

Present and future smart edge networks

Dia 18/01/2016 das 11:00 às 12:00 horas Sala H- 301

First, the talk describes a present smart edge network with intelligent algorithms offering an embedded Internet. Then, the second part of the talk describes a future smart edge network based on virtualization and femto datacenters. This solution is compatible with the new vision of IETF concerning SDN architecture and provides a participatory Internet. We will describe a first prototype and current performance.

Prof. Guy Pujolle



University Pierre et Marie Curie - Paris 6, France

Guy Pujolle is a computer science professor at Pierre et Marie Curie University - Paris 6 during 1981-1993 and from 2000 to the present day, a member of The Royal Physiographical Academy of Lund, Sweden, and a distinguished visiting professor at UFRJ (University Federal of Rio de Janeiro) from 2013. Before, he was a distinguished professor at the Division of IT Convergence Engineering of POSTECH, the Pohang University of Science and Technology, Korea, from 2011 to 2013. He was appointed by the Education Ministry to found the Department of Computer Science at the University of Versailles, where he spent the period 1994-2000 as Professor and Head. He was Head of the MASI Laboratory, University Pierre et Marie Curie, 1983-1993, Professor at ENST (Ecole Nationale Supérieure des Télécommunications), 1979-1981, and member of the scientific staff of INRIA (Institut National de la Recherche en Informatique et

Automatique), 1974-1979. Guy Pujolle received different prizes for his work and publications, in particular the Grand Prix of French Academy of Sciences (40 000\$) in 2013. He was also a member of the Scientific Advisory Board of Orange/France Telecom Group during 1990-1998 and 2002-2010, and member of several scientific advisory boards in the world. Dr. Pujolle is the French representative at the Technical Committee on Networking at IFIP. He is an editor for ACM International Journal of Network Management, Telecommunication Systems, and Editor in Chief of "Annals of Telecommunications". He was an editor for Computer Networks, Operations Research, Editor-In-Chief of Networking and Information Systems Journal, WINET, Ad Hoc Journal and several other journals.

Guy Pujolle is a pioneer in high-speed networking having led the development of the first Gbps network to be tested in 1980. Among first steps in different technologies, he achieved the first pre-ATM prototype in 1981, first prototype of a networking piloting system using a knowledge plane in 1996, first patent and prototypes on DPI (Deep Packet Inspection) in 2000, first prototype of a Wi-Fi controller in 2000, first patents on network virtualization (migration and opening virtual networks on the fly) in 2005. He is also the inventor of Virtual Access Points with the corresponding patent. He has published widely in the area of computer systems modeling and performance, queueing theory, high-speed networks, intelligence in networking, wireless networks, Post-IP networks, and virtual networks. He has published 22 influential texts and monographs in these areas. He is a Professor Honoris Causa of Beijing University of Posts and Telecommunications since 1988, and Invited Professor of several Universities: NCSU, Stanford, UFRJ, Rutgers, UQAM. He was awarded the Special Seymour Cray Award in 1991 for his research, and Silver Core from IFIP in 1995. Also in 1995 his book « les Réseaux » was awarded the Roberval Prize in France for the best scientific book of the year (130 000 copies sold January 2013). Guy Pujolle is co-founder of QoS MOS (www.qosmos.fr), Ucopia Communications (www.ucopia.com), EtherTrust (www.ethertrust.com), Virtuor (www.VirtuOR.fr) and Green Communications (www.green-communications.fr).