
lala Documentation

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Contents

1	Installation	3
1.1	PyPI	3
1.2	Git	3
1.3	Setup	3
1.4	Starting the bot	4
2	Updating	5
3	Configuration file options	7
4	Plugins	9
4.1	Birthday Reminder	9
4.2	Calendar	9
4.3	Decide	9
4.4	Downforeveryoneorjustme	10
4.5	Feinstaubalarm	10
4.6	Fortune	10
4.7	HTTP Title	10
4.8	Ilmenau weather	11
4.9	Last Messages	11
4.10	Chatlogger	11
4.11	Prometheus	11
4.12	Quotes	12
4.13	Roulette	13
5	Lala IRC Bot	15
6	Lala Config Module	17
7	Lala utils	19
8	Indices and tables	21
	Python Module Index	23

Contents:

CHAPTER 1

Installation

1.1 PyPI

Lala is available on the Python Package Index. This makes installing it with [pip](#) as easy as:

```
pip install lala
```

1.2 Git

If you want the latest code or even feel like contributing, the code is available on [Github](#).

You can easily clone the code with git:

```
git clone git://github.com/mineo/lala.git
```

Now you can start hacking on the code or install it system-wide:

```
python2 setup.py install
```

1.3 Setup

Setting up the bot is relatively easy: Simply copy the supplied example config file from:

```
/usr/share/lala/config.example
```

to either:

```
/etc/lala.config
```

or:

```
$XDG_CONFIG_HOME/lala/config
```

or (if the latter is not set):

```
$HOME/.lala/config
```

After that, you can modify the config file as you wish.

1.4 Starting the bot

Starting the bot is very easy as it installs a `twistd` plugin:

```
twistd lala
```

For now, only a `--verbose` option is provided which makes the output written to the log file more verbose.

Additionally, `twistd` itself offers a few options, use:

```
twistd --help
```

to view them.

CHAPTER 2

Updating

Some commits require a manual update of the SQLite database used for the quotes.

The following is a list of those commits and the commands to run the update, where `<sqlite-file>` is the path to the quote database file. Newer commits appear first.

- 410ccde58bf6f635b121c0a5349dce5fd643679a (part of release 0.4)
`sqlite3 <sqlite-file> misc/2-add-votes-to-quotes.sql`
- a602b32dfa8aeb0d89b18275fe9e371199f3fd7c (part of release 0.4)
`sqlite3 <sqlite-file> misc/1-add-id-columns.sql`
- 44f8b476a1e28af60b5e21704b5c1eafd2f9bb54 (part of release 0.3)
`sqlite3 <sqlite-file> misc/0-add-author-to-quotes.sql`

Configuration file options

Both the basic configuration and the plugin configuration of Lala takes place in a central configuration file.

The basic options, which can be set in the *base* section, are:

- **server** The server to connect to.
- **port** The port on which the server listens.
- **nick** The nick of the bot.
- **admins** A comma-separated list of people allowed to issue admin-only commands (like reconnect or quit) to the bot.
- **nickserv_password** Optional.
The password which is used to identify with Nickserv.
- **channels** Optional.
A comma-separated list of channels which are joined automatically after connection to the server.
- **fallback_encoding** Optional.
Lala assumes all messages received are UTF-8 encoded. If that's not the case, this is the second encoding to try.
- **plugins** Optional.
A comma-separated list of plugins to load at startup. The plugin "base" is always loaded, it contains basic commands like "help" and "reconnect".
- **debug** Optional.
if "yes", this has the same effect as specifying `-verbose` on the command line.

4.1 Birthday Reminder

The `birthday` plugin is a simple birthday reminder. It will congratulate a user if he joins the first time on his birthday. It provides only one command:

- `my_birthday_is`
Sets the birthday of a user. Expects the date to be in the format `%d.%m..`

4.1.1 Options

- None

4.2 Calendar

This plugin provides one command, `weeknum`, which simply echoes the current week number in the channel.

4.2.1 Options

- None

4.3 Decide

This plugin provides one command, `decide`, which, given a list of options separated by a slash (/) chooses one of them.

4.3.1 Options

- None

4.4 Downforeveryoneorjustme

This plugin provides a single command, `isitdown` that, given a URL checks its availability on [Downforeveryoneorjustme](#).

4.4.1 Options

- None

4.5 Feinstaubalarm

This plugin provides a single command, `feinstaubalarm` that checks if there's currently a "Feinstaubalarm" in Stuttgart, Germany.

4.5.1 Options

- None

4.6 Fortune

This plugin provides two commands, `fortune` and `ofortune`, both of which basically call the [fortune command](#) and post the result in the channel. In addition, `ofortune` supplies the `-o` option to `fortune` so that only offensive fortunes are chosen.

4.6.1 Options

- `fortune_files`
The fortune file(s) to use. Defaults to `fortunes`. This can be overridden when using either `fortune` or `ofortune` by adding the preferred fortune file after the command, like `!fortune riddles`.
- `fortune_path`
The full path to the fortune binary. Defaults to `/usr/bin/fortune`

4.7 HTTP Title

The `httptitle` plugin will print the `<title>` HTML element of every linked posted.

4.7.1 Options

- None

4.8 Ilmenau weather

This plugin can be used to display information about the weather in Ilmenau, Germany.

It only provides one command:

- `iweather` Displays weather information.

4.8.1 Options

- None

4.9 Last Messages

The `last` plugin saves the last messages in memory. It provides a `last` command to retrieve them.

4.9.1 Options

- `max_lines` The maximum number of lines to message upon the `last` command. Defaults to 30
- `datetime_format` The format used to format the timestamps in the log. Have a look at the [strftime documentation](#) for all possible options. The default is `%Y-%m-%d %H:%M:%S`.

4.10 Chatlogger

The `log` plugin logs all received messages to a file.

4.10.1 Options

- `log_file` The location of the log file.
- `max_log_days` The number of days for which logs are kept. Set this to zero to keep them indefinitely.

4.11 Prometheus

The `prometheus` plugin exposes metrics for [Prometheus](#).

4.11.1 Options

- `port` The port on which the web server exposes the metrics. Defaults to 9100.

4.12 Quotes

The `quotes` plugin can be used to capture quotes in a database. It will also print a quote containing the name of the joining person on every join.

It provides the following commands:

- `qadd <quote>`
Adds a new quote to the database
- `qdelete <quote id>`
Admin only.
Deletes the quote with the specified ID.
- `qget <quote id>`
Get the quote with the specified ID.
- `qlast`
Get the last inserted quote.
- `qrandom`
Retrieve a random quote.
- `qdislike <quote id>`
Dislikes the quote.
- `qlike <quote id>`
Likes the quote.
- `qtop <limit>`
Shows the `limit` (default: `max_quotes`) quotes with the best rating.
- `qflop <limit>`
Shows the `limit` (default: `max_quotes`) quotes with the worst rating.
- `quotestats`
Display some stats about the quote database. This is currently limited to the total number of quotes and the percentage of quotes per author.
- `searchquote <text>`
Search for a quote containing `text`.

4.12.1 Options

- `database_path`
The path to the SQLite database file. Defaults to `~/.lala/quotes.sqlite3`.
- `max_quotes`
The maximum number of quotes to print when using `searchquote` or `qtop/qflop`. Defaults to 5.

4.13 Roulette

The `roulette` plugin provides a basic version of [Russian roulette](#) with two commands:

- `shoot`
Shoots the revolver.
- `reload`
Reloads the revolver.

4.13.1 Options

- `None`

API:

CHAPTER 5

Lala IRC Bot

```
class lala.bot.Lala(*args, **kwargs)
    Bases: twisted.words.protocols.irc.IRCClient

    action(user, channel, data)
        Called when a user performs an ACTION on a channel.

    irc_RPL_WHOSREGNICK(prefix, params)

    joined(channel)
        Called after joining a channel.

    lineRate = 1

    modeChanged(user, channel, set, modes, args)
        The mode of a user has been changed. If it was added by Chanserv and the user is in the admin list,
        append him to identified_admins.

    msg(channel, message, log, length=None)
        Sends message to channel.

        Depending on log, the message will be logged or not.

        Do not use this method from plugins, use lala.util.msg() instead.

    nickname

    noticed(user, channel, message)
        Same as lala.bot.Lala.privmsg() for NOTICES.

    privmsg(user, channel, message)
        Handles received messages.

    signedOn()
        Called after a connection to the server has been established.

        Joins all configured channels and identifies with Nickserv.

    userJoined(user, channel)
        Handles join events.
```

```
userKicked (user, message)  
userLeft (user, channel)  
userQuit (user, message)  
versionName = 'lala'  
versionNum = '0.5.dev125+gf14a51a'
```

Lala Config Module

Config module

Changed in version 0.5.

The function `set_default_options` was removed. To achieve the same behaviour, set a module-level dict called “DEFAULT_OPTIONS” where the keys are the option names and the values are the default values in your plugin.

`lala.config.get(key, converter=None)`

Returns the value of a config option. The section is the name of the calling file.

Default values for all keys can be set with `set_default_options()`.

Parameters `key` – The key to lookup

`lala.config.get_int(*args)`

Returns the value of a config option as an int.

Parameters `*args` – See `lala.config.get()`

Return type `int`

`lala.config.get_list(*args)`

Gets a list option.

Parameters `*args` – See `lala.config.get()`

Return type list of strings

`lala.config.set(key, value, plugin=None)`

Sets the value of `key`. The section is the name of the calling file.

`lala.config.set_list(key, value, *args)`

Sets option `key` to `value` where `value` is a list of values.

None of the values in `value` are allowed to contain `lala.config._LIST_SEPARATOR`.

This method does *not* preserve the type of the items in the list, they’re all passed through `str()`.

Parameters

- `key` – See `lala.config.set()`

- **value** – A list of values for `key`.

`lala.config._LIST_SEPARATOR = ', '`

Used as a separator when storing lists of values in the config file

CHAPTER 7

Lala utils

Helpers to be used with plugins

class lala.util.**command**(*command=None, admin_only=False, aliases=None*)

Bases: `object`

Decorator to register a command. The name of the command is the `__name__` attribute of the decorated function.
Example:

```
@command
def heyiamacommand(user, channel, text):
    pass
```

You can also pass a `command` parameter to overwrite the name of the command:

```
@command(command="yetanothercommand")
def command_with_a_really_stupid_or_insanelly_long_name(user,
channel, text):
    pass
```

`aliases` can be a list of names under which the function will be available in addition to its primary name.

An additional argument, `admin_only` can be used to make a function available to admins only:

```
@command(admin_only=True)
def give_me_the_one_ring(user, channel, text):
    pass
```

New in version 0.5.

If the function returns a `twisted.internet.defer.Deferred` or a generator function that's generating them, an `Errback` will automatically be added to the `Deferred(s)`.

Changed in version 0.5.

The third argument received by a command function used to include the name of the command itself. Since version 0.5 this is no longer the case.

`lala.util.msg(target, message, log=True)`

Send a message to a target.

Parameters

- **target** (*str*) – Target to send the message to. Can be a channel or user
- **message** (*str* or [*str*]) – One or more messages to send
- **log** (*bool*) – Whether or not to log the message

`lala.util.on_join(f)`

Decorator for functions reacting to joins

Parameters **f** – The function which should be called on joins.

class `lala.util.regex(regex)`

Bases: `object`

Decorator to register a regex. Example:

```
@regex(" (https?://.+)\s?")
def somefunc(user, channel, text, match_obj):
    pass
```

`match_obj` is a `re.MatchObject`.

Parameters **regex** – A `re.RegexObject` or a string representing a regular expression.

`lala.pluginmanager.disable(trigger)`

Disables *trigger*.

Parameters **trigger** (*str*) – The trigger to disable. Can be a key for a callback or a regular expression

`lala.pluginmanager.enable(trigger)`

Enables *trigger*.

Parameters **trigger** (*str*) – The trigger to enable. Can be a key for a callback or a regular expression

`lala.pluginmanager.is_admin(user)`

Check whether *user* is an admin.

If a nickserv password is set, this will work by checking an internal list of identified admins.

If no nickserv password is set, this simply checks if *user* is in the “admins” option of the “base” section.

class `lala.pluginmanager.PluginFunc(func, enabled=True, admin_only=False, aliases=None)`

Bases: `object`

`lala.pluginmanager.load_plugin(name)`

CHAPTER 8

Indices and tables

- `genindex`
- `modindex`
- `search`

I

- `lala.config`, [17](#)
- `lala.pluginmanager`, [20](#)
- `lala.plugins.birthday`, [9](#)
- `lala.plugins.calendar`, [9](#)
- `lala.plugins.decide`, [9](#)
- `lala.plugins.down`, [10](#)
- `lala.plugins.feinstaubaalarm`, [10](#)
- `lala.plugins.fortune`, [10](#)
- `lala.plugins.httptitle`, [10](#)
- `lala.plugins.iw`, [10](#)
- `lala.plugins.last`, [11](#)
- `lala.plugins.log`, [11](#)
- `lala.plugins.prometheus`, [11](#)
- `lala.plugins.quotes`, [11](#)
- `lala.plugins.roulette`, [12](#)
- `lala.util`, [19](#)

Symbols

`_LIST_SEPARATOR` (in module `lala.config`), 18

A

`action()` (`lala.bot.Lala` method), 15

C

`command` (class in `lala.util`), 19

D

`disable()` (in module `lala.pluginmanager`), 20

E

`enable()` (in module `lala.pluginmanager`), 20

G

`get()` (in module `lala.config`), 17

`get_int()` (in module `lala.config`), 17

`get_list()` (in module `lala.config`), 17

I

`irc_RPL_WHOSREGNICK()` (`lala.bot.Lala` method), 15

`is_admin()` (in module `lala.pluginmanager`), 20

J

`joined()` (`lala.bot.Lala` method), 15

L

`Lala` (class in `lala.bot`), 15

`lala.config` (module), 17

`lala.pluginmanager` (module), 20

`lala.plugins.birthday` (module), 9

`lala.plugins.calendar` (module), 9

`lala.plugins.decide` (module), 9

`lala.plugins.down` (module), 10

`lala.plugins.feinstaubalarm` (module), 10

`lala.plugins.fortune` (module), 10

`lala.plugins.httptitle` (module), 10

`lala.plugins.iw` (module), 10

`lala.plugins.last` (module), 11

`lala.plugins.log` (module), 11

`lala.plugins.prometheus` (module), 11

`lala.plugins.quotes` (module), 11

`lala.plugins.roulette` (module), 12

`lala.util` (module), 19

`lineRate` (`lala.bot.Lala` attribute), 15

`load_plugin()` (in module `lala.pluginmanager`), 20

M

`modeChanged()` (`lala.bot.Lala` method), 15

`msg()` (in module `lala.util`), 19

`msg()` (`lala.bot.Lala` method), 15

N

`nickname` (`lala.bot.Lala` attribute), 15

`noticed()` (`lala.bot.Lala` method), 15

O

`on_join()` (in module `lala.util`), 20

P

`PluginFunc` (class in `lala.pluginmanager`), 20

`privmsg()` (`lala.bot.Lala` method), 15

R

`regex` (class in `lala.util`), 20

S

`set()` (in module `lala.config`), 17

`set_list()` (in module `lala.config`), 17

`signedOn()` (`lala.bot.Lala` method), 15

U

`userJoined()` (`lala.bot.Lala` method), 15

`userKicked()` (`lala.bot.Lala` method), 15

`userLeft()` (`lala.bot.Lala` method), 16

`userQuit()` (`lala.bot.Lala` method), 16

V

versionName (lala.bot.Lala attribute), [16](#)

versionNum (lala.bot.Lala attribute), [16](#)