Abstract

Software defined networking (SDN) is a combined approach of connection oriented technologies and routing overlay technology presenting a new open and programmable network. Decoupling control and data plane from network devices and bringing control plane in logically centralized SDN controller which can then act as network operating system. This paper is to present an OpenFlow controller – Floodlight Controller. The Floodlight Controller realizes a set of common functionalities to control and inquire an OpenFlow network, while applications on top of it realize different features to solve different user needs over the network. Floodlight consists of controller modules that implement core network services a software defined network would
Software Defined Networking with Floodlight Controller

expose to applications, and application modules that implement solutions for different purposes.

References

- Natasha Gude, Teemu Koponen, Justin Pettit, Ben Pfaff, Martin Casado, Nick McKeown, Scott Shenker, et al., 2008, "NOX: Towards an Operating System for Networks."
- David Erickson, et al., 2013, "The Beacon OpenFlow Controller", in HotSDN.
Calculus-based Approach", IEEE Globecom.
- Yosr jarraya, taous madi, and mourad debbabi, et. al., 2014, "a survey and a layered taxonomy of software-defined networking" in IEEE communication surveys & tutorials.

Index Terms

Computer Science  Networks

Keywords
Software Defined Network  Floodlight Controller