

Strategic Direction of Networking IPv6, SDN and NFV Where Do You Start?

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Agenda

- Todays network
- The journey to Software-defined
- Tomorrows need
- Connectivity ring: SDN, NFV and IPv6



Todays network



Todays network are...



When the business demands is for...



Simple Agile Elastic to demand Value for Money Open



Todays network

Unable to meet the needs of dynamic service delivery



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The Journey to 'Software-defined'



The world is moving to a New Style of IT

Networking innovations lay the foundation for transformation



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The Network must EVOLVE

Software-define, agile, on-demand and business aligned

- Explosion of devices
- Excess of data
- Convergence
 - Everything over IP
 - Unified, seamless, context aware access and end-to-end
- Simplification
 - Open standard based end-to-end
 - Service centric
- Software-defined
 - Virtualized, elastic and distribute

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But we can also learn from history

Software-defined Networking completes the 'holy trinity' of IT

Tomorrows network

Need to adapt to meet the needs of tomorrow

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Tomorrows network

Complete the infrastructure trinity – enable business value

Connectivity ring

What it is Software-defined Network?

ONF SDN Architecture

Software-defined Design Tenets

Agile

... in application development, sourcing and delivery

Automated

... across app-to-infra. lifecycle

Optimized

... for Service and global scale

Predictive

... of opportunities, threats, and failures

Legacy Networking Architecture

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Software-defined Network Architecture

Guessing vs. Knowing

Winning for the Next Decade

- Expensive HW-Centric Architecture
- Lagging Vendor-Centric Application Integration
- Challenged to Gain Data from Limited, Obfuscated Data

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- Open Platform Enables Rapid Multi-Party App Integration
- Visibility to Application Data, Events, Context & Net Telemetry

Putting it all together

Innovative and complete SDN solution

Delivering Meaningful Value

Programmable network aligned to business applications		
Lower TCO	Enable Emerging Application Architectures	Lower Barriers to Innovation
Simplification & 'In-Network' Services	Application Directed Infrastructure	Open Platform & Ecosystem
 Simplify through abstraction Reduce automation risks Leverage SDN enabled infrastructure to virtualize and deliver services 'innetwork 	 Build networks to enable and take advantage of the way applications will be built for the next 2 decades 	 Reduce acquisition timelines Low touch deployment and migration Retain operational controls Ensure apps are 'enterprise-grade'

IPv6 key to untapped innovation

Because everything needs connecting

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IPv4 address depletion
CGNAT "side-effects"
Ensure security
Global IPv6 deployment
Leverage automation
Governmental mandates
Merge & Acquisitions
Growth & Consolidation

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IT Initiatives

What the customer should plan?

SDN as a meaning to simplify IPv6 deployment

SDN framework reduces operational complexity and Risk

SDN provides a programmable platform for new service deployment

Starting the IPv6 transformation journey

IPv6 has implications across the entire IT environment

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IPv6 transition is multidomain

hD

Build an actionable strategy

Network Transformation Experience Workshop

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