INSTITUTE OF COMMUNICATION, INFORMATION AND PERCEPTION TECHNOLOGIES





ONOS+P4

Controlling P4 data planes with ONOS

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Abstract:

ONOS is an open source project started in 2014 at ON.Lab (Open Networking Laboratory) and hosted by The Linux Foundation. The goal of the project is to deliver a software-defined networking (SDN) OS for service providers that has scalability, high availability, high performance and APIs to make it easy to create apps and services that control the traffic in the network. The ONOS community has grown to include over 50 partners and collaborators (with AT&T, Verizon, Huawei, Cisco, and China Unicom among others) that contribute to all aspects of the project, from code development, to use cases and deployments. The talk will be an introduction to how ONOS supports data planes based on the P4 emerging technology, with a developer focus, including also a practice demonstration.

Short bio:

Andrea is a Member of Technical Staff at ON.Lab, ONOS and CORD Ambassador and Member of the A-Team. Andrea joined On.Lab in October 2015 as a Research Scholar Intern. Received a Master's Degree in Computer Science (1110/110) in December 2016 after a Bachelor's degree in Digital Communication. Both degrees were obtained at the Public University of Milan, Italy. His Master's thesis focused on SDN, ONOS, device and protocol integration. At ON.Lab, Andrea is on the ONOS core development team focusing on southbound architecture, protocol integration and driver subsystems. Andrea is also part of the Packet/Optical Use Case team. In the CORD project Andrea focuses on the Enterprise use case developing XOS services and ONOS applications tu support enterprise network needs.

Andrea is also part of the A-Team and is active in shaping the ONOS community.