

---

# Linux Installfest HOWTO

Eric (AKA Rick) Meyerhoff <rick-at-eworld3-dot-net>

2004-06-01

## Revision History

Revision 1.6	2012-01-01	EM
Annual review and update. Removed references to modems, floppy disks, floppy drives. Updated the GNU Free Documentation License to Version 1.3.		
Revision 1.5	2011-01-06	EM
Annual review and update.		
Revision 1.4	2010-01-01	EM
Annual review and update. Just changed the copyright date.		
Revision 1.3	2006-12-31	EM
Annual review and update. Just changed the copyright date and added AKA.		
Revision 1.2	2006-04-12	EM
Added the Translations section, corrected the section number references in the license and removed the reference to the defunct www.installfest.org.		
Revision 1.1	2004-09-04	EM
Added obfuscated email address.		
Revision 1.0	2004-06-01	EM
Initial release. Thanks to Tabatha "CTRL-I" Marshall for all her encouragement.		

## Abstract

This document provides some guidelines that should help you run a successful installfest.

## Table of Contents

Introduction .....	1
Copyright and License .....	2
Scope .....	2
Version .....	2
Translations .....	2
Disclaimer .....	2
Roles .....	3
Before, During and After .....	3
Before (preparation) .....	3
During (on the day of the installfest) .....	6
After (lessons learned) .....	7
A. Sample Forms .....	7
Data Sheet .....	7
Legal Protection .....	9
Release .....	9
Waiver .....	10
B. Useful Web Sites .....	11
C. GNU Free Documentation License .....	11

## Introduction

This document provides some guidelines that should help you run a successful installfest. For purposes of this document, an installfest is a gathering at which experienced Linux users assist less experienced

users with the installation and configuration of Linux distributions, and where Linux users can bring Linux systems to receive assistance with system problem remediation.

Please take from this document whatever you want. It is meant to be a guide, not a recipe that must be followed exactly to have a successful installfest. Any installfest where most of the people leave happy is a successful event.

## Copyright and License

Copyright (c) 2003 through 2012 Eric Meyerhoff. Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 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".

## Scope

In order to limit the scope of this document, there are some issues that will *not* be covered:

- While other activities may occur at the same time and in roughly the same location as an installfest, they will not be considered part of the installfest for the purposes of this document.
- This document does not include any discussion of technical issues related to the installation of any Linux distribution.
- This document does not currently contain any discussion of installfest server or network configuration, although such a discussion may be added to this document in the future. It may be more appropriate for such information to be contained in a separate HOWTO.
- This document does not contain any discussion of new user education.

## Version

The current version of this document can be found at The Linux Documentation Project (<http://www.tldp.org>) [<http://www.tldp.org>]

## Translations

You are welcome to translate this document into another language but please see the TRANSLATIONS section of the license for information regarding your responsibilities.

Also, please work with the helpful and kind people at The Linux Documentation Project (<http://www.tldp.org>) [<http://www.tldp.org>] so that you can contribute your translation to the project.

## Disclaimer

No liability for the contents of this document can be accepted. Use the concepts, examples and information at your own risk. There may be errors and inaccuracies, that could be damaging to your system. Proceed with caution, and although it is highly unlikely that accidents will happen because of following advice or procedures described in this document, the author(s) take no responsibility for damage claimed to be caused by doing so.

All copyrights are held by their by their respective owners, unless specifically noted otherwise. Use of a term in this document should not be regarded as affecting the validity of any trademark or service mark. Naming of particular products or brands should not be seen as endorsements.

# Roles

People involved in an installfest will assume one or more of the following roles

coordinator	contact for all other participants
host	has the connection to the location
sponsor	represents an organization that provides the location, equipment, network, materials, food, beverages, etc. to the installfest
user	needs assistance installing a Linux distribution or solving a specific problem
receptionist	<ul style="list-style-type: none"><li>• greets people as they come in, gives them a name tag and has them sign a waiver</li><li>• can direct people to the restrooms, the nearest computer store</li><li>• orders food and beverages</li></ul>
tier 1 support	people who are knowledgeable about Linux and are willing to share their knowledge and provide hands-on assistance to users
tier 2 support	sets up and maintains network hardware and services (DNS, DHCP), mirrors of Linux distributions

## Before, During and After

This HOWTO has three sections for things you should think about or do *before*, *during* and *after* the day of the installfest. It is assumed that you will be having installfests periodically and hopefully regularly.

### Before (preparation)

#### date, time and duration

In order to reach the most people, fests should be held on both weekends and weekdays. The time of day is not as important as the duration of the fest, which should be 6 to 10 hours. Here is why:

- some people will not be able to arrive when the fest starts
- it takes time to get systems moved in, connected, disconnected and moved out of the working area
- making sub-systems like sound, printers and other peripherals function properly sometimes takes as long as a Linux installation
- some people want to get some life out of older CPUs but OS installation takes longer on slower machines

#### location

Make sure that the place where your installfest will be held has:

strong tables	Each table may have to hold multiple monitors and computers.
restrooms	

chairs	People will want to sit down since they will be at the fest for several hours.
Internet access	Some people will want to know that they can access the Internet from their computer. Some people will need to download drivers or other software. A lot of helpful information is available on the Net. There is a list of Web sites at the end of this document.
an address that is easy to find	A map and simple directions will help.
an easy way to get hardware in and out	How will people bring their hardware from their cars to the installation room? Are carts and elevators available?
sufficient AC power	<p>Try to make sure that you have enough power for the number of computers that you expect people to bring. You do not want people to suddenly lose power because one person too many turned on his or her computer.</p> <p>How much power does a computer need? Laptops need about 0.5 amps. For a desktop/tower/workstation type of computer the amount of power needed depends on the monitor, number of disk drives, etc. Basically though, if everything is connected to one power strip, then they need at most 3 to 4 amps at the moment that the power is turned on and 1.5 to 2 amps while they are running.</p> <p>You should try to have access to the circuit breakers either directly or through readily available maintenance staff.</p>

If you are lucky you will be able to make arrangements to regularly hold installfests at a few locations that meet your needs. If possible you should hold your fests at a variety of locations such as technical colleges, universities and businesses because Linux is for everyone.

## administration

Linux distributions (distros)	Make sure that you will have several copies of the latest versions of the major Linux distributions available on CD. To learn which distributions to make available, please do a little research on the Web sites listed in the appendix of this document.
installfest server	<p>You may want to consider setting up a server for:</p> <ul style="list-style-type: none"><li>• DNS</li><li>• DHCP</li><li>• mirrors of distributions</li></ul> <p>You should provide multiple methods of accessing the distributions on the server:</p> <ul style="list-style-type: none"><li>• FTP</li><li>• rcp</li><li>• HTTP</li><li>• CD burning</li></ul>

- NFS

In order to conserve disk space you can create a virtual CD-ROM jukebox. See Randolph J. Tata's "CDServer-HOWTO" (<http://talcon.com/cdserver-howto/> [<http://talcon.com/cdserver-howto/>]) and Jeremy Impson's article "Build a Virtual CD-ROM Jukebox" (<http://www.linuxjournal.com/article.php?sid=5639> [<http://www.linuxjournal.com/article.php?sid=5639>]) for more information.

Hopefully someone will create a new Linux distribution to make it easy to set up such a server.

name tags

Something similar to the classic "hello my name is:" stickers.

misc. office supplies

You may want to make some of the following items available: scratch paper, ball-point pens, sharpies, scissors, stapler, duct tape, packing tape, blank CD-R media.

advertising

People will need to know:

- when and where the installfest will be held
- what to expect: waiver, soft drinks, pizza
- that if they wish to install a Linux distribution should bring every part of their computer system: monitor, keyboard, mouse, speakers, USB devices, power strip. Support people will need all the components to make sure everything is functioning properly.
- that they may want to bring blank CD-R media to trade for copies of distributions on CD-R (they should determine the number of disks needed for each distribution)

Here are some places to consider advertising:

- local computer user Web sites
- local news media
- local computer retail stores

minimum system requirements

Some people will want to install Linux on very old/slow systems in an attempt to make them usable. This is OK, but there are limitations. Please look at the distributions area of [www.linux.org](http://www.linux.org) [<http://www.linux.org>] for minimalist distributions. You may want to include minimum system requirements in your installfest advertisement so that people do not show up with an old machine, hoping to turn it into a power-house but leave disappointed.

networking equipment

someone will need to bring network switches and cables

signage

You should have a few signs posted to help people find their way around the location and provide other information. Some examples are:

- main entrance: So people know that they have found the right location.
- reception desk: People will need to find the reception desk from the main entrance.
- installation room: People will need to know how to get to the installation from the reception desk.
- rest rooms
- networking information

#### food and beverages

Due to the duration of an installfest you should consider the availability of food and drink.

Pizza usually works out well. Tell people that you will be collecting a specific amount of money at the door for pizza. If they *do not* want to share some pizza, then they *do not* need to pay. In order to know who has paid, use an ink stamp to mark their hand. Do not forget paper plates and napkins.

If there are no vending machines at the location you may want to provide soft drinks, including water and possibly coffee during the fest. If you do provide drinks, you should consider selling them at cost.

## During (on the day of the installfest)

### 1. before the starting time

The people who run the fest need to be at the location at least one hour before the fest is to begin. They will need time to set up the network, installfest server, power system, signage, etc.

### 2. at the door/reception

Depending on how you have decided to operate your fest, the receptionist will:

- ask users to sign a waiver
- ask users to fill out a data sheet
- ask all attendees to contribute money for food and/or drinks
- give all attendees name tags

### 3. during

Since you are using this HOWTO, everything will work out fine. People should understand that it is OK to ask around for help.

### 4. after the fest is finished

Make sure that all areas are cleaned up because you may want to use the location again and you do not want to give the location owner a bad impression. Look for: items people have forgotten, items that people brought as "give aways", drink cans and cups.

## After (lessons learned)

We would like to continually improve this document and everyone's installfest experience, so please share with us:

- what went wrong?
- what went well?
- new ideas?
- How this document helped or hindered you.

## A. Sample Forms

### Data Sheet

This data sheet is intended to be filled out by users when they arrive at the reception area.

#### *Installfest Data Sheet*

This form is *for your benefit!* It will help you and anyone who works on your computer to make reasonable decisions. Please complete one form per computer. If you don't know the answer now, just wait until you do.

Your name: \_\_\_\_\_

CPU type: \_\_\_\_\_ speed: \_\_\_\_\_ megahertz / gigahertz

RAM: \_\_\_\_\_ megabytes

Hard drive 1: \_\_\_\_\_ gigabytes/terabytes 2: \_\_\_\_\_ gigabytes/terabytes 3: \_\_\_\_\_ gigabytes/terabytes 4: \_\_\_\_\_ gigabytes/terabytes

Video card: \_\_\_\_\_

Monitor: \_\_\_\_\_

Sound card: \_\_\_\_\_

Does this computer have (circle all that apply):

- CD or CD-RW drive
- DVD drive
- Blu-ray drive
- network interface
- printer
- other: \_\_\_\_\_

Which of these do you want to do:

1. Install Linux:

What distribution? \_\_\_\_\_

Do you need disks? Yes / No

2. Fix one or more specific problems with an installation of Linux:

What distribution is installed? \_\_\_\_\_

List the software tool(s) and/or hardware that you need help fixing:  
\_\_\_\_\_

3. Other, please explain: \_\_\_\_\_

Do you want to (circle one):

1. Dual-boot Linux and an already-installed OS?

What is the name of other O.S.? \_\_\_\_\_

2. Install Linux as the only O.S.?

3. Install multiple Linux distributions?

What do you want to use the computer for? (circle all that apply)

- Internet access and usage
- learn Linux
- firewall
- server
- writing documents
- music/image storage
- other (please explain):

What is your skill level with (circle all that apply):

1. Linux/Unix:

first-timer

rookie beginner

intermediate

advanced

guru

2. computer hardware:

first-timer



rookie beginner

intermediate

advanced

guru

3. \_\_\_\_\_ :

first-timer

rookie beginner

intermediate

advanced

guru

## Legal Protection

You may want to consider having users sign some kind of agreement before any work is performed on their systems. Such a document will make it clear to users exactly what they can and cannot expect from the installfest.

If you do decide to use one of these documents, please have it reviewed by a lawyer in your area.

If you do have an agreement approved by a lawyer, please contribute to the Linux community by sending a copy to the lead author of this HOWTO so that it may be included in future versions.

## Release

The following is a significantly modified version of a form posted on David Pitts's Web site.

### INSTALLFEST RELEASE FORM

By signing this release agreement between you and the group holding the installfest (members of the \_\_\_\_\_ Linux User's Group, hereinafter referred to as Installers), you give up certain legal rights. Therefore, you should read the agreement carefully. If you have any questions about the legal effect of this agreement, you should consult an attorney and not any of the Installers. Please be aware that you may not participate in the installfest event unless you have signed this agreement. By signing this release agreement, you acknowledge the following:

1. That your signing this agreement is partial consideration for the services provided by Installers.
2. That Installers do not promise that the work done on your computer equipment will be successful. An Installer will help you attempt to install, configure, or otherwise get the Linux operating system to work on your computer equipment. However, because of possible defects in computer software or computer hardware, including improperly configured computer hardware, not every attempt is successful.
3. That the attempt to install, configure, or otherwise get the Linux operating system to work on your computer equipment has inherent dangers that no amount of care, caution, instruction, or expertise can eliminate.

4. That any attempt to install, configure, or otherwise get the Linux operating system to work on your computer equipment, especially including any attempt to partition or re-partition your computer's hard drive, may result in the loss of some or all of the data stored on that hard drive. That you are hereby advised that you should back up all important data before the attempt to install, configure or otherwise get the Linux operating system to work on your computer equipment.
5. That an installfest is an inherently chaotic event at which many computer components, peripherals and systems are present; therefore, you are responsible for the security of your property.
6. That you are expressly assuming the risks of the dangers set forth above.
7. That by signing this release agreement, you hereby forever release the Installers from any legal liability they might have arising from the attempt to install, configure, or otherwise get the Linux operating system to run on your computer equipment. That this release includes, but is not limited to, any losses caused by the negligence of any Installer who attempts to install, configure or otherwise get the Linux operating system to work on your computer.

By signing below, you agree that you understand the terms above:

Your:

signature: \_\_\_\_\_

name: \_\_\_\_\_

month: \_\_\_\_\_ day: \_\_\_\_\_ year: \_\_\_\_\_

Witness: signature: \_\_\_\_\_

name: \_\_\_\_\_

month: \_\_\_\_\_ day: \_\_\_\_\_ year: \_\_\_\_\_

## Waiver

The following is Copyright 1998 Chris Halsall and the Victoria Linux Users Group [<http://www.vlug.org/>]. Reuse permitted for Open Source Software promotion.

### Linux InstallFest Waiver

I, \_\_\_\_\_ acknowledge that I am participating in the "Linux Install Festival" entirely at my own risk. I assume responsibility for the integrity of the data on my computer system, have backed up all important data, and I will hold the volunteer helpers blameless for any damage to my computer system, to my data, or any other damages or liability that may result through my participation in this event. I further agree to be responsible for any licensing fees, shareware registrations, or other licensing requirements that may apply to the software I will receive. The purpose of this event is to distribute software packages that are Open Source, legally distributable with no charge to the user.

Every reasonable effort will be made to ensure that my system operates correctly before and after the installation, but I recognize that, because the software installed at this event is licensed free of charge, the copyright holder(s) and volunteer helpers and/or other parties provide this material "as is" without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of this software, and the accuracy of its associated documentation, is with me. Should this software or its associated documentation prove defective, I assume the cost of all necessary servicing, repair, or correction.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## B. Useful Web Sites

These Web sites may be useful in planning and running an installfest:

- The Linux Documentation Project ([www.tldp.org](http://www.tldp.org)) [<http://www.tldp.org>]
- [www.linux.org](http://www.linux.org) [<http://www.linux.org>]
- [www.distrowatch.com](http://www.distrowatch.com) [<http://www.distrowatch.com>]

## C. GNU Free Documentation License

Version 1.3, 3 November 2008

Copyright © 2000, 2001, 2002, 2007, 2008 Free Software Foundation, Inc. [<http://www.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. Secondly, 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 dif-

ferent 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 Copyleft [<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 © 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.