

2nd Data Center Converged And Virtual Ethernet Switching DC CAVES - Introduction

Renato Recio

Program Committee → Thanks for your help

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- Manoj Wadekar, QLogic, USA
- Suresh Vobbilisetty, Brocade, USA

- **Renato Recio, Program Committee Chair, IBM, USA**

Agenda - Morning

9:00 - 9:30	On-site registration
9:30 - 9:45	Introduction and Opening Remarks R. Recio (IBM, USA)
9:45 - 11:00	<p>WS 1 – Ethernet Virtual Bridging Virtual Switching in an Era of Advanced Edges <i>Justin Pettit, Jesse Gross, Ben Pfaff, Martin Casado (Nicira Networks, USA) and Simon Crosby (Citrix Systems, USA)</i></p> <p>A Case for VEPA: Virtual Ethernet Port Aggregator <i>Paul Congdon, Prasant Mohapatra (University of California, Davis, USA) and Anna Fischer (HP, UK)</i></p>
11:00 - 11:15	Coffee Break
11:15-12:30	<p>WS 2 – Automation of Ethernet Virtual Bridging VMready - Implementation of a Profile Based Virtual Port Switching Framework <i>Vijoy Pandey & Jay Kidambi (Blade Network Technologies, USA)</i></p> <p>Ethernet Virtual Bridging Automation Use Cases <i>Renato Recio, Rakesh Sharma (IBM, USA) & Sivakumar Krishnasamy (IBM, India)</i></p>
12:30 13:30	- Lunch Break

Agenda - Afternoon

<p>13:30 - 14:45</p>	<p>WS 3 – Forwarding Approaches for Data Center Networks Introduction to Port Extension (IEEE P802.1Qbh) <i>Joe Pelissier (Cisco, USA) & Rene Raeber (Cisco, Switzerland)</i> Comparative Evaluation of CEE-based Switch Adaptive Routing <i>Daniel Crisan, Mitch Gusat & Cyriel Minkenberg (IBM, Switzerland)</i></p>
<p>14:45- 15:00</p>	<p>Coffee Break</p>
<p>15:00- 16:15</p>	<p>WS 4 – Management and Optimization of Data Center Network Implementation and Evaluation of Network Management System to Reduce Management Cost Caused by Server Virtualization <i>Masahiro Yoshizawa, Toshiaki Tarui & Hideki Okita (Hitachi, Japan)</i> Faster and Efficient VM Migrations for Improving SLA and ROI in Cloud Infrastructures <i>Sujal Das (Mellanox, USA), Michael Kagan (Mellanox, Israel) & Diego Crupnicoff (Mellanox, Argentina)</i></p>

Logistics

- Each attendee that participates in both DC CAVES and ITC 22 will receive a CD with the workshop papers and the full version of ITC 22 Papers.
- Attendees also registered to ITC 22 will get the overall material and badge for ITC 22 as well.
- ITC 22 Program is available at <http://www.i-teletraffic.org/itc22/technical-program/>

Back-ups

DC CAVES Workshop Scope

- The workshop is intended to serve as a forum to present the latest work by researchers and developers from both academia and industry, in the areas of:
 - Server network virtualization infrastructure
 - Physical switch virtualization (including fabric convergence) infrastructure

- Server virtualization infrastructure includes:
 - Layer-2/3/+ switching technologies performed within the server

- Physical switch virtualization and convergence infrastructure includes:
 - Layer-2/3/+ fabric virtualization technologies, such as VLANs, MPLS, VPLS, Switch Stacking and mechanisms that partition a single physical switch into multiple virtual switches; and
 - Storage and Ethernet convergence technologies, such as iSCSI, NAS, FCoE and FC over MPLS.

DC CAVES Workshop - Areas of Interest

- Server virtualization infrastructure
 - Automation of virtual server network identity management
 - Enhanced virtual server network access and traffic controls
 - Networking technologies to enable virtual server migration within a DC & across DCs
 - Security plane infrastructure virtualization
 - Enhancements to virtual server switches
 - Offloading of virtual switching to external fabrics
 - Converged fabric reference services architectures
 - Future directions

- Virtual & converged fabric infrastructure
 - Overall network virtualization & performance
 - Performance evaluation of converged iSCSI, NAS and emerging FCoE fabrics
 - Converged fabric security considerations
 - Transport stack options for converging Inter-Process Communication (IPC) traffic
 - Additional Ethernet Quality of Service enhancements needed for converged environments
 - Performance and fault event management for converged fabrics
 - Converged fabric management infrastructure and reference services architectures
 - Future directions