P4 Hackathon
COINRG

(Computing in the Network Proposed RG)

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COINRG

Our goal:

Foster research in computing in the network to improve performance for networks and applications

Focus:
- Architectures
- Protocols
- Real-world use cases, applications, work in progress

Goal of the COINRG Hackathon:

Survey the Cloud-to-Edge Computing Continuum using P4

Hackathon Summary

NoviFlow

- 12 participants
  - 11 local
  - 1 remote
- Support from Noviflow P4 experts (**thanks to Rémi and Pierre-Louis!!!**)
- What we did:
  - Basic examples to get everyone onboard
  - IPV6 Switch ML from the remote participant
    - Relates to the work on "Scaling Distributed Machine Learning with In-Network Aggregation" (IPv4)
    - The p4-16 code is checked to to the repo: **https://github.com/IETF-Hackathon/p4-ipv6-switch-ml**
    - There is a discussion on the list about this work
  - P4 to Golang
  - Packet Filtering
    - Store a packet compare any new packet to this one and an action is performed
    - Link to alerting, ML, decision systems
  - Ideas gathering for future projects (picture to be uploaded)

Next Steps

- Continue gathering ideas for projects and use cases via the COINRG mailing list.
- Discussions at the COIN Interim.
- Another hackathon in Singapore.

Thanks to the Hackathon organizers,
our helpers and all the participants!

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https://datatracker.ietf.org/rg/coinrg/about/