# Ponysay

Making your terminal about 20 % cooler. Covers ponysay version 3.0.2.

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This manual is for ponysay (version 3.0.2).

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

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# 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 from a shell start-up script. But if you know anypony else who likes ponies you can always make screen-shots of ponysay --q executions and communicate 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.

+h

++help Show summary of options, and use colours even if stdout is piped.

-v

--verion Show version of program.

-f PONY

--file PONY

--pony PONY

--quote 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.

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 to -q. If one or more ponies are added as an argument to -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.

```
--f [PONY...]
--files [PONY...]
--ponies [PONY...]
```

Variadic variant of -f, meaning that all arguments added after this one will parsed as an argument to this option. Additionally, those options are added to -f.

```
++f [PONY...]
++files [PONY...]
++ponies [PONY...]
```

Variadic variant of +f, meaning that all arguments added after this one will parsed as an argument to this option. Additionally, those options are added to +f.

An important feature of this options, is that you can but it in the end of the command line, without any argument to get a random non-MLP:FiM pony. However, altough it is not nice, since version 3.0, +f can also be unargumented if at the end of the command line.

```
--F [PONY...]
--any-files [PONY...]
--any-ponies [PONY...]
--anyponies [PONY...]
--anyponies [PONY...]
This option combines --f and ++f.
--q [PONY...]
--quotes [PONY...]
```

Variadic variant of -q, meaning that all arguments added after this one will parsed as an argument to this option. Additionally, those options are added to -q.

An important feature of this options, is that you can but it in the end of the command line, without any argument to get a quote from any pony with a quote. However, altough it is not nice, since version 3.0,  $\neg q$  can also be unargumented if at the end of the command line.

#### -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.

### -W COLUMN

### --wrap COLUMN

Specify the screen column where the message should be wrapped, this is by default 60, as with cowsay. The balloon's extra width is taken into consideration.

If the argument is not a number, but starts instead with n (for 'none' or 'no'), no wrapping is done, and if it starts with i (for 'inherit') the width of the terminal is used.

n and i is case insensitive, so you may use N and I instead. Additionally, typo correction is for QWERTY (and QWERTZ) and Dvorak is built in to ponysay; the nearest key, either to the left or to the right, depending on which hand is used to press the key, is also allowed.

-с

--compress

--compact

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.

-1

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

--bubblelist

--balloonlist

Prints a list of all balloon styles.

-A

--all List all ponies, MLP:FiM and non-MLP:FiM, in this case the first list are MLP:FiM and the second are non-MLP:FiM.

+A

++all

--symall

--altall List all ponies names, including alternatives, these from MLP:FiM and non-MLP:FiM. The first list are the MLP:FiM and the second one are non-MLP:FiM.

-0

--pony-only

--ponyonly

Print just the pony, nothing else like the speech balloon. Naturally the ponysay will not wait for a message from stdin.

-i

--info By adding this flag you will get a metadata for a pony printed, rather than the pony itself. The output will beformated with bold tag names. The output will be wrapped according to the -W option.

+i

++info This works just like the -i option, except the pony will use the output has her message rather that just print that information.

#### -r RESTRICTION

#### --restrict RESTRICTION

This option is used to restrict which ponies can be randomly select based one their metadata. The restrict is given is disjunctive normal form, and can hence express any logical combination, however only for tags with one entry. For tags with multiple values all values are tested and of one of them passes a test passes.

The argument for --restrict is a + separated list of values that all must be satisfied for a pony to be qualified for random selection. The option --restrict can be used multiply times, only one of them need to be satisfied for a pony to qualified for random selection.

A value in the argument is a combination of the tag name and tag value on the form NAME=VALUE. Additionally if the tag names ends with a question mark (?) the tag is satsified if the tag is missing; if the value starts with a bang (!) the test is inverted. Using just a bang means that the test passes for and only for all ponies with the tag definied; using the question mark and a empty value means that the test passes for all ponies; finally, using the question mark and just a bang for the value means that the test passes for and only for all ponies without the tag definied.

if notall, trick For most shells, to notneed to use disjuncform is normalto use { }. For example you --restrict={eye={blue,green,cyan}+coat={black,grey},coat=white} (note that there is no whitespaces) means that only ponies with white coat will be randomly selected as will as ponies with black or grey coat provided that they have either blue, green or cyan eyes.

-X

- --256-colours
- --256colours
- --x-colours

Use xterm's 256-colour support (supported by most X11 terminals), despite your terminal's actual compatibilies.

-V

- --tty-colours
- --ttycolours
- --vt-colours

Use Linux VT's compatbilies without KMS utilisation, despite your terminal's actual compatibilies.

-K

- --kms-colours
- --kmscolours

Use Linux VT's compatiblies with KMS utilisation, despite your terminal's actual compatibilies.

+c

### --colour ANSI-COLOUR

Colour the balloon, including link and message (the parts that are not individually specified.) The argument, should be a ANSI colour sequence without leading CSI and without a tailing 'm', for example 1;31 will make it in red and bold (or bright depending on the terminal.)

#### --colour-bubble

### --colour-balloon ANSI-COLOUR

Just like --colour, but it only colours the balloon, without the message or link.

### --colour-link ANSI-COLOUR

Just like --colour, but it only colours the balloon link.

### --colour-msg

### --colour-message ANSI-COLOUR

Just like --colour, but it only colours the message.

### --colour-pony ANSI-COLOUR

Just like --colour, but it colours the pony. This colouring has no effect ony regular pony files, as it has its own colouring.

### --colour-wrap

### --colour-hyphen ANSI-COLOUR

Just like --colour, but it colours hyphen added by the word wrapping. By default this is red (31), if you want uncoloured use 0, without 0 or 39, the default 31 is presistent.

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 Extra information

If file descriptor 3 is definied when ponysay is executed, extra information is printed to it. The printed information includes the name of the pony file, the name of the balloon style file, and if definied in the pony file, file meta data and comment.

In most shells, a file descriptor 3 can defined using 3>FILE, and linked to stderr using 3>&2. For example, you can print the information to ~/info by running ponysay I\'m just the cutest pony! 3> ~/info.

The message is not stored this way, for that you can use tee. However, if you use -q the quote file is printed to file descriptor 3.

### 3.2 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.

### 3.3 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.

# 3.4 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 11.

# 3.5 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 "$0"
}
```

# 3.6 $^{\sim}/.ponysayrc$

If you have the file ~/.ponysayrc (.ponysayrc in your home directory, the home directory can be spoofed by changing the system environment HOME,) the first thing ponysay does is running that file. This can be used for modifing environment variables (see Chapter 4 [Environment variables], page 9). For your convience this can be done by modifing the map env. The code in ~/.ponysayrc must be written in Python 3.

For example if you want to set the PONYSAY\_SHELL\_LINES to 5, but only 1 if you are using Linux VT (TTY), your ~/.ponysayrc may look like this:

```
if env[TERM] == 'linux':
    env[PONYSAY_SHELL_LINES] = 1
else:
    env[PONYSAY_SHELL_LINES] = 5
```

You can examine the source code of ponysay to figure out some nice hacking you may want to do, everything in the source code can be used directly as long as it is defined before ~/.ponysayrc is interpreted.

~/.ponysayrc is a fallback for ~/.config/ponysay/ponysayrc, which in turn is a fallback for \${XDG\_CONFIG\_HOME}/ponysay/ponysayrc. If neither of those exist, /etc/ponysayrc is used if that exists.

# 3.7 Narcissistic ponies

The following will not work if you have line breaks in you file names, but if you do have that, you may want to rethink that as it will usually cause problems for programs, especially for shell scripts.

The command \_\_pony=\$(ponysay -o 3>&1 1>/dev/null | grep ^pony\ file: | sed -e s/^pony\ file:\ //g) && (ponysay -of "\$\_\_pony" | ponythink -Wn -f "\$\_\_pony") will give you a pony thinking of herself. The command works on GNU Bash, but may not work on less POSIX compatible shells. It works by first getting a random pony and then uses the extra information printed to the file descriptor 3 (see Section 3.1 [Extra information], page 7) to fetch the file name with help of grep and sed. The file name is stored in a shell variable. It then the pipes output from one execution of ponysay into the second, using the stored file name in both. This does not work on FISH shell because of POSIX incompatibility.

Ponysay can use just about anything as a message because it quarantines the message's ANSI escape sequences, including colour. And is Unicode aware (including combining characters) and ANSI escape sequence aware.

Naturally this means that you can also make ponies think of eachother, for example: ponysay -f rarity -b round 'My little Spiky-wiky' | ponythink -f spikefloat -b unicode -W n

### 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 11 for information on how to use this.

### PONYSAY\_TYPO\_LIMIT

ponysay is able to auto correct misspelled pony names and balloon style name. Without consideration for transpositioning, the distance between two words are measured in the number of edits needed to get from one word to the other, with weighting on some character changes used to favour spellos over typos.

By default if the weighted distance is greater than 5 for the closest words, auto correction ignored. This limit can be changed by exporting the limit to PONYSAY\_TYPO\_LIMIT; setting the limit to zero will disable auto correction.

### PONYSAY\_WRAP\_HYPHEN

You can export what ponysay should use instead of a hyphen when wrapping messages. The hythen is red by default, if you want to change the colour or other formating, should should do so using the option --colour-hyphen (--colour-wrap).

### PONYSAY\_WRAP\_LIMIT

Defines how long a word mush be to be hyphenated. This is used for to wrap words that are long so the output gets as pretty as possible. This is not the only condition

under which a word can be hyphenated, it can also be hyphenated if the word cannot fit otherwise. The default value is 8.

# PONYSAY\_WRAP\_EXCEED

Defines how much a word must exceed the wrapping point to be hyphenated. This setting is used togather with PONYSAY\_WRAP\_LIMIT. The default value is 5.

# 5 Optional features

# 5.1 KMS ponies

KMS ponies is an optional feature that required that you have util-say>=3 (util-say<2 for ponysay<2.1 and util-say<3 for ponysay<3) 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. Other video cards can have problems too like 'gma500\_gfx' due to lack of propper drivers and correct KMS support. 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 "$@"
  }
```

KMS ponies uses /var/cache/ponysay/ or, if missing, ~/.cache/ponysay/ for cache space. You may also want to read Section 7.1 [Fill KMS cache], page 17.

# 6 Pony metadata

Pony files can contain metadata tags and a multiline comment. The following are the standard tags (comma separated lists may have whitespace surrounding the comma [,]):

### **GROUP NAME**

If a pony file contains multiple ponies, it *should* have a *GROUP NAME* tag. The tag is a comma seperated list of the recognised names of the ponies as a groups, if the list is empty the tag value must be (none). An officiallity tag should be added to each name.

NAME Every pony file should have this tag, one entry for each pony on the file. The value of the tag *must* be the pony's most common name as used on the TV show (or other source). If the pony's name have not been mentioned the value must be (not mentioned).

### OTHER NAMES

If a pony in the pony file has other names then the one in *NAME* it *should* have this take for this pony. Any pony in the file (in case of multiple ponies) that do not need this tag should use the value (none).

The tag is a comma separated list of alternative (to *NAME* names for the pony, each name should have an officiallity tag.

### APPEARANCE

This tag specifies in which episode the pony first appeared. It reasonable to specify it even for ponies that appears in every episode.

For uniformity the format S%sE%e %t[%P] is recommended; [] denotes and optional part, optional in the sence that it does not apply the every episode, but it should be used if applyable. %s is the series (season) number in two digits, %e is the episode number in two digits. %t is the episode title and should use the standardised title format for the used format however without surrounding quotes if the used language has that, in the unlike event that [or] is present in the title it should be backslashed ( $\[ \]$ ,  $\[ \]$ ). %P is the part in the format [Part %p], where [] does not denote and optional part but rather is verbatim, and %p is the part number in one digit (well, if the part number is not 10 or higher).

The standard way to format titles in American English is the same as in British English, however it is not fully standardised. Capitalisation of the first word, and all other words, except for articles, prepositions, conjunctions, and forms of 'to be' is recommended.

Be aware that MLP:FiM episodes use American spelling which include a rather uncommon why to write for examples abbrevations (like for example Mr. instead of Mr), this may however not be the case for non-MLP:FiM episodes. And if there are not series (season) the series number defaults to 1, however other numbers and tags (which the part number is) may be added if required.

KIND This tag decribes what kind of pony a pony is, it is a comma seperated lower case list, and it cannot be empty, by it can be (but shouldn't) skipped for every pony in the image.

Every fitting value should be used, however an alicorn (also known as alacorn, winged unicorn, acorn, pegasus unicorn, unipeg, unisus, horned pegasus, wing-horn, allacorn, cerapter pterippus, aquillacorn, pegasos aithiopikos, alate unicorns, or pegacorn (really all those name has been used throw history to define a unicorn whit wing or pegasus whit a horn)) should have the values alicorn andpony, but neither

pegasus nor unicorn or another of the possible therms mentioned. Earth ponies should have the value pony and earth (not earth pony.)

The standard values are (you may use other ones if fitting): unicorn, pegasus, alicorn, earth, pony, changeling, crystal, seapony, animal (applies to Spike) and item (applies to Tom and Pinkamina's imaginary friends.)

#### **GROUP**

This tag decribes which groups a pony classifies under, it is a comma seperated lower case list, and it cannot be empty, by it can be (but shouldn't) skipped for every pony in the image.

The standard values are (you may use other ones if fitting):

- mare Adult female pony
- stallion Adult male pony
- filly Female pony child
- colt Male pony child
- dragon Dragon (Spike, Crakle and the other dragons)
- mane The mane characters (also known as main characters [unponified] or protagonists)
- wildlife Wildlife, for example timberwolfs
- pet A pony's pet, Spike does not count because Twilight does not play with him during pony-pet play dates.
- royal Royal pony, either by birth, marriage, or conquer (i.e. the old school style). Shining Armour is royal by marriage, but his biological family doesn't become royal by this.
- villain Villains, normally minions to antagonists or recurring ponies. Applies to changelings.
- antagonist (applies to: Nightmare Moon, Gilda, Discord, Chrysalis) Antagonists are also known as archvillians or archenemies. Nightmare Moon, Discord and Chrysalis are such, but Gilda also counts as one.
- deuteragonist (applies to: the cutiemark cruisers) Deuteragonists are secondary characters, these are (as of season 3) only the Cutiemark Cruisers. The requirement is that thay are somewhat regular characters with dedicated episodes, but are not protagonists.
- tritagonist (applies to: Celestia, Luna, Cadance, Shining Armor, Spike) Important characters (excluding Derpy) that are neither protagonists, deuteragonists nor antagonists.
- background Background characters are not characters that are neither protagonists, deuteragonist, tritagonist, antagonist nor pets. They do not need to be strictly background characters, for example Big Mac and Cheerilee classifies under this group, as they are not too important to be considered tritagonists (as of seasson 3).
- voiced (only used together with background) Only background characters can be voiced. The additional requirement is that they have said something (ponies comics can also be voiced, in this case they need a minimal of one dialoge text).
- imaginary Imaginary ponies (or other animal), in this group classify Tom and Pinkamina's imaginary friends for example.

### **BALLOON**

For each balloon in the file (a pony file can have more than one balloon, but that is not common) their should one tag entry. There are four values that can be used:

top (the common setup, the balloon is at the top of the image), bottom (the balloon is at the bottom of the image), right (the balloon is neither at the top or at the bottom of the image, but is placed to the right of the pony) and inside (the balloon is somewhere as inside the image.)

LINK ON Files with only one pony should not use this tag. Specifies to which pony the link is connected, it is a number, starting from 1.

If a file contains Fluttershy and Pinkie (in that order, i.e. Pinkie is to the right of or below Fluttershy) and the link is connected to Pinkie, than the value should be 2.

In the rare case that the file contains multiple links (and multi ponies), the metadata should contains multiple entries of this tag, one entry for each link sorted in the order of the linkes placement in the image, in the same way ponies are ordered.

LINK In the rare case that the file contains multiple links the metadata should contains multiple entries of this tag, one entry for each link sorted in the order of the linkes placement in the image, in the same way ponies are ordered.

The value for this tag must be either regular or mirrored. regular applies to linkes with NNE-SSW (\) direction. mirrored applies to linkes with NNW-SSE (/) direction, in version 2.9.1 only rainbowdrag uses this.

- COAT The name of the colour (as best estimated by you), in lowercase, that the pony's coat have. If the creature is (for example) a dragon, the colour of the scales is used. Common colour names are preferable. Only one colour should be named, but the name may describe a colour combination.
- MANE The name of the colour (as best estimated by you), in lowercase, that the pony's mane have. Common colour names are preferable. Only one colour should be named, but the name may describe a colour combination like rainbow for Rainbow Dash mane colour schema.
- EYE The name of the colour (as best estimated by you), in lowercase, that the pony's eyes have. Common colour names are preferable. Only one colour should be named, but the name may describe a colour combination. If the eyes are closed in the picture, use close in addition the the actual eye colour, separated by a comma.
- AURA The name of the colour (as best estimated by you), in lowercase, that the pony's magic aura have. Common colour names are preferable. Only one colour should be named, but the name may describe a colour combination.

The magic aura is the colourisation around items that are affected by magic.

If the pony file have multiple ponies, some with magicial abilities and some without, the ponies without magicial abilies should use the value (no magic). If the pony has magicial abilies but without an aura, use the value (invisible).

Only humans [here we must call ourself humans rather than ponies, otherwise the sentance does not make sense] can see the magic aura, describe the colour that we humans see, not ponies and other creatures in the TV Show [proof, see S01E11 Winter Wrap Up and S02E25-26 A Canterlot Wedding] (Presumably Discord can see Magic too).

DISPLAY This tag describes how a pony is places in the image. The standard values are: full, (full body), head (just the head), down (upside down), left (pony is looking to our left), right (pony is looking to our right), front (pony is looking at us). front can be combined with left and right, but left and right nor full and head cannot be combined.

WIDTH The width of the pony image measured in text columns.

HEIGHT The height of the pony image measured in text lines, this include the balloon (occupies one line) even if it the first line with nothing else on that line.

### BALLOON TOP

The number of lines at the beginning of the pony image that should be skipped if the balloon is not printed.

### BALLOON BOTTOM

The number of lines at the end of the pony image that should be skipped if the balloon is not printed.

POSE One word (preferably) to distinguish the pony files from other pony files with the same MASTER. It is preferable that this is written in bare infinitive. Master files should try to specify this tag but are not required to, however, non-master files (slave files) are required to specify this tag. This tag is important for the extras feature to function.

### BASED ON

Either the name of a pony that the pony is based. If the original pony is not from MLP:FiM, the name a value that pony's MEDIA tag can used inside brackets, for example (Tumblr), after the original pony's name. If the pony is not based on any pony the value (original) can be used. If the ponies is based on multiple ponies, make a comma separated list.

MASTER This tag refers to the pony file that is not named with extra attributes. For example, all files where Shining Armor is the (sole) speaking pony the this tag should be shiningarmor, except for in shiningarmor.pony where this tag may be omitted. This tag is important for the ponyquotes feature to work.

WING This is added manually only if needed, is the colour of wings from a pegasus or other alated creature (i.e.: Chrysalis).

SOURCE This tag specifies from where the pony image (not the file itself) originates. If the source is unknown the value should be (unknown), if a GitHub user draw it the the value should be that user inside square brackets (in case of multiple artists, the tag is comma seperated list). Otherwise the source should be specified in any reasonable manner.

In order the claim authorship (the GitHub user value) it image must have been written from scratch (using templates is okay) or must be a major edit of another image. Just converting (including fixing the colours) an image (for example from the Internet or a screenshot) with or without removing the background is not enough.

MEDIA This tag must not be used for MLP:FiM ponies, but only for extraponies. It specifies the media from where the pony (not the image) originates.

LICENSE Which licence applies to the image? Full name and version should be used. In case of multiple license there should be one entry for each license. Omit this tag is the license is not known.

The are two special cases here where this is no license. In which case it either uses regular copyright, in which case use the value (regular), or everyone is the copyright holder (for example Public Domain), in which case use the value (public).

FREE Is the image fully free? (For example Linux-libre is fully free, but not regular Linux.)

The value *must* either be yes. sharable or no, or the tag must be omitted. yes mean free, no mean non free for a libre distro and sharable mean that you need

permission from the author of the original image (or consept art like aurora) for inclusion with free ponies.

This is the most important tag as it helps us build a fully free version that can be officially distributed on FSF endorsed GNU/Linux distributions (GNU/Linux-libre).

Duplicate tags should be ordered in the order of the pony they describe from top-left to bottom-right in the image. It is important that if there are for example three ponies the image then all used tags that depends on the number of ponies in the image is used three times.

'Officiallity tag' refers the an annotation added to a tag value's list element. If the value is unofficial the string (unofficial) is appended (preferable with leading whitespace) to the element. If it is official the appended string is of the format (official, %c) (the brackets are verbatim), where %c is a comment. For example Chrysalis' name has not been mentioned in the show, however it is used in the manuscript, therefore a pony file with Chrysalis should have the (partial) metadata:

NAME: (not mentioned)

OTHER NAMES: Chrysalis (official, in manuscript and comic)

### 7 The tool chest

The tool chest is a collection of subcommands under the command ponysay-tool, its purpose is to provide tools to ponysay relevant actions that is not printing ponies (like the commands ponysay and ponythink).

### 7.1 Fill KMS cache

Before reading this section you may want to read the earlier section Section 5.1 [KMS ponies], page 11.

Invoking the command ponysay-tool --kms (no additional options are available) will pregenerate all kmsponies for your current TTY palette. This is useful if your computer is not fast enough, for you, at converting a pony to a kmspony. As the kmsponies may change between versions (noted in the change log if it happens) you may want to run this commmend after installing a new version of ponysay. Ponies that are already in the cache with the current KMS version will not be re-generated. May not work in all KMS drivers due to KMS inconsistants.

### 7.2 Metadata pasting

ponysay-tool allows you to copy, remove, stash and apply stashed pony metadata (but not merging, that must be done by hand.) The following commands does not support additional options.

ponysay-tool --edit-rm PONY-FILE will remove all metadata from the file PONY-FILE. To just remove some data you must use ponysay-tool --edit PONY-FILE or do it by hand. Note that you always use pony file, not pony names.

ponysay-tool --edit-stash PONY-FILE will print all metadata from a file to stdout. Cherry-picking cannot be done.

ponysay-tool --edit-apply PONY-FILE replace all metadata in a file with the metadata used provided in stdin.

To copy the metadata from one pony to another (and remove the old metadata) you will have to pipe the stashing and the applying command: ponysay-tool --edit-stash SOURCE-PONY-FILE | ponysay-tool --edit-apply TARGET-PONY-FILE

# 7.3 Editing metadata

ponysay-tool allows you to edit the metadata in a pony file by running ponysay-tool --edit PONY-FILE, where PONY-FILE is the pony file to edit, not the pony name. No additional options are available.

ponysay-tool --edit PONY-FILE is interative and opens an editor inspired by GNU Emacs. The tool will give you the standard tags to fill and will automatically fill in *HEIGHT* and *WIDTH* for you without allowing you to editing those two tags. Additionally the editor will print the pony at the right side of the terminal with the name of the file you are editing.

The commands the editor use is a small subset of the standard commands in GNU Emacs. Currently the commands are only coded for xterm (just about all terminals except Linux VT.) C-x means x with control held down. M-x means x with alt (meta) held down.

#### C-space

C-@ Set mark; only if mark is set and is at the same position as the point (cursor) the mark is deactivated. A mark creates a text select, it cannot span between lines.

C-k Cut out the rest of the line and add it to the kill ring.

C-w Cut out selected text and add it to the kill ring.

M-w Add the selected text to the kill ring and unset the mark.

C-y Paste (yank) text from the kill ring.

M-y Cycle in the kill ring.

C-o Insert a next line below the current line and go to it. This is useful if you want to

add another entry for a tag.

C-j

enter Go to next line, create a new line if at last line.

C-n

down Go to next line, do not create a new line if at last line.

C-p

up Go to previous line.

C-f

right Go to next column.

C-b

left Go to previous column.

home Go to the beginning of the line.

end Go to the end of the line.

backspace

C-h

C-? Remove the previous character on the same line.

delete Remove the current character on the same line.

insert Enter or exit override mode.

C-x C-x Swap the mark and the point.

C-x C-s Save your changes.

C-x C-c Exit the editor, do not forget to save if you have made changes.

### 7.4 Metadata collections

Pony metadata collection files are used by ponysay to by just reading one file per directory determine all pony files metadata and determine which ponies will pass the --restrict option when ponies are randomly selected.

A metadata colletion file's content a list, of pony files with and their corresponding metadata as a map from tag name to tag value set, serialised with Python's cPickle module.

Running ponysay-tool --metadata PONY-DIR will generate the file metadata with the serialised information. For use by the installer, the files to include can be explicitly declared appending their basename to the command.

### 7.5 Dimension files

Pony dimension files are used by ponysay to determine the size of all ponies and use that information to determine which ponies fit the terminal and may be randomly selected.

Running ponysay-tool --dimensions PONY-DIR will generate three files widths, heights and onlyheights to the directory PONY-DIR, the contain optimised information about the widths, heights and heights with printed without the balloon, respectively, for each pony the the directory. For use by the installer, the files to include can be explicitly declared appending their basename to the command.

### 7.6 Pony browsing

Running ponysay-tool --browse PONY-DIR, or ponysay-tool -b PONY-DIR will display all ponies in PONY-DIR for you. You can limit the listed ponies by using the option --restrict, or -r, that works the same was in with the commands ponysay and ponythink. See Chapter 2 [Invoking ponysay], page 2 for more infomation about the --restrict option.

In this browser you will on the right side have all pony files, in your selected directory, listed except those that does not match your --restrict settings. In the rest of the free space, the pony select in the list is centered. You can move the pony, in case it is too big, by using the arrows keys with control held down, or using the W, A, S, D keys (for QWERTY and QWERTZ layout,) or with the < (or  $\ddot{A}$ ), A, D, E keys (for Dvorak and Svorak layout.) To recenter the pony press C-1 (d1 with control held down.)

Browse between ponies using the arrow keys or with C-n and C-p, for next pony and previous pony, respectively. Additionally, Q can be used list quotes for pony, and I for metadata; press the key again to return the pony browsing.

The tool can be exited using the key combinations C-q or C-x C-c.

### 8 Limitations

### 8.1 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 <a href="https://github.com/erkin/ponysay/issues/1">https://github.com/erkin/ponysay/issues/1</a> 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 don't 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.

Any Terminal runing in VT-50 compatibility mode lost many of the VT100 terminals capabilities like UTF-8 and 256 colour support, making impossible for ponysay run in that emulated mode indifferent if the terminal used can support those two requisites.

### 8.2 GNU Hurd

ponysay should work just fine on GNU/Hurd, except for in the native virtual terminal (TTY). Hurd's terminal is limited to 16 colours and does not provide the capality of modifing.

If we are lucky it may be possible draw pictures, in full resultions, as you can in linux; which is currently not inplemented in ponysay. Another, not yet implemented possiblity, is to use low resolution with ACSII character for colour interpolation.

### 8.3 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.

# 9 Problems and requests

### 9.1 External bugs

There is only one known bug that may occour that is external to ponysay, meaning that it is a bug that can occour with ponysay, but is not actually a bug in ponysay. This bug is common for programs that prints a lot of colours, even with cat; it is only known to happen for VTE-based terminals, such as mate-terminal, gnome-terminal and terminator.

The bug, is that lines (often no more than one line) can skipped when all lines move up one step, the next line is skipped instead, and so one; or that an escape sequence is interpreted as pure text (this is common in GNU Emacs, however GNU Emacs does not support programs such as ponysay.)

This bug can often be suppressed by piping the output to cat multiple times when using a VTE-based terminal (or always if you prefer). The use of VTE-based terminal can often be determined by checking for the environment variable *COLORTERM*, to which VTE-based terminal usually export their name (some reported another terminals name.)

If you want to do this in GNU Bash you can add this (with possible modifications depending on what you also have done with ponysay) code sample to your ~/.bashrc file.

```
[[! "$COLORTERM" = ""]] &&
  function ponysay
  {
    exec ponysay "$@" | cat | cat | cat |
}
```

It is important for this bug workaround that cat is unbuffered, which is default in GNU's version of cat, but not in Unix's version. If this does not work, test adding the option -u to cat.

# 9.2 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. Wrong authorship, author name, alias and source count as bug, but in this case you need provide evidence that we are wrong, and who are the real artist, we not want fix a mistaken with another one.

# 9.3 Requesting ponies

If you want I specific pony added, ask us at <a href="https://github.com/erkin/ponysay/issues">https://github.com/erkin/ponysay/issues</a> 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.

# 10 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. The script works in bash, dash and zsh, but not in fish, so case you sh links to fish, run bash dependency-test.sh (or with one of the other compatible shells.)

# 10.1 Required runtime dependencies

coreutils

stty is used to determine the size of the terminal.

python>=31

ponysay is written in pure Python 3.

## 10.2 Optional runtime dependencies

util-say>=3

For improved TTY support for user with custom colour palette and KMS support. It can be downloaded at https://github.com/maandree/util-say. If this is used chmod from coreutils is also required.

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.

# 10.3 Package building dependencies

python>=32

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)

coreutils

For set ownership on directories at build time. For set simbolic links on files.

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

info<sup>3</sup> Used to install this info manual with install-info. (Optional, standard)

# 10.4 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>=3

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

Sometimes distributed as python3 rather than python.

Sometimes distributed as python3 rather than python.

Normally a part of texinfo.

# 11 Installing

### 11.1 From upstream

### 11.1.1 Installations basics

Before installing ponysay, make sure your system have the packages listed under Section 10.1 [Required runtime dependencies], page 22 and Section 10.3 [Package building dependencies], page 22 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 ./setup.py --freedom=parital install or python3 ./setup.py --freedom=parital install. This will install ponysay into /usr, normally meaning you need to run as root, e.g. by running sudo ./setup.py --freedom=parital install.

The --freedom option and manditory, if you only want completely free ponies, use --freedom=strict instread of --freedom=partial.

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, Swedish and Turkish: man -L es 6 ponysay, man -L sv 6 ponysay, man -L tr 6 ponysay. To install the localised manual, add the option --with-man-es, --with-man-sv or --with-man-tr when running ./setup.py.

### 11.1.2 Custom installations

--everything

--with-ponythink

--with-ponythink-command=/usr/bin/ponythink

With 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 skips 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:

```
Install everything that is not explicity excluded.

--minimal

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

--with-ponysay-command=/usr/bin/ponysay

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

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

### --with-ponysay-tool

--with-ponyponysay-tool-command=/usr/bin/ponyponysay-tool

Install the ponysay-tool 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

### --with-bash-completion=/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

### --with-fish-completion=/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

### --with-zsh-completion=/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

### --with-shell-completion=/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

### --with-pdf-manual=/usr/doc

Install PDF manual, and select directory for it.

### --with-pdf-compression

### --with-pdf-manual-compression=gz

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

#### --with-info

### --with-info-manual=/usr/share/info

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

### --with-info-install

### --with-info-manual-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

### --with-info-manual-compression=gz

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

```
--with-man-en
--with-manpage-en
--with-man-manual-en
--with-en-man
--with-en-manpage
--with-en-man-manual=/usr/share/man
          Install English man manual. Set directory for man manuals. (Default)
--with-man-es
--with-manpage-es
--with-man-manual-es
--with-es-man
--with-es-manpage
--with-es-man-manual=/usr/share/man
          Install Spanish man manual. Set directory for man manuals.
--with-man-sv
--with-manpage-sv
--with-man-manual-sv
--with-sv-man
--with-sv-manpage
--with-sv-man-manual=/usr/share/man
          Install Swedish man manual. Set directory for man manuals.
--with-man-tr
--with-manpage-tr
--with-man-manual-tr
--with-tr-man
--with-tr-manpage
--with-tr-man-manual=/usr/share/man
          Install Turkish man manual. Set directory for man manuals.
--with-man
--with-manpage
--with-man-manual
          Macro for all --with-man-LANG.
--with-man-en-compression
--with-manpage-en-compression
--with-man-manual-en-compression
--with-en-man-compression
--with-en-manpage-compression
--with-en-man-manual-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
--with-manpage-es-compression
--with-man-manual-es-compression
--with-es-man-compression
--with-es-manpage-compression
--with-es-man-manual-compression=gz
          Compress Spanish man manual, select compression by file name extension. This
```

option does not imply --with-man-es. (Default)

```
--with-man-tr-compression
--with-manpage-tr-compression
--with-man-manual-tr-compression
--with-tr-man-compression
--with-tr-manpage-compression
--with-tr-{\tt man-manual-compression=gz}
          Compress Turkish man manual, select compression by file name extension. This
          option does not imply --with-man-tr. (Default)
--with-man-compression
--with-manpage-compression
--with-man-manual-compression
          Macro for all --with-man-LANG-compression.
--man-section-ponysay
--man-sectionpage-ponysay
--ponysay-man-section
--ponysay-manpage-section=6
          Change the section for the ponysay manpage.
--man-section-cowsay
--manpage-section-cowsay
--cowsay-man-section
--cowsay-manpage-section=1
          Change the section for the cowsay manpage.
--man-section-fortune
--manpage-section-fortune
--fortune-man-section
--fortune-manpage-section=6
          Change the section for the fortune manpage.
--with-ponies
          Install standard xterm ponies. (Default)
--with-ttyponies
          Install standard tty ponies. (Default)
--with-extraponies
          Install extra xterm ponies. (Default)
--with-extrattyponies
          Install extra tty ponies. (Default)
--with-quotes
          Install pony quotes. (Default)
--with-balloons
          Install balloon styles. (Default)
--with-ucs
--with-ucs-names
          Install UCS pony names. (Default)
--without-custom-env-python
          Let the installer set the env name for python in ponysay. (Default)
--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

#### --bindir=/usr/bin

Set the system's directory for command executables.

#### --lib-dir

### --libdir=/usr/lib/ponysay

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

### --libexec-dir

### --libexecdir=/usr/libexec/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

### --sharedir=/usr/share

Set the system's directory for resource files.

### --sysconf-dir

### --sysconfdir=/etc

Set the system's local specific configuration directory.

### --cache-dir

### --cachedir=/var/cache

Set the system's directory for cache directories.

### --dest-dir

### --destdir=

Set off environment for installation.

### --linking=symbolic

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. ponysay -L will give the same output as ponysay -l if copy or hard is used. This is because it does link reading and not content or inode comparison.

### --freedom=MANDITORY!

Set your freedom. If you the any of the values strict, full, true or yes, the setup will make sure that only completly free parts of the package is installed. This should be used (--freedom=strict) on distributions for GNU endorsed (endorsable) GNU/Linux-libre distributions.

If you do not want this, will need to explicity say so (you do also need to say if you do want it) by using either of the values sloppy, partial, false or no.

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

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

### 11.2 Package repositories

### 11.2.1 Arch Linux

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

### 11.2.2 Arch Linux ARM

community/ponysay from Arch Linux (Section 11.2.1 [Arch Linux], page 28) is also available for Arch Linux ARM.

### 11.2.3 Chakra

Chakra users can install from (CCR) a stable version named a ponysay (developer maintained Arch Linux mirror), additionally a git verion of ponysay is available as ponysay-git (developer maintained Arch Linux mirror).

### 11.2.4 Debian GNU/Linux and Ubuntu

A .deb file is available at http://roryholland.co.uk/misc.html#ponysay (user maintained), and PPA:s can be found at https://launchpad.net/~vincent-c/+archive/ppa (user maintained) and https://launchpad.net/~blazemore/+archive/ponysay (user maintained). Note: Look Availabily before use one of these ppa.

### 11.2.5 Gentoo Linux

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

### 11.2.6 Source Mage GNU/Linux

The spell util/ponysay (user maintained) is available in Grimoire for Source Mage GNU/Linux. Note: They skip impar versions.

### 11.3 Exotic operating systems

An "exotic operating system" is a operating system that is not GNU (GNU/Linux ("Linux") and GNU/Hurd are GNU distross.)

Mac OS X users can use the ponysay Homebrew (https://github.com/mxcl/homebrew) formula to install ponysay.

Ponysay is also reported to be able to run on Windows 8 through Cygwin, provided that python3 is installed. It will probabily also run one any other version of Windows through Cygwin. Additionally among the preinstalled fonts in Windows 8; Consolas 10pt, and larger, can be used for almost perfect ponies (they may be just a little distorted on the height), however Consolas is only able print the ASCII based balloons.

# 11.4 Uninstalling

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  ${\tt Makefile}$ . To perform an uninstallation of old files run  ${\tt makeuninstall-old}$ .

Note: make is no longer supported, instead use setup.py a python 3 wrapper whit same syntaxis as the old make.

# 12 Inner workings

### 12.1 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. New for Ponysay 3.1 is \$X\$, which is a cross if the \$/\$ directed balloon link and the \$\\$ directed balloon link.

Variables whose name begin with balloon are parsed as balloon inserts, it can be either balloon, balloonX, balloon, Y or balloonX, Y, whether X is the minimum width of the balloon and Y is the minimum height of the balloon. New in Ponysay 3.0 is that the X can also be an range of columns, it contains of two numbers, the preferable start column, from the column that variables is placedon, the other number is the minimum width of the balloon. The two values are separated either by a 1, a r or a c. If 1 is used the the balloon is printed as normal, except that it if wrapping is enabled and the balloon whould exceed the wrapping column, the balloon continues to fill on its left, at most as much as the position value. If r is used, the balloon fills the it's left first and then to its right. If c is used the balloon will try the fill on its left and right side equally.

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.

# 12.2 Pony metadata extension

New in ponysay 3.0 is pony metadata, this feature is not supported in util-say (at least not yet). It extends the previously described format of the pony files, by letting you specify details about the pony image, and the pony itself, as well as adding comments.

The metadata entry must be at the absolute beginning of the file (UTF-8 signture excluded), and is the file must be encoded in UNIX line breaks. The metadata entry begins with a line with exactly 3 dollar signs and nothing else (\$\$\$), and end in the same way direct follow by the pony image starting from the next line.

A metadata tag consists of a tag name in upper case and a tag value, with a colon (:), optionally with surrounding regular spaces or tab spaces, but at least one regular space or tab space directly after the colon. The name can only consist of A to Z (upper case ASCII letters) and regular spaces. All tab spaces in the tag names and values are handled as regular spaces. Multiple tag names can be used multiple times or can be completely skipped. There are only a few tags, namely BALLOON TOP, BALLOON BOTTOM, MASTER and FREE, that absolutely should not be used multiple tag, but nor should WIDTH and HEIGHT; a general rule

<sup>&</sup>lt;sup>1</sup> Section 12.1 [Pony anatomy], page 30

is that a tag desribing a pony should be duplicated exactly as many times as there are ponies in the image.

Any line that does not conform to the format of a tag line is a part of the comment field. Leading line breaks in the comment field is ignored.

### 12.3 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.

# 12.4 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.

# 12.5 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.

# 12.6 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.

# 12.7 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.

# 12.8 Shell auto-completion

To make it easier to write auto-completion for shells, ponysay supports the options --onelist, ++onelist, --Onelist and --quoters, which has no short versions. To make it even easier we use auto-auto-complete (https://www.github.com/maandree/auto-auto-complete) to generate auto-completion scripts, currently it supports bash, fish and zsh, the built system uses that program to generate completion for each shell.

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.

Executing ponysay --Onelist will list every available standard pony as well as extra 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.

# 12.9 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 9. 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.

It is important that the UCS names are stored in a file and not in file names, because it can cause problems on some platforms.

# 13 Contributing

# 13.1 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 <a href="https://github.com/maandree/util-say">https://github.com/maandree/util-say</a>. 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 (<a href="https://github.com/rossy2401/img2xterm">https://github.com/rossy2401/img2xterm</a>) 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 is available in util-say's info manual.
img2ponysay is a legacy command that uses the default settings of ponytool for converting a image file to a pony file.
```

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 10.4 [Dependencies for pony providers], page 22.

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.

# 13.2 Pony naming guildlines

These are not rules, this are guildlines you can use when in doubt on how you want to name your ponies. That is, these are only suggestioned based on observion of current practice and discussions, it is probable that these suggestions are not optimal in complex cases.

Try to follow the MLP:FiM Wikia on http://mlp.wikia.com/wiki/List\_of\_ponies, if it is in conflict with an authorised game, such as Gameloft, it is more likely that that game has make an error, especially ignore a game on palette mismatch, and the Wikia is probabily more agreed with fist party merchandice, fans and crew at same time.

For in the wikia the order of precedence is:

- The series itself: In they first run, and uncensored
- The crew: M. A. Larson, Sabrina "Sibsy", Lauren Faust (For the first and second season only), et al.
- First party merchandice: Blind Bags and colectable toys [Further duscution is taken after any renamed]
- Second party merchandise: Any that claim to by official whitout logo and all the fancy stuff [further discusion first]
- Three party merchandice: Any that use the toys or characters but only in they tags, on-line stores and soo [Only if the evidence and use are far extended that a further discussion for renaming or not is needed]
- Placeholder: Any fan given name gived voted in a open procees on http://reddit.com/r/listofponies where any can vote or give sugestions fallow they rules. These ones CAN potentially becomed official names or/and influence subsecuent discutions about renaming ponies.

Sometimes there are background ponies with the same palette and cutie mark, but of different kinds (earth pony, unicorn, pegasus and so on). In these cases the Wikia often list them as the same pony, they are given the same name. When this happens you can name the pony that appears first in the show just the name and append either 'earth', 'unicorn' or 'pegasus' depending on the kind. If the pony is a background alicorn, it is a princess and is titled as such, you can bet your sweet flank the Wikia will have given her a royal name [look 'Princess Erroria' second appearence].

When there are many alternative names, but no official, use one you think is most recognised or your personal favourite. It with short names when the names are similar. Symbolic links can help in this last case.

# 14 Distributing

If you are planning on maintaining ponysay in your favourite operating system you should first read Section 10.1 [Required runtime dependencies], page 22 and Section 10.2 [Optional runtime dependencies], page 22. 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 11.1.2 [Custom installations], page 23.

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.

The following is a reference distribution written in Arch Linux's PKGBUILD format. It is not complete, proper, verbose enough or well written, it just contains the core of an stable git distribution.

```
pkgname=ponysay
pkgver=3.0.1
pkgrel=1
arch=('any')
pkgdesc="Cowsay reimplementation for ponies"
url="https://github.com/erkin/ponysay"
license=('custom:GPL3' 'FDL')
depends=('python>=3' 'coreutils')
optdepends=("util-say>=3: Improved TTY support with KMS and PNG files")
makedepends=('git' 'texinfo' 'info' 'gzip' 'python>=3')
source=("ponysay::git+https://github.com/erkin/ponysay")
nd5suns=('SKIP')
build()
{
    cd "$srcdir/ponysay"
    git checkout "$pkgver"
    ./setup.py --everything --without-pdf-compression \
               --bin-dir=/usr/bin --dest-dir="$pkgdir" \
               --freedom=parital build
    # CHANGE --freedom=parital to --freedom=strict
    # FOR ONLY COMPLETELY FREE PONIES,
    # useful for GNU/Linux-libre distributions
}
package()
    cd "$srcdir/ponysay"
    ./setup.py DESTDIR=$pkgdir install
```

# 15 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 \${XDG\_DATA\_HOME}/ponysay or ~/.local/share/ponysay (fallback).

browser ponies

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

desktop ponies

A program for Windows (need .NET framework 4), OSX (need Mono 3.0.2 and XQuartz) and Unix (need mono and mono-basic) this say they README file, but is reported have really many problems or simply not work outside Windows) that run gif pixelated ponies like those ones on ponysay on your screen with interactivity one and each other, quotes and one or two games. Programmed by RoosterDragon with help of artists like Botchan, Jay Wright and many others artist.

ponification

The process of converting English text to Equestrian English. The process if transforming a non-pony artowork, character history or another thing into a pony version of that.

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 or Basic 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, -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 all 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 all 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 3.0.2

- New ponies: brucemane, cremebrulee, deepblue, fleetfoot, filmreel, flashsentry, hairytipper, ironwill, mantishy, maybelle, misty, mule, nightmarerarity, peachbottom, rainbowdashcrystal, rainbowdrop, rainbowfim, shortround, strawberrycream, sunsetshimmer, theoldenpony, unclewing, wildflower
- New extraponies: aurora, aquarius, aries, barbara, buttonmom, cancer, capricorn, childrenofthenight, chrome, firefox, fluffle, fyreflyready, gemini, gnupony, internetexplorer, leo, libra, lilmissrarity, milky, milkylay, opera, oscura, pisces, princeartemis, reddit, robodash, sagittarius, scorpio, snowdrop-crew, solaris, sweetiebot, taurus, twibrain, virgo, wiggles
- Pony symlink added:
  - ullet walter o waltercoltchack
  - ullet barbra o barbara
  - ullet buttonmash o highscore
  - ullet brad o flashsentry
  - ullet ie o internet explorer
  - ullet dancefever o hairytipper
- Default value for -W, the message wrapping column, has been changed from 40 to 60, to wrap messages better.
- nightmare has renamed into nightmaremoon for concistency with the comic
- ironwill (3.0.1 and lower) has been renamed to ironwillwalk because now we have a non walk version to be master.
- doctor has ben reintegrated to ponies thanks to official comic issue 8 where drhooves is siting alongside doctor and in front of celestia
- Turkish manual page added.
- Swedish manual page added.
- +h (++help, --help-colour) added.
- Added manpage for ponysay-tool.
- auto-auto-completion now is no more part of ponysay, therefor you need install them and rebuild to get *auto-completion*, otherwise these *auto-completion* files aren't installed.

# Version 3.0.1

- New ponies: harshwhinny
- All ponies has been reviewed and improved when needed.
- The ponysay-tool command is now installed.

# Version 3.0

New ponies: applesplit, amira, babseed, bear, beautybrass, bigmacsleep, billneiigh, cadancecrystal, cadancescruffy, cloudchaser, descent, gingersnap, haakim, hayseed, jubileena, featherweight, fiddlesticks, flitter, lighningdust, midnightstrike, mrbreezy, orangebird, orangefrog, pansyshy, pinkiecrazyface, princesserroria, poundcake, raccoon, rainbowblitz, rarity, ravenearth, ravenunicorn, royalunicornguard, rumble, shiningarmorcrystal, sombra,

spikecrystal, squirrel, sweetcream (IDW Comic Issue #1), trixieamulet, twilacorn, twilightcrystal, twilightfly, twilightpricess, twilightwings, twinkleshine

- New extraponies: donutpony, gleamingshield, hastelle, johndelancie, jristz, maandree, orion, pipsqueak, pardise, pizzapony, snowdrop, tempo, ticket
- lotusbloosom has been renamed to lotusblossom (typo)
- maredowellgallop has been renamed to maredowellgallop (need a version named as master)
- ironwillwalk has been renamed to ironwillwalk (need a version named as master)
- Renamed option -F to +f and option --F to ++f, -F and --F has new definitions.
- Environment variable PONYSAY\_TYPO\_LIMIT has been added.
- Environment variable PONYSAY\_WRAP\_HYPHEN has been added.
- Environment variable PONYSAY\_WRAP\_LIMIT has been added.
- Environment variable PONYSAY\_WRAP\_EXCEED has been added.
- Added support for ~/.ponysayrc with the alternatives: \${XDG\_CONFIG\_ HOME}/ponysay/ponysayrc and ~/.config/ponysay/ponysayrc as well as the global fallback/etc/ponysayrc
- -f, +f and -q may be unargumented if that are at the end of the command line.
- ponysay-tool is introduced, it can be used to edit, remove and copy pony meta data, and more.
- ponysay-tool --kms generates all kmsponies for the current TTY palette.
- Pony metadata tags *BALLOON TOP* and *BALLOON BOTTOM* can be used to specify how much extra height the balloon causes at the top and at the bottom of the pony.
- \${XDG\_DATA\_HOME}/ponysay/\* is allowed in favour of \${HOME}/.local/share/ponysay/\*
- Balloons can be have and explicit minimum column span with placement justification.
- Only ponies that fit the terminal will be randomly selected (for directory with pony dimension files generated), however if no pony fits, any of the can be randomly selected.
- Setup option --sysconf-dir with default value /etc added,
- New manditory setup option --freedom.
- Pony metadata options added: --info, ++info and --restrict.
- fillycelestia and filliestia has been moved to extraponies.
- shadowbolts has been renamed to nightingale (shadowbolts split)
- lily has been renamed to lilyvalley (official name)
- sweatiesing has been renamed to sweetising (name consistency)
- carecake has renamed into carrotcake (official full name)
- peppermoon has renamed to pepermoon (typo)
- maria has been renamed to danger (name given by the author)
- maliot renamed to melilot (typo)
- Pony symlink added:
  - lily  $\rightarrow$  lilyvalley
  - ullet sweetiedrops o bonbon
  - ullet carecake o carrotake
  - berrydreams → blueberry
- The license has been changed to the GNU General Public License version 3+, from WTFPL 2.

# Version 2.9.1

• Bug fix: correction in the -W option broke the -o option.

### Version 2.9

- New ponies: pinkieumbrelahatfear, twilighttime
- New extraponies: molestia (Tumblr)
- The option -q works like -f and -F, it takes one argument, and may be used multiple times for more arguments.
- The old option -q is renamed to --q.
- The options --f and --F has been added.
- Weighted distance for autocorrection on pony names and boolean style name is set to 5, rather than unlimited. Currently this cannot be modified (without editing the source code.)
- If file descriptor 3 is definied when ponysay is executed, extra information is printed to it.
- Arguments starting with n or i is allowed for -W.

# Version 2.8

- New ponies: airheart, bastionyorsets, gustavelegrand, milkyway, peppermoon, pinkacopter, pinkiefly, pinkieparade, pinkieumbrellahat, shiningarmorwedding, soaringofficer, starlight, sunnyrays, sweatiesing, tenderheart, tom, twilightspike, zecorabalance
- New extraponies: applejack (Tumblr), applejack-63, artemis, blueberry, butterscotch, drhoovesdiscorded (Tumblr), duskshine, elusive, rainbowblitz
- Pony symlink added:
  - ullet georgewashingtony o bastionyorsets
- Support for explicit hyphenation using soft hyphens had been added to the word wrapper.
- Support for explicit non-word wrapping using non-breaking space had been added to the word wrapper.
- The word wrapper colours the inserted hyphens in red.
- Support for terminal capabilities emulation with the flags -X, -V and -K.
- Support for printing just the pony, using the flag -o.
- Colouring option flags are added.
- Automatic correction of incorrectly spelled pony names and balloon style names added.

# Version 2.7

- New ponies: basil, cloudkicker, cerberus, cow, derpysad, flowertrio, frederickhorseshoepin, horsemd, jeffletroski, jesuspezuna, joe, joetuxedo, manticore, meadownsong, meliot, pinkiegummydisguise, seaswirl, theodoredonaldkerabatsos, turf, waltercoltchak
- New extraponies: blueballblitz (Varous fanfics, Shadowbolt), drhooves1, drhooves2, drhooves3, drhooves4, drhooves5, drhooves6, drhooves7, drhooves8, drhooves9, drhooves10, drhooves11, nyx (Fanfic: Past Sins), nyxdisguised (Fanfic: Past Sins), pinkaminacupcake (Fanfic)
- cracky is renamed to crackle.

### Version 2.6

- New ponies: applebloomdance, blueberry, blueberrycake, blueharvest, candylicious, cherrycola, cracky, cutiemarkcrusaders, derpybags, derpycloud, firestreak, hughjelly, lemonhearts, lyrabonbon, noi, pictureperfect, poppycock, quickfix, silverspeed, rainbowhurricane, rainbowshadowbolt, silverspeed, surprise (wonderbolt), thunderlane, timeturner, twilightthebearded
- New extraponies: faust (alicorn), maria (Moonstuck, seapony), posey (Tumblr), slanderpony, sparkler (Tumblr), twilight (Tumblr)
- Pony symlink added:
  - ullet bonbonlyra o lyrabonbon
  - $\bullet$  epona  $\rightarrow$  quickfix
  - ullet clockwork o quickfix
  - ullet drhooves o timeturner
  - ullet lotusbloosom o lotus
- doctor and doctornohat has become extraponies, because their mane style is difference from in the TV show. And timeturner no longer links to any of them.
- ./configure and make is no longer support.

# Version 2.5.1

- New extraponies: sealyra
- Build system as compatibility with standard GNU Make build system.

# Version 2.5

- Brand new highly configurable build system.
- UTF-8 as I/O encoding is enforced. (Critical bug fix for ASCII locale users.)

# 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:
  - ullet pinkieoinko 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:
  - $sindy \rightarrow powderrouge$
- 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:
  - ullet mrsparkle o nightlight
  - ullet elsie o 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:
  - ullet amethyststar o sparkler
  - ullet berrypinch ightarrow ruby
  - $\bullet \ \mathtt{craftycrate} \to \mathtt{boxxy}$
  - ullet magnum o raritysdad
  - $\bullet \ \mathtt{pearl} \to \mathtt{raritysmom}$
  - ullet powderrouge o sindy
  - ullet royalribbo o 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:  $perry \rightarrow \{pokey \rightarrow perrypierce\}.$
- 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.
- New ponies: applecore, applejackscarecrow, bonbonstand, changeling, chrysalis, cottoncloudy, diamondmint, discord, fillycadence, flam, fleurdelis, flim, fluttershyshy, fluttershystare, lyrasit, oinkoinkoink (is pinkie), philomenaphoenix, pinkiecannon, pinkiecannonfront, pinkiecannonhappy,

pinkiegummy, pinkiehugfluttershy, pinkiehugsfluttershy, pinkiepartycannon, pinkieprincess, pinkiesilly, pinkietongue, pinkiewhoops, pinkiewhoopseat, pinkiewhoopsout, rainbowdrag, rainbowsalute, rainbowshine, raritydrama, shiningarmor, shiningarmorguard, snowflake, spikemustache, stevenmagnet, stevenmagnettrue, twilightcrazyfromball, twilightrage, twilightzero, wildfire.

- Pony symlinks added:
  - djpon-3  $\rightarrow$  vinyl
  - ullet fillycadance o fillycadence
  - ullet horsepower o 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:
  - ullet carrottop o carrot
  - ullet goldenharvest o carrot
  - ullet harpass o lyra
  - ullet heartstrings o lyra
  - ullet lulamoon o trixie
  - $\bullet \ \mathtt{minuette} \to \mathtt{colgate} \\$
  - ullet noteworthy ightarrow blues
  - $perry \rightarrow pokey$
  - ullet pokeypierce o pokey
  - ullet timeturner o doctornohat
  - ullet trixielulamoon o trixie
  - ullet twilightvelvet o 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

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# Appendix C Ponysay license

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Version 3, 29 June 2007

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