choose from "Slide," "Sub-Slide", "Fragment", "Skip", and "Notes." On conversion, cells designated as "skip" will not be included, "notes" will be included only in presenter notes, etc.

- `--to slides`

   This generates a Reveal.js HTML slideshow.

Running this slideshow requires a copy of reveal.js (version 4.x).

By default, this will include a script tag in the html that will directly load reveal.js from a public CDN.

This means that if you include your slides on a webpage, they should work as expected. However, some features (specifically, speaker notes & timers) will not work on website because they require access to a local copy of reveal.js.

Speaker notes require a local copy of reveal.js. Then, you need to tell `nbconvert` how to find that local copy.

Timers only work if you already have speaker notes, but also require a local https server. You can read more about this in *ServePostProcessorExample*.

To make this clearer, let's look at an example of how to get speaker notes working with a local copy of reveal.js: *SlidesWithNotesExample*.

Example: creating slides w/ speaker notes

Let's suppose you have a notebook `your_talk.ipynb` that you want to convert to slides. For this example, we'll assume that you are working in the same directory as the notebook you want to convert (i.e., when you run `ls .`, `your_talk.ipynb` shows up amongst the list of files).

First, we need a copy of reveal.js in the same directory as your slides. One way to do this is to use the following commands in your terminal:

```
git clone https://github.com/hakimel/reveal.js.git
cd reveal.js
git checkout 3.5.0
cd ..
```

Then we need to tell nbconvert to point to this local copy. To do that we use the `--reveal-prefix` command line flag to point to the local copy.

```
jupyter nbconvert your_talk.ipynb --to slides --reveal-prefix reveal.js
```

This will create file `your_talk.slides.html`, which you should be able to access with `open your_talk.slides.html`. To access the speaker notes, press `s` after the slides load and they should open in a new window.

Note: This does not enable slides that run completely offline. While you have a local copy of reveal.js, by default, the slides need to access mathjax, require, and jquery via a public CDN. Addressing this use case is an open issue and PRs are always encouraged.

Serving slides with an https server: `--post serve`

Once you have speaker notes working you may notice that your timers don't work. Timers require a bit more infrastructure; you need to serve your local copy of reveal.js from a local https server.

Fortunately, `nbconvert` makes this fairly straightforward through the use of the `ServePostProcessor`. To activate this server, we append the command line flag `--post serve` to our call to nbconvert.

```
jupyter nbconvert your_talk.ipynb --to slides --reveal-prefix reveal.js --post serve
```

This will run the server, which will occupy the terminal that you ran the command in until you stop it. You can stop the server by pressing `ctrl C` twice.

2.2.6 Markdown

- `--to markdown`

  Simple markdown output. Markdown cells are unaffected, and code cells indented 4 spaces. Images are output as .png files in a folder.

2.2.7 Ascii

- `--to asciidoc`

  Ascii output. Images are output as .png files in a folder.

2.2.8 reStructuredText

- `--to rst`

  Basic reStructuredText output. Useful as a starting point for embedding notebooks in Sphinx docs. Images are output as .png files in a folder.

Note: nbconvert uses pandoc to convert between various markup languages, so pandoc is a dependency when converting to LaTeX or reStructuredText.

2.2.9 Executable script

- `--to script`

  Convert a notebook to an executable script. This is the simplest way to get a Python (or other language, depending on the kernel) script out of a notebook. If there were any magics in an Jupyter notebook, this may only be executable from a Jupyter session.

  For example, to convert a Julia notebook to a Julia executable script:

  ```
  jupyter nbconvert --to script my_julia_notebook.ipynb
  ```

2.2.10 Notebook and preprocessors

- `--to notebook`

  New in version 3.0.

  This doesn't convert a notebook to a different format *per se*, instead it allows the running of nbconvert preprocessors on a notebook, and/or conversion to other notebook formats. For example:

  ```
  jupyter nbconvert --to notebook --execute mynotebook.ipynb
  ```

This will open the notebook, execute it, capture new output, and save the result in `mynotebook.nbconvert.ipynb`. Specifying `--inplace` will overwrite the input file instead of writing a new file. By default, `nbconvert` will abort conversion if any exceptions occur during execution of a cell. If you specify `--allow-errors` (in addition to the `--execute` flag) then conversion will continue and the output from any exception will be included in the cell output.

The following command:

```
jupyter nbconvert --to notebook --nbformat 3 mynotebook
```

will create a copy of `mynotebook.ipynb` in `mynotebook.v3.ipynb` in version 3 of the notebook format.

If you want to convert a notebook in-place, you can specify the output file to be the same as the input file:

```
jupyter nbconvert --to notebook mynb --output mynb
```

Be careful with that, since it will replace the input file.

Note: nbconvert uses pandoc to convert between various markup languages, so pandoc is a dependency when converting to latex or reStructuredText.

The output file created by `nbconvert` will have the same base name as the notebook and will be placed in the current working directory. Any supporting files (graphics, etc) will be placed in a new directory with the same base name as the notebook, suffixed with `_files`:

```
$ jupyter nbconvert notebook.ipynb
$ ls
notebook.ipynb    notebook.html    notebook_files/
```

For simple single-file output, such as html, markdown, etc., the output may be sent to standard output with:

```
$ jupyter nbconvert --to markdown notebook.ipynb --stdout
```

2.3 Converting multiple notebooks

Multiple notebooks can be specified from the command line:

```
$ jupyter nbconvert notebook*.ipynb
$ jupyter nbconvert notebook1.ipynb notebook2.ipynb
```

or via a list in a configuration file, say `mycfg.py`, containing the text:

```
c = get_config()
c.NbConvertApp.notebooks = ["notebook1.ipynb", "notebook2.ipynb"]
```

and using the command:

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

USING NBCONVERT AS A LIBRARY

In this notebook, you will be introduced to the programmatic API of nbconvert and how it can be used in various contexts.

A great blog post by @jakevdp will be used to demonstrate. This notebook will not focus on using the command line tool. The attentive reader will point-out that no data is read from or written to disk during the conversion process. This is because nbconvert has been designed to work in memory so that it works well in a database or web-based environment too.

3.1 Quick overview

Credit: Jonathan Frederic (@jdfreder on github)

The main principle of nbconvert is to instantiate an `Exporter` that controls the pipeline through which notebooks are converted.

First, download @jakevdp's notebook (if you do not have `requests`, install it by running `pip install requests`, or if you don't have pip installed, you can find it on PYPI):

```python
from urllib.request import urlopen

url = "https://jakevdp.github.io/downloads/notebooks/XKCD_plots.ipynb"
response = urlopen(url).read().decode()
response[0:60] + " ..."
```

```
'{\n "cells": [\n  {\n   "cell_type": "markdown",\n   "metadata": ...'
```

The response is a JSON string which represents a Jupyter notebook.

Next, we will read the response using nbformat. Doing this will guarantee that the notebook structure is valid. Note that the in-memory format and on disk format are slightly different. In particular, on disk, multiline strings might be split into a list of strings.

```python
import nbformat

jake_notebook = nbformat.reads(response, as_version=4)
jake_notebook.cells[0]
```

```
{'cell_type': 'markdown',
 'metadata': {},
 'source': '# XKCD plots in Matplotlib'}
```

The nbformat API returns a special type of dictionary. For this example, you don't need to worry about the details of the structure (if you are interested, please see the nbformat documentation).

The nbconvert API exposes some basic exporters for common formats and defaults. You will start by using one of them. First, you will import one of these exporters (specifically, the HTML exporter), then instantiate it using most of the defaults, and then you will use it to process the notebook we downloaded earlier.

```
[3]: from traitlets.config import Config

     # 1. Import the exporter
     from nbconvert import HTMLExporter

     # 2. Instantiate the exporter. We use the `classic` template for now; we'll get into more
     →details
     # later about how to customize the exporter further.
     html_exporter = HTMLExporter(template_name="classic")

     # 3. Process the notebook we loaded earlier
     (body, resources) = html_exporter.from_notebook_node(jake_notebook)
```

The exporter returns a tuple containing the source of the converted notebook, as well as a resources dict. In this case, the source is just raw HTML:

```
[4]: print(body[:400] + "...")
```

```
<!DOCTYPE html>

<html lang="en">
<head><meta charset="utf-8"/>
<meta content="width=device-width, initial-scale=1.0" name="viewport"/>
<title>Notebook</title><script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/
→jquery.min.js"></script><script src="https://cdnjs.cloudflare.com/ajax/libs/require.js/
→2.1.10/require.min.js"></script><script type="module">
  import mermaid from 'https://cdn...
```

If you understand HTML, you'll notice that some common tags are omitted, like the body tag. Those tags are included in the default HtmlExporter, which is what would have been constructed if we had not modified the template_file.

The resource dict contains (among many things) the extracted .png, .jpg, etc. from the notebook when applicable. The basic HTML exporter leaves the figures as embedded base64, but you can configure it to extract the figures. So for now, the resource dict should be mostly empty, except for a key containing CSS and a few others whose content will be obvious:

```
[5]: print("Resources:", resources.keys())
     print("Metadata:", resources["metadata"].keys())
     print("Inlining:", resources["inlining"].keys())
     print("Extension:", resources["output_extension"])
```

```
Resources: dict_keys(['metadata', 'output_extension', 'deprecated', 'theme', 'include_css
→', 'include_lab_theme', 'include_js', 'include_url', 'require_js_url', 'mathjax_url',
→'mermaid_js_url', 'jquery_url', 'jupyter_widgets_base_url', 'widget_renderer_url',
→'html_manager_semver_range', 'should_sanitize_html', 'language_code', 'should_not_
→encode_svg', 'inlining', 'raw_mimetypes', 'global_content_filter'])
Metadata: dict_keys(['name'])
Inlining: dict_keys(['css'])
Extension: .html
```

Exporters are stateless, so you won't be able to extract any useful information beyond their configuration. You can re-use an exporter instance to convert another notebook. In addition to the from_notebook_node used above, each

exporter exposes `from_file` and `from_filename` methods.

3.2 Extracting Figures using the RST Exporter

When exporting, you may want to extract the base64 encoded figures as files. While the HTML exporter does not do this by default, the `RstExporter` does:

```
[6]: # Import the RST exproter
     from nbconvert import RSTExporter

     # Instantiate it
     rst_exporter = RSTExporter()
     # Convert the notebook to RST format
     (body, resources) = rst_exporter.from_notebook_node(jake_notebook)

     print(body[:970] + "...")
     print("[.....]")
     print(body[800:1200] + "...")
```

```
XKCD plots in Matplotlib
========================


This notebook originally appeared as a blog post at `Pythonic
Perambulations <http://jakevdp.github.com/blog/2012/10/07/xkcd-style-plots-in-matplotlib/
↪>`__
by Jake Vanderplas.

.. raw:: html

    <!-- PELICAN_BEGIN_SUMMARY -->

*Update: the matplotlib pull request has been merged! See* `This
post <http://jakevdp.github.io/blog/2013/07/10/XKCD-plots-in-matplotlib/>`__
*for a description of the XKCD functionality now built-in to
matplotlib!*

One of the problems I've had with typical matplotlib figures is that
everything in them is so precise, so perfect. For an example of what I
mean, take a look at this figure:

.. code:: ipython3

    from IPython.display import Image
    Image('http://jakevdp.github.com/figures/xkcd_version.png')



.. image:: output_3_0.png
```

```
Sometimes when showing schematic plots, this is the type of figure I
want to display. But drawing it by hand is a pain: I'd rather just use
matpl...
[...]
mage:: output_3_0.png


Sometimes when showing schematic plots, this is the type of figure I
want to display. But drawing it by hand is a pain: I'd rather just use
matplotlib. The problem is, matplotlib is a bit too precise. Attempting
to duplicate this figure in matplotlib leads to something like this:

.. code:: ipython3

    Image('http://jakevdp.github.com/figures/mpl_version.png')



.. ima...
```

Notice that base64 images are not embedded, but instead there are filename-like strings, such as `output_3_0.png`. The strings actually are (configurable) keys that map to the binary data in the resources dict.

Note, if you write an RST Plugin, you are responsible for writing all the files to the disk (or uploading, etc...) in the right location. Of course, the naming scheme is configurable.

As an exercise, this notebook will show you how to get one of those images. First, take a look at the `'outputs'` of the returned resources dictionary. This is a dictionary that contains a key for each extracted resource, with values corresponding to the actual base64 encoding:

```
[7]: sorted(resources["outputs"].keys())
```

```
[7]: ['output_13_1.png',
     'output_16_0.png',
     'output_18_1.png',
     'output_3_0.png',
     'output_5_0.png']
```

In this case, there are 5 extracted binary figures, all `png`s. We can use the Image display object to actually display one of the images:

```
[8]: from IPython.display import Image

     Image(data=resources["outputs"]["output_3_0.png"], format="png")
```

[8]:
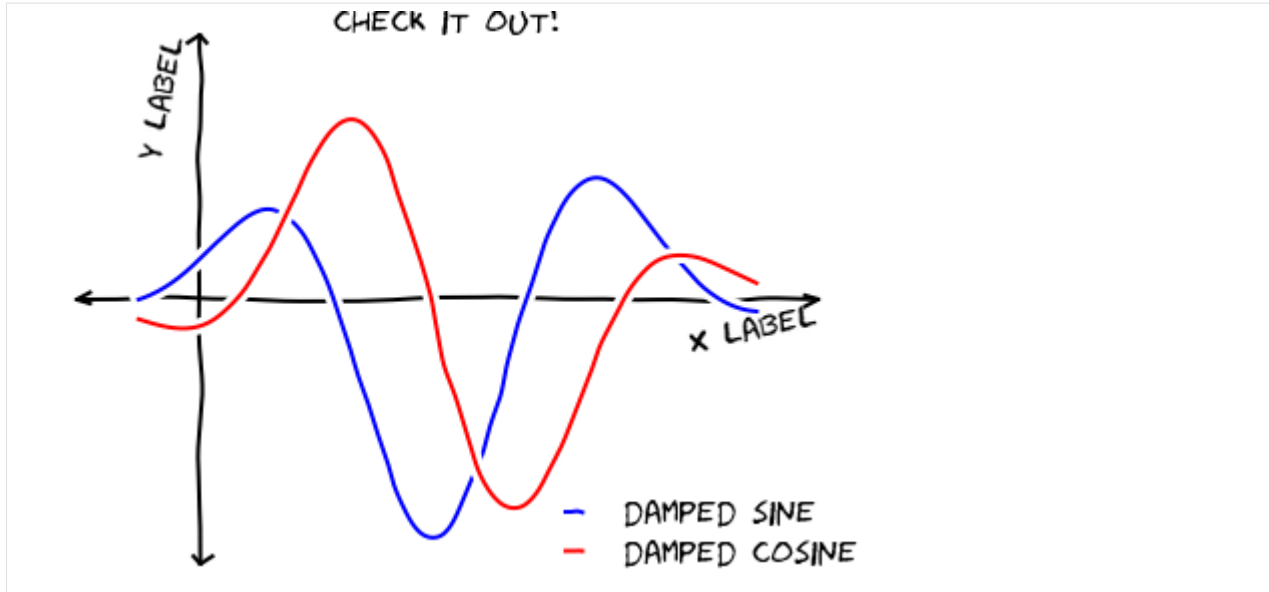
Note that this image is being rendered without ever reading or writing to the disk.

3.3 Extracting Figures using the HTML Exporter

As mentioned above, by default, the HTML exporter does not extract images – it just leaves them as inline base64 encodings. However, this is not always what you might want. For example, here is a use case from @jakevdp:

> I write an awesome blog using Jupyter notebooks converted to HTML, and I want the images to be cached. Having one html file with all of the images base64 encoded inside it is nice when sharing with a coworker, but for a website, not so much. I need an HTML exporter, and I want it to extract the figures!

3.3.1 Some theory

Before we get into actually extracting the figures, it will be helpful to give a high-level overview of the process of converting a notebook to a another format:

1. Retrieve the notebook and it's accompanying resources (you are responsible for this).

2. Feed the notebook into the `Exporter`, which:

   1. Sequentially feeds the notebook into an array of `Preprocessor`s. Preprocessors only act on the **structure** of the notebook, and have unrestricted access to it.

   2. Feeds the notebook into the Jinja templating engine, which converts it to a particular format depending on which template is selected.

3. The exporter returns the converted notebook and other relevant resources as a tuple.

4. You write the data to the disk using the built-in `FilesWriter` (which writes the notebook and any extracted files to disk), or elsewhere using a custom `Writer`.

3.3.2 Using different preprocessors

To extract the figures when using the HTML exporter, we will want to change which `Preprocessor`s we are using. There are several preprocessors that come with nbconvert, including one called the `ExtractOutputPreprocessor`.

The `ExtractOutputPreprocessor` is responsible for crawling the notebook, finding all of the figures, and putting them into the resources directory, as well as choosing the key (i.e. `filename_xx_y.extension`) that can replace the figure inside the template. To enable the `ExtractOutputPreprocessor`, we must add it to the exporter's list of preprocessors:

```python
[9]: # create a configuration object that changes the preprocessors
     from traitlets.config import Config

     c = Config()
     c.HTMLExporter.preprocessors = ["nbconvert.preprocessors.ExtractOutputPreprocessor"]

     # create the new exporter using the custom config
     html_exporter_with_figs = HTMLExporter(config=c)
     html_exporter_with_figs.preprocessors
```

```python
[9]: ['nbconvert.preprocessors.ExtractOutputPreprocessor']
```

We can compare the result of converting the notebook using the original HTML exporter and our new customized one:

```python
[10]: (_, resources) = html_exporter.from_notebook_node(jake_notebook)
      (_, resources_with_fig) = html_exporter_with_figs.from_notebook_node(jake_notebook)

      print("resources without figures:")
      print(sorted(resources.keys()))

      print("\nresources with extracted figures (notice that there's one more field called
      ↪'outputs'):")
      print(sorted(resources_with_fig.keys()))

      print("\nthe actual figures are:")
      print(sorted(resources_with_fig["outputs"].keys()))
```

```
resources without figures:
['deprecated', 'global_content_filter', 'html_manager_semver_range', 'include_css',
↪'include_js', 'include_lab_theme', 'include_url', 'inlining', 'jquery_url', 'jupyter_
↪widgets_base_url', 'language_code', 'mathjax_url', 'mermaid_js_url', 'metadata',
↪'output_extension', 'raw_mimetypes', 'require_js_url', 'should_not_encode_svg',
↪'should_sanitize_html', 'theme', 'widget_renderer_url']

resources with extracted figures (notice that there's one more field called 'outputs'):
['deprecated', 'global_content_filter', 'html_manager_semver_range', 'include_css',
↪'include_js', 'include_lab_theme', 'include_url', 'inlining', 'jquery_url', 'jupyter_
↪widgets_base_url', 'language_code', 'mathjax_url', 'mermaid_js_url', 'metadata',
↪'output_extension', 'outputs', 'raw_mimetypes', 'require_js_url', 'should_not_encode_
↪svg', 'should_sanitize_html', 'theme', 'widget_renderer_url']

the actual figures are:
['output_13_1.png', 'output_16_0.png', 'output_18_1.png', 'output_3_0.png', 'output_5_0.
↪png']
```

3.4 Custom Preprocessors

There are an endless number of transformations that you may want to apply to a notebook. In particularly complicated cases, you may want to actually create your own `Preprocessor`. Above, when we customized the list of preprocessors accepted by the `HTMLExporter`, we passed in a string – this can be any valid module name. So, if you create your own preprocessor, you can include it in that same list and it will be used by the exporter.

To create your own preprocessor, you will need to subclass from `nbconvert.preprocessors.Preprocessor` and overwrite either the `preprocess` and/or `preprocess_cell` methods.

3.5 Example

The following demonstration adds the ability to exclude a cell by index.

Note: injecting cells is similar, and won't be covered here. If you want to inject static content at the beginning/end of a notebook, use a custom template.

```python
[11]: from traitlets import Integer

from nbconvert.preprocessors import Preprocessor


class PelicanSubCell(Preprocessor):
    """A Pelican specific preprocessor to remove some of the cells of a notebook"""

    # I could also read the cells from nb.metadata.pelican if someone wrote a JS
    →extension,
    # but for now I'll stay with configurable value.
    start = Integer(0, help="first cell of notebook to be converted").tag(config=True)
    end = Integer(-1, help="last cell of notebook to be converted").tag(config=True)

    def preprocess(self, nb, resources):
        self.log.info("I'll keep only cells from %d to %d", self.start, self.end)
        nb.cells = nb.cells[self.start : self.end]
        return nb, resources
```

Here a Pelican exporter is created that takes `PelicanSubCell` preprocessors and a `config` object as parameters. This may seem redundant, but with the configuration system you can register an inactive preprocessor on all of the exporters and activate it from config files or the command line.

```python
[12]: # Create a new config object that configures both the new preprocessor, as well as the
    →exporter
c = Config()
c.PelicanSubCell.start = 4
c.PelicanSubCell.end = 6
c.RSTExporter.preprocessors = [PelicanSubCell]

# Create our new, customized exporter that uses our custom preprocessor
pelican = RSTExporter(config=c)

# Process the notebook
print(pelican.from_notebook_node(jake_notebook)[0])
```

Sometimes when showing schematic plots, this is the type of figure I
want to display. But drawing it by hand is a pain: I'd rather just use
matplotlib. The problem is, matplotlib is a bit too precise. Attempting
to duplicate this figure in matplotlib leads to something like this:

.. code:: ipython3

    Image('http://jakevdp.github.com/figures/mpl_version.png')

.. image:: output_5_0.png

3.6 Programmatically creating templates

```
[13]: from jinja2 import DictLoader

dl = DictLoader(
    {
        "footer": """
{%- extends 'lab/index.html.j2' -%}

{% block footer %}
F0000000TEEEEER
{% endblock footer %}
"""
    }
)


exportHTML = HTMLExporter(extra_loaders=[dl], template_file="footer")
(body, resources) = exportHTML.from_notebook_node(jake_notebook)
for l in body.split("\n")[-4:]:
    print(l)
```

```
</body>

F0000000TEEEEER
</html>
```

3.7 Real World Uses

@jakevdp uses Pelican and Jupyter Notebook to blog. Pelican will use nbconvert programmatically to generate blog post. Have a look a Pythonic Preambulations for Jake's blog post.

@damianavila wrote the Nikola Plugin to write blog post as Notebooks and is developing a js-extension to publish notebooks via one click from the web app.

DEJAVU

Dejavu intends to be a tool to facilitate for Jupyter users to generate static outputs from their notebooks, mimicking the behavior of voilà.

4.1 Running dejavu

Dejavu works exactly the same as nbconvert and you can use all command line options that you would with nbconvert. To run a default instance:

```
jupyter dejavu notebook.ipynb
```

In case you want to show code in addition to its output use the flag `--show-input`.

4.2 Configuring the Notebook for slides presentations

In case the user intends to do a slide presentation out of their Jupyter notebook it's recommended to use the `reveal` template. In orders to obtain a better result from it's advised to use the slides metadatas available in the cells:

- In the notebook, select a cell and click on the "Property Inspector menu"

Tip: The "Property Inspector menu" can be located in the right side bar, its symbol contains two gears.

- Select a cell in the notebook
- In the Property Inspector menu select the cell's slide type:
  - Slide
  - Sub-Slide
  - Fragment
  - Skip
  - Notes
- Repeat the process for all cells

LATEX CITATIONS

`nbconvert` now has support for LaTeX citations. With this capability you can:

- Manage citations using BibTeX.
- Cite those citations in Markdown cells using HTML data attributes.
- Have `nbconvert` generate proper LaTeX citations and run BibTeX.

For an example of how this works, please see the citations example in the nbconvert-examples repository.

REMOVING CELLS, INPUTS, OR OUTPUTS

When converting Notebooks into other formats, it is possible to remove parts of a cell, or entire cells, using preprocessors. The notebook will remain unchanged, but the outputs will have certain pieces removed. Here are two primary ways to accomplish this.

6.1 Removing pieces of cells using cell tags

The most straightforward way to control which pieces of cells are removed is to use **cell tags**. These are single-string snippets of metadata that are stored in each cells "tag" field. The `TagRemovePreprocessor` can be used to remove inputs, outputs, or entire cells.

For example, here is a configuration that uses a different tag for removing each part of a cell with the HTMLExporter. In this case, we demonstrate using the nbconvert Python API.

```python
from traitlets.config import Config
import nbformat as nbf
from nbconvert.exporters import HTMLExporter
from nbconvert.preprocessors import TagRemovePreprocessor

# Setup config
c = Config()

# Configure tag removal - be sure to tag your cells to remove  using the
# words remove_cell to remove cells. You can also modify the code to use
# a different tag word
c.TagRemovePreprocessor.remove_cell_tags = ("remove_cell",)
c.TagRemovePreprocessor.remove_all_outputs_tags = ("remove_output",)
c.TagRemovePreprocessor.remove_input_tags = ("remove_input",)
c.TagRemovePreprocessor.enabled = True

# Configure and run out exporter
c.HTMLExporter.preprocessors = ["nbconvert.preprocessors.TagRemovePreprocessor"]

exporter = HTMLExporter(config=c)
exporter.register_preprocessor(TagRemovePreprocessor(config=c), True)

# Configure and run our exporter - returns a tuple - first element with html,
# second with notebook metadata
output = HTMLExporter(config=c).from_filename("your-notebook-file-path.ipynb")
```

```python
# Write to output html file
with open("your-output-file-name.html", "w") as f:
    f.write(output[0])
```

This additional example demonstrates using the CLI to remove cells with a certain cell tag

```
jupyter nbconvert mynotebook.ipynb --TagRemovePreprocessor.enabled=True --
→TagRemovePreprocessor.remove_cell_tags remove_cell
```

6.2 Removing cells using Regular Expressions on cell content

Sometimes you'd rather remove cells based on their _content_ rather than their tags. In this case, you can use the `RegexRemovePreprocessor`.

You initialize this preprocessor with a single `patterns` configuration, which is a list of strings. For each cell, this preprocessor checks whether the cell contents match any of the strings provided in `patterns`. If the contents match any of the patterns, the cell is removed from the notebook.

For example, execute the following command to convert a notebook to html and remove cells containing only whitespace:

```
jupyter nbconvert --RegexRemovePreprocessor.patterns="['\s*\Z']" mynotebook.ipynb
```

The command line argument sets the list of patterns to `'\s*\Z'` which matches an arbitrary number of whitespace characters followed by the end of the string.

See https://regex101.com/ for an interactive guide to regular expressions (make sure to select the python flavor). See https://docs.python.org/library/re.html for the official regular expression documentation in python.

EXECUTING NOTEBOOKS

Jupyter notebooks are often saved with output cells that have been cleared. nbconvert provides a convenient way to execute the input cells of an .ipynb notebook file and save the results, both input and output cells, as a .ipynb file.

In this section we show how to execute a `.ipynb` notebook document saving the result in notebook format. If you need to export notebooks to other formats, such as reStructured Text or Markdown (optionally executing them) see section *Using nbconvert as a library*.

Executing notebooks can be very helpful, for example, to run all notebooks in Python library in one step, or as a way to automate the data analysis in projects involving more than one notebook.

7.1 Executing notebooks from the command line

The same functionality of executing notebooks is exposed through a *command line interface* or a Python API interface. As an example, a notebook can be executed from the command line with:

```
jupyter nbconvert --to notebook --execute mynotebook.ipynb
```

7.2 Executing notebooks using the Python API interface

This section will illustrate the Python API interface.

7.2.1 Example

Let's start with a complete quick example, leaving detailed explanations to the following sections.

Import: First we import nbconvert and the `ExecutePreprocessor` class:

```
import nbformat
from nbconvert.preprocessors import ExecutePreprocessor
```

Load: Assuming that `notebook_filename` contains the path of a notebook, we can load it with:

```
with open(notebook_filename) as f:
    nb = nbformat.read(f, as_version=4)
```

Configure: Next, we configure the notebook execution mode:

```
ep = ExecutePreprocessor(timeout=600, kernel_name='python3')
```

We specified two (optional) arguments `timeout` and `kernel_name`, which define respectively the cell execution time-out and the execution kernel.

> The option to specify **kernel_name** is new in nbconvert 4.2. When not specified or when using nbconvert <4.2, the default Python kernel is chosen.

Execute/Run (preprocess): To actually run the notebook we call the method *preprocess()*:

```
ep.preprocess(nb, {'metadata': {'path': 'notebooks/'}})
```

Hopefully, we will not get any errors during the notebook execution (see the last section for error handling). Note that `path` specifies in which folder to execute the notebook.

Save: Finally, save the resulting notebook with:

```
with open('executed_notebook.ipynb', 'w', encoding='utf-8') as f:
    nbformat.write(nb, f)
```

That's all. Your executed notebook will be saved in the current folder in the file `executed_notebook.ipynb`.

7.3 Execution arguments (traitlets)

The arguments passed to `ExecutePreprocessor` are configuration options called traitlets. There are many cool things about traitlets. For example, they enforce the input type, and they can be accessed/modified as class attributes. More-over, each traitlet is automatically exposed as command-line options. For example, we can pass the timeout from the command-line like this:

```
jupyter nbconvert --ExecutePreprocessor.timeout=600 --to notebook --execute mynotebook.
→ipynb
```

Let's now discuss in more detail the two traitlets we used.

The `timeout` traitlet defines the maximum time (in seconds) each notebook cell is allowed to run, if the execution takes longer an exception will be raised. The default is 30 s, so in cases of long-running cells you may want to specify an higher value. The `timeout` option can also be set to `None` or `-1` to remove any restriction on execution time.

The second traitlet, `kernel_name`, allows specifying the name of the kernel to be used for the execution. By default, the kernel name is obtained from the notebook metadata. The traitlet `kernel_name` allows specifying a user-defined kernel, overriding the value in the notebook metadata. A common use case is that of a Python 2/3 library which includes documentation/testing notebooks. These notebooks will specify either a python2 or python3 kernel in their metadata (depending on the kernel used the last time the notebook was saved). In reality, these notebooks will work on both Python 2 and Python 3, and, for testing, it is important to be able to execute them programmatically on both versions. Here the traitlet `kernel_name` helps simplify and maintain consistency: we can just run a notebook twice, specifying first "python2" and then "python3" as the kernel name.

7.4 Handling errors and exceptions

In the previous sections we saw how to save an executed notebook, assuming there are no execution errors. But, what if there are errors?

7.4.1 Execution until first error

An error during the notebook execution, by default, will stop the execution and raise a `CellExecutionError`. Conveniently, the source cell causing the error and the original error name and message are also printed. After an error, we can still save the notebook as before:

```python
with open('executed_notebook.ipynb', mode='w', encoding='utf-8') as f:
    nbformat.write(nb, f)
```

The saved notebook contains the output up until the failing cell, and includes a full stack-trace and error (which can help debugging).

7.4.2 Handling errors

A useful pattern to execute notebooks while handling errors is the following:

```python
from nbconvert.preprocessors import CellExecutionError

try:
    out = ep.preprocess(nb, {'metadata': {'path': run_path}})
except CellExecutionError:
    out = None
    msg = 'Error executing the notebook "%s".\n\n' % notebook_filename
    msg += 'See notebook "%s" for the traceback.' % notebook_filename_out
    print(msg)
    raise
finally:
    with open(notebook_filename_out, mode='w', encoding='utf-8') as f:
        nbformat.write(nb, f)
```

This will save the executed notebook regardless of execution errors. In case of errors, however, an additional message is printed and the `CellExecutionError` is raised. The message directs the user to the saved notebook for further inspection.

7.4.3 Execute and save all errors

As a last scenario, it is sometimes useful to execute notebooks which raise exceptions, for example to show an error condition. In this case, instead of stopping the execution on the first error, we can keep executing the notebook using the traitlet `allow_errors` (default is False). With `allow_errors=True`, the notebook is executed until the end, regardless of any error encountered during the execution. The output notebook, will contain the stack-traces and error messages for **all** the cells raising exceptions.

7.5 Widget state

If your notebook contains any Jupyter Widgets, the state of all the widgets can be stored in the notebook's metadata. This allows rendering of the live widgets on for instance nbviewer, or when converting to html.

We can tell nbconvert to not store the state using the `store_widget_state` argument:

```
jupyter nbconvert --ExecutePreprocessor.store_widget_state=False --to notebook --execute␣
→mynotebook.ipynb
```

This widget rendering is not performed against a browser during execution, so only widget default states or states manipulated via user code will be calculated during execution. `%%javascript` cells will execute upon notebook rendering, enabling complex interactions to function as expected when viewed by a UI.

If you can't view widget results after execution, you may need to select *File → Trust Notebook* in the menu.

CONFIGURATION OPTIONS

Configuration options may be set in a file, `~/.jupyter/jupyter_nbconvert_config.py`, or at the command line when starting nbconvert, i.e. `jupyter nbconvert --Application.log_level=10`.

The most specific setting will always be used. For example, the LatexExporter and the HTMLExporter both inherit from TemplateExporter. With the following config

```
c.TemplateExporter.exclude_input_prompt = False  # The default
c.PDFExporter.exclude_input_prompt = True
```

input prompts will not appear when converting to PDF, but they will appear when exporting to HTML.

8.1 CLI Flags and Aliases

The dynamic loading of exporters can be disabled by setting the environment variable `NBCONVERT_DISABLE_CONFIG_EXPORTERS`. This causes all exporters to be loaded regardless of the value of their `enabled` attribute.

When using Nbconvert from the command line, a number of aliases and flags are defined as shortcuts to configuration options for convenience.

The following flags are defined:

debug
> set log level to logging.DEBUG (maximize logging output)
>
> Long Form: {'Application': {'log_level': 10}}

show-config
> Show the application's configuration (human-readable format)
>
> Long Form: {'Application': {'show_config': True}}

show-config-json
> Show the application's configuration (json format)
>
> Long Form: {'Application': {'show_config_json': True}}

generate-config
> generate default config file
>
> Long Form: {'JupyterApp': {'generate_config': True}}

y
> Answer yes to any questions instead of prompting.
>
> Long Form: {'JupyterApp': {'answer_yes': True}}

execute

Execute the notebook prior to export.

Long Form: {'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.

Long Form: {'ExecutePreprocessor': {'allow_errors': True}}

stdin

read a single notebook file from stdin. Write the resulting notebook with default basename 'notebook.*'

Long Form: {'NbConvertApp': {'from_stdin': True}}

stdout

Write notebook output to stdout instead of files.

Long Form: {'NbConvertApp': {'writer_class': 'StdoutWriter'}}

inplace

Run nbconvert in place, overwriting the existing notebook (only relevant when converting to notebook format)

Long Form: {'NbConvertApp': {'use_output_suffix': False, 'export_format': 'notebook'}, 'FilesWriter': {'build_directory': ''}}

clear-output

Clear output of current file and save in place, overwriting the existing notebook.

Long Form: {'NbConvertApp': {'use_output_suffix': False, 'export_format': 'notebook'}, 'FilesWriter': {'build_directory': ''}, 'ClearOutputPreprocessor': {'enabled': True}}

coalesce-streams

Coalesce consecutive stdout and stderr outputs into one stream (within each cell).

Long Form: {'NbConvertApp': {'use_output_suffix': False, 'export_format': 'notebook'}, 'FilesWriter': {'build_directory': ''}, 'CoalesceStreamsPreprocessor': {'enabled': True}}

no-prompt

Exclude input and output prompts from converted document.

Long Form: {'TemplateExporter': {'exclude_input_prompt': True, 'exclude_output_prompt': True}}

no-input

Exclude input cells and output prompts from converted document. This mode is ideal for generating code-free reports.

Long Form: {'TemplateExporter': {'exclude_output_prompt': True, 'exclude_input': True, 'exclude_input_prompt': True}}

allow-chromium-download

Whether to allow downloading chromium if no suitable version is found on the system.

Long Form: {'WebPDFExporter': {'allow_chromium_download': True}}

disable-chromium-sandbox

Disable chromium security sandbox when converting to PDF..

Long Form: {'WebPDFExporter': {'disable_sandbox': True}}

show-input

Shows code input. This flag is only useful for dejavu users.

Long Form: {'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.

Long Form: {'HTMLExporter': {'embed_images': True}}

sanitize-html

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

Long Form: {'HTMLExporter': {'sanitize_html': True}}

The following aliases are defined:

log-level (Application.log_level)

config (JupyterApp.config_file)

to (NbConvertApp.export_format)

template (TemplateExporter.template_name)

template-file (TemplateExporter.template_file)

theme (HTMLExporter.theme)

sanitize_html (HTMLExporter.sanitize_html)

writer (NbConvertApp.writer_class)

post (NbConvertApp.postprocessor_class)

output (NbConvertApp.output_base)

output-dir (FilesWriter.build_directory)

reveal-prefix (SlidesExporter.reveal_url_prefix)

nbformat (NotebookExporter.nbformat_version)

8.2 App Options

Application.log_datefmt : Unicode

Default: `'%Y-%m-%d %H:%M:%S'`

The date format used by logging formatters for %(asctime)s

Application.log_format : Unicode

Default: `'[%(name)s]%(highlevel)s %(message)s'`

The Logging format template

Application.log_level : any of
`0``|``10``|``20``|``30``|``40``|``50``|'DEBUG'|'INFO'|'WARN'|'ERROR'|'CRITICAL'``
Default: `30`

Set the log level by value or name.

Application.logging_config : Dict

Default: `{}`

Configure additional log handlers.

The default stderr logs handler is configured by the log_level, log_datefmt and log_format settings.

This configuration can be used to configure additional handlers (e.g. to output the log to a file) or for finer control over the default handlers.

If provided this should be a logging configuration dictionary, for more information see: https://docs.python.org/3/library/logging.config.html#logging-config-dictschema

This dictionary is merged with the base logging configuration which defines the following:

- A logging formatter intended for interactive use called `console`.

- A logging handler that writes to stderr called `console` which uses the formatter `console`.

- A logger with the name of this application set to `DEBUG` level.

This example adds a new handler that writes to a file:

```
c.Application.logging_config = {
    "handlers": {
        "file": {
            "class": "logging.FileHandler",
            "level": "DEBUG",
            "filename": "<path/to/file>",
        }
    },
    "loggers": {
        "<application-name>": {
            "level": "DEBUG",
            # NOTE: if you don't list the default "console"
            # handler here then it will be disabled
            "handlers": ["console", "file"],
        },
    },
}
```

Application.show_config : Bool
    Default: `False`

    Instead of starting the Application, dump configuration to stdout

Application.show_config_json : Bool
    Default: `False`

    Instead of starting the Application, dump configuration to stdout (as JSON)

JupyterApp.answer_yes : Bool
    Default: `False`

    Answer yes to any prompts.

JupyterApp.config_file : Unicode
    Default: `''`

    Full path of a config file.

JupyterApp.config_file_name : Unicode
    Default: `''`

    Specify a config file to load.

JupyterApp.generate_config : Bool
    Default: `False`

    Generate default config file.

JupyterApp.log_datefmt : Unicode
> Default: `'%Y-%m-%d %H:%M:%S'`

> The date format used by logging formatters for %(asctime)s

JupyterApp.log_format : Unicode
> Default: `'[%(name)s]%(highlevel)s %(message)s'`

> The Logging format template

JupyterApp.log_level : any of
`0``|``10``|``20``|``30``|``40``|``50``|'DEBUG'|'INFO'|'WARN'|'ERROR'|'CRITICAL'``
> Default: `30`

> Set the log level by value or name.

JupyterApp.logging_config : Dict
> Default: `{}`

> Configure additional log handlers.

> The default stderr logs handler is configured by the log_level, log_datefmt and log_format settings.

> This configuration can be used to configure additional handlers (e.g. to output the log to a file) or for finer control over the default handlers.

> If provided this should be a logging configuration dictionary, for more information see: https://docs.python.org/3/library/logging.config.html#logging-config-dictschema

> This dictionary is merged with the base logging configuration which defines the following:

> - A logging formatter intended for interactive use called `console`.
> - A logging handler that writes to stderr called `console` which uses the formatter `console`.
> - A logger with the name of this application set to `DEBUG` level.

> This example adds a new handler that writes to a file:

```
c.Application.logging_config = {
    "handlers": {
        "file": {
            "class": "logging.FileHandler",
            "level": "DEBUG",
            "filename": "<path/to/file>",
        }
    },
    "loggers": {
        "<application-name>": {
            "level": "DEBUG",
            # NOTE: if you don't list the default "console"
            # handler here then it will be disabled
            "handlers": ["console", "file"],
        },
    },
}
```

JupyterApp.show_config : Bool
> Default: `False`

> Instead of starting the Application, dump configuration to stdout

JupyterApp.show_config_json : Bool
    Default: `False`

    Instead of starting the Application, dump configuration to stdout (as JSON)

NbConvertApp.answer_yes : Bool
    Default: `False`

    Answer yes to any prompts.

NbConvertApp.config_file : Unicode
    Default: `''`

    Full path of a config file.

NbConvertApp.config_file_name : Unicode
    Default: `''`

    Specify a config file to load.

NbConvertApp.export_format : Unicode
    Default: `''`

    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

NbConvertApp.from_stdin : Bool
    Default: `False`

    read a single notebook from stdin.

NbConvertApp.generate_config : Bool
    Default: `False`

    Generate default config file.

NbConvertApp.log_datefmt : Unicode
    Default: `'%Y-%m-%d %H:%M:%S'`

    The date format used by logging formatters for %(asctime)s

NbConvertApp.log_format : Unicode
    Default: `'[%(name)s]%(highlevel)s %(message)s'`

    The Logging format template

NbConvertApp.log_level : any of
``0``|``10``|``20``|``30``|``40``|``50``|'DEBUG'|'INFO'|'WARN'|'ERROR'|'CRITICAL'``
    Default: `30`

    Set the log level by value or name.

NbConvertApp.logging_config : Dict
    Default: `{}`

    Configure additional log handlers.

    The default stderr logs handler is configured by the log_level, log_datefmt and log_format settings.

    This configuration can be used to configure additional handlers (e.g. to output the log to a file) or for finer control over the default handlers.

    If provided this should be a logging configuration dictionary, for more information see: https://docs.python.org/3/library/logging.config.html#logging-config-dictschema

    This dictionary is merged with the base logging configuration which defines the following:

- A logging formatter intended for interactive use called `console`.

- A logging handler that writes to stderr called `console` which uses the formatter `console`.

- A logger with the name of this application set to `DEBUG` level.

This example adds a new handler that writes to a file:

```
c.Application.logging_config = {
    "handlers": {
        "file": {
            "class": "logging.FileHandler",
            "level": "DEBUG",
            "filename": "<path/to/file>",
        }
    },
    "loggers": {
        "<application-name>": {
            "level": "DEBUG",
            # NOTE: if you don't list the default "console"
            # handler here then it will be disabled
            "handlers": ["console", "file"],
        },
    },
}
```

NbConvertApp.notebooks : List
    Default: `[]`

List of notebooks to convert.
    Wildcards are supported. Filenames passed positionally will be added to the list.

NbConvertApp.output_base : Unicode
    Default: `'{notebook_name}'`

Overwrite base name use for output files.
    Supports pattern replacements '{notebook_name}'.

NbConvertApp.output_files_dir : Unicode
    Default: `'{notebook_name}_files'`

Directory to copy extra files (figures) to.
    '{notebook_name}' in the string will be converted to notebook basename.

NbConvertApp.postprocessor_class : DottedOrNone
    Default: `''`

PostProcessor class used to write the
    results of the conversion

NbConvertApp.recursive_glob : Bool
    Default: `False`

set the 'recursive' option for glob for searching wildcards.

NbConvertApp.show_config : Bool
    Default: `False`

Instead of starting the Application, dump configuration to stdout

NbConvertApp.show_config_json : Bool
    Default: `False`

Instead of starting the Application, dump configuration to stdout (as JSON)

NbConvertApp.use_output_suffix : Bool
    Default: `True`

Whether to apply a suffix prior to the extension (only relevant
        when converting to notebook format). The suffix is determined by the exporter, and is usually '.nbconvert'.

NbConvertApp.writer_class : DottedObjectName
    Default: `'FilesWriter'`

Writer class used to write the
        results of the conversion

8.3 Exporter Options
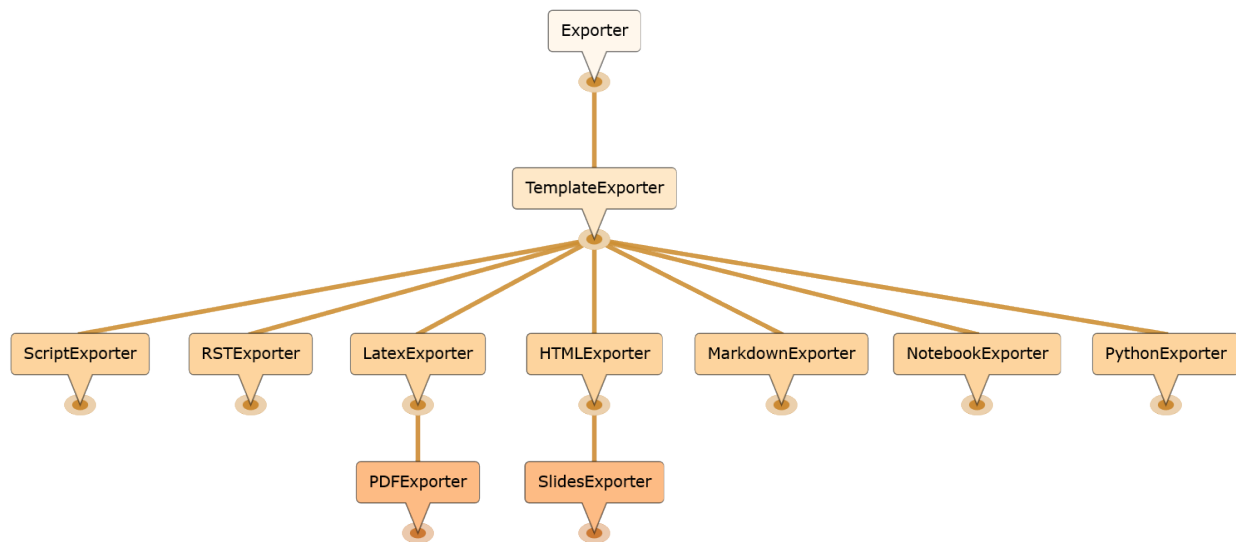
Exporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

List of preprocessors available by default, by name, namespace,
        instance, or type.

Exporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

Exporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

Exporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocessors have run.

Exporter.preprocessors : List
    Default: `[]`

List of preprocessors, by name or namespace, to enable.

TemplateExporter.default_preprocessors : List
Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

List of preprocessors available by default, by name, namespace,
instance, or type.

TemplateExporter.enabled : Bool
Default: `True`

Disable this exporter (and any exporters inherited from it).

TemplateExporter.exclude_code_cell : Bool
Default: `False`

This allows you to exclude code cells from all templates if set to True.

TemplateExporter.exclude_input : Bool
Default: `False`

This allows you to exclude code cell inputs from all templates if set to True.

TemplateExporter.exclude_input_prompt : Bool
Default: `False`

This allows you to exclude input prompts from all templates if set to True.

TemplateExporter.exclude_markdown : Bool
Default: `False`

This allows you to exclude markdown cells from all templates if set to True.

TemplateExporter.exclude_output : Bool
Default: `False`

This allows you to exclude code cell outputs from all templates if set to True.

TemplateExporter.exclude_output_prompt : Bool
Default: `False`

This allows you to exclude output prompts from all templates if set to True.

TemplateExporter.exclude_output_stdin : Bool
Default: `True`

This allows you to exclude output of stdin stream from lab template if set to True.

TemplateExporter.exclude_raw : Bool
Default: `False`

This allows you to exclude raw cells from all templates if set to True.

TemplateExporter.exclude_unknown : Bool
Default: `False`

This allows you to exclude unknown cells from all templates if set to True.

TemplateExporter.extra_template_basedirs : List
Default: `[]`

No description

TemplateExporter.extra_template_paths : List
Default: `[]`

No description

TemplateExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

TemplateExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

TemplateExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

TemplateExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

TemplateExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

TemplateExporter.template_extension : Unicode
    Default: `''`

    No description

TemplateExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

TemplateExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

TemplateExporter.template_paths : List
    Default: `['.']`

    No description

ASCIIDocExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

ASCIIDocExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

ASCIIDocExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

ASCIIDocExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

ASCIIDocExporter.exclude_input_prompt : Bool
Default: `False`

This allows you to exclude input prompts from all templates if set to True.

ASCIIDocExporter.exclude_markdown : Bool
Default: `False`

This allows you to exclude markdown cells from all templates if set to True.

ASCIIDocExporter.exclude_output : Bool
Default: `False`

This allows you to exclude code cell outputs from all templates if set to True.

ASCIIDocExporter.exclude_output_prompt : Bool
Default: `False`

This allows you to exclude output prompts from all templates if set to True.

ASCIIDocExporter.exclude_output_stdin : Bool
Default: `True`

This allows you to exclude output of stdin stream from lab template if set to True.

ASCIIDocExporter.exclude_raw : Bool
Default: `False`

This allows you to exclude raw cells from all templates if set to True.

ASCIIDocExporter.exclude_unknown : Bool
Default: `False`

This allows you to exclude unknown cells from all templates if set to True.

ASCIIDocExporter.extra_template_basedirs : List
Default: `[]`

No description

ASCIIDocExporter.extra_template_paths : List
Default: `[]`

No description

ASCIIDocExporter.file_extension : FilenameExtension
Default: `''`

Extension of the file that should be written to disk

ASCIIDocExporter.filters : Dict
Default: `{}`

Dictionary of filters, by name and namespace, to add to the Jinja
environment.

ASCIIDocExporter.optimistic_validation : Bool
Default: `False`

Reduces the number of validation steps so that it only occurs after all preprocesors have run.

ASCIIDocExporter.preprocessors : List
Default: `[]`

List of preprocessors, by name or namespace, to enable.

ASCIIDocExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

ASCIIDocExporter.template_extension : Unicode
    Default: `''`

    No description

ASCIIDocExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

ASCIIDocExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

ASCIIDocExporter.template_paths : List
    Default: `['.']`

    No description

HTMLExporter.anchor_link_text : Unicode
    Default: `'¶'`

    The text used as the text for anchor links.

HTMLExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

HTMLExporter.embed_images : Bool
    Default: `False`

    Whether or not to embed images as base64 in markdown cells.

HTMLExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

HTMLExporter.exclude_anchor_links : Bool
    Default: `False`

    If anchor links should be included or not.

HTMLExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

HTMLExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

HTMLExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

HTMLExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

HTMLExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

HTMLExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

HTMLExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

HTMLExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

HTMLExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

HTMLExporter.extra_template_basedirs : List
    Default: `[]`

    No description

HTMLExporter.extra_template_paths : List
    Default: `[]`

    No description

HTMLExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

HTMLExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

HTMLExporter.html_manager_semver_range : Unicode
    Default: `'*'`

    Semver range for Jupyter widgets HTML manager

HTMLExporter.jquery_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

    URL to load jQuery from.

    Defaults to loading from cdnjs.

HTMLExporter.jupyter_widgets_base_url : Unicode
    Default: `'https://unpkg.com/'`

    URL base for Jupyter widgets

HTMLExporter.language_code : Unicode
    Default: `'en'`

    Language code of the content, should be one of the ISO639-1

HTMLExporter.mathjax_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

    URL to load Mathjax from.

    Defaults to loading from cdnjs.

HTMLExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

HTMLExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

HTMLExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

HTMLExporter.require_js_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

    URL to load require.js from.

    Defaults to loading from cdnjs.

HTMLExporter.sanitize_html : Bool
    Default: `False`

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

HTMLExporter.skip_svg_encoding : Bool
    Default: `False`

    Whether the svg to image data attribute encoding should occur

HTMLExporter.template_extension : Unicode
    Default: `''`

    No description

HTMLExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

HTMLExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

HTMLExporter.template_paths : List
    Default: `['.']`

    No description

HTMLExporter.theme : Unicode
Default: `'light'`

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

HTMLExporter.widget_renderer_url : Unicode
Default: `''`

Full URL for Jupyter widgets

LatexExporter.default_preprocessors : List
Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

List of preprocessors available by default, by name, namespace,
instance, or type.

LatexExporter.enabled : Bool
Default: `True`

Disable this exporter (and any exporters inherited from it).

LatexExporter.exclude_code_cell : Bool
Default: `False`

This allows you to exclude code cells from all templates if set to True.

LatexExporter.exclude_input : Bool
Default: `False`

This allows you to exclude code cell inputs from all templates if set to True.

LatexExporter.exclude_input_prompt : Bool
Default: `False`

This allows you to exclude input prompts from all templates if set to True.

LatexExporter.exclude_markdown : Bool
Default: `False`

This allows you to exclude markdown cells from all templates if set to True.

LatexExporter.exclude_output : Bool
Default: `False`

This allows you to exclude code cell outputs from all templates if set to True.

LatexExporter.exclude_output_prompt : Bool
Default: `False`

This allows you to exclude output prompts from all templates if set to True.

LatexExporter.exclude_output_stdin : Bool
Default: `True`

This allows you to exclude output of stdin stream from lab template if set to True.

LatexExporter.exclude_raw : Bool
Default: `False`

This allows you to exclude raw cells from all templates if set to True.

LatexExporter.exclude_unknown : Bool
Default: `False`

This allows you to exclude unknown cells from all templates if set to True.

LatexExporter.extra_template_basedirs : List
    Default: []

    No description

LatexExporter.extra_template_paths : List
    Default: []

    No description

LatexExporter.file_extension : FilenameExtension
    Default: ''

    Extension of the file that should be written to disk

LatexExporter.filters : Dict
    Default: {}

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

LatexExporter.optimistic_validation : Bool
    Default: False

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

LatexExporter.preprocessors : List
    Default: []

    List of preprocessors, by name or namespace, to enable.

LatexExporter.raw_mimetypes : List
    Default: []

    formats of raw cells to be included in this Exporter's output.

LatexExporter.template_extension : Unicode
    Default: ''

    No description

LatexExporter.template_file : Unicode
    Default: None

    Name of the template file to use

LatexExporter.template_name : Unicode
    Default: ''

    Name of the template to use

LatexExporter.template_paths : List
    Default: ['.']

    No description

MarkdownExporter.default_preprocessors : List
    Default: ['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....

    List of preprocessors available by default, by name, namespace,
        instance, or type.

MarkdownExporter.enabled : Bool
    Default: True

    Disable this exporter (and any exporters inherited from it).

MarkdownExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

MarkdownExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

MarkdownExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

MarkdownExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

MarkdownExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

MarkdownExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

MarkdownExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

MarkdownExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

MarkdownExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

MarkdownExporter.extra_template_basedirs : List
    Default: `[]`

    No description

MarkdownExporter.extra_template_paths : List
    Default: `[]`

    No description

MarkdownExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

MarkdownExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

MarkdownExporter.optimistic_validation : Bool
> Default: `False`

> Reduces the number of validation steps so that it only occurs after all preprocesors have run.

MarkdownExporter.preprocessors : List
> Default: `[]`

> List of preprocessors, by name or namespace, to enable.

MarkdownExporter.raw_mimetypes : List
> Default: `[]`

> formats of raw cells to be included in this Exporter's output.

MarkdownExporter.template_extension : Unicode
> Default: `''`

> No description

MarkdownExporter.template_file : Unicode
> Default: `None`

> Name of the template file to use

MarkdownExporter.template_name : Unicode
> Default: `''`

> Name of the template to use

MarkdownExporter.template_paths : List
> Default: `['.']`

> No description

NotebookExporter.default_preprocessors : List
> Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

> **List of preprocessors available by default, by name, namespace,**
> > instance, or type.

NotebookExporter.enabled : Bool
> Default: `True`

> Disable this exporter (and any exporters inherited from it).

NotebookExporter.file_extension : FilenameExtension
> Default: `''`

> Extension of the file that should be written to disk

NotebookExporter.nbformat_version : any of 1``|``2``|``3``|``4
> Default: `4`

> **The nbformat version to write.**
> > Use this to downgrade notebooks.

NotebookExporter.optimistic_validation : Bool
> Default: `False`

> Reduces the number of validation steps so that it only occurs after all preprocesors have run.

NotebookExporter.preprocessors : List
> Default: `[]`

> List of preprocessors, by name or namespace, to enable.

PDFExporter.bib_command : List
    Default: `['bibtex', '{filename}']`

    Shell command used to run bibtex.

PDFExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

PDFExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

PDFExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

PDFExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

PDFExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

PDFExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

PDFExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

PDFExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

PDFExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

PDFExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

PDFExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

PDFExporter.extra_template_basedirs : List
    Default: `[]`

    No description

PDFExporter.extra_template_paths : List
Default: `[]`

No description

PDFExporter.file_extension : FilenameExtension
Default: `''`

Extension of the file that should be written to disk

PDFExporter.filters : Dict
Default: `{}`

Dictionary of filters, by name and namespace, to add to the Jinja
environment.

PDFExporter.latex_command : List
Default: `['xelatex', '{filename}', '-quiet']`

Shell command used to compile latex.

PDFExporter.latex_count : Int
Default: `3`

How many times latex will be called.

PDFExporter.optimistic_validation : Bool
Default: `False`

Reduces the number of validation steps so that it only occurs after all preprocessors have run.

PDFExporter.preprocessors : List
Default: `[]`

List of preprocessors, by name or namespace, to enable.

PDFExporter.raw_mimetypes : List
Default: `[]`

formats of raw cells to be included in this Exporter's output.

PDFExporter.template_extension : Unicode
Default: `''`

No description

PDFExporter.template_file : Unicode
Default: `None`

Name of the template file to use

PDFExporter.template_name : Unicode
Default: `''`

Name of the template to use

PDFExporter.template_paths : List
Default: `['.']`

No description

PDFExporter.verbose : Bool
Default: `False`

Whether to display the output of latex commands.

PythonExporter.default_preprocessors : List
    Default: ['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....

    List of preprocessors available by default, by name, namespace,
        instance, or type.

PythonExporter.enabled : Bool
    Default: True

    Disable this exporter (and any exporters inherited from it).

PythonExporter.exclude_code_cell : Bool
    Default: False

    This allows you to exclude code cells from all templates if set to True.

PythonExporter.exclude_input : Bool
    Default: False

    This allows you to exclude code cell inputs from all templates if set to True.

PythonExporter.exclude_input_prompt : Bool
    Default: False

    This allows you to exclude input prompts from all templates if set to True.

PythonExporter.exclude_markdown : Bool
    Default: False

    This allows you to exclude markdown cells from all templates if set to True.

PythonExporter.exclude_output : Bool
    Default: False

    This allows you to exclude code cell outputs from all templates if set to True.

PythonExporter.exclude_output_prompt : Bool
    Default: False

    This allows you to exclude output prompts from all templates if set to True.

PythonExporter.exclude_output_stdin : Bool
    Default: True

    This allows you to exclude output of stdin stream from lab template if set to True.

PythonExporter.exclude_raw : Bool
    Default: False

    This allows you to exclude raw cells from all templates if set to True.

PythonExporter.exclude_unknown : Bool
    Default: False

    This allows you to exclude unknown cells from all templates if set to True.

PythonExporter.extra_template_basedirs : List
    Default: []

    No description

PythonExporter.extra_template_paths : List
    Default: []

    No description

PythonExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

PythonExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

PythonExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

PythonExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

PythonExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

PythonExporter.template_extension : Unicode
    Default: `''`

    No description

PythonExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

PythonExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

PythonExporter.template_paths : List
    Default: `['.']`

    No description

QtExporter.anchor_link_text : Unicode
    Default: `'¶'`

    The text used as the text for anchor links.

QtExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

QtExporter.embed_images : Bool
    Default: `False`

    Whether or not to embed images as base64 in markdown cells.

QtExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

QtExporter.exclude_anchor_links : Bool
>   Default: `False`

>   If anchor links should be included or not.

QtExporter.exclude_code_cell : Bool
>   Default: `False`

>   This allows you to exclude code cells from all templates if set to True.

QtExporter.exclude_input : Bool
>   Default: `False`

>   This allows you to exclude code cell inputs from all templates if set to True.

QtExporter.exclude_input_prompt : Bool
>   Default: `False`

>   This allows you to exclude input prompts from all templates if set to True.

QtExporter.exclude_markdown : Bool
>   Default: `False`

>   This allows you to exclude markdown cells from all templates if set to True.

QtExporter.exclude_output : Bool
>   Default: `False`

>   This allows you to exclude code cell outputs from all templates if set to True.

QtExporter.exclude_output_prompt : Bool
>   Default: `False`

>   This allows you to exclude output prompts from all templates if set to True.

QtExporter.exclude_output_stdin : Bool
>   Default: `True`

>   This allows you to exclude output of stdin stream from lab template if set to True.

QtExporter.exclude_raw : Bool
>   Default: `False`

>   This allows you to exclude raw cells from all templates if set to True.

QtExporter.exclude_unknown : Bool
>   Default: `False`

>   This allows you to exclude unknown cells from all templates if set to True.

QtExporter.extra_template_basedirs : List
>   Default: `[]`

>   No description

QtExporter.extra_template_paths : List
>   Default: `[]`

>   No description

QtExporter.file_extension : FilenameExtension
>   Default: `''`

>   Extension of the file that should be written to disk

QtExporter.filters : Dict
>   Default: `{}`

> **Dictionary of filters, by name and namespace, to add to the Jinja**
> environment.

QtExporter.html_manager_semver_range : Unicode
> Default: `'*'`

Semver range for Jupyter widgets HTML manager

QtExporter.jquery_url : Unicode
> Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

URL to load jQuery from.

Defaults to loading from cdnjs.

QtExporter.jupyter_widgets_base_url : Unicode
> Default: `'https://unpkg.com/'`

URL base for Jupyter widgets

QtExporter.language_code : Unicode
> Default: `'en'`

Language code of the content, should be one of the ISO639-1

QtExporter.mathjax_url : Unicode
> Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

URL to load Mathjax from.

Defaults to loading from cdnjs.

QtExporter.optimistic_validation : Bool
> Default: `False`

Reduces the number of validation steps so that it only occurs after all preprocesors have run.

QtExporter.preprocessors : List
> Default: `[]`

List of preprocessors, by name or namespace, to enable.

QtExporter.raw_mimetypes : List
> Default: `[]`

formats of raw cells to be included in this Exporter's output.

QtExporter.require_js_url : Unicode
> Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

URL to load require.js from.

Defaults to loading from cdnjs.

QtExporter.sanitize_html : Bool
> Default: `False`

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

QtExporter.skip_svg_encoding : Bool
> Default: `False`

Whether the svg to image data attribute encoding should occur

QtExporter.template_extension : Unicode
    Default: `''`

    No description

QtExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

QtExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

QtExporter.template_paths : List
    Default: `['.']`

    No description

QtExporter.theme : Unicode
    Default: `'light'`

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

QtExporter.widget_renderer_url : Unicode
    Default: `''`

    Full URL for Jupyter widgets

QtPDFExporter.anchor_link_text : Unicode
    Default: `'¶'`

    The text used as the text for anchor links.

QtPDFExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

QtPDFExporter.embed_images : Bool
    Default: `False`

    Whether or not to embed images as base64 in markdown cells.

QtPDFExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

QtPDFExporter.exclude_anchor_links : Bool
    Default: `False`

    If anchor links should be included or not.

QtPDFExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

QtPDFExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

QtPDFExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

QtPDFExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

QtPDFExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

QtPDFExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

QtPDFExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

QtPDFExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

QtPDFExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

QtPDFExporter.extra_template_basedirs : List
    Default: `[]`

    No description

QtPDFExporter.extra_template_paths : List
    Default: `[]`

    No description

QtPDFExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

QtPDFExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

QtPDFExporter.html_manager_semver_range : Unicode
    Default: `'*'`

    Semver range for Jupyter widgets HTML manager

QtPDFExporter.jquery_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

    URL to load jQuery from.

    Defaults to loading from cdnjs.

QtPDFExporter.jupyter_widgets_base_url : Unicode
> Default: `'https://unpkg.com/'`

> URL base for Jupyter widgets

QtPDFExporter.language_code : Unicode
> Default: `'en'`

> Language code of the content, should be one of the ISO639-1

QtPDFExporter.mathjax_url : Unicode
> Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

> URL to load Mathjax from.

> Defaults to loading from cdnjs.

QtPDFExporter.optimistic_validation : Bool
> Default: `False`

> Reduces the number of validation steps so that it only occurs after all preprocesors have run.

QtPDFExporter.paginate : Bool
> Default: `True`

> Split generated notebook into multiple pages.

> If False, a PDF with one long page will be generated.

> Set to True to match behavior of LaTeX based PDF generator

QtPDFExporter.preprocessors : List
> Default: `[]`

> List of preprocessors, by name or namespace, to enable.

QtPDFExporter.raw_mimetypes : List
> Default: `[]`

> formats of raw cells to be included in this Exporter's output.

QtPDFExporter.require_js_url : Unicode
> Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

> URL to load require.js from.

> Defaults to loading from cdnjs.

QtPDFExporter.sanitize_html : Bool
> Default: `False`

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

QtPDFExporter.skip_svg_encoding : Bool
> Default: `False`

> Whether the svg to image data attribute encoding should occur

QtPDFExporter.template_extension : Unicode
> Default: `''`

> No description

QtPDFExporter.template_file : Unicode
> Default: `None`

Name of the template file to use

QtPDFExporter.template_name : Unicode
Default: `''`

Name of the template to use

QtPDFExporter.template_paths : List
Default: `['.']`

No description

QtPDFExporter.theme : Unicode
Default: `'light'`

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

QtPDFExporter.widget_renderer_url : Unicode
Default: `''`

Full URL for Jupyter widgets

QtPNGExporter.anchor_link_text : Unicode
Default: `'¶'`

The text used as the text for anchor links.

QtPNGExporter.default_preprocessors : List
Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

List of preprocessors available by default, by name, namespace,
    instance, or type.

QtPNGExporter.embed_images : Bool
Default: `False`

Whether or not to embed images as base64 in markdown cells.

QtPNGExporter.enabled : Bool
Default: `True`

Disable this exporter (and any exporters inherited from it).

QtPNGExporter.exclude_anchor_links : Bool
Default: `False`

If anchor links should be included or not.

QtPNGExporter.exclude_code_cell : Bool
Default: `False`

This allows you to exclude code cells from all templates if set to True.

QtPNGExporter.exclude_input : Bool
Default: `False`

This allows you to exclude code cell inputs from all templates if set to True.

QtPNGExporter.exclude_input_prompt : Bool
Default: `False`

This allows you to exclude input prompts from all templates if set to True.

QtPNGExporter.exclude_markdown : Bool
Default: `False`

This allows you to exclude markdown cells from all templates if set to True.

QtPNGExporter.exclude_output : Bool
   Default: `False`

   This allows you to exclude code cell outputs from all templates if set to True.

QtPNGExporter.exclude_output_prompt : Bool
   Default: `False`

   This allows you to exclude output prompts from all templates if set to True.

QtPNGExporter.exclude_output_stdin : Bool
   Default: `True`

   This allows you to exclude output of stdin stream from lab template if set to True.

QtPNGExporter.exclude_raw : Bool
   Default: `False`

   This allows you to exclude raw cells from all templates if set to True.

QtPNGExporter.exclude_unknown : Bool
   Default: `False`

   This allows you to exclude unknown cells from all templates if set to True.

QtPNGExporter.extra_template_basedirs : List
   Default: `[]`

   No description

QtPNGExporter.extra_template_paths : List
   Default: `[]`

   No description

QtPNGExporter.file_extension : FilenameExtension
   Default: `''`

   Extension of the file that should be written to disk

QtPNGExporter.filters : Dict
   Default: `{}`

   Dictionary of filters, by name and namespace, to add to the Jinja
      environment.

QtPNGExporter.html_manager_semver_range : Unicode
   Default: `'*'`

   Semver range for Jupyter widgets HTML manager

QtPNGExporter.jquery_url : Unicode
   Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

   URL to load jQuery from.

   Defaults to loading from cdnjs.

QtPNGExporter.jupyter_widgets_base_url : Unicode
   Default: `'https://unpkg.com/'`

   URL base for Jupyter widgets

QtPNGExporter.language_code : Unicode
    Default: `'en'`

    Language code of the content, should be one of the ISO639-1

QtPNGExporter.mathjax_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

    URL to load Mathjax from.

    Defaults to loading from cdnjs.

QtPNGExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

QtPNGExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

QtPNGExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

QtPNGExporter.require_js_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

    URL to load require.js from.

    Defaults to loading from cdnjs.

QtPNGExporter.sanitize_html : Bool
    Default: `False`

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

QtPNGExporter.skip_svg_encoding : Bool
    Default: `False`

    Whether the svg to image data attribute encoding should occur

QtPNGExporter.template_extension : Unicode
    Default: `''`

    No description

QtPNGExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

QtPNGExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

QtPNGExporter.template_paths : List
    Default: `['.']`

    No description

QtPNGExporter.theme : Unicode
    Default: `'light'`

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

QtPNGExporter.widget_renderer_url : Unicode
    Default: `''`

    Full URL for Jupyter widgets

RSTExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

RSTExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

RSTExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

RSTExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

RSTExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

RSTExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

RSTExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

RSTExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

RSTExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

RSTExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

RSTExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

RSTExporter.extra_template_basedirs : List
    Default: `[]`

    No description

RSTExporter.extra_template_paths : List
    Default: `[]`

    No description

RSTExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

RSTExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

RSTExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

RSTExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

RSTExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

RSTExporter.template_extension : Unicode
    Default: `''`

    No description

RSTExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

RSTExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

RSTExporter.template_paths : List
    Default: `['.']`

    No description

ScriptExporter.default_preprocessors : List
    Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

    List of preprocessors available by default, by name, namespace,
        instance, or type.

ScriptExporter.enabled : Bool
    Default: `True`

    Disable this exporter (and any exporters inherited from it).

ScriptExporter.exclude_code_cell : Bool
    Default: `False`

    This allows you to exclude code cells from all templates if set to True.

ScriptExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

ScriptExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

ScriptExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

ScriptExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

ScriptExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

ScriptExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

ScriptExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

ScriptExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

ScriptExporter.extra_template_basedirs : List
    Default: `[]`

    No description

ScriptExporter.extra_template_paths : List
    Default: `[]`

    No description

ScriptExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

ScriptExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

ScriptExporter.optimistic_validation : Bool

Default: `False`

Reduces the number of validation steps so that it only occurs after all preprocesors have run.

ScriptExporter.preprocessors : List

Default: `[]`

List of preprocessors, by name or namespace, to enable.

ScriptExporter.raw_mimetypes : List

Default: `[]`

formats of raw cells to be included in this Exporter's output.

ScriptExporter.template_extension : Unicode

Default: `''`

No description

ScriptExporter.template_file : Unicode

Default: `None`

Name of the template file to use

ScriptExporter.template_name : Unicode

Default: `''`

Name of the template to use

ScriptExporter.template_paths : List

Default: `['.']`

No description

SlidesExporter.anchor_link_text : Unicode

Default: `'¶'`

The text used as the text for anchor links.

SlidesExporter.default_preprocessors : List

Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

List of preprocessors available by default, by name, namespace,
  instance, or type.

SlidesExporter.embed_images : Bool

Default: `False`

Whether or not to embed images as base64 in markdown cells.

SlidesExporter.enabled : Bool

Default: `True`

Disable this exporter (and any exporters inherited from it).

SlidesExporter.exclude_anchor_links : Bool

Default: `False`

If anchor links should be included or not.

SlidesExporter.exclude_code_cell : Bool

Default: `False`

This allows you to exclude code cells from all templates if set to True.

SlidesExporter.exclude_input : Bool
    Default: `False`

    This allows you to exclude code cell inputs from all templates if set to True.

SlidesExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

SlidesExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

SlidesExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

SlidesExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

SlidesExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

SlidesExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

SlidesExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

SlidesExporter.extra_template_basedirs : List
    Default: `[]`

    No description

SlidesExporter.extra_template_paths : List
    Default: `[]`

    No description

SlidesExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

SlidesExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

SlidesExporter.font_awesome_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/cs...`

    URL to load font awesome from.

    Defaults to loading from cdnjs.

SlidesExporter.html_manager_semver_range : Unicode
    Default: `'*'`

Semver range for Jupyter widgets HTML manager

SlidesExporter.jquery_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

URL to load jQuery from.

Defaults to loading from cdnjs.

SlidesExporter.jupyter_widgets_base_url : Unicode
    Default: `'https://unpkg.com/'`

URL base for Jupyter widgets

SlidesExporter.language_code : Unicode
    Default: `'en'`

Language code of the content, should be one of the ISO639-1

SlidesExporter.mathjax_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

URL to load Mathjax from.

Defaults to loading from cdnjs.

SlidesExporter.optimistic_validation : Bool
    Default: `False`

Reduces the number of validation steps so that it only occurs after all preprocessors have run.

SlidesExporter.preprocessors : List
    Default: `[]`

List of preprocessors, by name or namespace, to enable.

SlidesExporter.raw_mimetypes : List
    Default: `[]`

formats of raw cells to be included in this Exporter's output.

SlidesExporter.require_js_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

URL to load require.js from.

Defaults to loading from cdnjs.

SlidesExporter.reveal_height : Unicode
    Default: `''`

height used to determine the aspect ratio of your presentation. Use the horizontal pixels available on your intended presentation equipment.

SlidesExporter.reveal_number : Unicode
    Default: `''`

slide number format (e.g. 'c/t'). Choose from: 'c': current, 't': total, 'h': horizontal, 'v': vertical

SlidesExporter.reveal_scroll : Bool
    Default: `False`

If True, enable scrolling within each slide

SlidesExporter.reveal_theme : Unicode
    Default: `'simple'`

    Name of the reveal.js theme to use.

    We look for a file with this name under `reveal_url_prefix`/css/theme/`reveal_theme`.css.

    https://github.com/hakimel/reveal.js/tree/master/css/theme has list of themes that ship by default with reveal.js.

SlidesExporter.reveal_transition : Unicode
    Default: `'slide'`

    Name of the reveal.js transition to use.

    The list of transitions that ships by default with reveal.js are: none, fade, slide, convex, concave and zoom.

SlidesExporter.reveal_url_prefix : Unicode
    Default: `''`

    The URL prefix for reveal.js (version 3.x).
        This defaults to the reveal CDN, but can be any url pointing to a copy of reveal.js.

        For speaker notes to work, this must be a relative path to a local copy of reveal.js: e.g., "reveal.js".

        If a relative path is given, it must be a subdirectory of the current directory (from which the server is run).

        See the usage documentation (https://nbconvert.readthedocs.io/en/latest/usage.html#reveal-js-html-slideshow) for more details.

SlidesExporter.reveal_width : Unicode
    Default: `''`

    width used to determine the aspect ratio of your presentation. Use the horizontal pixels available on your intended presentation equipment.

SlidesExporter.sanitize_html : Bool
    Default: `False`

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

SlidesExporter.skip_svg_encoding : Bool
    Default: `False`

    Whether the svg to image data attribute encoding should occur

SlidesExporter.template_extension : Unicode
    Default: `''`

    No description

SlidesExporter.template_file : Unicode
    Default: `None`

    Name of the template file to use

SlidesExporter.template_name : Unicode
    Default: `''`

    Name of the template to use

SlidesExporter.template_paths : List
    Default: `['.']`

    No description

SlidesExporter.theme : Unicode
> Default: `'light'`

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

SlidesExporter.widget_renderer_url : Unicode
> Default: `''`

> Full URL for Jupyter widgets

WebPDFExporter.allow_chromium_download : Bool
> Default: `False`

> Whether to allow downloading Chromium if no suitable version is found on the system.

WebPDFExporter.anchor_link_text : Unicode
> Default: `'¶'`

> The text used as the text for anchor links.

WebPDFExporter.default_preprocessors : List
> Default: `['nbconvert.preprocessors.TagRemovePreprocessor', 'nbconvert....`

> **List of preprocessors available by default, by name, namespace,**
>> instance, or type.

WebPDFExporter.disable_sandbox : Bool
> Default: `False`

> Disable chromium security sandbox when converting to PDF.

> WARNING: This could cause arbitrary code execution in specific circumstances, where JS in your notebook can execute serverside code! Please use with caution.

> `https://github.com/puppeteer/puppeteer/blob/main@%7B2020-12-14T17:22:24Z%7D/docs/troubleshooting.md#setting-up-chrome-linux-sandbox` has more information.

> This is required for webpdf to work inside most container environments.

WebPDFExporter.embed_images : Bool
> Default: `False`

> Whether or not to embed images as base64 in markdown cells.

WebPDFExporter.enabled : Bool
> Default: `True`

> Disable this exporter (and any exporters inherited from it).

WebPDFExporter.exclude_anchor_links : Bool
> Default: `False`

> If anchor links should be included or not.

WebPDFExporter.exclude_code_cell : Bool
> Default: `False`

> This allows you to exclude code cells from all templates if set to True.

WebPDFExporter.exclude_input : Bool
> Default: `False`

> This allows you to exclude code cell inputs from all templates if set to True.

WebPDFExporter.exclude_input_prompt : Bool
    Default: `False`

    This allows you to exclude input prompts from all templates if set to True.

WebPDFExporter.exclude_markdown : Bool
    Default: `False`

    This allows you to exclude markdown cells from all templates if set to True.

WebPDFExporter.exclude_output : Bool
    Default: `False`

    This allows you to exclude code cell outputs from all templates if set to True.

WebPDFExporter.exclude_output_prompt : Bool
    Default: `False`

    This allows you to exclude output prompts from all templates if set to True.

WebPDFExporter.exclude_output_stdin : Bool
    Default: `True`

    This allows you to exclude output of stdin stream from lab template if set to True.

WebPDFExporter.exclude_raw : Bool
    Default: `False`

    This allows you to exclude raw cells from all templates if set to True.

WebPDFExporter.exclude_unknown : Bool
    Default: `False`

    This allows you to exclude unknown cells from all templates if set to True.

WebPDFExporter.extra_template_basedirs : List
    Default: `[]`

    No description

WebPDFExporter.extra_template_paths : List
    Default: `[]`

    No description

WebPDFExporter.file_extension : FilenameExtension
    Default: `''`

    Extension of the file that should be written to disk

WebPDFExporter.filters : Dict
    Default: `{}`

    Dictionary of filters, by name and namespace, to add to the Jinja
        environment.

WebPDFExporter.html_manager_semver_range : Unicode
    Default: `'*'`

    Semver range for Jupyter widgets HTML manager

WebPDFExporter.jquery_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/jquery/2.0.3/jquery.m...`

    URL to load jQuery from.

    Defaults to loading from cdnjs.

WebPDFExporter.jupyter_widgets_base_url : Unicode
    Default: `'https://unpkg.com/'`

    URL base for Jupyter widgets

WebPDFExporter.language_code : Unicode
    Default: `'en'`

    Language code of the content, should be one of the ISO639-1

WebPDFExporter.mathjax_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.7/latest....`

    URL to load Mathjax from.

    Defaults to loading from cdnjs.

WebPDFExporter.optimistic_validation : Bool
    Default: `False`

    Reduces the number of validation steps so that it only occurs after all preprocesors have run.

WebPDFExporter.paginate : Bool
    Default: `True`

    Split generated notebook into multiple pages.

    If False, a PDF with one long page will be generated.

    Set to True to match behavior of LaTeX based PDF generator

WebPDFExporter.preprocessors : List
    Default: `[]`

    List of preprocessors, by name or namespace, to enable.

WebPDFExporter.raw_mimetypes : List
    Default: `[]`

    formats of raw cells to be included in this Exporter's output.

WebPDFExporter.require_js_url : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/require.js/2.1.10/req...`

    URL to load require.js from.

    Defaults to loading from cdnjs.

WebPDFExporter.sanitize_html : Bool
    Default: `False`

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

WebPDFExporter.skip_svg_encoding : Bool
    Default: `False`

    Whether the svg to image data attribute encoding should occur

WebPDFExporter.template_extension : Unicode
    Default: `''`

    No description

WebPDFExporter.template_file : Unicode
    Default: `None`

Name of the template file to use

WebPDFExporter.template_name : Unicode
Default: `''`

Name of the template to use

WebPDFExporter.template_paths : List
Default: `['.']`

No description

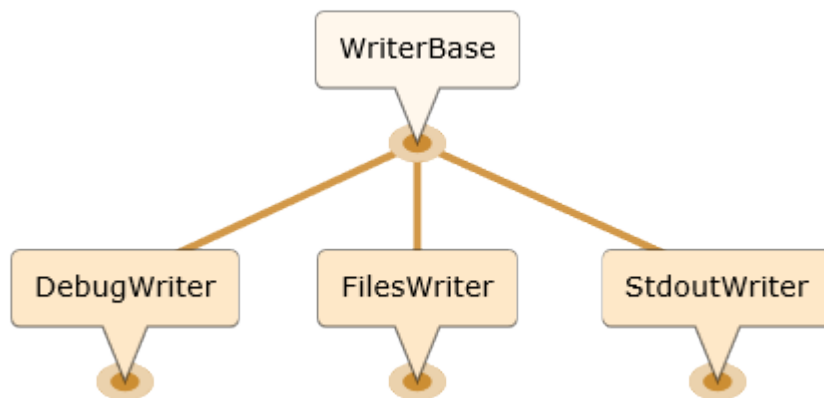**WebPDFExporter.theme : Unicode**
Default: `'light'`

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

WebPDFExporter.widget_renderer_url : Unicode
Default: `''`

Full URL for Jupyter widgets

8.4 Writer Options

WriterBase.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

WriterBase.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

WriterBase.files : List
Default: `[]`

List of the files that the notebook references. Files will be included with written output.

DebugWriter.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

DebugWriter.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

DebugWriter.files : List
Default: `[]`

List of the files that the notebook references. Files will be included with written output.

FilesWriter.build_directory : Unicode
Default: `''`

Directory to write output(s) to. Defaults
to output to the directory of each notebook. To recover previous default behaviour (outputting to the current working directory) use . as the flag value.

FilesWriter.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

FilesWriter.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`
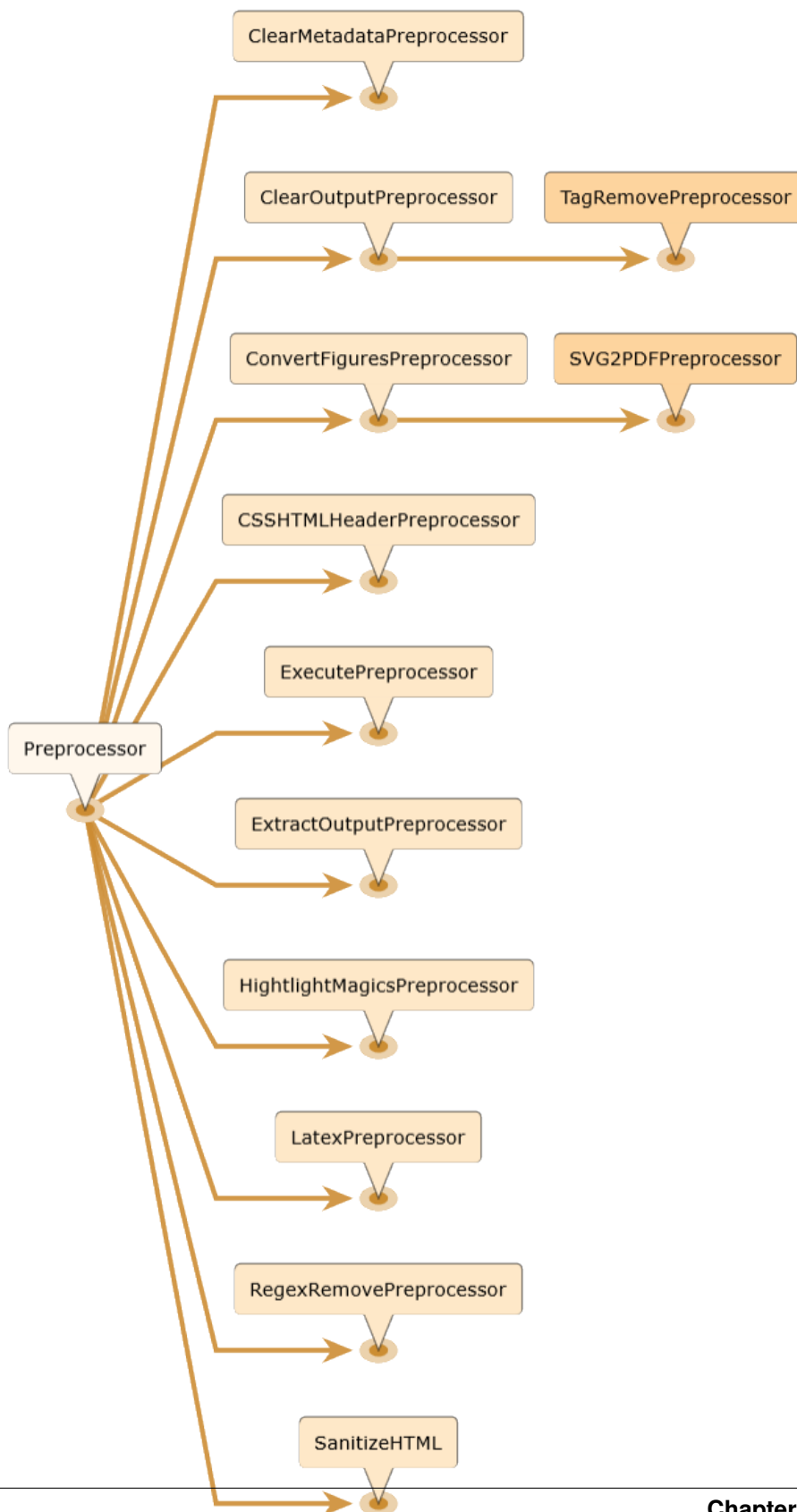
An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

FilesWriter.files : List
Default: `[]`

List of the files that the notebook references. Files will be included with written output.

FilesWriter.relpath : Unicode
Default: `''`

When copying files that the notebook depends on, copy them in
relation to this path, such that the destination filename will be os.path.relpath(filename, relpath). If FilesWriter is operating on a notebook that already exists elsewhere on disk, then the default will be the directory containing that notebook.

StdoutWriter.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

StdoutWriter.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

StdoutWriter.files : List
Default: `[]`

List of the files that the notebook references. Files will be included with written output.

8.5 Preprocessor Options

Preprocessor.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

Preprocessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding
    the others.

Preprocessor.enabled : Bool
    Default: `False`

    No description

CSSHTMLHeaderPreprocessor.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

CSSHTMLHeaderPreprocessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding
    the others.

CSSHTMLHeaderPreprocessor.enabled : Bool
    Default: `False`

    No description

CSSHTMLHeaderPreprocessor.highlight_class : Unicode
    Default: `'.highlight'`

    CSS highlight class identifier

CSSHTMLHeaderPreprocessor.style : Union
    Default: `<class 'jupyterlab_pygments.style.JupyterStyle'>`

    Name of the pygments style to use

ClearMetadataPreprocessor.clear_cell_metadata : Bool
    Default: `True`

    Flag to choose if cell metadata is to be cleared in addition to notebook metadata.

ClearMetadataPreprocessor.clear_notebook_metadata : Bool
    Default: `True`

    Flag to choose if notebook metadata is to be cleared in addition to cell metadata.

ClearMetadataPreprocessor.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

ClearMetadataPreprocessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding
    the others.

ClearMetadataPreprocessor.enabled : Bool
    Default: `False`

No description

ClearMetadataPreprocessor.preserve_cell_metadata_mask : Set

Default: `set()`

Indicates the key paths to preserve when deleting metadata across both cells and notebook metadata fields. Tuples of keys can be passed to preserved specific nested values

ClearMetadataPreprocessor.preserve_nb_metadata_mask : Set

Default: `{('language_info', 'name')}`

Indicates the key paths to preserve when deleting metadata across both cells and notebook metadata fields. Tuples of keys can be passed to preserved specific nested values

ClearOutputPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

ClearOutputPreprocessor.display_data_priority : List

Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ClearOutputPreprocessor.enabled : Bool

Default: `False`

No description

ClearOutputPreprocessor.remove_metadata_fields : Set

Default: `{'collapsed', 'scrolled'}`

No description

CoalesceStreamsPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

CoalesceStreamsPreprocessor.display_data_priority : List

Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

CoalesceStreamsPreprocessor.enabled : Bool

Default: `False`

No description

ConvertFiguresPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

ConvertFiguresPreprocessor.display_data_priority : List

Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ConvertFiguresPreprocessor.enabled : Bool

Default: `False`

No description

ConvertFiguresPreprocessor.from_format : Unicode
> Default: `''`

> Format the converter accepts

ConvertFiguresPreprocessor.to_format : Unicode
> Default: `''`

> Format the converter writes

ExecutePreprocessor.allow_error_names : List
> Default: `[]`

> List of error names which won't stop the execution. Use this if the `allow_errors` option it too general and you want to allow only specific kinds of errors.

ExecutePreprocessor.allow_errors : Bool
> Default: `False`

> If `False` (default), when a cell raises an error the execution is stopped and a `CellExecutionError` is raised, except if the error name is in `allow_error_names`. If `True`, execution errors are ignored and the execution is continued until the end of the notebook. Output from exceptions is included in the cell output in both cases.

ExecutePreprocessor.default_language : Unicode
> Default: `'ipython'`

> Deprecated default highlight language as of 5.0, please use language_info metadata instead

ExecutePreprocessor.display_data_priority : List
> Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

> An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ExecutePreprocessor.enabled : Bool
> Default: `False`

> No description

ExecutePreprocessor.error_on_timeout : Dict
> Default: `None`

> If a cell execution was interrupted after a timeout, don't wait for the execute_reply from the kernel (e.g. KeyboardInterrupt error). Instead, return an execute_reply with the given error, which should be of the following form:

```
{
    'ename': str,  # Exception name, as a string
    'evalue': str,  # Exception value, as a string
    'traceback': list(str),  # traceback frames, as strings
}
```

ExecutePreprocessor.extra_arguments : List
> Default: `[]`

> No description

ExecutePreprocessor.force_raise_errors : Bool
> Default: `False`

> If False (default), errors from executing the notebook can be allowed with a `raises-exception` tag on a single cell, or the `allow_errors` or `allow_error_names` configurable options for all cells. An allowed error will be recorded in notebook output, and execution will continue. If an error occurs when it is not explicitly allowed,

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a `CellExecutionError` will be raised. If True, `CellExecutionError` will be raised for any error that occurs while executing the notebook. This overrides the allow_errors and allow_error_names options and the raises-exception cell tag.

ExecutePreprocessor.interrupt_on_timeout : Bool
Default: `False`

If execution of a cell times out, interrupt the kernel and continue executing other cells rather than throwing an error and stopping.

ExecutePreprocessor.iopub_timeout : Int
Default: `4`

The time to wait (in seconds) for IOPub output. This generally doesn't need to be set, but on some slow networks (such as CI systems) the default timeout might not be long enough to get all messages.

ExecutePreprocessor.ipython_hist_file : Unicode
Default: `':memory:'`

Path to file to use for SQLite history database for an IPython kernel.

The specific value `:memory:` (including the colon at both end but not the back ticks), avoids creating a history file. Otherwise, IPython will create a history file for each kernel.

When running kernels simultaneously (e.g. via multiprocessing) saving history a single SQLite file can result in database errors, so using `:memory:` is recommended in non-interactive contexts.

ExecutePreprocessor.kernel_manager_class : Type
Default: `'jupyter_client.manager.KernelManager'`

The kernel manager class to use.

ExecutePreprocessor.kernel_name : Unicode
Default: `''`

Name of kernel to use to execute the cells. If not set, use the kernel_spec embedded in the notebook.

ExecutePreprocessor.on_cell_complete : Callable
Default: `None`

A callable which executes after a cell execution is complete. It is called even when a cell results in a failure. Called with kwargs `cell` and `cell_index`.

ExecutePreprocessor.on_cell_error : Callable
Default: `None`

A callable which executes when a cell execution results in an error. This is executed even if errors are suppressed with `cell_allows_errors`. Called with kwargs `cell`, `cell_index` and execute_reply.

ExecutePreprocessor.on_cell_execute : Callable
Default: `None`

A callable which executes just before a code cell is executed. Called with kwargs `cell` and `cell_index`.

ExecutePreprocessor.on_cell_executed : Callable
Default: `None`

A callable which executes just after a code cell is executed, whether or not it results in an error. Called with kwargs `cell`, `cell_index` and execute_reply.

ExecutePreprocessor.on_cell_start : Callable
Default: `None`

A callable which executes before a cell is executed and before non-executing cells are skipped. Called with kwargs `cell` and `cell_index`.

ExecutePreprocessor.on_notebook_complete : Callable

Default: `None`

A callable which executes after the kernel is cleaned up. Called with kwargs `` `notebook` ``.

ExecutePreprocessor.on_notebook_error : Callable

Default: `None`

A callable which executes when the notebook encounters an error. Called with kwargs `` `notebook` ``.

ExecutePreprocessor.on_notebook_start : Callable

Default: `None`

A callable which executes after the kernel manager and kernel client are setup, and cells are about to execute. Called with kwargs `` `notebook` ``.

ExecutePreprocessor.raise_on_iopub_timeout : Bool

Default: `False`

If `False` (default), then the kernel will continue waiting for iopub messages until it receives a kernel idle message, or until a timeout occurs, at which point the currently executing cell will be skipped. If `True`, then an error will be raised after the first timeout. This option generally does not need to be used, but may be useful in contexts where there is the possibility of executing notebooks with memory-consuming infinite loops.

ExecutePreprocessor.record_timing : Bool

Default: `True`

If `True` (default), then the execution timings of each cell will be stored in the metadata of the notebook.

ExecutePreprocessor.shell_timeout_interval : Int

Default: `5`

The time to wait (in seconds) for Shell output before retrying. This generally doesn't need to be set, but if one needs to check for dead kernels at a faster rate this can help.

ExecutePreprocessor.shutdown_kernel : any of `'graceful'`` `` |'immediate'`` ` ``

Default: `'graceful'`

If `graceful` (default), then the kernel is given time to clean up after executing all cells, e.g., to execute its `atexit` hooks. If `immediate`, then the kernel is signaled to immediately terminate.

ExecutePreprocessor.skip_cells_with_tag : Unicode

Default: `'skip-execution'`

Name of the cell tag to use to denote a cell that should be skipped.

ExecutePreprocessor.startup_timeout : Int

Default: `60`

The time to wait (in seconds) for the kernel to start. If kernel startup takes longer, a RuntimeError is raised.

ExecutePreprocessor.store_widget_state : Bool

Default: `True`

If `True` (default), then the state of the Jupyter widgets created at the kernel will be stored in the metadata of the notebook.

ExecutePreprocessor.timeout : Int

Default: `None`

The time to wait (in seconds) for output from executions. If a cell execution takes longer, a TimeoutError is raised.

`None` or `-1` will disable the timeout. If `timeout_func` is set, it overrides `timeout`.

ExecutePreprocessor.timeout_func : Any

Default: `None`

A callable which, when given the cell source as input, returns the time to wait (in seconds) for output from cell executions. If a cell execution takes longer, a TimeoutError is raised.

Returning `None` or `-1` will disable the timeout for the cell. Not setting `timeout_func` will cause the client to default to using the `timeout` trait for all cells. The `timeout_func` trait overrides `timeout` if it is not `None`.

ExtractAttachmentsPreprocessor.attachments_directory_template : Unicode

Default: `'{notebook_name}_attachments'`

Directory to place attachments if use_separate_dir is True

ExtractAttachmentsPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

ExtractAttachmentsPreprocessor.display_data_priority : List

Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ExtractAttachmentsPreprocessor.enabled : Bool

Default: `False`

No description

ExtractAttachmentsPreprocessor.use_separate_dir : Bool

Default: `False`

Whether to use output_files_dir (which ExtractOutput also uses) or create a separate directory for attachments

ExtractOutputPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

ExtractOutputPreprocessor.display_data_priority : List

Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ExtractOutputPreprocessor.enabled : Bool

Default: `False`

No description

ExtractOutputPreprocessor.extract_output_types : Set

Default: `{'application/pdf', 'image/jpeg', 'image/png', 'image/svg+xml'}`

No description

ExtractOutputPreprocessor.output_filename_template : Unicode

Default: `'{unique_key}_{cell_index}_{index}{extension}'`

No description

HighlightMagicsPreprocessor.default_language : Unicode

Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

HighlightMagicsPreprocessor.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

HighlightMagicsPreprocessor.enabled : Bool
Default: `False`

No description

HighlightMagicsPreprocessor.languages : Dict
Default: `{}`

Syntax highlighting for magic's extension languages. Each item associates a language magic extension such as %%R, with a pygments lexer such as r.

LatexPreprocessor.author_names : List
Default: `[]`

Author names to list in the LaTeX document

LatexPreprocessor.date : Unicode
Default: `None`

Date of the LaTeX document

LatexPreprocessor.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

LatexPreprocessor.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

LatexPreprocessor.enabled : Bool
Default: `False`

No description

LatexPreprocessor.style : Unicode
Default: `'default'`

Name of the pygments style to use

LatexPreprocessor.title : Unicode
Default: `None`

Title of the LaTeX document

RegexRemovePreprocessor.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

RegexRemovePreprocessor.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

RegexRemovePreprocessor.enabled : Bool
    Default: `False`

    No description

RegexRemovePreprocessor.patterns : List
    Default: `[]`

    No description

SVG2PDFPreprocessor.command : Union
    Default: `traitlets.Undefined`

    The command to use for converting SVG to PDF

    This traitlet is a template, which will be formatted with the keys to_filename and from_filename.

    The conversion call must read the SVG from {from_filename}, and write a PDF to {to_filename}.

    It could be a List (recommended) or a String. If string, it will be passed to a shell for execution.

SVG2PDFPreprocessor.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

SVG2PDFPreprocessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

SVG2PDFPreprocessor.enabled : Bool
    Default: `False`

    No description

SVG2PDFPreprocessor.from_format : Unicode
    Default: `''`

    Format the converter accepts

SVG2PDFPreprocessor.inkscape : Unicode
    Default: `''`

    The path to Inkscape, if necessary

SVG2PDFPreprocessor.inkscape_version : Unicode
    Default: `''`

    The version of inkscape being used.

        This affects how the conversion command is run.

SVG2PDFPreprocessor.to_format : Unicode
    Default: `''`

    Format the converter writes

TagRemovePreprocessor.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

TagRemovePreprocessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

TagRemovePreprocessor.enabled : Bool
Default: `False`

No description

TagRemovePreprocessor.remove_all_outputs_tags : Set
Default: `set()`

Tags indicating cells for which the outputs are to be removed,matches tags in `cell.metadata.tags`.

TagRemovePreprocessor.remove_cell_tags : Set
Default: `set()`

Tags indicating which cells are to be removed,matches tags in `cell.metadata.tags`.

TagRemovePreprocessor.remove_input_tags : Set
Default: `set()`

Tags indicating cells for which input is to be removed,matches tags in `cell.metadata.tags`.

TagRemovePreprocessor.remove_metadata_fields : Set
Default: `{'collapsed', 'scrolled'}`

No description

TagRemovePreprocessor.remove_single_output_tags : Set
Default: `set()`

Tags indicating which individual outputs are to be removed,matches output i tags in `cell.outputs[i].metadata.tags`.

8.6 Postprocessor Options

PostProcessorBase.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

PostProcessorBase.display_data_priority : List
Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ServePostProcessor.browser : Unicode
Default: `''`

Specify what browser should be used to open slides. See
https://docs.python.org/3/library/webbrowser.html#webbrowser.register to see how keys are mapped to browser executables. If not specified, the default browser will be determined by the `webbrowser` standard library module, which allows setting of the BROWSER environment variable to override it.

ServePostProcessor.default_language : Unicode
Default: `'ipython'`

Deprecated default highlight language as of 5.0, please use language_info metadata instead

ServePostProcessor.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

ServePostProcessor.ip : Unicode
    Default: `'127.0.0.1'`

    The IP address to listen on.

ServePostProcessor.open_in_browser : Bool
    Default: `True`

    Should the browser be opened automatically?

ServePostProcessor.port : Int
    Default: `8000`

    port for the server to listen on.

ServePostProcessor.reveal_cdn : Unicode
    Default: `'https://cdnjs.cloudflare.com/ajax/libs/reveal.js/3.5.0'`

    URL for reveal.js CDN.

ServePostProcessor.reveal_prefix : Unicode
    Default: `'reveal.js'`

    URL prefix for reveal.js

8.7 Other Options

NbConvertBase.default_language : Unicode
    Default: `'ipython'`

    Deprecated default highlight language as of 5.0, please use language_info metadata instead

NbConvertBase.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

NotebookClient.allow_error_names : List
    Default: `[]`

    List of error names which won't stop the execution. Use this if the `allow_errors` option it too general and you want to allow only specific kinds of errors.

NotebookClient.allow_errors : Bool
    Default: `False`

    If `False` (default), when a cell raises an error the execution is stopped and a `CellExecutionError` is raised, except if the error name is in `allow_error_names`. If `True`, execution errors are ignored and the execution is continued until the end of the notebook. Output from exceptions is included in the cell output in both cases.

NotebookClient.display_data_priority : List
    Default: `['text/html', 'application/pdf', 'text/latex', 'image/svg+xml...`

    An ordered list of preferred output type, the first encountered will usually be used when converting discarding the others.

NotebookClient.error_on_timeout : Dict

Default: `None`

If a cell execution was interrupted after a timeout, don't wait for the execute_reply from the kernel (e.g. KeyboardInterrupt error). Instead, return an execute_reply with the given error, which should be of the following form:

```
{
    'ename': str,  # Exception name, as a string
    'evalue': str,  # Exception value, as a string
    'traceback': list(str),  # traceback frames, as strings
}
```

NotebookClient.extra_arguments : List

Default: `[]`

No description

NotebookClient.force_raise_errors : Bool

Default: `False`

If False (default), errors from executing the notebook can be allowed with a `raises-exception` tag on a single cell, or the `allow_errors` or `allow_error_names` configurable options for all cells. An allowed error will be recorded in notebook output, and execution will continue. If an error occurs when it is not explicitly allowed, a `CellExecutionError` will be raised. If True, `CellExecutionError` will be raised for any error that occurs while executing the notebook. This overrides the `allow_errors` and `allow_error_names` options and the `raises-exception` cell tag.

NotebookClient.interrupt_on_timeout : Bool

Default: `False`

If execution of a cell times out, interrupt the kernel and continue executing other cells rather than throwing an error and stopping.

NotebookClient.iopub_timeout : Int

Default: `4`

The time to wait (in seconds) for IOPub output. This generally doesn't need to be set, but on some slow networks (such as CI systems) the default timeout might not be long enough to get all messages.

NotebookClient.ipython_hist_file : Unicode

Default: `':memory:'`

Path to file to use for SQLite history database for an IPython kernel.

The specific value `:memory:` (including the colon at both end but not the back ticks), avoids creating a history file. Otherwise, IPython will create a history file for each kernel.

When running kernels simultaneously (e.g. via multiprocessing) saving history a single SQLite file can result in database errors, so using `:memory:` is recommended in non-interactive contexts.

NotebookClient.kernel_manager_class : Type

Default: `'jupyter_client.manager.KernelManager'`

The kernel manager class to use.

NotebookClient.kernel_name : Unicode

Default: `''`

Name of kernel to use to execute the cells. If not set, use the kernel_spec embedded in the notebook.

NotebookClient.on_cell_complete : Callable

Default: `None`

A callable which executes after a cell execution is complete. It is called even when a cell results in a failure. Called with kwargs `cell` and `cell_index`.

NotebookClient.on_cell_error : Callable

    Default: `None`

A callable which executes when a cell execution results in an error. This is executed even if errors are suppressed with `cell_allows_errors`. Called with kwargs `cell`, `cell_index` and `execute_reply`.

NotebookClient.on_cell_execute : Callable

    Default: `None`

A callable which executes just before a code cell is executed. Called with kwargs `cell` and `cell_index`.

NotebookClient.on_cell_executed : Callable

    Default: `None`

A callable which executes just after a code cell is executed, whether or not it results in an error. Called with kwargs `cell`, `cell_index` and `execute_reply`.

NotebookClient.on_cell_start : Callable

    Default: `None`

A callable which executes before a cell is executed and before non-executing cells are skipped. Called with kwargs `cell` and `cell_index`.

NotebookClient.on_notebook_complete : Callable

    Default: `None`

A callable which executes after the kernel is cleaned up. Called with kwargs `notebook`.

NotebookClient.on_notebook_error : Callable

    Default: `None`

A callable which executes when the notebook encounters an error. Called with kwargs `notebook`.

NotebookClient.on_notebook_start : Callable

    Default: `None`

A callable which executes after the kernel manager and kernel client are setup, and cells are about to execute. Called with kwargs `notebook`.

NotebookClient.raise_on_iopub_timeout : Bool

    Default: `False`

If `False` (default), then the kernel will continue waiting for iopub messages until it receives a kernel idle message, or until a timeout occurs, at which point the currently executing cell will be skipped. If `True`, then an error will be raised after the first timeout. This option generally does not need to be used, but may be useful in contexts where there is the possibility of executing notebooks with memory-consuming infinite loops.

NotebookClient.record_timing : Bool

    Default: `True`

If `True` (default), then the execution timings of each cell will be stored in the metadata of the notebook.

NotebookClient.shell_timeout_interval : Int

    Default: `5`

The time to wait (in seconds) for Shell output before retrying. This generally doesn't need to be set, but if one needs to check for dead kernels at a faster rate this can help.

NotebookClient.shutdown_kernel : any of `'graceful'```|'immediate'``

    Default: `'graceful'`

If `graceful` (default), then the kernel is given time to clean up after executing all cells, e.g., to execute its `atexit` hooks. If `immediate`, then the kernel is signaled to immediately terminate.

NotebookClient.skip_cells_with_tag : Unicode

Default: `'skip-execution'`

Name of the cell tag to use to denote a cell that should be skipped.

NotebookClient.startup_timeout : Int

Default: `60`

The time to wait (in seconds) for the kernel to start. If kernel startup takes longer, a RuntimeError is raised.

NotebookClient.store_widget_state : Bool

Default: `True`

If `True` (default), then the state of the Jupyter widgets created at the kernel will be stored in the metadata of the notebook.

NotebookClient.timeout : Int

Default: `None`

The time to wait (in seconds) for output from executions. If a cell execution takes longer, a TimeoutError is raised.

`None` or `-1` will disable the timeout. If `timeout_func` is set, it overrides `timeout`.

NotebookClient.timeout_func : Any

Default: `None`

A callable which, when given the cell source as input, returns the time to wait (in seconds) for output from cell executions. If a cell execution takes longer, a TimeoutError is raised.

Returning `None` or `-1` will disable the timeout for the cell. Not setting `timeout_func` will cause the client to default to using the `timeout` trait for all cells. The `timeout_func` trait overrides `timeout` if it is not `None`.

NINE

CREATING CUSTOM TEMPLATES FOR NBCONVERT

9.1 Selecting a template

Most exporters in nbconvert are subclasses of `TemplateExporter`, and make use of jinja to render notebooks into the destination format.

Alternative nbconvert templates can be selected by name from the command line with the `--template` option. For example, to use the `reveal` template with the HTML exporter, one can type.

```
jupyter nbconvert <path-to-notebook> --to html --template reveal
```

9.2 Where are nbconvert templates installed?

Nbconvert templates are *directories* containing resources for nbconvert template exporters such as jinja templates and associated assets. They are installed in the **data directory** of nbconvert, namely `<installation prefix>/share/jupyter/nbconvert`. Nbconvert includes several templates already.

For example, three HTML templates are provided in nbconvert core for the HTML exporter:

- `lab` (The default HTML template, which produces the same DOM structure as JupyterLab)

- `classic` (The HTML template styled after the classic notebook)

- `reveal` (For producing slideshows).

Note: Running `jupyter --paths` will show all Jupyter directories and search paths.

For example, on Linux, `jupyter --paths` returns:

```
$ jupyter --paths
config:
    /home/<username>/.jupyter
    /<sys-prefix>/etc/jupyter
    /usr/local/etc/jupyter
    /etc/jupyter
data:
    /home/<username>/.local/share/jupyter
    /<sys-prefix>/share/jupyter
    /usr/local/share/jupyter
    /usr/share/jupyter
```

(continues on next page)

```
runtime:
    /home/<username>/.local/share/jupyter/runtime
```

9.2.1 Adding Additional Template Paths

In order to add additional paths to be searched, you need to pass `TemplateExporter.extra_template_basedirs` config options indicating the extra directories to search for templates. Be careful not to override `TemplateExporter.template_paths` unless you intend to replace ALL paths and don't want the default locations included.

When using the commandline the extra template paths are added by calling `--TemplateExporter.extra_template_basedirs=path/you/want/included`.

9.3 The content of nbconvert templates

9.3.1 conf.json

Nbconvert templates all include a `conf.json` file at the root of the directory, which is used to indicate

- the base template that it is inheriting from.
- the mimetypes of the template.
- preprocessors classes to register in the exporter when using that template.

Inspecting the configuration of the reveal template we see that it inherits from the lab template, exports text/html, and enables two preprocessors called "100-pygments" and "500-reveal".

```json
{
  "base_template": "lab",
  "mimetypes": {
    "text/html": true
  },
  "preprocessors": {
    "100-pygments": {
        "type": "nbconvert.preprocessors.CSSHTMLHeaderPreprocessor",
        "enabled": true
    },
    "500-reveal": {
      "type": "nbconvert.exporters.slides._RevealMetadataPreprocessor",
      "enabled": true
    }
  }
}
```

9.3.2 Inheritance

Nbconvert walks up the inheritance structure determined by `conf.json` and produces an aggregated configuration, merging the dictionaries of registered preprocessors. The lexical ordering of the preprocessors by name determines the order in which they will be run.

Besides the `conf.json` file, nbconvert templates most typically include jinja templates files, although any other resource from the base template can be overridden in the derived template.

For example, inspecting the content of the `classic` template located in `share/jupyter/nbconvert/templates/classic`, we find the following content:

```
share/jupyter/nbconvert/templates/classic
├── static
│   └── styles.css
├── conf.json
├── index.html.j2
└── base.html.j2
```

The `classic` template exporter includes a `index.html.j2` jinja template (which is the main entry point for HTML exporters) as well as CSS and a base template file in `base.html.j2`.

Note: A template inheriting from `classic` would specify `"base_template": "classic"` and could override any of these files. For example, one could make a "classiker" template merely providing an alternative `styles.css` file.

9.3.3 Inheritance in Jinja

In nbconvert, jinja templates can inherit from any other jinja template available in its current directory or base template directory by name. Jinja templates of other directories can be addressed by their relative path from the Jupyter data directory.

For example, in the reveal template, `index.html.j2` extends `base.html.j2` which is in the same directory, and `base.html.j2` extends `lab/base.html.j2`. This approach allows using content that is available in other templates or may be overridden in the current template.

9.3.4 A practical example

Say you would like to modify the existing Markdown template to wrap each output statement in a fenced code block:

````
```output
(1, 2, 3)
```
````

Start by creating a new template directory, say `mdoutput`. In it, you have the following files:

```
conf.json
index.md.j2
```

The configuration file, `conf.json` states that your template applies to markdown files:

```
{
  "mimetypes": {
```

```
    "text/markdown": true
  }
}
```

The `index.md.j2` template entrypoint extends the existing markdown template, and redefines how output blocks are rendered:

```
{% extends 'markdown/index.md.j2' %}

{%- block traceback_line -%}
```output
{{ line.rstrip() | strip_ansi }}
```
{%- endblock traceback_line -%}

{%- block stream -%}
```output
{{ output.text.rstrip() }}
```
{%- endblock stream -%}

{%- block data_text scoped -%}
```output
{{ output.data['text/plain'].rstrip() }}
```
{%- endblock data_text -%}
```

You can now convert your notebook to markdown using the new template:

```
jupyter nbconvert --execute notebook.ipynb --to markdown --template=mdoutput
```

(If you put your template folder in a different location than your notebook, remember to add `--TemplateExporter.extra_template_basedirs=path/to/template/parent`.)

To further explore the possibilities of templating, take a look at the root of all templates: `null.j2`. You can find it in the `./nbconvert/templates/base` subfolder of one of the data paths given by `jupyter --paths`.

CUSTOMIZING EXPORTERS

New in version 4.2: You can now use the `--to` flag to use custom export formats defined outside nbconvert.

The command-line syntax to run the `nbconvert` script is:

```
jupyter nbconvert --to FORMAT notebook.ipynb
```

This will convert the Jupyter document file `notebook.ipynb` into the output format designated by the `FORMAT` string as explained below.

10.1 Extending the built-in format exporters

A few built-in formats are available by default: `html`, `pdf`, `webpdf`, `script`, `latex`. Each of these has its own *exporter* with many configuration options that can be extended. Having the option to point to a different *exporter* allows authors to create their own fully customized templates or export formats.

A custom *exporter* must be an importable Python object. We recommend that these be distributed as Python libraries.

10.2 Registering a custom exporter as an entry point

Additional exporters may be registered as named entry_points. nbconvert uses the `nbconvert.exporters` entry point to find exporters from any package you may have installed.

If you are writing a Python package that provides custom exporters, you can register the custom exporters in your package's `setup.py`. For example, your package may contain two custom exporters, named "simple" and "detail", and can be registered in your package's `setup.py` as follows:

```
setup(
    # ...
    entry_points={
        "nbconvert.exporters": [
            "simple = mymodule:SimpleExporter",
            "detail = mymodule:DetailExporter",
        ],
    }
)
```

Now people who have installed your Python package containing the two custom exporters can call the entry point name:

```
jupyter nbconvert --to detail mynotebook.ipynb
```

instead of having to specify the full import name of the custom exporter.

10.3 Using a custom exporter without entrypoints

We encourage registering custom exporters as entry points as described in the previous section. Registering a custom exporter with an entry point simplifies using the exporter. If a custom exporter has not been registered with an entry point, the exporter can still be used by providing the fully qualified name of this exporter as the argument of the `--to` flag when running from the command line:

```
$ jupyter nbconvert --to <full.qualified.name of custom exporter> notebook.ipynb
```

For example, assuming a library `tcontrib` has a custom exporter name `TExporter`, you would convert to this custom format using the following:

```
$ jupyter nbconvert --to tcontrib.TExporter notebook.ipynb
```

A library can contain multiple exporters. Creators of custom exporters should make sure that all other flags of the command line behave the same for the custom exporters as for built-in exporters.

ELEVEN

PARAMETERS CONTROLLED BY AN EXTERNAL EXPORTER

An external exporter can control almost any parameter of the notebook conversion process, from simple parameters such as the output file extension, to more complex ones such as the execution of the notebook or a custom rendering template.

All external exporters can expose custom options using the `traitlets` configurable API. Refer to the library that provides these exporters for details on how these configuration options works.

You can use the Jupyter configuration files to configure an external exporter. As for any `nbconvert` exporters you can use either the configuration file syntax of `c.MyExporter.config_option=value` or the command line flag form `--MyExporter.config_option=value`.

WRITING A CUSTOM EXPORTER

Under the hood exporters are python classes that expose a certain interface. Any importable classes that expose this interface can be use as an exporter for nbconvert.

For simplicity we expose basic classes that implement all the relevant methods that you have to subclass and overwrite just the relevant methods to provide a custom exporter. Below we show you the step to create a custom exporter that provides a custom file extension, and a custom template that inserts before and after each markdown cell.

We will lay out files to be ready for Python packaging and distributing on PyPI, although the exact art of Python packaging is beyond the scope of this explanation.

We will use the following layout for our package to expose a custom exporter:

```
mypackage
├── LICENSE.md
├── setup.py
└── mypackage
    ├── __init__.py
    └── templates
        └── test_template.tpl
```

If you wished to create this same directory structure you could use the following commands when you are at the directory under which you wish to build your `mypackage` package:

```
mkdir -p mypackage/mypackage/templates
touch mypackage/LICENSE.md
touch mypackage/setup.py
touch mypackage/mypackage/__init__.py
touch mypackage/mypackage/templates/test_template.tpl
```

Important: You should not publish this package without adding content to your `LICENSE.md` file. For example, `nbconvert` follows the Jupyter Project convention of using a Modified BSD License (also known as New or Revised or 3-Clause BSD). For a guide on picking the right license for your use case, please see choose a license. If you do not specify the license, your code may be unusable by many open source projects.

As you can see the layout is relatively simple, in the case where a template is not needed we would actually have only one file with an Exporter implementation. Of course you can change the layout of your package to have a more fine-grained structure of the subpackage. But lets see what a minimum example looks like.

We are going to write an exporter that:

- exports to html, so we will reuse the built-in html exporter

- changes the file extension to `.test_ext`

```python
# file __init__.py
import os
import os.path

from traitlets.config import Config
from nbconvert.exporters.html import HTMLExporter


# -----------------------------------------------------------------------------
# Classes
# -----------------------------------------------------------------------------


class MyExporter(HTMLExporter):
    """
    My custom exporter
    """

    # If this custom exporter should add an entry to the
    # "File -> Download as" menu in the notebook, give it a name here in the
    # `export_from_notebook` class member
    export_from_notebook = "My format"

    def _file_extension_default(self):
        """
        The new file extension is ``.test_ext``
        """
        return ".test_ext"

    @property
    def template_paths(self):
        """
        We want to inherit from HTML template, and have template under
        ``./templates/`` so append it to the search path. (see next section)

        Note: nbconvert 6.0 changed ``template_path`` to ``template_paths``
        """
        return super().template_paths + [
            os.path.join(os.path.dirname(__file__), "templates")
        ]

    def _template_file_default(self):
        """
        We want to use the new template we ship with our library.
        """
        return "test_template"  # full
```

And the template file, that inherits from the html `full` template and prepend/append text to each markdown cell (see Jinja2 docs for template syntax):

```
{% extends "full.tpl" %}

{% block markdowncell -%}
```

```
## this is a markdown cell
{{ super() }}
## THIS IS THE END


{% endblock markdowncell %}
```

Assuming you install this package locally, or from PyPI, you can now use:

```
jupyter nbconvert --to mypackage.MyExporter notebook.ipynb
```

THIRTEEN

CUSTOMIZING SYNTAX HIGHLIGHTING

Under the hood, nbconvert uses pygments to highlight code. pdf, webpdf and html exporting support changing the highlighting style.

13.1 Using Builtin styles

Pygments has a number of builtin styles available. To use them, we just need to set the style setting in the relevant preprocessor.

To change html and webpdf highlighting export with:

```
jupyter nbconvert --to html notebook.ipynb --CSSHTMLHeaderPreprocessor.style=<name>
```

To change pdf and latex highlighting export with:

```
jupyter nbconvert --to pdf notebook.ipynb --LatexPreprocessor.style=<name>
```

where <name> is the name of the pygments style. Available styles may vary from system to system. You can find all available styles with:

```
pygmentize -L styles
```

from a terminal or

```
from pygments.styles import get_all_styles

print(list(get_all_styles()))
```

from python.

You can preview all the styles from an environment that can display html like jupyter notebook with:

```
from pygments.styles import get_all_styles
from pygments.formatters import Terminal256Formatter
from pygments.lexers import PythonLexer
from pygments import highlight

code = """
import os
def function(test=1):
    if test in [3,4]:
      print(test)
```

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```python
"""
for style in get_all_styles():
    highlighted_code = highlight(code, PythonLexer(), Terminal256Formatter(style=style))
    print(f"{style}:\n{highlighted_code}")
```

13.2 Making your own styles

To make your own style you must subclass `pygments.styles.Style`, and then you must register your new style with Pygments using their plugin system. This is explained in detail in the Pygments documentation.

FOURTEEN

ARCHITECTURE OF NBCONVERT

This is a high-level outline of the basic workflow, structures and objects in nbconvert. Specifically, this exposition has a two-fold goal:

1. to alert you to the affordances available for customisation or direct contributions

2. to provide a map of where and when different events occur, which should aid in tracking down bugs.

14.1 A detailed pipeline exploration

Nbconvert takes in a notebook, which is a JSON object, and operates on that object.

This can include operations that take a notebook and return a notebook. For example, that operation could be to execute the notebook as though it were a continuous script; if it were executed `--in-place` then it would overwrite the current notebook. Or it could be that we wish to systematically alter the notebook, for example by clearing all output cells. Format agnostic operations on cell content that do not violate the nbformat spec can be interpreted as a notebook to notebook conversion step; such operations can be performed as part of the preprocessing step.

But often we want to have the notebook's structured content in a different format. Importantly, in many cases the structure of the notebook should be reflected in the structure of the output, adapted to the output's format. For that purpose, the original JSON structure of the document is crucial scaffolding needed to support this kind of structured output. In order to maintain structure, it can be useful to apply our conversion programmatically on the structure itself. To do so, when converting to formats other than the notebook, we use the jinja templating engine.

The basic unit of structure in a notebook is the cell. Accordingly, since our templating engine is capable of expressing structure, the basic unit in our templates will often be specified at the cell level. Each cell has a certain type; the three most important cell types for our purposes are code, markdown, and raw NbConvert. Code cells can be split further into their input and their output. Operations can also occur separately on input and output and their respective subcomponents. Markdown cells and raw NbConvert cells do not have analogous substructure.

The template's structure then can be seen as a mechanism for selecting content on which to operate. Because the template operates on individual cells, this has some upsides and drawbacks. One upside is that this allows the template to have access to the individual cell's metadata, which enables intelligently transforming the appropriate content. The transformations occur as a series of replacement rules and filters. For many purposes these filters take the form of external calls to pandoc, which is a utility for converting between many different document formats. One downside is that this makes operations that require global coördination (e.g., cross referencing across cells) somewhat challenging to implement as filters inside templates.

Note that all that we've described is happening in memory. This is crucial in order to ensure that this functionality is available when writing files is more challenging. Nonetheless, the reason for using nbconvert almost always involves producing some kind of output file. We take the in-memory object and write a file appropriate for the output type.

The entirety of heretofore described process can be described as part of an `Exporter`. `Exporter`s often involves `Preprocessor`s, `filters`, `templates` and `Writer`s. These classes and functions are described in greater detail

below.

Finally, one can apply a `Postprocessor` after the writing has occurred. For example, it is common when converting to slides to start a webserver and open a browser window with the newly created document (`--to slides --post serve`).

14.2 Classes

14.2.1 Exporters

The primary class in nbconvert is the `nbconvert.exporters.exporter.Exporter`. Exporters encapsulate the operation of turning a notebook into another format. There is one Exporter for each format supported in nbconvert. The first thing an Exporter does is load a notebook, usually from a file via `nbformat`. Most of what a typical Exporter does is select and configure preprocessors, filters, and templates. If you want to convert notebooks to additional formats, a new Exporter is probably what you are looking for.

See also:

Writing a custom Exporter

Once the notebook is loaded, it is preprocessed...

14.2.2 Preprocessors

A `nbconvert.preprocessors.Preprocessor` is an object that transforms the content of the notebook to be exported. The result of a preprocessor being applied to a notebook is always a notebook. These operations include re-executing the cells, stripping output, removing bundled outputs to separate files, etc. If you want to add operations that modify a notebook before exporting, a preprocessor is the place to start.

See also:

Custom Preprocessors

Once a notebook is preprocessed, it's time to convert the notebook into the destination format.

14.2.3 Templates

Most Exporters in nbconvert are a subclass of `nbconvert.exporters.templateexporter.TemplateExporter`, which make use of jinja to render a notebook into the destination format.

Nbconvert templates can be selected from the command line with the `--template` option. For example, to use the `reveal` template with the HTML exporter

```
jupyter nbconvert <path-to-notebook> --to html --template reveal
```

Note: Since version 6.0, The HTML exporter defaults to the `lab` template which produces a DOM structure corresponding to the notebook component in JupyterLab.

To produce HTML corresponding to the looks of the classic notebook, one can use the `classic` template by passing `--template classic` to the command line.

The nbconvert template system has been completely revamped with nbconvert 6.0 to allow for greater extensibility. Nbconvert templates can now be installed as third-party packages and are automatically picked up by nbconvert.

For more details about how to create custom templates, check out the *Creating Custom Templates for nbconvert* section of the documentation.

14.2.4 Filters

Filters are Python callables which take something (typically text) as an input, and produce a text output. If you want to perform custom transformations of particular outputs, a filter may be the way to go.

The following code snippet is an excerpt from the main default template of the HTML export. The displayed block determines how text output on `stdout` is displayed in HTML.

```
{% block stream_stdout -%}
<div class="output_subarea output_stream output_stdout output_text">
<pre>
{{- output.text | ansi2html -}}
</pre>
</div>
{%- endblock stream_stdout %}
```

In the `{{- output.text | ansi2html -}}` bit, we invoke the `ansi2html` filter to transform the text output.

Typically, filters are pure functions. However, filters that require some configuration, may be implemented as Configurable classes.

See also:

- *Creating Custom Templates for nbconvert*
- More on Jinja Filters

Once it has passed through the template, an Exporter is done with the notebook, and returns the file data.

At this point, we have the file data as text or bytes and we can decide where it should end up. When you are using nbconvert as a library, as opposed to the command-line application, this is typically where you would stop, take your exported data, and go on your way.

14.2.5 Writers

A *Writer* takes care of writing the resulting file(s) where they should end up. There are two basic Writers in nbconvert:

1. stdout - writes the result to stdout (for pipe-style workflows)
2. Files (default) - writes the result to the filesystem

Once the output is written, nbconvert has done its job.

14.2.6 Postprocessors

A *Postprocessor* is something that runs after everything is exported and written to the filesystem. The only postprocessor in nbconvert at this point is the `nbconvert.postprocessors.serve.ServePostProcessor`, which is used for serving reveal.js HTML slideshows.

FIFTEEN

PYTHON API FOR WORKING WITH NBCONVERT

Contents:

15.1 NbConvertApp

See also:

Configuration options
> Configurable options for the nbconvert application

class nbconvert.nbconvertapp.**NbConvertApp**(***kwargs: Any*)

> Application used to convert from notebook file type (`*.ipynb`)

> **init_notebooks**()
>
> > Construct the list of notebooks.
> >
> > If notebooks are passed on the command-line, they override (rather than add) notebooks specified in config files. Glob each notebook to replace notebook patterns with filenames.

> **convert_notebooks**()
>
> > Convert the notebooks in the self.notebooks traitlet

> **convert_single_notebook**(*notebook_filename*, *input_buffer=None*)
>
> > Convert a single notebook.
> >
> > Performs the following steps:
> >
> > 1. Initialize notebook resources
> >
> > 2. Export the notebook to a particular format
> >
> > 3. Write the exported notebook to file
> >
> > 4. (Maybe) postprocess the written file
> >
> > > **Parameters**
> > >
> > > - **notebook_filename** (`str`) –
> > >
> > > - **input_buffer** – If input_buffer is not None, conversion is done and the buffer is used as source into a file basenamed by the notebook_filename argument.

> **init_single_notebook_resources**(*notebook_filename*)
>
> > Step 1: Initialize resources
> >
> > This initializes the resources dictionary for a single notebook.

> **Returns**
>> **resources dictionary for a single notebook that MUST include the following keys:**
>>> • config_dir: the location of the Jupyter config directory
>>>
>>> • unique_key: the notebook name
>>>
>>> • output_files_dir: a directory where output files (not including the notebook itself) should be saved
>
> **Return type**
>> dict

export_single_notebook(*notebook_filename*, *resources*, *input_buffer=None*)

> Step 2: Export the notebook
>
> Exports the notebook to a particular format according to the specified exporter. This function returns the output and (possibly modified) resources from the exporter.
>
> **Parameters**
>> • **notebook_filename** (str) – name of notebook file.
>>
>> • **resources** (dict) –
>>
>> • **input_buffer** – readable file-like object returning unicode. if not None, notebook_filename is ignored
>
> **Returns**
>> • *output*
>>
>> • *dict* – resources (possibly modified)

write_single_notebook(*output*, *resources*)

> Step 3: Write the notebook to file
>
> This writes output from the exporter to file using the specified writer. It returns the results from the writer.
>
> **Parameters**
>> • **output** –
>>
>> • **resources** (dict) – resources for a single notebook including name, config directory and directory to save output
>
> **Returns**
>> results from the specified writer output of exporter
>
> **Return type**
>> file

postprocess_single_notebook(*write_results*)

> Step 4: Post-process the written file
>
> Only used if a postprocessor has been specified. After the converted notebook is written to a file in Step 3, this post-processes the notebook.

15.2 Exporters

See also:

Configuration options
> Configurable options for the nbconvert application

nbconvert.exporters.**export**(*exporter*, *nb*, ***kw*)

> Export a notebook object using specific exporter class.

> > **Parameters**

> > > - **exporter** (Exporter class or instance) – Class or instance of the exporter that should be used. If the method initializes its own instance of the class, it is ASSUMED that the class type provided exposes a constructor (__init__) with the same signature as the base Exporter class.

> > > - **nb** (NotebookNode) – The notebook to export.

> > > - **config** (*config (optional, keyword arg)*) – User configuration instance.

> > > - **resources** (*dict (optional, keyword arg)*) – Resources used in the conversion process.

> > **Returns**

> > > **output**
> > > > [str] The resulting converted notebook.

> > > **resources**
> > > > [dictionary] Dictionary of resources used prior to and during the conversion process.

> > **Return type**
> > > tuple

nbconvert.exporters.**get_exporter**(*name*, *config={}*)

> Given an exporter name or import path, return a class ready to be instantiated

> Raises ExporterName if exporter is not found or ExporterDisabledError if not enabled

nbconvert.exporters.**get_export_names**(*config={}*)

> Return a list of the currently supported export targets

> Exporters can be found in external packages by registering them as an nbconvert.exporter entrypoint.

15.2.1 Exporter base classes

class nbconvert.exporters.**Exporter**(***kwargs: Any*)

> Class containing methods that sequentially run a list of preprocessors on a NotebookNode object and then return the modified NotebookNode object and accompanying resources dict.

> **__init__**(*config=None*, ***kw*)

> > Public constructor

> > > **Parameters**

> > > > - **config** (traitlets.config.Config) – User configuration instance.

> > > > - ****kw** – Additional keyword arguments passed to parent __init__

from_notebook_node(*nb: NotebookNode, resources: Any | None = None, **kw: Any*) →
            tuple[nbformat.notebooknode.NotebookNode, dict[str, Any]]

Convert a notebook from a notebook node instance.

Parameters

- **nb** (`NotebookNode`) – Notebook node (dict-like with attr-access)

- **resources** (`dict`) – Additional resources that can be accessed read/write by preprocessors
  and filters.

- ****kw** – Ignored

from_filename(*filename: str, resources: dict[str, Any] | None = None, **kw: Any*) →
            tuple[nbformat.notebooknode.NotebookNode, dict[str, Any]]

Convert a notebook from a notebook file.

Parameters

- **filename** (`str`) – Full filename of the notebook file to open and convert.

- **resources** (`dict`) – Additional resources that can be accessed read/write by preprocessors
  and filters.

- ****kw** – Ignored

from_file(*file_stream: Any, resources: dict[str, Any] | None = None, **kw: Any*) →
            tuple[nbformat.notebooknode.NotebookNode, dict[str, Any]]

Convert a notebook from a notebook file.

Parameters

- **file_stream** (`file-like object`) – Notebook file-like object to convert.

- **resources** (`dict`) – Additional resources that can be accessed read/write by preprocessors
  and filters.

- ****kw** – Ignored

register_preprocessor(*preprocessor, enabled=False*)

Register a preprocessor. Preprocessors are classes that act upon the notebook before it is passed into the Jinja
templating engine. Preprocessors are also capable of passing additional information to the Jinja templating
engine.

Parameters

- **preprocessor** (`nbconvert.preprocessors.Preprocessor`) – A dotted module
  name, a type, or an instance

- **enabled** (`bool`) – Mark the preprocessor as enabled

class nbconvert.exporters.**TemplateExporter**(***kwargs: Any*)

Exports notebooks into other file formats. Uses Jinja 2 templating engine to output new formats. Inherit from
this class if you are creating a new template type along with new filters/preprocessors. If the filters/ preprocessors
provided by default suffice, there is no need to inherit from this class. Instead, override the template_file and
file_extension traits via a config file.

Filters available by default for templates:

- add_anchor

- add_prompts

- ansi2html

- ansi2latex

- ascii_only

- citation2latex

- clean_html

- comment_lines

- convert_pandoc

- escape_html

- escape_html_keep_quotes

- escape_html_script

- escape_latex

- filter_data_type

- get_lines

- get_metadata

- highlight2html

- highlight2latex

- html2text

- indent

- ipython2python

- json_dumps

- markdown2asciidoc

- markdown2html

- markdown2latex

- markdown2rst

- path2url

- posix_path

- prevent_list_blocks

- strip_ansi

- strip_dollars

- strip_files_prefix

- strip_trailing_newline

- text_base64

- wrap_text

__init__(*config=None*, ***kw*)

    Public constructor

        Parameters

            - **config** (`config`) – User configuration instance.

- **extra_loaders** (`list[of Jinja Loaders]`) – ordered list of Jinja loader to find templates. Will be tried in order before the default FileSystem ones.

- **template_file** (`str (optional, kw arg)`) – Template to use when exporting.

from_notebook_node(*nb: NotebookNode*, *resources: dict[str, Any] | None = None*, ***kw: Any*) → tuple[str, dict[str, Any]]

Convert a notebook from a notebook node instance.

> **Parameters**
>
> - **nb** (`NotebookNode`) – Notebook node
>
> - **resources** (`dict`) – Additional resources that can be accessed read/write by preprocessors and filters.

from_filename(*filename: str*, *resources: dict[str, Any] | None = None*, ***kw: Any*) → tuple[str, dict[str, Any]]

Convert a notebook from a filename.

from_file(*file_stream: Any*, *resources: dict[str, Any] | None = None*, ***kw: Any*) → tuple[str, dict[str, Any]]

Convert a notebook from a file.

register_preprocessor(*preprocessor*, *enabled=False*)

Register a preprocessor. Preprocessors are classes that act upon the notebook before it is passed into the Jinja templating engine. Preprocessors are also capable of passing additional information to the Jinja templating engine.

> **Parameters**
>
> - **preprocessor** (`nbconvert.preprocessors.Preprocessor`) – A dotted module name, a type, or an instance
>
> - **enabled** (`bool`) – Mark the preprocessor as enabled

register_filter(*name*, *jinja_filter*)

Register a filter. A filter is a function that accepts and acts on one string. The filters are accessible within the Jinja templating engine.

> **Parameters**
>
> - **name** (`str`) – name to give the filter in the Jinja engine
>
> - **filter** (`filter`) –

15.2.2 Specialized exporter classes

The `NotebookExporter` inherits directly from `Exporter`, while the other exporters listed here inherit either directly or indirectly from `TemplateExporter`.

class nbconvert.exporters.**NotebookExporter**(***kwargs: Any*)

Exports to an IPython notebook.

This is useful when you want to use nbconvert's preprocessors to operate on a notebook (e.g. to execute it) and then write it back to a notebook file.

class nbconvert.exporters.**HTMLExporter**(***kwargs: Any*)

Exports a basic HTML document. This exporter assists with the export of HTML. Inherit from it if you are writing your own HTML template and need custom preprocessors/filters. If you don't need custom preprocessors/ filters, just change the 'template_file' config option.

class nbconvert.exporters.**SlidesExporter**(***kwargs: Any*)

    Exports HTML slides with reveal.js

class nbconvert.exporters.**LatexExporter**(***kwargs: Any*)

    Exports to a Latex template. Inherit from this class if your template is LaTeX based and you need custom transformers/filters. If you don't need custom transformers/filters, just change the 'template_file' config option. Place your template in the special "/latex" subfolder of the "../templates" folder.

class nbconvert.exporters.**MarkdownExporter**(***kwargs: Any*)

    Exports to a markdown document (.md)

class nbconvert.exporters.**PDFExporter**(***kwargs: Any*)

    Writer designed to write to PDF files.

    This inherits from *LatexExporter*. It creates a LaTeX file in a temporary directory using the template machinery, and then runs LaTeX to create a pdf.

class nbconvert.exporters.**WebPDFExporter**(***kwargs: Any*)

    Writer designed to write to PDF files.

    This inherits from *HTMLExporter*. It creates the HTML using the template machinery, and then run playwright to create a pdf.

class nbconvert.exporters.**PythonExporter**(***kwargs: Any*)

    Exports a Python code file. Note that the file produced will have a shebang of '#!/usr/bin/env python' regardless of the actual python version used in the notebook.

class nbconvert.exporters.**RSTExporter**(***kwargs: Any*)

    Exports reStructuredText documents.

15.3 Preprocessors

See also:

Configuration options

    Configurable options for the nbconvert application

class nbconvert.preprocessors.**Preprocessor**(***kwargs: Any*)

    A configurable preprocessor

    Inherit from this class if you wish to have configurability for your preprocessor.

    Any configurable traitlets this class exposed will be configurable in profiles using c.SubClassName.attribute = value

    You can overwrite *preprocess_cell()* to apply a transformation independently on each cell or *preprocess()* if you prefer your own logic. See corresponding docstring for information.

    Disabled by default and can be enabled via the config by

        'c.YourPreprocessorName.enabled = True'

    __init__(***kw*)

        Public constructor

        Parameters

            • **config** (*Config*) – Configuration file structure

            • ****kw** – Additional keyword arguments passed to parent

preprocess(*nb*, *resources*)

> Preprocessing to apply on each notebook.
>
> Must return modified nb, resources.
>
> If you wish to apply your preprocessing to each cell, you might want to override preprocess_cell method instead.
>
> > **Parameters**
> >
> > • **nb** (`NotebookNode`) – Notebook being converted
> >
> > • **resources** (`dictionary`) – Additional resources used in the conversion process. Allows preprocessors to pass variables into the Jinja engine.

preprocess_cell(*cell*, *resources*, *index*)

> Override if you want to apply some preprocessing to each cell. Must return modified cell and resource dictionary.
>
> > **Parameters**
> >
> > • **cell** (`NotebookNode cell`) – Notebook cell being processed
> >
> > • **resources** (`dictionary`) – Additional resources used in the conversion process. Allows preprocessors to pass variables into the Jinja engine.
> >
> > • **index** (`int`) – Index of the cell being processed

15.3.1 Specialized preprocessors

Converting and extracting figures

class nbconvert.preprocessors.**ConvertFiguresPreprocessor**(***kwargs: Any*)

> Converts all of the outputs in a notebook from one format to another.

class nbconvert.preprocessors.**SVG2PDFPreprocessor**(***kwargs: Any*)

> Converts all of the outputs in a notebook from SVG to PDF.

class nbconvert.preprocessors.**ExtractOutputPreprocessor**(***kwargs: Any*)

> Extracts all of the outputs from the notebook file. The extracted outputs are returned in the 'resources' dictionary.

Converting text

class nbconvert.preprocessors.**LatexPreprocessor**(***kwargs: Any*)

> Preprocessor for latex destined documents.
>
> Populates the `latex` key in the resources dict, adding definitions for pygments highlight styles.
>
> Sets the authors, date and title of the latex document, overriding the values given in the metadata.

class nbconvert.preprocessors.**HighlightMagicsPreprocessor**(***kwargs: Any*)

> Detects and tags code cells that use a different languages than Python.

Metadata and header control

class nbconvert.preprocessors.**ClearMetadataPreprocessor**(***kwargs: Any*)

>   Removes all the metadata from all code cells in a notebook.

class nbconvert.preprocessors.**CSSHTMLHeaderPreprocessor**(***kwargs: Any*)

>   Preprocessor used to pre-process notebook for HTML output. Adds IPython notebook front-end CSS and Pygments CSS to HTML output.

Removing/Manipulating cells, inputs, and outputs

class nbconvert.preprocessors.**ClearOutputPreprocessor**(***kwargs: Any*)

>   Removes the output from all code cells in a notebook.

class nbconvert.preprocessors.**CoalesceStreamsPreprocessor**(***kwargs: Any*)

>   Merge consecutive sequences of stream output into single stream to prevent extra newlines inserted at flush calls

class nbconvert.preprocessors.**RegexRemovePreprocessor**(***kwargs: Any*)

>   Removes cells from a notebook that match one or more regular expression.
>
>   For each cell, the preprocessor checks whether its contents match the regular expressions in the `patterns` traitlet which is a list of unicode strings. If the contents match any of the patterns, the cell is removed from the notebook.
>
>   To modify the list of matched patterns, modify the patterns traitlet. For example, execute the following command to convert a notebook to html and remove cells containing only whitespace:
>
>   ```
>   jupyter nbconvert --RegexRemovePreprocessor.patterns="['\s*\Z']" mynotebook.ipynb
>   ```
>
>   The command line argument sets the list of patterns to `'\s*\Z'` which matches an arbitrary number of whitespace characters followed by the end of the string.
>
>   See https://regex101.com/ for an interactive guide to regular expressions (make sure to select the python flavor). See https://docs.python.org/library/re.html for the official regular expression documentation in python.

class nbconvert.preprocessors.**TagRemovePreprocessor**(***kwargs: Any*)

>   Removes inputs, outputs, or cells from a notebook that have tags that designate they are to be removed prior to exporting the notebook.
>
>   **remove_cell_tags**
>   >   removes cells tagged with these values
>
>   **remove_all_outputs_tags**
>   >   removes entire output areas on cells tagged with these values
>
>   **remove_single_output_tags**
>   >   removes individual output objects on outputs tagged with these values
>
>   **remove_input_tags**
>   >   removes inputs tagged with these values

Executing Notebooks

class nbconvert.preprocessors.**ExecutePreprocessor**(***kwargs: Any*)

>   Executes all the cells in a notebook

>   **preprocess**(*nb: NotebookNode*, *resources: Any = None*, *km: jupyter_client.manager.KernelManager | None = None*) → tuple[nbformat.notebooknode.NotebookNode, dict[str, Any]]

>   >   Preprocess notebook executing each code cell.

>   >   The input argument *nb* is modified in-place.

>   >   Note that this function recalls NotebookClient.__init__, which may look wrong. However since the pre-process call acts line an init on execution state it's expected. Therefore, we need to capture it here again to properly reset because traitlet assignments are not passed. There is a risk if traitlets apply any side effects for dual init. The risk should be manageable, and this approach minimizes side-effects relative to other alternatives.

>   >   One alternative but rejected implementation would be to copy the client's init internals which has already gotten out of sync with nbclient 0.5 release before nbconvert 6.0 released.

>   >   **Parameters**

>   >   >   - **nb** (*NotebookNode*) – Notebook being executed.

>   >   >   - **resources** (*dictionary (optional)*) – Additional resources used in the conversion process. For example, passing {'metadata': {'path': run_path}} sets the execution path to run_path.

>   >   >   - **km** (*KernelManager (optional)*) – Optional kernel manager. If none is provided, a kernel manager will be created.

>   >   **Returns**

>   >   >   - **nb** (*NotebookNode*) – The executed notebook.

>   >   >   - **resources** (*dictionary*) – Additional resources used in the conversion process.

>   **preprocess_cell**(*cell*, *resources*, *index*)

>   >   Override if you want to apply some preprocessing to each cell. Must return modified cell and resource dictionary.

>   >   **Parameters**

>   >   >   - **cell** (*NotebookNode cell*) – Notebook cell being processed

>   >   >   - **resources** (*dictionary*) – Additional resources used in the conversion process. Allows preprocessors to pass variables into the Jinja engine.

>   >   >   - **index** (*int*) – Index of the cell being processed

class nbconvert.preprocessors.**CellExecutionError**(*traceback: str*, *ename: str*, *evalue: str*)

>   Custom exception to propagate exceptions that are raised during notebook execution to the caller. This is mostly useful when using nbconvert as a library, since it allows to deal with failures gracefully.

15.4 Filters

Filters are for use with the `nbconvert.exporters.templateexporter.TemplateExporter` exporter. They provide a way for you transform notebook contents to a particular format depending on the template you are using. For example, when converting to HTML, you would want to use the `ansi2html()` function to convert ANSI colors (from e.g. a terminal traceback) to HTML colors.

See also:

Exporters

    API documentation for the various exporter classes

nbconvert.filters.**add_anchor**(*html*, *anchor_link_text='¶'*)

    Add an id and an anchor-link to an html header

    For use on markdown headings

nbconvert.filters.**add_prompts**(*code*, *first='>>> '*, *cont='... '*)

    Add prompts to code snippets

nbconvert.filters.**ansi2html**(*text*)

    Convert ANSI colors to HTML colors.

        Parameters

            text (*unicode*) – Text containing ANSI colors to convert to HTML

nbconvert.filters.**ansi2latex**(*text*)

    Convert ANSI colors to LaTeX colors.

        Parameters

            text (*unicode*) – Text containing ANSI colors to convert to LaTeX

nbconvert.filters.**ascii_only**(*s*)

    ensure a string is ascii

nbconvert.filters.**citation2latex**(*s*)

    Parse citations in Markdown cells.

    This looks for HTML tags having a data attribute names `data-cite` and replaces it by the call to LaTeX cite command. The transformation looks like this:

```
<cite data-cite="granger">(Granger, 2013)</cite>
```

    Becomes

```
\cite{granger}
```

    Any HTML tag can be used, which allows the citations to be formatted in HTML in any manner.

nbconvert.filters.**comment_lines**(*text*, *prefix='# '*)

    Build a Python comment line from input text.

        Parameters

-     **text** (*str*) – Text to comment out.

-     **prefix** (*str*) – Character to append to the start of each line.

nbconvert.filters.**escape_latex**(*text*)

> Escape characters that may conflict with latex.
>
> > **Parameters**
> > > **text** (`str`) – Text containing characters that may conflict with Latex

class nbconvert.filters.**DataTypeFilter**(***kwargs: Any*)

> Returns the preferred display format

nbconvert.filters.**get_lines**(*text*, *start=None*, *end=None*)

> Split the input text into separate lines and then return the lines that the caller is interested in.
>
> > **Parameters**
> > > - **text** (`str`) – Text to parse lines from.
> > > - **start** (`int`, *optional*) – First line to grab from.
> > > - **end** (`int`, *optional*) – Last line to grab from.

nbconvert.filters.**convert_pandoc**(*source*, *from_format*, *to_format*, *extra_args=None*)

> Convert between any two formats using pandoc.
>
> This function will raise an error if pandoc is not installed. Any error messages generated by pandoc are printed to stderr.
>
> > **Parameters**
> > > - **source** (`string`) – Input string, assumed to be valid in from_format.
> > > - **from_format** (`string`) – Pandoc format of source.
> > > - **to_format** (`string`) – Pandoc format for output.
> >
> > **Returns**
> > > **out** – Output as returned by pandoc.
> >
> > **Return type**
> > > string

class nbconvert.filters.**Highlight2HTML**(***kwargs: Any*)

> Convert highlighted code to html.

class nbconvert.filters.**Highlight2Latex**(***kwargs: Any*)

> Convert highlighted code to latex.

nbconvert.filters.**html2text**(*element*)

> extract inner text from html
>
> Analog of jQuery's $(element).text()

nbconvert.filters.**indent**(*instr*, *nspaces=4*, *ntabs=0*, *flatten=False*)

> Indent a string a given number of spaces or tabstops.
>
> indent(str,nspaces=4,ntabs=0) -> indent str by ntabs+nspaces.
>
> > **Parameters**
> > > - **instr** (`basestring`) – The string to be indented.
> > > - **nspaces** (`int (default: 4)`) – The number of spaces to be indented.
> > > - **ntabs** (`int (default: 0)`) – The number of tabs to be indented.

- **flatten** (*bool (default: False)*) – Whether to scrub existing indentation. If True, all lines will be aligned to the same indentation. If False, existing indentation will be strictly increased.

> **Returns**
> str|unicode

> **Return type**
> string indented by ntabs and nspaces.

nbconvert.filters.**ipython2python**(*code*)

> Transform IPython syntax to pure Python syntax

> > **Parameters**
> > **code** (`str`) – IPython code, to be transformed to pure Python

nbconvert.filters.**markdown2html**(*source: str*) → str

> Convert a markdown string to HTML using mistune

nbconvert.filters.**markdown2latex**(*source*, *markup='markdown'*, *extra_args=None*)

> Convert a markdown string to LaTeX via pandoc.

> This function will raise an error if pandoc is not installed. Any error messages generated by pandoc are printed to stderr.

> > **Parameters**
> > - **source** (*string*) – Input string, assumed to be valid markdown.
> > - **markup** (*string*) – Markup used by pandoc's reader default : pandoc extended markdown (see https://pandoc.org/README.html#pandocs-markdown)

> > **Returns**
> > **out** – Output as returned by pandoc.

> > **Return type**
> > string

nbconvert.filters.**markdown2rst**(*source*, *extra_args=None*)

> Convert a markdown string to ReST via pandoc.

> This function will raise an error if pandoc is not installed. Any error messages generated by pandoc are printed to stderr.

> > **Parameters**
> > **source** (*string*) – Input string, assumed to be valid markdown.

> > **Returns**
> > **out** – Output as returned by pandoc.

> > **Return type**
> > string

nbconvert.filters.**path2url**(*path*)

> Turn a file path into a URL

nbconvert.filters.**posix_path**(*path*)

> Turn a path into posix-style path/to/etc

> Mainly for use in latex on Windows, where native Windows paths are not allowed.

`nbconvert.filters.`**`prevent_list_blocks`**(*s*)

    Prevent presence of enumerate or itemize blocks in latex headings cells

`nbconvert.filters.`**`strip_ansi`**(*source*)

    Remove ANSI escape codes from text.

        Parameters

            source (`str`) – Source to remove the ANSI from

`nbconvert.filters.`**`strip_dollars`**(*text*)

    Remove all dollar symbols from text

        Parameters

            text (`str`) – Text to remove dollars from

`nbconvert.filters.`**`strip_files_prefix`**(*text*)

    Fix all fake URLs that start with `files/`, stripping out the `files/` prefix. Applies to both urls (for html) and relative paths (for markdown paths).

        Parameters

            text (`str`) – Text in which to replace 'src="files/real…' with 'src="real…'

`nbconvert.filters.`**`wrap_text`**(*text*, *width=100*)

    Intelligently wrap text. Wrap text without breaking words if possible.

        Parameters

- **text** (`str`) – Text to wrap.

- **width** (`int, optional`) – Number of characters to wrap to, default 100.

15.5 Writers

See also:

Configuration options

    Configurable options for the nbconvert application

class `nbconvert.writers.`**`WriterBase`**(***kwargs: Any*)

    Consumes output from nbconvert export…() methods and writes to a useful location.

    `__init__`(*config=None*, ***kw*)

        Constructor

    `write`(*output*, *resources*, ***kw*)

        Consume and write Jinja output.

        Parameters

- **output** (`string`) – Conversion results. This string contains the file contents of the converted file.

- **resources** (`dict`) – Resources created and filled by the nbconvert conversion process. Includes output from preprocessors, such as the extract figure preprocessor.

15.5.1 Specialized writers

class nbconvert.writers.**DebugWriter**(***kwargs: Any*)

> Consumes output from nbconvert export…() methods and writes useful debugging information to the stdout.
> The information includes a list of resources that were extracted from the notebook(s) during export.

class nbconvert.writers.**FilesWriter**(***kwargs: Any*)

> Consumes nbconvert output and produces files.

class nbconvert.writers.**StdoutWriter**(***kwargs: Any*)

> Consumes output from nbconvert export…() methods and writes to the stdout stream.

15.6 Postprocessors

See also:

Configuration options
> Configurable options for the nbconvert application

class nbconvert.postprocessors.**PostProcessorBase**(***kwargs: Any*)

> The base class for post processors.
>
> **postprocess**(*input_*)
>
> > Post-process output from a writer.

15.6.1 Specialized postprocessors

class nbconvert.postprocessors.**ServePostProcessor**(***kwargs: Any*)

> Post processor designed to serve files
>
> Proxies reveal.js requests to a CDN if no local reveal.js is present
>
> **postprocess**(*input*)
>
> > Serve the build directory with a webserver.

MAKING AN NBCONVERT RELEASE

This document guides a contributor through creating a release of nbconvert.

16.1 Assign all merged PRs to milestones

Go to GitHub and assign all PRs that have been merged to milestones. This will be helpful when you update the changelog. If you go to this GitHub page you will find all the PRs that currently have no milestones.

16.2 Gather all PRs related to milestone

ghpro can be used to extract the pull requests by call the following from nbconvert directory (will ask for an API token the first time):

```
github-stats --milestone=$VERSION --since-tag $LAST_VERSION --links
```

16.3 Manually categorize tickets

Group the tickets by these general categories (or others if they are relevant). This usually a manual processes to evaluate the changes in each PR.

1. New Features
2. Deprecations
3. Fixing Problems
4. Testing, Docs, and Builds

16.4 Collect major changes

From the tickets write up any major features / changes that deserve a paragraph to describe how they work.

16.5 Update docs/source/changelog.rst

Copy these changes with the new version to the top of changelog.rst. Prior release changelogs can be used to pick formatting of the message.

16.6 Check installed tools

Review `CONTRIBUTING.md`, particularly the testing and release sections.

16.7 Clean the repository

You can remove all non-tracked files with:

```
git clean -xfdi
```

This would ask you for confirmation before removing all untracked files.

Make sure the `dist/` and `build/` folders are clean and avoid stale builds from previous attempts.

16.8 Create the release

1. Update the *changelog* to account for all the PRs assigned to this milestone.
2. Update version number in `nbconvert/_version.py` and remove `.dev` from dev_info. Note that the version may already be on the dev version of the number you're releasing.
3. Commit and tag the release with the current version number:

   ```
   git commit -am "release $VERSION"
   git tag $VERSION
   ```

4. You are now ready to build the `sdist` and `wheel`:

   ```
   pip install build
   python -m build .
   ```

5. You can now test the `wheel` and the `sdist` locally before uploading to PyPI. Make sure to use twine to upload the archives over SSL.

   ```
   twine upload dist/*
   ```

6. The conda-forge bot will automatically add a PR on your behalf to the nbconvert-feedstock repo. You may want to review this PR to ensure conda-forge will be updated cleanly.

16.9 Release the new version

Push directly on main, including –tags separately

```
git push upstream
git push upstream --tags
```

16.10 Return to development state

If all went well, change the `nbconvert/_version.py` back by adding the
> `.dev` suffix and moving the version forward to the next patch release number.

16.11 Email googlegroup with update letter

Make sure to email jupyter@googlegroups.com with the subject line of "[ANN] NBConvert $VERSION – …" and include at least the significant changes, contributors, and individual PR notes (if not many significant changes).

CHANGES IN NBCONVERT

17.1 7.16.3

(Full Changelog)

17.1.1 Maintenance and upkeep improvements

- Remove pytest pin #2129 (@blink1073)
- Add Compatibility with Pandoc 2.9.2 #2128 (@blink1073)
- Pin to Pytest 7 #2124 (@blink1073)

17.1.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.2 7.16.2

(Full Changelog)

17.2.1 Bugs fixed

- [HTMLExporter] Initialize resources before widget filtering #2118 (@yuvipanda)

17.2.2 Contributors to this release

(GitHub contributors page for this release)

@yuvipanda

17.3 7.16.1

([Full Changelog](#))

17.3.1 Maintenance and upkeep improvements

- Fix permissions for prep release workflow [#2112](#) ([@blink1073](#))
- Update publish workflow [#2111](#) ([@blink1073](#))
- fix for tests/ dir not in sys.path, closes #2066 [#2108](#) ([@ivanov](#))

17.3.2 Documentation improvements

- Update project description [#2107](#) ([@ivanov](#))

17.3.3 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#) | [@ivanov](#)

17.4 7.16.0

([Full Changelog](#))

17.4.1 Enhancements made

- Add a toggle to skip the svg encoding of images [#2106](#) ([@gwincr11](#))

17.4.2 Contributors to this release

([GitHub contributors page for this release](#))

[@gwincr11](#)

17.5 7.15.0

([Full Changelog](#))

17.5.1 Enhancements made

- Support configurable width and height of reveal presentations #2104 (@franzhaas)

17.5.2 Maintenance and upkeep improvements

- chore: update pre-commit hooks #2105 (@pre-commit-ci)
- handle xhtml void elements in mermaid diagrams #2103 (@bollwyvl)

17.5.3 Contributors to this release

(GitHub contributors page for this release)

@bollwyvl | @franzhaas | @pre-commit-ci

17.6 7.14.2

(Full Changelog)

17.6.1 Maintenance and upkeep improvements

- update to mermaid 10.7.0 #2098 (@bollwyvl)

17.6.2 Contributors to this release

(GitHub contributors page for this release)

@bollwyvl

17.7 7.14.1

(Full Changelog)

17.7.1 Bugs fixed

- Fix broken image scaling in case a custom width or height is provided for the image #2094 (@AndSte01)

17.7.2 Maintenance and upkeep improvements

- Allow pre-fetch of css files without attempting download #2095 (@AlexanderRichert-NOAA)
- Bump the actions group with 1 update #2091 (@dependabot)

17.7.3 Contributors to this release

(GitHub contributors page for this release)

@AlexanderRichert-NOAA | @AndSte01 | @dependabot

17.8 7.14.0

(Full Changelog)

17.8.1 Enhancements made

- Convert `coalescese_streams` function to `CoalesceStreamsPreprocessor` #2089 (@ryan-williams)

17.8.2 Maintenance and upkeep improvements

- chore: update pre-commit hooks #2090 (@pre-commit-ci)
- Fix webpdf test on Python 3.12 #2088 (@blink1073)
- Clean up import #2087 (@blink1073)

17.8.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @pre-commit-ci | @ryan-williams

17.9 7.13.1

(Full Changelog)

17.9.1 Bugs fixed

- Restore removed import #2086 (@blink1073)

17.9.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.10 7.13.0

(Full Changelog)

17.10.1 Enhancements made

- Add table, td, tr to allowed list of tags #2083 (@yuvipanda)

17.10.2 Maintenance and upkeep improvements

- Remove twitter links that cause linkcheck to fail #2084 (@yuvipanda)
- Update ruff config #2079 (@blink1073)
- chore: update pre-commit hooks #2076 (@pre-commit-ci)

17.10.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @pre-commit-ci | @yuvipanda

17.11 7.12.0

(Full Changelog)

17.11.1 Enhancements made

- Allow to load config from env. #2075 (@Carreau)

17.11.2 Maintenance and upkeep improvements

- Use ruff on notebooks and update typings #2068 (@blink1073)

17.11.3 Documentation improvements

- update Python version support in docs #2037 (@minrk)

17.11.4 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @Carreau | @gnestor | @minrk | @mpacer

17.12 7.11.0

(Full Changelog)

17.12.1 Enhancements made

- Support es modules in js includes #2063 (@timkpaine)

17.12.2 Maintenance and upkeep improvements

- Clean up lint handling and list generics #2065 (@blink1073)
- Remove not needed pytest-dependency test requirement #2062 (@danigm)

17.12.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @danigm | @timkpaine

17.13 7.10.0

(Full Changelog)

17.13.1 Enhancements made

- Update to mermaid 10.6.0, docs keyboard navigation #2058 (@bollwyvl)

17.13.2 Maintenance and upkeep improvements

- Fix typing for traitlets 5.13 #2060 (@blink1073)
- Adopt ruff format #2059 (@blink1073)
- Update typings and remove dead link #2056 (@blink1073)

17.13.3 Documentation improvements

- Update to mermaid 10.6.0, docs keyboard navigation #2058 (@bollwyvl)

17.13.4 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @bollwyvl

17.14 7.9.2

(Full Changelog)

17.14.1 Bugs fixed

- Restore ResourcesDict to the public API #2055 (@blink1073)

17.14.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.15 7.9.1

(Full Changelog)

17.15.1 Maintenance and upkeep improvements

- Include tests in sdist #2053 (@blink1073)

17.15.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.16 7.9.0

(Full Changelog)

17.16.1 Maintenance and upkeep improvements

- Update to mermaidjs 10.5.0 #2051 (@bollwyvl)
- Update typing for traitlets 5.11 #2050 (@blink1073)
- chore: update pre-commit hooks #2049 (@pre-commit-ci)
- Fixup typings #2048 (@blink1073)
- Remove redundant link check in CI #2044 (@blink1073)
- Bump actions/checkout from 3 to 4 #2042 (@dependabot)
- Adopt sp-repo-review #2040 (@blink1073)

17.16.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @bollwyvl | @dependabot | @pre-commit-ci

17.17 7.8.0

(Full Changelog)

17.17.1 Enhancements made

- MermaidJS 10.3.1, accessibility features, handle MIME #2034 (@bollwyvl)

17.17.2 Bugs fixed

- Fix: Prevent error from all whitespace lang string #2036 (@Adamtaranto)

17.17.3 Contributors to this release

(GitHub contributors page for this release)

@Adamtaranto | @bollwyvl

17.18 7.7.4

(Full Changelog)

17.18.1 Bugs fixed

- Give main tag a height of 100% in css for reveal html #2032 (@lkeegan)

17.18.2 Maintenance and upkeep improvements

17.18.3 Contributors to this release

(GitHub contributors page for this release)

@Carreau | @lkeegan | @pre-commit-ci

17.19 7.7.3

(Full Changelog)

17.19.1 Bugs fixed

- Restore pauses during webpdf render #2025 (@jstorrs)

17.19.2 Contributors to this release

(GitHub contributors page for this release)

@jstorrs

17.20 7.7.2

(Full Changelog)

17.20.1 Bugs fixed

- Show a warning if an image has no alternative text #2024 (@brichet)

17.20.2 Contributors to this release

(GitHub contributors page for this release)

@brichet

17.21 7.7.1

(Full Changelog)

17.21.1 Bugs fixed

- Restore 'media=print' option #2022 (@brichet)

17.21.2 Contributors to this release

(GitHub contributors page for this release)

@brichet

17.22 7.7.0

(Full Changelog)

17.22.1 Enhancements made

- [Accessibility] some accessibility improvements #2021 (@brichet)
- Adopt playwright #2013 (@brichet)
- Update to Jupyterlab 4 #2012 (@brichet)

17.22.2 Bugs fixed

- html: write image/svg+xml data as base64 and skip clean_html #2018 (@jstorrs)
- Remove HTML escaping JSON-encoded widget state #1934 (@manzt)

17.22.3 Maintenance and upkeep improvements

- Fix lint error #2010 (@blink1073)
- Support Python 3.8-3.12 #2008 (@blink1073)

17.22.4 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @brichet | @jstorrs | @maartenbreddels | @manzt | @martinRenou | @pre-commit-ci

17.23 7.6.0

(Full Changelog)

17.23.1 Maintenance and upkeep improvements

- Update to Mistune v3 #1820 (@TiagodePAlves)

17.23.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @kloczek | @TiagodePAlves

17.24 7.5.0

(Full Changelog)

17.24.1 Enhancements made

- Add mermaidjs 10.2.3 #1957 (@bollwyvl)

17.24.2 Bugs fixed

- Fix pdf conversion with explicitly relative paths #2005 (@tuncbkose)
- Ensure TEXINPUTS is an absolute path #2002 (@tuncbkose)

17.24.3 Maintenance and upkeep improvements

- bump pandoc max version [#1997](#) ([@tuncbkose](#))
- exclude bleach 5.0.0 from dependencies resolution [#1990](#) ([@karlicoss](#))

17.24.4 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#) | [@bollwyvl](#) | [@karlicoss](#) | [@pre-commit-ci](#) | [@tuncbkose](#)

17.25 7.4.0

([Full Changelog](#))

17.25.1 Enhancements made

- Add ExtractAttachmentsPreprocessor [#1978](#) ([@tuncbkose](#))

17.25.2 Bugs fixed

- Moved ensure_dir_exists to FilesWriter [#1987](#) ([@tuncbkose](#))
- Tweak exporter default_config merging behavior [#1981](#) ([@tuncbkose](#))
- Revert unintended effects of #1966 [#1974](#) ([@tuncbkose](#))

17.25.3 Maintenance and upkeep improvements

- Fix test_errors_print_traceback test [#1985](#) ([@blink1073](#))
- Ensure toml support in coverage reporting [#1984](#) ([@blink1073](#))
- Use local coverage [#1976](#) ([@blink1073](#))

17.25.4 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#) | [@krassowski](#) | [@pre-commit-ci](#) | [@tuncbkose](#)

17.26 7.3.1

(Full Changelog)

17.26.1 Bugs fixed

- Remove overwriting of default KernelManager #1972 (@tuncbkose)

17.26.2 Maintenance and upkeep improvements

17.26.3 Contributors to this release

(GitHub contributors page for this release)

@pre-commit-ci | @tuncbkose

17.27 7.3.0

(Full Changelog)

17.27.1 Enhancements made

- Allow pattern in output_base #1967 (@JeppeKlitgaard)
- Make date configurable in latex/PDF #1963 (@achimgaedke)
- Update jupyterlab CSS #1960 (@martinRenou)

17.27.2 Maintenance and upkeep improvements

- Update ci badge #1968 (@blink1073)
- More detailed release instructions #1959 (@Carreau)

17.27.3 Contributors to this release

(GitHub contributors page for this release)

@achimgaedke | @blink1073 | @Carreau | @JeppeKlitgaard | @martinRenou

17.28 7.2.10

([Full Changelog](#))

17.28.1 Enhancements made

- Add cell-id anchor for cell identification [#1897](#) ([@krassowski](#))

17.28.2 Bugs fixed

- Do not import pyppeteer for installation check [#1947](#) ([@krassowski](#))

17.28.3 Maintenance and upkeep improvements

- Clean up license [#1949](#) ([@dcsaba89](#))
- Add more linting [#1943](#) ([@blink1073](#))

17.28.4 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#) | [@dcsaba89](#) | [@krassowski](#) | [@pre-commit-ci](#)

17.29 7.2.9

([Full Changelog](#))

17.29.1 Bugs fixed

- Fix handling of css sanitizer [#1940](#) ([@blink1073](#))

17.29.2 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#)

17.30 7.2.8

(Full Changelog)

17.30.1 Bugs fixed

- always pass relax_add_props=True when validating #1936 (@minrk)

17.30.2 Maintenance and upkeep improvements

- Update codecov link #1935 (@blink1073)
- Fix types and add lint to automerge #1932 (@blink1073)
- Add type checking #1930 (@blink1073)
- Add spelling and docstring enforcement #1929 (@blink1073)
- Add scheduled ci run #1926 (@blink1073)

17.30.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @maartenbreddels | @martinRenou | @minrk | @pre-commit-ci

17.31 7.2.7

(Full Changelog)

17.31.1 Bugs fixed

- Fix Hanging Tests on Linux #1924 (@blink1073)

17.31.2 Maintenance and upkeep improvements

- Adopt ruff and handle lint #1925 (@blink1073)

17.31.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @pre-commit-ci

17.32 7.2.6

([Full Changelog](#))

17.32.1 Maintenance and upkeep improvements

- Include all templates in sdist [#1916](#) ([@blink1073](#))
- clean up workflows [#1911](#) ([@blink1073](#))
- CI Cleanup [#1910](#) ([@blink1073](#))

17.32.2 Documentation improvements

- Fix docs build and switch to PyData Sphinx Theme [#1912](#) ([@blink1073](#))

17.32.3 Contributors to this release

([GitHub contributors page for this release](#))

[@blink1073](#)

17.33 7.2.5

([Full Changelog](#))

17.33.1 Bugs fixed

- Fix for webpdf print margins [#1907](#) ([@JWock82](#))

17.33.2 Maintenance and upkeep improvements

- Bump actions/upload-artifact from 2 to 3 [#1904](#) ([@dependabot](#))
- Bump actions/checkout from 2 to 3 [#1903](#) ([@dependabot](#))

17.33.3 Contributors to this release

([GitHub contributors page for this release](#))

[@dependabot](#) | [@JWock82](#)

17.34 7.2.4

(Full Changelog)

17.34.1 Maintenance and upkeep improvements

- Handle jupyter core warning #1905 (@blink1073)
- Add dependabot #1902 (@blink1073)
- Add Py-typed marker. #1898 (@Carreau)

17.34.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @Carreau | @pre-commit-ci

17.35 7.2.3

(Full Changelog)

17.35.1 Bugs fixed

- clean_html: allow SVG tags and SVG attributes #1890 (@akx)

17.35.2 Maintenance and upkeep improvements

17.35.3 Contributors to this release

(GitHub contributors page for this release)

@akx | @pre-commit-ci

17.36 7.2.2

(Full Changelog)

17.36.1 Bugs fixed

- Fix default config test #1885 (@blink1073)

17.36.2 Maintenance and upkeep improvements

- Add ensure label workflow #1884 (@blink1073)
- Add release workflows #1883 (@blink1073)
- Maintenance cleanup #1881 (@blink1073)

17.36.3 Contributors to this release

(GitHub contributors page for this release)

@blink1073 | @pre-commit-ci

17.37 7.2.1

(Full Changelog)

17.37.1 Bugs fixed

- Fix version handling #1878 (@blink1073)

17.37.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.38 7.2.0

(Full Changelog)

17.38.1 Maintenance and upkeep improvements

- Prep for jupyter releaser #1877 (@blink1073)
- Add support for jupyter_client 8 #1867 (@blink1073)

17.38.2 Contributors to this release

(GitHub contributors page for this release)

@blink1073

17.39 7.1.0

- Fix markdown table not render bug by @Neutree in [#1853](#)
- Replace lxml.html.clean_html with bleach; drop lxml dependency by @akx in [#1854](#)
- Remove CircleCI badge from README by @akx in [#1857](#)
- Added support for section (slide) "data-*" attributes by @bouzidanas in [#1861](#)

17.40 7.0.0

- Update to Mistune 2.0.2 by @TiagodePAlves in [#1764](#)
- Add qtpdf and qtpng exporters by @davidbrochart in [#1611](#)
- Add recursive flag for glob notebook search by @paoloalba in [#1785](#)
- Encode SVG image data as UTF-8 before calling lxml cleaner by @emarsden in [#1837](#)
- Fix lab template output alignment by @dakoop in [#1795](#)
- Handle nbformat 5.5 by @blink1073 [#1841](#)
- Remove downloaded CSS from repository by @martinRenou [#1827](#)
- Switch from entrypoints to importlib-metadata by @konstin in [#1782](#)
- Updates for sphinx 5.0 support by @blink1073 in [#1788](#)
- Fixed unique div ids in lab template, fixed #1759 by @veghdev in [#1761](#)
- WebPDFExporter: Emulate media print by @martinRenou in [#1791](#)
- Fix fonts overridden by user stylesheet by inheriting styles by @dakoop in [#1793](#)
- Fix lab template output alignment by @dakoop in [#1795](#)
- Clean up markdown parsing by @blink1073 in [#1774](#)
- Switch to hatch build backend by @blink1073 in [#1777](#)

17.41 6.5.0

- Support bleach 5, add packaging and tinycss2 dependencies by @bollwyvl in [#1755](#)
- Drop dependency on testpath. by @anntzer in [#1723](#)
- Adopt pre-commit by @blink1073 in [#1744](#), [#1746](#), [#1748](#), [#1749](#), [#1757](#)
- Add pytest settings and handle warnings by @blink1073 in [#1745](#)
- Update cli example by @leahecole in [#1753](#)
- Clean up workflows by @blink1073 in [#1750](#)

17.42 6.4.4

- HTMLExporter: Respect the embed_images flag for HTML blocks #1721

17.43 6.4.3

- Remove ipython genutils #1727
- Add section to customizing showing how to use template inheritance #1719

17.44 6.4.2

- Adding theme support for WebPDF exporter #1718
- Add option to embed_images in Markdown cells #1717
- HTMLExporter: Add theme alias and docs #1716
- Add basic support for federated labextensions themes #1703
- Always hide the collapser element #1712
- Raise pyppeteer requirement to >=1,<1.1 #1711

17.45 6.4.1

- Handle needs_background cell metadata #1704
- Fix styling regression #1708
- Fix DOM structure of markdown cells in lab template #1709
- CodeMirror style bleed fix #1710

17.46 6.4.0

The full list of changes can be seen on the 6.4.0 milestone

- Allow passing extra args to code highlighter #1683
- Prevent page breaks in outputs when printing #1679
- Add collapsers to template #1689
- Optionally speed up validation #1672

17.47 6.3.0

The full list of changes can be seen on the 6.3.0 milestone

- Update state filter #1664
- Add slide numbering #1654
- Fix HTML templates mentioned in help docs #1653

17.48 6.2.0

The full list of changes can be seen on the 6.2.0 milestone

- Add the ability to fully customize `widget_renderer_url` #1614
- Enable users to customize MathJax URLs #1609
- Add CLI configuration for disable-chromium-sandbox #1625
- Enables webpdf to be rendered with templates #1601
- Adds dejavu #1599

17.49 6.1.0

This release is mostly a long list of bug fixes and capability additions. Thanks to the many contributors for helping Improve nbconvert!

The following 31 authors contributed 81 commits.

- Adolph
- Alessandro Finamore
- Angus Hollands
- Atsuo Ishimoto
- Bo
- David Brochart
- Frédéric Collonval
- Jeremy Howard
- Jim Zwartveld
- José Ignacio Romero
- Joyce Er
- joyceerhl
- Kyle Cutler
- Leah E. Cole
- Leah Wasser
- Nihiue

- Matthew Seal

- Michael Adolph

- Mohammad Mostafa Farzan

- Okky Mabruri

- Pill-GZ

- ptcane

- Raniere Silva

- Ryan Moe

- Stefan Lang

- Sylvain Corlay

- Tobin Jones

- txoof

- Yuvi Panda

17.49.1 Significant Changes

- Dropped Python 3.6 and added Python 3.9 #1542 and #1556

- Convert execute preprocessor wrapper to resemble papermill #1448

17.49.2 Comprehensive notes

- Feature: support static widgets in Reveal.js slides #1553

- Feature: add speaker notes to Reveal.js template #1543

- Add correct output mimetype to WebPDF exporter #1534

- Set mimetype for webpdf correctly #1514

- Fix docstring issue and a broken link #1576

- Add CLI example for removing cell tag syntax #1504

- Include output of stdin stream in lab template #1454

- Don't use a shell to call inkscape #1512

- JupyterLab export as HTML with widgets fails to load widgets #1474

- Move note inside Reveal.js HTML slideshow #1510

- fix issue 1507: broken command line option –CSSHTMLHeaderPreprocessor.style= #1548

- Fix order of template paths #1496

- Changed documentation of external_exporters #1582

- Fix template precedence when using a custom template (#1558) #1577

- add pip to docs envt #1571

- Fix CI By Adding PIP to conda envt for docs build #1570

- Explicitly install pip in docs environment.yml #1569

- small update to docs hide cell #1567
- Allow child templates to override mathjax #1551
- Allow get_export_names to skip configuration check #1471
- Update docs: Tex Live package on Ubuntu #1555
- Test jupyter_client #1545
- Update jupyterlab css #1539
- Webpdf: Use a temporary file instead of an URL #1489
- Applied patch for marking network changes #1527
- Change webpdf display name #1515
- Allow disabling pyppeteer sandbox #1516
- Make pagination configurable in webpdf #1513
- Fix Reveal.js version in documentation #1509
- Fix dangling reference to get_template_paths() #1463
- Solved svg2pdf conversion error if Inkscape is installed into the default path on a windows machine #1469
- fix typo #1499
- Update version dependency of traitlets #1498
- Update execute.py #1457
- Fix code output indentation when running nbconvert –no-input #1444
- fix issue (i'd call it a BUG) #1167 #1450
- #1428 add docstring #1433
- Update nbconvert_library.ipynb #1438
- Supports isolated iframe when converting to HTML #1593

17.50 6.0.7

Primarily a release addressing template extensions issues reported since 6.0 launched.

17.50.1 Comprehensive notes

- Comment typo fix #1425
- Documented updated to default conversion changes from 6.0 #1426
- Allow custom template files outside of the template system to set their base template name #1429
- Restored basic template from 5.x #1431
- Added proper support for backwards compatibility templates #1431

17.51 6.0.6

A range of bug fixes for webpdf exports

17.51.1 Comprehensive notes

- Removed CSS preprocessor from default proprocessor list (fixes classic rendering) #1411
- Fixed error when pickling TemplateExporter #1399
- Support for fractional height html / webpdf exports #1413
- Added short wait time for fonts and rendering in webpdf #1414
- Updated template documentation
- Minor fixes to the webpdf exporter #1419
- Fixup use with a running event loop within webpdf #1420
- Prevent overflow in input areas in lab template #1422

17.52 6.0.5

- Revert networkidle2 change which caused custom cdn-fetched widgets in webpdf

17.53 6.0.4

17.53.1 Comprehensive notes

Fixing Problems

- The webpdf exporters does not add pagebreaks anymore before reaching the maximum height allowed by Adobe #1402
- Fixes some timeout issues with the webpdf exporter #1400

17.54 6.0.3

Execute preprocessor no longer add illegal execution counts to markdown cells #1396

17.55 6.0.2

A patch for a few minor issues raised out of the 6.0 release.

17.55.1 Comprehensive notes

Fixing Problems

- Added windows work-around fix in CLI for async applications #1383
- Fixed pathed template files to behave correctly for local relative paths without a dot #1381
- ExecuteProcessor now properly has a `preprocess_cell` function to overwrite #1380

Testing, Docs, and Builds

- Updated README and docs with guidance on how to get help with nbconvert #1377
- Fixed documentation that was referencing `template_path` instead of `template_paths` #1374

17.56 6.0.1

A quick patch to fix an issue with get_exporter #1367

17.57 6.0

The following authors and reviewers contributed the changes for this release – Thanks you all!

- Ayaz Salikhov
- bnables
- Bo
- David Brochart
- David Cortés
- Eric Wieser
- Florian Rathgeber
- Ian Allison
- James Wilshaw
- Jeremy Tuloup
- Joel Ostblom
- Jon Bannister
- Jonas Drotleff
- Josh Devlin
- Karthikeyan Singaravelan

- Kerwin.Sun

- letmerecall

- Luciano Resende

- Lumír 'Frenzy' Balhar

- Maarten A. Breddels

- Maarten Breddels

- Marcel Stimberg

- Matthew Brett

- Matthew Seal

- Matthias Bussonnier

- Matthias Geier

- Miro Hrončok

- Phil Austin

- Praveen Batra

- Ruben Di Battista

- Ruby Werman

- Sang-Yun Oh

- Sergey Kizunov

- Sundar

- Sylvain Corlay

- telamonian

- Thomas Kluyver

- Thomas Ytterdal

- Tyler Makaro

- Yu-Cheng (Henry) Huang

17.57.1 Significant Changes

Nbconvert 6.0 is a major release of nbconvert which includes many significant changes.

- Python 2 support was dropped. Currently Python 3.6-3.8 is supported and tested by nbconvert. However, nbconvert 6.0 provides limited support for Python 3.6. nbconvert 6.1 will drop support for Python 3.6. Limited support means we will test and run CI on Python 3.6.12 or higher. Issues that are found only affecting Python 3.6 are not guaranteed to be fixed. We recommend all users of nbconvert use Python 3.7 and higher.

- Unlike previous versions, nbconvert 6.0 relies on the nbclient package for the execute preprocessor, which allows for asynchronous kernel requests.

- `template_path` has become `template_paths`. If referring to a 5.x style `.tpl` template use the full path with the `template_file` argument to the file. On the command line the pattern is `--template-file=<path/to/file.tpl>`.

- Nbconvert 6.0 includes a new "webpdf" exporter, which renders notebooks in pdf format through a headless web browser, so that complex outputs such as HTML tables, or even widgets are rendered in the same way as with the HTML exporter and a web browser.

- The default template applied when exporting to HTML now produces the same DOM structure as JupyterLab, and is styled using JupyterLab's CSS. The pygments theme in use mimics JupyterLab's codemirror mode with the same CSS variables, so that custom JupyterLab themes could be applied. The classic notebook styling can still be enabled with

```
jupyter nbconvert --to html --template classic
```

- Nbconvert 6.0 includes a new system for creating custom templates, which can now be installed as packages. A custom "foobar" template is installed in Jupyter's data directory under `nbconvert/templates` and has the form of a directory containing all resources. Templates specify their base template as well as other configuration parameters in a `conf.json` at the root of the template directory.

- The "slideshow" template now makes use of RevealJS version 4. It can now be used with the HTML exporter with

```
jupyter nbconvert --to html --template reveal
```

The `--to slides` exporter is still supported for convenience.

- Inkscape 1.0 is now supported, which had some breaking changes that prevented 5.x versions of nbconvert from converting documents on some systems that updated.

17.57.2 Remaining changes

We merged 105 pull requests! Rather than enumerate all of them we'll link to the github page which contains the many smaller impact improvements.

The full list can be seen on GitHub

17.58 5.6.1

The following authors and reviewers contributed the changes for this release – Thanks you all!

- Charles Frye
- Chris Holdgraf
- Felipe Rodrigues
- Gregor Sturm
- Jim
- Kerwin Sun
- Ryan Beesley
- Matthew Seal
- Matthias Geier
- thuy-van
- Tyler Makaro

17.58.1 Significant Changes

RegExRemove applies to all cells

RegExRemove preprocessor now removes cells regardless of cell outputs. Before this only cells that had outputs were filtered.

17.58.2 Comprehensive notes

New Features

- Add support for alt tags for jpeg and png images #1112
- Allow HTML header anchor text to be HTML #1101
- Change RegExRemove to remove code cells with output #1095
- Added cell tag data attributes to HTML exporter #1090 and #1089

Fixing Problems

- Update svg2pdf.py to search the PATH for inkscape #1115
- Fix latex dependencies installation command for Ubuntu systems #1109

Testing, Docs, and Builds

- Added Circle CI builds for documentation #1114 #1120, and #1116
- Fix typo in argument name in docstring (TagRemovePreprocessor) #1103
- Changelog typo fix #1100
- Updated API page for TagRemovePreprocessor and TemplateExporter #1088
- Added remove_input_tag traitlet to the docstring #1088

17.59 5.6

The following 24 authors and reviewers contributed 224 commits – Thank you all!

- 00Kai0
- Aidan Feldman
- Alex Rudy
- Alexander Kapshuna
- Alexander Rudy
- amniskin
- Carol Willing
- Dustin H
- Hsiaoming Yang

- imtsuki

- Jessica B. Hamrick

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- Kunal Marwaha

- Matthew Seal

- Matthias Geier

- Miro Hrončok

- M Pacer

- Nils Japke

- njapke

- Sebastian Führ

- Sylvain Corlay

- Tyler Makaro

- Valery M

- Wayne Witzel

The full list of changes they made can be seen on GitHub

17.59.1 Significant Changes

Jupter Client Pin

The `jupyter_client` dependency is now pinned to `>5.3.1`. This is done to support the Parallel NBConvert below, and future versions may require interface changes from that version.

Parallel NBConvert

NBConvert `--execute` can now be run in parallel via threads, multiprocessing, or async patterns! This means you can now parallelize nbconvert via a bash loop, or a python concurrency pattern and it should be able to execute those notebooks in parallel.

Kernels have varying support for safe concurrent execution. The ipython kernel (ipykernel version 1.5.2 and higher) should be safe to run concurrently using Python 3. However, the Python 2 ipykernel does not always provide safe concurrent execution and sometimes fails with a socket bind exception. Unlike ipykernel which is maintained by the project, other community-maintained kernels may have varying support for concurrent execution, and these kernels were not tested heavily.

Issues for nbconvert can be viewed here: #1018, and #1017

Execute Loop Rewrite

This release completely rewrote the execution loop responsible for monitoring kernel messages until cell execution is completed. This removes an error where kernel messages could be dropped if too many were posted too quickly. Furthermore, the change means that messages are not buffered. Now, messages can be logged immediately rather than waiting for the cell to terminate.

See #994 for exact code changes if you're curious.

17.59.2 Comprehensive notes

New Features

- Make a default global location for custom user templates #1028
- Parallel execution improvements #1018, and #1017
- Added `store_history` option to `preprocess_cell` and `run_cell` #1055
- Simplify the function signature for preprocess() #1042
- Set flag to not always stop kernel execution on errors #1040
- `setup_preprocessor` passes kwargs to `start_new_kernel` #1021

Fixing Problems

- Very fast stream outputs no longer drop some messages #994
- LaTeX errors now properly raise exceptions #1053
- Improve template whitespacing #1076
- Fixes for character in LaTeX exports and filters #1068, #1039, #1024, and #1077
- Mistune pinned in preparation for 2.0 release #1074
- Require mock only on Python 2 #1060 and #1011
- Fix selection of mimetype when converting to HTML #1036
- Correct a few typos #1029
- Update `export_from_notebook` names #1027
- Dedenting html in ExtractOutputPreprocessor #1023
- Fix backwards incompatibility with markdown2html #1022
- Fixed html image tagging #1013
- Remove unnecessary css #1010

Testing, Docs, and Builds

- Pip-install nbconvert on readthedocs.org #1069
- Fix various doc build issues #1051, #1050, #1019, and #1048
- Add issue templates #1046
- Added instructions for bumping the version forward when releasing #1034
- Fix Testing on Windows #1030
- Refactored `test_run_notebooks` #1015
- Fixed documentation typos #1009

17.60 5.5

The following 18 authors contributed 144 commits – Thank you all!

- Benjamin Ragan-Kelley
- Clayton A Davis
- DInne Bosman
- Doug Blank
- Henrique Silva
- Jeff Hale
- Lukasz Mitusinski
- M Pacer
- Maarten Breddels
- Madhumitha N
- Matthew Seal
- Paul Gowder
- Philipp A
- Rick Lupton
- Rüdiger Busche
- Thomas Kluyver
- Tyler Makaro
- WrRan

The full list of changes they made can be seen on GitHub

17.60.1 Significant Changes

Deprecations

Python 3.4 support was dropped. Many of our upstream libraries stopped supporting 3.4 and it was found that serious bugs were being caught during testing against those libraries updating past 3.4.

See #979 for details.

IPyWidget Support

Now when a notebook executing contains Jupyter Widgets, the state of all the widgets can be stored in the notebook's metadata. This allows rendering of the live widgets on, for instance nbviewer, or when converting to html.

You can tell nbconvert to not store the state using the `store_widget_state` argument:

```
jupyter nbconvert --ExecutePreprocessor.store_widget_state=False --to notebook --execute␣
↪mynotebook.ipynb
```

This widget rendering is not performed against a browser during execution, so only widget default states or states manipulated via user code will be calculated during execution. `%%javascript` cells will execute upon notebook rendering, enabling complex interactions to function as expected when viewed by a UI.

If you can't view widget results after execution, you may need to select `File --> Trust Notebook` in the menu.

See #779, #900, and #983 for details.

Execute Preprocessor Rework

Based on monkey patching required in papermill the `run_cell` code path in the ExecutePreprocessor was reworked to allow for accessing individual message parses without reimplementing the entire function. Now there is a `process_message` function which take a ZeroMQ message and applies all of its side-effect updates on the cell/notebook objects before returning the output it generated, if it generated any such output.

The change required a much more extensive test suite covering cell execution as test coverage on the various, sometimes wonky, code paths made improvements and reworks impossible to prove undamaging. Now changes to kernel message processing has much better coverage, so future additions or changes with specs over time will be easier to add.

See #905 and #982 for details

Out Of Memory Kernel Failure Catches

When running out of memory on a machine, if the kernel process was killed by the operating system it would result in a timeout error at best and hang indefinitely at worst. Now regardless of timeout configuration, if the underlying kernel process dies before emitting any messages to the effect an exception will be raised notifying the consumer of the lost kernel within a few seconds.

See #959, #971, and #998 for details

Latex / PDF Template Improvements

The latex template was long overdue for improvements. The default template had a rewrite which makes exports for latex and pdf look a lot better. Code cells in particular render much better with line breaks and styling the more closely matches notebook browser rendering. Thanks t-makaro for the efforts here!

See #992 for details

17.60.2 Comprehensive notes

New Features

- IPyWidget Support #779, #900, and #983

- A new ClearMetadata Preprocessor is available #805

- Support for pandoc 2 #964

- New, and better, latex template #992

Fixing Problems

- Refactored execute preprocessor to have a process_message function #905:

- Fixed OOM kernel failures hanging #959 and #971

- Fixed latex export for svg data in python 3 #985

- Enabled configuration to be shared to exporters from script exporter #993

- Make latex errors less verbose #988

- Typo in template syntax #984

- Improved attachments +fix supporting non-unique names #980

- PDFExporter "output_mimetype" traitlet is not longer 'text/latex' #972

- FIX: respect wait for clear_output #969

- address deprecation warning in cgi.escape #963

- Correct inaccurate description of available LaTeX template #958

- Fixed kernel death detection for executions with timeouts #998:

- Fixed export names for various templates #1000, #1001, and #1001:

Deprecations

- Dropped support for python 3.4 #979

- Removed deprecated `export_by_name` #945

Testing, Docs, and Builds

- Added tests for each branch in execute's run_cell method #982
- Mention formats in –to options more clearly #991
- Adds ascii output type to command line docs page, mention image folder output #956
- Simplify setup.py #949
- Use utf-8 encoding in execute_api example #921
- Upgrade pytest on Travis #941
- Fix LaTeX base template name in docs #940
- Updated release instructions based on 5.4 release walk-through #887
- Fixed broken link to jinja docs #997

17.61 5.4.1

5.4.1 on Github

Thanks to the following 11 authors who contributed 57 commits.

- Benjamin Ragan-Kelley
- Carol Willing
- Clayton A Davis
- Daniel Rodriguez
- M Pacer
- Matthew Seal
- Matthias Geier
- Matthieu Parizy
- Rüdiger Busche
- Thomas Kluyver
- Tyler Makaro

17.61.1 Comprehensive notes

New Features

- Expose pygments styles #889
- Tornado 6.0 support – Convert proxy handler from callback to coroutine #937
- Add option to overwrite the highlight_code filter #877

Fixing Problems

- Mathjax.tpl fix for rendering Latex in html #932

- Backwards compatibility for empty kernel names #927 #924

Testing, Docs, and Builds

- DOC: Add missing language specification to code-block #882

17.62 5.4

5.4 on Github

17.62.1 Significant Changes

Deprecations

Python 3.3 support was dropped. The version of python is no longer common and new versions have many fixes and interface improvements that warrant the change in support.

See #843 for implementation details.

Changes in how we handle metadata

There were a few new metadata fields which are now respected in nbconvert.

`nb.metadata.authors` metadata attribute will be respected in latex exports. Multiple authors will be added with `,` separation against their names.

`nb.metadata.title` will be respected ahead of `nb.metadata.name` for title assignment. This better matches with the notebook format.

`nb.metadata.filename` will override the default `output_filename_template` when extracting notebook resources in the `ExtractOutputPreprocessor`. The attribute is helpful for when you want to consistently fix to a particular output filename, especially when you need to set image filenames for your exports.

The `raises-exception` cell tag (`nb.cells[].metadata.tags[raises-exception]`) allows for cell exceptions to not halt execution. The tag is respected in the same way by nbval and other notebook interfaces. `nb.metadata.allow_errors` will apply this rule for all cells. This feature is toggleable with the `force_raise_errors` configuration option. Errors from executing the notebook can be allowed with a `raises-exception` tag on a single cell, or the `allow_errors` configurable option for all cells. An allowed error will be recorded in notebook output, and execution will continue. If an error occurs when it is not explicitly allowed, a 'CellExecutionError' will be raised. If `force_raise_errors` is True, `CellExecutionError` will be raised for any error that occurs while executing the notebook. This overrides both the `allow_errors` option and the `raises-exception` cell tags.

See #867, #703, #685, #672, and #684 for implementation changes.

Configurable kernel managers when executing notebooks

The kernel manager can now be optionally passed into the `ExecutePreprocessor.preprocess` and the `executenb` functions as the keyword argument `km`. This means that the kernel can be configured as desired before beginning preprocessing.

This is useful for executing in a context where the kernel has external dependencies that need to be set to non-default values. An example of this might be a Spark kernel where you wish to configure the Spark cluster location ahead of time without building a new kernel.

Overall the ExecutePreprocessor has been reworked to make it easier to use. Future releases will continue this trend to make this section of the code more inheritable and reusable by others. We encourage you read the source code for this version if you're interested in the detailed improvements.

See #852 for implementation changes.

Surfacing exporters in front-ends

Exporters are now exposed for front-ends to consume, including classic notebook. As an example, this means that latex exporter will be made available for latex 'text/latex' media type from the Download As interface.

See #759 and #864 for implementation changes.

Raw Templates

Template exporters can now be assigned raw templates as string attributes by setting the `raw_template` variable.

```python
class AttrExporter(TemplateExporter):
    # If the class has a special template and you want it defined within the class
    raw_template = """{%- extends 'rst.tpl' -%}
{%- block in_prompt -%}
raw template
{%- endblock in_prompt -%}
"""


exporter_attr = AttrExporter()
output_attr, _ = exporter_attr.from_notebook_node(nb)
assert "raw template" in output_attr
```

See #675 for implementation changes.

New command line flags

The `--no-input` will hide input cells on export. This is great for notebooks which generate "reports" where you want the code that was executed to not appear by default in the extracts.

An alias for `notebook` was added to exporter commands. Now `--to ipynb` will behave as `--to notebook` does.

See #825 and #873 for implementation changes.

17.62.2 Comprehensive notes

New Features

- No input flag (`--no-input`) #825
- Add alias `--to ipynb` for notebook exporter #873
- Add `export_from_notebook` #864
- If set, use `nb.metadata.authors` for LaTeX author line #867
- Populate language_info metadata when executing #860
- Support for `\mathscr` #830
- Allow the execute preprocessor to make use of an existing kernel #852
- Refactor ExecutePreprocessor #816
- Update widgets CDN for ipywidgets 7 w/fallback #792
- Add support for adding custom exporters to the "Download as" menu. #759
- Enable ANSI underline and inverse #696
- Update notebook css to 5.4.0 #748
- Change default for slides to direct to the reveal cdn rather than locally #732
- Use "title" instead of "name" for metadata to match the notebook format #703
- Img filename metadata #685
- Added MathJax compatibility definitions #687
- Per cell exception #684
- Simple API for in-memory templates #674 #675
- Set BIBINPUTS and BSTINPUTS environment variables when making PDF #676
- If `nb.metadata.title` is set, default to that for notebook #672

Deprecations

- Drop support for python 3.3 #843
- Default conversion method on the CLI was removed (`--to html` now required)

Fixing Problems

- Fix api break #872
- Don't remove empty cells by default #784
- Handle attached images in html converter #780
- No need to check for the channels already running #862
- Update `font-awesome` version for slides #793
- Properly treat JSON data #847
- Skip executing empty code cells #739

- Ppdate log.warn (deprecated) to log.warning #804
- Cleanup notebook.tex during PDF generation #768
- Windows unicode error fixed, nosetest added to setup.py #757
- Better content hiding; template & testing improvements #734
- Fix Jinja syntax in custom template example. #738
- Fix for an issue with empty math block #729
- Add parser for Multiline math for LaTeX blocks #716 #717
- Use defusedxml to parse potentially untrusted XML #708
- Fixes for traitlets 4.1 deprecation warnings #695

Testing, Docs, and Builds

- A couple of typos #870
- Add python_requires metadata. #871
- Document `--inplace` command line flag. #839
- Fix minor typo in `usage.rst` #863
- Add note about local `reveal_url_prefix` #844
- Move `onlyif_cmds_exist` decorator to test-specific utils #854
- Include LICENSE file in wheels #827
- Added Ubuntu Linux Instructions #724
- Check for too recent of pandoc version #814 #872
- Removing more nose remnants via dependencies. #758
- Remove offline statement and add some clarifications in slides docs #743
- Linkify PR number #710
- Added shebang for python #694
- Upgrade mistune dependency #705
- add feature to improve docs by having links to prs #662
- Update notebook CSS from version 4.3.0 to 5.1.0 #682
- Explicitly exclude or include all files in Manifest. #670

17.63 5.3.1

5.3.1 on Github

- MANIFEST.in updated to include `LICENSE` and `scripts/` when creating sdist. #666

17.64 5.3

17.64.1 Major features

Tag Based Element Filtering

For removing individual elements from notebooks, we need a way to signal to nbconvert that the elements should be removed. With this release, we introduce the use of tags for that purpose.

Tags are user-defined strings attached to cells or outputs. They are stored in cell or output metadata. For more on tags see the nbformat docs on cell metadata.

Usage:

1. Apply tags to the elements that you want to remove.

For removing an entire cell, the cell input, or all cell outputs apply the tag to the cell.

For removing individual outputs, put the tag in the output metadata using a call like `display(your_output_element, metadata={tags=[<your_tags_here>]})`.

NB: Use different tags depending on whether you want to remove the entire cell, the input, all outputs, or individual outputs.

2. Add the tags for removing the different kinds of elements to the following traitlets. Which kind of element you want to remove determines which traitlet you add the tags to.

The following traitlets remove elements of different kinds:

- `remove_cell_tags`: removes cells

- `remove_input_tags`: removes inputs

- `remove_all_outputs_tag`: removes all outputs

- `remove_single_output_tag`: removes individual outputs

17.64.2 Comprehensive notes

- new: configurable `browser` in ServePostProcessor #618

- new: `--clear-output` command line flag to clear output in-place #619

- new: remove elements based on tags with `TagRemovePreprocessor`. #640, #643

- new: CellExecutionError can now be imported from `nbconvert.preprocessors` #656

- new: slides now can enable scrolling and custom transitions #600

- docs: Release instructions for nbviewer-deploy

- docs: improved instructions for handling errors using the `ExecutePreprocessor` #656

- tests: better height/width metadata testing for images in rst & html #601 #602

- tests: normalise base64 output data to avoid false positives #650

- tests: normalise ipython traceback messages to handle old and new style #631

- bug: mathjax obeys \\(\\) & \\[\\] (both nbconvert & pandoc) #609 #617

- bug: specify default templates using extensions #639
- bug: fix pandoc version number #638
- bug: require recent mistune version #630
- bug: catch errors from IPython `execute_reply` and `error` messages #642
- nose completely removed & dependency dropped #595 #660
- mathjax processing in mistune now only uses inline grammar #611
- removeRegex now enabled by default on all TemplateExporters, does not remove cells with outputs #616
- validate notebook after applying each preprocessor (allowing additional attributes) #645
- changed COPYING.md to LICENSE for more standard licensing that GitHub knows how to read #654

17.65 5.2.1

5.2 on GitHub

17.65.1 Major features

In this release (along with the usual bugfixes and documentation improvements, which are legion) we have a few new major features that have been requested for a long time:

Global Content Filtering

You now have the ability to remove input or output from code cells, markdown cells and the input and output prompts. The easiest way to access all of these is by using traitlets like TemplateExporter.exclude_input = True (or, for example HTMLExporter.exclude_markdown = True if you wanted to make it specific to HTML output). On the command line if you just want to not have input or output prompts just use –no-prompt.

Execute notebooks from a function

You can now use the executenb function to execute notebooks as though you ran the execute preprocessor on the notebooks. It returns the standard notebook and resources options.

Remove cells based on regex pattern

This removes cells based on their matching a regex pattern (by default, empty cells). This is the RegexRemovePreprocessor.

Script exporter entrypoints for nonpython scripts

Now there is an entrypoint for having an exporter specific to the type of script that is being exported. While designed for use with the IRkernel in particular (with a script exporter focused on exporting R scripts) other non-python kernels that wish to have a language specific exporter can now surface that directly.

17.65.2 Comprehensive notes

- new: configurable ExecutePreprocessor.startup_timeout configurable #583
- new: RemoveCell preprocessor based on cell content (defaults to empty cell) #575
- new: function for executing notebooks: `executenb` #573
- new: global filtering to remove inputs, outputs, markdown cells (&c.), this works on all templates #554
- new: script exporter entrypoint #531
- new: configurable anchor link text (previously ¶) `HTMLExporter.anchor_link_text` #522
- new: configurable values for slides exporter #542 #558
- improved releases (how-to documentation, version-number generation and checking) #593
- doc improvements #593 #580 #565 #554
- language information from cell magics (for highlighting) is now included in more formats #586
- mathjax upgrades and cdn fixes #584 #567
- better CI #571 #540
- better traceback behaviour when execution errs #521
- deprecated nose test features removed #519
- bug fixed: we now respect width and height metadata on jpeg and png mimetype outputs #588
- bug fixed: now we respect the `resolve_references` filter in `report.tplx` #577
- bug fixed: output metadata now is removed by ClearOutputPreprocessor #569
- bug fixed: display id respected in execute preproessor #563
- bug fixed: dynamic defaults for optional jupyter_client import #559
- bug fixed: don't self-close non-void HTML tags #548
- buf fixed: upgrade jupyter_client dependency to 4.2 #539
- bug fixed: LaTeX output through md→LaTeX conversion shouldn't be touched #535
- bug fixed: now we escape < inside math formulas when converting to html #514

17.65.3 Credits

This release has been larger than previous releases. In it 33 authors contributed a total of 546 commits.

Many thanks to the following individuals who contributed to this release (in alphabetical order):

- Adam Chainz
- Andreas Mueller
- Bartosz T
- Benjamin Ragan-Kelley
- Carol Willing
- Damián Avila
- Elliot Marsden
- Gao, Xiang
- Jaeho Shin
- Jan Schulz
- Jeremy Kun
- Jessica B. Hamrick
- John B Nelson
- juhasch
- Livia Barazzetti
- M Pacer
- Matej Urbas
- Matthias Bussonnier
- Matthias Geier
- Maximilian Albert
- Michael Scott Cuthbert
- Nicholas Bollweg
- Paul Gowder
- Paulo Villegas
- Peter Parente
- Philipp A
- Scott Sanderson
- Srinivas Reddy Thatiparthy
- Sylvain Corlay
- Thomas Kluyver
- Till Hoffmann
- Xiang Gao
- YuviPanda

17.66 5.1.1

- fix version numbering because of incomplete previous version number

17.67 5.1

- improved CSS (specifically tables, in line with notebook) #498
- improve in-memory templates handling #491
- test improvements #516 #509 #505
- new configuration option: IOPub timeout #513
- doc improvements #489 #500 #493 #506
- newly customizable: output prompt #500
- more python2/3 compatible unicode handling #502

17.68 5.0

- Use `xelatex` by default for latex export, improving unicode and font support.
- Use entrypoints internally to access Exporters, allowing for packages to declare custom exporters more easily.
- New ASCIIDoc Exporter.
- New preprocessor for sanitised html output.
- New general `convert_pandoc` filter to reduce the need to hard-code lists of filters in templates.
- Use pytest, nose dependency to be removed.
- Refactored Exporter code to avoid ambiguity and cyclic dependencies.
- Update to traitlets 4.2 API.
- Fixes for Unicode errors when showing execution errors on Python 2.
- Default math font matches default Palatino body text font.
- General documentation improvements. For example, testing, installation, custom exporters.
- Improved link handling for LaTeX output
- Refactored the automatic id generation.
- New kernel_manager_class configuration option for allowing systems to be set up to resolve kernels in different ways.
- Kernel errors now will be logged for debugging purposes when executing notebooks.

17.69 4.3

4.3 on GitHub

- added live widget rendering for html output, nbviewer by extension

17.70 4.2

4.2 on GitHub

- `Custom Exporters` can be provided by external packages, and registered with nbconvert via setuptools entry-points.
- allow nbconvert reading from stdin with `--stdin` option (write into `notebook` basename)
- Various ANSI-escape fixes and improvements
- Various LaTeX/PDF export fixes
- Various fixes and improvements for executing notebooks with `--execute`.

17.71 4.1

4.1 on GitHub

- setuptools fixes for entrypoints on Windows
- various fixes for exporters, including slides, latex, and PDF
- fixes for exceptions met during execution
- include markdown outputs in markdown/html exports

17.72 4.0

4.0 on GitHub

EIGHTEEN

NEED HELP?

18.1 Technical Support

- GitHub Issues and Bug Reports. A place to report bugs or regressions found for nbconvert
- Community Technical Support and Discussion - Jupyter Discourse : A place for installation, configuration, and troubleshooting assistance by the Jupyter community. As a non-profit project with maintainers who are primarily volunteers, we rely on the community for technical support. Please use Discourse to ask questions and share your knowledge.

18.2 Documentation

- Documentation for Jupyter nbconvert PDF
- nbconvert examples repo on GitHub
- Documentation for Project Jupyter

18.3 Jupyter Resources

- Jupyter mailing list
- Project Jupyter website

INDICES AND TABLES

- genindex
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- search

PYTHON MODULE INDEX

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