Brno University of Technology - Faculty of Information Technology Bachelor's Thesis - Implementation 2017/2018

Requirements

Bot is customized to MY account credentials!

To change it on yours, please see the *customization* section.

Credentials

- GitHub personal access token
 - full access if possible to avoid unsolicited access problems
- Github organization
 - to be a member
- Organization's repository
 - the bot is set to check this repository (pull requests / builds / etc.)
- Your own forked repository from the organization's repository
 - to create a pull request which will be inspected by the bot (bot reacts to the PR's comments)
- Gitter personal access token
 - do not forget to sign in
- Gitter room

Customization

Rewrite my informations by yours in:

- initializing script miqbot_init.sh
 - occurrence of xtest123/testrepo to yours organization/repository
- resetting script miqbot_reset.sh
 - occurrence of xtest123/testrepo to yours organization/repository
- configuration file ~/miq_bot/config/settings/development.local.yml
 - github credentials -> username
 - github credentials -> password
 - occurrence of xtest123/testrepo to yours organization/repository

Setup

- 1. Download and install Oracle VM VirtualBox
- 2. Download CentOS 7
 - CentOS-7-x86 64-Minimal-1708.iso
- 3. Set up the virtual machine follow the instructions in VM SETUP.md
- 4. Execute the following commands in the following order from top to bottom:
 - cd /root
 - yum install -y git
 - git clone https://github.com/europ/VUTBR-FIT-BT-IMPL.git
 - cd VUTBR-FIT-BT-IMPL
 - ./install.sh
 - ./rbenv.sh
 - ./miqbot_init.sh
 - cd ~/miq_bot
 - Start the bot (git checkout master to check that everything works correctly):
 - Start all Sidekiq workers together
 - * bundle exec foreman start

- Start Sidekiq workers separately (open 3 shells)
 - * bundle exec rails s
 - * bundle exec sidekiq -q miq_bot
 - * bundle exec sidekiq -q miq_bot_glacial

NOTE

- If you would like to access the Sidekiq idle (dashboard) from your outer browser (not in virtual machine) then you have to launch the bundle exec rails s on address 0.0.0.0 inside of the virtual machine and on some port e.g. 3000. After this you will be able to access the Sidekiq idle via http://<VM_IP>:<PORT> e.g. http://192.168.56.12:3000.
 - 1. service firewalld stop
 - 2. bundle exec rails s -b 0.0.0.0 -p 3000
- At bot termination via SIGINT it is possible to get him into unstable state. Besides that, you may also face an "actor crashed" error too. This could be solved by reseting the bot which also require to launch him firstly on master branch.
 - 1. ~/VUTBR-FIT-BT-IMPL/miqbot_reset.sh
 - 2. cd ~/miq_bot && git checkout master
 - 3. Launch

Pull Requests

To check the pull request functionality you have to git checkout the pertaining branch of the pull request which can be found in the footnotes of the thesis.

ManageIQ Bot

The original setup of the ManageIQ bot can be found here.

Bachelor's Thesis

Bachelor's Thesis is available here.