

# Org-mode for Emacs: your life in plain text

Bastien Guerry - [bzg@gnu.org](mailto:bzg@gnu.org)

FOSDEM 2011 (Feb. 5th)

# Outline

- 1 Introduction
- 2 Org as a organizer
- 3 Org as an authoring tool
- 4 Behind and around Org
- 5 Org's development and community
- 6 Org's future

# Key facts

“Org-mode is for keeping notes, maintaining ToDo lists, doing project planning, and authoring with a fast and effective plain-text system.”

- <http://orgmode.org>
- Created in **2003** by Carsten Dominik
- GNU GPLv3 or any later version
- Early integration into GNU Emacs
- Current stable version is **7.4**
- More than **7210 commits** since january 2008
- **65** developers contributed (in the top 2% of ohloh.net projects)
- A superactive community of users and contributors (fans?)

# What is so special about Org?

## Theorem (Quote by Jeffery Travis)

*"I'm having the same feeling for org-mode that I did when I first learned to really program and use emacs."*

# Org-mode's core mission

- **A simple TODO list manager**
  - also a full-fledged organizer
- **An intuitive note taking environnement**
  - also a full-fledged authoring environment

# Org-mode's core design

## Background:

- Emacs (GNU Emacs, XEmacs, Aquamacs)
- Plain text (allow flexible processing)
- Derive from outline-mode

## Design principles:

- “Don’t impose unwanted complexity”
- “95% of the features added after core implementation”
- Tries to adapt to everyone’s need

## Theorem (No learning curve)

*You set the learning curve depending on your needs.*

# What is it like to be a TODO item?

- TODOS are **outline** items
- TODOS have **metadata**
  - todo, timestamps, tags, priority cookie, properties, notes, etc.

# Organizing TODOS items

- Moving TODO items around by hand
- Moving TODO items by **refiling**
- Moving TODO items to an archive location



# Exploring items: sparse tree, agenda and column view

- Sparse tree: `C-c /`
- Agenda view: (user-defined)
- Column view: `C-c C-x C-c`

# Taking action

- Update TODO keywords
- Update tags and other metadata (notes, properties, etc.)
- Taking action from the Agenda

## Theorem (Trick: speed commands)

*The “speed commands” mechanism allows you to update TODO very quickly. Users can customize it through `org-speed-commands-user`.*

# Logging and reporting

- Simple **logging** mechanism
- Straightforward generation of **clock reports**

# Capturing TODO items

- Capturing TODO items from within Emacs (dired, MUA, emacs-w3m, etc.)
- Capturing TODO items from other applications through `org-protocol.el`, by Sebastian Rose – you can capture from:
  - Firefox
  - Conkeror
  - Acrobat Reader
  - Thunderbird
  - ...

## Theorem (Customizable link mechanism)

*org-add-link-type lets you add any link type. Useful for creating app-aware links. E.g.: links to man pages, info nodes, external MUA, mairix, git, etc.)*

# Many export formats

- ASCII / HTML /  $\text{\LaTeX}$
- freemind / XOXO / iCalendar
- Docbook
- Taskjuggler
- A generic exporter
- ...
- Mediawiki / OpenDocumentText

## Theorem (Exporting projects, files, trees, regions)

*Depending on your needs, you can export projects, files, subtrees or regions. You can also run Emacs in batch mode to export your projects.*

# Lists, blocks, tables, infile facilities

## Core:

- Lists
- Blocks
- Tables

## More:

- Preview  $\text{\LaTeX}$  snippet
- Infile fontification of source blocks
- ...

# Tables and integrated spreadsheet

- Wonderful editing facilities for tables
- Powerful spreadsheet features

# The Org Babel Library

- Eric Schulte and Dan Davison wrote Org Babel, a tool to implement literate programming (and beyond).
- Let's you “tangle” code within an Org file, interactively compute the results of functions, etc.



# Behind and around Org

- Integration with Emacs
- Interaction with many external tools
- VimOrganizer (by Herbert Sitz)
- MobileOrg for iPhone (by Richard Morel)
- MobileOrg for Android (by Matthew Jones)
- A community always eager to try **new tools** (and to make them interact/integrate with Org...)

## Theorem (Org is now a format)

*Org files come with the .org extension. This extension is now used outside of Emacs. Tools like Pandoc or Gollum support Org's format. And there is even VimOrg, which let's you edit Org files through Vim.*

# Main committers and release cycle

Main contributors (git commits):

- **Carsten Dominik (4048)**
- **Eric Schulte (1269)**
- Dan Davison (617)
- Bastien Guerry (442)
- Nicolas Goaziou (192)
- David Maus (105)
- Bernt Hansen (94)

Fast release cycle:

- ...
- v7.2: 2010-10-29
- v7.3: 2010-11-01
- v7.4: 2010-12-10

# Code figures (source: ohloh.net)

Language	Code Lines	# Lines	# Ratio	Blank	Total
Emacs Lisp	74,552	8,937	10.7%	8,471	91,960
T <sub>E</sub> X/L <sub>A</sub> T <sub>E</sub> X	5,902	3,021	33.9%	858	9,781
CSS	617	132	17.6%	56	805
Python	541	91	14.4%	125	757
Make	376	32	7.8%	71	479
Perl	345	115	25.0%	51	511
JavaScript	137	26	16.0%	36	199
C	12	7	36.8%	2	21
HTML	8	0	0.0%	4	12
XML	8	0	0.0%	3	11
shell script	6	3	33.3%	0	9

# An superactive and friendly mailing list

- `emacs-orgmode@gnu.org`
- **75748** emails from March 2006 until today
- About **2000** people sent at least one email
- A place for learning how people **do** stuff
- A friendly place for beginners

# Org-mode website



## Org-Mode: Your Life in Plain Text

### Org - an Emacs Mode for Notes, Project Planning, and Authoring

Org-mode is for keeping notes, maintaining ToDo lists, doing project planning, and authoring with a fast and effective plain-text system.

#### News

Current Version (7.4)

#### Downloads

The standard distribution  
The development version  
Alternative distributions

#### Documentation

The Org guide and manual  
Reference card  
The FAQ  
Tutorials

#### Links

Talks about Org-mode  
Mailing list  
MobileOrg  
Worg  
Contributing to Org-mode

```
projects.org
* TODO Get new laptop :buy:
* PROJ Organize interstellar dust meeting :work:
  ** DONE Book the meeting room
  ** WAITING Organize LOC :phone:
    Emails sent out, waiting for replies
  ** STARTED Invited speakers [2/3]
    - [X] Draine
    - [ ] Tielens
    - [X] Hollenbach
  ** TODO 1st Announcement :URGENT:
* TODO Fix the bell in the hall :home:
-U:--- projects.org Top L10 (Org Fill)-----
Wrote /Users/dominik/org/projects.org
```

### Shirts and Donations



Promote Org-mode and support its development by getting your Org-mode T-shirt, bag, or mug in either the US-Shop or the EU-Shop

... or by making a direct donation.



### Simplicity

At its core, Org-mode is a simple outliner for note-taking and list management. You can learn the basics for using it in five minutes. This may be all you need, and Org-mode will not impose more complex features on you.

### Portability

Org files are plain text. You can view and edit them in any editor, or add and extract data with custom-made scripts. Your data will never be locked into an obscure or proprietary data format. Org-mode runs in Emacs, which is available for nearly every platform.

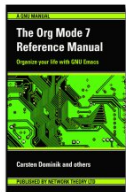
### Depth

Org-mode will not let you down when you need more than a simple outliner. It has a lot of features (e.g. photos, etc.)

# Org printed manual by Network-Theory.co.uk (Brian Gough)

## NETWORK THEORY LTD - PUBLISHING FREE SOFTWARE MANUALS

[\[Home\]](#) [\[Catalogue\]](#) [\[New Titles\]](#) [\[News\]](#) [\[Site Map\]](#) [\[About\]](#) [\[Contact\]](#)



### The Org Mode 7 Reference Manual (for Org version 7.3)

by Carsten Dominik and others

Paperback (6"x9"), 282 pages - New release! (now shipping - December 2010)

Retail Price: \$14.95 (£9.95 in UK)

ISBN-13: 978-1-906966-08-9

[The Book Depository - UK/Worldwide \(free shipping\)](#) [Buy now!](#)

### About the Book

This manual is a printed edition of the official Org reference documentation from the Org 7.3 distribution.

Org mode is a powerful system for organizing projects, tasks and notes in the Emacs editor. Major features include fast outline and table editing, TODO lists, agendas, scheduling and deadlines, cross-references and hyperlinks to arbitrary resources, as well as customisable document publishing in PDF and HTML from simple plain text markup.

Org mode stores all data in human-readable plain text files, ensuring complete portability, simple integration with other text processing tools and support for revision-tracking and synchronization using any version control system.

Org mode is free software under the GNU General Public License and can be used in Emacs on all major operating systems.

You can examine the contents of the printed book here

# Worg's facts

- Started in november 2007
- Emacs + Org + git + server-side publication
- 2253 commits since then
- Text and code released under GNU GPLv3 or later
- A very long user-contributed FAQ
- Many useful tutorials, hacks, code snippets
- Maintained by Matt Lundi since january 2011

# The Worg website



## Org tutorials

[{Back to Worg's index}](#)

### General Introductions to Org-mode

- [Google Tech Talk about Org-mode](#), a 45 minute talk given by Carsten Dominik
- [Organizing a Scientist's Life and Work](#), a 45 minute talk given by Carsten Dominik at the neurological Research Cologne.
- [Getting Organized with Emacs Org-mode](#) by [Abhijeet Chavan](#), an article originally published on [emacs.org](#)
- [The OrgMode tutorial](#) by [David O'Toole](#), covering the basics of TODO lists and the Japanese, Chinese, Korean, and Russian
- [A 25 minute screencast](#) by [Scott Jaderholm](#), demonstrating the basic features of Org-mode
- [Outlining Your Notes with Org](#) by [Sacha Chua](#) covers outlining, searching and indexing
- [Using Emacs org-mode for GTD](#) by [Charles Cave](#) contains an introduction into Org-mode. He has also written a more extensive document ([see below](#)), but here we still link to the early version.
- Emacs Org-mode, [video version of a 2-hour talk](#) by Russell Adams at the Houston Emacs User Group. This talk is *not* about Org-mode, but about the Linux command `xargs`.
- *In German language:* [Ordnung ins Chaos mit Org-Mode](#), an excellent introduction to Org-mode from the free electronic journal [Freies Magazin](#).
- *In French:* [A general introduction](#) on Org for the "lifehacking" group, by Olivier

### Power users describe their setup

In the following documents, the authors describe the details of their setup, along with the workflows they use to get organized with Org-mode. While as a beginner you probably should start with only a simple setup, these descriptions will be a fantastic source of inspiration once you start growing your use of Org-mode.

#### Table of Contents

- [General Introductions to Org-mode](#)
- [Power users describe their setup](#)
- [Tutorials on specific features](#)
  - [Lists](#)
  - [Tables, Spreadsheet, Plotting](#)
  - [Dates and Times](#)
  - [Tags, Properties, and Column View](#)
  - [Remember](#)
  - [Capture](#)
  - [Agenda and search](#)
  - [Customization](#)
  - [Export and Publishing](#)
- [Special tasks](#)
  - [Natural Project Planning](#)
  - [Tracking Habits](#)
  - [Using version Control with Your org files](#)
  - [How to use jsMath with org-mode](#)
  - [Creating a Blog with Jekyll and org](#)
  - [Creating Beamer presentations](#)
  - [Keeping up with your team's tasks](#)
- [Personal Setup](#)
- [Screencasts](#)
- [Features waiting for tutorials](#)
- [Org-related pages by Tutorial authors](#)



# Important past changes

- November 2007: Worg setup
- January 2008: moving org.el to git
- March-April 2008: splitting org.el (v6.01)
- Using Worg/org-issues.org for tracking issues (maintained by David Maus)
- New capture mechanism (a rewrite of the “remember” mechanism)
- Using patchwork for tracking patches (hosted by John Wiegley)
- Org Babel since 7.0
- <http://orgmode.org> and the org-mode.git repository moved to a dedicated server, maintained by Jason Dunsmore

# Org's future

## Possible contributions:

- using org-mode (instead of outline-mode) for emacs/etc/TODO
- More export formats?
  - Work on a stable generic (recursive) parsing/rendering engine (see org-mode/EXPERIMENTAL/org-export.el)
- Interaction with online TODO managers?
- Interaction with online bug trackers?
- Collaboration?
  - TODO: write an online tool supporting org format (with Arc?)

## Theorem (Why?)

*We don't have a roadmap!*