

2018 P4 Workshop

Talk

Title

P4 to program AFI Sandboxes on Juniper's TRIO ASIC

Abstract

Junos TRIO is Juniper's programmable ASIC. It powers Junipers MX Series 3D universal edge routers. AFI (Advanced Forwarding Interface) is Juniper's Application Programming Interface which provides third party developers with ability to control and manage forwarding path in the data planes of Juniper's platforms. AFI **sandbox** is small virtual container, a section of forwarding path, which can be programmed via AFI. P4 can be also be used to program the AFI sandbox. The talk focuses on design and architecture of using P4 to program AFI sandbox specifically on Junos TRIO ASIC. More details about AFI can be found at <https://github.com/Juniper/AFI>.

Presenter

Name: Sandesh Kumar Sodhi

Email: sksodhi@juniper.net

Affiliation: Juniper Networks Inc.

Bio

Sandesh Kumar Sodhi is senior engineer working on packet forwarding software for Juniper Networks routing and switching platforms. Sandesh holds Bachelor's degree in computer science from Indian Institute of Technology, Varanasi and has 18 years of industry experience in computer networks. Sandesh is domain expert for Juniper's Advanced Forwarding Interface (AFI), the API interface to program Juniper's forwarding silicon. He is also a principal architect of P4 support on Juniper Networks routing and switching platforms. Sandesh also represents Juniper in 'P4 Runtime' working group.

