ICNS 2011

Foreword

The Seventh International Conference on Networking and Services (ICNS 2011), held between May 22 - 27, 2011 in Venice, Italy, continued a series of events targeting general networking and services aspects in multi-technologies environments. The conference covered fundamentals on networking and services, and highlighted new challenging industrial and research topics. Ubiquitous services, next generation networks, inter-provider quality of service, GRID networks and services, and emergency services and disaster recovery were considered.

IPv6, the Next Generation of the Internet Protocol, has seen over the past three years tremendous activity related to its development, implementation and deployment. Its importance is unequivocally recognized by research organizations, businesses and governments worldwide. To maintain global competitiveness, governments are mandating, encouraging or actively supporting the adoption of IPv6 to prepare their respective economies for the future communication infrastructures. In the United States, government's plans to migrate to IPv6 has stimulated significant interest in the technology and accelerated the adoption process. Business organizations are also increasingly mindful of the IPv4 address space depletion and see within IPv6 a way to solve pressing technical problems. At the same time IPv6 technology continues to evolve beyond IPv4 capabilities. Communications equipment manufacturers and applications developers are actively integrating IPv6 in their products based on market demands.

IPv6 creates opportunities for new and more scalable IP based services while representing a fertile and growing area of research and technology innovation. The efforts of successful research projects, progressive service providers deploying IPv6 services and enterprises led to a significant body of knowledge and expertise.

With the growth of the Internet in size, speed and traffic volume, understanding the impact of underlying network resources and protocols on packet delivery and application performance has assumed a critical importance. Measurements and models explaining the variation and interdependence of delivery characteristics are crucial not only for efficient operation of networks and network diagnosis, but also for developing solutions for future networks.

Local and global scheduling and heavy resource sharing are main features carried by Grid networks. Grids offer a uniform interface to a distributed collection of heterogeneous computational, storage and network resources. Most current operational Grids are dedicated to a limited set of computationally and/or data intensive scientific problems.

Optical burst switching enables these features while offering the necessary network flexibility demanded by future Grid applications. Currently ongoing research and achievements refers to high performance and computability in Grid networks. However, the communication and computation mechanisms for Grid applications require further development, deployment and validation.

The conference has the following independents tracks:
ENCOT: Emerging Network Communications and Technologies

COMAN: Network Control and Management
SERVI: Multi-technology service deployment and assurance
NGNUS: Next Generation Networks and Ubiquitous Services
MPQSI: Multi Provider QoS/SLA Internetworking
GRIDNS: Grid Networks and Services
EDNA: Emergency Services and Disaster Recovery of Networks and Applications
IPv6DFI: Deploying the Future Infrastructure
IPDy: Internet Packet Dynamics
GOBS: GRID over Optical Burst Switching Networks

ICNS 2011 also included:
> LMPCNA 2011: The Third International Workshop on Learning Methodologies and Platforms used in the Cisco Networking Academy

We welcomed technical papers presenting research and practical results, position papers addressing the pros and cons of specific proposals, such as those being discussed in the standard forums or in industry consortia, survey papers addressing the key problems and solutions on any of the above topics short papers on work in progress, and panel proposals.

We take here the opportunity to warmly thank all the members of the ICNS 2011 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to ICNS 2011. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We hope that ICNS 2011 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in sensor technologies and applications research.

We are certain that the participants found the event useful and communications very open. We also hope the attendees enjoyed the beautiful surroundings of Venice.

ICNS 2011 Chairs
Pedro Andrés Aranda Gutiérrez, Telefónica I+D - Madrid, Spain
Carlos Becker Westphall, Federal University of Santa Catarina, Brazil
Eugen Borcoci, University 'Politehnica' Bucharest, Romania
Jaime Lloret Mauri, Polytechnic University of Valencia, Spain
Sathiamoorthy Manoharan, University of Auckland, New Zealand
Yoshiaki Taniguchi, Osaka University, Japan
Abdulrahman Yarali, Murray State University, USA
Emmanuel Bertin, France Telecom R&D - Orange Labs, France
Steffen Fries, Siemens, Germany
Sorin Georgescu, Ericsson Research, Canada
Mary Luz Mouronte López, Ericsson, Spain
Nirav Kapadia, Fijitsu America, USA
Patryk Chamuczynski, Technisat Digital R&D, Poland

LMPCNA 2011 Chairs

Kristen DiCerbo, Cisco Systems, Inc., USA

Adam M. Gadomski, ECONA

Ron J. Kovac, Ball State University, USA

Iain Murray, Curtin University of Technology - Perth, Australia

Doru Ursutiu, University "Transilvania"- Brasov, Romania / IAOE

Harry Wang, Cisco Academy Training Centre - Asia Pacific, Australia