Opportunities and Obstacles in Open Source Networking

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Dell
Shifting Gears
Agenda

• Journey so far…
• Inflection Points
• Birdseye View – Adopters perspective
  Opportunities and Challenges from an Open Source viewpoint
  Top Down and Bottom up Use Cases – SONiC
• Take Away
  Drive more use case conversations in SONiC
SONiC - Journey so far...
Inflection Points

Windows

x86

Standard Interfaces

Linux

OSS

Applications
Inflection Points

Windows

x86

Standard Interfaces

Linux

OSS

Applications

Monolithic
Switch Hardware and Software model

Commodity switch ASICs

Disaggregated Open Networking

ONIE, SAI

Open Source

Switch Applications

DevOps Enabled
In parallel

- Developer driven CI/CD
- Container Ecosystem
- Hybrid and Multi cloud use cases
- Kubernetes, Open Stack environment
- Event driven platforms
  Serverless Paradigms
Adopter’s perspective –

Markets

• Hyperscalers
• Enterprise
• Service Providers
change
Opportunity Vs Obstacles

Markets
- Hyperscalers
- Enterprise
- Service Providers

Landscape and Uniqueness
- Business Goals
- Organizational Top down or Bottom up alignment on open source
- Capex vs Opex conversations
- Operating and support models
- Procurement and purchasing models
- Transition on legal for Open Source engagement & velocity
- Ambitious vs Risk Averse
Adopter’s perspective –

- Open source is not free – Investment Goals
- Management of Security
- Internal Best Practices and Transition
- Velocity and Diversity of project
- Multiple PoC; several choices
- Stability, roadmap and predictability
- Evolution of new business model
- Milestone –
  - Day 0 and Day 1 Vision
  - Behavior, Vision and Tooling
Approach

- Lead with robustness of SONiC Stack
- Identify integration points for the overall solution and deployment
- Hybrid approaches and validation of the open source model
- Risk averse and short term goals
Approach

- Long term strategic goal for best practice
- Ambitious build out models
- Vision beyond Kubernetes or
Pokemon moment in SONiC
Monday, March 7, 2016
Wrap Up & Take Away

- Expand Community Interaction on Use Cases
- Developers <-> Use Cases
- Provide ideas for Integration points and test practices
- Champion new ideas for collaborations and provide feedback for community