Opportunities and Obstacles in Open Source Networking



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Dell

Shifting Gears



Agenda

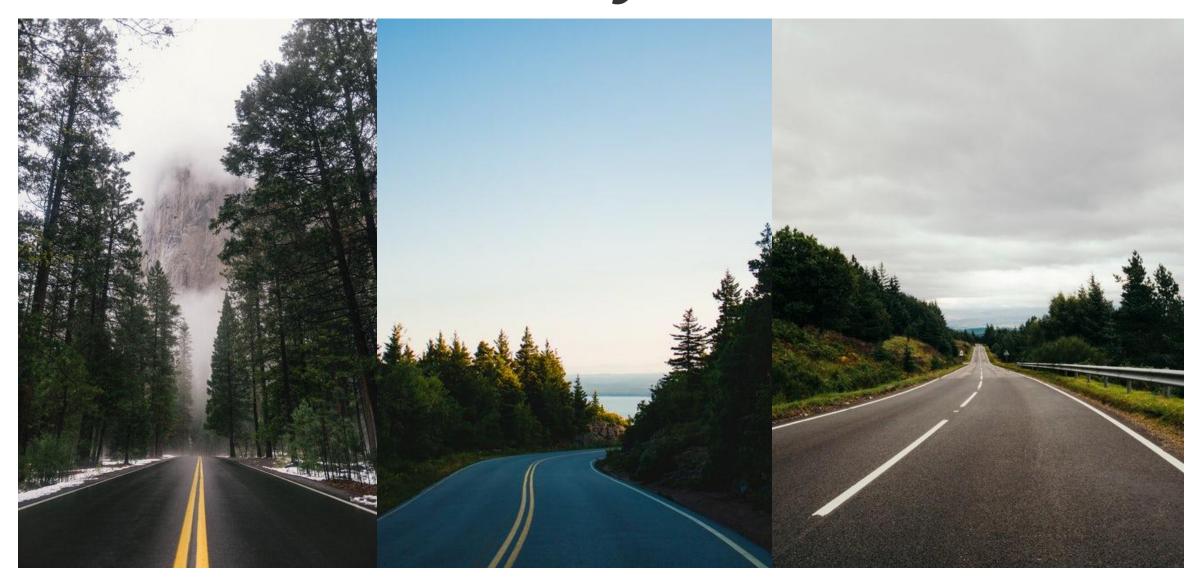
- Journey so far...
- Inflection Points
- Birdseye View Adopters perspective

Opportunities and Challenges from an Open Source viewpoint Top Down and Bottom up Use Cases – SONiC

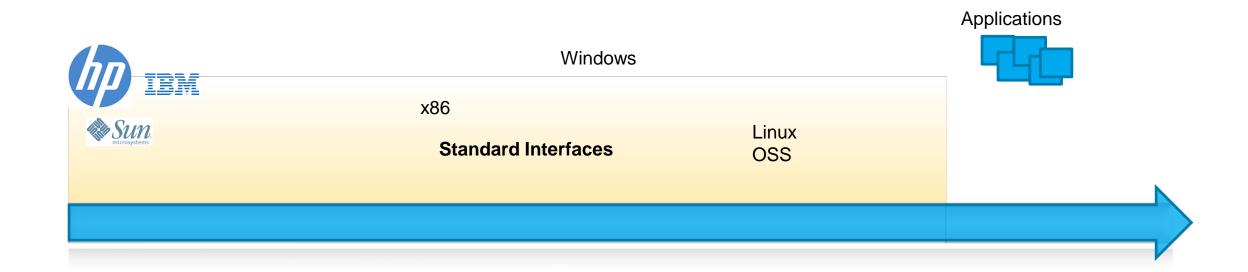
Take Away

Drive more use case conversations in SONiC

SONiC - Journey so far...



Inflection Points



Inflection Points



Windows





x86

Standard Interfaces

Linux OSS

Monolithic
Switch Hardware and
Software model

Commodity switch ASICs

Disaggregated Open Networking

ONIE, SAI

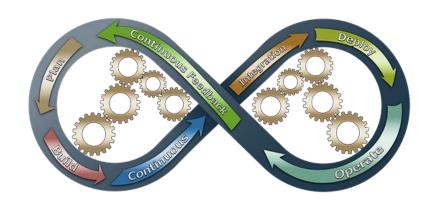
Open Source

Switch Applications



DevOps Enabled

In parallel



- Developer driven CI/CD
- Container Ecosystem
- Hybrid and Multi cloud use cases
- Kubernetes, Open Stack environment
- Event driven platformsServerless Paradigms

Adopter's perspective -

Markets

- Hyperscalers
- Enterprise
- Service Providers



Vs





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



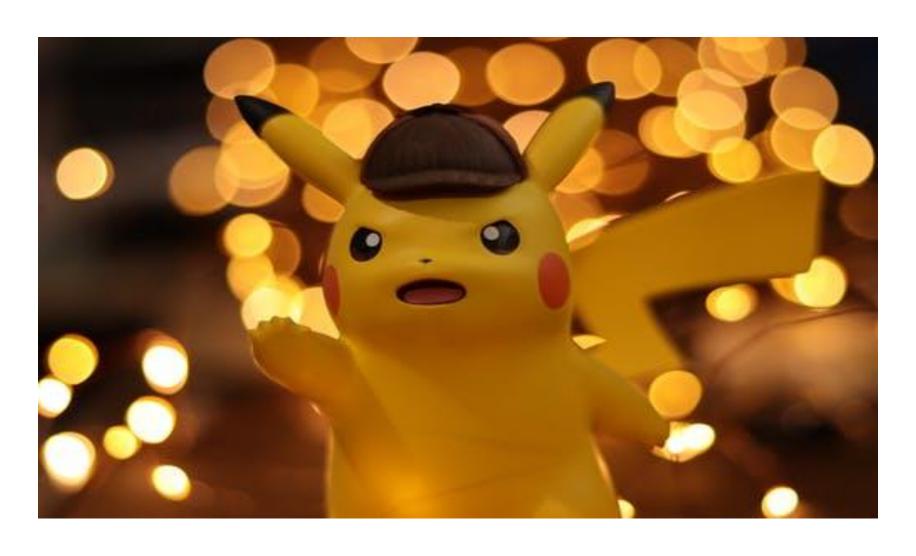
- Lead with robustness of SONiC Stack
- Identify integration points for the overall solution and deployment
- Hybrid approaches and validation of the open source model
- Risk averse and short term goals

Approach

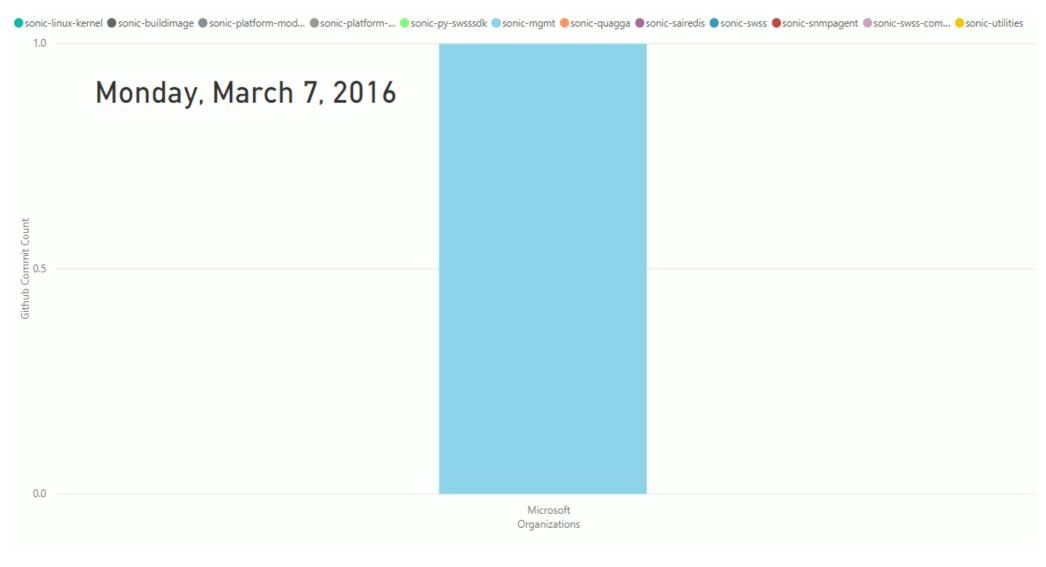


- Long term strategic goal for best practice
- Ambitious build out models
- Vision beyond kubernetes or

Pokemon moment in SONiC



Wrap Up & Take Away



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