Ponysay

A cowsay wrapper for ponies. Covers ponysay version 1.2.

by Mattias Andrée (maandree)

This manual is for ponysay (version 1.2), Copyright © 2012 Mattias Andrée

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, with no Front-Cover Texts, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

Table of Contents

1	Overview				
2	2 Invoking ponysay				
3	3.1 F 3.2 P 3.3 R	vanced usage of ponysay. Cortune cookies. Conification Cunning on TTY Cunning on screen.	3 3		
4	Env	vironment variables	4		
5	5.1 T	nitations Cerminals Cowsay	6.1		
6	6.1 R	bblems and requests	6		
7	$\mathbf{De}_{\mathbf{j}}$	pendencies	7		
	7.2 C 7.3 P	Required runtime dependencies Optional runtime dependencies Cackage building dependencies Dependencies for pony providers	7		
8	Ins	$\operatorname{talling} \ldots \ldots \ldots \ldots$	8		
	8.2 A 8.3 G	From upstream Arch Linux Gentoo Linux Debian GNU/Linux and Ubuntu	8		
9	Ext	tensions	9		
		onyquotes4ponysaymsponies4ponysay			
10	0 In	ner workings 1	0		
	10.2 10.3	Pony anatomy	0.0		
1:	1 C	0 ntributing	1		
		Providing ponies			

Appendix A	Ponysay constributors	12
Appendix B	Ponysay license	13
Appendix C	GNU Free Documentation License	14
Appendix D	Concept index	21

1 Overview

ponysay displays an image of a My Little Pony pony saying some text provided by the user in a terminal. It is a wrapper for cowsay. If message is not provided, e.g. by piping, it accepts standard input. The pony saying the given message is printed on standard output.

ponythink is to ponysay as cowthink is to cowsay.

2 Invoking ponysay

The format for running the ponysay program is:

```
ponysay [option...] [message]
ponythink [option...] [message]
```

Running ponysay will print a speech balloon, ponythink will print a thought balloon. Otherwise ponysay and ponythink is the same thing.

ponysay supports the following options:

'-h' Show summary of options.

'-v' Show version of program.

'-f PONY' Specify the pony that should printed, this can either be a file name or a pony name printed by ponysay -1. If it is a file name with a relative path and does not include a '/', it must begin with './', this is a cowsay issue. This option can be used multiple times to specify a set of ponies from which one will be selected randomly. If no pony is specified one will be selected randomly.

'-q [PONY...]'

This option requires the extension ponyquotes4ponysay. By using this option, a pony will be printed with quotes from her in My Litte Pony: Friendship is Magic. The pony will be selected randomly, at least one pony is added as an argument after -q.

'-W COLUMN'

Specify the screen column where the message should be wrapped, this is by default 40, which is inherited from cowsay.

- '-1' Lists all installed ponies. If the extension ponyquotes4ponysay is installed the ponies which have quotes, i.e. can be used with the -q option, will be mark by being printed in bold or bright (depending on the terminal.)
- '-L' Lists all installed ponies. If the extension ponyquotes4ponysay is installed the ponies which have quotes, i.e. can be used with the -q option, will be mark by being printed in bold or bright (depending on the terminal.) This options differs from -1 by printed symonym ponies (symbolic links) inside brackes after their target ponies.

If neither -q is used nor any *message* is specified, ponysay will read the message from stdin (standard input); however, if no arguments are used that nothing is piped to stdin, a help message will be printed. If you want to use ponysay without arguments and enter the message by hand, you can run cat | ponysay.

3 Advanced usage of ponysay.

3.1 Fortune cookies

If you have fortune installed – this program may be named fortune-mod in your GNU/Linux distributions package reposity – you can run fortune | ponysay to get a random pony reading a random fortune cookie.

By adding fortune | ponysay to the end [easiest way] of your ~/.bashrc – or equivalent for your shell if use do not use GNU Bash (standard shell for most distributions now adays) – you will get the effect described in the previous paragraph every time you open a terminal.

3.2 Ponification

You can ponify text (i.e. replaces words search as "everyone" with "everypony") by using fortune | ponypipe instead of using fortune. ponypipe can be downloaded from https://github.com/maandree/ponypipe. Alternatively use can use pinkie (or pinkiepie), which can be downloaded from https://github.com/maandree/pinkie-pie, which is just fortune | ponypipe. There is also a large sed script, similar to ponypipe: http://www.reddit.com/r/mylittlelinux/comments/srixi/using_ponysay_with_a_ponified_fortune_warning/

3.3 Running on TTY

If you use TTY and have a custom colour palette, you should also add to your ~/.bashrc, before fortune | ponysay:

```
[[ "$TERM" = "linux" ]] &&
  function ponysay
  {   exec ponysay "$@"
      #RESET PALETTE HERE
}
```

3.4 Running on screen

screen will adapt ASNI colour escape sequencies to your terminal's capabilities. This means that is your terminal reports itself as xterm in \$TERM it ponies will lose colours; they will only use the lower 16 colours instread of the top 240 colours. By default, almost all X terminal, including xterm and mate-terminal reports themself as xterm in \$TERM, and some reports their actual name in \$COLORTERM. So before openning screen you use set \$TERM to xterm-256color, if you are using a terminal with support for xterm's 256 colours; this can be done by adding to your ~/.bashrc:

```
[[ "$TERM" = "xterm" ]] &&
  function screen
  {   export TERM="xterm-256color"
      exec screen "$0"
}
```

4 Environment variables

ponysay supports the follow environment variables:

'PONYSAY_BOTTOM'

Under TTY (Linux VT), if the output is larger the the screen's height, only the beginning is printed, leaving two blank lines. If you want the buttom to be printed rather the the beginning you can export PONYSAY_BOTTOM with the value yes, y or 1

'PONYSAY_SHELL_LINES'

Under TTY (Linux VT), if the output is larger the the screen's height, two lines are left blank. If you want more, or less, blank lines you can export PONYSAY_SHELL_LINES with the value of how many blank lines you want. Naturally this takes effect if the output is not actually larger than the screen.

'PONYSAY_FULL_WIDTH'

You can export PONYSAY_FULL_WIDTH with the value yes, y or 1, if you do not want the output to be truncated on the width to fit the terminal.

'PONYSAY_TRUNCATE_HEIGHT'

Export PONYSAY_TRUNCATE_HEIGHT with the value yes, y or 1, if you want to truncate the output on the height even if you are not running ponysay under TTY.

'PONYSAY_COWSAY'

'PONYSAY_COWTHINK'

If you want to use another program than cowsay (the first cowsay found in \$PATH), you can export PONYSAY_COWSAY with the value of that program. If, and only if, PONYSAY_COWSAY does not have any value, cowsay is patch with use utf8; to the beginning. The use utf8; patch is introduced to make it easier to customise cowsay. PONYSAY_COWTHINK will be used instead of PONYSAY_COWSAY if you run ponythink.

See Section 9.2 [kmsponies4ponysay], page 9 for additional environment variabled used by the extension kmsponies4ponysay.

5 Limitations

5.1 Terminals

Ponysay works perfectly on xterm, xterm like terminals including putty, settings may however need to be customised for Unicode Character Set (UCS) support, but less well, depending on font, on VTE based terminals including mate-terminal.

On Linux's native terminal Linux VT (TTY) it works less well, and not good at all with Kernal Mode Settings (KMS) support. See https://github.com/erkin/ponysay/issues/1 for more information. ponysay clears the screen before printing to TTY, this is because if your graphics driver supports KMS, the colours will be messed by when the ponies position moves on the screen, this is also reason why the output is truncated on the height in TTY by default.

Due to extreme limitations in 9term ponysay will never be able to run on it.

Most terminals have support for 256 colours, we do however only use the top 240 colours; this is because the lower 16 colours are usally, in contrast to the top 240, customised. We assume that the top 240 colours have their standard values. In TTY with KMS support we dot have any actual (except for 2^{24} + full transparency.)

5.2 Cowsay

When cowsay determines the length of a word it measures in number of bytes (in UTF-8), therefore non-ASCII words will malformat the balloon with the message.

Further, cowsay does not recognise ANSI escape sequences, therefore, using colours and text styling in messages will also malformat the balloon with the message.

cowsay does not support balloon, including the link between the message and the pony, customisation, other than using cowthink. However you can modify cowsay (written perl, so you can edit the installed files) to make the balloon look different, maybe using box drawing characters.

cowsay does support setting the minimum size of the balloon, both directions on the balloon—pony links. or any other placement of the balloon than at the top to the left.

cowsay's word wrapping handles single line breaks as normal blankspaces, this messes up messaged created with programs seach as figlet and TOIlet.

6 Problems and requests

6.1 Reporting bugs

If you find a bug in ponysay, install the last version from https://github.com/erkin/ponysay, and if it is still present, please report it at https://github.com/erkin/ponysay/issues. Please be as descriptive as possible, as it will help us verify it solve it faster.

6.2 Requesting ponies

If you want I specific pony added, ask us at https://github.com/erkin/ponysay/issues and we will add it. To speed the up the process, if possible, supply good pictures. Full visibly, transparent background, and pixelated are the properties that makes a picture good.

7 Dependencies

7.1 Required runtime dependencies

'bash' Required for the main script [file: ponysay].

'cowsay' This is a wrapper for cowsay.

'coreutils'

The main script [file: ponysay] uses stty, cut, ls, cat, sort, readlink, pwd, head

'sed' Used to remove .pony from pony names when running ponysay -1 and ponysay -L.

'perl' Required to run ponysay -1 and ponysay -L.

7.2 Optional runtime dependencies

'ponyquotes4ponysay'

For support of My Little Pony quotes with associated pony: the -q option. It can be downloaded at https://github.com/maandree/ponyquotes4ponysay.

Since version 1.2, this module is included in ponysay. You can edit ponysay's Makefile to remove it.

7.3 Package building dependencies

'gcc' Used for compiling ponysaytruncater.c.

'gzip' Used for compressing manpages.

'make' Required to run the make script.

'coreutils'

The make script uses install, unlink, rm, ln, mkdir and cp.

'git' Required for submodules.

7.4 Dependencies for pony providers

'make' Required to run make -B ttyponies'.

'coreutils'

In and readlink are used in the ttyponies subscript.

'bash' Used in the ttyponies subscript.

'util-say'

Used by make ttyponies to build ttyponies from xterm ponies. It can be downloaded at https://github.com/maandree/util-say.

8 Installing

8.1 From upstream

Before installing ponysay, make sure your system have the packages listed under Section 7.1 [Required runtime dependencies], page 7 and Section 7.3 [Package building dependencies], page 7 installed.

Tarballs can be downloaded at https://github.com/erkin/ponysay/tarball/master for bleeding edge, or from https://github.com/erkin/ponysay/tags for releases.

If you have git you clone the project URL https://github.com/erkin/ponysay.git.

In the terminal,cd into the ponysay directory and execute make install. This will install ponysay into the /usr, meaning you may need to run make install as root, e.g. by running sudo make install.

Now you will be to use ponysay, run: ponysay "I am just the cutest pony!", or if have a specific pony in your mind: ponysay -f pinkie "Partay!~".

ponysay comes with this info manual and a manpage in section 6, man 6 ponysay (or just man ponysay). The manpage is also available in Spanish: man -L es 6 ponysay.

8.2 Arch Linux

The official Arch Linux package repositories contains ponysay as community/ponysay. The Arch Linux User Repository (AUR) contains a bleeding edge git version of ponysay as ponysay-git.

8.3 Gentoo Linux

Gentoo users can use the overlay https://github.com/etu/aidstu-overlay, which contains ponysay as games-misc/ponysay.

8.4 Debian GNU/Linux and Ubuntu

A .deb file is available at http://roryholland.co.uk/misc.html#ponysay, and a PPA can be found at https://launchpad.net/~blazemore/+archive/ponysay.

9 Extensions

Ponysay does not support extensions, per se, but rather have optional features that are enabled when other packages are installed.

9.1 ponyquotes4ponysay

ponyquotes4ponysay is a package that adds support for MLP:FiM quotes that are displayed with the associated ponies. See Chapter 2 [Invoking ponysay], page 2 for more information. ponyquotes4ponysay can be downloaded at https://github.com/maandree/ponyquotes4ponysay.

As of version 1.2 ponyquotes4ponysay is included in ponysay, but can easily be removed.

9.2 kmsponies4ponysay

kmsponies4ponysay is an extension for TTY users that have a custom TTY colour palette and KMS support. KMS is supported on must computers, but due to lack of published specifications Nvidea drivers does not support KMS. kmsponies4ponysay can be downloaded at https://github.com/maandree/kmsponies4ponysay.

To use this extension your ~/.bashrc (or equivalent for your shell) must keep track of your colour palette, it is not possible for a program to ask to terminal. Either the shell should export a palette string to \$PONYSAY_KMS_PALETTE or you should export a command to can get the palette string to \$PONYSAY_KMS_PALETTE_CMD. The palette string should be the stream which sets the colour palette to the terminal when echo:ed; preferably, to increase speed and reduce cache usage, it should be consistent everytime it is exported for every colours palette. So you may want to keep it sorted, always be in either upper case or lower case, and not contain an character that is not used to set the colour palette.

Assuming you have a function in your ~/.bashrc, to reset the colour palette to what you set it to last time in the terminal, named reset-palette, your ~/.bashrc should, for example, contain:

```
[[ "$TERM" = "linux" ]] &&
  function ponysay
  {    export PONYSAY_KMS_PALETTE="'reset-palette'"
       exec ponysay "$0"
}
```

10 Inner workings

10.1 Pony anatomy

The pony files are cow files used by cowsay, they are partial Perl-scripts that assign a value to a scalar variable named \$the_cow. The files use a predefined scalar named variable named \$thoughts, these are used to create a link between the message and the pony. The message (and the balloon) it self is printed by cowsay and is not definied in the pony files.

The pony images consists of white space, lower half blocks [U+2584], upper half blocks [U+2580] and ANSI colour sequences (CSI m), and, in TTY, colour value change sequences (OSI P).

10.2 Printing in TTY with KMS

Since Linux VT (TTY) does not have capabilities for returning the position of the cursor, the screen must always be cleared before printing the ponies to make sure the pony's colours is not lost, i.e. reduced to mare 16 colours, during print. The colours are reduced if the pony's position on the screen is changed. This is only relevant with KMS support. The clear the screen we print "\e[H\e[2J" (\e is ESC) in at beginning. "\e[H" places the cursor at the beginning of the screen, and "\e[2J" clears everything on the screen after, and including at, the cursor. If we would use "\ec" (that is a reset), we would also turn off num. lock and caps. lock.

10.3 Truncation

Ponysay supports three type of output truncations, cutting away overflow on the right and truncation the height by either keeping the bottom or keeping the top. By default the latest is enabled under TTY, cutting away overflow on the right is always enabled by default.

Truncating the height in TTY is required under Kernel Mode Settings (KMS) support to keep the colours from being messed up ad the ponies is moved in the screen during print; this done either by piping to head (keeps the top) or by piping to tail (keeps the bottom.) head and tail takes as argument the number of lines to keep at most.

The size of the terminal, measured in characters, is fetched from stty size, which returns HEIGHT WIDTH, and cut it the used to get either the height or the width. This required on GNU Coreutils; earlier tput rows and tput cols were used, this however required, the only de facto standard, package ncurses, some shells have environment variables for this.

For truncation the width, we have a custom program, named ponysaytruncater, that is installed to /usr/lib/ponysay/truncater. It recognised UTF-8 ANSI escape sequences, including OSI P and CSI m, which is essential for the truncation to be correct. It also expands tabs to every eight coloumn and resets the background colour when needed, and writes ANSI escape sequences that are on the left side of the truncation. The truncater stops CSI sequences on the first ASCII letter ([a-zA-Z]), but also stops escape sequences after the first character after the initial escape if it is not either [(CSI) or] (OSI). For support UTF-8, to handles all bytes that do not match 10xxxxxx as beginning of a character.

10.4 Languages

Ponysay is written primarily in GNU Bash shell script (POSIX compliant); the truncater is however written in C, because it is simple, fast, does not pose addition dependencies, and is easy to do byte hacking in.

Sometimes shell is too slow, in these cases [that exist today] Perl is used; Perl is already required by cowsay, is similar to shell, but also supports hash tables. [maandree: I actually learned Perl just for this.]

11 Contributing

11.1 Providing ponies

Most pony images are browser ponies or desktop ponies, browser ponies is a port of desktop ponies, implementing it in JavaScript. Browser ponies are available at https://github.com/panzi/Browser-Ponies. Desktop ponies are available at http://desktop-pony-team.deviantart.com/.

There is also a collection of ponies that are not yet pixelated in a Java reimplementation: https://github.com/maandree/unisay/tree/develop/dev/newponies

There is a checklist named "pony-checklist" at the top level of the project directory. You can use the check which ponies are added and which are not.

New ponies can be created from regular images by using util-say, which is available at https://github.com/maandree/util-say. img2xterm (https://github.com/rossy2401/img2xterm) was used earlier, but util-say tries do optimise the images in some aspects: as good as possible for low capability terminals, tries to place the pony-balloon link, displayed as good as possible when marked in the terminal (somewhat compromised by the first aspect,) and same width on all rows.

```
Using util-say:
img2ponysay -2 -- SOURCE_IMAGE > PONY_FILE

PONY_FILE should end with .pony and be localed in ponies/
Omit -2 if the source image does not use double pixel size.
```

For more information see: https://github.com/maandree/util-say/wiki/img2ponysay

When a pony is added please also add a ttypony version, i.e. the pony files used in TTY, but if you don't please state so in the pull request so we do not miss the create it; the simplest way to do this is to run make -B ttyponies after adding the ponies to ponies/, running make -B ttyponies will build (or rebuild) all ttyponies with a pony present in ponies/, and creates all needed symlinks.

To be able to run make -B ttyponies you must have the packages listed under Section 7.4 [Dependencies for pony providers], page 7.

Appendix A Ponysay constributors

Active developers of ponysay:

- Erkin Batu Altunbaş
- Mattias Andrée
- Sven-Hendrik Haase
- Pablo Lezaeta
- Jan Alexander Steffens

Patchers and other contributors of ponysay:

- Elis Axelsson
- Duane Bekaert
- Kyah Rindlisbacher
- James Ross-Gowan
- Louis Taylor
- \bullet Jannis

Appendix B Ponysay license

Ponysay is Free Software (yet not Open Source) and in licensed under the terms of Do What The Fuck You Want To Public Licese (WTFPL) version 2.

You have the four essential freedoms:

- The freedom to run the program, for any purpose (freedom 0).
- The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- The freedom to redistribute copies so you can help your neighbour (freedom 2).
- The freedom to distribute copies of your modified versions to others (freedom 3). By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE Version 2, December 2004

Copyright © 2012 Erkin Batu Altunbaş

Everyone is permitted to copy and distribute verbatim or modified copies of this license document, and changing it is allowed as long as the name is changed.

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. You just DO WHAT THE FUCK YOU WANT TO.

Appendix C 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.

Appendix D Concept index

9	${f L}$
9term	languages
\mathbf{A}	linux vt
advanced usage	M make
_	O
B bugs 6	on startup 3 optional dependencies 7, 9 options 2 output trunction 10
\mathbf{C}	overview
clearing tty 10 contributing 7, 11 create pony file 11 custom cowsay 4	P ponification
	pony requests 6
D	ponypipe
debian gnu/linux	PONYSAY_COWSAY
E	PONYSAY_KMS_PALETTE
environment variables	PONYSAY_SHELL_LINES
\mathbf{F}	programming languages 10 putty 5
figlet 5 fortune 3	Q
\mathbf{G}	quotes
gentoo linux	R
Н	replace cowsay 4
hacking	${f S}$
I	script languages
$\begin{array}{ccc} \text{inner workings} & & 10 \\ \text{installing} & & 8 \\ \text{invoking} & & 2 \\ \end{array}$	T tiolet
K	truncation 4, 10 tty 3, 4, 9, 10 ttypony
kernel mode settings 5, 9, 10	
kms	U ubuntu8