

# Documentation Howto

The folders "sphinx\_beginner" and "sphinx\_intermediate" are Re-Writes of the documentation which was originally done in Word, converted to ReStructuredText.

Here, we're using [ReStructuredText](#) for writing, and [Sphinx](#) to convert the Markup into HTML and PDF ("Sphinx is a tool that makes it easy to create intelligent and beautiful documentation")

Sphinx uses `conf.py` for configuration and provides a convenient Makefile for conversion. Just call `make html` (`make singlehtml` creates one single HTML file), or `make latexpdf` to run it. The resulting documents will be in `_build/html/` or `_build/latex/`, respectively.

Currently, we do not include the HTML output into git, just the PDF and maybe the `singlehtml` page.

## Requirements:

- ReStructuredText <https://en.wikipedia.org/wiki/ReStructuredText>
- Sphinx >1.1 <http://sphinx-doc.org/>
- Pygments >1.5 <http://pygments.org/>
- TeXLive >2011 <http://www.tug.org/texlive/>

## Links:

- [ReST Cheat Sheet](#)
- [ReST and Sphinx Primer](#)
- [Writing Technical Documentation with Sphinx, Paver, and Cog](#)

PS: I've manually updated the Makefiles to do some minor `sed` replacement to use the LaTeX package `fancyvrb` for styling the verbatim boxes; this package should be included in the TeXLive distribution.

## Todos:

- Features to try out:
  - centered
  - hlist

- glossary
- Include examples from “Bioinformatics One-Liners”
- Proper Use of sectioning:
  - '#' with overline, for parts
  - '\*' with overline, for chapters
  - '=', for sections
  - '-', for subsections
  - '^', for subsubsections
  - ‘‘’, for paragraphs
- Better control of verbatim code-blocks:
  - distinguish user input from output (boldface?)

## Change Fonts

To change the font of the (latex) output, add the respective package to the preamble in conf.py: For Tex Gyre Termes font:

```
\\usepackage{tgtermes}
```

For Palatino:

```
\\usepackage[sc]{mathpazo}
```

For full list of Tex Fonts see the [LaTeX Font Catalog ...](#)

## syntax highlight styling

To change the formatting of verbatim code blocks (which are highlighted using Pygments), you can create a style file and reference this in 'conf.py':

```
pygments_style = 'lsi.lsiClass'
```

**This is the content of the file lsi.py:**

```
from pygments.style import Style
from pygments.token import Keyword, Name, Comment, String, Error, Number

class lsiClass(Style):
    default_style = "sphinx"
    styles = {
        Comment:          'bold #800',
        Keyword:          'bold #005',
        Name:              '#f00',
        Name.Function:    '#0f0',
        Name.Class:       'bold #0f0',
        String:           'bg:#eee #111'
    }
```

For details, see the [Pygments Docu](#)