Opening Keynote Presentation

Clouding the Issue versus Issuing the Cloud – Ethernet as both problem and solution

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Ethernet in the cloud

A problem and a solution?

September 2013

Boscolo B4 Nice-Plaza, Nice, France

Welcome

Who is the CEF?

Exploring the challenges of scaling Ethernet to meet the needs of cloud

A multi-layered, cross-industry approach with a focus on the customer requirement

CloudEthernet Forum Members @ Sept 25

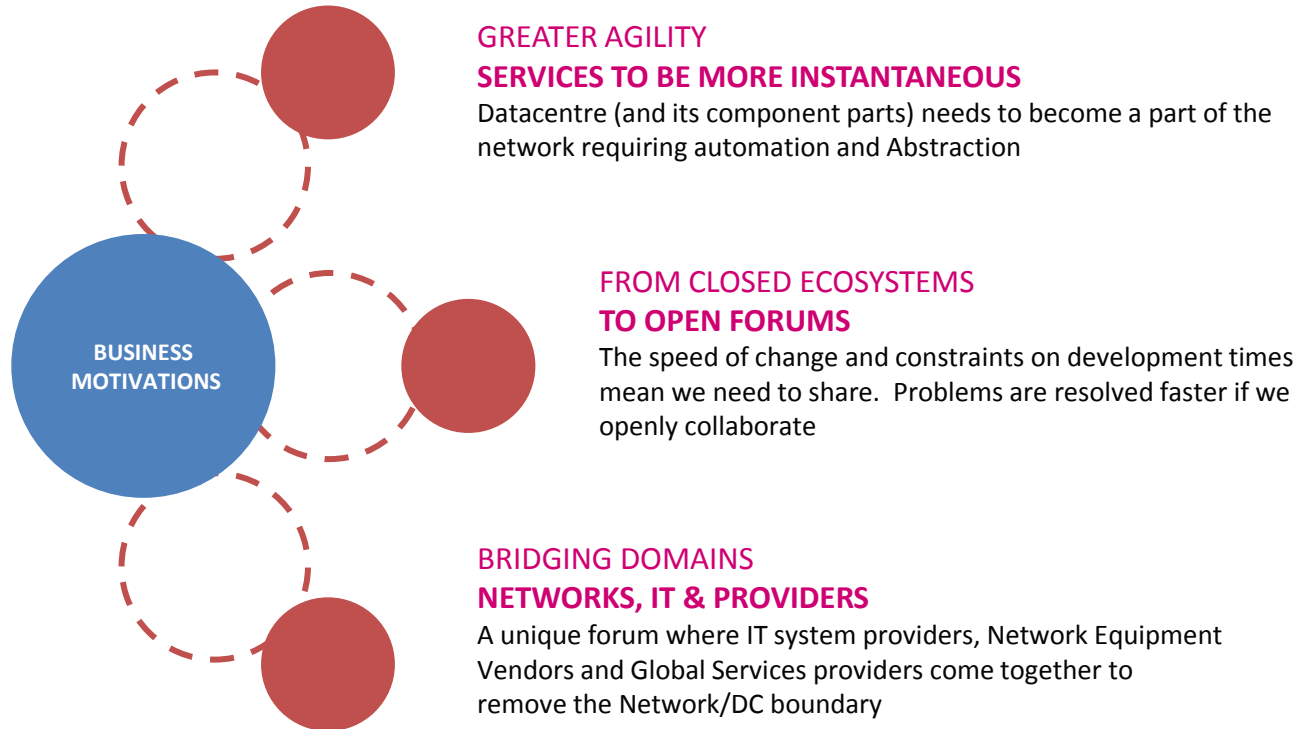# CLOUD ETHERNET FORUM
A VENDOR PERSPECTIVE

Phil Tilley

September 2013

Cloud Infrastructure Readiness Scorecard

Cloud Infrastructure

Compute ☑

Storage ☑

Virtualized,
instantly available,
easily consumable.

Network ?

CRITICALITIES OF A CLOUD ERA

BUSINESS MOTIVATIONS

GREATER AGILITY
SERVICES TO BE MORE INSTANTANEOUS
Datacentre (and its component parts) needs to become a part of the network requiring automation and Abstraction

FROM CLOSED ECOSYSTEMS
TO OPEN FORUMS
The speed of change and constraints on development times mean we need to share. Problems are resolved faster if we openly collaborate

BRIDGING DOMAINS
NETWORKS, IT & PROVIDERS
A unique forum where IT system providers, Network Equipment Vendors and Global Services providers come together to remove the Network/DC boundary

THE NETWORK MAKES THE CLOUD

Cloud Services Market Growth

- Enterprises and consumers around the globe need increasing amounts of on-demand cloud compute and storage capacity

- Cloud service providers need to minimize complexity of scaling and rapid redistribution of VMs and storage to meet performance, cost and regulation compliance objectives
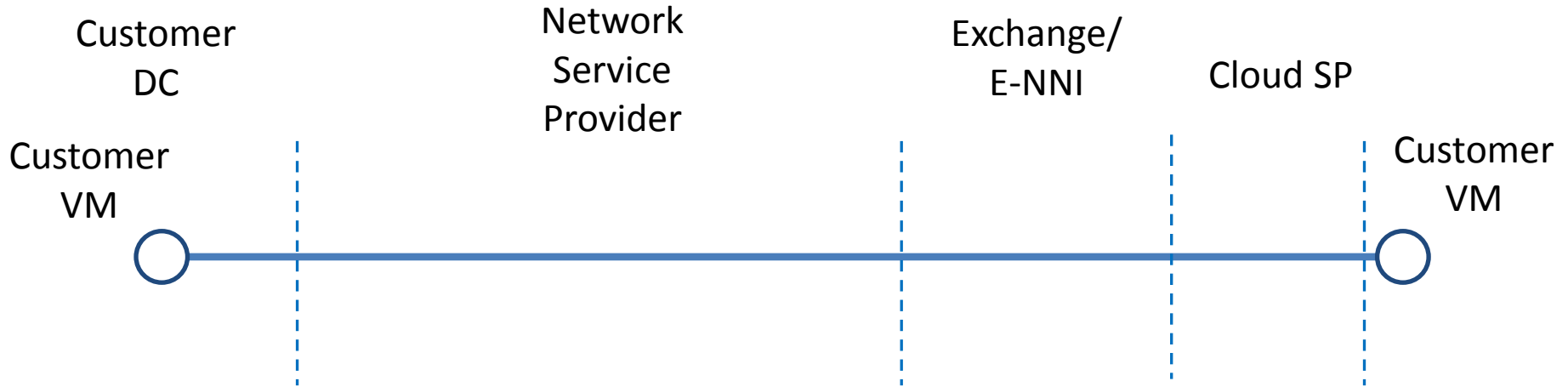
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Cloud Services Scaling Challenges

- Ethernet is the fundamental networking technology used in the backplane, racks, between racks and site interconnects BUT

- Current layer 2 technology approaches do not yet effectively support increasingly large and geographically dispersed VM and storage environments

- Orchestration layer to support very large VM environments dependent on increasingly complex L2/L3 interactions

Stakeholders in Scaling Cloud Services

– A range of companies need to work together effectively to address technological issues of scaling cloud service infrastructures

- Data Center Providers

- WAN Service Providers

- System Integrators

- Network Equipment Manufacturers

- Cloud Service Providers

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The end to end challenge

Customer
DC

Network
Service
Provider

Exchange/
E-NNI

Cloud SP

Customer
VM

Customer
VM

Forum Activities

– **Technical**

  • Identify required technical work

  • Develop specifications and implementation agreements

– **Marketing**

  • Promote technical solutions developed by the Forum

– **Operations**

  • Identify required business processes

  • Develop recommended best practices

First Forum Activities

- Launch & members meeting

  – Launched at Ethernet Innovation Summit, CA – May 23rd, 2013

  – Inaugural Members Meeting, Montreal – July 24th, 2013

- Publish

  – Problem Statement White Paper

  – Use Cases

- Technical Committee Setup

  - VLAN exhaustion in pure L2 networks

  - BUM-related performance degradation

  - Inter-relationship between orchestration layer and disposition of assets

Upcoming Events

Next Members Meeting, Seattle, USA, October 24th
(Members Board Meeting October 23rd)

APAC Regional Meeting, Singapore, November 19th

Keynote Interview & Audience Q&A

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