

Pull Requests: Do's & Don'ts



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Agenda

- Terminology
- Do's and Don'ts
- Projects guidelines and templates
- Open Discussion
- Questions

Commit

- A record of your changes
- Adding your changes to the tree of the repository

```
commit a2fc2b4ef9ec5cd27f9e30dfced03acab9bb8ff0
Merge: ad9c0fe 656c594
Author: Liora Milbaum <lioramilbaum@users.noreply.github.com>
Date: Tue Apr 3 17:50:45 2018 +0300
```

Merge pull request #33 from bregman-arie/add_travis

Add travis configuration file

```
commit ad9c0fea523679bd50236c8e98ffde3cb5fcd8ca
Merge: 184913e cafa6a4
Author: Liora Milbaum <lioramilbaum@users.noreply.github.com>
Date: Tue Apr 3 17:39:01 2018 +0300
```

Merge pull request #34 from bregman-arie/add_gitignore

Add gitignore file

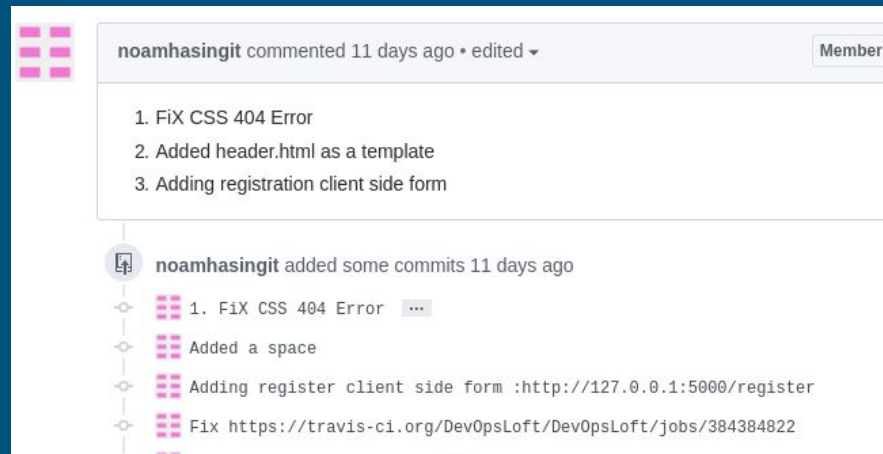
```
commit cafa6a40dfb935a478361e5c85142b36376c53eb (origin/add_gitignore)
Author: Arie Bregman <abregman@redhat.com>
Date: Wed Mar 28 01:45:25 2018 +0300
```

Modify gitignore

This will make sure we don't add "junk" files
when doing commits.

Pull Request

- A request to submit code
- **Pull request can include several commits**
- Different systems use different approach for code reviews
 - Gerrit
- Why knowing how to submit pull requests is important?



Reviewer

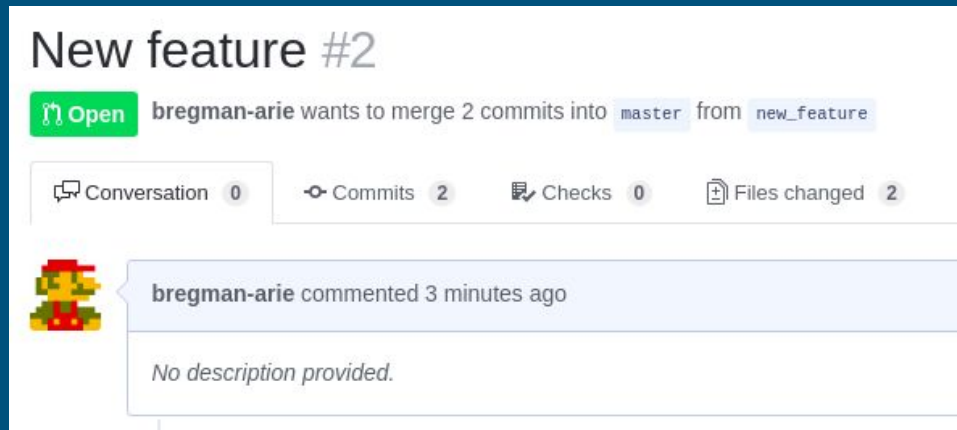
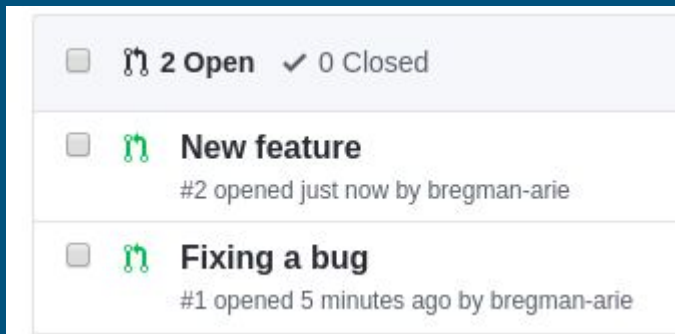
- A person who goes over your changes, comment about them and vote accordingly
- Reviewer can be anyone
 - Technical or Non-technical
 - Someone from your team or external
 - Junior or Senior



CI

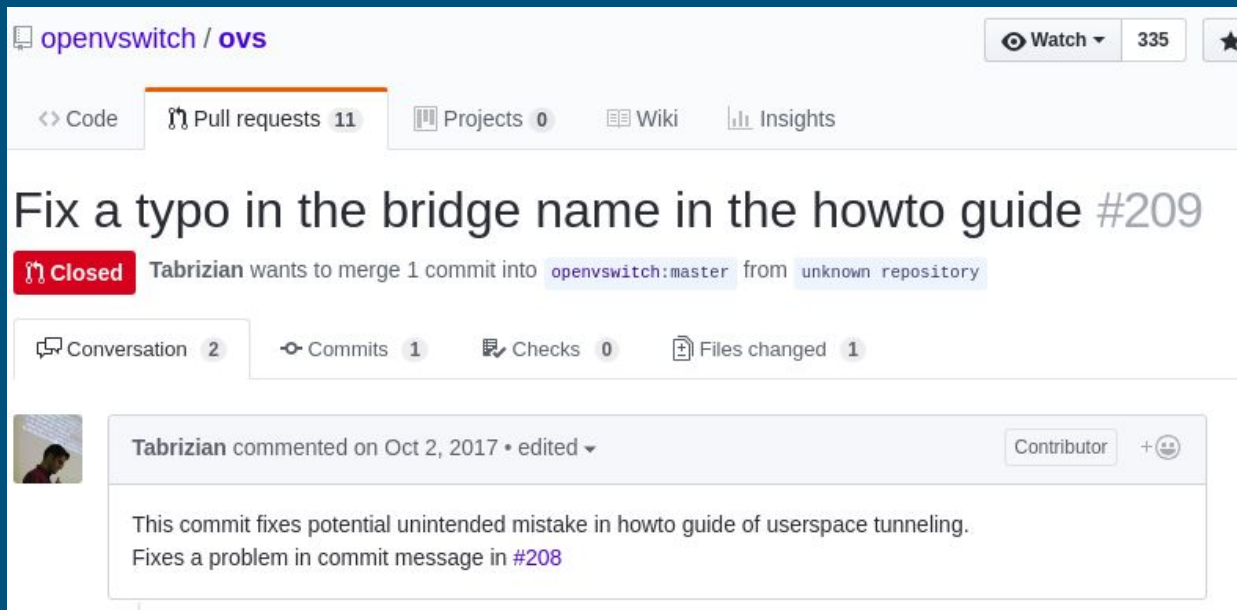
- What is CI? We need a separate session for this
- Trying to describe the most common workflow would be:
 - An automated process for easily and safely testing your pull request with latest revision of your project
- CI can includes stages like compiling, testing, installing and configuring the project
- Popular CI systems
 - Jenkins
 - Travis

Don't: Meaningless commit messages



- Why this is bad?
 - Reviewer doesn't know what your code suppose to do
 - In the future, people will not be able to understand why a certain change was done when running for example 'git log'

Do: Meaningful commit messages



The screenshot shows a GitHub pull request interface for the `openvswitch / ovs` repository. The pull request title is "Fix a typo in the bridge name in the howto guide #209". It is marked as "Closed" and shows that "Tabrizian" wants to merge 1 commit into `openvswitch:master` from an "unknown repository". The interface includes navigation tabs for Code, Pull requests (11), Projects (0), Wiki, and Insights. Below the title, there are statistics for Conversation (2), Commits (1), Checks (0), and Files changed (1). A comment from "Tabrizian" dated "Oct 2, 2017" is visible, stating: "This commit fixes potential unintended mistake in howto guide of userspace tunneling. Fixes a problem in commit message in #208".

openvswitch / ovs

Watch 335

Code Pull requests 11 Projects 0 Wiki Insights

Fix a typo in the bridge name in the howto guide #209

Closed Tabrizian wants to merge 1 commit into `openvswitch:master` from `unknown repository`

Conversation 2 Commits 1 Checks 0 Files changed 1

Tabrizian commented on Oct 2, 2017 • edited

Contributor +

This commit fixes potential unintended mistake in howto guide of userspace tunneling.
Fixes a problem in commit message in #208

openstack: Correct fail_json call in module_utils #41064



Merged

mkrizek merged 1 commit into `ansible:devel` from `Akasurde:openstack_fail_json` a day ago

💬 Conversation 3

🔑 Commits 1

📄 Checks 0

📄 Files changed 1



Akasurde commented 2 days ago

Member



SUMMARY

Fixes: [#40925](#)Signed-off-by: Abhijeet Kasurde akasurde@redhat.com

ISSUE TYPE

- Bugfix Pull Request

COMPONENT NAME

`lib/ansible/module_utils/openstack.py`

ANSIBLE VERSION

`2.7devel`

Don't: include multiple commits in a single PR

css 404 ERROR , export header to include as a template #48

Merged lioramilbaum merged 7 commits into DevOpsLoft:master from noamhasingit:master 8 days ago

Conversation 7 Commits 7 Checks 0 Files changed 9

noamhasingit commented 10 days ago • edited

1. FiX CSS 404 Error
2. Added header.html as a template
3. Adding registration client side form

noamhasingit added some commits 10 days ago

- 1. FiX CSS 404 Error 582dae4
- Added a space 3850dd9
- Adding register client side form :http://127.0.0.1:5000/register 750bbcd
- Fix https://travis-ci.org/DevOpsLoft/DevOpsLoft/jobs/384384822 13cec0b
- modified: application.py 932bbfb
- modified: application.py 58c24ef
- modified: register.py 4568229



Don't: include multiple commits in a single PR

- Why this is bad?
 - You are enforcing one reviewer to review several changes
 - Can take a lot of time, instead of splitting the review effort
 - Changes can be unrelated and then there is really no reason to send them together



Do: Limit number of commits per PR

- One is usually enough
- There is sometimes a reason for including two
- More than two? Ask yourself if it's necessary

Don't: Ignore CI

css 404 ERROR , export header to include as #48

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Member

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✗ 582dae4

✓ 3850dd9

✗ 750bbcc

✗ 13cec0b

✗ 932bbfb

✗ 58c24ef

✓ 4508229

Don't: Ignore CI

- Why this is bad?
 - You don't want to merge something that breaks the project
 - Some reviewers will not review your PR until you fix the issues

Do: Act based on CI results

- CI usually has purpose :)
- Your PR doesn't pass CI? FIX IT
- Don't expect the reviewer to provide feedback/vote before you fixed everything
- There are some good lessons in understand how CI works and why it fails
 - Code styling and conventions
 - Learning more on the tests side (= the dark side for many folks ;]

Don't: Commit messages in the code itself

```
@contextlib.contextmanager
def defer_apply(self):
    """Defer apply context."""
    self.filter_defer_apply_on()
    try:
        yield
    finally:
        # Yesterday, while eating my breakfast, the application
        # failed for me since it was missing the armageddon fix function.
        # Now I'm adding the fix so others won't fail on this as well
        # The function itself running several tools like "fix-all" and
        # "this-will-never fail".
        # In the future, we should apply this also in files like "a.py"
        # and "b.py". Let's also discuss if we want to have it in "c.py"
        # as well.
        self.armageddon_fix()
        self.filter_defer_apply_off()
```


Don't: Commit messages in the code itself

- Why this is bad?
 - In my opinion comments in code should explain the code itself and commit messages should explain why a PR was submitted and what its goal
 - Affects readability of the code
- Note: this message is not even a valid commit message :)

Do: Distinguish between commit message and code comments

- Find some logic that works for you to make code readable and yet, easy for the reviewer to understand your code

Summary

- Commit messages
 - Structure is important
 - To the point
- Submitter-Reviewer relationship
 - Put yourself in the reviewer shoes
 - Listen to what he/she have to say. No matter how experienced she/he is.
 - It includes some of the dynamics you have when having a technical discussion with someone face-to-face
- CI
 - Git hooks is a great way to save some time
 - Act based on the results
- Limit number of commits per PR

Project's guidelines & templates

- Some projects provide their own insights, guidelines and/or templates for pull requests & commits
 - [OpenStack Git commit best practices](#)
 - Ansible template
- [GitHub blog post](#)
- When joining a big project or community, check if they have some predefined guidelines

Open Discussion

- Do you have your own unwritten rules you follow?
- Do you agree with everything I mentioned?

Questions?

