

This manual is a guide for the GNU Web Translators. Last updated on 28.07.2009, for GNUnited Nations version 0.3.1.

Copyright © 2009 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License."

Table of Contents

1	Introduction	. 1
2	Team Members	. 2
	2.1 Joining A Team	2
	2.2 How To Submit a Translation	
	2.2.1 How To Submit a Translation in PO Format	3
	2.2.2 How To Submit a Translation as Plain Text	3
	2.3 Leaving A Team	4
3	Team Co-ordinators	5
•	3.1 How To Form A New Team	
	3.2 The Gentle Art of Managing A Translation Team	
	3.2.1 Peer Review	
	3.2.1.1 How To Track Tasks and Bugs Using Savannah	
	3.2.1.2 How To Proceed With Unreviewed Translations	
	3.2.2 CVS Commits And Best Practices	
	3.2.3 Taking Advantage of Savannah	
	3.2.3.1 Managing Members	
	3.2.3.2 Homepage of The Team	11
	3.2.3.3 Support Tracker	. 11
	3.2.3.4 Tasks Tracker	11
	3.2.3.5 Bugs Tracker	
	3.2.3.6 Patch Tracker	
	3.2.3.7 News Tracker	
	3.2.3.8 Managing Mailing Lists	
	3.2.3.9 Version Control Systems	
	3.2.4 Promoting Members As Co-leaders	
	3.3 Reporting Team Status	
	3.4 How To Retire Painlessly	18
4	'trans-coord' Admins	14
5	Details About The Translation Process	15
	5.1 Migration To The New Style	15
	5.2 Summary of SSI #includes	
	5.3 How To Use Custom CSS	16
	5.3.1 Localizing The 'topbanner' Image	17
	5.3.2 Specific Issues Related to RTL	17
	5.4 What To Translate	
	5.5 When To CAPITALIZE	
	5.6 Language-specific Terminology	18
6	Overview Of The Translation Process	19
	6.1 Related Mailing Lists	19
	6.2 Savannah Projects Membership	20
A	ppendix A GNU Free Documentation License	21

1 Introduction

This manual is an attempt to describe in detail the process of translating www.gnu.org articles—how to join a team, or start a new one, the responsibilities of the team members and leaders, as well as some peculiarities of the GNU Project's website when it comes to localization.

The GNU website contains hundreds of documents, most of them philosophical articles (essays) and technical documents which need to be translated to make them available to a broader audience. This is especially important for the philosophy-related materials, as many people do not speak English and even those that do usually prefer to read such articles in their native language. Dealing with the task of translating a website this large is a hard job, and too often people volunteering as translators get frustrated or lose interest in keeping up with that work. Reading this manual, and the related GNUN manual (see Section "GNUnited Nations" in The GNUnited Nations Manual), is just the tip of the iceberg. This is not meant to discourage any potential volunteer; rather, we prefer to be honest and to give preliminary estimation of the work/responsibility involved—if you feel you are not in a position to help you may move on to a smaller project before going through all procedures.

It is important to realize that being a GNU Web Translator is a hard job at all levels, but your help is much appreciated and is invaluable contribution to the society. While there are many people who contribute to our community by writing free software (and their number is constantly increasing), the ones actively engaged in teaching others to appreciate and defend their freedom are only a few. Consequently and rather unfortunately, there are not so many volunteers willing to maintain on the long term translations of the various essays that describe the fundamental values of the free software movement.

Translators of the http://gnu.org website are organized in language teams. Each team has one or more co-ordinators, who are responsible for the respective team. The co-ordinators participate in the Savannah 'trans-coord' organizational project, which is managed by the GNU Web Translation Managers. The manual is organized in chapters that follow the organizational structure of the whole translation project.

If you wish to join a translation team or contribute a translation or two, see Chapter 2 [Members], page 2. If your intention is to form a translation team, see Chapter 3 [Leaders], page 5. The chapter about the 'trans-coord' administrators (a.k.a. *GNU Translation Managers*) describes all the responsibilities and procedures involved in performing this duty. See Chapter 4 [Translation Managers], page 14.

2 Team Members

Being a team member means to co-operate with a group of other people, working under the co-ordinatorship of the appointed team leader. Usually, this involves translating articles and reviewing/proof-reading other people's translations, participating in discussions about terminology issues, and sometimes performing clean-up tasks.

2.1 Joining A Team

To join a team, please first look at the existing teams at http://www.gnu.org/server/standards/README.translations.html#TranslationsUnderway. Chances are that there is already an established team. If there is no team listed for your language, this means that:

- There is no team established and there are no translations to this language.
- Some translations were submitted by occasional contributors, but no team has ever been formed.
- The page is not updated to reflect the current situation (this shouldn't happen, but it's a possibility anyway).

If the team is marked as *orphaned*, there is no problem: you can still submit your translation to web-translators@gnu.org (see Section 2.2 [Submitting], page 2). In case you want to establish a new translation team or become a co-ordinator of an existing one, please refer to the next chapter, see Chapter 3 [Leaders], page 5.

Contacting the team is best done via Savannah—each translation team has its own project, named 'www-lang', with the project page being https://savannah.gnu.org/projects/www-lang. Usually teams have mailing lists, either on Savannah or on some external site. Some teams have homepages, http://gnu.org/server/standards/translations/lang with additional contact details and procedures for team members.

You could also write directly to the team leader via the Savannah interface—that way you request will be recorded by Savannah and can be tracked or completed when the membership is approved.

The actual process of submitting translations for review varies from team to team, as teams have certain liberties to organize themselves as they see fit. Thus, this manual does not make any attempt to cover that aspect—please refer to the team-specific documentation (if any) or ask the co-ordinator.

Certainly, it is not mandatory to be an active team member to contribute a translation or two. If you feel that you don't have the time to participate actively, that is fine; you can still send your translation to the team. No contributions should be rejected.

If you do not hear from the team within a reasonable time frame (say, two weeks), please write to web-translators@gnu.org.

For general information about the translation process, see Chapter 5 [Translation Tips], page 15.

2.2 How To Submit a Translation

Everyone can still submit translations even if there is no translation team formed. There are two ways to do that—following the existing procedures, which is the preferred way, and sending it as plain text, which means more work for a limited group of volunteers (the Translation Managers) to convert the translation in '.po' format.

2.2.1 How To Submit a Translation in PO Format

All translations¹ are maintained via GNUN (see http://www.gnu.org/software/gnun/), which significantly eases maintenance and avoids the unpleasant situation where a translation is lagging behind the original. See Section "Advantages" in *The GNUnited Nations Manual*.

As of September 2008 all new translations at gnu.org are installed in '.po' format, and the '.html' is generated automatically. Here are the steps to produce and submit such a translation:

• Make a checkout of the CVS Web repository of the 'www' Savannah project. You can find generic instructions at https://savannah.gnu.org/cvs/?group=www. All updates to the website are done as commits in the repository, so you would need an up-to-date working copy. Anonymous access works under any circumstances, i.e. it is not mandatory to have a registered account at Savannah to use it. You can also check out only a specific directory, for example:

cvs -z3 -d:pserver:anonymous@cvs.savannah.gnu.org:/web/www co www/gnu This command will fetch only the '/gnu' directory—in other words, all articles at http://gnu.org/gnu.

- Assuming you already know the article you want to translate, you have to create an empty 'article.lang.po' file and then translate all messages with a PO editor. See Section "New Translation" in *The GNUnited Nations Manual*. For an almost complete list of PO editors, see Section "PO Files" in *The GNUnited Nations Manual*.
- When you are pleased with the translation, check that the PO file is valid and submit it to web-translators@gnu.org, attached to your message. The web-translators will review (to the best of their ability) the translation and will install it in the repository.
- In order GNUN to be able to generate (and subsequently update) a gettextized translation, the language should have the server templates available as PO files. These templates are short, and translating them shouldn't take much time. If the language code is present in the TEMPLATE_LINGUAS variable at 'server/gnun/gnun.mk', then you don't have to do anything. If not, the required files are 'server/po/banner.lang.po' and 'server/po/footer-text.lang.po'—you can translate and submit them in the usual way, together with the translation of the essay.

If you don't want to translate the templates for whatever reason—do not worry, the webtranslators will install empty templates (which means the English strings will be used).

It is quite possible that there will be errors or typos, so once you are informed that the translation is online, check it carefully and if necessary, resubmit the PO file with corrections. Do not forget to run cvs update first and edit the updated '.po' file from the repository—most probably the Translation Managers have already made some modifications to it, usually to fix validation errors and to complete the PO file header.

2.2.2 How To Submit a Translation as Plain Text

If you feel the procedure described in the previous section is too burdensome and unfeasible for you to follow, you can still submit a translation in plain text. It will be manually converted to PO file by the GNU Web Translation Managers, which can be tricky sometimes, and naturally, means more work for them and slower processing of your request.

You should never translate the HTML markup—i.e. do not use the "View Source" functionality of your browser to translate the raw HTML. Most of it is irrelevant, and automatically inherited from the markup of the original article. Simply save your translation in a plain text file ('.txt'), preferably in UTF-8 encoding. You can use any decent text editor for that—Emacs, Vim, gEdit, Kate, OpenOffice.org (the file should be saved as '.txt', not '.odt'), etc.

¹ Well—not really, but the goal is to maintain all of them.

Translate the title, the blue heading (if it differs slightly from the title) and the body of the article upto the link 'back to top'. For example, for http://www.gnu.org/philosophy/free-sw.html that would be:

The Free Software Definition - GNU Project - Free Software Foundation (FSF)

We maintain this free software definition...

. . .

...If you would like to review the complete list of changes, you can do so on our cvsweb interface.

Since web-translators do not speak all languages, it is essential to mark somehow any inner markup, because very often it is hard to figure out what translated text should be enclosed inside or <a> elements, to name a few. The easiest way to do this is just to use the corresponding HTML markup, although anything else is suitable. For example, here is how to indicate that the link "History section" at the first paragraph of the same article should correspond to "sección historial" in the translation:

Si quisiera revisar los cambios que hemos hecho, por favor vea la {sección historial} más abajo para más información.

It is not necessary to include the value of the href attribute, as it is already known.

If you wish your name to appear in the footer as a translator of the article, please also provide a translation of 'Translation: your name in your native language' or 'Translated by: your name in your native language', as you prefer. Please also state if you wish your email address to be published (some readers prefer to send suggestions directly to the translator, but we certainly do not require that translators must publish their address).

Finally, send the translation to web-translators@gnu.org, either inline or as an attachment to your message. Once online, please check for any errors or omissions that may have resulted from the conversion process, and report them back.

2.3 Leaving A Team

When you realize that you don't have time or can't devote sufficient resources to perform the tasks anymore, it is prudent to inform the translation team co-ordinator and possibly all the rest of the team-mates. The team leader should always have a rough estimation about the available translators, even though there are no reliable means to establish that. Your announcement that you are stepping down (temporarily or permanently) may help her in this regard.

3 Team Co-ordinators

A gnu.org translation team leader is the person who is ultimately responsible for organizing and managing the team, including, but not limited to, having the final say on contributed translations and exercising levels of control as she sees fit.

A prospective team co-ordinator should have perfect understanding of the GNU Philosophy and the various issues the free software movement set out to solve. Energy and time are always needed, as well as certain communication skills.

However, a team leader is not a dictator (for life); every action and/or decision taken should have its justification and should stem from the goals of the project at large. Inefficient or inoperative leaders are replaced, if necessary.

3.1 How To Form A New Team

Establishing a new team is not hard, but a certain procedure ought to be followed. The most important thing to realize is that this is somewhat a long-term engagement that requires a lot of spare time, communication and technical skills, and devotion. The only "bonus" team leaders have is more work and more responsibilities.

You should read most of the philosophy-related articles and *all* the documentation related to the translation process before you decide to form a new team, or take over an orphaned team. Once you have the internal feeling that having a gnu.org translation team for your language is a must, and you are the one for this job, follow these steps:

- 1. If you do not have a Savannah account, register at https://savannah.gnu.org/account/register.php. Write access to the repository and project membership is handled via Savannah, so you would need an account in any case.
- 2. Checkout a complete working copy of the CVS Web repository as described at https://savannah.gnu.org/cvs/?group=ww. If you still don't have a Savannah account or if you have registered one, but are not yet member of any Savannah project, refer to the instructions under "Anonymous CVS Access". If you are already a member of (any) Savannah project, you can proceed with "Project Member CVS Access via SSH", although you will still lack permission to commit (later, when it is granted, you can use the same working copy).

Examine the layout and structure of the repository. Basically, it is mapped to the URL locations, more or less. Take a look at the most important materials to translate under '/philosophy', '/gnu', '/ditros', '/copyleft' and '/licenses' directories just to get a rough estimate about the amount of work involved. If you are still not scared and determined to go on further, excellent.

As you have probably observed, every directory that contains translatable articles has a '/po' sub-directory, which is where the new canonical source format of the translations is stored.

- 3. Assuming you have already read the GNUN manual entirely (as recommended in the beginning of this section), check if your language code is present in the variable TEMPLATE_LINGUAS at 'server/gnun/gnun.mk'. If it is not, the first thing to do is to translate and submit to web-translators@gnu.org the files 'server/po/banner.lang.po' and 'server/po/footer-text.lang.po', together with your first message stating that you would like to establish a new team. See Section "New Translation" in The GNUnited Nations Manual.
 - The language code (lang) should be the ISO 639-1 code of the language, for example 'hy' for Armenian or 'el' for Greek. If there is no such code, use the ISO 639-2 one—e.g. 'mai' for Maithili. If the language is a variant such as Brazilian Portuguese or

Simplified Chinese, use small caps and a dash—'pt-br' and 'zh-cn' instead of 'pt_BR' and 'zh_CN'.

- The PO file header and initial comments should be completed as documented.
- Do not use HTML entities for non-ASCII characters as in the English original. They are harder to type and read. So, if there is 'ü' and this is a character from the alphabet of your language, just write it as 'ü' directly.
- 4. Any prospective team leader should submit a few translations first. This is a process of pointing errors and omissions (which are expected and natural); it's an important thing to do as the leader is going to carry out these checks on her own, once the team is approved. If there are existing translations that are not yet in PO format, the best thing to do is to migrate one or two. You can use find to find out what's already in the repository, for example:

find -name *.lang.html

- 5. Submit at least two translations of your own. We maintain a list with priority articles at http://www.gnu.org/server/standards/translations/priorities.html, although it is probably hard to start with one of them. Choose whatever you wish, provided it is an essay and not an auxiliary page. Avoid translating the homepage or 'whatsnew.html'—they are moving targets and keeping up would be only a distraction for both parties in the process. As usual, send the completed translation to web-translators@gnu.org.
- 6. The Translation Managers will review your translations, and eventually comment on them (mostly technical details if there is no one among them speaking your language). Depending on the case, it might be required to submit a corrected file. In any event, please take into account the remarks in future work.
- 7. Once the Translation Managers determine that you are doing well and about to complete the process, they will send you the standard questionnaire for new team leaders. It is relevantly short and it shouldn't take more than 10-30 minutes to complete. This questionnaire is important, as we consider it crucial any translation team co-ordinator to have a good understanding of the philosophy of the free software movement. It is not unusual energetic people who complete all technical steps without trouble to fail here.
- 8. If all goes well, you will receive a response inviting you to apply for a new translation project at Savannah. The project name should be 'www-lang' where lang is, unsurprisingly, the language code. If such a project already exists, this step will be skipped and you'll be made an administrator of the project. To register the project, go to https://savannah.gnu.org/register/ and make sure you fill in the required fields. The "Group type" should be 'www.gnu.org translation team', and "Project license"—'WebSite Only'. In the "Tarball URL" field enter a bogus URL such as 'http://gnu.org'.

Pay attention: This step is a formality. You should proceed with the project registration only when you have been asked by **web-translators@gnu.org** to do so. Otherwise, the submission may appear in the task list of the Savannah Hackers for a fairly long time, which is troublesome.

- 9. When the project is approved, the team information will be added to the list at 'README.translations.html', you will become a member of the 'www' project (thus granting you CVS write access to the whole repository—so be careful) and the 'trans-coord' project. You'll also be subscribed to the following mailing lists:
 - www-commits
 - trans-coord-discuss

You'll have to request subscription to 'www-discuss' yourself—this list is managed by the GNU Webmasters, but all team leaders are required to subscribe in order to receive important site-wide announcements.

The whole process should not take more than two weeks or maximum a month—if this period turns out to be longer, it is an indication that you do not have the required time and resources for this job, or web-translators are badly lagging behind and do not process the requests with the expected pace.

Applications for new teams are sometimes processed in parallel¹—the most suitable candidate is chosen in this case. This is, undoubtedly, based on a subjective judgment made by the Translation Managers, and many factors are important.

The procedure for taking over an orphaned team is the same. Once completed, you will be made an admin of the respective 'www-lang' Savannah project, or if it doesn't exist, invited to apply for registration. Do not automatically remove old members just because you are starting "afresh"—some of them might want to continue to contribute. Contact them privately, explaining that you're the new appointed team co-ordinator, and ask them if they would be willing to continue their involvement in the team.

3.2 The Gentle Art of Managing A Translation Team

It is not our ambition to describe all activities involved in managing a team—it's very likely that you will encounter new problems, take care of tasks nobody else is aware of, or invent new techniques and approaches in your quest to keep things running. Managing a team is a hard task on all counts: communication with others, recruiting volunteers (and keeping them as long as possible), defending certain decisions, leading discussions about terminology issues, handling personal conflicts within the team, technical skills when reviewing/merging/syncing translations, etc. The list goes on and on.

This manual can only summarize some of the most common issues and *suggest* ways to deal with them. It is up to the team leader to establish the precise team procedures and practices.

The trans-coord-discuss@gnu.org mailing list was specifically created to discuss issues that leaders encounter while managing the teams, and for general organizational work. Feel free to discuss anything related to the translation process there.

3.2.1 Peer Review

First and foremost, find at least one person for peer review. You will review her translations, and she will review yours (at least in the beginning). Being a team leader does not mean that you cannot make mistakes; everyone does. The mutual review (especially if done by a larger group) is crucial for the quality of the translation process. Too many errors are just missed (especially if they are obvious) when the translator does a final review of her own translation.

It is good to establish a practice: Do not commit officially (i.e. in 'www', which will appear online at http://gnu.org immediately) a translation that is not yet reviewed by someone else who is not the translator. Always perform a final review yourself even if the translation has been checked by another member of the team. In other words, every translation installed at gnu.org should pass through your hands (read: eyes).

One common technique for performing such reviews is to use a mailing list—the translator sends the new translation and participants comment on specific parts, quoting them appropriately. The benefit of this approach is that it is straightforward, but the drawback is that there is no automatic "record" about the conclusion of the specific discussion (or sub-thread) and sometimes such discussions easily digress, making it even harder to come up with a solution.

Another way is to use Savannah's built-in trackers (the 'Tasks' and 'Bugs' trackers, specifically). This is further explained in the next section, see Section 3.2.1.1 [Tracking Tasks], page 8. One way or another, you should create some kind of review process.

¹ In general, we try to avoid this and direct all new volunteers to the person who is already carrying out the process—this is also a verification if she can cooperate easily with others.

3.2.1.1 How To Track Tasks and Bugs Using Savannah

The team leader has to make sure that prospective translations are reviewed, that they do not contain obvious errors and/or confusing expressions and that they match the spirit and intention of the original essay. However, many teams tend to suffer from a specific problem: team members rely on the leader to make these extensive reviews. That is fine, as far as it goes, and the leader should always review translations before installing them in the repository—but it is nearly impossible (especially for a large team) to rely on a single person for such tasks. Team co-ordinators often do not manage to make such reviews in time, resulting in frustration among the team members and generally slowing the translation process.

A solution to this specific problem is to distribute the load among more people. For example: Member D makes a translation of 'foo.html' and uploads 'foo.lang.po' in the translation project's repository at Savannah, marking the relevant task as "Ready for Test" (of course, the equivalent is sending a message with the attached translation to the team's mailing list, or similar). Then Member A, B and C (or only A and B if C is currently busy) review it independently and post comments/suggestions/errors in the bug tracker. Discussion goes on between them and D, problems are rectified and finally the leader (who may happen to be one of A, B, C, D) makes a final review. It is easier to make the final review when most of the issues are already fixed in previous revisions. Finally, the translation is published. The result is better quality of the translation (since more people looked at it) and the whole burden does not fall solely on the shoulders of the leader. You can also set up an internal formal rule: If a member makes a translation, he has to review another one (or two) as well.

Some translations can take a fairly long time—the typical example is a complicated essay or a transcript of a speech. It is best to avoid duplicate work by indicating, or better—recording, that someone is working on this specific article. The 'Tasks' tracker is suitable for this purpose.

It is prudent to discuss the most convenient naming scheme and practice among team members, and publish the convention and/or rules at the team's homepage. Note that you can create *Custom Fields* in the trackers, and resolved bugs can be searched based on these custom values.

Thus, a possible straightforward way to manage these tasks is:

- If someone starts working on a new translation, she creates a new task with a 'Subject' indicating the article, for example simply 'philosophy/bsd.html' and assigns it to herself.
- When the translation is finished and ready for review, the translator changes the 'Status' to "Ready For Test".
- Other members review it, and open bugs relevant to one specific problem. It is usually better not to conflate two different issues together—it makes them harder to discuss, and hard to track them by severity. Some are grammatical errors, some are fundamental ones that change the whole meaning, some are simply suggestions for improvement. It helps if the project admin creates new Category fields for every article, for instance 'gnu/gnu-history.lang.html', 'philosophy/microsoft.lang.html'—it would enable functionality like "Show me all bugs ever reported against this translation", which is useful.
- Once the bugs (or at least the important bugs) are fixed, the team leader can make the final review and install the translation in the official repository, marking the task as 'Done'. Bugs that are not resolved should remain opened, naturally.

Of course, teams can choose to manage these things using external resources and eventually other bug (or issue) tracking systems. Whatever you decide, please make sure that bugs can be reported using free software only, and that the software providing that service is free. It makes an extremely bad impression if a reader has to report a problem about a gnu.org translation via non-free hosting platforms like SourceForge.

If you use a certain facility (i.e. a bug tracking system) to manage bugs in translations, it is best to take advantage of 'generic.lang.html' and advertise it on every page. See Section "generic.LANG.html" in *The GNUnited Nations Manual*, for details.

3.2.1.2 How To Proceed With Unreviewed Translations

Sometimes a translation (typically your own) is not reviewed by anyone else for a fairly long time. This is unfortunate, but there is no reason to keep it in draft state forever. If nobody reviewed it for a substantially long period (like 3 or 4 months), commit it as it is. Readers may report bugs as well (and they do!).

It is important to record somehow that this published translation still lacks appropriate review. If the suggestion in the previous section is implemented, it would mean leaving the relevant task 'Open' and 'Ready For Test' despite the translation being officially online. You may also add a comment to the PO file.

3.2.2 CVS Commits And Best Practices

As all team leaders have write access to the CVS repository of the 'www' project, this technically means that they are able to modify every single file in it, and also those of the Web CVS repositories of other projects at Savannah. This vote of confidence should never be abused—the only files team co-ordinators should add/update are those relevant to their translation work. It is OK to fix an obvious typo in an original article; for anything else please report to webmasters@gnu.org.

If you wish to volunteer as webmaster and help with generic webmaster work and RT tickets, that is perfectly fine—please follow the established (by the GNU Webmasters) procedure. If you are approved, you can modify such pages wearing your "webmaster's hat".

If a particular page has issues with the markup which create problems for your language, please inform trans-coord-discuss@gnu.org. For general issues that affect more articles, or for severe problems, please write to www-discuss@gnu.org.

It is recommended to read the entire CVS manual at least once, for a basic understanding of how this VCS works. See Section "Top" in *Version Management with CVS*. It is not necessary to become an expert—the 'www' project does not use complex features like tags, vendor branches, merging, etc. as they are not very useful for a live website.

However, you'd probably have to learn how to use CVS for effective work—to extract information from the history, review diffs and specific changes, synchronize with the working repository of the team (if any), adding/removing files, etc.

If you make changes that affect more than one file but the change is coherent, please do it as a single commit. This will generate only one message to www-commits@gnu.org, which is better than 5 messages for 5 files about semantically the same change. Always write commit logs in English², providing a short description of the change. If you modify a file that is not an article but a script or part of software (such as 'server/gnun/gnun.mk'), it would be nice to follow the GNU Coding Standards and describe the change precisely. For example, do not write:

```
Added support for Nepali.

or

Yay! First commit of the Panjabi homepage!

Instead, write the log as follows:

(TEMPLATE_LINGUAS): Add 'ne'.

and
```

² This advice is applicable for the 'www' repository only—feel free to write logs in your native language when committing in your project's Sources repository.

(HOME_LINGUAS): Add 'pa'.

This makes it easier for others to search for a particular change in the history.

If you add a binary file (for example, '.png'), do it with cvs commit -kb file. This turns off keyword substitution, which prevents RCS keywords like '\$Id\$' to get expanded, subsequently corrupting the file. See Section "Substitution Modes" in Version Management with CVS. More importantly, using '-kb' prevents corruption of the binary when people using CVS clients under Windoze checkout, modify the file, and then commit it with messed EOLs. (Unfortunately there are still committers using non-free operating systems—we cannot dictate what OS people use, but we can at least try to prevent damage.)

Although not absolutely compulsory, it is recommended that every team leader subscribes to www-commits@gnu.org. It is useful to examine the diffs of your own messages, if you miss something while inspecting the diff before the commit. In any case, a team leader should be subscribed to that list to avoid his own commit messages to be moderated. If you absolutely do not desire receiving all traffic, just disable mail delivery in Mailman's user interface.

3.2.3 Taking Advantage of Savannah

Every translation team should have a project in Savannah. There are some teams that use their own resources outside from Savannah; although there's no obligation to use Savannah for team work, the need for a Savannah project for each language is obvious: it's a standard way to find information for translation teams and their contacts.

Using external hosting facilities is sometimes justified—for example, some languages have a single mailing list for all free software-related translations, where all translators co-operate. Others have already established repositories and/or bug tracking systems where usual contributors already have access. Some team members prefer to work within the established infrastructure of a broad translation team (for whatever reason), and this is entirely acceptable. However, it is important to remember that regardless of the technical resources which a team decides to use, the responsibility of the team co-ordinator remains the same.

Those teams that are using Savannah have a broad variety of tools at hand: team membership management, documents, trackers (bugs, tasks and support), alerts, CVS (and any other VCS that Savannah supports), home pages, mailing lists, etc. How each team uses these resources is up to the team itself, but it often turns out to choose Savannah for nearly all of the team activities, as it requires almost zero work; the Savannah Hackers are happy to support us.

Whatever you (in your capacity as a team leader) decide, please do it with caution: some organizational decisions may become ineffective as time goes by, and some may not scale well when the team grows. If the team is young and has a couple of members, it is better to refrain from such decision and discuss them with all the members when their number grows. Two or three people do not need a rocket platform or complex wizardry to do their work.

The next sections contain suggestions about how a team can use the facilities provided by Savannah. It is not mandatory to follow them, they are just suggestions.

3.2.3.1 Managing Members

You should add active translators as members of the translation team, and remove them when they leave. Team members should have access to all of the project's resources, and tracking their number is one of the ways for web-translators to determine the status of the team.

It is OK if a particular contributor wants to translate an article or two and does not want to be engaged with the team on a long-term basis. In such situations, there is no need to add her as a member.

It is a good idea to mark inactive members, for example if there is no interaction (bug reports, new translations, updates to existing translations, proof-reading) for at least six months. You can do that by unmarking the 'On Duty' checkbox for the respective project member under

'Set Permissions'. Inactive members have absolutely the same rights as active ones—the only exception is that they don't count for the total number of members, and they appear separately on 'View Members'.

3.2.3.2 Homepage of The Team

Every Savannah project has a Web repository, which is, for technical and historical reasons, only CVS. By default it is mapped to http://www.gnu.org/server/standards/translations/lang; to add files to it first make a checkout, following the instructions at https://savannah.gnu.org/cvs/?group=www-lang.

It is recommended to describe all team-specific procedures, if there are any. That way, you can point potential team members to the corresponding page containing these instructions, instead of repeatedly explaining every volunteer separately.

All team-specific pages should follow the usual linking criteria (see http://gnu.org/server/standards/README.webmastering.html#pollinking and the FSF HTML Style Sheet Guidelines—http://gnu.org/server/fsf-html-style-sheet.html).

For historical reasons, team-specific materials were available in the 'www' repository, under adhoc locations as '/spanish', '/wwwsr', etc. These locations are deprecated, and the contents will be moved without warning to '/graveyard' in the 'trans-coord' Sources repository, following the original 'www' layout (that is, if there were any sub-directories, they will be retained).

3.2.3.3 Support Tracker

This tracker is supposed to be related to things about the *project management* itself, i.e. project members may report here missing functionality and/or features that requires the project admin(s)'s action. Do not use it for anything else as it quickly becomes confusing. It is OK to disable it if the team is small.

3.2.3.4 Tasks Tracker

This is a way to manage all sorts of tasks. They appear in the personal Savannah page of the assignee, so it is difficult to miss them out. It is possible to use this tracker to "announce" to the team members that a specific article should be translated. The one who volunteers may assign the task to herself.

Teams may use this tracker to avoid duplicate work, by declaring that they intend to work on a specific translation.

Feel free to organize the 'Tasks' management as you see fit.

3.2.3.5 Bugs Tracker

The 'Bugs' tracker is designed for tracking bugs. You can use for several purposes:

- Suggest readers to report bugs there.
- Use it for all kinds of internal team tasks.
- Forward bugs reported against *lang* translations in the 'trans-coord' project and assign them to the specific maintainer (who is supposed to be a 'www-lang' project member), if you have such policy.

3.2.3.6 Patch Tracker

This tracker doesn't make much sense for translation projects, as the original on which the translation is based is volatile and the translation patch is 100% guaranteed not to apply cleanly very soon after it is submitted. Even ignoring this detail, this specific feature is slowly marching towards complete deprecation, as there are much better ways to submit patches nowadays.

You should disable this feature, as it causes only confusion.

3.2.3.7 News Tracker

That is a way to inform newcomers and interested people (who visit the project page from time to time, or subscribe to the 'News' RSS feed) about a major change or event within the project.

You can also setup news entries to be sent to a mailing list (that's possible for the other trackers as well).

The purpose of this feature is informational—if members need to know about an important change (in practices, procedures, etc.), it is perfectly OK to announce it here. Some teams use it to announce new translations, which is also fine.

3.2.3.8 Managing Mailing Lists

You can create new mailing lists via the Savannah interface. However, this should be done after some thought. If the project membership is low (<= 10 members), there is no need to create more than one mailing list. If there is a general translation list common for all translators of the language (i.e. GNOME, GNUstep, KDE, and free software in general), there is no reason at all to create a list at Savannah.

You can redirect all messages generated by the trackers to any list (including those that are not on GNU servers).

3.2.3.9 Version Control Systems

An easy way to keep up with changes in the original articles and to manage continuous contributions is to keep all translations in the translation project's Sources repository. That way, it is easy to edit draft translations and install them in 'www' only when they're ready. It is also convenient to update the translation (merge any changes from the original) while it is still under review.

See Section "PO Files and Team" in *The GNUnited Nations Manual*, for more information.

Remember: A choice of a particular VCS is a sensitive matter—some modern ones provide compelling features, but they also bump the barrier for participation higher. The VCS is supposed to ease collaborative maintenance—if it eases only you, project members just won't use so that won't be a net win.

Web-based Systems

An alternative way to maintain translations is to use one of the existing online editors. There are plans to install a web-based system for managing '.po' files at Savannah, including online editing and statistics. Until it happens, teams who wish to use this functionality may setup such a server on a host of their own, or use one of the existing free hosting platforms such as Launchpad (http://translations.launchpad.net).

Here is a short and probably incomplete list of such systems:

- Pootle—http://translate.sourceforge.net/wiki/pootle
- Vertaal—http://code.google.com/p/vertaal
- Narro—http://code.google.com/p/narro
- Launchpad—https://dev.launchpad.net

If you decide to use such a system, please make sure that no translations are published in HTML format there.

Note that to keep the '.pot' files regularly updated (assuming such a web-based system runs msgmerge automatically), you'll have to take care of the one-way regular sync from the 'www' CVS repository.

3.2.4 Promoting Members As Co-leaders

When the team grows large and it becomes hard for a single person to manage, there is no problem to add another (or even another two) people to help. Note that a subsequently appointed team co-ordinator is not simply a *committer* with write access to the 'www' repository; she has full responsibilities just like a single leader, although the latter still remains the primary contact for the team.

If you'd like another person to act as a co-leader and help you with the management tasks, send a message to web-translators@gnu.org with her name and Savannah account. She has to be already a member of 'www-lang'.

The procedure for co-leaders is a simplified version of the one for a new team or taking over an existing team. See Section 3.1 [New Team], page 5.

To remove co-ordinators, please write to web-translators@gnu.org with details and rationale for the removal. Do not edit 'README.translations.html' yourself; this is a final formality step to be performed by the Translation Managers.

3.3 Reporting Team Status

Team leaders must send an annual report about the status of the team. A good report should include:

- General information about the team's accomplishments during the past year, like:
 - A list of new translations.
 - New members since the last report.
 - Current active members.
 - Solved problems and other issues, if any. (Usual bug reports and other improvements/fixes to the existing translations do not count as *problems* in this sense.)
- Current problems (technical or social), conflicts, and ideas for sorting them out.
- Anything else you consider important or worth mentioning.

The best time to send a report is near the end of the year, for example November. In any case, please do not send it later than December 15th, as the Translation Manager has to prepare a general report to the FSF, and it is better if it takes into account the reports of the team leaders.

If there is no sensitive information in the report and you feel like sharing it, you can send it to trans-coord-discuss@gnu.org (which is still a private mailing list). That way, other list readers may help with suggestions how to solve a particular issue. Informing each other about the progress improves the community spirit.

If you do not wish to share some information that is in the report, please send it to web-translators@gnu.org.

3.4 How To Retire Painlessly

When you feel you don't have the energy to manage the team successfully, or perhaps you start losing motivation, please inform web-translators@gnu.org. It would be substantially easier if you try to find a replacement or recommend a specific person—we will try to find someone in any case, but your judgment is important and it will be considered with priority.

An excellent way to step down is to do it with a "plan"—suggest the person you consider capable of doing the job as co-leader (see Section 3.2.4 [Co-leaders], page 13) and retire completely when she is absolutely ready to proceed without your further help and advice.

4 'trans-coord' Admins

This chapter is not yet written. The current admins know what to do, hopefully.

5 Details About The Translation Process

The purpose of this chapter is to summarize some odd and not so obvious details about specific parts of the gnu.org website. Most of them become well known as time goes by; however, practice shows that it is difficult to figure them out at once.

Some limitations and oddities are just historical remnants from old habits and previous incarnations of old (inefficient) translation and webmastering processes. Others are outright deficiencies (i.e. "bugs"), but no one has stepped in to correct them so far.

5.1 Migration To The New Style

Migration to the new style should be straightforward, and this is one of the problems GNUN set out to solve. If you have to migrate old-style translations, see Section "Migrating" in *The GNUnited Nations Manual*. If the old translation is HTML 2.0 (or 3.2), you still have to take care about the inner markup. Overall, it is substantially easier than doing all of it manually.

Subsequent migrations to newer (X)HTML standards and newer look and feel of the website are supposed to happen semi-automatically, although this manual will be updated as needed.

5.2 Summary of SSI #includes

The GNU Project's website uses SSI (Server Side Includes) to manage some common parts that are the same in many of the articles. With the help of GNUN their handling should be behind the scenes, but for some of them manual intervention is needed. Here is a (possibly incomplete) list of the #include's used:

'server/banner.html'

This is the file containing the menus, the FSF widget, and any visible announcements made from time to time. If a string gets "fuzzy" or "new" here, it will appear in English in all translations, until 'server/po/banner.lang.po' is updated. Note that some validation errors originate from an error in 'server/banner.lang.html'.

'server/footer-text.html'

This is a very short file currently containing the "back to top" link. Also translatable via GNUN.

'server/header.html'

The declaration that is included in literally every file. It is maintained manually, as it does not make much sense to put it under GNUN's control (there are no translatable strings). Remember to specify the proper xml:lang and lang attributes, and for RTL languages, the dir attribute. For example, the file 'header.ar.html' should contain this line:

<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="ar" lang="ar"
 dir="rt1">

'server/footer.html'

This is a very short and simple file (at least at the time of writing), containing another #include directive. It is maintained manually, so just add lang to the filename, in order the localized 'footer-text.lang.html' to be included.

'translations.include'

The list of translations for the homepage (and only the homepage). It is maintained manually; in order the link to a translation to appear on all of the homepages, it has to be present here.

'gnusflashes.include'

A portion of the most recent 3 news items from 'server/whatsnew.html', generated automatically. If your language does not have 'server/po/whatsnew.lang.po', this file will be used. Otherwise, if there is an existing localized homepage and you commit 'whatsnew.lang.po', the homepage will be rebuilt to include the translated 'gnusflashes.lang.include'.

'server/whatsnew.include'

Generated automatically, this file is included from 'server/whatsnew.html'. Translations are built automatically, and the localized 'gnusflashes.include' is derived from it.

```
'licenses/gpl-3.0-body.html'
'licenses/fdl-1.3-body.html'
```

'...' Some of the licenses have the text of the license itself separated in another file. This serves two purposes: 1) to provide a "standalone" HTML version of the license without the gnu.org style; 2) to prevent strings sneaking in the '.pot' files, as licenses have only unofficial translations, hosted elsewhere. Nothing special should be done about these SSI directives; the files generated by GNUN include them verbatim as they should not be translated.

'server/sidebar*.html'

These files are deprecated—they are remnants from an older design that lived shortly in the middle between the old classic design and the current one. If all translations are successfully migrated and none of them includes such files, you should delete them. You can use grep to check this.

The files 'header.html', 'banner.html', 'footer.html' and 'footer-text.html' in the 'server' sub-directory are what webmasters call "the server templates". These files are included in almost every article, translated or not. They are somewhat important, as an error made in translating them propagates everywhere. The server templates, the homepages, and whatsnew (a.k.a. "GNU News") are being rebuilt by GNUN whenever there is a change in the original English files; the GRACE variable has no effect for them. See Section "Runtime Variables" in *The GNUnited Nations Manual*.

5.3 How To Use Custom CSS

The file 'style.css' gets included in almost all the English articles. It includes two other files, which form the actual CSS style used. However, this style is seldom right for translations—many languages have much longer expressions, and that is natural. To include your own CSS, create a file 'style.lang.css' and add it after the original 'style.css' in your 'server/po/banner.lang.po', i.e.

```
# type: style
msgid "@import url('/style.css');"
msgstr ""
"@import url('/style.css');\n"
"@import url('/style.bg.css');"
```

Override only what is necessary and looks broken in your language; do not invent your own style. This is important for the consistency of the gnu.org website. A typical language-specific 'style.lang.css' file looks like this:

```
.inner { max-width: 65em; }
#logo{background:url(/graphics/topbanner.bg.png) no-repeat;}
#fssbox {font-size: 50%;}
```

This widens the menu and the area where the articles are displayed (because the menu entries are *much* longer than the English equivalents when translated), includes a localized logo, and makes the font size for the FSF widget twice smaller (because in this language, the translations are almost twice longer and displayed truncated, which is undesirable).

When creating your own 'style.lang.css', don't forget to include the license notice from the 'style.css', with a short comment.

5.3.1 Localizing The 'topbanner' Image

If you'd like the nice gnu image to be localized (i.e. "GNU Operating System" to appear in your native language, here are the steps:

- 1. Copy 'graphics/topbanner.svg' as 'graphics/topbanner.lang.svg' where lang is the language code, as usual. Edit the file with Inkscape or with a plain text editor such as GNU Emacs, translating "GNU Operating System". Then with Inkscape, save the file as 'graphics/topbanner.lang.png' (File -> Export Bitmap...). Then open the PNG image with the GIMP and flatten it (Image -> Flatten Image). Don't forget to save and cvs add the files¹.
- 2. Create a 'style.lang.css' at the toplevel directory, if it doesn't exist already. Normally, you would need only one line in it, namely:

#logo{background:url(/graphics/topbanner.lang.png) no-repeat;}

3. If not done already for other reasons, update 'banner.lang.po' to include the language specific 'style.lang.css'. See Section 5.3 [CSS], page 16.

If you feel uncomfortable manipulating images—don't despair! Send a plea for help to trans-coord-discuss@gnu.org, some people would be happy to help you. Failing that, write to www-discuss@gnu.org.

5.3.2 Specific Issues Related to RTL

Unfortunately, the http://gnu.org website does not have excellent support for RTL (right-to-left) languages, although best efforts are made. If your language is in this category, make sure to:

- Set the attribute dir="rtl" in the html element at 'server/header.lang.html'.
- You must have a custom CSS to override some of the pre-defined values. See 'style.ar.css' and 'style.fa.css' to understand how these two languages solve some of the problems. See Section 5.3 [CSS], page 16.

Important: Some articles contain their own <style> redefinitions, or style attributes in the form . In such situations, it is quite possible that the general language-specific CSS does not help, and the translation of this specific article does not look correct. Please write to trans-coord-discuss@gnu.org; if you have a working solution that works for both cases—so much the better. For general issues that affect your language and require a general solution, write to www-discuss@gnu.org or webmasters@gnu.org, precisely describing the problem.

5.4 What To Translate

The article http://www.gnu.org/server/standards/translations/priorities.html lists the most important essays to translate. In general, articles in the directories 'philosophy', 'gnu', 'copyleft' and 'licenses' are important. The others may be deferred for a time when a team completes most of the important translations, or they can be translated as a "rest"-in translators' parlance this means doing something in between which is typically easier to handle.

Do not translate articles under these directories:

 $^{^{1}}$ This advice applies to all new files, of course.

'software/pkg/'

These pages are maintained by the respective pkg maintainers. GNUN does not support them for the time being, as they reside in separate repositories. The procedures for contributing translations of such articles are not yet settled.

'brave-gnu-world'

The Brave GNU World initiative has been abandoned long time ago, and it's in a separate repository—thus not supported by the automatic GNUN build job.

'home.shtml'

There is not problem to translate this page, but don't make the mistake to pick it up as your first translation. It is modified often, sometimes intensively, and only active team members should take that road.

'server/whatsnew.html'

This is "What's New", also known as "GNU's Flashes", also known as "GNU News". Translate it only if the team has sufficient manpower to catch up—new entries appear immediately on the homepages. You might want to subscribe to trans-coord-news@gnu.org in case you maintain localized 'gnunews'.

5.5 When To CAPITALIZE

The English language has strict rules for capitalization of titles, chapters, acronym expansions and the like. They do not make sense for many other languages, but unfortunately, many translators *erroneously duplicate* the capitalization in their translation.

Examples for common (and correct) English capitalization is the title of the article "Why Software Should Be Free" or "Free Software Foundation" (FSF). However, in languages that do not have such grammar rules it is wrong to write "Dlaczego Oprogramowanie Powinno Być Wolne" (Polish) or "Fondation Pour Le Logiciel Libre" (French).

Another prominent and widely spread mistake is to write your own language with a capital letter in the translations-list when languages are written beginning with a small letter according to your own rules. In other words, it is right to write 'English' or 'Deutsch' (because in English and German languages are capitalized), but not 'Français' or 'Português'—write them as 'français' or 'português', respectively.

5.6 Language-specific Terminology

This is a very important topic, not yet covered by this manual.

6 Overview Of The Translation Process

In general, it is expected that all participants in the translation process apply common sense for all of the decisions (important or not) they are going to take in their capacity as a manager, team leader, or contributing member. Certainly, many decisions are not easy, and require some thought.

This manual is a work in progress—it is not set in stone, and it will never be finished—the ultimate goal is to constantly improve the translation process, and as a consequence, the documentation. Every participant in the process should be free to suggest modifications to the current procedures and suggestions how to improve the current state of affairs. Ideally, they should be accompanied with patches to the Texinfo source, but that's not mandatory. In any event, please write to trans-coord-discuss@gnu.org—the goal of this list is precisely to discuss improvements of the translation process.

6.1 Related Mailing Lists

Here is a short summary of the mailing lists relevant to the translation process, and a brief description about how they relate to the various participants in the process.

www-discuss@gnu.org

The basic discussion list of the GNU Webmasters. All team leaders are required to subscribe.

This is a private mailing list.

www-commits@gnu.org

Commits to the 'www' repository are sent here. All Translation Managers are required to subscribe. It is strongly recommended that team leaders subscribe—in any case they should, and mail delivery can be disabled personally.

This is a public mailing list, so everyone can subscribe and review the archives. The 'www' CVS repository is also public.

trans-coord-discuss@gnu.org

The main discussion list for the GNU Web Translators. Team leaders must subscribe, as errors from GNUN are mailed here. Team members are welcome to join as well, provided they are already members of 'www-lang'. If they want to subscribe with a different email address, a verification from the team leader is required.

This is a private mailing list, although there is no absolute reason for that. It may become public in the future.

trans-coord-news@gnu.org

This is a list for notifications about gnunews and GNUnited Nations releases. It is not mandatory to subscribe to it, although the traffic is very low. If you want to track only GNUN release announcements, subscribe to the 'gnun' topic via Mailman's user interface. Likewise, if you want to recieve only What's New updates, subscribe to the 'whatsnew' topic. In the near future, there will be automatic announcements for newly available English articles and translations.

This is a public mailing list.

trans-coord-devel@gnu.org

All development of GNUN happens here. Commits to the 'trans-coord' repository are also sent to this list.

This is a public list, and bug-gnun@gnu.org is an alias.

trans-coord-logs@gnu.org

All build logs from the various GNUN automatic builds are sent to this list, so it is not a very pleasant thing to be subscribed, especially if you are not interested in GNUN's internals. However, everyone can use the web archives to check the log why a particular article was not built at expected.

This is a public list.

6.2 Savannah Projects Membership

Participants in the www.gnu.org translations process normally have to be members of the following Savannah projects, depending on the case:

'www'

The main project which hosts the 'gnu.org' Web repository. Administrators are the Chief Webmaster, entrusted webmasters and the Translation Manager (in order to approve leader's applications). All team leaders (and co-leaders) should be members of this project.

Note that this project has no direct relationship with translators, although anything happening in 'www' directly affects them. The 'www' project is managed separately and has a different (entirely unrelated) process for approving contributors.

'trans-coord'

An organizational project especially created for coordination and improvement of the translation process. All team leaders are required to be members, as bugs reported to web-translators@gnu.org are often redirected to the 'trans-coord' 'Bugs' tracker.

The admins of this project are the GNU Web Translation Managers.

'www-lang'

All translation team leaders of the language *lang* should be members of the project 'www-lang'. The admins of the project are the team leader and the co-leaders, if any.

Appendix A GNU Free Documentation License

Version 1.3, 3 November 2008

Copyright © 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc. http://fsf.org/

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

0. PREAMBLE

The purpose of this License is to make a manual, textbook, or other functional and useful document free in the sense of freedom: to assure everyone the effective freedom to copy and redistribute it, with or without modifying it, either commercially or noncommercially. Secondarily, this License preserves for the author and publisher a way to get credit for their work, while not being considered responsible for modifications made by others.

This License is a kind of "copyleft", which means that derivative works of the document must themselves be free in the same sense. It complements the GNU General Public License, which is a copyleft license designed for free software.

We have designed this License in order to use it for manuals for free software, because free software needs free documentation: a free program should come with manuals providing the same freedoms that the software does. But this License is not limited to software manuals; it can be used for any textual work, regardless of subject matter or whether it is published as a printed book. We recommend this License principally for works whose purpose is instruction or reference.

1. APPLICABILITY AND DEFINITIONS

This License applies to any manual or other work, in any medium, that contains a notice placed by the copyright holder saying it can be distributed under the terms of this License. Such a notice grants a world-wide, royalty-free license, unlimited in duration, to use that work under the conditions stated herein. The "Document", below, refers to any such manual or work. Any member of the public is a licensee, and is addressed as "you". You accept the license if you copy, modify or distribute the work in a way requiring permission under copyright law.

A "Modified Version" of the Document means any work containing the Document or a portion of it, either copied verbatim, or with modifications and/or translated into another language.

A "Secondary Section" is a named appendix or a front-matter section of the Document that deals exclusively with the relationship of the publishers or authors of the Document to the Document's overall subject (or to related matters) and contains nothing that could fall directly within that overall subject. (Thus, if the Document is in part a textbook of mathematics, a Secondary Section may not explain any mathematics.) The relationship could be a matter of historical connection with the subject or with related matters, or of legal, commercial, philosophical, ethical or political position regarding them.

The "Invariant Sections" are certain Secondary Sections whose titles are designated, as being those of Invariant Sections, in the notice that says that the Document is released under this License. If a section does not fit the above definition of Secondary then it is not allowed to be designated as Invariant. The Document may contain zero Invariant Sections. If the Document does not identify any Invariant Sections then there are none.

The "Cover Texts" are certain short passages of text that are listed, as Front-Cover Texts or Back-Cover Texts, in the notice that says that the Document is released under this License. A Front-Cover Text may be at most 5 words, and a Back-Cover Text may be at most 25 words.

A "Transparent" copy of the Document means a machine-readable copy, represented in a format whose specification is available to the general public, that is suitable for revising the document straightforwardly with generic text editors or (for images composed of pixels) generic paint programs or (for drawings) some widely available drawing editor, and that is suitable for input to text formatters or for automatic translation to a variety of formats suitable for input to text formatters. A copy made in an otherwise Transparent file format whose markup, or absence of markup, has been arranged to thwart or discourage subsequent modification by readers is not Transparent. An image format is not Transparent if used for any substantial amount of text. A copy that is not "Transparent" is called "Opaque".

Examples of suitable formats for Transparent copies include plain ASCII without markup, Texinfo input format, LaTeX input format, SGML or XML using a publicly available DTD, and standard-conforming simple HTML, PostScript or PDF designed for human modification. Examples of transparent image formats include PNG, XCF and JPG. Opaque formats include proprietary formats that can be read and edited only by proprietary word processors, SGML or XML for which the DTD and/or processing tools are not generally available, and the machine-generated HTML, PostScript or PDF produced by some word processors for output purposes only.

The "Title Page" means, for a printed book, the title page itself, plus such following pages as are needed to hold, legibly, the material this License requires to appear in the title page. For works in formats which do not have any title page as such, "Title Page" means the text near the most prominent appearance of the work's title, preceding the beginning of the body of the text.

The "publisher" means any person or entity that distributes copies of the Document to the public.

A section "Entitled XYZ" means a named subunit of the Document whose title either is precisely XYZ or contains XYZ in parentheses following text that translates XYZ in another language. (Here XYZ stands for a specific section name mentioned below, such as "Acknowledgements", "Dedications", "Endorsements", or "History".) To "Preserve the Title" of such a section when you modify the Document means that it remains a section "Entitled XYZ" according to this definition.

The Document may include Warranty Disclaimers next to the notice which states that this License applies to the Document. These Warranty Disclaimers are considered to be included by reference in this License, but only as regards disclaiming warranties: any other implication that these Warranty Disclaimers may have is void and has no effect on the meaning of this License.

2. VERBATIM COPYING

You may copy and distribute the Document in any medium, either commercially or noncommercially, provided that this License, the copyright notices, and the license notice saying this License applies to the Document are reproduced in all copies, and that you add no other conditions whatsoever to those of this License. You may not use technical measures to obstruct or control the reading or further copying of the copies you make or distribute. However, you may accept compensation in exchange for copies. If you distribute a large enough number of copies you must also follow the conditions in section 3.

You may also lend copies, under the same conditions stated above, and you may publicly display copies.

3. COPYING IN QUANTITY

If you publish printed copies (or copies in media that commonly have printed covers) of the Document, numbering more than 100, and the Document's license notice requires Cover Texts, you must enclose the copies in covers that carry, clearly and legibly, all these Cover Texts: Front-Cover Texts on the front cover, and Back-Cover Texts on the back cover. Both

covers must also clearly and legibly identify you as the publisher of these copies. The front cover must present the full title with all words of the title equally prominent and visible. You may add other material on the covers in addition. Copying with changes limited to the covers, as long as they preserve the title of the Document and satisfy these conditions, can be treated as verbatim copying in other respects.

If the required texts for either cover are too voluminous to fit legibly, you should put the first ones listed (as many as fit reasonably) on the actual cover, and continue the rest onto adjacent pages.

If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material. If you use the latter option, you must take reasonably prudent steps, when you begin distribution of Opaque copies in quantity, to ensure that this Transparent copy will remain thus accessible at the stated location until at least one year after the last time you distribute an Opaque copy (directly or through your agents or retailers) of that edition to the public.

It is requested, but not required, that you contact the authors of the Document well before redistributing any large number of copies, to give them a chance to provide you with an updated version of the Document.

4. MODIFICATIONS

You may copy and distribute a Modified Version of the Document under the conditions of sections 2 and 3 above, provided that you release the Modified Version under precisely this License, with the Modified Version filling the role of the Document, thus licensing distribution and modification of the Modified Version to whoever possesses a copy of it. In addition, you must do these things in the Modified Version:

- A. Use in the Title Page (and on the covers, if any) a title distinct from that of the Document, and from those of previous versions (which should, if there were any, be listed in the History section of the Document). You may use the same title as a previous version if the original publisher of that version gives permission.
- B. List on the Title Page, as authors, one or more persons or entities responsible for authorship of the modifications in the Modified Version, together with at least five of the principal authors of the Document (all of its principal authors, if it has fewer than five), unless they release you from this requirement.
- C. State on the Title page the name of the publisher of the Modified Version, as the publisher.
- D. Preserve all the copyright notices of the Document.
- E. Add an appropriate copyright notice for your modifications adjacent to the other copyright notices.
- F. Include, immediately after the copyright notices, a license notice giving the public permission to use the Modified Version under the terms of this License, in the form shown in the Addendum below.
- G. Preserve in that license notice the full lists of Invariant Sections and required Cover Texts given in the Document's license notice.
- H. Include an unaltered copy of this License.
- I. Preserve the section Entitled "History", Preserve its Title, and add to it an item stating at least the title, year, new authors, and publisher of the Modified Version as given on the Title Page. If there is no section Entitled "History" in the Document, create one stating the title, year, authors, and publisher of the Document as given on its

Title Page, then add an item describing the Modified Version as stated in the previous sentence.

- J. Preserve the network location, if any, given in the Document for public access to a Transparent copy of the Document, and likewise the network locations given in the Document for previous versions it was based on. These may be placed in the "History" section. You may omit a network location for a work that was published at least four years before the Document itself, or if the original publisher of the version it refers to gives permission.
- K. For any section Entitled "Acknowledgements" or "Dedications", Preserve the Title of the section, and preserve in the section all the substance and tone of each of the contributor acknowledgements and/or dedications given therein.
- L. Preserve all the Invariant Sections of the Document, unaltered in their text and in their titles. Section numbers or the equivalent are not considered part of the section titles.
- M. Delete any section Entitled "Endorsements". Such a section may not be included in the Modified Version.
- N. Do not retitle any existing section to be Entitled "Endorsements" or to conflict in title with any Invariant Section.
- O. Preserve any Warranty Disclaimers.

If the Modified Version includes new front-matter sections or appendices that qualify as Secondary Sections and contain no material copied from the Document, you may at your option designate some or all of these sections as invariant. To do this, add their titles to the list of Invariant Sections in the Modified Version's license notice. These titles must be distinct from any other section titles.

You may add a section Entitled "Endorsements", provided it contains nothing but endorsements of your Modified Version by various parties—for example, statements of peer review or that the text has been approved by an organization as the authoritative definition of a standard.

You may add a passage of up to five words as a Front-Cover Text, and a passage of up to 25 words as a Back-Cover Text, to the end of the list of Cover Texts in the Modified Version. Only one passage of Front-Cover Text and one of Back-Cover Text may be added by (or through arrangements made by) any one entity. If the Document already includes a cover text for the same cover, previously added by you or by arrangement made by the same entity you are acting on behalf of, you may not add another; but you may replace the old one, on explicit permission from the previous publisher that added the old one.

The author(s) and publisher(s) of the Document do not by this License give permission to use their names for publicity for or to assert or imply endorsement of any Modified Version.

5. COMBINING DOCUMENTS

You may combine the Document with other documents released under this License, under the terms defined in section 4 above for modified versions, provided that you include in the combination all of the Invariant Sections of all of the original documents, unmodified, and list them all as Invariant Sections of your combined work in its license notice, and that you preserve all their Warranty Disclaimers.

The combined work need only contain one copy of this License, and multiple identical Invariant Sections may be replaced with a single copy. If there are multiple Invariant Sections with the same name but different contents, make the title of each such section unique by adding at the end of it, in parentheses, the name of the original author or publisher of that section if known, or else a unique number. Make the same adjustment to the section titles in the list of Invariant Sections in the license notice of the combined work.

In the combination, you must combine any sections Entitled "History" in the various original documents, forming one section Entitled "History"; likewise combine any sections Entitled "Acknowledgements", and any sections Entitled "Dedications". You must delete all sections Entitled "Endorsements."

6. COLLECTIONS OF DOCUMENTS

You may make a collection consisting of the Document and other documents released under this License, and replace the individual copies of this License in the various documents with a single copy that is included in the collection, provided that you follow the rules of this License for verbatim copying of each of the documents in all other respects.

You may extract a single document from such a collection, and distribute it individually under this License, provided you insert a copy of this License into the extracted document, and follow this License in all other respects regarding verbatim copying of that document.

7. AGGREGATION WITH INDEPENDENT WORKS

A compilation of the Document or its derivatives with other separate and independent documents or works, in or on a volume of a storage or distribution medium, is called an "aggregate" if the copyright resulting from the compilation is not used to limit the legal rights of the compilation's users beyond what the individual works permit. When the Document is included in an aggregate, this License does not apply to the other works in the aggregate which are not themselves derivative works of the Document.

If the Cover Text requirement of section 3 is applicable to these copies of the Document, then if the Document is less than one half of the entire aggregate, the Document's Cover Texts may be placed on covers that bracket the Document within the aggregate, or the electronic equivalent of covers if the Document is in electronic form. Otherwise they must appear on printed covers that bracket the whole aggregate.

8. TRANSLATION

Translation is considered a kind of modification, so you may distribute translations of the Document under the terms of section 4. Replacing Invariant Sections with translations requires special permission from their copyright holders, but you may include translations of some or all Invariant Sections in addition to the original versions of these Invariant Sections. You may include a translation of this License, and all the license notices in the Document, and any Warranty Disclaimers, provided that you also include the original English version of this License and the original versions of those notices and disclaimers. In case of a disagreement between the translation and the original version of this License or a notice or disclaimer, the original version will prevail.

If a section in the Document is Entitled "Acknowledgements", "Dedications", or "History", the requirement (section 4) to Preserve its Title (section 1) will typically require changing the actual title.

9. TERMINATION

You may not copy, modify, sublicense, or distribute the Document except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, or distribute it is void, and will automatically terminate your rights under this License.

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, receipt of a copy of some or all of the same material does not give you any rights to use it.

10. FUTURE REVISIONS OF THIS LICENSE

The Free Software Foundation may publish new, revised versions of the GNU Free Documentation License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. See http://www.gnu.org/copyleft/.

Each version of the License is given a distinguishing version number. If the Document specifies that a particular numbered version of this License "or any later version" applies to it, you have the option of following the terms and conditions either of that specified version or of any later version that has been published (not as a draft) by the Free Software Foundation. If the Document does not specify a version number of this License, you may choose any version ever published (not as a draft) by the Free Software Foundation. If the Document specifies that a proxy can decide which future versions of this License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Document.

11. RELICENSING

"Massive Multiauthor Collaboration Site" (or "MMC Site") means any World Wide Web server that publishes copyrightable works and also provides prominent facilities for anybody to edit those works. A public wiki that anybody can edit is an example of such a server. A "Massive Multiauthor Collaboration" (or "MMC") contained in the site means any set of copyrightable works thus published on the MMC site.

"CC-BY-SA" means the Creative Commons Attribution-Share Alike 3.0 license published by Creative Commons Corporation, a not-for-profit corporation with a principal place of business in San Francisco, California, as well as future copyleft versions of that license published by that same organization.

"Incorporate" means to publish or republish a Document, in whole or in part, as part of another Document.

An MMC is "eligible for relicensing" if it is licensed under this License, and if all works that were first published under this License somewhere other than this MMC, and subsequently incorporated in whole or in part into the MMC, (1) had no cover texts or invariant sections, and (2) were thus incorporated prior to November 1, 2008.

The operator of an MMC Site may republish an MMC contained in the site under CC-BY-SA on the same site at any time before August 1, 2009, provided the MMC is eligible for relicensing.

ADDENDUM: How to use this License for your documents

To use this License in a document you have written, include a copy of the License in the document and put the following copyright and license notices just after the title page:

Copyright (C) year your name.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ''GNU Free Documentation License''.

If you have Invariant Sections, Front-Cover Texts and Back-Cover Texts, replace the "with...Texts." line with this:

with the Invariant Sections being list their titles, with the Front-Cover Texts being list, and with the Back-Cover Texts being list.

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

If your document contains nontrivial examples of program code, we recommend releasing these examples in parallel under your choice of free software license, such as the GNU General Public License, to permit their use in free software.