Intro to the Hackfest for OSM developers

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OSM#15

12/06/2023

Objectives

- Learn about:

  - OSM: installation, architecture, usage

  - Tooling: git, tox, gerrit, Jenkins

  - Way of working of an open-source project: code contribution, automated testing, code review

- Contribute to an Open-Source project with:

  - Bug fixes

  - Small features

  - Unit tests for modules
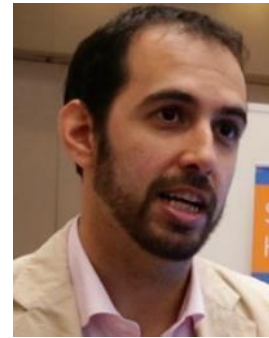
  - E2E Tests exercising use cases

Hackfest mentors and experts

Gulsum Atici (MDL)

Guillermo Calviño (MDL)

Gerardo García (TSC)

Mark Beierl (TSC)

Pedro Escaleira (Expert)

Chiara Grasselli (Expert)

Davide Borsatti (Expert)

Requirements for participants

- MUST

  - HW: laptop to develop

    - Recommended: Ubuntu 22.04

    - Other options: Windows 10 or higher, Linux

  - Know-how: Python

- MAY

  - Know-how: Linux, Kubernetes, Docker, Openstack, Robot Framework

- Prepare your environment for the Hackfest:
  https://osm.etsi.org/wikipub/index.php?title=OSM15_Hackfest

Hackfest resources

- Wiki: https://osm.etsi.org/wikipub/index.php?title=OSM15_Hackfest

- Etherpad: https://osm.etsi.org/pad/p/OSM15_Hackfest

- Slack: https://join.slack.com/t/opensourcemano/shared_invite/zt-1688p662q-2ZUJghK_XeCJsoZWLh_KPA
  - Slack channel: #hackfests

- Teamup (agenda): https://teamup.com/ks3m6q6qpr9sy5kxom

- Presentations: https://osm-download.etsi.org/ftp/Hackfests/OSM15_Hackfest/

- Google Classroom: https://classroom.google.com/c/NjEzNDQ3MjMzNTEw?cjc=h6aw3xg

- Google Spreadsheet (resource details): https://docs.google.com/spreadsheets/d/1CQztNhSra9brAIbuanD8pVE0tPOTGLAb1D9RTatArhU/edit#gid=966863

Initial survey

- Questionnaire: https://forms.gle/GwfnpTQdyRHFuFAK8

Agenda

W24	12 Jun 2023	Tue 13	Wed 14	Thu 15	Fri 16
9am	9am Local Setup (IT) & Registration	9am Hackfest: Meeting with Mentors	9am Hackfest: Meeting with Mentors	9am Hackfest: Meeting with Mentors	9am Hackfest: Coding Session
		9:30am Hackfest: Coding Session	9:30am Hackfest: Coding Session	9:30am Hackfest: Coding Session	
10am	10am Hackfest: Theory Session				10:30am Coffee Break by TeraFlow
11am	11am Coffee Break by TeraFlow	11am Coffee Break by TeraFlow	11am Coffee Break by TeraFlow	11am Coffee Break by TeraFlow	11am Hackfest: Demos & Wrap-Up
	11:30am Hackfest Theory Session	11:30am Hackfest: Coding Session	11:30am Hackfest: Coding Session	11:30am Hackfest: Coding Session	
12pm					
1pm					
2pm	2pm Hackfest: Environment setup & challenges details	2pm Hackfest: Meeting with Mentors	2pm Hackfest: Meeting with Mentors	2pm Hackfest: Meeting with Mentors	
		2:30pm Hackfest: Coding Session		2:30pm Hackfest: Coding Session	
3pm					
	3:30pm Hackfest Challenges				
4pm		4pm Hackfest: Coding Session			
	4:30pm Q&A Hackfest Challenges			4:30pm Hackfest: Meeting with Mentors	
5pm					
	5:30pm Hackfest: Challenge Distribution	5:30pm Hackfest: Meeting with Mentors	5:30pm Hackfest: Meeting with Mentors	5:30pm Hackfest: Meeting With Mentors	
6pm					
7pm					
8pm			8pm Networking Dinner (Self Funded)		

Way of working

- 1 day for Theory

  - Common for all Hackfest participants

- 3 days for Hacking

  - Coding driven by Challenges

  - Participants will group in pairs (ideally) or individually to solve the Challenges

  - Mentors will meet 2-3 times daily with their teams to answer questions and give support and advice

  - Experts will assist on-site

  - Participants will have dedicated OSM instances and Openstack accounts

- Final day for presentations and wrap-up

- Potential follow-up in TECH calls

Schedule for Day 1

- Theory (4 hours)
  - Introduction to OSM
  - OSM architecture
  - OSM installation. Demo
  - OSM usage. Onboarding
  - OSM usage. Instantiation and operation
  - Hackfest environment
  - Development environment
  - How to contribute to OSM
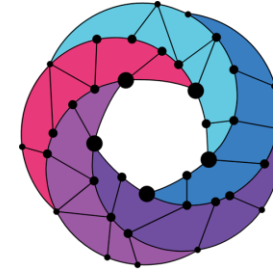- Presentation of challenges and challenge distribution

Hackfest Challenges

- Challenges are small work items, self-contained and achievable in the Hackfest time frame

- Could be bug fixes, new features, unit tests for modules, E2E Tests exercising use cases

- Challenges are proposed by relevant people in OSM community (TSC members, Module Development Leaders, Committers)

- Participants will group in pairs (ideally) or individually to solve the challenges

- Each challenge has 1 mentor

- Hackfest participants will have clear instructions on what to do and how to test their contributions

- Hackfest participants will be able to see **intermediate and solid progress**

Hackfest Challenges. Details

TITLE	MODULES	MENTORS	DIFFICULTY
Challenge 1. Global option `-o <FORMAT>` in osmclient to adapt output format	osmclient	Gerardo	LOW
Challenge 2. Global option `-c` in osmclient to filter output and show only selected fields in xxx-show and xxx-list commands	osmclient	Gerardo	LOW
Challenge 3. Deprecation framework for old commands in osmclient	osmclient	Gerardo	LOW
Challenge 4. Replace pycurl library in osmclient by requests library	osmclient, devops (installer)	Gerardo	MEDIUM
Challenge 5. Remove the duplicated information from VDUR in VNFR for Vertical-scaling operation	RO	Gulsum	MEDIUM
Challenge 6. NS Delete Operation should raise error if the deletion operation is not completed successfully	RO	Gulsum	MEDIUM
Challenge 7. Remove EE Charms when VNF has only day-1 operations	LCM, N2VC	Guillermo	HIGH
Challenge 8. Vulnerability fix of bug 2088 regarding Remote Code Execution in N2VC/LCM	N2VC, NBI, LCM	Pedro	MEDIUM/HIGH

Recognition

- Certificate for participation for all participants

- Public recognition in social networks (blog, twitter and/or TECH calls) for participants that complete a challenge

Thank You!