

Generating LaTeX from reST for Software Documentation

Ryszard Kubiak

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reStructuredText, docutils, Sphinx

reStructuredText markup notation

docutils document converter

David Goodger (Canada)
and others

Sphinx for many-file documents

Georg Brandl (Germany)
and others

One source – many output formats

reStructuredText → HTML, PDF (via TeX), ePub, ...

Extensions (Python)

- Own classes (for directives and text roles).
- Class overloading.
- Transformations.

Processing steps

reST

↓ syntax analysis

document tree

↓ transformations

extended document tree

↓ writing

HTML or L^AT_EX or ...

Use serif or sans-serif font?

Dilemmas

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Paragraphs – justified or raggedright?

Emphasis – original

```
def visit_emphasis(self, node):
    self.body.append(r'\emph{')

def depart_emphasis(self, node):
    self.body.append('}'')
```

Emphasis – corrected

```
def visit_emphasis(self, node):
    if isinstance(node.parent,
                  nodes.reference):
        self.body.append(r'\relax{')
    else:
        self.body.append(r'\emph{')
```