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SONiC/SAI Support in Juniper Devices (Multi-PFE)

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AGENDA

- JUNOS EVOLVED
  - Disaggregated
  - Open

- SONiC/SAI support on Juniper ASIC
  - Single-PFE
  - Multi-PFE
JUNOS EVOLVED TO SUPPORT CLOUD NATIVE APPS
SOFTWARE DISAGGREGATION WITH JUNOS

- Decoupling of Software from Hardware (White Box)
- Decomposition of software stack into functional components
  - Management - OpenConfig, Yang
  - Control - SONiC, Open/R
  - Forwarding - P4, SAI
- Intelligence shifted off device
  - Support for external controllers (SDN) – ONOS, ODL
Applications of JUNOS Disaggregation

- **JUNOS WB**
  - JUNOS
  - 3rd Party Hardware

- **Disaggregated RPD**
  - RPD
  - Other apps
  - JUNOS OR 3rd Party OS
  - 3rd Party Hardware OR Juniper HW

- **Virtual JUNOS**
  - VCP
  - VFP
  - 3rd Party Hardware OR Juniper HW

- **SONiC Single-PFE**
  - RPD
  - Other apps
  - SONIC
  - Juniper HW

- **SONiC Multi-PFE**
  - RPD
  - Other apps
  - SONIC
  - JUNOS
  - Juniper HW

- **SONiC Multi-PFE, Modular Chassis**
  - RPD
  - Other apps
  - SONIC
  - JUNOS
  - Juniper HW
JUNOS-SONiC SWITCH STATE ARCHITECTURE - SINGLE-PFE
JUNOS-SONiC SWITCH STATE ARCHITECTURE – MULTI-PFE
MULTI-PFE DEMO

- A video clip of the demo will be included
Please Join Juniper at Open Compute Project (OCP) Summit

Booth A2
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