# Autogenerate documentation with sphinx

Install sphinx

Create ‘docs’ folder and cd to docs. Then run ‘sphinx-quickstart’

* conf.py
* index.rst
* Makefile
* make.bat

‘make clean’

‘make html’

# RST to HTML

If you already have your documentation written in reStructuredText (RST) then you can just run ‘make html’. If, you have Word Documents, Jupyter Notebooks, or Markdown files that you want to create documentation from you need to first convert them to RST then run generate the html.

## DOCX, Jupyter Notebooks, and MarkDown to RST

First, convert everything to RST (see sub-sections below).

Then, running ‘make html’ will generate html from the rst.

### docx to rst

Method 1)

Move Word docx to docs/source/worddocs

Pandoc.exe -f docx filename.docx -t rst -o filename.rst

Unzip filename.docx (need bash to use unzip)

Move filename.rst to docs/source level with index.rst

Move media folder with images in it to docs/source/\_static

Open filename.rst and search for ‘image’.

Fix paths to where you images are located e.g. ‘image:: \_static/media/image2.jpeg’

Method 2) - not so good with images maybe

Install rstdoc

rstfromdocx -lurg usermanual.docx

moved generated rst in with index.rst. Edit your index.rst and add the names of your \*.docx files to the toctree.

### ipynb to rst

Install nbsphinx

# Edit your conf.py and add 'nbsphinx' to extensions.

Extensions = [

‘sphinx.ext.autodoc’,

‘sphinx.ext.doctest’,

’sphinx.ext.intersphinx’,

’sphinx.ext.autosummary’,

’sphinx.ext.mathjax’,

’nbsphinx’

]

# Add type of source files

source\_suffix = [‘.rst’, ‘.ipynb’]

Edit your index.rst and add the names of your \*.ipynb files to the toctree.

Make sure to put your .ipynb files in the docs/source folder

When you run make html the jupyter notebook will be converted to html and appear just as a converted Word document.

### MD to rst

Edit conf.py

‘Import recommonmark.Parser’

# Add a sourcefile parser for markdown

Source\_parsers = {

‘.md’: ‘recommonmark.parser.CommonMarkParser’,

}

# Add type of source files

source\_suffix = [‘.rst’, ‘.md’]

# indes.rst – sample with mix and matched sources

.. toctree::

:maxdepts: 2

:caption: Contents:

Sample\_doc.rst

Markdown\_doc.md

Notebook.ipynb

# Conf.py – sample

Extensions = [

‘sphinx.ext.autodoc’,

‘sphinx.ext.doctest’,

’sphinx.ext.intersphinx’,

’sphinx.ext.autosummary’,

’sphinx.ext.mathjax’,

’nbsphinx’

]

# Add type of source files

source\_suffix = [‘.rst’,‘.ipynb’,’md’]

# Misc.

When using github pages you need an empty .nojekyll file in same dir as generated html files for html\_theme = 'sphinx\_rtd\_theme' to work.

After building documentation copy everything in build/html to docs/