IETF Hackathon COIN/P4

IETF 106
Nov. 16-17, 2019
Singapore



Hackathon plan

- Overall goal: familiarization with data-plane programming
- Original problem: packet filtering for big data applications (started in Montreal)
- Inputs:
 - P4.org documentation
 - We also had access to the work from Michel Bonfim on SFC monitoring:
 - https://github.com/michelsb/SFCMon
- Current work: a set of individual projects
- Future work: a common project to be defined by the (P)RG

What got done

• Our projects:

- Tutorials for newcomers to P4
- Monitoring in Service Function Chaining (SFC domains) (Michel)
- Packet filtering for the detection of critical events in industrial and autonomous systems – running prototype! (Khooi)
- BGP route origin validation (ROV): hit a snag but pivoted to the a working use case (Aris/Luuk/Khooi)



What we learned

- Delta from the last hackaton
 - More interesting projects and language fluency, as P4 is getting traction
- Logistics for next time
 - Agree on P4 version ahead of the meeting
 - Consider making P4 setup at an interim meeting
 - Bring a VM on a USB stick for fast start
 - Poster boards and slack channels are essential for local and remote communication

The team

Alessandro Bassi
Michel Bonfim ☆
Jeffrey He
Aris Cahyado Risdianto ☆
Evangelos Haleplidis ☆
Luuk Hendriks
Marie-José Montpetit
Padma Pillay-Esnault ☆
Eve Schooler
Émile Stephan
Khooi Xin Zhe ☆

☆ first time participants



Join Us!

Friday November 22 10am-12pm IRTF COINRG meeting Sophia Room

coin@irtf.org