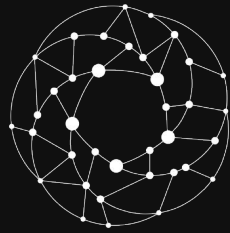# OSM Hackfest – Session 10
How to develop in OSM

Eduardo Sousa (Whitestack)

Open Source MANO

Main Resources

Resources in the Wiki

- Development Guidelines
  https://osm.etsi.org/wikipub/index.php/Workflow_with_OSM_tools
- Developer HowTo
  https://osm.etsi.org/wikipub/index.php/Developer_HowTo
- Developer HowTo for RO
  https://osm.etsi.org/wikipub/index.php/Developer_HowTo_for_RO_Module
- How to upgrade components
  https://osm.etsi.org/wikipub/index.php/How_to_upgrade_the_OSM_Platform

Other places you should visit

- Gitweb

  https://osm.etsi.org/gitweb/

- Gerrit

  https://osm.etsi.org/gerrit/

- Bugzilla

  https://osm.etsi.org/bugzilla/

I need help with OSM. What should I do?

- Search the wiki

- Ask in OSM Slack Workspace
  https://join.slack.com/t/opensourcemano/shared_invite/enQtMzQ3M zYzNTQ0NDIyLWJkMzRjNDM0MjFjODYzMGQ3ODIzMzJlNTg2ZGI5OTdi ZjFiNDMyMzYxMjRjNDU4N2FmNjRjNzY5NTE1MjgzOTQ

- Send an email to the mailing list
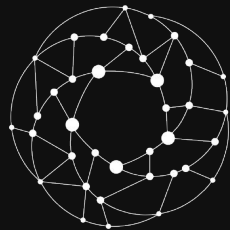 OSM_TECH@list.etsi.org

I would like to present something new

- TECH Call (every Thursday at 4PM CET) - General topics
- MON Call (every other Wednesday at 4PM CET) - Monitoring topics
- MARCOM Call (every other Wednesday at 4PM CET) - Marketing OSM
  NOTE: MON and MARCOM alternate

- Send an email to the mailing list
  OSM_TECH@list.etsi.org

Developer Workflow
How to contribute

There are multiple ways to contribute

- Writing code

- Writing tests

- Writing documentation

- Helping in Devops

- Helping the MARCOM team

- Creating a PoC

Contribution workflow

1. Clone the repository
   git clone https://osm.etsi.org/gerrit/osm/NBI.git

2. Install the commit-msg hook
   curl -Lo NBI/.git/hooks/commit-msg http://osm.etsi.org/gerrit/tools/hooks/commit-msg
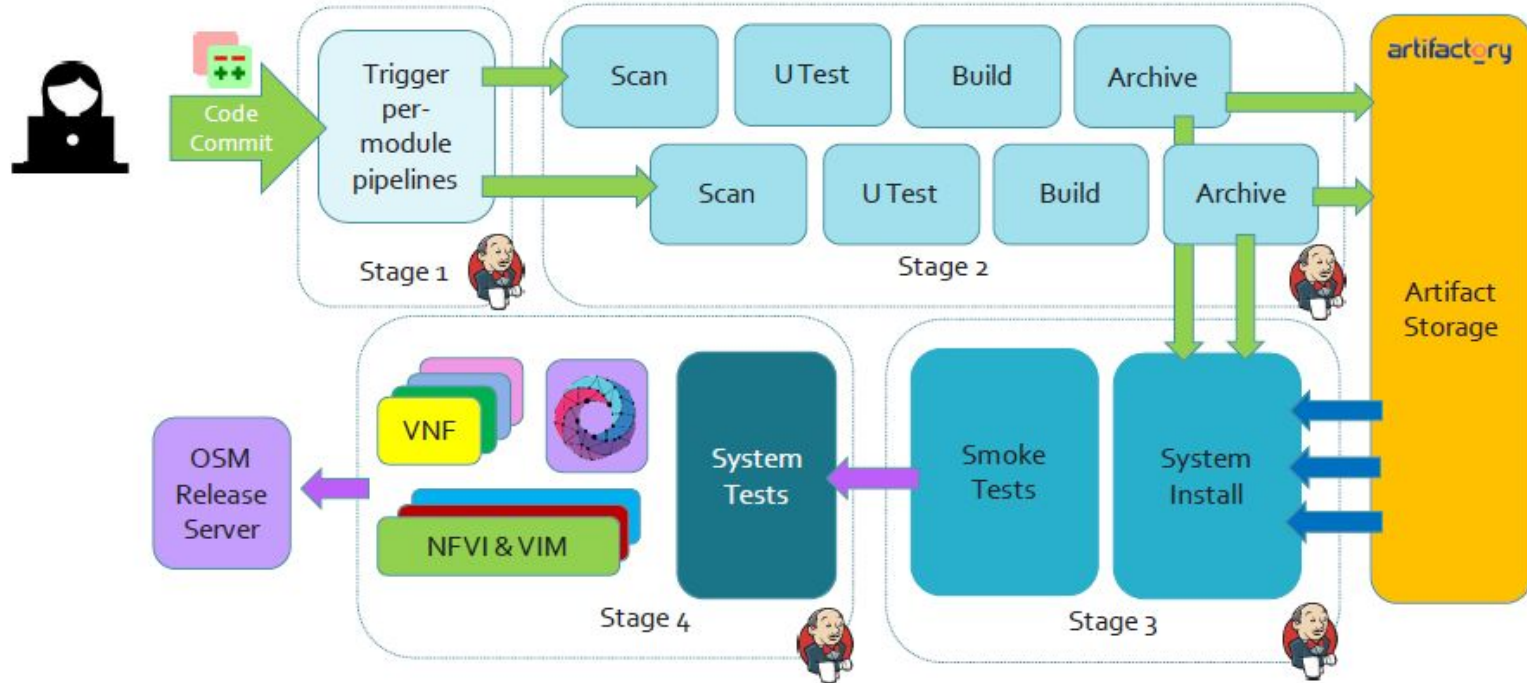
3. Make the hook executable
   chmod u+x NBI/.git/hooks/commit-msg

4. Make your changes

Contribution workflow (part 2)

5. Add an Apache 2 license header for your new files

6. Add all the files that are necessary for your contribution
   git add <path_of_file>

7. Commit your changes
   git commit -s -m "Relevant message in the context of the commit"

8. Push your changes upstream
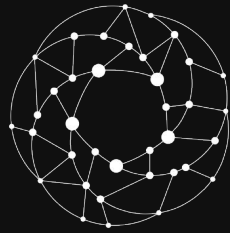   git push origin HEAD:refs/for/master

CI/CD Pipeline

Gerrit and the MDLs

Wait for the MDL to review your commit.

It might yield, one of two outcomes:

1) The code is OK and you get +2 in the Code-Review
2) The code is not OK and you get -2 in the Code-Review

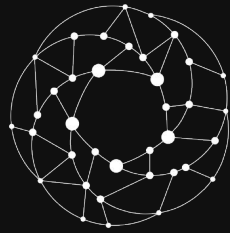For case 2), fix the error and push it again and again until the MDL think the code is OK.

Extra resources

Remote debugging dockers

https://davidraleigh.github.io/2017/06/27/Debugging-a-Remote-Docker-Container-with-PyCharm.html

The End