Ponysay

Infesting your terminal with ponies. Covers ponysay version 2.5.

I'm not giving him cake! I'm ASSAULTING him with cake!

by Mattias Andrée (maandree)

This manual is for ponysay (version 2.5),
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".

'For me! For my friends! For EQUESTRIA!'

Table of Contents

1	Overview	. 1
2	Invoking ponysay	. 2
3	Advanced usage of ponysay. 3.1 Fortune cookies. 3.2 Ponification. 3.3 Running on TTY. 3.4 Running on screen.	4 4
4	Environment variables	. 5
5	Optional features	
6	Limitations 6.1 Terminals 6.2 Cowsay	7
7	Problems and requests	8
8	Dependencies 8.1 Required runtime dependencies 8.2 Optional runtime dependencies 8.3 Package building dependencies 8.4 Dependencies for pony providers	9 9
9	Installing 9.1 From upstream 9.1.1 Installations basics 9.1.2 Custom installations 9.2 Arch Linux 9.3 Gentoo Linux 9.4 Debian GNU/Linux and Ubuntu 9.5 Uninstallation	10 . 10 10 13 13
10	10.1 Pony anatomy 10.2 Pony quote infrastructure 10.3 Balloon style files 10.4 Printing in TTY with KMS 10.5 Truncation 10.6 Languages 10.7 Shell auto-completion 10.8 Universal Character Set	. 14 . 14 . 15 . 15 . 16

	ting	
12 Distribut	ing	20
13 Terminol	ogy	21
Appendix A	Change log	23
Appendix B	Ponysay contributors	28
Appendix C	Ponysay license	29
Appendix D	GNU Free Documentation License	30
Appendix E	Concept index	37

1 Overview

ponysay displays an image of a My Little Pony pony saying a message provided by the user in a terminal, or a quote from the show My Little Pony: Friendship is Magic (MLP:FiM). Historically ponysay was a wrapper for cowsay, but has since version 2.1 become an independent reimplementation of cowsay.

If a message is not provided, e.g. by piping, it accepts standard input. The pony quoting the given message is printed on standard output.

ponythink is to ponysay as cowthink is to cowsay.

ponysay is generally used to decorate your terminal with a random pony, when you start the terminal. But if you know anypony how does like ponies [fat chance] you can always make screen-shots of ponysay -q executions and communication that way over e-mail.

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:

```
'--' Parse the following arguments as parts of message.
```

'-h'

'--help' Show summary of options.

·-ν'

'--verion'

Show version of program.

'-f PONY'

'--file PONY'

'--pony PONY'

Specify the pony that should printed, this can either be a file name or a pony name printed by ponysay -1. 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.

If you have util-say installed, you can use .png-files as the arguments for this options.

In versions earlier than version 2.0, the if the pony were a file name it had to include a '/'. This is not longer required and any existing pony name supersedes file names.

```
'-F'
```

'++file PONY'

'++pony PONY'

Just as '-F', but it uses extra (non-MLP:FiM) ponies instead of standard (MLP:FiM) ponies

```
'-b STYLE'
```

'--bubble STYLE'

'--balloon STYLE'

Specify the balloon style that should used, this can either be a file name or a balloon name printed by 'ponysay -B'. This option can be used multiple times to specify a set of styles from which one will be selected randomly. If no balloon style is specified a fallback style will be used.

```
'-q [PONY...]'
'--quote [PONY...]'
```

By using this option, a pony will be printed with quotes from her in My Little Pony: Friendship is Magic. The pony will be selected randomly, unless at least one pony is added as an argument after '-q'. If one or more ponies are added after '-q', the pony will be selected randomly from that set of ponies. This option requires the extension ponyquotes4ponysay, which is included by default since version 1.2.

The argument can be a file name, but only if it ends with '.pony'.

```
'-W COLUMN'
```

'--wrap COLUMN'

Specify the screen column where the message should be wrapped, this is by default 40, as with cowsay.

'-с'

'--compress'

Compress the message in the same way cowsay does, that is basically without multiple spaces, and only paragraphs separations. Using this options will mean that you cannot display figlet and TOIlet style messages.

'-l'

'--list' Lists all installed ponies. The ponies which have quotes, i.e. can be used with the '-q' option, will be marked by being printed in bold or bright (depending on the terminal.)

'-L'

'--altlist'

'--symlist'

Lists all installed ponies. The ponies which have quotes, i.e. can be used with the '-q' option, will be marked by being printed in bold or bright (depending on the terminal.) This options differs from '-1' by printing alternative names (symbolic links) inside brackets after their target ponies.

'+1'

'++list' Just as '-1', except it lists extra (non-MLP:FiM) ponies instead of standard (MLP:FiM) ponies.

'+L'

'++symlist'

'++altlist'

Just as '-L', except it lists extra (non-MLP:FiM) ponies instead of standard (MLP:FiM) ponies.

'-B'

'--balloonlist'

Prints a list of all balloon styles.

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 and 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.

If no pony is selected, ponysay will look for a 'best.pony' file, this file should be a symbolic link to the pony you want as a default. If it is not a symbolic link, '-q' cannot determine which quotes to use.

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 repository – 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 you do not use GNU Bash (standard shell for most distributions now a days) – you will get the effect described in the previous paragraph every time you open a terminal.

3.2 Ponification

You can ponify messages (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 you 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/However I think ponypipe as better at replacing words than the sed script, but I haven't used the script so I wouldn't know for sure.

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
}
```

You should read more about this in Section 5.1 [KMS ponies], page 6.

3.4 Running on screen

screen will adapt ANSI colour escape sequences to your terminal's capabilities. This means that if your terminal reports itself as xterm in \$TERM ponies will lose their colours; they will only use the lower 16 colours instead of the top 240 colours. By default, almost all X terminals, including xterm and mate-terminal reports themselves as xterm in \$TERM, and some reports their actual name in \$COLORTERM. So before opening 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':

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

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 bottom 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 than 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 eve n 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_UCS_ME

Export PONYSAY_UCS_ME with the value yes, y or 1, if you want [simulated] symlink to pony files using Universal Character Set in their names. Otherwise pony files uses only ASCII. If you want to remove the ASCII:ised names export PONYSAY_UCS_ME with the value harder, h or 2 instead.

If you have not enabled this, UCS names are not usable, suggested or listed. If you use yes UCS names will be usable, suggested and listed. If you use harder ASCII:ised names will not be suggested or listed, but they will still be usable.

PONYSAY_KMS_PALETTE

PONYSAY_KMS_PALETTE_CMD

PONYSAY_KMS_PALETTE or PONYSAY_KMS_PALETTE_CMD is used to tell ponysay how your TTY palette looks, this feature lets you get the best images in TTY if you have Kernel Mode Setting (KMS) support.

See Section 5.1 [KMS ponies], page 6 for information on how to use this.

5 Optional features

5.1 KMS ponies

KMS ponies is an optional feature that required that you have util-say>=2 (util-say<2 for ponysay<2.1) installed. It lets TTY users that have a custom TTY colour palette and KMS support get best TTY images that can be display at the current state of the art. KMS is supported on most computers, but due to lack of published specifications Nvidia drivers does not support KMS. util-say can be downloaded at https://github.com/maandree/util-say.

To use this feature 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 every time 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"
  }
```

KMS ponies uses '/var/cache/ponysay/' or, if missing, '~/.cache/ponysay/' for cache space.

6 Limitations

6.1 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 without Kernel Mode Setting (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.

Most terminals have support for 256 colours, we do however only use the top 240 colours; this is because the lower 16 colours are usually, 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 limit (except for 2^{24} + full transparency.)

ponysay works perfectly on xterm, urxvt and putty, but rxvt, mrxvt and Eterm do not have UTF-8 support and are currently not supported. Additionally aterm have neither UTF-8 support nor 256 colour support, and is therefore not yet supported.

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

6.2 Cowsay

This section describes the limitation of cowsay, but since version 2.1 cowsay is no longer used because of it. So none of the following limitations are present anymore.

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 not 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.

7 Problems and requests

7.1 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.

7.2 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.

8 Dependencies

We have provided a script that should run one most, if not all shells, named './dependency-test.sh' that will help you track down any missing package.

8.1 Required runtime dependencies

coreutils

stty is used to determine the size of the terminal.

python>=3

ponysay is written in pure Python 3.

8.2 Optional runtime dependencies

util-say>=2

For improved TTY support for user with custom colour palette and KMS support. It can be downloaded at https://github.com/maandree/util-say.

For the purpose of simplifying for pony contributors, ponysay supports using .png-images (note that the file must not miss the '.png' at the end of the file name) in addition to .pony-files or pony names.

8.3 Package building dependencies

python>=3

Required to run the './setup.py' file, which is also invoked from the make script.

gzip Used for compressing manuals. (Optional, standard)

xz Used for compressing manuals. (Optional, non-standard)

texinfo Used to compile this info manual. (Optional, standard)

info Used to install this info manual with install-info. (Optional, standard)

make Required to run the make script. (Optional)

sh Required to run the ./configure script. (Optional)

sed Used in the ./configure script. (Optional)

8.4 Dependencies for pony providers

bash Required to run dev/dist.sh.

coreutils

In and readlink are used in the ttyponies subscript of dev/dist.sh.

util-say>=2

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

9 Installing

9.1 From upstream

9.1.1 Installations basics

Before installing ponysay, make sure your system have the packages listed under Section 8.1 [Required runtime dependencies], page 9 and Section 8.3 [Package building dependencies], page 9 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 can clone the project URL https://github.com/erkin/ponysay.git.

In the terminal, cd into the ponysay directory and execute ./configure && make install. This will install ponysay into '/usr', normally meaning you 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. To install the Spanish manual add the option '--with-man-es' when running ./configure.

If your system does not have sh, make or sed or can use ./setup.py OPTIONS VERB or python3 setup.py OPTIONS VERB (or python instead of python3) instead of ./configure OPTIONS && make VERB. ./setup.py recognised ./setup.py version and ./setup.py help, which is not supported by make or ./configure.

9.1.2 Custom installations

./configure and ./setup.py and recognises the same options. Whether the exception for with '--with-everything' and '--with-nothing', every option that starts with '--with-' or '--without-' exists in both variants. '--with-' options install parts of the package. '--without-' options skipps installation of parts of the packages. With the same exception, '--without-' options take not arguments and '--with-' optionally takes an argument, if no argument is provided a default argument is implied.

The configuration script recognised the following options, the default values for options with arguments are written after the equality sign (=) in the option:

```
'--everything'
'--with-everything'
Install everything that is not explicity excluded.
'--minimal'
Install only the essentials. Note that this can ya
```

Install only the essentials. Note that this can vary depending on version. Currently this means that the commands, xterm ponies and legal documents is installed.

```
'--nothing'
'--with-nothing'
```

Install nothing, except legal documents, that is not explicity included.

'--with-ponysay=/usr/bin/ponysay'
Install the ponysay command, and set file name. (Default)

'--with-ponythink=/usr/bin/ponythink'

Install the ponythink command, and set file name. (Default)

'--with-shared-cache=/var/cache/ponysay'

Install a user shared cache, this is only used by KMS ponies so far. (Default)

'--with-bash=/usr/share/bash-completion/completions/ponysay'

Install auto-completion for installed commands in GNU Bash. Select the file name for the installed script for the ponysay command, the other commands modifies this file name. (Default)

'--with-fish=/usr/share/fish/completions/ponysay.fish'

Install auto-completion for installed commands in Friendly interactive shell. Select the file name for the installed script for the ponysay command, the other commands modifies this file name. (Default)

'--with-zsh=/usr/share/zsh/site-functions/_ponysay'

Install auto-completion for installed commands in the zsh shell. Select the file name for the installed script for the ponysay command, the other commands modifies this file name. (Default)

'--with-shell=/usr/share'

Macro for '--with-bash', '--with-fish' and '--with-zsh'. The argument is the used share/ directory that all shells have in common.

'--with-pdf=/usr/doc'

Install PDF manual, and select directory for it.

'--with-pdf-compression=gz'

Compress PDF manual, select compression by file name extension. This option does not imply '--with-pdf'. (Default)

'--with-info=/usr/share/info'

Install info manual, and select directory for it. (Default)

'--with-info-install=My Little Ponies for your terminal'

Use install-info when installing info manual. Set the description for the manual. This option does not imply '--with-info'. (Default)

'--with-info-compression=gz'

Compress info manual, select compression by file name extension. This option does not imply '--with-info'. (Default)

'--with-man-en=/usr/share/man'

Install English man manual. Set directory for man manuals. (Default)

'--with-man-es=/usr/share/man'

Install Spanish man manual. Set directory for man manuals.

'--with-man'

Macro for all '--with-man-LANG'.

'--with-man-en-compression=gz'

Compress English man manual, select compression by file name extension. This option does not imply '--with-man-en'. (Default)

'--with-man-es-compression=gz'

Compress Spanish man manual, select compression by file name extension. This option does not imply '--with-man-es'. (Default)

'--with-man-compression'

Macro for all '--with-man-LANG-compression'.

'--man-section-ponysay=6'

Change the section for the ponysay manpage.

'--man-section-cowsay=1'

Change the section for the cowsay manpage.

'--man-section-fortune=6'

Change the section for the fortune manpage.

'--with-ponies=/usr/share/ponysay/ponies'

Install standard xterm ponies, and select installation directory for them. (Default)

'--with-ttyponies=/usr/share/ponysay/ttyponies'

Install standard tty ponies, and select installation directory for them. (Default)

'--with-extraponies=/usr/share/ponysay/extraponies'

Install extra xterm ponies, and select installation directory for them. (Default)

'--with-extrattyponies=/usr/share/ponysay/extrattyponies'

Install extra tty ponies, and select installation directory for them. (Default)

'--with-quotes=/usr/share/ponysay/quotes'

Install pony quotes, and select installation directory for them. (Default)

'--with-balloons=/usr/share/ponysay/balloons'

Install balloon styles, and select installation directory for them. (Default)

'--with-ucs=/usr/share/ponysay/ucsmap'

Install UCS pony names, and select installation file name for the map. (Default)

'--without-custom-env-python'

Let the installer set the env name for python in 'ponysay'. (Default)

$\verb|`--with-custom-env-python=python3||$

Set the env name for python in 'ponysay'.

'--prefix=/usr'

Set a prefix to all implicit directories.

'--private'

Change all implicit configurations to fit local user a installation for the current user.

'--opt' Change all implicit directories to fit installation to '/opt'.

'--bin-dir=/usr/bin'

Set the system's directory for command executables.

'--lib-dir=/usr/lib/ponysay'

Set the system's directory for non-command executables. Currently their is not non-command executables, so this options has no effect, but bleeding edge distributors should specify it if it differs from prefered.

'--share-dir=/usr/share'

Set the system's directory for resource files.

'--cache-dir=/var/cache'

Set the system's directory for cache directories.

'--dest-dir='

Set off environment for installation.

'--linking=hard'

Set how to link identical files. Directories cannot be hard linked on most systems, therefore directories or always symbolically linked of hard linked is specified. Recognised arguments are copy, hard and symbolic. copy implies that files and directories are not linked, but duplicated.

Recognised compressions are 'gz' which uses 'gzip -9', and 'xz' which uses 'xz -9e'. 'xz' is still exotic to bost programs, use using it is not recommended. Distributors are strongly disencouraged to compression for the PDF manual and should use '--without-pdf-compression'.

You can run ./configure [OPTIONS] view to make sure everything is correct before building and installing.

9.2 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.

9.3 Gentoo Linux

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

9.4 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.

9.5 Uninstallation

If you did not install ponysay with a package manager, but rather manually from the upstream, you can uninstall it by running make uninstall.

Well written package manages will uninstall files that the package is no longer using, i.e. if deleted, moved or renamed. To uninstall files that are not longer used, by the currently installed version you will need that versions 'Makefile'. To perform an uninstallation of old files run make uninstall-old.

10 Inner workings

10.1 Pony anatomy

The pony files are simple raw output data that can be printed to the terminal, except it contains scalar variables. 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).

Variables are recalled by putting the variable's name between two dollar signs (\$var\$), and are stored by putting the variable's name followed by the value between two dollar signs and with a equality sign between the name and the value (\$var=value\$). Variable names cannot include equality signs, but the value can; dollar signs can be used by placing an ESC character before the dollar sign.

There are three predefined variables: \$\$ (empty variable name), \$\\$ and \$/\$. \$\$ has a dollar sign (\$) as its value, while \$\\$ and \$/\$ contains the characters for the link to the balloon directed in the same direction as the variable name's slash.

Variables whose name begin with balloon are parsed as balloon inserts, it can be either balloon, balloon, balloon, Y or balloon, Y, whether X is the minimum width of the balloon and Y is the minimum height of the balloon.

Prior to version 2.1 the pony files were cow files used by cowsay, they are partial Perl-scripts that assign a value to a scalar variable named \$the_cow. Cow files use a predefined scalar variable named \$thoughts, these are used to create a link between the message and the pony. The message (and the balloon) itself was printed by cowsay and is not defined in the cow files.

10.2 Pony quote infrastructure

When compiling, pony quotes are built to 'quotes/', the file names are lists of ponies joined with plus signs (+) – the pony names are the same as the pony files, except they do not end with '.pony' – with a index at the end, and a full stop (.) before the index.

The source files are located in 'ponyquotes/', where their is a file named 'ponies'. This file is called the pony map, and is the basis for how the compiled files are named. In the ponymap ponies with the same quotes are on the same line join together with plus signs (+), if the lines because too long for file names the line is split into multiple lines with the first pony in common.

In 'ponyquotes/' there are also quote files, each contain just one quote, just as when compiled to 'quotes/'. The source quote files are identical to the compiled quote files, except that their name contains just the first pony.

10.3 Balloon style files

Balloon style files are located in the directory 'balloons/', the ones ending with '.say' applies to ponysay and the ones ending with '.think' applies to ponythink.

Balloon style consists of 20 strings. Each string is defined on separate lines, by their name and their value separated with a colon (name:value), if the name is empty it continues the last one on a new line in the value. Only 10 of the strings may be multi-lined: nw, nnw, n, nne, ne, sw, ssw, s, sse and se.

The following strings are used, and must be defined in the files:

- \ The character for the link to the balloon directed as \.
- / The character for the link to the balloon directed as /.

ww The beginning of the balloon's line where the message is located if and only if the message contains only one line.

ee The end of the balloon's line where the message is located if and only if the message contains only one line.

nw The top left corner of the balloon.

nnw If both this string and the nne string fits between the top corners, this is printed directly to the right of the top left corner.

n The top edge of the balloon.

nne If both this string and the nnw string fits between the top corners, this is printed directly to the right of the top left corner.

ne The top right corner of the balloon.

nee The end of the balloon's line where the message's first line is located if and only if the message contains more than one line.

e The right edge of the balloon.

see The end of the balloon's line where the message's last line is located if and only if the message contains more than one line.

se The bottom right corner of the balloon.

sse If both this string and the ssw string fits between the bottom corners, this is printed directly to the left of the bottom right corner.

s The bottom edge of the balloon.

ssw If both this string and the sse string fits between the bottom corners, this is printed directly to the right of the bottom left corner.

sw The bottom left corner of the balloon.

sww The beginning of the balloon's line where the message's last line is located if and only if the message contains more than one line.

w The left edge of the balloon.

nww The beginning of the balloon's line where the message's first line is located if and only if the message contains more than one line.

10.4 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.

10.5 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 Setting (KMS) support to keep the colours from being messed up when the ponies is moved in the screen during print. Prior to version 2.0 this was 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 requires only 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.

Since version 2.1 truncation is done internally in the Python script, before that it was done in a custom C program truncater, that was 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 eighth column 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). In the previous, C, program it supported UTF-8 by assuming that bytes do not match 10xxxxxx and only those bytes were visible. This now fixed internally in Python, but has also been improved to exclude combining characters from the set of visible characters. Another difference is that the background colours are not reset, instead ANSI colours after the truncation point are still printed.

10.6 Languages

Before version 2.0 ponysay was written primarily in GNU Bash script; the truncater was 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 Perl was used; Perl was already required by cowsay, it is also similar to shell, but also supports hash tables.

However since version 2.0 we were trying to move from all there languages and only use Python 3, which as been accomplished in version 2.1.

10.7 Shell auto-completion

To make it easier to write auto-completion for shells, ponysay supports the two options '--onelist', '++onelist' and '--quoters', which has no short versions.

Executing ponysay --onelist will list every available standard (MLP:FiM) pony, independent of where it is located, the output is a sorted and consists only of one pony per line.

Executing ponysay ++onelist will list every available extra (non-MLP:FiM) pony, independent of where it is located, the output is a sorted and consists only of one pony per line.

ponysay --quoters work just as ponysay --onelist, excepts it limits the ponies to those that have quotes. Ponies that have quotes, but does not exist, i.e. does not have a .pony-file, are not listed.

Auto-completion scripts should not suggest these options.

10.8 Universal Character Set

In earlier versions of ponysay only the output truncation supported Universal Character Set, though handcoded UTF-8 character counting. Now ponysay lets Python decode the data, Python store all 31 bits of a character in as one character, not in UTF-16 as some other languages does, this means that the code is agnostic to the character encoding. However in Unicode 6.1 their are four ranges of combining characters, these do not take up any width in proper terminal, we therefore have a class in the code named UCS that help us take them into consideration when determine the length of a string.

Some ponies have names that contain non-ASCII characters, read about it in Chapter 4 [Environment variables], page 5. The UCS names are stored in the file 'share/ucsmap', in it

lines that are not empty and does not start with a hash (#) are parsed, and contains a UCS name and a ASCII:ised name. The UCS name comes first, followed by the ASCII:ised name that the UCS name should replace or link towards. The two names are separated by and simple left to right arrow character [U+2192], optionally with surrounding white space.

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 of the early Ponysay: https://github.com/maandree/unisay/tree/develop/dev/newponies

There is a checklist named 'pony-checklist' at the 'dev/' directory. You can use the check which ponies are added and which are not. Please update it when fit.

New ponies can be created from regular images by using util-say, which is available at https://github.com/maandree/util-say. Prior to version 2.1 of ponysay, img2xterm could be used, by since version 2.1 ponysay is using a new format that only util-say supports. img2xterm (https://github.com/rossy2401/img2xterm) was used in the early stage, but util-say tries to 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/',
or 'extraponies/' if the pony is not a MLP:FiM pony.

Omit '-2' if the source image does not use double pixel size.

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

If you have util-say installed, which is required to build ponies, you can use PNG files as argument the for ponysay -f, this requires that the file is named '.png' at the end.

The following bash code will print the palette the ponies (the terminals) use:

```
c=16
while ((c < 256)); do
    echo -en "\e[48;5;${c}m \e[49m"
    c=$(( $c + 1 ))
    if (( $(( c % 36 )) == 16 )); then
        echo
    fi
done; echo</pre>
```

For the palette to be correct, which is especially important when you draw ponies, you must not redefine the colours in the range 16 to 255 (inclusive).

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 dev/dist.sh ttyponies after adding the ponies to 'ponies/', running dev/dist.sh ttyponies will build (or rebuild) all ttyponies with a pony present in 'ponies/', and creates all needed symlinks.

To be able to run dev/dist.sh ttyponies you must have the packages listed under Section 8.4 [Dependencies for pony providers], page 9.

Also when adding new ponies, please map them up in the file 'ponyquotes/ponies'. If the pony is a new pony without any other alternative image just add it to a new line, without '.pony', preferably in its alphabetical position. If the file is a symlink add it to the same line as the target pony, and if the pony has and alternative image add it the the same line as that pony. Ponies on the same line are separated with a plus sign (+) without any white space. When a line is too long for a file name (this has happened to Pinkie Pie ['pinkie'],) it must be split into multiple lines, these lines should have their first pony file in common.

12 Distributing

If you are planning on maintaining ponysay in your favourite operating system you should first read Section 8.1 [Required runtime dependencies], page 9 and Section 8.2 [Optional runtime dependencies], page 9. If your OS does not follow Filesystem Hierarchy Standard (FHS), e.g. installing amusement binaries in '/usr/games' instead of '/usr/bin' or only supporting '/opt' equivalent directories you should read about configurations in Section 9.1.2 [Custom installations], page 10.

Apart from this, you should configure ponysay before building it with the option '--everything'. Otherwise only the info manual and the English manpage will be installed for documentation.

Please inform us about your distribution so we can list it so everypony can see it.

13 Terminology

MLP:FiM The television show My Little Pony: Friendship is Magic.

My Little Pony

The successor to My Pretty Pony, the toy not the short story by Stephen King.

TTY

Linux VT Linux's native terminal emulator. The name TTY comes from the file names for the devices used for terminals by Linux VT, which is '/dev/tty*'.

KMS

Kernel Mode Setting

A feature in Linux allowing mode setting in kernel-space, this gives the TTY, for example better colour support. I would go to Wikipedia for more information.

ttyponies Pony files used in TTY.

kmsponies Pony files generated for use in TTY with custom TTY colour palette and KMS support.

extraponies

extra ponies

Pony files of ponies that are not a part of MLP:FiM.

standard ponies

Pony files of ponies that are a part of MLP:FiM.

system ponies

sysponies Pony files located in '/usr/share/ponysay'.

homeponies

usrponies Pony files located in '~/.local/share/ponysay'.

browser ponies

A JavaScript program which is the source for most of our ponies. It is a port of desktop ponies.

ponification

The process of converting English text to Equestrian English.

Equestrian English

The English dialect spoken by the ponies in MLP:FiM, the basic role is that it is American English with as many words and parts of words as possible exchanged to words having to do with ponies, including the work 'pony' itself. This is normally the language we, the developers, write in, except we may use another English, e.g. British English, as the base language.

best.pony The pony you think is [the] best pony. It should be a symlink pony. It is a feature affecting the '-f', '-F' and '-q' options.

pony symlink symlink pony

A pony file that is a symbolic link to another pony file. Symbolic links can be created with the command <code>ln-s</code> <code>TARGET</code> <code>SYMLINK</code>.

ponyquotes

A feature enabling ponies to quote them self from MLP:FiM.

environment variables

Variables stored to the environment with the command export VARIABLE=VALUE. The variable name is often written with the prefix \$ due to have they are read in shell, using the command echo \$VARIABLE.

UCS

Universal Character Set

The set of of character, develop by the Unicode Consortium. It defined a partially filled space of 2^{31} characters, some of which are not glyphs.

$combining\ characters$

Character that have zero width and is used to compose characters with diacritical when there is no precomposed character to use.

ASCII

ASCII character

American Standard Code for Information Interchange (ASCII) defines 128 characters, some are not glyphs. It contains control characters, basic punctuation, the decimal digit, and lower case and upper case English alphabet characters a-z.

short options

Command line arguments starting with either exactly one hyphen (-) or exactly one plus sign (+), and have exactly one character beyond that. They may be argumentless, argumented, optionally argumented, or variadic (consumes are following arguments).

long options

Command line arguments starting with either at least two hyphens (-) or at least two plus signs (+), beyond that they have at least one character, but often at least one work. They by be argumentless, argumented, optionally argumented, or variadic (consumes are following arguments).

completion

auto-completion

shell completion

shell auto-completion

Provided by a shell dependent script, argument suggestion is provided of then by pressing the tab key.

ANSI escape sequences

escape sequences

Character sequences starting with a ESC character, with a special interpretation for terminals standardise by ANSI.

ANSI colour sequences

 $ANSI\ colours$

colour sequences

ANSI escape sequences defining a colour or other formatting, known as CSI m, a sequence starting with CSI and ending with an m. This is extended to 256 colours, from 16 colours, by xterm which is de facto standardise.

CSI The character combination ESC followed by [, used in standardised ANSI escape sequences.

OSI The character combination ESC followed by], used in non-standardised ANSI escape sequences.

Appendix A Change log

Version 2.5

Brand new highly configurable build system.

Version 2.4

Nothing worth mentioning.

Note: Identifies itself as version 2.3

Version 2.3

- Support for 'best.pony' file.
- '-q' accepts file names.
- Improved Unicode support: treats combining characters as invisible.
- Optional support for UCS pony names.
- Pony files and balloon style files can be pipes (as well as sockets, doors and as always regular files.)
- Support cowsay style message compression.
- New ponies: 'blaze'
- New extraponies: 'fyrefly' (Tumblr), 'surprise' (Tumblr), 'woona' (moonstuck), 'woonanohat' (moonstuck)
- Pony symlink added:
 - 'pinkieoink' → 'oinkoinkoink'
- Support for non-MLP:FiM ponies (known as extraponies). This is implemented with the options '-F', '+1', and '+L' corresponding to '-f', '-1', and '-L'.

Version 2.2

- Full support for arbitrary positioning of balloon in pony files.
- ANSI colour sequences in pony files are applied only to the pony image, not the balloon link or the balloon itself.
- Support for colours in the message.
- Support custom balloon styles using the option '-b', '-B' will list all available. This list depends on whether you are invoking ponysay or ponythink

Version 2.1.1

Nothing worth mentioning.

Version 2.1

- 'applebumkin' is renamed to 'applebumpkin'.
- New ponies: 'owlowiscious', 'purplehaze'
- Cowsay has be reimplemented, and have full Unicode support and support for figlet style messages.
- Deleted environment variables: PONYSAY_COWSAY, PONYSAY_COWTHINK
- You will need Python 3, but not GNU Bash, Perl or Cowsay.
- New .pony file format is used: unisay's format instead of cowsay's Perl based format. This includes arbitrary position of balloon, mirrored balloon links, and minimum size of balloon.

Version 2.0

- Makefile is generated by running ./configure.
- All Perl scripts and almost all Bash are reimplemented in one Python 3 script.
- kmsponies4ponysay is included.

Version 1.4.1

• Code is repaired and more portable.

Version 1.4

Make file is improved.

Note: Identifies itself as version 1.3

Version 1.3

- New ponies: 'forestspirit', 'hollydash', 'raggedy', 'rhyme'
- 'sindy' is renamed to 'powderrouge'. Pony symlink added:
 - 'sindy' → 'powderrouge'
- 'PREFIX=/some-dir' can be used when invoking make, the default value is '/usr'

Version 1.2

- ponyquotes4ponysay is included.
- Support for extension: kmsponies4ponysay.
- Pony symlinks added:
 - 'mrsparkle' → 'nightlight'
 - 'elsie' → 'prettyvision'
- New ponies: 'ace', 'blueblood', 'filthyrich', 'gingergold', 'hayfever', 'highscore', 'junebug', 'mrsparkle', 'persnickety', 'ponet', 'screwloose', 'tornadobolt'.
- 'elsie' is renamed to 'prettyvision'.
- Arbitrary spaces in '-f' argument is not longer accepted (it causes problems with file names including spaces.)

Note: Identifies itself as version 1.1

Version 1.1

- Manpages are compressed before installation.
- info manual added.
- Shell completion for ponythink added, in addition to ponysay.
- fish completion added.
- '/usr/lib/ponysay' is used instead of '/usr/bin' for code used by the main script.
- '~/.local/share/ponysay' is used for private pony directories.
- ncurses is no longer needed for determining the screen's size, coreutils is used instead.
- Pony symlinks added:
 - $\bullet \ \text{`amethyststar'} \mapsto \text{`sparkler'}$
 - 'berrypinch' → 'ruby'
 - 'craftycrate' → 'boxxy'

- 'magnum' → 'raritysdad'
- 'pearl' \mapsto 'raritysmom'
- 'powderrouge' → 'sindy'
- 'royalribbo' → 'violet'
- New ponies: 'blossomforth', 'bonvoyage', 'cadance', 'celestiasmall', 'changelingqueen', 'cherryberry', 'discordamused', 'discordpuppetmaster', 'fleurdelishair', 'fleurdelislay', 'owl', 'perrypierce', 'petunia', 'pinacolada', 'skyra', 'truffleshuffle'.
- Pony spelling removed: 'fillycadence'.
- Pony symlink change: 'perry' \mapsto {'pokey' \mapsto 'perrypierce'}.
- Option '-L' added, lists ponies with symlink mapping.
- Support for extension: ponyquotes4ponysay.
- Accepts arbitrary spaces in '-f' argument.

Version 1.0

- Spanish translation of the manpage is added.
- 'applecore', • New ponies: 'applejackscarecrow', 'bonbonstand', 'changeling', 'fillycadence', 'chrysalis', 'cottoncloudy', 'diamondmint', 'discord', 'fluttershyshy', 'flam', 'fleurdelis', 'flim', 'fluttershystare', 'lyrasit', 'oinkoinkoink' (is pinkie), 'philomenaphoenix', 'pinkiecannon', 'pinkiecannonfront', 'pinkiecannonhappy', 'pinkiegummy', 'pinkiehugfluttershy', 'pinkiehugsfluttershy', 'pinkieprincess', 'pinkiepartycannon', 'pinkiesilly', 'pinkietongue', 'pinkiewhoops', 'pinkiewhoopseat', 'pinkiewhoopsout', 'rainbowdrag', 'rainbowsalute', 'rainbowshine', 'raritydrama', 'shiningarmor', 'shiningarmorguard', 'spikemustache', 'stevenmagnet', 'stevenmagnettrue', 'twilightcrazyfromball', 'twilightrage', 'twilightzero', 'wildfire'.
- Pony symlinks added:
 - 'djpon-3' → 'vinyl'
 - 'fillycadance' → 'fillycadence'
 - 'horsepower' \mapsto 'snowflake'
- Improved TTY support: ponies have low colours resolution, instead of monochrome, when the high colour resolution is not available.

Version 0.10

- Manpage manual added.
- The directories for pony directories are changed from '/usr/share' to '/usr/share/ponysay' and '~' to '~/.ponysay'.
- Pony symlinks added:
 - 'carrottop' → 'carrot'
 - $\bullet \ \ \text{`goldenharvest'} \mapsto \text{`carrot'} \\$
 - 'harpass' → 'lyra'
 - 'heartstrings' → 'lyra'
 - 'lulamoon' → 'trixie'
 - 'minuette' → 'colgate'
 - 'noteworthy' \mapsto 'blues'

- 'perry' → 'pokey'
- 'pokeypierce' → 'pokey'
- 'timeturner' \mapsto 'doctornohat'
- 'trixielulamoon' → 'trixie'
- 'twilightvelvet' → 'mrssparkle'
- Support for truncating output on height, enabled by default under TTY.
- Environment variables added: PONYSAY_FULL_WIDTH, PONYSAY_SHELL_LINES, PONYSAY_TRUNCATE_HEIGHT, PONYSAY_BOTTOM.

Version 0.9

- Output truncated on width to fit screen.
- Support for TTY (Linux VT).
- bash completion added.
- zsh completion added.
- New ponies: 'allie', 'archer', 'boxxy', 'carecake', 'cupcake', 'daringdo', 'davenport', 'fancypants', 'ironwillwalk', 'lily', 'lunafly', 'maredowellfly', 'maredowellgallop', 'master', 'mjolna', 'orange', 'raritysdad', 'raritysmom', 'royalnightguard', 'ruby', 'sparkler', 'violet'.

Version 0.8

• New ponies: 'aloe', 'angle', 'applebloom', 'applebumkin', 'applefritter', 'berrypunch', 'bigmac', 'blinkie', 'blues', 'braeburn', 'caesar', 'candymane', 'caramel', 'cheerilee', 'cheerilee80', 'clyde', 'colgate', 'colton', 'daisy', 'derpystand', 'derpystandwing', 'diamondtiara', 'dinky', 'doctornohat', 'elsie', 'fido', 'fillycelestia', 'fillydash', 'fillydashfly', 'fillyjack', 'fillyjacktravel', 'fillypinkie', 'fillypinkiecurly', 'fillyrarity', 'fillyshy', 'fluttershygala', 'gilda', 'gildastand', 'granny', 'grannychair', 'grannysleep', 'gummy', 'hoity', 'horte', 'inky', 'laflour', 'lightning', 'lintsalot', 'lotus', 'mayor', 'mrssparkle', 'nightmare', 'opal', 'parasprite', 'philomena', 'photofinish', 'pinkamina', 'pinkiebounce', 'pinkiechicken', 'pinkiegala', 'pipsqueak', 'pokey', 'rainbowfly', 'rainbowgala', 'rainbowsleep', 'raindrops', 'rarityfly', 'raritygala', 'rarityponder', 'redheart', 'rocky', 'rose', 'rover', 'royalguard', 'sapphire', 'scootaloo', 'screwball', 'shadowbolts', 'silverspoon', 'silverstar', 'sindy', 'snails', 'snips', 'soarin', 'soigne', 'spike', 'spikefloat', 'spikelove', 'spot', 'stella', 'strongheart', 'sue', 'suedance', 'tank', 'trixiestage', 'trixiestand', 'turnip', 'twist', 'winona'.

Note: Identifies itself as version 0.7

Version 0.7

- New ponies: 'carrot', 'octavia', 'trixie', 'vinyl', 'zecora'.
- Support for listing ponies with '-1' option.

Version 0.6

- New ponies: 'bonbon', 'celestia', 'doctor', 'fillistia', 'spitfire', 'woona' (not moonstuck).
- Dropping usage of utility which, using hash instead.

Note: Identifies itself as version 0.5

Version 0.5

• Using utility which to determine existence of cowsay.

Version 0.4

- '.cow' files are removed.
- Support for '-W' option.
- Select random pony if not specified.
- '-f' supports file names, and not only pony names.

Version 0.3

• Fixed use of '.pony' files.

Version 0.2

- Pony files end with '.pony' instead of '.cow'.
- 'lyrasleep' is renamed to 'lyra'.
- '.cow' files are kept but not used.
- '-h' prints proper help.

Version 0.1

First release.

• Includes the ponies: 'applejack', 'derpy', 'derpysit', 'fluttershy', 'luna', 'lyrasleep', 'pinkie', 'rainbow', 'rarity', 'sweetie', 'twilight'.

Appendix B Ponysay contributors

Active developers and major contributors of ponysay:

- Erkin "erkin" Batu Altunbaş
- Mattias "maandree" Andrée
- Elis "etu" Axelsson
- Sven-Hendrik "svenstaro" Haase
- Pablo "jristz" Lezaeta
- Jan Alexander "heftig" Steffens

Patchers and other contributors of ponysay:

- Duane "Marneus68" Bekaert
- Kyah "L-four" Rindlisbacher
- James "rossy2401" Ross-Gowan
- Louis "kragniz" Taylor
- Daniel "gtmanfred" Wallace
- Jannis "sycoso"
- "spider-mario"

Appendix C Ponysay license

Ponysay is release by Erkin Batu Altunbaş et al. Copyright © 2012 Erkin Batu Altunbaş et al.

Ponysay is Free Software (yet not Open Source) and in licensed under the terms of Do What The Fuck You Want To Public License (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 © 2004 Sam Hocevar <sam@hocevar.net>

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

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

Appendix D 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 E Concept index

T	'with-pdf'11
'++altlist'	'with-pdf-compression'
'++file'	'with-ponies'
'++list'	'with-ponysay'
'++onelist'	'with-ponythink'
'++pony'	'with-quotes' 12
	'with-shared-cache' 11
'++symlist'	'with-shell'
'+1'	'with-ttyponies'
'+L' 3	'with-ucs'
	'with-zsh'
-	'without-balloons'
·· 2	'without-bash' 11
'altlist'	'without-custom-env-python'
'balloon'	'without-extraponies'
'balloonlist'	'without-extrattyponies'
	'without-fish'
'bin-dir'	'without-info'
'bubble'	'without-info-compression'
'bubblelist'	'without-info-install'
'cache-dir'	'without-man'
'compress'	'without-man-compression'
'dest-dir'	'without-man-en'
'everything'	'without-man-en-compression'
'file'2	
'help'	'without-man-es'
'lib-dir'	'without-man-es-compression'
'linking'	'without-pdf' 11
'list'	'without-pdf-compression'
	'without-ponies'
'man-section-cowsay'	'without-ponysay'
'man-section-fortune'	'without-ponytink'
'man-section-ponysay'	'without-quotes'
'minimal'	'without-shared-cache'
'nothing'	'without-shell'
'onelist'	'without-ttyponies'
'opt'	'without-ucs'
'pony'	'without-zsh'
'prefix'	'wrap'
'private'	'-b'
'quote' 2	-в ·
'quoters'	
'share-dir'	'-c'
'symlist'	'-f'
'version'	'-F'
'with-balloons'	'-h'
	'-1'
'with-bash'	'-L'
'with-custom-env-python'	'-q' 2
'with-everything'	'-v'
'with-extraponies'	'-W'
'with-extrattyponies'	-, -,
'with-fish'	
'with-info'	•
'with-info-compression'	/configure
'with-info-install' 11	./configure
'with-man'	./setup.py
'with-man-compression'	'.bashrc'
'with-man-en'	.png
'with-man-en-compression'	
	/
'with-man-es'	/
'with-man-es-compression'	'/var/cache/ponysay'6
'with-nothing'	, :, _uo_uo, poujouj

~	extra ponies
'~/.bashrc'	extraponies
	\mathbf{F}
9	features, optional 6
9term	fhs
	figlet
\mathbf{A}	filesystem hierarchy standard 20 fonts 7
advanced usage	fortune
anatomy of pony files	
ANSI colours	G
ANSI escape sequences 22 arch linux 13	gentoo linux
arguments	H
ascii	
aterm	hacking
auto-completion, inner workings	homeponies
D	I
В	images, png
balloon style files	img2ponysay
basic installation	inner workings
'best.pony' 3 best.pony 21	installation customisation
broken ponies	installing
browser ponies	mvoking 2
bubble style files	T 7
bugs 8	K
	kernel mode setting 5, 6, 7, 15, 21
\mathbf{C}	kms 5, 6, 7, 9, 15, 21
cache	kmsponies
change log	
character	$\mathbf L$
clearing tty	languages
colour palette	limitations
colour sequences	linux vt
combining characters	long options
configure	
contributing	${f M}$
cowsay 7	
create pony file	maintaining OS package
CSI	manpage translations
customised installations	message
To the state of th	MLP:FiM
D	mrxvt
debian gnu/linux 13 dependencies 9	my little pony
desktop ponies	
distributing ponysay	0
	on startup 4
T.	optional dependencies
\mathbf{E}	optional features
environment variables	options
Equestrian English	OS package maintaining 20 OSI 22
escape sequences	output truncation
Eterm	overview
CAUCIDIO1010	

P	shell completion
package maintaining	shell, auto-completion
palette	short options
png images	standard ponies
ponification	startup 4
pony anatomy	symlink pony
pony names	sysponies
pony palette	systemponies
pony quote infrastructure 14	
pony requests	Т
pony symlink 21	1
ponypipe 4	terminals 7
ponyquotes	terminology
PONYSAY_BOTTOM5	text ponification
PONYSAY_FULL_WIDTH5	TOIlet 3
PONYSAY_KMS_PALETTE	truncation
PONYSAY_KMS_PALETTE_CMD	tty
PONYSAY_SHELL_LINES5	ttyponies
PONYSAY_TRUNCATE_HEIGHT 5	ttypony
PONYSAY_UCS_ME5	
ponythink	TT
portable network graphics	\mathbf{U}
previous releases	ubuntu
programming languages	ucs
putty	unicode
	uninstallation
	universal character set
${f Q}$	upstream installation
quote infrastructure	urxvt
quotes	usrponies
1	util-say
_	util-sav
R	·
rxvt	\mathbf{V}
	versions
${f S}$	versions
screen 4	X
script languages	$oldsymbol{\Lambda}$
setup.py'	xterm
shell auto-completion	xterm palette