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# **sphinxcontrib.multilatem**

*Release 0.1*

2016-06-06



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## 1.1 Getting started

### 1.1.1 Overview

parameterized within reStructuredText source files.

`Sphinx` offers a built-in LaTeX builder which can produce pretty PDF documents. It requires PDF documents to be declared in the `conf.py` file, see the `latex_documents` setting. That works for simple projects, but is not flexible enough for projects which create multiple PDFs with varying templates and parameterization.

This extension provides a new LaTeX builder which determines which PDFs to generate from declarations in line in the reStructuredText source. Those declarations, in the form of reST directives, allow various parameters to be set in the LaTeX output, such as which document class to use, custom parameters, etc.

More information is available here:

- Documentation: <https://sphinxcontrib-multilatem.readthedocs.org/en/latest/>
- Download: <https://pypi.python.org/pypi/sphinxcontrib-multilatem>
- Development: <https://github.com/t4ngo/sphinxcontrib-multilatem>

### 1.1.2 Installation

Install this package using `pip install sphinxcontrib-multilatem`, or from source using `python setup.py install`. Then add it to your project's Sphinx configuration file `conf.py`:

```
extensions = ['sphinxcontrib-multilatem']
```

#### Minimal example

Yet to be written.

## 1.2 Usage

Yet to be written.

## 1.3 Extension internals

### 1.3.1 References between distinct PDF documents

Sphinx references point to the source file of their targets. That matches the HTML builder well, because generally one source file turns into one HTML output file. However, the LaTeX builder generally puts multiple source files into a single output file.

1. Collect `latex_document` nodes: iterate over all source files and traverse their doctrees.
2. Assemble doctrees of `latex_document` nodes: use Sphinx' built-in assembling logic.
3. Determine which source files went into which `latex_document` nodes: traverse the doctree of each `latex_document` node looking for `start_of_file` nodes.

#### Resolving of references

Unknown directive type “uml”.

```
.. uml::

    LaTeXBuilder -> LaTeXBuilder: assemble_doctree
    LaTeXBuilder -> BuildEnvironment: resolve_references
    BuildEnvironment -> StandardDomain: resolve_xref
    StandardDomain -> StandardDomain: build_reference_node
    StandardDomain -> LaTeXBuilder: get_relative_uri
    LaTeXBuilder -> LaTeXBuilder: get_target_uri
    alt Sphinx' builtin LaTeXBuilder
        LaTeXBuilder -> LaTeXBuilder: Check that reference\nis in current LaTeX\noutput document
        LaTeXBuilder ->]: raise NoUri
    else This extension
        LaTeXBuilder --> StandardDomain: Inter-document URI string\nfor reference node
    end
```

#### Resolving of references

Unknown directive type “uml”.

```
.. uml::

    LaTeXWriter -> document: walkabout
    ... Traverse document tree ...
    document -> LaTeXTranslator: visit_reference
    ... Traverse document tree ...
```

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**Version** 2.0

**Date** January 2004

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## Indices and tables

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