

### Welcome. Logistics.

Hagen Woesner, EWSDN

### The End of the Future (Internet) – with SDN, why is everybody doing IPv4?

Hagen Woesner, EICT/BISDN

### SDN Landscape and Challenges

Attila Takacs, Ericsson

### Free your middlebox functions down to the data plane with tiny, fast network VMs

Saverio Niccolini, NEC

## opening session

### SDN for Service Providers. Cisco approach with Multilayer State-full Path Computation Element

Stefano Previdi, Cisco

### An SDN Framework

Ken Gray, Juniper

### Macroflows and Microflows: Enabling Rapid Network Innovation through a Split SDN Data Plane

Rajesh Narayanan, Dell

## industry track I

### Software will eat the Network

Antonio Manzalini, Telecom Italia

### Use cases for alto with SDN

Diego Lopez, Telefonica

### BGP Free Edge – An operator's perspective on aspects of SDN/OF deployment application

Robert Raszuk, NTT MCL

## industry track II

### Open Networking Laboratory: Overview and Initiatives

William Snow, On.Lab

### SDN: The programmable bit-pipe

Andreas Gladisch, Deutsche Telekom

## industry track III

For detailed instructions on getting to the conference, please see the website of the **Commundo Tagungshotel Darmstadt** (<http://goo.gl/3hCdx>).



The **registration desk** will be open from 8:30 on the first day, October 25<sup>th</sup>.

Please find the room **Bistro 2** at **20:00** on Thursday. Food and drinks are included in the registration fee.

## logistics



## EWSDN

European Workshop on Software Defined Networks



## sponsors

October 25<sup>th</sup> - 26<sup>th</sup>, 2012  
Darmstadt, Germany

## Welcome to Darmstadt for the first European Workshop on Software Defined Networks

SDN is surely the latest hype in the networking community, and we would like to check the myth and substantiate some of its assumptions.

High flow establishment rates, carrier features and programmability of new matches and actions are still open research topics on the way to a truly programmable network. We hope that EWSDN allows fruitful interaction among participants – both from academia and industry.

The workshop chair – Hagen Woesner

The TPC co-chairs – Jürgen Quittek, Stefano Salsano, Elio Salvadori

# welcome

- 09:30 Opening session
- 11:15 Coffee break
- 11:30 Industry track I
- 13:00 Lunch
- 14:00 Industry track II
- 15:30 Coffee break
- 15:45 Industry track III
- 16:45 Coffee break
- 17:00 Wireless, cellular and multilayer
- 18:30 End

## day 1

- 09:30 Virtualization and layer 2 issues
- 11:00 Coffee break
- 11:15 2nd OFELIA Open Call
- 13:15 Lunch
- 14:15 Panel - Open hardware & software for SDN
- 15:15 Coffee break
- 15:30 Performances, testing, development
- 17:00 Coffee break
- 17:15 Open session
- 18:30 End

## day 2

### Software Defined Wireless Networks: Unbridling SDNs

Salvatore Costanzo, Laura Galluccio, Giacomo Morabito and Sergio Palazzo

### Toward Software-Defined Cellular Networks

Li Erran Li, Morley Mao and Jennifer Rexford

### OpenFlow and Multi-Layer Extensions: Overview and Next Steps

Meral Shirazipour, Ying Zhang, Neda Beheshti, Geoffrey Lefebvre and Mallik Tatipamula

## wireless, cellular and multilayer

### OpenFlow Virtualization Framework with Advanced Capabilities

Balázs Sonkoly, András Gulyás, Felicián Németh, János Czentye, Krisztián Kurucz, Barnabás Novák and Gábor Vaszku

### VeRTIGO: network virtualization and beyond

Roberto Doriguzzi Corin, Matteo Gerola, Roberto Riggio, Francesco De Pellegrini and Elio Salvadori

### Implementing Layer 2 Network Virtualization using OpenFlow: Challenges and Solutions

Jon Matías, Borja Tornero, Alaitz Mendiola, Eduardo Jacob and Nerea Toledo

### Energy efficient minimum spanning tree in OpenFlow networks

Luca Prete, Fabio Farina, Mauro Campanella and Andrea Biancini

## virtualization and layer 2 issues

### Packet-In Message Control for Reducing CPU Load and Control Traffic in OpenFlow Switches

Daisuke Kotani and Yasuo Okabe

### A Flexible OpenFlow Controller Benchmark

Michael Jarschel, Frank Lehrieder, Zsolt Magyari and Rastin Pries

### OFTEN Testing OpenFlow Networks

Maciej Kuzniar, Marco Canini and Dejan Kostic

### A practical experience in designing an OpenFlow controller

Roberto Bifulco, Roberto Canonico, Marcus Brunner, Peer Hasselmeyer and Faisal Mir

## performances, testing, development

### Techno-economic analysis of software defined networking for the virtualization of a mobile network

Bram Naudts, Mario Kind, Fritz-Joachim Westphal, Sofie Verbrugge, Didier Colle and Mario Pickavet

### Enabling Future Internet Architecture Research and Experimentation by Using Software Defined Networking

Flavio Silva, Joao Pereira, Pedro Frosi Rosa and Sergio Kofuji

### A use-case based analysis of network management functions in the ONF SDN model

Alisa Devlic, Wolfgang John and Pontus Sköldström

## open session

### Software-Defined Networking: Experimenting with the control to forwarding plane interface

Evangelos Haleplidis, Spyros Denazis, Odysseas Koufopavlou, Joel Halpern and Jamal Hadi Salim

### PaFloMon: A Slice-Aware Passive Flow Monitoring Framework for OpenFlow Enabled Experimental Facilities

Christos Argyropoulos, Dimitrios Kalogeras, Georgios Androulidakis and Vasilis Maglaris

### Pursuing a Software Defined Information-centric Network

Dimitris Syrivellis, George Parisis, Dirk Trossen, Paris Flegkas, Vasilis Sourlas, Thanasis Korakis and Leandros Tassioulas

### Customizing Data-plane Processing in Edge Routers

Fulvio Rizzo and Ivano Cerrato

### On QoS Support to Ofelia and OpenFlow

Balázs Sonkoly, András Gulyás, Felicián Németh, János Czentye, Krisztián Kurucz, Barnabás Novák and Gábor Vaszkun

### Abstraction through extended VirtuALisation in Openflow Networks – AVALON

Pontus Sköldström

## 2nd OFELIA open call

### Open Hardware and Open Software for SDN

Academic research depends on open hardware and software. This panel is set up to discuss the current status of available switches, controllers, and identify gaps that prohibit progress.

## panel discussion