

sphinx-i18n

THE TRUE STORY



robertlehmann.de

Development Processes in Open Source Projects

# LATEX

Everybody **hates** it with a passion.

ReST

Sphinx

Docutils

gettext

Issue  
#653

GSoC



# SPHINX

PYTHON DOCUMENTATION GENERATOR

TO THE RESCUE!

implemented June 2007  
as *py-rest-doc* for Docutils

live August 2007  
on docs.python.org

released March 2008  
as Sphinx



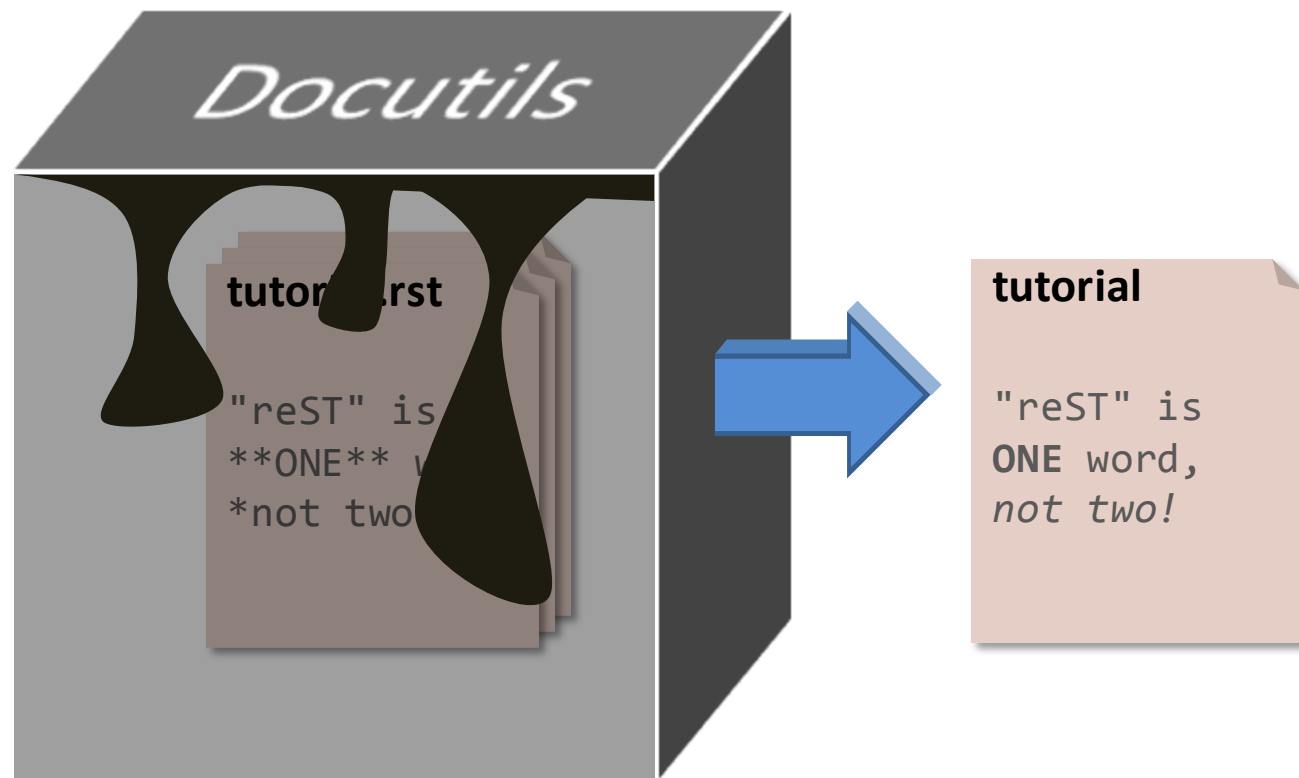
**BSD license**  
requires attribution

1.0 in July 2010

1.0.7 in January 2011  
latest stable release

3290 commits  
[as of 2011/05/15]

# reStructuredText



math rendering

search

markup domains

indices

syntax highlighting

feedback

**tutorial.rst**

```
"reST" is  
**ONE** word,  
*not two!*
```



tutorial.html

tutorial.pdf

tutorial.tex

tutorial.1.gz

tutorial.epub

i18n

autodoc

...

themes

doctests

**Hierarchical structure:** easy definition of a document tree, with automatic links to siblings, parents and children

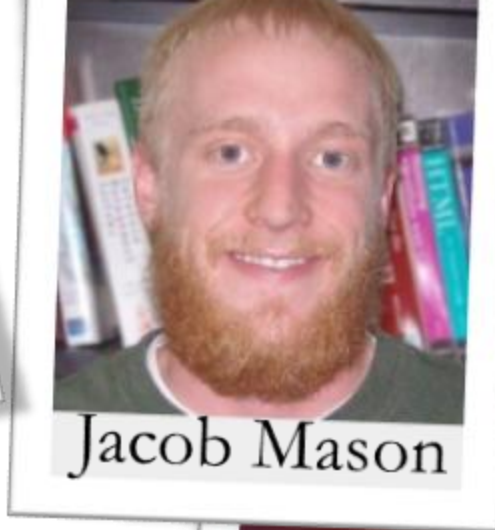
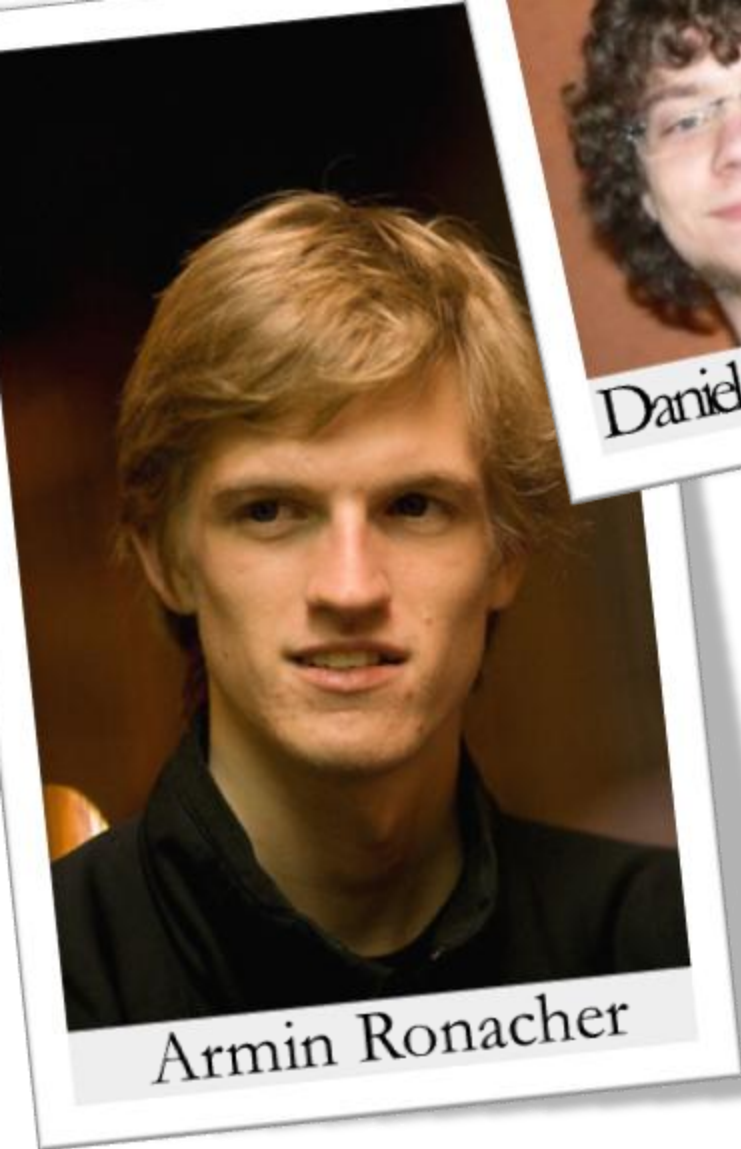
# Georg “birkenfeld” Brandl

- 2004: Pycocoo project
  - the makers of Werkzeug, Pygments, Jinja, ...
- 2008: PSF Community Award
- 2011: Frank Willison Award

that's changed LOCs

- 205k churns [as of 2011/06/27]
- 2500 commits





**...and about 70 others!**



# Who's using it





Overview Downloads (0) Source Changesets Wiki Issues (143) Followers (348) Forks/Queues (84)

branches » tags » RSS pull request fork patch queue follow get source »

## birkenfeld / sphinx <http://sphinx.pocoo.org/latest>

Sphinx is a tool that makes it easy to create intelligent and beautiful documentation for Python projects, written by Georg Brandl and licensed under the BSD license.



Clone this repository (size: 57.3 MB): [HTTPS](#) / [SSH](#)  
\$ hg clone https://bitbucket.org/birkenfeld/sphinx

sphinx /

View at rev

Filename	Size	Last modified	Message
custom_fixers			
doc			
sphinx			
tests			
utils			
.hgignore	268 B	7 months ago	Ignore files generated when building the test do...
.hgtags	1.4 KB	5 months ago	Added tag 1.0.1 for changeset f0698d1a...
AUTHORS	2.0 KB	5 months ago	Add changelog entry and credits.
CHANGES	57.8 KB	2 days ago	Add Nepali translation, thanks to Arati Sharma.
EXAMPLES	7.4 KB	4 months ago	Change redirected URLs to the new locations
LICENSE	10.2 KB	5 months ago	New year update.
MANIFEST.in	523 B	10 months ago	Fix file name in manifest.
Makefile	1.6 KB	5 months ago	Ignore japanese search: it has long lines but breaking them...
README	691 B	11 months ago	Add some changes not picked up in the transplantation...

# Github for Mercurial

### Discussions

View: [Topic list](#), [Topic summary](#)

Topics 1 - 10 of 1596 [Older »](#)

**You cannot post messages because only members can post, and you are not currently a member.**

**Description:** This list is for discussion of usage and development of Sphinx, the Python documentation tool (see <http://sphinx.pocoo.org>).

### Home

#### Discussions

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#### Group info

**Language:** English  
**Group categories:**  
[Computers > Software](#)  
[Computers > Programming](#)  
[More group info »](#)

#### Active older topics

- [Release of 1.1: any plans?](#)  
**6 new** of 6 - Jun 22
- [Trying sphinx on django documen](#)  
**3 new** of 3 - Jun 10
- [C and CPP documentation](#)  
**1 new** of 1 - Jun 7
- [how to call classes and function](#)  
**1 new** of 1 - Jun 7
- [Different HTML field-name gener](#)  
**1 new** of 1 - Jun 8
- [Odg.: Extract documentation eler](#)  
**5 new** of 5 - Jun 9
- [Nepali Translation of Sphinx](#)  
**2 new** of 2 - Jun 3
- [Integrating a DBUS documentatio](#)  
**1 new** of 1 - Jun 3

#### ★ ["UnicodeDecodeError" problem](#)

when I try to compile django docs from text format into html, I encountered this problem: "Exception occurred: File "/usr/lib/python2.6/posixpath.py", line 70, in join path += '/' + b UnicodeDecodeError: 'ascii' codec can't decode byte 0xe6 in position 14: ordinal not in range(128)" ... [more »](#)

By zhaozhi - Jun 26 - **1 new** of 1 message

#### ★ [Index reference without a blank line?](#)

Hi, Suppose I have input like this: 1. Four score and seven years ago, 2. 'Twas brillig, and the slithy toves 3. Able was I ere I saw Elba. and I want the index to include a reference to "brillig" where it occurs in item 2. I can do this: 1. Four score and seven years ago, ... index.: brillig 2. 'Twas brillig, and the slithy toves... [more »](#)

By Warren Weckesser - Jun 25 - **3 new** of 3 messages

#### ★ [problem with html theme options?](#)

Sorry to send a very basic question to the list, but I'm trying to use html\_theme\_options, and failing. This is what I'm trying in conf.py: html\_theme = 'default' html\_theme\_options = {'sidebarbgcolor': '#ffffff' ... If I change html\_theme to 'blue' then Sphinx will not compile, so it is "noticing" the option. However, the output is just the default... [more »](#)

By Anna PS - Jun 24 - **1 new** of 1 message

#### ★ [parsing intersphinx objects.inv](#)

Hi, If I want to know, for instance, what modules are included in another projects zlib zipped objects.inv, I can do from sphinx.ext.intersphinx import read\_inventory\_v2 from posixpath import join uri = '[link] inv = 'objects.inv' f = open(inv, 'rb') line = f.readline() # burn a line... [more »](#)

By Skipper Seabold - Jun 23 - **1 new** of 1 message

#### ★ [image renumbering](#)

I'm using sphinx for user documentation and every time I make a change to the text on the page new copies of the images on those pages are created with an incrementing value appended to the end of the image. I don't know why this was done, but for my uses this is pointless and space wasting. I've identified in the sphinx code base where the image copying is... [more »](#)

By Trevor - Jun 22 - **1 new** of 1 message

#### ★ [templates and autosummary](#)

Hi, I have some questions regarding templates and autosummary. I have a simple .rst file with the following: ===== begin of mypackages.rst ===== .. autosummary:: toctree: modules pyproj.module1 pyproj.module2 pyproj.pack1.module3 ===== end of mypackages.rst ===== and my conf.py has the following: ... [more »](#)

By Ernesto Posse - Jun 22 - **1 new** of 1 message

#### ★ [Error when creating module index when using autodoc for sub-module.](#)

Hello. While I try to build up my project I want to use autodoc so that I don't have to document everything twice. And I don't know why but it causes some trouble when i have something like this. System: Fedora 15 64Bit Python: 3.2.0 (as server by the fedora-rpm) Sphinx: 1.1hg-20110621 (Revision: 3294:ad11fd6e333)... [more »](#)

By megadethna...@yahoo.de - Jun 21 - **1 new** of 1 message

#### ★ [Unusual error when updating conf.py](#)

Hello all, I've encountered a fairly bizarre Sphinx error (now solved) which I wanted to share with the list. I'm a new user of Sphinx, and this was my first try at using it to document something. I started by creating a fresh environment using sphinx-quickstart, and added the 'sphinx\_http\_domain' extension (at [link])... [more »](#)

By Andrew Tipton - Jun 15 - **2 new** of 2 messages

#### ★ [sphinx-contrib write request](#)

There is some interest in the sphinx-contrib project with sphinx-quickstart. I'm interested in contributing to the project. I'm interested in contributing to the project. I'm interested in contributing to the project.

# sphinx-dev mailing list



**SUMMER OF CODE // 2010**

[code.google.com/soc](http://code.google.com/soc)

Google™



python™

umbrella  
organisation



Pocoo

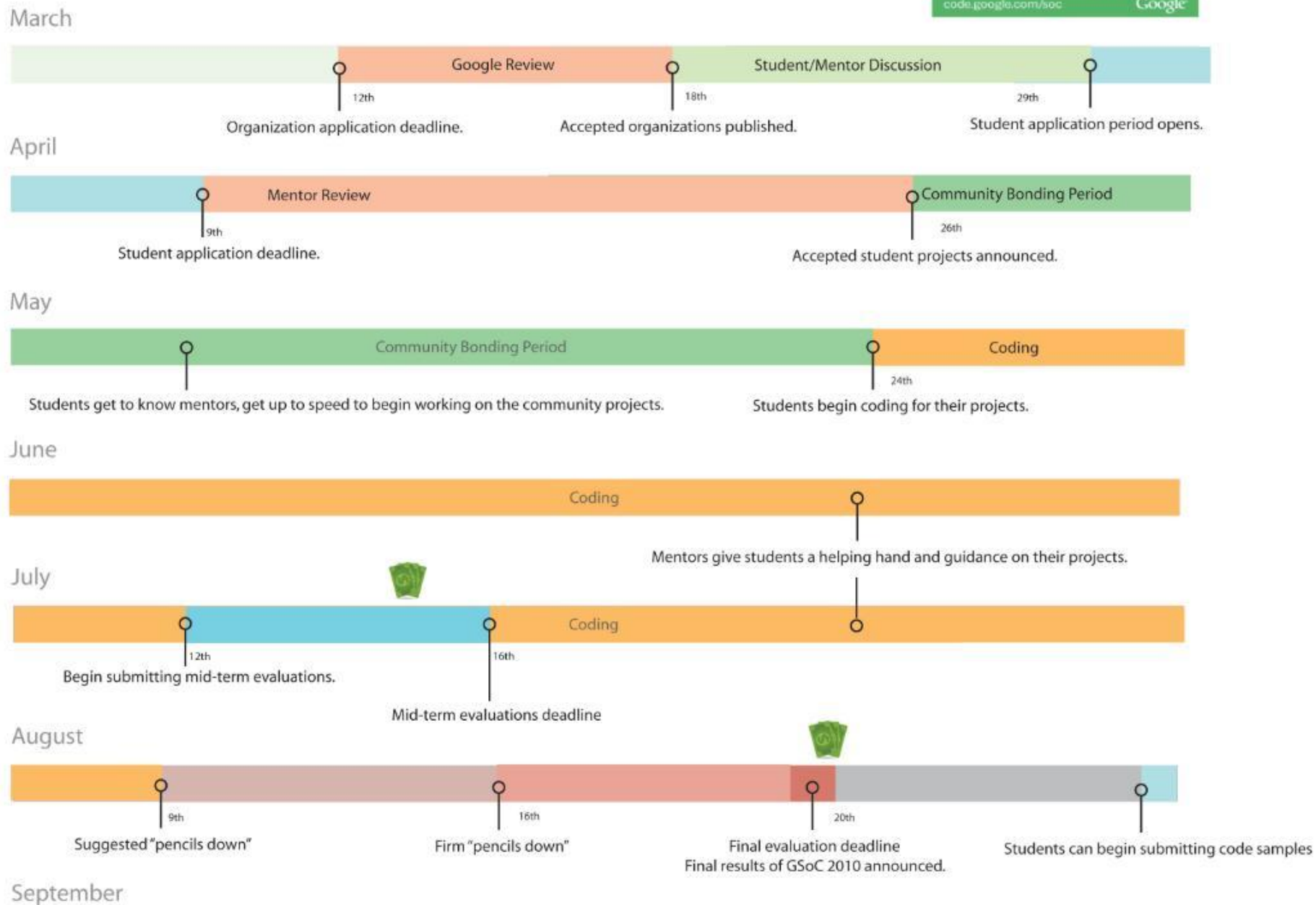
SUMMER OF CODE // 2010

[code.google.com/soc](http://code.google.com/soc)





# Google Summer of Code 2010 Timeline



This is the [python.org](#) translation service, powered by [Pootle](#).

You can translate the [official documentation](#) into your language of choice and [view translated documents](#) online.

The corresponding backend toolchain has been produced during [Google's Summer of Code](#) and is considered **beta** quality. If you encounter any bugs, annoyances or missing features *please* [get in touch](#) with us. We are doing our best to keep the services stable but cannot guarantee for anything. Warning: May contain traces of nuts!

## Languages

Language	Overall Completion	Last Activity
<a href="#">Chinese</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	
<a href="#">French</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2011-04-28 03:02 (merwok)
<a href="#">German</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2010-08-11 14:57 (Random)
<a href="#">Japanese</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2010-11-03 11:15 (naaki)
<a href="#">Polish</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2010-09-14 20:42 (konryd)
<a href="#">Portuguese</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2010-10-08 20:46 (andrikmb)
<a href="#">Russian</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	
<a href="#">Spanish</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2010-08-23 03:19 (rborvall)

## Projects

Project	Overall Completion	Last Activity
<a href="#">Python 3000</a>	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2011-04-28 03:02 (merwok)
<a href="#">Terminology</a>		

## Latest News

- New user [Defereullej](#) registered.
- New user [unreavaknorceu](#) registered.
- New user [guerfisuari](#) registered.
- New user [greatrmedeuro](#) registered.
- New user [herbalaffiliateuek](#) registered.

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# Sphinx Native Language Support:

## Toolchain for Creating, Tracking and Viewing Internationalized Versions of Sphinx Documents

- Translated
- Needs review
- Untranslated

## Top Contributors

### Suggestions

### Reviews

### Submissions

<a href="#">nobody</a>	546
<a href="#">tacionomm</a>	21
<a href="#">fpaterno</a>	12
<a href="#">andrikmb</a>	9
<a href="#">thomasdesvenain</a>	8

<a href="#">aconrad</a>	391
<a href="#">tacionomm</a>	371
<a href="#">tshirtman</a>	262
<a href="#">Dilettant</a>	231
<a href="#">jyb</a>	215

*cool story, bro.*

but what is this

**internationalization**

you are talking about



enter gettext!



# gettext

```
0106 #include <libintl.h>
```

```
2954 char *lcopy = malloc(len);
```

```
2955 if (!lcopy)
```

```
2956     dfaerror(_("out of memory"));
```

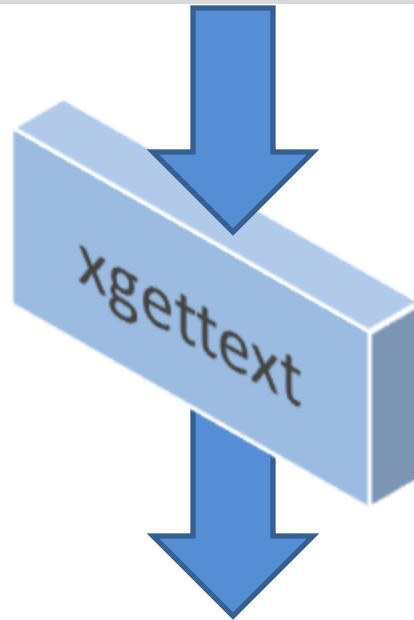
dfa.c - deterministic extended regexp routines for GNU

gettext(3) usually aliased as \_

# gettext

dfa.c

```
2954 char *lcopy = malloc(len);  
2955 if (!lcopy)  
2956     dfaerror(_("out of memory"));
```



grep.pot

```
#: src/dfa.c:2956  
msgid "out of memory"  
msgstr ""
```

# gettext

grep.po

```
#: src/dfa.c:2956  
msgid "out of memory"  
msgstr "Speicher ist alle."
```

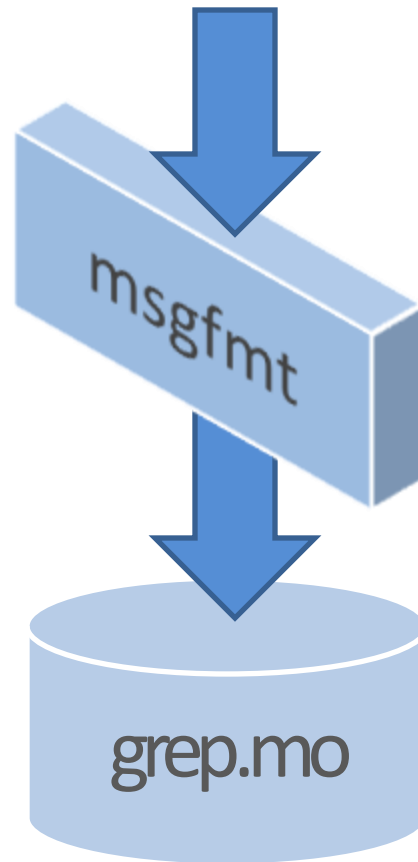


msginit

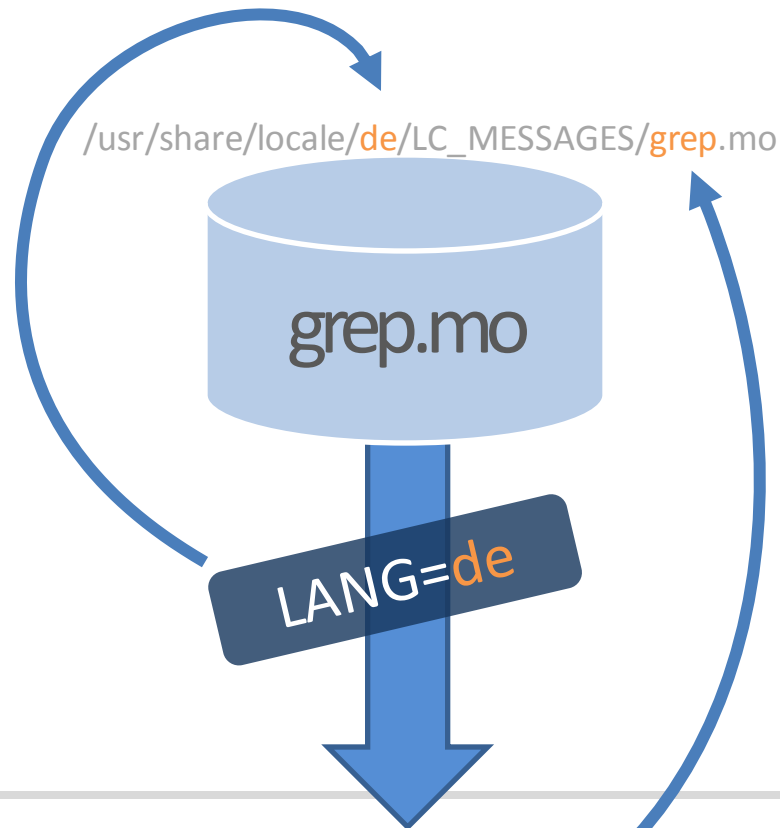
# gettext

grep.po

```
#: src/dfa.c:2956  
msgid "out of memory"  
msgstr "Speicher ist alle."
```



# gettext



grep.c

```
1346 #if defined(ENABLE_NLS)
1347 bindtextdomain("grep", "/usr/share/locale")
1348 textdomain("grep");
1349 #endif
```

**bindtextdomain(3)** – set directory containing message catalogs  
**textdomain(3)** – set domain for gettext() calls

*\*gasp\**

Cool. What else?

internationalization is hard,  
let's go shopping

```
873 if (not_text)
874     printf (_("Binary file %s matches\n"),
875             filename);
```

grep.c – main driver file for grep

```
#: src/grep.c:874
#, c-format
msgid "Binary file: %s matches\n"
msgstr ""
"Übereinstimmungen in Binärdatei %s\n"
```

```
219 x = gettext("There is %s file",  
220             "There are %s files", n)
```

test\_gettext.py, CPython

**Plural-Forms:** `nplurals=2; plural=n!=1`

```
msgid "There is %s file"  
msgid_plural "There are %s files"  
msgstr[0] "Hay %s fichero"  
msgstr[1] "Hay %s ficheros"
```



```
751 /* --option */  
752 printf(_("unrecognized option\n"));
```

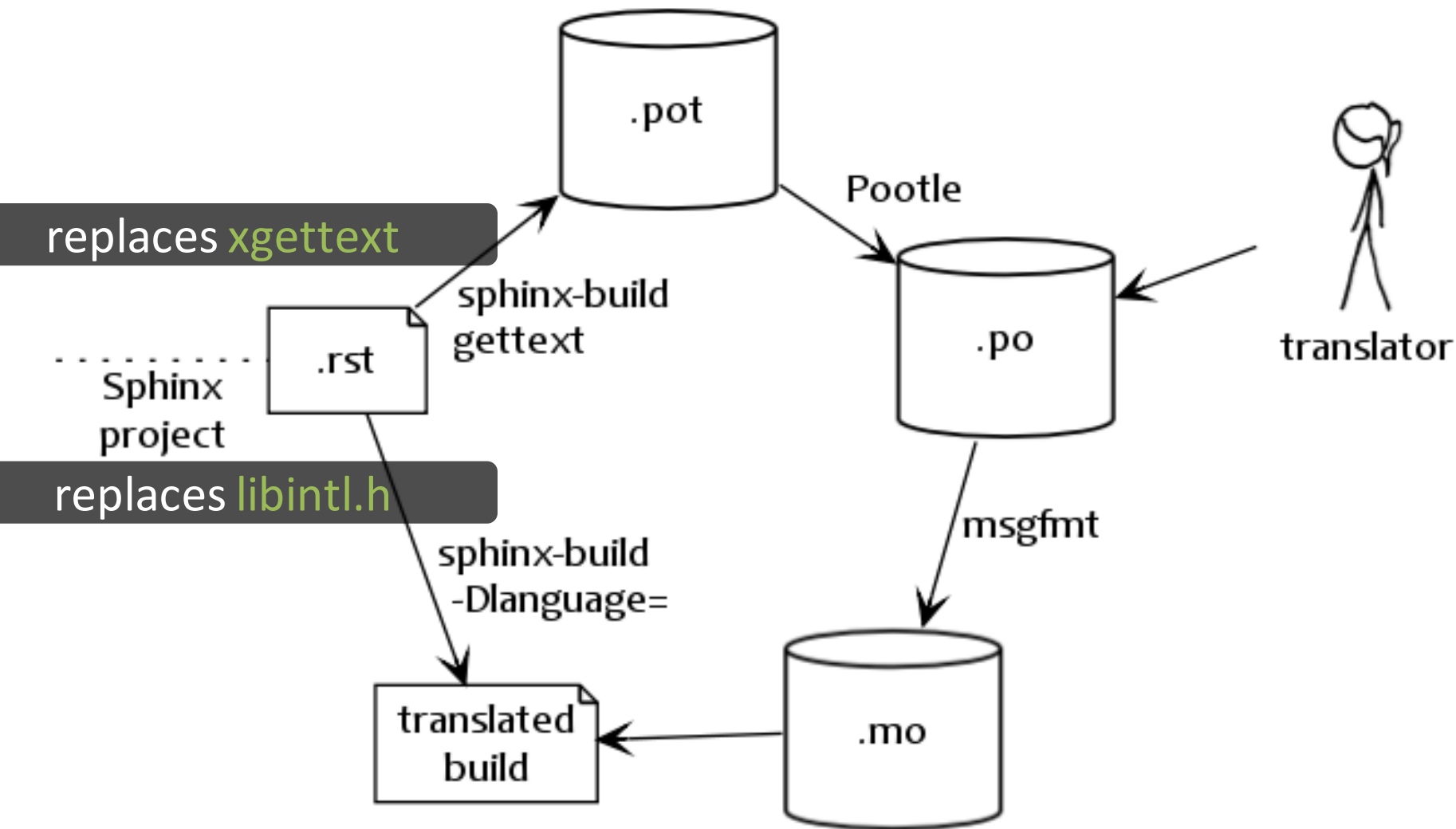
lib/getopt.c

```
#. --option  
#: lib/getopt.c:752  
msgid "unrecognized option\n"  
msgstr ""
```

*awesome! but...*

how does it work  
in **Sphinx**?

enter sphinx-i18n



Sokohakatonaku'll write.

Original Japanese text: Google

そこはかどなく書くよ。

+ Contribute a better translation

Can not Find in Proguard ...>

<[Sphinx] sent

2011-02-02

## Actually tried to i18n the Sphinx

Sphinx , Python

Held on January 29, 2011 at PyConMini JP, kindly to the introduction of the i18n features of Sphinx  
Mr. Ian. ( [Http://Www.slideshare.net/Ianmlewis/Sphinx-11-I18N](http://Www.slideshare.net/Ianmlewis/Sphinx-11-I18N) )

So, really tried. First English -> I'll try the Japanese.

Furthermore, the environment

- sphinx-1.1pre
- GNU gettext -tools 0.18.1
- FreeBSD -8.1R

Shirou Wakayama  
*actually tried to i18n the Sphinx*

Was done. Linux, such as might be handled differently LOCALE, probably the same

1. In the build. Creating a pot file

```
% Make gettext # can build / locale / index.pot
```

### Profile

#### rudi

Android (Java) is the center of recent and Python. I also do occasional rest for my English translation. Twitter: r\_rudi

### Category

- Technology
- 読了
- Python
- Android
- OpenGL
- Game
- Mac
- GAE
- sphinx

### Latest Titles

- [Android] Japanese view

## Sokohakatonaku'll write.

Original Japanese text: Google

そこはかとなく書くよ。

### Msgid rest of the order

In addition,. When translated po file. You talked that there is a problem that is changing the order of rst files.

Apparently, the sphinx. We already have a strange turn when you export the pot file. I think it is because I have defaultdict self.catalogs in sphinx / builders / gettext.py. I feel like the things to worry about reversing this order.

Do I keep up on issue.

- FreeBSD -8.1R

Was done. Linux, such as might be handled differently LOCALE, probably the same.

messages are scrambled ☹️  
(sorry, my Japanese is horrible)

#### 1. In the build. Creating a pot file

```
% Make gettext # can build / locale / index.pot
```

- Mac
- GAE
- sphinx

#### Latest Titles

- [Android] Japanese view

# sphinx-build gettext

## bpssl Documentation

### What is bpssl?

bpssl is a Django application that helps you support HTTPS on your website. The main functionality is performing redirection for HTTPS only URLs and views. For instance, if a request for your login view '/login' is recieved over HTTP, the provided middleware can redirect the user to the equivalent HTTPS page.

Specifying views and urls as secure is supported as are `flatpages`, `Fastcgi` and HTTP proxy setups are also well supported. See the sourcecode/homepage at:

```
#b6395b85f34144a1a91a23a1bce5aa37  
msgid "What is bpssl?"  
msgstr ""
```

```
#2a85f8ce621c4e88897b51f59d868a55  
msgid "Specifying views and urls as secure is supported as are `flatpages`, `Fastcgi` and HTTP proxy setups are also well supported. See the sourcecode/homepage at:"  
msgstr ""
```

```
#3ec7b8f0c3e0425baac65f2a0f97394c  
msgid "bpssl is a Django application that helps you support HTTPS on your website. The main functionality is performing redirection for HTTPS only URLs and views. For instance, if a request for your login view '/login' is recieved over HTTP, the provided middleware can redirect the user to the equivalent HTTPS page."  
msgstr ""
```

```
#46cbf44fbb2040d983af60128148537d  
msgid "bpssl Documentation"  
msgstr ""
```

Ian Lewis @ PyConMini.JP  
slideshare.net/ianmlewis/Sphinx-11-l18N



you are doing it wrong





## #653 I18nBuilder (-b gettext) saves non-unique messages to \*.pot files.

Reported by defnull, created 3 months ago.

The I18nBuilder class uses the ID of a doctree node to hash messages. This may lead to duplicate messages in the \*.pot file:

```
> msginit -l de -i api.pot
api.pot:92: duplicate message definition...
api.pot:57: ...this is the location of the first definition
api.pot:252: duplicate message definition...
api.pot:189: ...this is the location of the first definition
api.pot:364: duplicate message definition...
api.pot:133: ...this is the location of the first definition
api.pot:468: duplicate message definition...
api.pot:73: ...this is the location of the first definition
api.pot:576: duplicate message definition...
api.pot:157: ...this is the location of the first definition
msginit: found 5 fatal errors
```



## #630 .pot file msgid order while using the gettext builder



Reported by r\_rudi, created 4 months ago.

I think it seems the gettext builder in sphinx creates a .pot (and .po) file with different order msgids from original .rst sentence order.

While translating to other language, some word have several meanings and should be translated to different word. Since it depends on the "context", I think .pot and .po file keeping order is important to translate a long text not just a message.

I think it occurred because of using a defaultdict(dict) in builders/gettext.py. I changed it to defaultdict(OrderedDict) and get the result I want. However, OrderedDict comes from Python 2.6/3.2, this may be implemented using a list.

If you think this is a good idea, would you be able to change the implementation?

Thank you.

**Status:** new

**Responsible:** nobody

**Type:** proposal

**Milestone:** none

**Component:** none

**Version:** none





## #653 I18nBuilder (-b

Reported by defnull, created 3 months ago

The I18nBuilder class uses the ID of a doctrine  
> msginit -l de -i api.pot  
api.pot:92: duplicate message definition  
api.pot:57: ...this is the location of  
api.pot:252: duplicate message definition  
api.pot:189: ...this is the location of  
api.pot:364: duplicate message definition  
api.pot:133: ...this is the location of  
api.pot:468: duplicate message definition  
api.pot:73: ...this is the location of  
api.pot:576: duplicate message definition  
api.pot:157: ...this is the location of  
msginit: found 5 fatal errors



## #630 .pot file msgid orde

Reported by r\_rudi, created 4 months ago

I think it seems the gettext builder in sphinx creates  
While translating to other language, some word  
think .pot and .po file keeping order is important  
I think it occurred because of using a defaultdict(  
OrderedDict comes from Python 2.6/3.2, this may  
If you think this is a good idea, would you be able  
Thank you.

Status: new  
Milestone: none

Responsible:  
Component:

## Pull request

@mtlpython

*We've just fixed a problem in the  
gettext builder.*

## Pull request

@shibu

*I'd like to create patch for  
Internationalization feature for 1.1.*

## Pull request

@r\_rudi

*Hello, I write the gettext builder patch.  
Please check and merge if fair enough.*

## Pull request

@kou

*I hereby encourage you to pull some  
changes in my fork of sphinx.  
You can find my changes on the i18n-  
generate-valid-pot branch.*

*let's call it a day*










all work has  
already been **done!**

not quite:  
*the dreaded merge*



release  
the kraken

**octomerge** of sorts  
literally 8 different sources!

	Kouhei Sutou	7b77dd3717af	[i18n] ensure adding reference line to internal messages.
	Kouhei Sutou	f8e84c899668	[i18n] support rename resolution in translated text.
	Kouhei Sutou	143f65df9a58	[i18n] support reference line.
	Kouhei Sutou	27f708da46ca	[i18n] don't generate duplicated msgid
	SHIBUKAWA Yoshiki	d9030def45ce	skip literal_block
	SHIBUKAWA Yoshiki	7940facc511	msgid must be unique.
	SHIBUKAWA Yoshiki	70bffc602bf6	dict -> OrderedDict
	r_rudi	938853568c12	fix the definition list items doesn't appear in the pot file
	r_rudi	1b932e385b1a	[i18n] support reference line.
	r_rudi	6a6743a76b0f	[i18n] add default locale_dir.
	r_rudi	9c03c9a232d6	[i18n] add Makefile to create .mo files.
	r_rudi	256d461f4431	become pep8 clean.
	r_rudi	5861f48bc874	skip duplicated msgid.
	r_rudi	83b419609bc5	A method which writes .po files are moved from finish
	Cyril R	6855d354a5eb	Patched intl.py to maintain directory structure

merged by Georg

cower, mere mortals



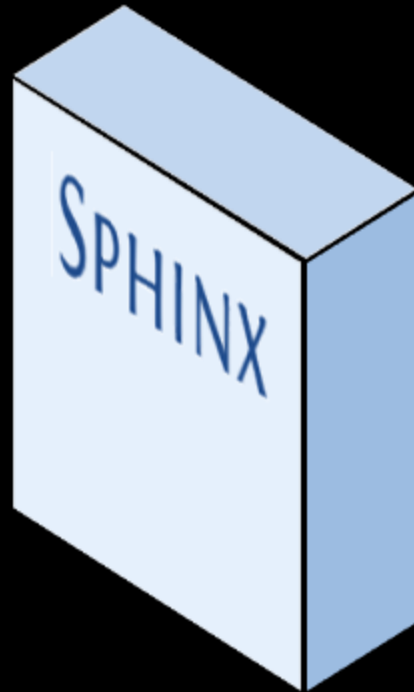
here comes  
the merge resolver

Georg Brandl

# thanks. questions?

I'm that stargaming guy.

#pocoo on  
Freenode



[sphinx.pocoo.org](http://sphinx.pocoo.org)