18/21 MARCH 2014 MARRIOTT HOTEL & CONFERENCE CENTER PARIS FRANCE

Aricent · Metaswitch Networks · MRV · PACKET DESIGN · PCCW Global · QOSMOS Your Network is Information · RAD · Telco Systems A BATM Company

endorsed by

ONF OPEN NETWORKING FOUNDATION

broadband forum

MEF

OPEN DAYLIGHT

ciena

gold sponsor

MPLS SDN WORLD CONGRESS 2014

the new architecture.

organized by

upperside conferences

platinum sponsors

Alcatel·Lucent · CISCO · ERICSSON · HUAWEI · JUNIPER NETWORKS

Confirming the Congress as the First Worldwide Event in the MPLS and SDN Area

The 16th edition of the MPLS World Congress will take place in Paris in March 2014. What was until now known as MPLS & Ethernet World Congress will become the MPLS SDN World Congress in 2014.

The objective set by Upperside Conferences is to confirm the success of the 2013 edition. MPLS SDN World Congress, together with the collocated NFV & SDN Summit, attracted 1350 participants last March. This figure represents a new record number of participants attending this conference.

A strong presence of service providers (more than 50% of the audience) as well as a growing internationalization (more than 65 countries represented) confirms MPLS SDN World Congress as the first worldwide event in the MPLS area.

MPLS SDN World Congress will once again allow us to benefit from the enlightenment of the precise stakes involved in the convergence of the MPLS protocols, particularly their respective roles in the access networks.

2014 - The Union of MPLS SDN World and NFV & SDN Summit: 1500 participants

As was the case this year, the 16th edition of MPLS World will be jointly organized with the NFV & SDN Summit, whose second edition of 2013 attracted more than 400 participants, making this event the largest in Europe (Upperside Conferences was the first to organize an event around the SDN theme in June 2012). The growing interest in this new technology should attract about 1500 attendees for the 2014 edition of MPLS SDN World Congress and the NFV & SDN Summit.

The two events will have a common first day and will conclude with a panel discussion made up of key players (manufacturers and operators) from these technologies.

The 2014 Agenda: Data Center Virtualization, Segment Routing

The 2014 agenda will privilege operator and enterprises scenarios and testimonies. The main focus will be on Data Center Virtualization, especially overlays and WAN interconnection issues. A large session will be dedicated to the Segment Routing initiative, launched during the 2013 edition of the Congress.

Other sessions will cover OpenFlow aspects, performance and traffic engineering issues and mobile SDN.

The proposals have been analyzed and categorized according to their degree of pertinence by the members of the scientific committee.

Upperside would again like to thank the members of the committee for their commitment and support.

The Interop Platform

The European Advanced Networking Test Center (EANTC) in collaboration with Upperside Conferences invites vendors to a multi-vendor MPLS & SDN interoperability test in February 2014.

The objective of the tests is to verify protocol interoperability for service provider oriented toolkits focused on functionality, flexibility and adaptability of networks. Once we verify protocol interoperability we will construct an orchestrated data center to data center network.

Cloud delivery and orchestration will be the major focus of the interop along the topics of:

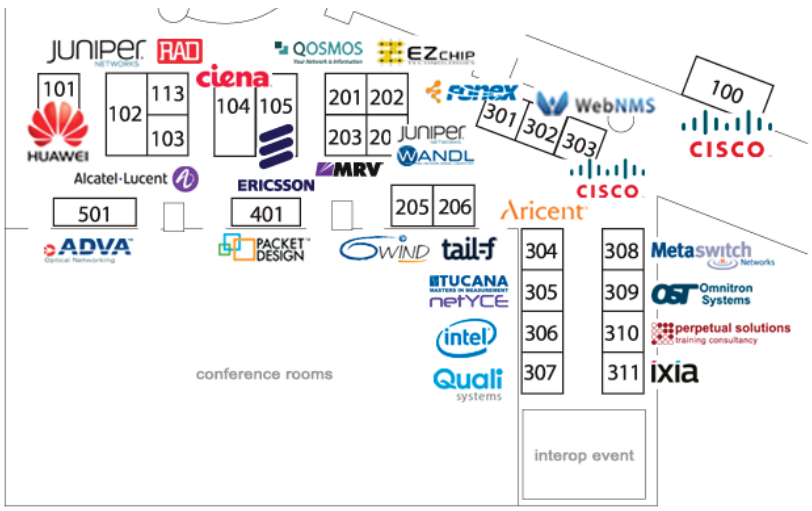
- **Software Defined Networking (SDN): OpenFlow and PCE**
- **IPv6 Migration Scenarios**
- **MPLS and Ethernet Transport**
- **Data Center Interconnection**

During the congress, EANTC will present results in regular guided tours to conference attendees.

The showcase will be open for the full four days of the conferences (Tuesday to Friday).

To get more info: http://www.eantc.de/showcases/mpls_ewc_2014/intro.html

The Exhibition



TUESDAY 18 MARCH 2014 MPLS TECHNICAL TUTORIAL

07.45 WELCOME, REGISTRATION AND COFFEE

09.00 **MPLS in Mobile Backhaul Evolution: 4G and Beyond**

Examining the principal drivers for IP/MPLS backhaul transport infrastructure that accommodates the scaling and latency needs of these evolving LTE mobile networks. Key challenges, options, benefits and tradeoffs of architectures supported with IP VPNs and L2VPN and native Ethernet are explored, along with several deployment scenarios. Details on key aspects of the architecture such as reliability, security, and timing, and its evolution which includes small cells coordination support will be highlighted. Key existing and emerging industry standards/agreements are referenced.

- Introduction to Broadband Forum
- Mobile Market Overview and Business Drivers
- Ethernet and IP VPN Backhaul Architecture for LTE, LTE-Advance and small cells
- Timing and Synchronization
- Interference Cancelation and Coordinated Multipoints
- QoS
- Resiliency, Protection and Performance

10.00 COFFEE BREAK

- IPv6 Considerations
- Energy Efficiency
- Relationship to MEF 22.1 Mobile Backhaul IA
- Deployment Examples
- Broadband Forum Mobile Backhaul Workplan
- Summary

12.30 LUNCH

14.00 **Enhancing IP/MPLS based Carrier Services to Address Data Center Interconnection (DCI)**

The tutorial describes the requirements, motivation and options for using IP/MPLS technologies as a Data Center Interconnect technology.
The use of existing BGP-VPLS and LDP-VPLS as Data Center interconnect technologies, together with the enhancements needed to provide a resilient and scalable interconnect, taking into account service instance and MAC address scaling is underlined. The benefits of control plane based MAC learning using BGP are discussed, as well as a method for hiding the Intra DC MAC-addresses from the MPLS infrastructure.
Additionally, this tutorial describes the use of the relatively new E-VPN and PBB-EVPN technologies and how it enables Service Providers to offer an enhanced Data Center interconnect service.

- Next Generation Data Center Interconnect Use Cases and Requirements
- Motivations for using IP/MPLS technologies for Data Center Interconnect
- Building Blocks of a Data Center Interconnect Solution
- Use of existing BGP-VPLS & LDP-VPLS technologies for Data Center Interconnect

15.00 COFFEE BREAK

- Use of new BGP/MPLS E-VPN & PBB-EVPN technologies for DCI
- Applying E-VPN for Data Center Interconnect
- E-VPN/PBB-EVPN IETF Standardization Update
- Summary

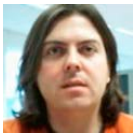
17.00 END OF THE MPLS TECHNICAL TUTORIAL

MORNING SESSION PRESENTED BY

David Sinicrope
Vice President, Broadband Forum Board of Directors
ERICSSON

AFTERNOON SESSION PRESENTED BY

Santiago Alvarez
Broadband Forum Ambassador Manager
Technical Marketing
CISCO



Yves Hertoghs
Broadband Forum Ambassador
Distinguished Systems Engineer
CISCO

TUESDAY 18 MARCH 2014 CARRIER ETHERNET SEMINAR

The evolution of Ethernet continues at a fast pace. This year's pre-conference seminar is an opportunity to look in-depth at the latest in Carrier Ethernet. the seminar features just-approved specifications, new case studies, new CE Cloud use cases, the work of MEF's new Service Operations Committee and more

MEF

07.45 WELCOME, REGISTRATION AND COFFEE

09.00 Welcome to the MEF Pre-Conference Seminar

Johan Witters | EMEA Marketing Co-Chair | MEF
Consultant Business Data Services | ALCATEL-LUCENT

09.05 **Introduction**

The MEF's perspective on Carrier Ethernet in the region and the impact of the migration to CE 2.0 services worldwide.

Johan Witters | EMEA Marketing Co-Chair | MEF
Consultant Business Data Services | ALCATEL-LUCENT

09.20 **Carrier Ethernet, SDN and Cloud**

Ethernet is the dominant service but Cloud will be increasingly important component of its continued growth. Over time SDN will become the key driver for on-demand services and applications. This session articulates the MEF positioning and marketing realities that leverage for Carrier Ethernet, SDN and Cloud. A simple example use case shows how Carrier Ethernet Services would be implemented using SDN provisioning together with SDN-enabled fault and performance monitoring. 3 CE for Cloud use cases and the potential for large scale opportunities of an Carrier Ethernet, SDN, Cloud ecosystem are shown together with existing and planned extensions to support this infrastructure,its management and processes.

Abel Tong | Director of Solutions Marketing | CYAN
Ben Mack-Crane | Editor FAWG ONF | HUAWEI

10.00 COFFEE BREAK

10.30 **The MEF CE 2.0 Wholesale Access and Multiple Provider Services**

Market-driven expansion of Ethernet Services demands ever-faster partnering and time to market and revenue. This panel session brings insight into how the MEF CE 2.0 Wholesale Ethernet Access standard speeds-up and reduces the cost of interconnections and opens new business opportunities for both service providers and access service providers. The session covers the benefits of deploying and offering MEF services, introduce technical implementation guidance and highlights efficiencies gained. The sessions previews new «Transit» services and other enhancements in progress within the MEF.

Bill Bjorkman | Technical Ambassador | MEF
Emerson Moura | CALA Marketing Co-Chair | MEF |
Tech. Solutions Architect | CISCO
Youcef Ayad | Nordics Market. Co-Chair | MEF |
Sr. Product Manager | TELIASONERA
Jamy Rousseau | Chef Produit Ethernet Fibre & FTTH | SFR

11.10 **LTE Advance and small cell Backhaul**

LTE bandwidth and services together with the enormous growth in smart mobile devices provides backhaul challenge. Operators need to provide higher bandwidth to more smaller sites, support accurate synchronization, and manage connectivity among the sites for interference management.This session describes the latest development in mobile backhaul for LTE, LTE Advance and small cells. Including Synchronization, coordination, resiliency, and performance objectives.

Rami Yaron | Mobile Backhaul Co-Chair& CE2.0 Specialist | MEF
Consultant, Lead Instructor | PERPETUAL SOLUTIONS
Richard Strike | UK Marketing Co-Chair | MEF Business Development Director | ADVA OPTICAL

11.50 **Implementing Multi COS – a Best Practice Guide**

The different services supported today by the 4G mobile networks and the backhaul performance requirements imply the implementation of multi class of service backhaul. This session explain the need for Multi-CoS in the mobile backhaul network. It also provide network architecture use cases and deployment recommendation

Moshe Shimon | VP Product Line Management | TELCO SYSTEMS
Bill Bjorkman | Technical Ambassador | MEF

12.30 LUNCH

14.00 **Service Management and Operations**

Covers the MEF's initiative to define, streamline & standardize processes for buying, selling, delivering and operating MEF-defined services.The session brings insight into the new work covering processes, information, interfaces and terminology applied to partner relationship management, lifecycle management and industry standards alignment. The session also covers related management specifications and addresses new orchestration and monitoring required for controlling dynamic CE services.

Shahar Steiff | Service Operations committee Co-chair | MEF
AVP New Technologies | PCCW GLOBAL

14.40 COFFEE BREAK

15.10 **Carrier Ethernet Panel Discussion**

MODERATOR

Carsten Rossenhoevel
EMEA Marketing Co-Chair | MEF
Managing Director | EANTC

PANELISTS

Youcef Ayad | TELIA SONERA
Jamy Rousseau | SFR
Zeev Draer | VP, Strategic Marketing | MRV
Sharfuddin Syed | Sr. Principal Systems Engineer | INFINERA

15.45 END OF THE CARRIER ETHERNET SEMINAR

WEDNESDAY 19 MARCH 2014 CONFERENCE DAY ONE

MORNING

MPLS SDN WORLD CONGRESS 2014 | NFV SDN SUMMIT 2014

07.45 WELCOME, REGISTRATION AND COFFEE

MORNING CHAIRPERSON

Luyuan Fang | Principal Network Engineer | MICROSOFT

Opening Speeches

08.30 - 08.50

Carrier Ethernet, SDN, NFV and Cloud – a Vision and Strategy

Nan Chen | President | MEF

08.50 - 09.10

Open SDN in the Mainstream
How ONF continues to drive the open SDN movement to commercial success.

Dan Pitt | Executive Director | ONF

09.10 - 09.30

SDN as We Envisioned It
Original intent and current marketing hype.

Guru Parulkar
| Executive Director ONRC | STANFORD UNIVERSITY

Keynote Speeches

09.30 - 10.00

Carrier Business Transformation through SDN Migration and Network Evolution towards NFV

Justin Dustzadeh | CTO and VP Technology Strategy, Fixed Network Business | HUAWEI

10.00 COFFEE BREAK

10.30 - 11.00

Bala Thekkedath
| Director of Marketing, IP & Broadband |
ERICSSON

11.00 - 11.30

The Key Role of SDN in Networking the Cloud and Cloudifying the Network

Sunil Khandekar | CEO | NUAGE

11.30 - 12.00

A Native MPLS Fabric

Kireeti Kompella | JUNIPER NETWORKS

12.00 - 12.30

Orchestration for Application Centric Networking

Dave Ward | CISCO

12.30 LUNCH

Alcatel·Lucent | CISCO | ERICSSON | HUAWEI | JUNIPER NETWORKS

MPLS SDN WORLD CONGRESS 2014 | NFV SDN SUMMIT 2014

AFTERNOON CHAIRMAN

Thomas Nadeau | BROCADE

Data Center Virtualization: Overlays and WAN Interconnection

14.00 **Standardising Virtual Networks for the Data Center**

Providing an update on standardisation in data center virtual networks, focussing on the work of the IETF and NVO3 working group in particular, addressing some key questions of what can realistically be standardised.

Matthew Bocci | Director, Technology and Standards | ALCATEL-LUCENT

14.30 **Data Center Network Virtualization meets the WAN**

Much as there may be a desire to make connections between virtualized data centers and WANs as «seamless» as possible, there is no getting around the fact that they are significantly different environments. Discussing how these two disparate worlds can be integrated to leverage service provider assets and deliver the services expected by cloud customers.

Bruce Davie | VMWARE

15.00 **Interconnecting Multi-Tenant DCs Using Ethernet Virtual Network**

Analysing various solutions in different contexts to provide E2E data center solutions for interconnection, while making a case for Ethernet Virtual Network (EVN). This solution offers not only address various requirements for DC interconnection but also provides a way to achieve those using EVN.

Sam K. Aldrin | HUAWEI TECHNOLOGIES

15.30 **Orchestrating Application Delivery in NFV Environments using MPLS-SDN**

Describing how service providers can innovate in transitioning from a traditional service/application delivery model to a cloud based model by using recent advances in MPLS-SDN. It ties NFV with service chaining in a Telco DC to the VPNs that are used for service transport. Showing how this can be orchestrated with a hierarchical MPLS L3/EVPN transport service from the MPLS enabled Telco DC to the mobile or fixed access network.

Sriganesh Kini | Distinguished Engineer | ERICSSON

16.00 COFFEE BREAK

16.30 **Datacenter Network Virtualization, Open and Simple**

Discussing how network virtualization needs of IaaS DC platforms can be addressed with a simple architecture combining the network API exposed by the cloud management platform and an overlay networking implementation based on the well-known BGP/MPLS architecture for VPN services. Describing how we prototyped such an approach with minimal development resources and largely relying on opensource components.

Thomas Morin | ORANGE

17.00 **A Pragmatic View of SDN for Data Center and Data Center Interconnect**

Discussing the characteristics of modern large scale Data Centers, and WAN DC inter-connections. Sharing our production experiences of "BGP only" Data Center fabric with the SDN controller, including our evolution path from L2 to all L3; additional benefits of SDN controller brings; and further improvement needed.

Luyuan Fang | Principal Network Engineer | MICROSOFT

17.30 **NFV Breaks out of the Data Center**

NFV is almost always discussed in the context of virtual functions resident in data centers. Such centralized placement may indeed substantially simplify operational logistics, but for many network functions of interest it may even more substantially increase bandwidth usage and reduce system performance. Discussing the placement of VNFs at various locations throughout the network, and in particular at the customer premises.

Yaakov (J) Stein | CTO | RAD

Panel/Debate

18.00 **Data Center Virtualization Convergence and NFV Network Requirements**

MODERATOR
Carsten Rossenhoevel
EANTC

PARTICIPANTS
Kireeti Kompella | JUNIPER NETWORKS
Dave Ward | CISCO
Bruce Davie | VMWARE
Thomas Morin | ORANGE
Axel Clauberg | DEUTSCHE TELEKOM
Dr. Justin Dustzadeh | HUAWEI
Bikash Koley | GOOGLE
Craig Pierantozzi | MICROSOFT
Wim Henderickx | ALCATEL-LUCENT
Zeev Draer | MRV
Yaakov (J) Stein | RAD

19.00 END OF THE CONFERENCE DAY ONE WELCOME COCKTAIL

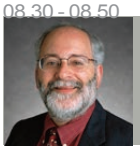
07.45 WELCOME, REGISTRATION AND COFFEE

MORNING CHAIRMAN

Azhar Sayeed | CISCO

Opening Session

08.30 - 08.50



Andrew G. Malis
HUAWEI

08.50 - 09.30

Dr. Yakov Rekhter
JUNIPER NETWORKS

Use Case Session

09.30 **Service Provider SDN: Lessons Learnt and Evolution**

Showing the results of customer lab-trials, and explaining how these fit into a Service Provider SDN vision. SDN Service Chaining is one of the key identified applications, which uses OpenFlow switching to dynamically chain network appliances like DPI, Firewall, VirusScan etc., in a much more effective way than with today's IP networks.

Elisa Bellagamba | ERICSSON

09.50 **SDN based Network Architectures for Service Providers Benefits and Challenges**

Providing a detailed view about the potential and challenges of SDN in combination with network virtualization from a services provider's point of view. "Real world" use cases based on the existing requirements and network architecture are provided, including scenarios for virtualization of network functionalities (e.g. firewalling, warding against DDoS attacks, (virtual) ePC).

Nicolai Leymann | Fixed Mobile Engineering | DEUTSCHE TELEKOM AG

10.10 **SDN and Mobile Networks**

Flexibility and nimbleness is an absolute must to allow users to freely move between macro and fixed networks. SDN can provide dynamic policy and reconfiguration for this to happen.
Covering the role of SDN in the Mobile Networks both in EPC and the backhaul and discussing in depth the mobile use case and how SDN and virtualization can play a role for Mobile providers.

Azhar Sayeed | CISCO

10.30 **Carrier SDN with a Hybrid Control Plane: Use Cases and Proof Points**

Demonstrating, with real-world uses cases, how Carrier SDN can be employed to extend infrastructure intelligence further towards the network edge and ultimately into the customer premise, leveraging cost-effective implementations of MPLS or non-MPLS devices in new reference architectures to reduce port counts and throughput demands on existing LSRs and LERs.

Christopher Liljenstolpe | METASWITCH

10.50 COFFEE BREAK

Mobile Backhaul Session

11.20 **Wireless Meshed Networking for Small Cells Backhauling**

Small cells are increasingly gaining popularity among operators because they represent a sort of "ultimate" answer to the need of ubiquitous coverage and capacity.

Paolo Volpato | Product Strategy Manager | ALCATEL LUCENT

11.40 **SDN-based Hybrid Access**

Discussing problem statement: what is SDN-based Hybrid Access and its value proposition?
Presenting case studies.

Dr. XiPeng Xiao | HUAWEI TECHNOLOGIES

12.00 **SDN Impact on Mobile Broadband Networks**

Discussing the ways in which the SDN concept and its architecture principles can complement cloud and Network Function Virtualization in mobile broadband networks and advance the transformation of the network architecture into a pure software infrastructure which is highly efficient and flexible.

Nurit Sprecher | NOKIA SOLUTIONS AND NETWORKS

12.30 LUNCH

AFTERNOON CHAIRMAN

Jean-Marc Uzé | JUNIPER NETWORKS

MPLS, SDN & NFV for Enterprises Session

14.00 **Extending The Geographic Reach of a VPN Service**

Describing the concept of VSDP and how it can be implemented based on Inter-provider Option B. It describes how VSDPs can be used to provide a seamless VPN service across geographic regions. Potential deployment options, secure deployment procedures as well as the trust models will be discussed in detail.

Ron Bonica | Distinguished Engineer | JUNIPER NETWORKS

14.20 **Beyond the Data Centre: SDN & NFV in the Customer Premises**

How CSPs need adapt their engagement with the enterprise if they are to realise a shared vision for SDN & NFV.
How the programmable delivery of new services to the enterprise will enable CSPs to measurably reduce a major component of network TCO: that of introducing a new service.
How network-edge and CPE routing technologies have evolved to become 'SDN/NFV ready'.

Pravin Mirchandani | CMO | ONEACCESS

Segment Routing Session

14.40 **From Tag Switching to SDN and Segment Routing MPLS: an Enduring Architecture**

Covering the founding principles of MPLS that have allowed MPLS to evolve and morph in so many ways. Exploring how separation of control and data, PCE, BGP-LS have combined to enable SDN control of MPLS via Segment Routing.

George Swallow | CISCO

15.00 **Segment Routing: Update and Future Evolution**

By 2014, the first phase of the Segment Routing will be available. Providing an update on the product, the standardization process and most specifically focusing on the deployment use-cases it supports. Introducing the future evolution of the technology and new use-cases that we want to support.

Clarence Filsfils | CISCO

15.20 **Fast Reroute Approach Using Segment Routing**

Fast ReRoute protection is needed to complement network convergence when traffic restoration time requirements are high.
Several fast reroute solutions already exists for IP or MPLS networks but none is meeting all the operator's expectations (coverage, simplicity, side effects …). Detailing a new Fast Reroute approach using the flexibility of Segment Routing technology. Comparing it with existing Fast ReRoute solutions, both from a theoretical point of view and with simulations results on a real SP network topology.

Stephanel Litkowski | ORANGE

15.40 COFFEE BREAK

16.10 **MPLS Label Advertisement in IGPs**

Highlighting historical approaches to link-state routing using the notion of short, fixed size 'labels' and comparing them to the recent MPLS incarnations, particularly «Segment routing» and «IGP Label Advertisement».

Hannes Gredler | Distinguished Engineer | JUNIPER NETWORKS

16.30 **Segment Routing in Seamless MPLS Networks**

Segment Routing (SR) as an alternative to LDP protocol to reduce the number of control planes in the domain.
SR used together with LDP to enhance the coverage of IP and LDP Fast-ReRoute
Segment Routing use to provide source routed paths to applications in domains of the network where the operator does not want or cannot operationalise the RSVP-TE protoctol.

Mustapha Aissaoui | Product Line Manager, IP Divi. | ALCATEL-LUCENT

16.50 **RSVP-TE for ECMP, traffic Engineering & Segment Routing**

Segment Routing is emerging as an interesting mechanism to offer simplicity, scale and support for a wide array of applications. Discussing a use case for SR providing an insight into how and under what circumstances - carriers can deploy both these vehicles in enhancing network functionality and reducing operational complexity.

Vinod Joseph | Principal Architect for Advanced Technology Solutions | JUNIPER NETWORKS

17.10 **Source Label - MPLS Improvement**

Why do we need MPLS Source Label
The concept of MPLS Source Label
The Data Plane processing
Source Label signaling (Capability negotiation and Source Label distribution)
Use cases of MPLS Source Label.

Mach Chen | Senior Staff Engineer, Carrier IP Product Line | HUAWEI TECHNOLOGIES

17.30 END OF THE CONFERENCE DAY TWO

FRIDAY 21 MARCH 2014 CONFERENCE DAY THREE

07.45 WELCOME, REGISTRATION AND COFFEE

MORNING CHAIRMAN

Rajiv Papneja | Senior Director, Carrier IP Solutions North America IP Competence Center | HUAWEI

OpenFlow Session

09.00 **Extending MPLS with Hybrid OpenFlow switching**

Benefits of integrating OpenFlow switching into existing MPLS/IP/Ethernet platforms
Flexibility and speed of application deployment over IP/MPLS infrastructure with integrated OpenFlow switching
Applicability of Hybrid OpenFlow switch in DC, WAN, Mobile Backhaul networks.
Benefits behind programmable Open Flow Hybrid MPLS/IP switch/router

Andrew Dolganow | Director Product Line Managment IP Division, SDN, Platform, L3 Multicast | ALCATEL-LUCENT

09.20 **Efforts toward Interoperable OpenFlow**

The Forwarding Abstractions Working Group (FAWG) is shoring up the foundation of the OpenFlow architecture by creating a framework that simultaneously allows for scalability, interoperability and practical development. This new optional framework will move OpenFlow beyond the "research" niche where some hope to isolate the technology.

Ben Mack-Crane | Editor FAWG ONF | HUAWEI

09.40 **Improving Openflow Flow Set Up Times**

Proposing a solution to dynamically detect increase in the flow set up time to a specific switch, depending on the network conditions as well as the geographical location of the switches, and then moving the switch to a different controller domain if it will reduce the flow setup time.

Faseela K | ERICSSON

10.00 COFFEE BREAK

10.30 **SDN Enhancement with Stateful Openflow**

Introducing a novel way to enhance openflow's data path with state preserving and maintaining capabilities to address the current technical challenges.

Hayim Porat | Lead Architect and Manager of the Cloud Networking and Security Research Groups, IT division | HUAWEI

10.50 **Extending OpenFlow to the Carrier Network: Challenges**

Extending the new concepts of SDN /OpenFlow to the Carrier Networks : issues of hybrid deployment, practical challenges in deploying the solution (realization vs Hype). Analyzing « NFV» the new paradigm acting as catalyst for acceleration of such deployments

Sudeepta Ray | Assistant Vice President - Technology |ARICENT

Performance and Management Session

11.10 **Real-Time Analytics and Policy Management for Software Defined Networking**

North-bound SDN APIs allow creation of network-aware applications. Cloud and data center applications have successfully taken advantage of these APIs to provide seamless virtual machine mobility and elasticity. However, these applications are unaware of whether or not the underlying wide area network can provide acceptable performance. Introducing the concept of a network access broker (NAB), an analytics and policy management layer that provides this information.

Cengiz Alaettinoglu | Chief Technical Officer | PACKETDESIGN

11.30 **Effective Benchmark Test Methodology to Qualify SDN/ OpenFlow Enabled Networks**

While standards continue to formalize the openness of the SDN/NFV proposals and use cases, operators scramble to understand the operational readiness of these solutions
How SDN/NFV solutions impact the key performance indicators.
How current network monitoring tools will be integrated into the emerging paradigm. Impact on north-south bound convergence in addition to network infrastructure convergence. Dependencies of control and forwarding plane convergence.

Authors: **Rajiv Papneja** | Senior Director, Carrier IP Solutions North America IP Competence Center | HUAWEI and **Dean Lee** | Director, Network Infrastructure Business | IXIA

12.30 LUNCH

AFTERNOON CHAIRPERSON

Niloufar Tayebi | Expert Industry Marketing | CIENA

14.00 **SDN-based Traffic Management for IP/MPLS Networks: Reality, not Snake Oil**

Demonstrating how a centralised network- and traffic-aware controller can be used in existing IP / MPLS networks to close the feedback loop between the network and applications and services that use the network, providing both dynamic
SLA guarantees through admission control and providing real-time network- and traffic-aware service placement.

Authors: **John Evans** | Distinguished Engineer | CISCO and **Arash Afrakteh** | Principal Engineer | CISCO

14.30 **Practical Considerations for IP and LDP Fast-Reroute**

There have been many schemes proposed for IP and/or LDP Fast-Reroute over the past few years. Discussing the relative merits of several of these, focusing especially on ways of improving Loop-Free Alternate (LFA) coverage, including Remote LFA and coverage extension using RSVP LSPs.

Julian Lucek and **Chris Bowers** | JUNIPER NETWORKS

Optical Session

15.00 **Design and Optimization for Packet Optical Integration**

Introducing a few of recent research results on the design and optimization for Packet Optical Integration (POI) networks and discussing possible evolution directions of backbone network architecture. The recent waves of innovation on Software Defined Networking (SDN) and Network Function Virtualization (NFV) further enhance this vision.

Dr. Victor Yu Liu | HUAWEI

15.30 **GMPLS, SDN, Optical Networking, Control Plane**

What techniques and mechanisms are envisioned that enable integration of emerging SDN mechanisms with existing GMPLS-controlled domains?
Outlining some network configurations involving interworking of this nature, and describing a set of strategies for integrating various control techniques.

Achim Autenrieth | Principle Engineer Advanced Technology | ADVA OPTICAL NETWORKING

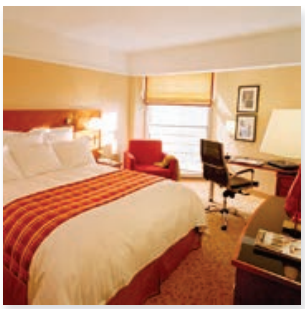
16.00 **Enabling Dynamic Packet-optical Connectivity Services for Optimal Cloud Service Delivery, a First Step towards SDN**

Discussing how allowing the network to be controlled by data center applications, such as compute and storage, is the first practical step in the direction of turning your network into an open, software-defined network.

Niloufar Tayebi | Expert Industry Marketing | CIENA

16.30 END OF THE CONFERENCE

MARRIOTT PARIS RIVE GAUCHE HOTEL AND CONFERENCE CENTER

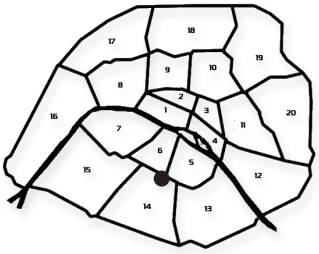


Located on the renowned Parisian 'Left Bank', close to Montparnasse, the Latin Quarter and Saint Germain des Près, the hotel is only 5 minutes from the Boulevard Peripherique (the city's ring road). Moreover, it is easily accessible by train and airport transfers. The hotel's 757 Guestrooms & Suites offer you a bird's-eye view of Paris, whilst our latest technology equipments provide everything you need to work. Every room boasts a connectivity panel, linking all your digital tools to the flat-screen TV, a highly secure WiFi connection, and a large desk with an ergonomic chair.

If business, pleasure or both, take advantage of our many services, our 24-hour Concierge assistance, our room service or upgrade your stay with our Executive Level and Lounge.

Make the most of your stay and take a break in our 350 m2 (3,800 Sq Ft) Fitness Center which offers massages and private coaching upon reservation. Alternatively, you could follow one of our jogging routes.

R'Yves, a superb bar, lounge and restaurant in downtown Paris, welcomes you every day in a cozy and relaxing 70s atmosphere for a light refreshment or a full meal. Guests will enjoy a wide variety of international dishes offered by our talented chef. …



And don't forget the temptations of the Left Bank such as the most famous shopping addresses in Saint Germain des Près, the world renowned Montparnasse Brasseries, the Champs Elysées and the Eiffel Tower, all less than 20 minutes away by metro!

For guests in Executive hotel rooms and suites, the Executive Lounge offers all day refreshments.

Marriott Revive® bedding with down comforter, custom duvet, crisp linens and plush pillows.

Enjoy spacious work space in our downtown Paris hotel's luxury suites with secure broadband Internet

Hotel rooms feature iron/ironing board, tea and coffee making facilities, and 24-hour room service.

This hotel has a smoke-free policy

Marriott Rewards Category 7

Deluxe room
€ 217.94 per night
1 King or 2 Twin/Single
One breakfast included

Executive room
€ 285.94 per night
Executive Lounge Access
1 King or 2 Twin/Single
One breakfast included

Junior Suite
€ 332.94 per night
Executive Lounge Access
1 King, 1 Sofabed
One breakfast included

To book your room:
http://www.uppersideconferences.com

MARRIOTT

17 Boulevard Saint Jacques
75014 Paris - France
Metro line 6: Saint Jacques or Glacière

Tel: ++ 33 (0)1 40 78 79 80
Fax: ++ 33 (0)1 45 88 43 93
Web: http://www.marriott.com

To book your room: http://www.uppersideconferences.com

MPLS SDN WORLD CONGRESS 2014

INTERNET
www.uppersideconferences.com
contact@uppersideconferences.com

TELEPHONE
33 1 53 46 63 80

FAX
33 1 53 46 63 85

POST MAIL
54 rue du Fbg St Antoine
75012 Paris - France

DATES AND VENUE

18/21 March 2014

Hotel Marriott Paris Rive Gauche
17, Boulevard Saint Jacques
75014 Paris
France

Metro line 6: Glacière

ORGANIZED BY

Upperside Conferences
54 rue du Faubourg Saint Antoine
75012 Paris
France
Telephone: ++ 33 (0)1 53 46 63 80
Fax: ++ 33 (0)1 53 46 63 85
contact@uppersideconferences.com

SIRET: 399.004.068.00033
VAT: FR12 399.004.068

TERMS OF PARTICIPATION

Full payment or Purchase Order is required for admission to the conference.

PAYMENT

Cards (Visa, Amex, Mastercard, Diner)
Bank transfer
Cheque and Travelers cheque.

REGISTRATION FEES

4 Day Event 18/21 March 2014
Technical Tutorials + Conference
€ 2,495.00 + VAT 20% € 499.00 = **€ 2,994.00**

3 Day Conference 19/21 March 2014
€ 2,075.00 + VAT 20% € 415.00 = **€ 2,490.00**

Technical Tutorials only 18 March 2014
€ 825.00 + VAT 20% € 165.00 = **€ 990.00**

These passes include: access to the MPLS SDN World Congress, access to the exhibition and interop event; coffee breaks, luncheons, welcome reception and proceeding.

Set of lecture notes (Electronic version on USB key)
Euros 750.00. Delivery by Fedex included.

To register for **Pass Plus MPLS SDN World Congress + NFV & SDN Summit 2014,** Please go to **http://www.uppersideconferences.com**

CANCELLATION CONDITIONS

Substitution of delegates is permitted at any time.

For all cancellations received before February 18, 2014, the entire registration amount will be refunded.
For all cancellations received after February 18, 2014 and before March 4, 2014 the registration amount less 10% administrative charge will be refunded.
For all cancellations received after March 4, 2014, regrettably, no refunds can be made.

CONFERENCE PROGRAM MODIFICATIONS

Upperside Conferences reserves the right to make any necessary changes to the program. Every effort will be made to keep presentations and speakers as represented. However, unforeseen circumstances may result in the substitution of a presentation topic or a speaker.

CANCELLATION OF THE CONFERENCE

Payments will be refunded if the conference is cancelled by the organizer.

CONFERENCE LANGUAGE

English

☐ I would like to register, I have read and accept registration fees, payment and cancellation policies.

Please tick and report the letter in the block below.

☐ A **4 Day Event** 18/21 March 2014 **Technical Tutorials + Conference** | **2,495.00** + VAT 20% € 499.00 = **€ 2,994.00**

☐ B **3 Day Conference** 19/21 March 2014 | **€ 2,075.00** + VAT 20% € 415.00 = **€ 2,490.00**

☐ C **Technical Tutorials** (MPLS Tutorial and/or Carrier Ethernet Seminar) 18 March 2014 | **€ 825.00** + VAT 20% € 165.00 = **€ 990.00**

☐ D I am unable to attend, please reserve me a set of lecture notes. Euros 750.00 (+ VAT 20% for French companies only)

	MR/MRS	FIRST NAME	FAMILY Name	EMAIL
☐ 1				
☐ 2				
☐ 3				

COMPANY | BOOKING CONTACT

ADDRESS

ZIP CODE | CITY | COUNTRY

TEL. | FAX | EMAIL

☐ AMERICAN EXPRESS ☐ VISA ☐ MasterCard ☐ Diners Club International

☐ I enclose a cheque in favour of Upperside Conferences

☐ Please invoice my Company. Payment upon receipt of invoice

HOLDER

EXPIRY DATE | CVC

INVOICING ADDRESS IF DIFFERENT / REMARKS