Industrial Panel – Monday 19 April, 14:00-17:00

Future is now:

Will virtualization meet next generation enterprise network's needs?

Virtualization is catalysing business transformation across all industries. Both 5G and Enterprise networks are driving the adoption of virtualisation platforms and opening the universal CPE market as a way of reducing complexity and maintenance challenges associated with supporting different vendors for customer hosted firewalls, routers, security gateways and other SDWAN related functions. In this context, security, reliability, resilience, and ease of orchestrating remote edge hosted components is a significant challenge being addressed by the communications industry and will be a focus area driving architecture decisions and tactical deployment of functions in an on-demand model.

In this workshop we bring together service providers, vendors, and industry expertise to engage, collaborate and hold Q&A sessions to gain a mutual understanding of the problem in space, solutions and to share best practice.

Workshop Chair:

Guido Alberto Maier, Professor, Politecnico di Milano (POLIMI), Italy

Marcello Forti, Director, ADVA, Italy

Davide Botto, CEO, IWAY, Italy.

_____ SESSION PROGRAM _____

[14.00-14.05] [Marcello Forti, ADVA]

Welcome & Workshop Introduction by Chair

[14.05-14.25] [Anthony Magee, ADVA]

5G & Enterprise convergence with reliability in mind

In this presentation we will discuss the opportunities arising in the Enterprise & 5G market, we will explore the implications of some often-overlooked 5G aspects such as uRLLC and break the definition down into network and operational implications. We will then present a view on how open and interoperable (O-RAN compatible) solutions are being prepared towards the enablement of these features for the enterprise market.

[14.25-14:45] [Prof. Guido Maier, POLIMI / Davide Botto, CEO, IWAY / Giulia Nava & Fabio Carminati, POLIMI Students]

The challenge of today's skills for the technological challenges of tomorrow

Virtualization of networks is a complex and articulated transformation process that is currently ongoing in the ICT sector worldwide. Its success largely depends on the availability of engineers and experts in IT systems and networks with suitable skill and expertise. The training process to build such professionals requires teaching important new knowledge and innovative approaches. The University is responsible for training new technicians of these technologies while on the other side Companies also have to adjust their staff skills to ensure the development and a coherent and effective transformation of existing networks. A challenge that goes through knowledge and an effective technical and methodological support, and which requires a strict cooperation between the academia and the industry. In this contribution we will report on a success case of such cooperation.

[14.50-15:10] [Ing. Pasquale Magliacano, IWAY]

Demo NFV Live

Based on the PoliMI NFV course laboratory platform, this live overview highlights in a nutshell automation potentialities, operational simplicity and troubleshooting tools embedded in an effective commercial network function virtualization solution.

[15.10-15:20] COFFEE BREAK

[15.20-15:40] [Stefano Nicastro, Sales Engineers Director – South Europe Colt Technology Services]

The era of change for Edge Computing: architectural building blocks, new services and use cases for Enterprises

Enabled by SDN, On Demand network services are already a reality, and uCPE is paving the way for implementing the virtualization of network functions at the WAN edge. Even though the initial use cases are very much connectivity service focused, the uCPE platform inherently provides many of the fundamental capabilities required to support a new set of use-cases that the Telecoms industry has catalogued under the banner of Edge Computing.

[15.45-16:05] [Carlo Cafasso, Head of Operations & Maintenance Telecommunications, ATM]

An Operational Technology use case - ATM

Transport technologies for operational control centres increasingly need reliable networks and computing systems. Mission critical application necessity for security and low latency causes resistance against centralized core cloud solutions and pushes the sector to explore alternatives. In this presentation we will discuss sector peculiarities and potential benefits of network virtualization.

[16:10-16:30] [Dott. Danilo Noschese, Network Automation Engineering, Open Fiber]

Network Automation within Open Fiber

The reason why Open Fiber was created is to build high-speed fiber optic electronic communication network, in a context where the European Commission is aimed at achieving a true "Gigabit Society" and operates only in the wholesale market.
In order to reduce the "time to market", Open Fiber has invested time and resources to create a Service Automation Platform in a scenario where the transport network is multivendor and multilayer.
Finally, Open Fiber are also doing several POCs to understand which opportunities could be generated using an "Edge Computing platform" where the transport network is "IP and DWDM based".

[16:30-17:00]   **Q&A**