# Saruman Documentation

## *Release 0.2.3*

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September 13, 2016

Saruman: a logic, configuration based, distribuable firewall.

Saruman is a extended firewall (meaning firewall + dns + dhcp +intruision detection + reverse proxy) build by a former Iresam. It targets I-Resam need's first but should be enough flexible to be used elsewhere.

*saruman* takes care of the boring bits for you.

Here's an overview of the documentation we have for you. First the documentation on *using* saruman:

# Saruman

**A simply logic, configuration based, distributable and reliable extended-firewall.**

Saruman is a extended firewall (meaning firewall + dns + dhcp +intruision detection + reverse proxy) build by a former Iresam. It targets I-Resam need's first but should be enough flexible to be used elsewhere.

It still unstable and yet brings not that much. Try at your own risks.

## 1.1 Most important Urls

- The full documentation is at saruman.readthedocs.org

- We are on Pypi so we're only an `pip install saruman` away from installation on your computer.

- The code is at github.com/tychota/saruman.

And... we're automatically being tested by Scrutinizer !

## 1.2 Technologies used

- Saruman **does require** Python 3, and if possible the newest version (**Python3.5** for now)

- It **does require** an Celery broker : take **RabbitMQ**, it is good, fast and reliable.

- It **does only works** on a recent linux machine : it requires **nftables** and **iproute2** so a linux 4+ kernel would be a necessity.

## 1.3 Available commands

Saruman gives you three commands to manage the worker and one to run your firewall. Worker's commands must be run in root since they manage main parts of your system. Firewall's one doesn't need this. The commands are:

- **saruman workers enable**: start the celery workers on the machine.

- **saruman workers disable**: start the celery workers on the machine.

- **saruman workers reload**: restart the celery workers on the machine.

- **saruman firewall start**: start the firewall

## 1.4 AMQP json-rpc api

Still infant

# Options

## 2.1 Command line options

These command line options are supported by the release commands (`saruman workers enable`, `saruman workers enable`, `saruman workers enable`, `saruman firewall start`).

**-v, --verbose**        Run in verbose mode, printing a bit more, mostly only interesting for debugging.

**-h, --help**        Display help text

# Assumptions

*Saruman* originated at Iresam so there are some assumptions build-in that might or might not fit you but I'm pretty sure it'll probably fit :-)

- In our case, *saruman* is run on a VM cluster so we have different VM handling different stuff For instance one for the netfilter firewall and router, one for dhcp, one for reverse proxy, one for admin site, one for AMQP broker so you have to tag the tasks you create so *saruman* could know which VM has to handle what.

That's just the style we started with. Pretty clear and useful.

# Further reading

Mighty fine documementation, the stuff you're reading now. But some other suggestions, ideas and a different tone might help you improve your firewall. So here are some pointers to other material.

And documentation on *saruman* as a project; for instance for reporting bugs and fixing the code:

# Improving saruman: report bugs, fork on github or email us

Did you find a bug? Do you have an improvement? Do you have questions? We run *saruman* as a proper open source project on github at https://github.com/tychota/saruman, so you have three basic options:

- Report bugs or problems at https://github.com/tychota/saruman/issues ! And feature requests too ! Normally you'll get a quick reply within a day or so, depending on our relative timezones. If you don't get an answer within a few days, please send off a quick email to remind us.

- Or make a fork, fix the bug or add something and open a pull request.

  *If* you are going to fork saruman, take a look at Information for developers of saruman for setup and test running information.

- You can mail Tycho Tatitscheff if you want to ask a question, too. Or if you want to tell us about an idea you have.

# Credits

- Tycho Tatitscheff (Nelen & Schuurmans) is the originator and main author.

- Zest software for their releases manager and also for inspiration (copy paste of most docs).

# Information for developers of saruman

## 7.1 Running tests

We like to use Virtual env to get a simple environment and to use pytest to test. When you are in the root folder of your *saruman* checkout, do this:

```
$ virtualenv ~/venv/saruman --python=`which python3.5`  # Or a different python version.
$ source ~/venv/firewall/bin/activate
$ python setup.py test
```

## 7.2 Python versions

The tests currently pass on python 3.4 and 3.5. Travis continuous integration tests 3.4 and 3.5 for us automatically.

## 7.3 Necessary programs

To run the firewall and test, you need to have an AMQP broker ! On ubuntu:

```
$ sudo apt-get install rabbitmq
```

# Entrypoints for saruman

*Saruman* use an unique cli-entrypoint, that use click to parse command line arguments

# Changelog for Saruman

## 9.1 0.2.3 (2016-01-03)

- fixing badges and covergae in testing

## 9.2 0.2.2 (2016-01-03)

- testing works

## 9.3 0.2.1 (2016-01-03)

- fixing a lot of nasty issues

## 9.4 0.2.0 (2016-01-03)

- adding sphinx documentation
- adding CI coverage
- fixing nasty unpack in modprobe.py

## 9.5 0.1.2 (2016-01-03)

- fixing some typo.

## 9.6 0.1.1 (2016-01-03)

- remove download urls as we use sdist

## 9.7 0.1.0 (2016-01-03)

- add zest.release to perform check on release an better automation

- add some yaml config files